Can people afford to pay for health care?

New evidence on financial protection in Sweden

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

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

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

Established in 1999, the Office is supported by the Government of the Autonomous Community of Catalonia, Spain. It is part of the Division of Health Systems and Public Health of the WHO Regional Office for Europe.
Can people afford to pay for health care?

New evidence on financial protection in Sweden
Contents

Spending on health 1
Coverage, access and unmet need 2
Household spending on health 5
Coverage, access and unmet need 3
Financial protection 6
Factors that strengthen and undermine financial protection 9
Implications for policy 10
References 12
Glossary of terms 13
This review assesses the extent to which people in Sweden experience financial hardship when they use health services, including medicines. The analysis draws on household budget survey data collected by Statistics Sweden annually from 2006 to 2009 and in 2012 (the latest year of data currently available). It focuses on two indicators of financial protection: catastrophic health spending and impoverishing health spending. It also considers the presence of access barriers leading to unmet need for health care.

All currency is presented in Swedish krona (SEK) and converted into equivalent values in euros. On 1 April 2019, SEK 100 was equal to €9.58, rounded to €10 in this review (OANDA, 2019).

Spending on health

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 current spending on health (Xu et al., 2003; Xu et al., 2007; WHO, 2010; WHO Regional Office for Europe, 2019). Increases in public spending or reductions in out-of-pocket payments are not in themselves guarantees of better financial protection, however. Policy choices are also important.

Sweden spends more publicly on health than many other European Union (EU) countries. In 2016, public spending on health accounted for 84% of current spending on health, 18.5% of government spending and 9.1% of GDP, which is among the highest in the EU.

As a result of high levels of public spending on health, the out-of-pocket payment share of current spending on health is below the EU15 average, but higher than in comparator countries such as France, Germany and the Netherlands (Fig. 1).
Overall levels of spending on health do not tell the full story, however. The out-of-pocket payment share of current spending on health is substantially higher for outpatient care, outpatient medicines, medical products and dental care than for other health services (Fig. 2).

**Fig. 2. Breakdown of current spending on health in Sweden by health care and financing scheme, 2016**

Note: OOPs: out-of-pocket payments; public: all compulsory financing schemes.

Sources: Eurostat (2019) and OECD (2019).
Coverage, access and unmet need

Residence in Sweden is the basis for entitlement to publicly financed health services. The publicly financed benefits package covers a broad spectrum of services.

Adults experience gaps in coverage due to user charges (co-payments), which are applied to all health services except diagnostic tests and inpatient medicines, but people under 20 years old, including the children of asylum seekers and undocumented children, are generally able to use all publicly financed health services without co-payments.

Fixed co-payments for outpatient visits and inpatient stays (a flat amount per visit or day in hospital) are set locally and vary across the country. Co-payments for outpatient visits are subject to a nationally determined cap, so that no adult has to pay more than SEK 1150 (€115) for outpatient visits in a 12-month period. Children and adolescents under 20 years old and people aged over 85 are exempt from these co-payments.

All adults must pay the full cost of outpatient prescribed medicines up to a cap of SEK 2300 (€230) per person in a 12-month period, which is separate from the cap for outpatient visits.

Adults must also pay the full cost of dental care. There is no cap on out-of-pocket payments for dental care, only a system of protection against high costs, with payment falling as the amount spent in a 12-month period increases. However, there are exemptions from these user charges for people aged under 23 in all regions and people aged over 80 in most regions. In addition, since 2008, all adults have benefited from a very small annual subsidy for dental care, which reduces the out-of-pocket cost among people using dental care by around €15–30 per person (depending on age). The level of this subsidy was doubled in 2019 (after the study period).

Although there are no exemptions from co-payments on the basis of income, people receiving social benefits from the government can apply for retrospective reimbursement of co-payments or ask the region for an invoice, which the municipality will then pay on their behalf. These bureaucratic approaches to reducing the financial burden of co-payments for people receiving social benefits reflect the division of responsibilities between municipalities (social benefits) and regions (health care).

Levels of unmet need in Sweden are close to the EU average; unmet need for health care is driven slightly more by waiting time than cost, while unmet need for dental care is driven by cost (Eurostat, 2019). Unmet need for dental care has fallen substantially over time and is now close in level to unmet need for health care, but income inequality in unmet need remains much higher for dental care than for health care (Fig. 3). Data on unmet need for prescribed medicines show substantial income inequality and some age-related inequality (Fig. 4).
Fig. 3. Income inequality in self-reported unmet need for health care and dental care due to cost, distance and waiting time in Sweden, 2004–2017

Notes: population is people aged over 16 years. Quintiles are based on income. Break in time series in 2014.

Fig. 4. Self-reported unmet need for prescribed medicines due to cost by educational attainment and age, Sweden and EU, 2014

Source: European Health Interview Survey data from Eurostat (2019).
Voluntary health insurance offers faster access to ambulatory care and shorter waiting times for elective treatment, but plays a marginal role in the health system. It covers around 6% of the population (Swedish Insurance Federation, 2019), with take up concentrated among certain types of employees (Sagan & Thomson, 2016), and accounts for less than 1% of current spending on health (WHO, 2019).

The table below highlights key issues in the governance of coverage, summarizes the main gaps in publicly financed coverage and indicates the role of voluntary health insurance in filling these gaps.

<table>
<thead>
<tr>
<th>Coverage dimension</th>
<th>Population entitlement</th>
<th>The benefits package</th>
<th>User charges (co-payments)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issues in the governance of publicly financed coverage</td>
<td>Adult asylum seekers and undocumented adults have limited entitlements</td>
<td>Regional variation in waiting times; patients may seek specialist care in different regions but will have to pay for travel costs and the national waiting time guarantee does not apply</td>
<td>Local variation in co-payments</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Waiting time guarantees stipulate that no patient should have to wait more than 7 days for a primary care appointment, 90 days for a specialist appointment and 90 days for treatment</td>
<td>No automatic exemption from co-payments for low-income people</td>
</tr>
<tr>
<td>Main gaps in publicly financed coverage</td>
<td>Adult asylum seekers and undocumented adults have limited entitlements</td>
<td>Waiting times</td>
<td>Co-payments for all health services except diagnostic tests and inpatient medicines</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Multiple caps</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>No cap on co-payments for dental care or inpatient stays</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Medicines and medical devices not in the National Medicines Benefits Scheme are not covered</td>
</tr>
<tr>
<td>Are these gaps covered by voluntary health insurance?</td>
<td>Those in need would be unlikely to be able to afford voluntary health insurance</td>
<td>Yes, but voluntary health insurance only covers about 6% of the population (mainly paid for by employers) and accounts for less than 1% of current spending on health</td>
<td>No, voluntary health insurance does not cover co-payments</td>
</tr>
</tbody>
</table>

Source: authors.
Household spending on health

Household budget survey data indicate that out-of-pocket payments did not increase in real terms during the study period. In 2012, they accounted for around 2% of total household spending, with a slightly smaller share of household spending among poorer than richer households.

Out-of-pocket payments are mainly spent on outpatient medicines and dental care, followed by medical products, but with different patterns of spending across consumption quintiles.

Outpatient medicines, outpatient care and inpatient care account for a larger share of out-of-pocket payments among poorer than richer households, while dental care and medical products account for a larger share of out-of-pocket payments among richer than poorer quintiles (Fig. 5). These differences in spending across quintiles may reflect the presence of annual caps on co-payments for outpatient medicines and outpatient visits, the lack of a cap on co-payments for dental care and the fact that the range of publicly financed medical products is narrow in scope compared to medicines.

Fig. 5. Weighted average breakdown of out-of-pocket spending by type of health care and consumption quintile, all years

<table>
<thead>
<tr>
<th>Type of Health Care</th>
<th>Total</th>
<th>Poorest</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>Richest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient care</td>
<td>100</td>
<td>80</td>
<td>60</td>
<td>40</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>Outpatient care</td>
<td>80</td>
<td>60</td>
<td>40</td>
<td>20</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Diagnostic tests</td>
<td>60</td>
<td>40</td>
<td>20</td>
<td>10</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Medical products</td>
<td>40</td>
<td>20</td>
<td>10</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Dental care</td>
<td>20</td>
<td>10</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Medicines</td>
<td>10</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Notes: weighted average across all years to adjust for sample size and each year’s value in Swedish kroner relative to 2015. Diagnostic tests include allied health professional services; medical products include non-medicine products and equipment.

Source: authors based on household budget survey data.
Financial protection

The incidence of catastrophic health spending in Sweden is low compared to many other EU countries, on a par with France, Germany and the United Kingdom (Fig. 6). About 2% of households experienced catastrophic health spending in 2012, a share that has remained relatively stable over time.

Fig. 6. Incidence of catastrophic spending on health and the out-of-pocket share of current spending on health in selected European countries, latest year available

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

Source: WHO Regional Office for Europe (2019).
Catastrophic health spending is heavily concentrated among households in the poorest quintile. Around 6% of households in the poorest quintile experienced catastrophic spending compared to around 1% in the other quintiles.

Over time, the share of households with catastrophic spending who are impoverished or further impoverished after out-of-pocket payments has increased (Fig. 7). This may reflect a sustained rise in the general risk of poverty and social exclusion following the financial crisis, particularly among people aged over 75 years (Eurostat, 2019).

On average, households with catastrophic spending are spending a quarter of their total budget on health.

The largest contributors to catastrophic health spending are dental care and medical products. Across the study years, the weighted average of spending in each of these areas was around 35–40% of out-of-pocket payments, compared to around 8% for outpatient medicines. Among the poorest quintile, however, the largest contributor to catastrophic spending is outpatient medicines (Fig. 8).

---

Fig. 7. Share of households with catastrophic spending by risk of impoverishment

Source: authors based on household budget survey data.
Factors that strengthen and undermine financial protection

The health system factors that contribute to the low levels of catastrophic and impoverishing health spending in Sweden in 2012 include:

- high levels of public spending on health overall, resulting in a moderate out-of-pocket payment share of current spending on health in Europe;

- the fact that all children and adolescents living in Sweden, including the children of asylum seekers and undocumented children, enjoy free access to all publicly financed health services up to the age of 18, 20 or 23 years (depending on the health service);

- a relatively comprehensive range of publicly financed health services for adults;

- some protection against co-payments through age-related exemptions from co-payments for outpatient visits and dental care for people aged over 80 or 85 years (in addition to all children and adolescents); and

- some protection against co-payments through annual caps on co-payments for outpatient visits, outpatient medicines and outpatient medical devices; the caps are applied automatically at the point of use, so that once a person has reached the cap, no further co-payments are applied.

Fig. 8. Breakdown of catastrophic spending by type of health care in the poorest quintile

Source: authors based on household budget survey data.
The following health system factors undermine financial protection:

- the widespread application of co-payments for health services for adults;
  - the lack of exemptions from co-payments for poorer households;
  - the use of separate caps rather than a single cap for all co-payments;
  - and the lack of any cap on co-payments for dental care;

- limited coverage of outpatient medical devices; and

- heavy reliance on out-of-pocket payments to finance outpatient medicines, medical products and dental care.

Although social security systems are in place to support vulnerable groups of people, the evidence presented in this study and evidence from Eurostat suggest that user charges for adults lead to financial hardship and establish financial barriers to access for dental care and outpatient medicines. This indicates that the current mechanism in place to protect poor people – retrospective reimbursement of co-payments or asking the region for an invoice to be paid by the municipality on their behalf – is not enough.

Implications for policy

Financial protection is relatively strong in Sweden compared to many other EU countries, owing to a fairly comprehensive range of publicly financed health services for adults and free access to all covered health services for all children. Coverage is supported by high levels of public spending on health, resulting in a moderately low level of out-of-pocket payments.

Catastrophic health spending is low on average, but highly concentrated among the poorest households. Across all study years, close to 6% of households in the poorest quintile experienced catastrophic spending, compared to around 1% in the other quintiles.

The drivers of financial hardship also vary by socioeconomic status. Dental care and medical products drive financial hardship on average, but among the poorest quintile, outpatient medicines are the largest single driver.

Widespread user charges (co-payments) and inadequate protection against co-payments, particularly for poor households, lead to inequalities in access to health care and financial hardship.

For dental care, the lack of an annual cap on co-payments, the use of percentage co-payments and the presence of balance billing are clearly linked to catastrophic health spending across all income groups and to high levels of unmet need among poorer households. Exemptions from co-payments for children, adolescents and older people and the introduction in 2008 of an annual subsidy of SEK 150 (€15) or SEK 300 (€30) per adult for dental care are important protections but have not done enough; substantial socioeconomic inequalities in access to dental care are evident throughout the study period.
Recent changes in dental care coverage include doubling of the annual subsidy to SEK 300 and SEK 600 (€60) respectively and extending the age limit for exemptions from co-payment from 20 to 23 years in 2018. These improvements will benefit all households but may not be enough to close the gap in unmet need for dental care between rich and poor households.

**Outpatient medicines** and **outpatient medical devices** benefit from an annual cap on co-payments, which is applied to all adults, regardless of income. However, there are no exemptions from co-payments based on income, so co-payments for these services result in catastrophic health spending, particularly for the poorest households. Data on unmet need for prescribed medicines show that this is also the area of care (for which data are available) with the largest socioeconomic inequality in unmet need due to cost. This suggests that the annual cap may be relatively protective for richer households but is not sufficiently protective for poorer households.

One way of improving protection for poorer households is to improve coordination between municipalities (who are responsible for social services) and regions (responsible for health care). Current mechanisms aiming to protect people who receive social benefits – allowing them to apply to their municipality for retrospective reimbursement of all co-payments or to ask the region for an invoice that the municipality will then pay on their behalf – are bureaucratic and may not be adequate. Given the evidence on financial hardship and unmet need presented in this review, it would make sense to take further action to lower access barriers and out-of-pocket payments for people receiving social benefits – for example, by introducing a system in which regions automatically invoice municipalities, so that social beneficiaries do not have to pay co-payments at the point of use and there is no need for them to seek reimbursement themselves. In addition, the Dental and Pharmaceutical Benefits Agency (TLV) could take a more comprehensive approach to medical devices, as it does for medicines, to ensure a wider range of devices is covered.

The Commission for Equity in Health established in 2015 identifies two important types of action – mainly outside the health system – to achieve more equal health in Sweden: first, to enhance equality of opportunity, especially in early life; and second, to strengthen welfare services so that they are better able to reach those in need. Recent changes in dental care benefits are in line with the first type of action. Whether these changes are enough to tackle inequalities in dental care remains to be seen, however. Encouraging regions and municipalities to coordinate social services and health care, thereby reducing the bureaucratic burden on people receiving social benefits, would certainly be in line with the second type of action.
References


Glossary of terms

**Ability to pay for health care**: Ability to pay refers to all the financial resources at a household’s disposal. When monitoring financial protection, an ability to pay approach assumes that all of a household’s resources are available to pay for health care, in contrast to a capacity to pay approach (see below), which assumes that some of a household’s resources must go towards meeting basic needs. In practice, measures of ability to pay are often derived from household survey data on reported levels of consumption expenditure or income over a given time period. The available data rarely capture all of the financial resources available to a household – for example, resources in the form of savings and investments.

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

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

**Budget**: See household budget.

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

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

**Capacity to pay for health care**: In this study capacity to pay is measured as a household’s consumption minus a normative (standard) amount to cover basic needs such as food, housing and utilities. This amount is deducted consistently for all households. It is referred to as a poverty line or basic needs line.
Catastrophic out-of-pocket payments: Also referred to as catastrophic health spending. An indicator of financial protection. Catastrophic out-of-pocket payments can be measured in different ways. This study defines them as out-of-pocket payments that exceed 40% of a household’s capacity to pay for health care. The incidence of catastrophic health spending includes households who are impoverished and households who are further impoverished.

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

Co-payments (user charges or user fees): Money people are required to pay at the point of using health services covered by a third party such as the government, a health insurance fund or a private insurance company. Fixed co-payments are a flat amount per good or service; percentage co-payments (also referred to as co-insurance) require the user to pay a share of the good or service price; deductibles require users to pay up to a fixed amount first, before the third party will cover any costs. Other types of user charges include balance billing (a system in which providers are allowed to charge patients more than the price or tariff determined by the third party payer), extra billing (billing for services that are not included in the benefits package) and reference pricing (a system in which people are required to pay any difference between the price or tariff determined by the third party payer – the reference price – and the retail price).

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

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

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

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

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

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

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

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

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

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

Poverty line: A level of personal or household income or consumption below which a person or household is classified as poor. Poverty lines are defined in different ways. This study uses basic needs line and poverty line interchangeably. See basic needs line.
Quintile: One of five equal groups (fifths) of a population. This study commonly divides households into quintiles based on per equivalent person household consumption. The first quintile is the fifth of households with the lowest consumption, referred to in the study as the poorest quintile; the fifth quintile has the highest consumption, referred to in the study as the richest quintile.

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

Universal health coverage: Everyone can use the quality health services they need without experiencing financial hardship.

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

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

Utilities: Water, electricity and fuels used for cooking and heating.
The 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
North Macedonia
Norway
Poland
Portugal
Republic of Moldova
Romania
Russian Federation
San Marino
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Tajikistan
Turkey
Turkmenistan
Ukraine
United Kingdom
Uzbekistan

WHO Barcelona Office for Health Systems Strengthening
Sant Pau Art Nouveau Site (La Mercè pavilion)
Sant Antoni Maria Claret, 167
08025 Barcelona, Spain
Tel.: +34 673 290 861
Email: euhsf@who.int