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Designing Health Financing Systems to Reduce Catastrophic Health Expenditure
DESIGNING HEALTH FINANCING SYSTEMS TO REDUCE CATASTROPHIC HEALTH EXPENDITURE

by

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Every year, more than 150 million individuals in 44 million households face financial catastrophe as a direct result of having to pay for health care. This policy brief outlines the circumstances in which this occurs, and what policymakers need to consider in seeking to protect populations.

**What is catastrophic health expenditure and why is it a concern?**

When people have to pay fees or co-payments for health care, the amount can be so high in relation to income that it results in “financial catastrophe” for the individual or the household. Such high expenditure can mean that people have to cut down on necessities such as food and clothing, or are unable to pay for their children's education. Every year, approximately 44 million households, or more than 150 million individuals, throughout the world face catastrophic expenditure, and about 25 million households or more than 100 million individuals are pushed into poverty by the need to pay for services.

Moreover, the impact of these out-of-pocket payments for health care goes beyond catastrophic spending alone. Many people may decide not to use services, simply because they cannot afford either the direct costs, such as for consultations, medicines and laboratory tests, or the indirect costs, such as for transport and special food. Poor households are likely to sink even further into poverty because of the adverse effects of illness on their earnings and general welfare.

A concern of policy-makers is to protect people from financial catastrophe and impoverishment as a result of use of health services. WHO has proposed that health expenditure be viewed as catastrophic whenever it is greater than or equal to 40% of a household's non-subsistence income, i.e. income available after basic needs have been met. However, countries may wish to use a different cut-off point in setting their national health policies.

**When does catastrophic health expenditure occur?**

Three factors have to be present for catastrophic payments to arise: the availability of health services requiring out-of-pocket payments; low household capacity to pay; and lack of prepayment mechanisms for risk pooling. Prepayment refers to the situation where funds for health are collected through taxes and/or insurance contributions. They
protect against some of the financial risks of ill health because households can then access services when they need to at a lower cost than would apply if all services had to be met by out-of-pocket payments made at the time when a service is received. When out-of-pocket payments are required, households with elderly, handicapped, or chronically ill members are generally more likely to be confronted with catastrophic health spending than others. This is both because they usually have a greater need for health services and because they lack financial resources. In the absence of effective protection mechanisms, these groups face continuing risks of both financial hardship and ill-health.

Catastrophic expenditure can occur in all countries at all stages of development. In most countries of the Organisation for Economic Co-operation and Development (OECD), for example, health systems and financial risk-pooling mechanisms have been developed over several decades. Yet despite reasonably well developed financial risk protection mechanisms, some households in these countries still face catastrophic payments (Figure 1). In many middle-income countries, while use of health services has expanded rapidly, the development of risk protection mechanisms has lagged behind.

In general, health systems that require lower out-of-pocket payments for health care offer better protection to the poor against catastrophic spending. As indicated in Figure 1, where out-of-pocket spending is less than 15% of total health spending, very few households tend to be affected by catastrophic payments. Countries can reduce involved in illness by relying more on prepayment and less on out-of-pocket payments. In that way, people contribute to funding health services in a predictable fashion, and are not required to suddenly find money to pay for services when they fall ill unexpectedly.

While prepayment mechanisms reduce the chances of catastrophic spending, they do not automatically eliminate it. This is particularly true when prepayment schemes cover only some health needs (e.g. the benefits package for insurance is not very large or taxes support only a limited range of services), cover only high-income groups, or when households must still meet some of the costs of care or medication themselves through formal or informal payments.

![Figure 1. Proportion of households with catastrophic expenditures vs. share of out-of-pocket payment in total health expenditure](image-url)
**How can catastrophic expenditure be reduced?**

Catastrophic expenditures do not automatically disappear with rising income. National health financing systems must be designed not only to allow people to access services when they are needed, but also to protect households from financial catastrophe, by reducing out-of-pocket spending. In the long term, the aim should be to develop prepayment mechanisms, such as through social health insurance, tax-based financing of health care, or some mix of prepayment mechanisms.

In moving towards such a system, flexible short-term responses will be needed, which will depend on the stage of economic development of the country and on the social and political context. Policy-makers will need to consider how to:

- extend population coverage through prepayment mechanisms;
- protect the poor and disadvantaged;
- design a benefits package; and
- decide the level of cost sharing by the patients.

**Extending population coverage**

During the transition to universal coverage, different approaches can be taken. In countries where social health insurance already covers employees in the formal sector, coverage could be extended to include dependents and the self-employed, with government either covering the financial contributions for the poor, or providing services for them. Coverage could also be extended, particularly among middle- and high-income groups, by expanding the role of voluntary insurance so that the limited public resources available could be allocated largely to the poor population. Tax-based systems could extend coverage by improving the efficiency of tax collection, thereby raising more funds, and by ensuring that the funds available are used more effectively and efficiently. Ministries of health could also seek to ensure that they receive larger allocations from overall government expenditure and the international community can advocate for increased flows of external assistance for health.

**Protecting the poor and disadvantaged**

Programmes that specifically focus on the poor may not achieve the desired results. The most common shortcomings are that the benefits package includes only limited services and that co-payments are high. In addition, in practice it has been found that the beneficiaries of such programmes are often not actually poor. Moreover, there are other disadvantaged groups who should be considered, such as the elderly, the handicapped and those with chronic health conditions and special diseases; these groups are often easier to target.

**Designing the benefits package**

The nature of the benefits package funded by insurance, and the range of services offered by a tax-based prepayment system, need to be carefully considered, to strike a balance between cost and risk protection. A restricted benefits package will cost less than a more generous package, but will also be less successful in protecting against catastrophic...
expenditure. A short term solution might be to focus particularly on funding services and interventions that have been proven to be cost-effective ways to improve people's health and to expand the services available over time as funding increases.

Deciding on the level of cost sharing by the patients

The decision on the level of out-of-pocket payments has to balance the need to protect individuals from financial catastrophe and to ensure the system is efficient. Where patients are covered by insurance or tax-based systems and make no, or small, out-of-pocket payments (e.g. there are limited co-payments for insurance or low or zero user fees in tax funded systems), experience suggests that there may be over prescription and overuse of pharmaceuticals, and that hospital stays may be longer. This has major effects on total health expenditure and the financial viability of the system. On the other hand, the higher the level and extent of out-of-pocket payments the less the protection against the financial risks of ill health and the lower the access to needed services, particularly among the poor. It is not necessary to apply the same cost sharing level to all population. Exemptions or lower rate could be applied to vulnerable population groups.

Other important considerations

In this technical brief we have focused only on the issue of how best to protect people from financial catastrophe associated with out-of-pocket payments for health care. The solution is to seek to reduce reliance on out-of-pocket payments and increase reliance on some form of prepayment. However, the overall equity, efficiency and sustainability of health financing systems are determined by many other factors as well. They include how best to pool the funds that are collected by taxes or insurance contributions, how best to use them to purchase or provide services, and how providers should be paid. These issues are the focus of subsequent Technical Briefs for Policy-Makers.