

# Health Systems Development Programme



Health Systems Development

## **Towards universal coverage in low-income countries: what role for community financing?**

**Authors:**

**Dina Balabanova, Timothy Poletti, Charles Normand, Mohga Kamal-Yanni and Olga Ghazaryan**

**HSD/WP/13/06**

Draft: not for citation. This paper has been submitted to the Social Science and Medicine and is subject to future revision.

D Balabanova, T Poletti and C Normand are members of the Health Systems Development Programme, which is funded by the UK Department of International Development. M Kamal-Yanni and O Ghazaryan are employed by Oxfam GB, and this work was funded through their MEECIS project.

## **Abstract**

There is a renewed interest in how health financing systems in low-income countries can bridge the health financing gap and increase financial protection against the cost of illness. Evidence demonstrates that community financing can mobilise additional resources, increase access to care and provide some protection, although concerns remain about their ability to cover the poorest. There is an emerging international consensus that community prepayment schemes have a role to play in financing health care in resource poor environments, and increasing interest in scaling them up. Historical examples suggest voluntary insurance can play a significant role in the transition to universal coverage; there are also contemporary examples where it has contributed towards realising this policy objective in low-income settings. This paper reviews evidence from high- and low-income countries of the long-term contributions community financing has made to key health policy objectives including increasing population coverage, financial protection, equity, efficiency and quality of care. While identifying the contextual characteristics that facilitate this process, the paper discusses the role of community financing in developing universal and equitable financing systems.

## **Introduction**

There is a recognised need to increase health care financing in low-income countries, where governments on average can only raise 14% of GNP in income from taxation, compared to 31% in high-income countries (WHO, 2001). Government and donor funding for health care in such environments is insufficient to provide universal coverage for basic health care. Mobilising additional resources is recognised as a prerequisite for achieving the Millennium Development Goals, and there is a renewed interest in addressing this issue (UN Millennium Project, 2005).

The World Bank and the Bamako Initiative promoted user fees in the 1980s as a mechanism for bridging the health financing gap (Creese and Kutzin, 1995). Out-of-pocket expenditure accounts for around half of total health expenditure in many middle- and low-income countries, and much of this is in the private sector. (WHO, 2000). User fees have raised on average around 5% of recurrent health expenditure in the public sector, much less than the 15%–20% that had been predicted. However, the resources raised may be an important source of discretionary spending at the facility level (Gilson, 1997). User fees often reduce access to essential care for the poor; exemption mechanisms to mitigate negative equity effects are often ineffective (Whitehead et al, 2001). In low-income countries the poor are often excluded from formal risk sharing arrangements to protect against the costs of illness (World Bank, 2004). As a result, user fees also cause iatrogenic poverty due to catastrophic health care expenditure (Xu et al, 2003).

On balance, the international consensus on the utility of user fees is changing and key players are less likely to promote them, although in practice, they remain widespread. Furthermore, there has been an increasing interest in exploring mechanisms for health care financing in resource-poor settings that ensure financial protection for the poor and fairness in financial contributions, and improve access to priority health services (WHO, 2000; WHO, 2002).

Strengthening the insurance function of the health financing system is increasingly seen as central to poverty reduction strategies (Wagstaff et al, 2001). However, attempts to replicate

the benefits of taxation- or social-health-insurance-based health financing – which both provide universal access and financial protection – have met with mixed success in the low-income countries. Tax-based financing has failed to mobilise sufficient resources. Social health insurance has proved difficult to implement because of its complexity and high administrative costs, as well as the large informal sectors low-income countries. (Ensor, 1999). Universal access and comprehensive cover are unlikely to be achieved via either financing mechanism in the short- to medium-term.

Community health financing (CHF) covering a diverse range of schemes with different designs and objectives, is another response to under-funding. (World Bank, 2004) While some authors argue that there is insufficient evidence to draw firm conclusions about the utility of CHF (Ekman, 2005; ILO, 2002), there is increasing evidence that many schemes are successful in providing informally-employed, rural or disadvantaged populations with access to care and financial protection. An international consensus is emerging that community financing may have a useful role to play in the health systems of middle- and low-income countries (WHO, 2001; World Bank, 2004).

This paper explores the extent to which scaling up voluntary community financing schemes can help countries in progressing towards the ultimate policy goal of universal access and financial protection.. It will also examine the contribution that CHF can make to the subsidiary objectives of promoting equity, and increasing quality of care and efficiency, and the possible synergies between multiple financing mechanisms in achieving these objectives. It draws on historic examples of scaling up of community financing, as well as more recent country experiences.

## **Methods**

An extensive literature review of published and grey literature on the experience of countries that have implemented and scaled up community financing schemes was carried out. Peer-reviewed journal publications were identified through BIDS (CAB abstracts; IBSS), Web of Science, PubMed, and Embase; and grey literature through ELDIS / ID21, SIGLE. Search phrases used included: ‘micro-health insurance’, ‘health insurance’, ‘community health financing’, ‘community health insurance’ ‘community-based health insurance’, ‘social health insurance’, ‘scaling up’ and ‘pre-payment AND health’. Selection criteria favoured papers drawing on empirical studies, or multi-country reports by international organisations. Additional sources were identified through tracing references, from websites of international organisations active in the area of health financing, and personal communication.

Most studies focus on evaluation of the technical design of individual schemes, and their impact in terms of resource mobilisation, access to services, and financial protection. Few empirical studies looked specifically at equity and efficiency, or at the determinants of successful implementation and sustainability. Several recent conceptual frameworks address community financing from a health systems perspective, exploring mechanisms for scaling up community health insurance nationally and the factors influencing this process such as socio-economic and demographic context, culture, social capital, and preferences (Bennett, 2004; Carrin and James, 2005; Ranson and Bennett, 2002; Van Ginneken, 2003). The quality of governance, health sector capacity, and scheme design features such as managing contributions are also seen to be important. Some frameworks outline factors that can

facilitate the expansion of risk pooling and population coverage as community insurance schemes evolve (Arhin-Tenkorang, 2001; Normand and Weber, 1994).

## **Concepts of community financing**

There is a vast array of different types of community financing schemes, although the *“common features they share include the predominate role of the community in mobilizing, pooling and allocating resources, solidarity mechanisms, poor beneficiary population, and voluntary participation.”* (Jakab & Krishnan, 2001). Research identifying features that promote scaling up community financing is scarce, in part because the variation in scheme design makes comparative research to identify best practice difficult. A useful way to differentiate between schemes is by the degree of financial protection they provide; schemes that cover high cost, low frequency events such as hospital treatment for serious illness provide significant protection against catastrophic expenditure, those covering low cost, high frequency events such as basic primary care and immunization provide significant health benefits but provide limited protection against catastrophic expenditure (Bennett et al, 1998).

It is increasingly accepted that community financing arrangements that pool risk (e.g. community-based health insurance), or spread the cost of health related expenditure over time (pre-payment schemes), provide some protection from the impoverishing effects of illness and improve access to care (Ekman, 2004; WHO, 2001; World Bank, 2004). CHF schemes can also create accountable and transparent management structures, and via community involvement in scheme design and operation, ensure that services are appropriate to population needs and preferences.

The shortcomings of community-based financing are less frequently discussed. Schemes are rarely sustainable financially and institutionally without technical and financial support from NGOs and donors (Bennett et al, 1998). In part this is because community financing schemes are often aimed at disadvantaged groups or communities, and their characteristics – such as poverty, informal employment and seasonality of income – can impede risk sharing and so diminish protection (Ensor, 1999). Transaction costs can also be high (World Bank, 2002).

Several authors suggest that it is premature to make definitive conclusions about the impact of schemes on quality of care and efficiency, or the ability of schemes to increase access (Ekman, 2005; ILO, 2003). The evidence is mixed on the equity impact of the schemes. Some authors report positive equity outcomes (Jakab et al, 2004); other studies show that the poorest often cannot afford to join CHF schemes, and even if they join, other barriers can prevent them accessing care (Bennett & Gilson, 2001). There are also concerns that CHF could – via subsidy capture – distort the flow of subsidies through the health financing system in ways that undermine equity (Bennett, 2004).

Despite the known problems and the gaps in the evidence base, community financing is increasingly seen as both a viable and desirable alternative for user fees, and the number of schemes has increased rapidly over the last decade (World Bank, 2004).

## **The contribution of community financing to key policy objectives**

Community financing is often implemented to improve coverage in particular geographical areas, and fill gaps in financing and service provision. However, there may be a tension between scheme-level objectives – providing benefits for its members – and national policy objectives such as increasing equity, efficiency and quality of care for the whole population (Bennett, 2004). For example, an insurance scheme may fund accessible services for its members, but decrease the overall efficiency of the health system via duplication of services. Similarly, distribution of benefits may be equitable between members but decrease the equity of the system overall via subsidy capture that increases access barriers for non-members. It is therefore important to consider the interactions between CHI and the broader health system (Bennett, 2004).

This section presents evidence from high- and low-income countries of the long-term contribution community financing has made to key health policy objectives including increasing population coverage, financial protection, equity, efficiency and quality of care. The focus will be on community health insurance schemes involving prepayment. The importance of good governance, government stewardship and social capital in this process is also discussed. Finally, factors that facilitate or constrain the scaling up of community financing to meet national policy objectives are considered.

### ***Expanding coverage – a gradual process facilitated by growth and governments***

The national social health insurance schemes in Germany and Japan provide historical examples where the growth and consolidation of small-scale voluntary insurance schemes has made a significant contribution to achieving universal insurance coverage (Barnighausen and Sauerborn, 2002; Ogawa et al, 2003).

The Jyorei schemes in Japan began as village-level voluntary health insurance schemes for low-income rural populations. Their scaling up was facilitated by the government via the development of a legal framework within which the schemes operated, and definition of policy objectives for the national level schemes into which they were incorporated. Between 1934 and 1935, the government piloted community health insurance programmes based on the Jyorei system. These became the basis for the National Citizen's Health Insurance Fund (NCHIF), which still covers 34% of the population (Ogawa et al, 2003); in combination with other insurance schemes it has enabled the Japanese to expand universal health insurance cover to their population. A law detailing the legal framework for the NCHIF was passed in 1938, and the NCHIF eventually incorporated the existing Medical Cooperative Societies (with which the Jyorei had already been integrated). The final step to ensuring universal coverage was the introduction of legislation for mandatory health insurance in 1961.

The Jyorei schemes facilitated the introduction of national insurance mechanisms through developing technical and management expertise, and enhancing population familiarity and demand for insurance coverage; the Jyorei provided a successful working model that subsequent insurance schemes were able to build on. A similar experience has been documented in Germany (Barnighausen & Sauerborn, 2002).

In Germany, small voluntary health insurance schemes – the relief funds that developed as mutual support systems in the medieval craft-based guild system – laid the foundations for

the rapid expansion of insurance coverage in the 19<sup>th</sup> century (Barnighausen & Sauerborn, 2002). This process led directly to the development of a national health insurance system, which has proved to be successful in terms of raising revenue and in providing universal access to health care (Barnighausen & Sauerborn, 2002; Reinhardt, 1995). Again the process was driven by the government via the promulgation of a series of laws that moved progressively from defining general principles towards concrete rules. These laws gradually introduced more compulsion, and expanded their remit from a local level to regional and eventually supra-regional level. Finally, in 1883 Bismark legislated to introduce the first compulsory national insurance scheme for workers in formal employment. Over time compulsory insurance cover expanded incrementally, both in terms of population coverage and scope of services, until universal coverage was achieved around 1960 (Barnighausen & Sauerborn, 2002).

The major expansion of community financing in Germany and Japan – as part of a drive to introduce national insurance mechanisms – occurred during periods of significant economic growth. A similar process occurred in Korea – which experienced average growth of 6.1% between 1975-2002 (UNDP, 2006) – where as incomes increased, contributions became more affordable, and the government was able to collect sufficient tax revenue to subsidise health insurance for the informal and agricultural sectors. However it should be noted that the high remaining co-payments in Korea constrain the ability of the health insurance system to provide equitable access to care and insurance against the impoverishing effects of serious illness (Yu & Anderson, 1992).

Similarly to Germany and Japan, the extension of insurance in the formal sector in Korea was achieved gradually over time. However, attempts to extend compulsory coverage to the informal and agricultural sectors and integrate such schemes nationally was problematic (Yu & Anderson, 1992). Farmers resisted such moves and the government sought to encourage their participation through lower contribution rates based on income rather than assets; higher subsidies (50% compared to 33 % for urban participants); and investment in infrastructure and human resources to improve the quality of services and overcome supply side constraints. All of these strategies depended on the increased resources resulting from economic growth.

The Cooperative Medical System (CMS) in China – credited with dramatic decreases in morbidity and mortality in China – is another example where scaling up community insurance was significant in expanding access to health care (Shi, 1993). The system consisted of rural insurance schemes providing primary care that were well integrated with higher levels of care covering at its peak over 90% of China's estimated 800 million rural population (Hsiao, 2004).

A different approach was taken in Thailand, where progress towards universal financial protection has been made by incorporating a number of different financing mechanisms into the national health financing policy framework (Pannarunothai et al, 2000). The mechanisms include the Thai Health Card, a form of CHI that is heavily subsidised by the government and targeted at the poor, covering around 3 million people reliant on farming and informal income (Hsiao, 2004). This was supplemented with insurance schemes for government workers as well as earmarked tax-based funding to cover the cost of care for the elderly and children. Scaling up of the Health Card scheme (in terms of participation, geographical coverage and the scope of benefits) has been accompanied by increasing integration with the wider health system. The combination of different health financing

measures have increased insurance coverage considerably, although about a quarter of the population remains without insurance or access to publicly funded care (Supakankunti, 2000).

Vietnam is another country where voluntary community insurance is one component of a pluralistic health financing system aimed at achieving national insurance coverage over time. Voluntary community health insurance schemes have been introduced, which are targeted at those not covered by compulsory insurance arrangements. However, the percentage of the population insured under the schemes by the end of 1997 was only 5.5%, although this was over 10% of those eligible to join (Jowett & Thompson, 1999).

### ***Equity and protection for the poor – the need for subsidies and larger risk pools***

From an equity perspective securing subsidies aimed at lowering the cost of membership for the poorest people is crucial (Hsiao, 2004). Even if heavily subsidised premiums enable the poor to join schemes, the cost of transport, hotel expenses (food and other in-patient expenses), opportunity costs and geographical access barriers may prevent them from accessing care, even if free at point of use. Furthermore, the experience with user fees suggests that designing effective mechanisms to enable CHI schemes to channel subsidies to will be challenging (Gilson, 1997).

Although the evidence concerning effective mechanisms for ensuring pro-poor health outcomes is weak, more recently, new approaches have been pioneered for targeting subsidies – such as proxy means testing, conditional cash transfers, and health equity funds – that are demonstrably pro-poor and could be incorporated into scheme design (Palmer et al, 2004; World Bank, 2005). For example, health equity funds have proved useful in overcoming the financial barriers to care that remain even if access is free at point of use – as experience in Cambodia demonstrates. Ongoing monitoring and evaluation of the equity impacts of CHI feeding into programme adaptation will be essential if equity issues are to be addressed as CHI is scaled up (World Bank, 2005).

In Vietnam, in response to recommendations from a collaboration between the WHO and the Health Insurance Agency, inter-provincial risk-sharing is now possible following approval for the redistribution of funds between provinces. This provides schemes in poorer provinces with a cross subsidy and is a way of increasing the degree of risk pooling (Jowett & Thompson, 1999). This policy is explicitly designed to increase equity between regions.

In Thailand the government provides a matching subsidy – which effectively integrates the health card scheme with public health financing mechanisms – so that individuals purchasing cards only pay 50% of the cost. Additional unintended cross subsidy occurs due to the fact that budgetary allocations from the Health Card Funds are insufficient to cover the cost of the services provided at public facilities. The result of this is that the public providers effectively subsidise the provision of services for cardholders. As a result however, practitioners have a disincentive to treat health card holders, and provide them with inferior quality care. These subsidies were facilitated by a sustained economic growth averaging 5.1% from 1975-2003 (UNDP, 2006).

The German case illustrates the importance of merging individual funds to expand the size of risk pools as insurance mechanisms are scaled up. This can improve equity because it increases the potential for cross subsidy. However, if there is competition between

insurance funds they have an incentive to exclude high risk/high cost patients, which conflicts with health system equity goals. The experience in Japan suggests that mechanisms such as risk equalisation schemes mandated by the government were important in ensuring that health insurance is socially inclusive (Ogawa et al, 2003).

Bennett argues that the equity of community financing schemes should be assessed not only at the scheme level but also at a system-wide level (Bennett, 2004). Even if community financing schemes are equitable per se, they may not contribute to increased overall equity within health systems. If they capture subsidies that had previously been targeted at the most disadvantaged – who often cannot afford to join the schemes – the poorest people may become worse off with decreased access and increased risk of catastrophic expenditure.

Problems can result from the way that CHI schemes are integrated with the broader health system. In Vietnam CHI schemes purchase outpatient care from designated public hospitals, but not from local commune health facilities or from the private sector (which is perceived to provide better quality of care). This disadvantages rural people who cannot use local facilities, which increases their travel and opportunity costs. It also contributes to low participation rates because, when combined with longer waiting times and poor staff attitudes, it makes the schemes less attractive to join (Jowett & Thompson, 1999).

### ***Increasing the scope and quality of service***

Increasing the scope and quality of care motivates people to join community financing schemes and use services. Purchasing mechanisms, such as contracts that stipulate performance related requirements, can promote quality improvements, although many schemes fail to use such mechanisms effectively (Bennett et al, 1998); Ekman (2004) concluded that there is weak evidence that CHI schemes have an effect on quality of care.

In Thailand under the Health Card scheme, care is accessible only at public health facilities. The poor quality of care in the public health system is a disincentive to buying Health Cards; some scheme members seek care in the private sector despite their entitlement to free access at public facilities (Supakankunti, 2000). The situation is similar in Vietnam, where the insured receive poorer quality of care compared to those paying out-of-pocket (Jowett & Thompson, 1999).

The Jyorei schemes in Japan demonstrate how scaling up can increase the scope of services available to members (Ogawa et al, 2003). The Cooperative Medical System (CMS) schemes in China and the Dana Sehat schemes in Indonesia (which covered 21 million people in 2000) are also seen to have produced measurable gains in service quality (Hsiao, 2004). The integration of different levels of care in the Chinese CMS prior to 1980s enabled members to access a broad range of services, from primary health care at the village level, to five basic specialty services in county hospitals (Hsiao, 2004). Its subsequent collapse had a negative impact on the scope of services available rurally due to the loss of supervision and training previously provided by higher levels of care, as well as the weakening of government monitoring and regulation (Hsiao, 2004).

Ensuring the compatibility of required contribution levels with ability and willingness to pay is a fundamental determinant of membership in schemes. The experience of Germany demonstrates that trade offs have to be made between raising revenue, affordability, coverage and the scope of services that CHI offers. Recent research also suggests that



understanding consumers' preferences and adjusting the design of a CHI schemes accordingly may result in increased participation (De Allegri et al, 2006). This suggests that the benefit package should be adapted incrementally in light of both the population health needs and economic circumstances to ensure both willingness to pay for CHI and that schemes are financially sustainable (Barnighausen & Sauerborn, 2002).

### ***The importance of social capital and local governance***

Social capital is a measure of how much people within a society are willing and able to help each other. It is frequently regarded as an important determinant of communities' willingness to contribute to the running of CHI schemes. It is also seen to be a significant influence on individuals' willingness to pay for CHI – in addition to expected economic and quality gains – and thus schemes' feasibility and sustainability (Hsiao, 2004). The empirical evidence to support this is limited, although a recent study in China found that community level social capital – as measured using both trust and reciprocity indexes – was associated with an increase in willingness to join a government-subsidized CHI (Zhang et al, 2006). Analysis of multi-country household surveys has drawn similar conclusions (Jakab & Krishnan, 2001).

Social capital can be operationalised as links within communities, links between communities, links between different institutions, and links between governments and their citizens. In Armenia, high levels of social capital within village communities have assisted implementation of CHI schemes (Poletti et al, 2006). However, low levels of social capital in the other three areas may make it difficult to scale up CHI schemes and increase the size of risk pools by merging schemes. People may be happy to subsidise their neighbour, but not happy to subsidize people in other villages, and they may not trust regional or national institutions with the governance of schemes. Thus, social capital may be a constraint on scaling up CHI schemes.

### ***Efficiency***

The administrative cost of running schemes is often determined by the size and complexity of the schemes and the effectiveness of management procedures. Administrative costs have been estimated to be between 5-17% of the total costs of CHF schemes (Bennett et al, 1998). This compares unfavourably with social health insurance schemes in Europe, but is similar to those of SHI schemes in Latin America and Africa. In some West and Central African schemes administrative costs are 5-10% of total annual expenditure (Bennett et al, 2004). Management costs of the Thai Health Card are reported to be higher than for the compulsory social security scheme for formal sector employees (Pannarunothai et al, 2000).

Other studies suggest that CHF can result in better allocation of resources ensuring access to services and drugs that meet communities' needs (McPake et al, 1993). Examples include the CMS in China and the Dana Sehat in Indonesia (Hsiao, 2004). The introduction of CHI in Rwanda also led to more efficient use of drugs and staff (Schneider and Diop, 2001).

In contrast, Ekman (2004) found no evidence that CHI improved efficiency, and others suggest that technical efficiency is frequently undermined by a failure to define cost-effective packages of care or introduce effective purchasing mechanisms (Bennett et al, 1998; ILO, 2002). Capitation-based remuneration is recommended as a cost control measure. It is recognised that addressing moral hazard is crucial to controlling costs in CHI

schemes. There is a consensus that measures to address consumer moral hazard, such as membership on a family basis, or a waiting period between joining a scheme and becoming eligible for specified benefits such as obstetric care, must be introduced if schemes are to be sustainable (Bennett et al, 1998). Provider moral hazard is likely to be a problem if providers are paid on a fee-for-service basis, although some suggest that even in a fee-for-service system such as Germany's, some authors suggest that moral hazard and costs can be controlled via political pressure and technical measures, although this has not been achieved to date (Barnighausen & Sauerborn, 2002).

The Nkoranza Health Insurance Scheme in Ghana illustrates how failure to integrate primary care services into hospital-oriented schemes undermines efficiency, and contributes to lower participation (Atim & Madjiguene, 2000). Similarly, in Thailand and Vietnam local PHC services are not covered by the community financing schemes, which increases access costs for users.

CHF schemes often rely on volunteer labour, which is not included in estimates of administrative costs. Such volunteer input may be difficult to sustain as schemes are scaled up, which could increase costs.

There is evidence that improving drug procurement, distribution and prescribing can result in cost savings of 40-60% and improve drug availability in health systems (Oliveira-Cruz et al, 2001). Recognised strategies to improve procurement and prescribing include: the use of essential drug lists, which requires harmonisation with government policy; procurement via competitive tendering; improved storage and distribution; and systems to reduce theft and waste (Enemark et al, 2004).

### ***The importance of government stewardship***

Political stewardship emerges as particularly important in expanding the coverage of community financing schemes. In Japan and Germany, government action was essential in expanding and consolidating community financing schemes and integrating them with the broader health financing system. This role included: enacting supportive legislative and regulatory frameworks which defined policy objectives, the scope of services to be covered and quality standards; and consistent financial support. Finally, when the schemes became more ambitious in their scope, legislation establishing mandatory membership and provision for cross-subsidisation was enacted.

The Cooperative Medical System (CMS) in China also illustrates the importance of government support (Shi, 1993). In the 1980s, political and financial and political support for the CMS was withdrawn by the central government, and local financial resources diminished with the demise of the collective system. As a result, the scheme's coverage fell from over 90% to only 8% of the rural population by the mid-1990s. mainly due to the loss of political commitment and state financial support (Hsiao, 2004).

In Thailand there has been long-standing central government involvement in community financing. This has resulted in increasing integration between schemes and the public health system at the policy level, at the service delivery level, and in terms of public health financing and management (Pannarunothai et al, 2000). The Health Card scheme has been integrated with the management structure of the public health system – first at the district level, then regionally and provincially – in order to increase the size of risk pools, and to

address variable quality of fund management. This process improved the schemes' access to technical and managerial expertise and enabled them to develop inter-regional risk pooling and re-insurance, although there remains a recognised need for further capacity building in actuarial accounting and risk management. However, failure to integrate multiple government-supported risk pools (the Health Card scheme, publicly funded care for the elderly and children, government insurance schemes for state employees) undermines both efficiency and equity (Supakankunti, 2000). It increases administrative costs, can lead to cream skimming, and makes it difficult to assess whether the subsidies are equitably channelled through the different schemes.

In Tanzania, community financing has also been incorporated into national health policies and reform strategies. For example, user fees have been introduced concurrently with the establishment of Community Health Funds (CHF) which are prepayment schemes for primary care services targeted at the rural population and the informal sector (Chee et al, 2002). This ensures that people have an incentive to join the schemes to avoid paying at the point of use. The objective from the outset was that the CHF will be scaled up nationally, and the schemes have been integrated into the management structure of the public health system. However, this approach has been hampered by a lack of capacity of the District Health Management Teams to provide supervision and technical support, particularly in the areas of financial management and health information systems. The top-down approach to integration has also undermined community participation in managing the CHFs; it is recognised that this is essential for further scaling up. Similarly, in Ghana the government's drive to introduce the National Health Insurance Act (2003), mandating that all districts establish CHI schemes, has not been supported by developing the necessary health system capacities (Atim C, et al, 2001).

The integration between CHF schemes and government institutions or services at a managerial level can also encounter problems related to trust, accountability and legitimacy. For example in Vietnam, community management structures and their close links to government has lead to negative perceptions of the schemes; suspicion of state involvement has been identified as a constraint to increasing membership (Jowett et al, 2004).

### **Scaling-up community financing: determinants of success**

Based on a synthesis of contemporary and historical country experience, this paper seeks to assess the significance of community financing as a financial and organisational basis for expansion of financial protection and access to care. Developing and scaling up community financing is dependent on the socio-economic and political context in a country and a model successful in one context may not be easily replicable elsewhere (Poletti et al, 2006). Nevertheless, certain factors appear to be associated with sustainable schemes that increase coverage and effective financial protection. The discussion that follows is structured around Carrin and James's framework of factors that facilitate expanded coverage via social health insurance (Carrin and James, 2005).

The first factor is rising incomes due to economic growth. Higher incomes are important because people are more likely to be able to afford contributions to voluntary financing schemes and increased government tax revenues can support scaling up financially and subsidise participation by the poor. Korea, Germany and Japan illustrate the importance of relative affordability and subsidies for achieving good health insurance coverage. However, the examples of China, Thailand, and Vietnam, as well as that of the Dana Sehat schemes in

Indonesia suggest that even at lower income levels community financing mechanisms can contribute significantly to increasing coverage, provided schemes are well designed, and there is sustained government commitment and subsidies.

Addressing the risk of scheme bankruptcy as a consequence of unpredictable fluctuations in demand is also important if scaled up schemes are to be financially sustainable. Government or donor underwriting is a common solution. Another recently promoted approach is reinsurance, whereby individual schemes insure against such risk (World Bank & ILO, 2002), although this strategy may be difficult to implement in countries with underdeveloped capital markets and financial institutions. Both mechanisms would need to deal with potential negative impacts on efficiency; if a third party will cover budget deficits, there is less incentive to control costs.

The characteristics of the population to be covered – including its age structure, socio-economic characteristics, and the relative sizes of the urban and rural populations – are also important. The relative sizes of the formal and informal sectors is a major determinant of the feasibility of introducing social health insurance (Carrin & James, 2005); it is probably also a significant constraint to scaling up CHI mechanisms. The urbanisation that accompanies growth may increase the formal sector and population densities; both make collection of contributions easier and higher population densities reduces the cost of delivering services. Informally employed and rural populations in sparsely populated areas are more difficult to provide services for and to include in insurance schemes; including them in national insurance mechanisms requires significant subsidies and appropriate scheme design. The age structure is important not only because the dependency ratio affects per capita resource availability, but also because it affects patterns of morbidity. In many settings, chronic diseases – which are typically more prevalent in older age groups – pose significant challenges to community financing schemes because they increase demand and therefore costs.

Scaling-up community financing schemes is also constrained by health system deficiencies (Davies & Carrin, 2001). In many settings the care that can be provided under such schemes is limited by existing capacity, including shortages of human resources, poor infrastructure, and inadequate supplies of drugs and consumables. Legislative constraints on the roles of health practitioners – such as nurses not being allowed to prescribe drugs and specialist monopolies on certain types of service provision – limit the feasibility of increasing benefits packages (Poletti et al, 2006).

Sufficient managerial and technical expertise is also central to scheme development and expansion. Community health insurance schemes often face problems as a result of inadequate scheme design, and weak institutional and management processes (Bennett et al, 1998). For small schemes, NGOs often provide vital technical support; developing local capacity in key areas is seen as essential to ensuring institutional sustainability once external support is withdrawn (Preker et al, 2002). In China a lack of organisational capacity and policy support from higher policy level were seen as a reason for the failure to successfully reinstitute the Cooperative Medical System (Hsiao, 2004). Poor organisation and managerial failures also explain the weak performance of the voluntary CHI in Vietnam (Jowett & Thompson, 1999), and for problems with the introduction of inter-regional risk pooling and scaling up the Health Card scheme in Thailand (Pannarunothai et al, 2000). As risk pools expand and the packages of services covered by schemes increases, demand for (indigenous) managerial and technical expertise increases; scaling up must be accompanied

by investment in these areas. Setting up umbrella organisations could provide the necessary technical expertise to support the scaling up process (Bennett et al, 1998).

High levels of social capital and solidarity are necessary both at the scheme level and in scaling up. Trust in the scheme management and a belief that entitlements will be received, is essential if people are to be encouraged to participate in voluntary schemes. Social capital (across professionally or geographically-defined groups) also underpins acceptance of cross subsidisation. Community ownership gives legitimacy to the schemes as representatives of communities able to facilitate their input into the evolution of the health policy agenda. Low levels of social capital, due to migration, heterogeneous populations, and a distrust of government institutions, can hinder scheme development.

The importance of political stewardship and good governance in expanding access to care and financial protection has been increasingly recognised in recent years (WHO, 2000). Harmonising the objectives of community financing with the national health policy objectives seems to be important as community financing schemes grow. Political commitment by governments, translated into the development of appropriate legislative frameworks and sustained financial support, was central to the move towards universal coverage in Japan, Korea, and Germany; it has also been important in contemporary low-income settings such as Thailand for making progress towards this goal. Generally, as membership of schemes increases and a transition to universal coverage becomes feasible, compulsory membership is mandated in order to maximise risk-sharing and cross subsidy. In many cases, donor commitment is essential.

Some authors point out that even if technical capacity is adequate, poor governance or prescriptive government-led “top-down” approaches may undermine scheme transparency, accountability, local ownership and responsiveness to needs (Ranson & Bennett, 2002). Scaling up community schemes in these circumstances and linking it to the wider system may not produce the desired benefits, such as expanded coverage and community ownership (Bennett, 2004).

Integration of community financing with existing health systems and policies appears to be a prerequisite for successful scaling up of CHI and increasing benefits packages. However, although integration of financing flows and service provision can help to avoid duplication and achieve economies of scale, donor-supported schemes often operate in parallel to the government services. The examples of the Thai Health Card and the CMS in China show that integration is central to expanding coverage, increasing the scope of services, and improving efficiency and sustainability. In Thailand, inter-regional risk pooling, re-insurance and capitation-based payment to providers were possible only as a result of the significant technical capacity within the public health system. On the other hand, voluntary schemes can bring innovation and skills to the broader health system as illustrated by the development of Germany’s social insurance.

Close links between community financing schemes and other services are also needed because new technologies, longer treatment regimens for HIV/AIDS and TB and rising chronic disease burdens in developing countries pose complex demands for health services that involve different types of health professionals at different levels of care. More efficient drug purchasing, distribution and rational prescribing that could significantly reduce costs and improve accessibility of drugs, also requires the development of integrated systems (Foster, 1991).

A failure to develop mechanisms to place schemes within the wider health system and ensure that scheme level objectives complement national objectives may undermine progress towards increased equity nationally (Bennett, 2004), and via limiting access to public health sector financing and expertise decrease institutional and financial sustainability of the schemes. However, the process of integrating community financing with the mainstream system can create complex technical and administrative demands, as seen in Thailand. As coverage increases and smaller schemes are merged into larger risk pools, there are likely to be demands to develop new financing mechanisms (e.g. capitation-based subsidies, re-insurance, and inter-regional risk pooling). New remuneration mechanisms may also be needed to link provider payment to the quantity and quality of services delivered. These developments would require building integrated health information systems, defining basic care packages, implementing quality control measures and establishing independent regulators, as well as institutionalising the separation of purchaser and provider functions.

## **Conclusion**

Voluntary community financing schemes are a useful mechanism in underfinanced health system with limited population coverage, providing some financial protection and promoting access to care for vulnerable populations. History suggests that schemes can achieve sustainability, and over time become mainstream providers of insurance for a significant proportion of the population.

The expansion of community financing in low- and middle-income countries has raised questions about its potential contribution towards achieving the long-term policy objectives of universal access and financial protection. In some cases scaled-up and consolidated voluntary insurance schemes have gradually increased coverage across groups and sectors, with the process culminating in a government-led drive to compulsory social health insurance (Germany, Japan, Korea). Other countries are taking steps towards these policy objectives through building on the strengths of community financing models, in particular their ability to reach poor and vulnerable groups (e.g. the health card scheme in Thailand). Improved technical capacity and effective targeting mechanisms will be crucial if expanding coverage is to include the poorest.

In most settings, scaling-up is a non-linear process dependent on socio-economic development, strengthening health system capacity, and good governance at local and national levels. In low-income countries, expanding coverage is an ongoing challenge that occurs in irregular small steps involving pilot projects and experimentation to develop pragmatic solutions to chronic resource shortages.

Health financing in developing countries is dependant on some mixture of tax-based financing, mandatory insurance for the formal sector, private insurance, CHI, formal user-fees and informal contributions. Policy makers should consider what contribution each mechanism can make to realising the overarching objectives of universal access to care and financial protection. Community financing may have a role to play in progressing towards these objectives. However, they can be achieved via different combinations of financing mechanisms, and which combination is most appropriate will vary by setting and over time. While community financing could prove useful in countries with low public expenditure on health and high out-of-pocket payments at the point use, it is increasingly recognised as an

intermediate response to expanding risk protection to the entire population. The ultimate goal remains the creation of a risk pool based on the entire population that allows significant levels of cross-subsidy and generates sufficient funds to ensure universal access and financial protection.

Many European countries have moved from small-scale voluntary schemes towards national social insurance, or a mix of tax- and insurance-based financing. Other countries in Eastern Europe and the former Soviet Union replaced their tax-based systems with compulsory insurance systems in the early 1990s, as a part of radical public sector reform, while maintaining the already high population coverage. (Bonilla-Chacin et al, 2005). However, tax-based systems can also provide for universal coverage as the cases of New Zealand, Australia, the UK and Denmark illustrate.

A focus exclusively on community financing as a more equitable alternative to user fees, does not allow for consideration of the role of different financing mechanisms that may facilitate progress towards universal coverage. Harmonising policy objectives and coordinating financing mechanisms requires broad consensus between stakeholders with different interests and constituencies. Necessary trade-offs between objectives – for example between the scope of care package and affordability of contributions; between relying on community management and government involvement - may prove to be unpopular politically.

As discussed earlier, there is a tendency to examine community financing in isolation, focusing on the extent to which scheme-level objectives are met. However, in terms of overall equity and efficiency more research is needed on how CHI mechanisms interact with the broader health system and whether they do more harm than good. Schemes may benefit their members rather than the poor who often cannot afford to join, or they may capture public subsidies at the expense of less popular areas such as prevention.

In summary, there is a growing interest in scaling up community financing. The utility of such a strategy should be measured in terms of its contribution to realising the overarching health policy objectives of expanding access and financial protection for the whole population. In many contexts, CHI will be able to make a useful contribution towards these objectives, especially if schemes can be integrated with the broader health system in ways that increase efficiency, coverage and quality of services. As countries develop economically and socially, and as governance improves and health systems evolve, a different mix of taxation, social insurance, community financing and risk-adjusted private insurance will be required to progress towards universal access and protection. Research is needed not only on best scheme design but also on what the appropriate role for community financing is in particular contexts, to identify context-specific determinants of successful expansion.

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