The desirability and feasibility of scaling up community health insurance in low-income settings—Lessons from Armenia

Tim Poletti, Dina Balabanova, Olga Ghazaryan, Hasmik Kocharyan, Margarita Hakobyan, Karen Arakelyan, Charles Normand

London School of Hygiene and Tropical Medicine, London, UK
Oxfam (GB), Armenia
Support to Communities, Armenia
Trinity College, University of Dublin, Ireland

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Abstract

There is growing evidence that community financing mechanisms can raise additional revenue, increase equitable access to primary health care (PHC), and improve social protection. More recently there has been interest in scaling up community financing as a step towards universal coverage either via tax-based systems or social health insurance. Using key informant interviews and focus group discussions, this study sought to assess the desirability and feasibility of scaling up community health insurance in Armenia. The results suggest that there is broad-based political support for scaling up the schemes and that community financing is synergistic with major health sector reforms. High levels of social capital within the rural communities should facilitate scaling up. Existing schemes have increased access and quality of care, but expansion of coverage is constrained by affordability, poor infrastructure, and weak linkages with the broader health system. Long-term subsidies and system-building will be essential if the expanded schemes are to be financially viable and pro-poor. Overall, successfully scaling up community financing in Armenia would depend on addressing a range of obstacles related to legislation, institutional capacity, human resources and resistance to change among certain stakeholders.

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Introduction

Community financing as a response to public health financing deficits

Revenue raised by taxation in low-income countries averages 14% of GNP compared to 31% in high-income countries (WHO, 2001). As a result there is a health sector financing gap estimated to range from 25 to 50 billion US$ to over 100 billion US$ (Jha & Mills, 2001; Preker, Lagenbrunner, & Suzuki, 2001). The
widespread introduction of user fees in an attempt to bridge this gap has increased out-of-pocket expenditure, led to inequity in access to care and undermined financial protection against the cost of illness (WHO, 2000). Formal user fees have failed to raise significant additional revenue or improve efficiency and can promote perverse incentives, bureaucracy and corruption (Gilson, 1997; Kutzin, 1995; McPake, Hanson, & Mills, 1993). Catastrophic health expenditure due to user fees is a major cause of poverty in the developing world (Xu et al., 2003). Strengthening the financial protection provided by health systems to decrease catastrophic expenditure is increasingly seen as central to poverty reduction strategies (Claeson et al., 2001).

Health systems financed through taxation or compulsory social health insurance (SHI) can achieve high levels of risk pooling and provide universal coverage (Wagstaff, Watanabe, & van Doorslaer, 2001). However, instituting such mechanisms in low-income settings has proved difficult, and the poor in developing countries are largely excluded from risk sharing arrangements that ensure access and financial protection (Schieber & Maeda, 1997). Community health financing (CHF) schemes, such as community-based health insurance (CHI) that allow for risk pooling, or schemes that spread out the cost of health related expenditure over time, protect against the impoverishing effects of unpredictable expenditure (Ranson, 2002).

Central to most definitions of CHF is “the predominant role of collective action in raising, pooling, allocating or purchasing, and supervising the management of health financing arrangements” (World Bank, 2004). CHI schemes are increasingly common in countries where public expenditure on health care is less than 50% of total health expenditure (Carrin et al., 2001). There is growing evidence that community financing can increase access to care and resource mobilisation (Jakab & Krishnan, 2001; WHO, 2001; World Bank, 2004), and protect low income populations against the costs of illness (Hsiao, 2001; Jakab & Krishnan, 2001; Jütting, 2001). The Commission on Macroeconomics and Health recommended that user payments should increasingly be channelled via such mechanisms (WHO, 2001).

However, a number of authors argue that the evidence base is insufficiently robust to support definitive conclusions about financial protection, the impact of schemes on quality of care and efficiency, or the ability of schemes to increase access (Bennett, Creese, & Monasch, 1998; Ekman, 2004; ILO, 2002). A recent analysis has suggested that the achievements of CHI in terms of the three sub-functions of health financing systems (revenue collection, pooling of resources, and purchasing) have been modest (Carrin, Waelkins, & Criel, 2005); the major constraints they identified to participation in CHI schemes were affordability, trust in scheme management, the attractiveness of benefits packages, and the quality of care offered.

Some authors have suggested that CHF should be regarded as an intermediate stage towards universal risk protection through some mix of tax-based financing, social health insurance and private health insurance (Carrin et al., 2001). Historic examples of this have been described in Germany, Japan, and Korea where community financing has been scaled up and incorporated into national social health insurance (Barnighausen & Sauerborn, 2002; Carrin & James, 2005; Ogawa, Hasegawa, Carrin, & Kawabata, 2003), but there is little experience of scaling-up such schemes in low-income settings.

In Armenia, Oxfam GB instigated CHI schemes for inaccessible rural villages in the early 1990s. They have expanded their geographical coverage steadily, and now support schemes in 128 villages, which is about 15% of rural communities, and covers a population of 80,000. Prior to these schemes, symptomatic treatment of acute illnesses and first aid was provided by nurses via village-based health posts. However, the health posts had been run down, lacked essential supplies, and the nurses were poorly paid, unsupported, and had had no training opportunities. Oxfam’s schemes addressed these issues and increased access and quality of care (Oxfam, 2000; Sloggett, 2002).

In Armenia, despite significant health sector reform since independence, inequities in access to care remain. For example, in 1999, utilisation of government financed health services by the richest 20% of the population was 3 times higher than that of the poorest 20% (World Bank & International Monetary Fund, 2003, Chapter 7). To address these inequalities and facilitate the introduction of social health insurance in the future, there has been growing interest in Armenia in scaling up CHI nationally, and integrating it with the broader health system.

Analytical frameworks have been developed to assess the feasibility of scaling up CHI (Hanson, Ranson, Oliveira-Cruz, & Mills, 2001; Ranson & Bennett, 2002), or introducing SHI (Ensor, 1999; Normand & Weber, 1994; Van Ginneken, 2003).
Ensor highlights the importance of structural characteristics—including the proportion of the population employed in the industrial sector, population density, the income of a country and the rate of economic growth—as important determinants of the feasibility of collecting revenues via payroll taxes; in addition transitional countries are affected by ongoing economic change that result in features—such as the increasing relative size of the informal sector, and difficulty retaining human resources in the public sector—which further complicate the introduction of SHI. Van Ginneken (2003) makes similar points, arguing that prior to a move towards SHI, policy makers should consider the health sector’s capacity, the level of political commitment, and the economic, political and socio-cultural situation.

Ranson and Bennett’s framework (2002) outlines the strategies governments can adopt to improve the efficiency, impact and sustainability of CHI schemes including: forging a consensus on their policy objectives; overcoming environmental constraints; addressing the generic problems with insurance; and critically assessing scheme design and management structures and the potential for integration with the overall health system.

To highlight the importance of considering the desirability and feasibility of scaling up CHI, this paper adapts a framework developed by Normand and Weber which outlines three phases: a decision making phase (during which consideration of the constraints outlined in Ensor and Van Ginneken’s frameworks is important); a design phase; and an implementation phase (Fig. 1). This paper will focus on operationalising the decision making phase using Armenia as an illustrative case study.

### Objectives and methods

The study examined whether scaling-up community health insurance is feasible and desirable in Armenia given capacity and funding constraints, societal values and the existing policy environment. The acceptability of the schemes from a community perspective and the determinants of participation were also examined. Key informant interviews using semi-structured questionnaires—18 in Yerevan and 12 in the regions with schemes—were used to examine the desirability and feasibility of scaling up CHI. Issues examined included: equity, efficiency and quality of care; the scope of the care package; provider payment mechanisms; and financial sustainability. Respondents included: high-level government officials; heads of hospitals and polyclinics; family physicians; major donors; academics and consultants advising on health sector reform; NGOs involved in developing community financing models; health post nurses; and heads of village councils. Following a grounded theory approach, topics were covered in the interviews until saturation was reached (Strauss & Corbin, 1998); subsequent interviews focused on filling gaps in the data. In line with current practice in qualitative research, the interviews and focus group discussions were transcribed and analysed thematically (Barbour & Kitzinger, 1999; Green & Browne, 2005). Triangulation was used to check the validity of conclusions.

Population perspectives on CHI were explored through focus group discussions (FGDs) in three villages with Oxfam schemes that had low, intermediate and high participation rates (10%, 40% and 90%). There were two FGDs per village (one for members, another for non-members), with 8–10 respondents recruited according to pre-defined selection criteria to ensure that the groups were broadly representative in terms of gender, age, and health status. A discussion guide outlining the main

![Fig. 1. Scaling up community insurance.](image-url)
topics to be covered was developed and piloted. An experienced Armenian moderator facilitated the discussions, which were monitored by the British team through simultaneous translation. The factors influencing families’ decisions to join and stay in schemes that were studied included: village size and location; perceptions of quality and value for money; levels of social capital (via questions adapted from the World Bank’s Social Capital Assessment Toolkit); attitudes towards risk and risk pooling; and patterns of service utilisation.

In each village health post, quality of care was assessed through proxies such as appropriateness of infrastructure and equipment, drug availability, record keeping, availability of reference materials, and clinical procedures. Results were recorded on a quality of care checklist.

Results

The fit of community insurance with health policy objectives

Community insurance was seen by KIs to be compatible with the government’s health policy objectives, and synergistic with key government and donor-supported reforms such as the World Bank’s Primary Health Care Development Programme, and USAID initiatives to increase access to primary health care (PHC) for rural populations. Many KIs reported that the government has significantly increased the budget allocation for PHC. However, other KIs emphasised that the focus of reforms is at the ambulatory level—a PHC facility in a population centre of over 2000 people, staffed by a doctor. Little attention has been paid to health posts—the level at which the CHI schemes operate—even though they are the most easily accessible health care facilities for rural communities.

There was no consensus about the health policy objectives that community insurance should serve. Central-level KIs suggested that CHI should raise additional funds, and many saw a role for CHI to provide a safety net to the poorest for whom the public system cannot guarantee basic care. Most NGO and village-level KIs felt that CHI should promote community involvement in PHC and facilitate community input into policy debates. Other objectives suggested included ensuring that the state and communities share responsibility for health care provision. The government has enacted legislation for the introduction of social health insurance and some KIs felt that CHI could facilitate its introduction.

The focus group participants opposed mandatory membership: “The schemes should be voluntary; compulsion is from the Soviet era.” (FGD, non-members, low participation village). This rejection of compulsion would constrain the transition from voluntary CHI to compulsory social health insurance in Armenia in the future. However, it does not constrain the introduction or scaling up of voluntary schemes.

Key informants argued that it will be important to ensure compatibility between community insurance and legislative frameworks. Legislative issues identified included: the legal definition of providers’ clinical roles; accreditation of facilities and providers; clarification of the legal status of health facilities; prescribing authority; and legislation on quality of care, reporting and standards of clinical practice.

Assessing desirability of scaling up community insurance

Equity considerations

Coverage of community-run voluntary schemes averages 25% (Bennett et al., 1998), which limits their ability to achieve positive equity impacts. The cost of membership is a barrier to the poorest (Bennett & Gilson, 2001; Criel & Waelkins, 2003; Jakab et al., 2004, Chapter 5); affordability and availability of subsidies for the poor are key determinants of scheme equity (Hsiao, 2004). If targeting is ineffective, the benefits of CHF may be captured by the better off (World Bank, 2005).

In Armenia, 40% percent of villagers were members of Oxfam’s schemes at some stage over a twelve month period (2000–2001), although this varies between 10% and 90% across villages; around 20% were members at a given point in time (spring, 2001). This compares favourably with international experience, but is of concern because low participation undermines risk pooling. Despite exemptions for the poorest (who account for 10% of members), CHI is mainly reaching the middle-income quintiles (Sloggett, 2002).

In rural Armenia exemption mechanisms based on income would be difficult to implement because of socio-economic homogeneity. However, the existing targeting mechanisms of Oxfam’s scheme—whereby community representatives nominate those who are eligible for exemption, and reassess
exemptions regularly—is accepted by the communities as being equitable.

**Efficiency and sustainability considerations**

A previous financial evaluation of the schemes demonstrated that the average cost per year for each nurse-run village health post was 4651US$ (Sloggett, 2002), and concluded that the schemes are a cost-effective way of delivering PHC to isolated rural communities in Armenia. However, cost recovery rates are low (11% of recurrent costs; 80% of drug costs), and despite a quarterly premium of only 2000 Armenian Drams per family (4US$), affordability is currently a major factor in the low take-up (Oxfam, 2000; Sloggett, 2002), a conclusion supported in the focus group discussions.

Many KIs recognised that increasing the scope and coverage of the schemes was constrained both by available subsidies and by the amounts that contributions could be expected to raise. Most thought that it was unlikely that the government would subsidise community insurance: “Available funds are already being channelled into priority areas that are inadequately funded currently anyway.” (KI, central level). However, as other KIs pointed out, the government already subsidises the schemes, because it pays the salaries of the nurses. In theory it is also responsible for other costs under the basic benefits package. If the government was able to meet it existing obligations under the basic benefits package, and ensure that budgeted funds reach the health post, this would provide a significant subsidy to the schemes.

Several regional and NGO KIs suggested that local government could contribute funds to help meet the health needs of the poorest. However, most KIs and FGD participants felt that the most likely source of subsidies for community insurance were NGOs and donors currently engaged in Armenia; they recognised that this would mean that the longer term survival of the schemes would be dependant on ongoing external subsidy.

Ensuring sustainability also requires that costs are controlled as schemes are scaled up (Jakab & Krishnan, 2001). A number of KIs suggested that drug procurement costs could be lowered as CHI is scaled up; current drug procurement and distribution mechanisms in the state-funded health system are fragmented and inefficient, with facilities buying their own drugs from a wholesaler or pharmacy. KIs suggested that there is scope to realise significant savings—through more cost-effective prescribing and procurement based on an essential drug list and the use of generic drugs, as well as centralised procurement via competitive international tendering—a view that is supported by the literature (Enemark, Alban, & Vazquez, 2004; Oliveira-Cruz, Hanson, & Mills, 2001). Armenia has an Essential Drug List which could be used as the basis for these two strategies, although in practice it is not widely used, and there is resistance to regulation of prescribing autonomy. A number of KIs reported that newly developed family medicine treatment protocols have had little impact on purchasing or provider behaviour.

Addressing moral hazard by discouraging over-use of services is central to cost control, and retaining the family as the basis of membership if CHI is scaled was considered a reasonable first step. If the benefit package is expanded to include hospital care additional measures would be needed; suggested options included co-payments as well as waiting times between joining a scheme and becoming eligible for specified benefits. Both options are supported in the literature (Bennett et al., 1998).

**Considerations related to quality of care**

Many KIs believed that CHI has increased the availability and quality of PHC, and that villages not covered by schemes could benefit significantly from national scaling up. Proxy measurement of quality of care revealed no significant differences between the health posts which could explain the differing participation levels. However, it is difficult to draw firm conclusions on the importance of quality of care as a determinant of membership on this basis. The FGDs suggested that perceived poor quality of care and the narrow scope of services covered act as deterrents to membership for some people: “You pay a lot and get lower quality care than you would in the hospital.” (FGD, non-members, low participation). However several regional level KIs suggested that this was not always the case; a highly regarded nurse can promote participation. Availability of free essential drugs also contributed to a perception of good quality of care, although not all FGD participants were satisfied with the range of drugs on offer: “The reason that I don’t join the scheme is that they don’t have all the medication that I need.” (FGD, non-members, low participation village). Other participants thought demands for more drugs were unrealistic.
Assessing feasibility of scaling up community based insurance

Administrative constraints

The literature highlights the importance of technical support—to develop management capacity and expertise in scheme design—if community financing is to be scaled up successfully (Bennett et al., 1998); setting up umbrella organisations to provide such support is a suggested solution (Jha & Mills, 2001). After ten years of CHI in Armenia there is considerable expertise in managing community insurance schemes, and Oxfam has established foundations in two regions that could potentially play a technical and managerial support role as CHI is scaled up. Health information systems—which are central to effective financial management, monitoring and lesson learning—are weak in Armenia. They will need to be strengthened if scaling up is to be successful; USAID have already established pilot information systems at PHC level, which provides a base on which to build.

Compatibility of CHI with health financing mechanisms

In Armenia, formal and informal out-of-pocket payments account for 60% of total health expenditure (Hovhannisyan, Tragakes, & Lessof et al., 2001). Most respondents reported that informal payments—defined as a cash or monetary transaction for a service that users are entitled to (Balabanova & McKee, 2002)—are endemic, especially for hospital care. They are a significant burden on families and a barrier to accessing care:

Women are having home deliveries because they cannot afford to pay the informal payments that are required if you deliver in the hospital. (KI, village level)

Formal user fees provide an incentive to join community pre-payment schemes to get protection against having to pay them; informal payments undermine the incentive to join schemes because CHI provides no protection against them. KIs recognised that persisting informal payments would undermine scaling up community financing, reduce sustainability and constrain expansion of coverage. They also recognised that eliminating them would be difficult:

Addressing the issue will require improved salaries for doctors and formalising fee-for-service payments. There will be significant resistance to changes that threaten doctors’ income from informal payments. (KI, central level)

KIs reported that historically provider payment mechanisms were salary based, and not linked to the quality and quantity of services provided and provide no incentive for improvements in quality of care or efficiency. However, USAID-supported programmes have piloted performance-related financial incentives and quality assurance mechanisms which could be incorporated if CHI is scaled up.

Armenia’s state funded basic benefits package rarely functions as it is intended—mainly due to inadequate funding—and budgeted funds often do not reach peripheral PHC facilities:

In theory health posts were supposed to be financed via existing per capita funding arrangements; in reality they received little or no funding, and many health post nurses were not even receiving their salaries. … There is a lack of knowledge and understanding at higher policy levels about the reality with respect PHC services and living conditions in rural areas. (KI, central level)

To address these deficiencies, scaling-up community insurance will need to be accompanied by improved disbursement mechanisms and the mobilisation of significant new resources, especially in rural areas.

Feasibility of increasing service delivery at the health post level

In most rural areas, preventative care generally is lacking (immunisation is a notable exception) and chronic disease care is inadequate. The recent increase in funding for PHC has led to improvements: “There is a higher probability that people can get access to PHC for free.” (central level KI). However, there remains a widely recognised need to further increase the scope and quality of services at the health post level. Increased integration with higher levels of care—through out-reach visits by specialists and general practitioners—and the introduction of nurse practitioners were seen as ways to achieve this:

There is a need to empower nurses to deliver increased access to PHC services. … There is a need for family medicine trained nurses at peripheral levels to help correct the human resource deficits. (KI, donor agency)
However, resistance to this idea from specialists was anticipated:

... there is a powerful community of doctors who would resist the implementation of this based on concerns about losing patient contact, quality of care issues, and also the loss of income that such change would lead to. (KI, central level)

Other constraints identified included the knowledge and skills of the nurses, and legal constraints that restrict the type of services nurses can deliver and the drugs they can dispense. KIs pointed out that increasing the scope of services at health posts would require large scale retraining and investment in infrastructure, although it was noted that initiatives funded by the World Bank and USAID are already addressing these needs. Other suggested solutions included incorporating core PHC clinical skills into the curriculum for new nurses, and using the re-training programmes developed by World Bank’s PHC reform project. Addressing the broader human resource problems such as urban/rural imbalances and ensuring that there are no legislative barriers to the introduction of family medicine were also seen to be important.

**Integrating community financing with the broader health system**

Better integration between the community financing schemes and the broader health system was seen to be important if scaling up proceeds. Improved referral procedures and a clearly defined gate-keeping role for general practitioners were frequently cited as useful strategies for achieving this. The use of a shared-care model—under which doctors would provide overall clinical management but nurses would be responsible for routine monitoring and drug dispensing—was also suggested. Many KIs supported the idea of outreach visits as a way of increasing access for rural populations to specialists and general practitioners. It was also suggested that the supportive supervision model initiated by USAID-supported pilot projects could facilitate the integration of the schemes.

**Compatibility with values, expectation and social capital**

There was a consensus that any expansion of the schemes should aim to cover isolated rural communities. Several KIs also suggested that there could be a place for CHI in urban areas with significant concentrations of poverty.

There is a persisting belief that health care should be provided by the state, although this attitude is changing. Insurance is a relatively novel mechanism for financing health care in Armenia—the dominant model is tax-based—and some central level KIs felt that a poor understanding of insurance would hamper scaling-up CHI: “The population lacks a clear understanding of insurance and the need to pay in advance to ensure that they can get health care when they need it.” (KI, central level). However, the growth of existing CHI schemes suggests this is not insurmountable, and it is increasingly accepted that for the foreseeable future people will have to take some responsibility for meeting their own health care needs because there are insufficient public funds. A strong consensus from the focus group discussions was that compulsory membership of CHI was neither acceptable nor feasible because people are too poor: “If we don’t have money how can you make us pay?” (FGD, non-members, high participation).

Social capital is seen by many authors to be a prerequisite for initiating and sustaining CHI schemes (Hsiao, 2004). The FDGs revealed high levels of social capital; communities in isolated rural villages in Armenia are close knit and supportive environments (“People are able to borrow money.”; “People support each other in times of need”). The poor and socially disadvantaged were seen as deserving of assistance, and there was support for exemptions or subsidies for these groups. The FGDs participants had limited trust in the government, and the majority of NGO KIs and FGD participants, as well as many central KIs, felt that CHI schemes should remain independent. However, several KIs envisaged a regulatory role for the government, such as a need for government-mandated guidelines for expanded community insurance in order to ensure that they are compatible with overall health sector objectives and reforms.

**Feasibility of increasing benefits packages and contribution levels**

The services that are accessible to rural communities under the basic benefits package in Armenia are limited, and there is little protection against catastrophic health expenditure. Although community insurance schemes aim to fill the gap, there was widespread recognition that financial constraints limit the benefits that could be offered. The existing community financing schemes provide mainly basic
PHC and first aid, and most respondents felt that the limited coverage of chronic diseases was a weakness of the schemes. There is also significant unmet demand for reproductive health care, and many KIs suggested that it should be feasible to include it in a health-post based PHC package, although others expressed concerns about the cost and local capacity:

These are not appropriate services for a nurse to deliver. Gynaecologists should do it, as ambulatory doctors and nurses don’t have the necessary skills and the population would not find it acceptable. (KI, village level)

In the FGDs some thought that the schemes should fund the cost of an expanded benefits package by charging a higher premium; others felt that increases would further discourage participation: “If people can’t afford to pay now, how will they afford to pay if you increase the premiums?” (FGD, non-members, intermediate participation). Participants in the FGDs thought that CHI schemes should offer different packages of care at different prices, and recognised that hospital cover was not feasible financially, although some suggested partial cover of hospital costs via a defined cash benefit might be possible.

Political feasibility

Most stakeholders are supportive of CHI, and donors and non-governmental organisations currently provide financial support to existing schemes. However, existing support for CHI may not translate into financial support for scaling it up, as this would require significant increases in funding and a long-term commitment. There was a consensus that the government was unlikely to commit to funding the schemes in the medium term. Health professionals at a rural PHC level were much more supportive than those at higher levels. Regional level governments were seen as an essential stakeholder in scaling up, and strengthening links with them was seen as important for overcoming the resistance of specialists. The communities themselves had an extremely favourable opinion of CHI schemes, a finding consistent with previous research (Oxfam, 2000; Sloggett, 2002):

Membership of the CHI scheme gives people access to a doctor once a month via outreach visits. ... The scheme has also improved the facilities at the health post and the availability of drugs. The scheme also gives people a sense of security; they know that care is accessible if they need it. (KI, village level)

KIs identified some stakeholders as being hostile to scaling up CHI because they derive benefits from existing arrangements. Specialists derive significant income from informal payments and existing service monopolies; scaling up CHI would increase service delivery at peripheral levels of the health system and threaten this income. Newly trained family medicine physicians reported encountering resistance from gynaecologists when seeking to provide family planning and antenatal care. Attempts have been made to ease this tension through changes to the legal and regulatory framework, but according to central level KIs more needs to be done. Resistance also exists among the managers of urban PHC facilities, owners of private pharmacies, as well as regional level SHA and MoH representatives.

Discussion

There is a growing interest in alternatives to user fees, and scaling up community insurance is increasingly seen as a step toward improving coverage and financial protection and making health services more accountable. Armenia historically had a tax-based health financing that provided universal health care, but since 1991 there has been a significant funding shortfall in the health sector and the government is considering expanding CHI nationally. Normand and Weber’s framework allowed assessment of the desirability and feasibility of scaling up successful local community insurance schemes within the Armenian context.

Before discussing the study results in detail, a few limitations have to be acknowledged. There were practical difficulties related to language and logistics which limited the amount of qualitative research that could be done. Another was that the FGDs were stratified by membership status, and not by gender or age, which would have reduced the impact of culture and local power relationships on the discussion of sensitive issues such as gynaecological care. These problems were addressed to some extent through selection criteria to ensure diversity, although including people with different socioeconomic status was difficult due to homogeneity among the rural population. Despite these qualifications, thematic data triangulation and comparing and contrasting the opinions of stakeholders
working at different health system levels suggests that the data reflects the spectrum of opinion on CHI in Armenia.

Our research suggests that in Armenia scaling up community health insurance could improve coverage, and increase funding and access to PHC, and act as an intermediate step towards social insurance. The existing schemes have increased access to PHC of reasonable quality for isolated rural communities; it also does so at a reasonable cost. Given that public financing for health care is insufficient to fund universal access—hence the heavy reliance on out-of-pocket payments—it is likely that alternative sources of health financing, including CHI, will remain important. However, there are significant contextual constraints to the existing CHI schemes that should be addressed if the model is to be scaled up nationally.

In general, CHI schemes were seen as being compatible with the government’s longer-term health policy objectives, particularly strengthening PHC, introducing family medicine and the proposed introduction of social health insurance. There was also a widespread recognition of urban–rural inequalities in terms of the quality and accessibility of PHC, which will need be addressed via increased funding for PHC. Potentially this funding could be channelled through CHI schemes nationally. However, there is little consensus on what the specific health policy objectives for scaling up CHI should be and whether expanded community insurance should be a intermediary step towards social insurance or have a more lasting role in covering vulnerable populations.

Reaching a consensus on the objectives and priorities of community health insurance schemes will be critical if they are to be scaled up, as they have significant implications for scheme design and the investment required. Developing a comprehensive CHI scale-up strategy and achieving commitment by government and donors to incorporate the expanded CHI within national health sector reforms, and providing the necessary support and funding will be critical. This should be translated into an appropriate legislative and policy framework. The qualitative research suggests the need for consensus on the trade-offs between equity and efficiency that will need to be made if the schemes are to expand access to good quality care and remain affordable.

**Desirability**

Existing insurance schemes have improved equity, and there is agreement that any expansion should focus on covering isolated rural communities. However, participation rates are limited because of affordability problems. Long-term subsidies are essential if the expanded schemes are to become both financially viable and pro-poor. The government is unlikely to provide additional funding per se, but reform of public financing for PHC to ensure that funds reach the peripheral level may offer a way forward. Another option is subsidies from regional government, combined with continuing external subsidy from donors and NGOs.

The existing CHI schemes in Armenia have improved the availability and quality of basic PHC to rural communities, but are limited in scope and have not responded adequately to the growing burden of chronic diseases. Upgrading the skills of the nurses and adjusting the legal framework to enable them to deliver chronic disease, reproductive, and ante-natal care, was seen as central to addressing this shortcoming. It is recognised that expanded schemes should be better integrated with district primary and secondary care, through shared care between health post nurses and ambulatory-based doctors, out-reach visits by specialists, and telemedicine. Quality of care could be further improved through defining quality standards, improving the regulatory environment, and developing professional quality assurance procedures. Developing treatment and prescribing protocols and incorporating them into a standard treatment manual for rural practitioners would also be useful.

**Feasibility**

Significant changes in the legislative and regulatory framework are needed to facilitate the scaling up process, such as clear definitions of the roles and responsibilities of health care providers and facilities at different levels of the health system. There is significant technical and managerial capacity within the current community financing schemes that could be tapped into if CHI is scaled up. Regional umbrella organisations should also be established to provide technical support to individual schemes.

Raising sufficient financing was the major constraint identified to scaling up. Significant subsidies would be required to ensure that they are sustainable and that the poor are included. Without increases in contribution levels, financial protection and the level of services at the health posts will remain limited. However, contribution increases are constrained by poverty and poor economic devel-
development in rural communities, and by population ageing with an increasing dependency ratio. Current resource allocations based on simple capitation underestimate the needs of the rural communities. New allocation and disbursement mechanisms are needed—such as a weighted capitation mechanism designed to benefit disadvantaged groups—to ensure that adequate funding reaches peripheral levels.

In terms of the target population, there was a consensus that poor and isolated rural communities should remain the primary beneficiaries. Given that voluntary membership of CHI schemes is the only acceptable option currently, the determinants of participation in CHI schemes in Armenia must be monitored in order to ensure that schemes adapt appropriately in ways that promote enrolment. Affordability is the major determinant of participation currently; perceived quality of care and geographical proximity to other public services are also important. Provision of outreach specialist and general practice services, and expanded service delivery at the health posts, would address these issues and ensure that schemes are perceived as good value for money. Improving quality of care and allowing for different levels of contribution for different packages of care, will also be essential for encouraging membership.

Identifying those people most in need and effectively channelling subsidies to them could be challenging if scaling up occurs, but the current exemption mechanisms managed by communities are seen as fair and accountable and could be replicated.

It was expected that community financing schemes should focus on addressing gaps in existing public provision of PHC services, and should expand the scopes of services when feasible. An expanded package should include an increased range of PHC services (chronic care, reproductive health care), with partial cover of emergency hospital related costs being the next logical extension. Currently the possibilities for increasing the scope of benefits delivered by the schemes are limited by poverty within the communities they serve. Significant subsidies would be required to increase the benefits covered to better meet population needs.

Increasing the package of benefits will also require provider payment mechanisms that reduce the incentive to over-treat or over-charge. Existing pilots of performance-related payment linked to the quality and quantity of care delivered could provide applicable lessons. Informal payments will have to be addressed because they diminish the incentives to join voluntary CHI schemes and underpin specialist resistance to CHI. There is opposition to co-payments for scheme members, although these are likely feature in any roll-out of insurance to raise additional revenue and address moral hazard. Improvements in pharmaceutical purchasing and distribution are also vital for cost containment. Useful strategies include the use of competitive tendering for generic drugs; the development of standard treatment guidelines linked to the existing essential drug list; and ongoing training and promotion of cost effective prescribing.

There is broad support among the majority of stakeholders including the government, donors, NGOs, health staff at peripheral levels of the health system and especially among the participating communities; this should facilitate scaling-up community financing. However, there is resistance to scaling up by specialists, and their legitimate concerns about quality of care have to addressed. It will be important to engage with them to reach a consensus on the shape of the future financial arrangements that would ensure their support for increasing the scope of services available at peripheral levels of the system. Other useful strategies to combat their resistance include building supportive coalitions with central and district government institutions, faculties of family medicine and general practitioners, pharmaceutical suppliers and major donors.

It may be possible to align the interests of different actors and negotiate new professional roles and boundaries between different levels of care. For example, gynaecologists may be willing to give up their monopoly on reproductive health and antenatal care in exchange for earning income from outreach services. However, there is a danger that local communities and providers, especially nurses, will be excluded from the political process and may not be equipped to participate effectively in a national process.

There is a strong preference for government financing and provision of health services. However, given the reality of severe public sector shortages, community financing is seen to be an acceptable health financing mechanism. There is a lack of trust in the existing public system, and communities and key stakeholders strongly believe that CHI schemes should remain independent of the government. This would not be incompatible with a role for the government in terms of regulation (such as mandating guidelines for national level community financing to ensure compatibility with health policy objectives) and setting quality standards.
Levels of social capital within the rural communities in Armenia are high, and the pre-payment principle is compatible with the communities' values and levels of solidarity. However, there is less solidarity between communities. This, together with a loss of transparency and community ownership, as well as mistrust of government organisations will make it hard to introduce district or regional risk pools. Suggested strategies to overcome this in Armenia include information campaigns, involvement of trusted organisations (such as a local NGO, as in the Oxfam schemes) and ensuring communities are represented on financial and administrative management boards.

Generally there is adequate capacity within the health care system to provide services via community financing arrangements. However, its existing bias towards hospital based and curative care, poor quality of care, and inefficiency will hamper successful scaling-up of community insurance. Creating an enabling environment would require rationalisation of service delivery, investment in PHC infrastructure, and re-training existing staff to enable them to deliver a broader scope of services. Investments in integrated information systems are needed to support monitoring and evaluation during scheme rollout and facilitate the introduction of performance related incentives drawing on current donor pilot projects.

There should be better integration of health care delivery at primary and secondary care through mechanisms such as coordinated training, improved supervision and support systems, and the introduction of multi-disciplinary PHC teams. This would increase the scope of care available peripherally and increase efficiency. Integration could also facilitate access for rural communities to publicly funded secondary care, and promote continuity of care, particularly for chronic diseases and maternal care.

Improved communication, coordination and partnerships between NGOs, donors and government departments involved in community financing and PHC financing will also be needed. There are opportunities for horizontal and vertical integration between CHI schemes themselves and other public sector health initiatives such as health education, and vertical prevention and treatment programmes.

In summary, the case of Armenia demonstrates that community financing could be important in covering the poorest and most vulnerable society members in lower-middle income countries as a precursor to universal coverage models. However, Armenia illustrates the complexity of scaling up locally successful donor-funded schemes, and integrating them with national financing and delivery systems. The desirability and feasibility of such a move should be examined systematically taking into account local contextual constraints; using decision making frameworks such as the Normand and Weber presented in this paper (or the other frameworks) facilitates this process. While in the short-term significant progress could be made through legislative reforms, building institutional capacity, training human resources and tackling resistance to change, international experience shows that achieving universal coverage also requires economic growth, political will and good governance.

References


Further reading

