Brief 4: Risk-Pooling Mechanisms

What is risk pooling?

Risk pooling is also known as health insurance, which is a group of persons contributing to a common pool, usually held by a third party. These funds are used to pay for all or part of the cost of providing a defined set of health services for members of the pool. In low- and middle-income countries, there are relatively high out-of-pocket expenditures for health care services. Families may go into debt and sell critical assets in order to finance health services. Risk pooling is the collection and management of financial resources so that large, unpredictable individual financial risks become predictable and are distributed among all members of the pool. Risk pooling can provide financial protection to households in the face of high health care costs.

What are the different types of risk-pooling mechanisms available?

There are several different types of risk-pooling mechanisms that can be used to support and finance immunization services.

**National insurance systems:** Funding comes from general revenues and medical coverage is provided to the entire population for a fixed set of services (benefits package). Services are delivered through a network of public (and NGO) providers.

**Social health insurance systems:** Funding comes from mandatory, earmarked payroll contributions from individuals and employers. Coverage is provided to contributors, usually in a phased manner. Services are provided based on a defined benefits package that can include immunization services. Additional subsidies may come from external assistance or earmarked taxes.

**Mutuelles or community-based health insurance schemes:** These are generally non-profit prepayment plans for health care that are managed at the community level. Funding comes from prepayment into a pooled fund, supplemented by government or donor resources. Coverage is provided to community members, and services are provided by NGOs or public facilities. Benefits are based on community preferences and they may include preventive health care services, such as immunization.

**Private health insurance:** Funding of insurance premiums comes from individuals who purchase coverage (out-of-pocket) on a voluntary basis. Coverage is limited to contributors and benefits are pre-defined, and may include immunization. Service provision may be through a network of private providers.

The role of risk-pooling mechanisms for immunization

In the 58th session of the World Health Assembly (May 2005) of the WHO, member states endorsed Resolution WHA58.33. The resolution urges countries to strive towards sustainable health financing and achieving universal coverage through applying a mix of prepayment, social health insurance, and tax-financed services.
Risk-pooling mechanisms provide protection against high cost, low probability events. Immunization services are generally low cost and predictable, and are therefore not an obvious choice for financing through risk-pooling mechanisms. In addition, immunization services tend to be delivered through vertical programs supported by donors and government. For these reasons, immunization is usually not included in defined benefits packages provided to health insurance scheme enrollees. For instance, the Ghana National Health Insurance Scheme specifically excludes immunization.

There are a few examples in Latin America and Europe where insurance mechanisms support immunization. For instance, in Bulgaria, vaccines are procured directly by the Ministry of Health and distributed to practitioners, who are compensated through contracts with the National Health Insurance Fund. The Costa Rican Social Security Administration, which raises funding from payroll contributions and tax revenue (Ministry of Health), is required to provide adequate resources for delivery of the National Immunization Plan.

**Case Study: Mutuelles in Mali**

In West Africa, mutual health organizations (MHOs), or mutuelles, are voluntary organizations that provide health insurance services to enrollees. MHOs are owned, designed and managed by the communities they serve. Households pay an enrolment fee and regular premiums into a pooled fund to cover their use of a defined benefits package and the MHO reimburses providers out of the pooled fund for services. MHOs generally are not-for-profit organizations that are based on notions of mutual aid and solidarity. MHOs can provide additional sources of revenue mobilization and financial protection for households, increase financial access to care, and promote equity.

The experience of MHOs so far reveals that there is an increasing demand for these types of financial protection mechanisms: MHOs include individuals and households from a wide range of socio-economic backgrounds; members tend to have lower out-of-pocket expenditures; and members tend to use health services more when needed.

In 1997, the Government of Mali recognized the potential of MHOs in its 10-year health and social sector development plan. In these schemes, households pay a one-time membership enrolment fee, and monthly premiums or an annual premium (related to the number of beneficiaries). On joining, members commit to making use of preventive services such as childhood immunization. A recent study found that membership in MHOs improved utilization of priority preventive and curative health services. The total household payment was between US$29 and US$54 per year, or 2% and 8% of household income. Geographic barriers related to use of preventive services, such as immunization, appear to have been overcome by the scheme.
Operationalizing health insurance

Although health insurance schemes offer many benefits such as risk pooling and covering the cost of catastrophic illness, they are complex to develop and implement. They require a range of systems, such as: financial processes and management; contract management; enrolment and member services; utilization and quality management; claims management; information systems (to track use of services by beneficiaries and their associated costs); accreditation and quality assurance mechanisms (to monitor services offered by providers); and marketing and communications. Some of the dimensions of a health insurance scheme are listed below:

- **Beneficiaries** may be enrolled on a voluntary or mandatory basis. Schemes may target vulnerable population groups. There is usually some form of identification card for each beneficiary.

- **Benefits packages** generally include out-patient and in-patient care, surgical procedures, consultations, and diagnostic services. There are excluded benefits in most schemes and, in some cases, vertically provided programs such as immunization may be excluded.

- **Sources of funding** may be consumption taxes and social security, as well as direct government subsidies, payroll taxes, donor support, and other funding. In addition, patients may be required to pay a deductible and/or a co-payment at the time of service.

- **Payment of providers** is usually done on a reimbursement basis. The level of reimbursement is usually pre-determined and may be adjusted for severity of illness, such as a diagnostic-related group. Providers submit claims for reimbursement.

- **Selection of providers** can be made on the basis of accreditation (formal or informal).

- **Governance and management** may be through a national health insurance authority, including a governing board. The ministry of health is usually the responsible ministry. In some systems, governance and management are decentralized to district level as well.

Because health insurance reimburses providers on the basis of services rendered, there is an incentive for providers to offer lower cost, perhaps lower quality, services or to only serve a healthier population (adverse selection). In addition, once a patient is covered under a health insurance scheme, there is the incentive for them to consume more health care than is otherwise needed (moral hazard) because services are not linked to price. Health insurance schemes need to be developed in such a way as to mitigate these two behavioral incentives, for example through requiring nominal co-payments at the time of service, instituting a waiting period before beneficiaries can use services, and reimbursing providers based on a contractual arrangement of population coverage.
The performance of a particular type of risk-pooling mechanism against our criteria will depend upon the number of persons covered, the source of financing for the risk pool, administrative requirements, and the types of benefits.

Table 4.1 Assessment of the value of different types of risk-pooling mechanisms for immunization financing

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<tr>
<th>Characteristic</th>
<th>Assessment</th>
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<td>Predictable</td>
<td>If immunization is included in the benefits package of risk-pooling mechanisms, financing of services will generally be predictable and reliable. National health insurance relies on budgetary approval and may be subject to variation in national policies.</td>
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<td>Additional to government financing</td>
<td>Social health insurance, community-based health insurance, and voluntary health insurance are additional sources of financing to national governments (general revenues).</td>
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<td>Equitable</td>
<td>National health insurance would be the most equitable form of risk pooling in that everyone is covered and enrolment is not based on ability-to-pay. Access to quality health care providers may be a challenge for lower-income patients. Social health insurance is based on payroll tax, and would generally not cover workers in the informal sector or the medically indigent population. Community-based health insurance targets the lowest level of the health system, but there is some evidence that the very poorest may be excluded from the scheme.</td>
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<td>Efficient</td>
<td>National and social health insurance schemes are thought to be efficient in the sense that administrative structures are already in place. However, establishing risk-pooling mechanisms, including setting up new institutions, may be costly.</td>
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<td>Feasible</td>
<td>Health insurance schemes are complex to develop and implement, and require management capacity and skill in ministries of health and at district levels.</td>
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<td>Sustainable</td>
<td>Sustainability will depend upon the size of the risk pool, the health conditions to be managed within the pool, and the revenues collected to finance the cost of service provision.</td>
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<td>Promotes self-sufficiency</td>
<td>These schemes promote greater self-sufficiency in financing to the extent that they are financed by national sources.</td>
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<td>Fosters greater accountability</td>
<td>Insurance mechanisms are heavily information-dependent and require tracking of contributions, services provided, and providers, all of which would enhance accountability. Community-based schemes are managed at the community level and would foster greater accountability at that level. To the extent that service provision is contracted out to providers on the basis of the quantity and quality of care provided, this can improve accountability within the system.</td>
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Further Reading


http://www.who.int/health_financing/mechanisms/en/index2.html
http://www3.interscience.wiley.com/journal/122365593/abstract?CRETRY=1&SRETRY=0