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**Strategies to achieve universal coverage: are there lessons from  
middle income countries?**

A literature review commissioned by the Health Systems Knowledge  
Network

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### ***Background to the Health Systems Knowledge Network***

The Health Systems Knowledge Network was appointed by the WHO Commission on the Social Determinants of Health from September 2005 to March 2007. It was made up of 14 policy-makers, academics and members of civil society from all around the world, each with his or her own area of expertise. The network engaged with other components of the Commission (see [http://www.who.int/social\\_determinants/map/en](http://www.who.int/social_determinants/map/en)) and also commissioned a number of systematic reviews and case studies (see [www.wits.ac.za/chp/](http://www.wits.ac.za/chp/)).

The Centre for Health Policy led the consortium appointed as the organisational hub of the network. The other consortium partners were EQUINET, a Southern and Eastern African network devoted to promoting health equity ([www.equinet africa.org](http://www.equinet africa.org)), and the Health Policy Unit of the London School of Hygiene in the United Kingdom ([www.lshtm.ac.uk/hpu](http://www.lshtm.ac.uk/hpu)). The Commission itself is a global strategic mechanism to improve equity in health and health care through action on the social of determinants of health at global, regional and country level.

### ***Acknowledgments***

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**1. Introduction**

The desirability of providing universal coverage of health services is not in question. Few people, and no countries, would explicitly accept that universal coverage is not a desirable goal for a health system. However the mix of financing sources and provision arrangements within a universal coverage system, and the degree of equity sought and achieved, vary widely amongst countries. Countries that have yet to achieve universal coverage face many options with respect to strategies which will move them closer to universal coverage. Moreover, given that universal coverage requires cross-subsidies of various types, especially from richer groups to poorer groups, political dynamics and broader social influences are very important in affecting both the choice of strategies and the speed of progress.

In recent years, the topic of universal coverage has received greater attention. Rapidly growing countries in South-East Asia, in particular, have chosen to distribute some of the fruits of economic growth to their populations in the form of improved protection against health care costs. Countries in Latin America, which have long-standing social health insurance arrangements and considerable inequities due to separate financing arrangements for different population groups, have sought to merge arrangements or extend the benefits of better financed schemes to less well-served populations. Many African countries have debated various ways to increase health care financing. Countries which historically have achieved universal coverage, such as those of Eastern and Central Europe and the former Soviet Union (FSU), have embarked on major reforms of the funding sources and provision arrangements for universal coverage. In 2005, the WHO World Health Assembly urged member states to 'plan the transition to universal coverage of their citizens so as to contribute to meeting the needs of the population for health care and improving its quality, to reducing poverty, .....and to achieving health for all' (WHO 2005a).

A number of reviews have been written on options facing countries in moving towards universal coverage, focusing especially on the role of social health insurance (e.g. Carrin and James 2004, Barnighausen and Sauerborn 2002, Abel-Smith 1986). Less attention has been given to the political dynamics of change, and the attitudes of different stakeholders. This paper responds to the terms of reference from the Health Systems Knowledge Network (see Annex 1), and aims to:

- review the evidence on strategies to achieve universal coverage, where strategies are interpreted not just as technical strategies but also as strategies for managing the policy process
- generate lessons for senior policy-makers, donors and civil society groupings.

By agreement with the Knowledge Network, it focuses on countries which have either recently achieved universal coverage or are close to achieving it, essentially middle income countries, though some limited discussion of the circumstances of low income countries is included. A key issue addressed is the extent to which different strategies promote equity, where the concern is both equity of financing and equity of access to and use of services.

## 2. Methods

*Search strategy:* An initial search was done drawing on the following sources:

- relevant materials were extracted and reviewed from books, papers, reports and other documents accumulated over the author's 30 years' experience of engagement with low and middle income country health systems; these materials had been collected for both research and teaching purposes
- an analysis was done of papers, discussions and a book related to a conference 'Achieving Universal Coverage of Health Systems' organised (with support from the author) by the Office of Health Care Reform, Ministry of Public Health, Thailand on 15-17 March 1998 and including participants from Thailand, Korea, Philippines, Turkey as well as presentations relating to experience from OECD countries, Western Europe, Germany and Argentina
- a search was done of a database (Gilson 2006) on policy analyses of health issues in low and middle income countries (LMIC) for papers relating to universal coverage.
- References and literature reviews were studied of 2 PhD theses relating to universal coverage.

For the final version of the paper, a supplementary search was done (see Annex 2) which especially targeted regions and countries which had been poorly covered in the initial review, namely North Africa, the Middle East, and the countries of the former Soviet Union. The primary databases searched were PubMed, Ingenta, ELDIS, JSTOR, IBSS and ISS Web of Knowledge. Online searches were performed using Google Scholar and the websites of WHO, World Bank, Abt Associates and European Observatory for Health. In addition, searches of the same sources were done to complete as far as possible the country summaries in Annex 3.

*Type of evidence used:* the above searches produced a range of documentation, including peer reviewed papers, monographs, books, 'grey' literature including country case studies, and reports of discussions. Most evidence was qualitative in nature, consisting of conceptual frameworks, cross-country reviews, and specific country experiences, with limited quantitative analyses. To this written evidence was added experience gained from the author's many years of engagement in health policy debates relating to universal coverage, especially encompassing policy discussions in Thailand and South Africa. Non-research evidence was also drawn from 5 years' experience of teaching the topic of universal coverage to masters students at the LSHTM and LSE, including seminar discussions with many mid-career students with personal experience of universal coverage issues in their home countries; and experience of supervising 3 Thai PhD students all of whom studied aspects of universal coverage in Thailand.

*How/why evidence selected:* Prime attention was paid to evidence from low and middle income countries, though use was made of historical evidence from high income countries where relevant. Evidence from middle income countries in Asia and Latin America which were close to or had reached universal coverage was tabulated according to the themes listed in the terms of reference for the paper (see Annex 3 for table and Annex 1 for TOR).

*Comment on evidence base:* the evidence base on universal coverage is relatively thin, especially relating to low and middle income countries. The term universal coverage is used frequently as an aspiration or goal, resulting in innumerable ‘hits’ in web-based searches (16,500 on Google Scholar using search terms ‘universal coverage health developing countries’ for the period 1990-2006), but little specific content on experiences of reaching universal coverage, let alone analyses of explanations of progress or lack of progress. For certain countries (especially those in Asia) there is a fair amount of evidence on equity of financing and access to health care across socio-economic groups. Evidence on gender equity appears almost non-existent.

### **3. Definitional issues**

Universal coverage has been defined as ‘a situation where the whole population of a country has access to good quality services according to needs and preferences, regardless of income level, social status, or residency. It may be financed through tax or through contributory insurance schemes, and organised through one national scheme or a number of different schemes’ (Nitayarumphong 1998). It implies two key features:

- Equity of access
- Financial risk protection.

While not inherent in the definition, it also is usually assumed to imply equity in financing, namely that contributions are made on the basis of ability to pay.

Available definitions differ on whether they are explicit on the type or level of health care benefits. In the above definition, the concern is ‘good quality services’ – IE there is no mention of the scope of benefits. Other definitions refer to ‘necessary health care of good quality’ (Kutzin 2000), or ‘appropriate promotive, preventive, curative and rehabilitative health care’ (WHO 2005b). Given the scope for expanding the definition of service coverage, universal coverage can be seen as a relative rather than absolute concept (Kutzin 2000) with respect to health care services, though absolute with respect to population coverage (100%).

Achieving universal coverage requires that attention be paid not just to financial arrangements but also to addressing non financial barriers to accessing services. These can include geographical and cultural barriers, as well as problems of quality of care, including provider behaviour and attitudes, which can discourage access by certain population groups especially the poorest and women.

#### **4. Financing options for achieving universal coverage in LMIC**

Financing involves three interrelated functions: revenue collection, pooling, and purchasing (WHO 2000). Revenue collection involves obtaining contributions from households, organisations and donors in the form primarily of tax, mandatory social health insurance contributions, voluntary private health insurance contributions, direct payments by users, and donations. Pooling involves managing the funds in such a way that risks of paying for health care are borne by the pool and not by individuals or specific sub-groups. Purchasing involves the implicit or explicit transfer of the pooled funds to pay for health services, including key decisions on the services to be purchased, and the mode of payment.

The essence of financing arrangements for universal coverage is to ensure protection against the financial costs of ill-health for everyone. While historically the depth of coverage has usually not been specified, recently there has been an emphasis, especially in Latin America, on introducing universal coverage of an essential package of services (World Bank 1993, Frenk 2006, Baeza and Packard 2006). The definition of service packages is discussed below, in section 5.2.

In the context of low and middle income countries, financing universal coverage essentially means substantially reducing the often very high amounts paid out-of-pocket for health care, and substantially increasing the share of health financing that comes from tax funding and/or contributory health insurance. The implications of such changes for who pays and who benefits will depend on the financing source(s), the scope of risk pooling arrangements, the approach to purchasing, and the determinants of use of services, including the influence of any mechanisms designed to target benefits to specific groups (Gwatkin 2004).

##### **4.1 Individual financing sources and related structures and systems**

Although historically tax funding was associated with a government owned and provided health service (known as the Beveridge model after the founder of the UK National Health Service), and mandatory health insurance with a more decentralised health service with greater private ownership (the Bismark model after the Chancellor who created the German system), reforms over the last few decades mean that the association between source of funding and mode of provision is less clear. Moreover, a key feature of universal coverage arrangements, as discussed later, is reliance on a mix of financing sources. For convenience of exposition the equity implications of each source is discussed in turn here, with the overall mix of financing found in different systems addressed subsequently.

*Tax* funded arrangements pool money from all tax payers, with those who are able to use services (usually the general population) receiving benefits<sup>1</sup>. Funds may flow direct to providers from the ministry of health, or via an agency at central or local level required to act as a purchaser on behalf of the target population (a purchaser provider split). Equity implications depend on the incidence of taxes, and the distribution of benefits. In Thailand, for example, direct tax is very progressive (richer groups pay a higher proportion of income than poorer groups) and indirect tax

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<sup>1</sup> The use of tax revenue to subsidise participation in mandatory or voluntary insurance is considered later

somewhat less progressive (Tancharoensathien, Prakonsai, Limwattananon et al 2006). Analysis from Equitap found a similarly progressive pattern for direct taxes in Bangladesh and Sri Lanka, though the broader tax base of richer countries in the region (e.g. Taiwan, Japan) reduced their degree of progressivity somewhat (O'Donnell, van Doorslaer, Rannan-Eliya et al 2005a). For indirect taxes, Thailand was the most progressive, though indirect taxes in other Asian countries were still progressive to a fair degree.

Local governments often have some degree of tax-raising powers, which may contribute to health service financing in the local government area (as in Kyrgyzstan where this contributes 24% of health financing: Jakab et al 2005). Since few countries use adequate equalizing mechanisms to compensate for the differential revenue raising ability of local governments, such financing is often geographically inequitable (Preker et al, 2002).

There is substantial evidence that tax funding is not necessarily associated with an equitable receipt of benefits (Gwatkin 2004). This can arise from a variety of reasons, including a lack of health care infrastructure in the more remote or disadvantaged areas where the poor live, and lack of responsiveness of public services to the needs of the poor (Palmer in press). This pattern is not however universal: Sri Lanka provides an example where health services do well in serving the needs of poorer groups (Russell in press).

*Mandatory social health insurance* (SHI) raises money from contributions by employers and their employees who fall within the scheme (almost always those in formal employment), and uses it to pay for health services for members; sometimes there may be a tax subsidy to the scheme; sometimes there is a subsidy in the other direction, to non members as in Colombia where there is a 1% tax to support the subsidised insurance scheme for low income households. The self-employed are often allowed to join voluntarily, though such membership is usually low. Risk pooling and premium payment arrangements are likely to mean that payment, to a fair degree, is related to income<sup>2</sup> and use is related to need/demand. In Taiwan, for example, the ratio of insurance fund payments for care to premiums is highest for the poorest population quintile (1.75) and lowest for the top quintile (0.96) (Chiang 2005). However in Egypt, men receive three times the level of benefit as women (Gwatkin, 2004:19); and some schemes (for example in Thailand) cover only the worker, excluding their family members.

A number of countries have historically had multiple compulsory insurance schemes, often linked to major employers (e.g. Korea, Colombia), where pooling occurred only within each scheme. Such arrangements can be quite inequitable, since not all schemes are equally prosperous or cover population groups with similar risk profiles. Korea, for example, has chosen to unify arrangements into a single fund (Kwon 2003). An alternative approach is to introduce risk equalisation arrangements via a virtual fund, where schemes with a higher risk profile are compensated by financial transfers (as in Colombia, Rosa and Alberto, 2004).

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<sup>2</sup> SHI tends to be less progressive than tax financing because premiums are often a set proportion of income with caps on contributions above a certain income level, though subsidies to lower income members may offset this to some degree (Wagstaff 2005).

Given the common link between formal employment and mandatory insurance, SHI coverage is usually initially limited to the formal sector, providing better funded care than that available to poorer populations who fall outside its net. This has historically been the experience in many countries in Latin America (Mills 1983). McIntyre et al (2005) argue that in African countries where social health insurance has been attempted – eg Tanzania, Ghana, and Kenya - it has led to the entrenchment of a two tier health system, ‘creating a deep divide between the insured, who have excellent access to a wide range of high quality health services, and the uninsured who often are consigned to under-resourced public sector services for the poor’ (2005:37).

*Private voluntary health insurance (VHI)* can serve a number of functions. Mossialos and Thomson (2002) identify three forms: VHI which substitutes for mandatory insurance; VHI which provides complementary coverage for services excluded or not fully covered by such insurance; and VHI which provides supplementary coverage for faster access and increased consumer choice. The first form can be used as a policy tool, to encourage (or require) richer population groups to purchase their own health care coverage. The third form can happen by default, as in many Latin American countries where richer households are not satisfied with the statutory scheme and choose to purchase VHI in addition. VHI can reduce the degree of equity of the health system as a whole by removing richer groups from pooling arrangements, as in Chile (Kutzin 2000), and by accentuating differences in the amount and quality of care available to different population groups. The review by McIntyre et al (2005) indicates that in Africa, private health insurance has had very limited success and that in South Africa these schemes cover only a small proportion of the population, have led to the fragmentation of risk pools and an increase in expenditures, and have increasingly captured tax subsidies.

*Community-based or cooperative health insurance* is a form of VHI, though with very distinct characteristics, such as an emphasis on community ownership and empowerment. With the exception of a few well known schemes, membership is usually small, and benefits limited. Schemes usually have difficulty enrolling the poorest (Ranson, Sinha, Chatterjee et al 2006). Within schemes, there is experience of both equitable cross-subsidies (Dror, Koren and Steinberg in press) and inequitable ones (Ranson, Sinha, Chatterjee et al 2006). From a systems perspective, community health insurance may result in poorer groups contributing to their health care costs to a greater extent than richer groups who are able to access public services, and thus may be inequitable with respect to payment.

*Donations* as a substantial source of financing are most significant in low income countries, where they tend to be a volatile source of funding, varying from year to year. They flow from external agencies either via government or direct to service providers. Their in-country equity implications depend on the existing equity of services, or the extent to which the donor-funded project seeks to target specific groups.

*Direct payments* are an extremely important source of health financing in many countries. Usually they constitute direct payment to providers independent of other sources of funding, though in some countries sizeable copayments may be required by SHI (e.g. Korea). In many countries informal payments are of major concern: for example Ensor and Savelyeva (1998) argue that informal payments in Kazakhstan are

so important that they negatively impact on access to care and the functioning of formal payment systems. Direct payments are usually regressive, though since they may be unaffordable to the poorest, this effect may be less pronounced than might be expected.

#### **4.2 Equity implications of mixes of financing**

The overall equity of financing universal coverage in a country depends not only on the incidence of individual financing sources but also on their share in total health financing. Table 1 summarises the overall incidence of health financing for Asian countries with or approaching universal coverage (data from O'Donnell, van Doorslaer, Rannan Eliya et al 2005a). Countries where general tax funding makes up a higher share (eg Thailand, Sri Lanka, Hong Kong) appear to have a more progressive pattern of health financing than those dependent more on mandatory social health insurance financing (eg Korea, Taiwan). This pattern of a less progressive financing system in countries relying on mandatory health insurance is accentuated by the substantial copayments required from the insured in countries such as Korea<sup>3</sup>.

A key influence on the equity of overall arrangements is the extent to which the different sources of financing are pooled and services provided on the basis of need and irrespective of which scheme people fall under. In Thailand, for example, despite the existence of legislation which permits funds of the three main schemes (the civil servants scheme, the social security scheme, and the 30B<sup>4</sup> scheme for the rest of the population) to be channelled through the National Health Security Office, these three schemes are still funded and operated largely separately. Expenditures per insured member and subsidies per insured member differ markedly, with civil servants benefiting from the highest expenditure and the greatest subsidy (ILO 2004), and 30B scheme members benefiting least.

In Kyrgyzstan, general tax revenues are pooled by the Mandatory Health Insurance Fund (MHIF), which provides a basic benefit package for the whole population (Jakab et al, 2005). Compulsory health insurance provides contributions to a second pool, also managed by the MHIF, which entitles contributors to a complementary package providing lower co-payment for referrals and outpatient drug benefit. Certain needy population groups are also fully or partially exempt from co-payments.

Colombia and Mexico provide Latin American examples where complete merger or standardisation of arrangements for the whole population have not been achieved, since the benefit package for those who fall outside mandatory social health insurance is less generous (Frenk et al 2005, Rosa and Alberto 2004).

#### **4.3. Policy choices on financing universal coverage**

Governments face choices on mixes and balance of sources of finance for universal coverage. Based on the material in the previous section, this section suggests which

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<sup>3</sup> Note that these data show only half the picture needed to judge the equity of universal coverage arrangements; information on take up of benefits is needed to complete the picture.

<sup>4</sup> Just under US\$1

sources of finance might be less desirable and which more desirable, as well as addressing feasibility questions.

As implied above, the inclusion of private voluntary health insurance as a core element in universal coverage financing arrangements is controversial. It can in principle increase financial protection and access to health services for those willing and able to pay, but at a likely cost in terms of hampering the achievement of broad equity goals. For example in Chile, the health insurance reforms which allowed the better-off to opt out of public insurance arrangements and choose their own private insurer have damaged the efficiency and equity of the whole health system (Baeza and Munoz 1999), even though the public subsidies appear well targeted via the public insurance arrangements for the lower income groups, with 90% reaching the indigent and 8% going to other low income beneficiaries (Bitran et al 2000). Few low and middle income countries currently have a substantial private insurance market, and the competencies needed to create such a market are in short supply (Gottret and Schieber 2006:109). In addition, private insurance is not likely to cover more than a small proportion of the population, especially in poorer countries (McIntyre et al 2005). Thus it is not generally considered a desirable option for low and middle income countries.

Where there is a substantial private insurance sector, as in South Africa, there is the possibility of using private insurers as intermediaries managing premium collection and payment of service within a compulsory insurance system. In Colombia, for example, people in the contributory insurance arrangement can choose their preferred insurer (Yepes 2000). A risk equalisation fund can be used to try and ensure that insurers do not cream-skim, by seeking to enrol healthier members. This works by pooling contributions and distributing them to insurers in relation to the risk profile of their members. There are strong reasons to believe that such arrangements are unlikely to prevent selection behaviour by insurers, but there is little evidence on the extent of this problem in Colombia (Gottret and Schieber 2006:264).

Voluntary community-based or cooperative insurance historically played an important role in the evolution of European and Japanese universal coverage arrangements (Criel 1998, Ogawa, Hasegawa, Carrin et al 2003), and it has been argued that it could do the same with respect to low and middle income countries. It can potentially raise awareness of the value of insurance, create experience in managing risk pooling arrangements, and provide some degree of risk protection for groups poorly served by the public system (Ranson, Devadasan, Sinha et al 2006). However, the great majority of current schemes enrol only a small proportion of the eligible population, are small in size, and provide only limited financial protection (Bennett, Creese and Monasch 1998, Carrin, Waelkens and Criel 2005). Few survive for long, suggesting that they will need to evolve into more formal arrangements if they are to provide sustainable risk protection.

In terms of financing source, a key choice facing countries on the transition path to universal coverage is between general tax funding or mandatory social insurance payments, or mixes of these. In addition, even in high income countries with universal coverage, user fees or copayments usually still exist to some degree, so countries face choices on whether or not to retain user fee elements, and what to

charge for. In general, the wealthier the country, the smaller is the share of health financing from out-of-pocket payments (Figure 1).

Of OECD countries, mandatory insurance payments dominate in 15, general tax in 12, and 3 have a mix (WHO 2005b). In some countries in central and eastern Europe and the FSU, where there have been reforms to the previously centrally planned and funded systems, mandatory insurance dominates in 3 (Slovenia, Slovakia, Estonia), general tax revenues in 3 (Latvia, Romania, Kazakstan), and informal and out-of-pocket payments in 4 (Georgia, Azerbaijan, Kyrgyzstan, Moldova) (Preker et al 2002). In general terms, both tax and SHI funding have their advantages and disadvantages, which have been extensively reviewed and are summarised in Table 2. Advantages and disadvantages also greatly depend on the precise design and implementation features within countries (Kutzin 2000), as well as on country context, history, and institutional arrangements, making generic statements on which is better misleading. Wagstaff (2005), after reviewing the experience of Japan and the Asian ‘tigers’ (Hong Kong, Korea, Taiwan, Singapore), similarly concludes that the design of systems of financing and provision crucially affect how tax-financed and SHI-financed systems perform. In many ways, in terms of reform, the key issue is political and institutional – which risk pooling method is more acceptable to key stakeholders, more capable of being implemented. This is addressed further in section 8 below.

Three considerations are worth highlighting. Firstly, given the management capacity constraints common to less developed countries, one key consideration is the management requirements of raising funds and using them for health services. Wagstaff (2007) has recently questioned the common assumption that governments cannot increase general revenues to increase health expenditure but can make social health insurance contributions mandatory. He argues that raising additional tax revenue is feasible, and indeed has been done successfully by a number of countries, and that it does not seem to be easier to collect SHI revenues than general tax. For example, Yepes (2005) has drawn attention to the very substantial management demands of SHI (which go beyond just the raising of money) and especially to problems of corruption in the Colombian system, including avoiding joining a compulsory insurance scheme, and under-declaring income. Dixon et al (2004) indicate a further issue, that of ensuring that collected funds are actually transferred to pay providers: in Kyrgyzstan, they comment that what was intended to be an earmarked tax for health has become a discretionary transfer by the Social Fund.

Secondly, although tax funding has much to recommend it in terms of administrative simplicity, a key issue is ensuring that health continues to attract the necessary funds. In Thailand, for example, capitation rates that are lower than those thought necessary by analysts have been consistently set (Tangcharoensathein, Prakonsai, Limwattananon et al 2006), in order to keep costs down to the exchequer. In Costa Rica, a notable historical success in terms of universal coverage, those paying payroll taxes are subsidising to a considerable extent the non contributory regime (Table 3), an increasingly unpopular situation which encourages lower reporting of salaries (Saenz-Pacheco 2005).

Thirdly, governments need to set their priorities for public expenditure between different sectors. Increasing funds to the health sector, whether through general or

earmarked tax, is at the expense of using these funds for other purposes. The poorer the country, the more difficult the choices will be between alternative worthwhile uses of funds, which will include uses with health benefits (such as education).

#### **4.4 Provider payment mechanisms**

Provider payment is one of the key issues in purchasing arrangements, and is of fundamental importance in the process of achieving universal coverage since it can greatly affect the cost of cover (Carrin and Hanvoravongchai 2003) and hence how quickly it is feasible to offer the whole population the same level of benefits. For social insurance arrangements where the insurance agency and provider are separate bodies<sup>5</sup>, traditional payment arrangements have been based on fee-for-service. However, such payment systems have been shown to encourage cost inflation through increasing the volume of services (as in Korea: Moon 1998). This tendency is aggravated when prices are set well below normal charges as they were in Korea, for example, and creates the further problem that providers may raise charges to the uninsured as a further means of compensating for low prices for the insured. Concerns in tax funded arrangements of the inefficiency of historical patterns of allocation, and the reforms introduced in recent years – for example switching to case-based or capitation payment as in Thailand in the 30B scheme – mean that discussions about payment system are prominent also in tax-funded arrangements.

Payment methods which offer greater control over total costs than fee-for-service include case-based methods, capitation, global budgets and block contracts. All have their advantages and disadvantages, which relate to the nature of the incentives they provide for over or under provision and care of good quality. The Thai experience of capitation shows that it can be a very effective means to contain costs and simplify administration, though there have been concerns that this has been at the expense of the quantity and quality of services, especially that provided by the private sector (Carrin et al 1999, Mills, Bennett, Siriwanarangsun et al 2000). A number of countries, for example Korea, Taiwan and Thailand, are experimenting with case payment based on DRGs. Countries of the Former Soviet Union also provide a rich source of evidence (Dixon et al 2004), such as the use of capitation and global budget in Kyrgyzstan, Moldova, Uzbekistan and Tajikistan. In Kyrgyzstan, the MHIF has linked its contracting decision to performance indicators, contracts only with accredited hospitals, and specifies contract terms at inception. Kyrgyzstan has introduced hospital payments on a case-basis, with payment rates defined prospectively based on a system similar to Diagnostic Related Groups (DRGs) but created from Kyrgyz utilization and cost data (Bonilla-Chacin, 2005:395-6). The MHIF pays general practitioners a capitation based on the number of people enrolled.

Of all the potentially sensitive issues in universal coverage, selection and reform of payment methods is often one of the most sensitive since it threatens the interests of key actors. Medical associations tend to favour fee-for-service, and fear payment methods which shift risk towards them. As Korea and Taiwan found, once fee-for-service payment is in place, it is very difficult to move towards case-based or capitation payment. Similar problems arise where doctors historically gain part of the income from drug dispensing – they vehemently oppose removal of their role in

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<sup>5</sup> IE in contrast to the common Latin American arrangements where social insurance agencies ran their own services

dispensing, as seen in South Africa (Lucy Gilson personal communication), for example. Wagstaff (2005) concludes, on the basis of experience in Taiwan and Korea, that the concessions required to obtain approval for the separation of dispensing and prescribing may be more costly than the original policy.

## **5. Delivery options in low and middle income settings**

### **5.1 Different types of providers and role of primary care**

The two key issues on delivery options under universal coverage concern whether or not to allow access to non state providers, and how to encourage access to care at the lowest effective level. Earlier debates have included the issue of whether different schemes should have their own facilities, as historically was the case with SHI in a number of Latin American countries (Mills 1983), but the expansion of service infrastructure, and the increasing preferences for contractual arrangements, appears to have removed this issue as a point of debate.

Historically it was possible to maintain that expansion of risk protection arrangements should channel users to public services (Mills 1983, Abel-Smith 1986), which would then benefit from extra funding. However, over recent years, countries have seen a great expansion in private providers especially in urban settings and in previously controlled environments such as China, Vietnam and the FSU, especially at primary care level (Dixon et al, 2004). Where private providers are available, people increasingly expect that they should have the right to choose their preferred provider. This is feasible within universal coverage if there are contractual arrangements with non state providers, and if payment mechanisms ensure containment of costs. For example in Thailand, those covered by the social security scheme can choose their preferred provider, which then receives a capitation payment to cover the cost of care. The Thai 30B scheme (which covers everyone outside the formal and government sectors) has a similar capitation arrangement, though currently provides a choice between public and private services to only a limited extent, since the bulk of 30B members live in provincial towns and rural areas where private provider availability is more limited.

Within the Thai scheme, a major policy has been to try and build up the district health system, in order to encourage people to access the most local source of care first, before resorting to care at a general hospital (Tancharoensathien, Prakonsai, Limwattananon et al 2006). People are required to register with a primary care unit, and to seek care there first. This policy appears to have encouraged greater use of health centres and district hospitals. Korea also imposed a referral process, in 1989, but Peabody, Lee and Bickel (1995) observed that many patients chose to go direct to specialists and pay the full cost. For a gatekeeper policy to be effective, the primary care level must be easily accessible and of good quality, and the referral process needs to work smoothly. Incentives to retain patients at the lowest desirable level should not constrain appropriate referrals. In Thailand, where admission to hospital attracts a DRG-weighted payment, there were some reports from patients with heart conditions that the district hospital was reluctant to refer them to the provincial hospital (P. Prakonsai, personal communication).

## 5.2 Benefit package options

In theory, the definition of the benefit package is key in making universal coverage feasible. No country is able to provide universal coverage of all services that technically are available, so some type of rationing is inevitable. Limiting the benefit package to a specific set of high priority services can mean that it is affordable to provide these services to everyone. However there are four difficulties with this approach.

Firstly, if the package excludes services for which there is substantial demand, people will purchase these, thereby potentially incurring catastrophic payments. Countries have a difficult choice between including in the package services which are highly cost-effective but may be relatively cheap to buy, and those which may be less cost-effective but very expensive to purchase for those who need them. For example, Thailand excluded renal replacement therapy from its benefit package for universal coverage on cost-effectiveness grounds (Tancharoensathein, Prakonsai, Limwattananon et al 2006). Yet unpublished work is showing that households with a member with kidney failure can be impoverished as a result (P. Prakonsai personal communication). According to burden of disease statistics, nephritis and nephrotis account for around 1% of deaths in low and middle income countries (Lopez, Mathers and Ezzati et al 2006), suggesting it is a not insignificant cause of ill health and death, but treatment of kidney failure is extremely expensive, with a not very attractive cost-effectiveness ratio. Given financial constraints on the health sector, it may be more appropriate to see issues of helping households to cope with the less common conditions which can have catastrophic consequences as a broader safety net problem (for example requiring welfare support targeted to those who need it) rather than an issue which the health sector should itself solve.

Secondly, it is not straightforward to be explicit about the content of a benefit package or to ensure that providers follow in a transparent fashion a set of rules. People present to a health facility usually with an ill-defined problem, and providers then need to respond as best they can. The benefit package will in effect be limited by the skills mix, training, drugs and equipment available at different levels of care, as well as by how well referral mechanisms work. It will also be affected by the attitudes of providers and how they choose to ration access (Preker et al 2002).

Thirdly, physical access, as well as other barriers to access such as cultural barriers, are key to making a benefit package a reality, once financial access problems are reduced by risk pooling. Although it is clear that Thailand's extensive health infrastructure has greatly contributed to making universal coverage a reality, some evidence indicates that in the case of the elderly, utilisation differences for inpatient care between rural and urban residents have not yet been completely removed by universal coverage, probably because services are mainly in urban centres (Srithamrongsawat and Mills 2006). The policy of building up the district health system is designed to help address this, and does seem to have encouraged more local outpatient care access for the elderly. In VIMO SEWA, a community-based insurance scheme in Gujarat, take-up of insurance scheme benefits is much lower amongst members living in more remote districts, probably due at least in part to problems of physical access to services (Ranson, Sinha, Chatterjee et al 2006).

Finally, certain population groups almost inevitably will be able to access either higher quality or a broader range of services, effectively making the benefit package a minimum that is universally available, rather than the standard that all have access to. This can happen in two ways. Firstly, many countries on the path towards universal coverage have different health care schemes for different population groups – for example different services for the military, civil servants, the formal sector, the informal sector – and their benefit packages usually differ with some being more generous than others. Secondly, richer people will always be able to purchase additional services outside the package.

A key choice facing countries is whether the benefit package should include all levels of care (within what is affordable) or only services that are more costly – for example hospital admissions and chronic care. For the very poorest, any level of health expenditure can be difficult to cope with, but in slightly wealthier countries, primary care expenditure is usually affordable and it is continuing payments for chronic conditions or hospitalisation costs that threaten household livelihoods. Russell, for example, found that in Sri Lanka, even poor families often paid for primary care, but free hospital care provided a vital safety net (Russell in press). VIMO SEWA reimburses the cost of hospitalisations, but does not cover outpatient or primary care. Medical savings accounts arrangements are based on a similar principle – that only the most expensive treatments need an external insurance arrangement; otherwise people can pay out of pocket or using personal savings.

Drugs are probably the most straightforward part of medical care where a defined benefit package is feasible. For example Kyrgyzstan has developed an innovative outpatient drug package with a limited list of items (Dixon et al, 2004).

### **5.3 Tiering/quality of care for different population groups**

Within universal coverage arrangements, issues of different population groups having access to services of different levels of quality is one of the most difficult to deal with. Such inequalities are often entrenched firstly in the existence of different financing arrangements for different population groups, and secondly in the unequal distribution of access to services across a country. Inequities may also be influenced by social and cultural factors, such as the inability of women to travel alone outside the home, or to access cash to pay fees.

There are many examples of inequalities in Africa and the FSU. For example in Tajikistan, there are significant differences in utilisation rates by socio-economic groups, related to ability to pay' (Falkingham (2004: 247). Similarly, Gwatkin (2004) found that socio-economic inequalities in health service use for children's diarrhoea and acute respiratory infections and for obstetric deliveries show that coverage rates increase steadily across quintiles for each of the three interventions. Removing these differentials has been a long term process even in wealthy countries. An immediate step that countries can take is to initiate a process of standardising benefit packages and tax subsidies across different schemes, as Thailand has been seeking to do. Where countries have inherited many small schemes, as was the case in Korea, mergers of schemes can create economies of scale as well as help improve the equity of financing and access to health care.

Wagstaff (2007) has recently argued that in almost all respects general tax funding is more attractive than SHI, except in the difficulty it faces in ensuring the better-off do not gain a disproportionate share of benefits from public services. He suggests that forcing the better off into the private sector if they want more sophisticated care, as in Brazil, Sri Lanka and Malaysia, would create a 2 tier system but is likely to be more equitable than the alternative of having richer groups skew public services in their favour. This implies a more positive view of the role for private insurance, as a complement or supplement to general tax funding, than that presented earlier in this paper.

## **6. Strategies for disadvantaged groups**

### **6.1 Financing**

The issue of financing coverage for disadvantaged groups is a major concern of systems which rely heavily on mandatory insurance funding, since insurance premiums can be collected most easily in the formal sector. Commonly, it takes a considerable amount of time before social health insurance arrangements are extended to cover those outside the formal sector and universal coverage is reached. However, Carrin and James (2004) argued that the speed of change is increasing: the transition period in Germany was 127 years, Austria 69 years, and Belgium 118 years, but for Costa Rica it was 20 years, and Korea 26 years. However, the FSU and especially Africa still lag behind, particularly for reasons to do with the structure of employment (Ensor 1999). In some regions this problem is getting worse because of increased informalisation of the workforce including sub-contracting arrangements. Gideon, for example, finds that in Chile, it is low income women who are often most at risk of exclusion from formal insurance arrangements (Gideon 2007).

Extension of SHI cover to self-employed and low income workers has been financed in a number of ways (Mills 1998), with support from general tax often being key. The cost of insurance premiums can be kept low by providing highly subsidised public hospital care to such members (Singapore); social insurance funds can be used to cross-subsidise care for low income workers (Mexico, Costa Rica) or for formal sector employees of private firms as planned in Tanzania (McIntyre et al, 2005); all compulsory health insurance premiums can be subsidised by public funds (Thailand), or only those of the low income employed and self-employed, identified through some form of a means test (Philippines (Obermann, Jowett, Alcantara et al 2006), Korea, Turkey); innovative ways can be found of incorporating farmers, who usually make up the bulk of the self-employed (payment at the time of harvest; payment related to assets as well as or in place of income: Korea); the government can encourage and subsidise voluntary insurance or prepayment schemes which in time might become compulsory (Philippines, Ghana: McIntyre et al, 2005).

A related issue is how to finance the extension of cover to those without a steady income, namely many of the aged, the unemployed, and the disabled. A considerable number of the elderly, as well as children, can be covered as the dependants of those in formal sector employment: this, for example, has been frequently recommended as the next stage in the extension of the Thai social health insurance scheme, was done in Costa Rica in 1956 (Carrin and James 2004), and has been planned in Kenya

(McIntyre et al, 2005). A few countries have introduced insurance specifically for children – for example school children in Egypt (Nandakumar et al, 2000). Free care funded through general tax can be given to especially vulnerable groups (e.g. in many countries including Moldova and Burundi, pregnant women and children under five receive free care). In Europe, rights to health care have often been added to cash benefits given within social security schemes (for example for those who become unemployed), and those on social assistance may have their contributions paid for them (Mills 1998).

A key issue in this extension of cover is whether separate arrangements are made for the various population groups not in formal employment: for example a separate and self-contained arrangement created for the self-employed with tax subsidies; or whether government funding is used to bring them under the umbrella of the compulsory insurance scheme. The experience of countries in Asia suggests that the former is the preferred or most feasible option in the first instance: for example Japan, Korea and Taiwan all have had historical experience of separate arrangements for different population groups. Over time the different schemes were standardised and made more compatible, one of the key issues being at what point it is affordable to the government to bring the benefits for lower income groups up to the level of those in formal employment. Thailand also created a separate general tax-funded arrangement for the uninsured (the 30B scheme), and over time is intending to harmonise benefits across schemes.

Mexico has also taken the route of a specific programme for the uninsured. A major programme of voluntary insurance has been launched, to eventually protect 12m uninsured families and to guarantee them an explicit package of benefits (Frenk 2006). Financial transfers to states to cover the cost are linked to enrolment numbers, and over time the package is increasing in depth of coverage. The poorest two deciles are not required to contribute financially (Frenk, Knaul, Gonzalez-Pier et al 2005) and are intended to receive priority in the expansion of enrolment. In the early years of the scheme, 90% of enrolees were from the poorest quintile and over 70% were female-headed households, in part because of the predominance of single mothers amongst non salaried workers, though a recent study has found that only 43% are in the poorest quintile (Scott 2006). Women may be more likely to appreciate the benefits of enrolment: evidence from a community based health insurance scheme in West Africa suggests that women favour enrolment, since they can obtain care for their children without needing to find money (Arhin 1994). The challenge, as now faced in Colombia, will be to achieve high coverage of the target population: Colombia had anticipated achieving full coverage and phasing out all supply side subsidies in favour of transfers to those insured in the subsidised scheme. However this has proved neither feasible or affordable (Gaviria, Medina and Mejia in Wagstaff 2006).

Services for the general public do not necessarily reached disadvantaged groups. When fees are charged, exemptions are required for disadvantaged groups, though they rarely work well. A more promising approach is an equity fund, which compensates the facility for the less of fee revenue (Hanson et al in press). Where care is free, the problem of reaching disadvantaged groups is not inherently one, as it is for insurance, of contribution being tied to benefit, but rather one of service availability and quality. A financing solution increasingly being discussed is that of introducing subsidies or incentives in the form of direct payments to users, either

untied or conditional on use of services. This is being tried out, for example, in order to encourage pregnant women to deliver in facilities in Nepal (Borghini et al 2006). While experience of such conditional cash transfers is reported to be highly positive in several Latin American countries, there is virtually no evaluation evidence from low income settings (Palmer et al 2004).

Despite the enthusiasm for a greater degree of targeting of general tax funding – whether through cash transfers to individuals as an incentive to use publicly funded services, or through providing insurance coverage in a subsidised scheme as in Colombia and Mexico, or through funding a local purchaser such as a contracting unit for primary care in Thailand, there is little evidence on how well these arrangements work in efficiency or equity terms, and whether the increased transactions costs outweigh the benefits. A recent study in Bogota has found that for first level services, hierarchical arrangements have been replaced by a bilateral monopoly, and referrals to higher levels of care are complicated by disputes between insurers and providers (Castano-Yepes personal communication). More broadly, the advantages of demand-side funding, and a purchaser provider split, have yet to be conclusively established (Mills et al 2006).

## **6.2 Benefits**

Inclusion within a financing scheme does not guarantee access to benefits (health care). Even wealthy countries struggle to ensure equal access for all population groups. Benefit incidence studies for developing countries generally show that richer groups gain more benefit from public spending than poorer groups (Filmer 2003). For example, Gwatkin (2004) shows that in seven countries studied in Africa, government expenditure at secondary and tertiary levels benefited most the top quintile of the population, while for primary care the top 20 percent of the population received one and a half times as much gain as the bottom 20 percent of the population; and in developing and transitional regions in general, the better-off gained more from public spending than the rest of the population except in Latin America.

Table 4 shows data, for a subset of the countries in table 1, on the percentage of the total health care subsidy accruing to the poorest and richest 20% (data from O'Donnell, van Doorslaer and Rannan-Eliya 2005b). Note that this reflects the level of utilisation and the unit cost of providing that care. It is not a comprehensive assessment of the equity of benefits under universal coverage since individuals may receive benefits under their insurance arrangement from private providers (as in Thailand). Hong Kong has a strongly pro-poor distribution of public subsidies, and in Sri Lanka and Thailand it is approximately pro poor. Inpatient care tends to be the least pro poor.

Strategies to make services easily accessible are vital to achieving universal access. For example, during transition to universal coverage, and in order to improve access in rural areas, Korea focused efforts on the supply of health care in the countryside (Peabody, Lee, and Bickel 1995). Funding was provided to build remote health care centres, and to subsidise insurance societies in those areas. Tax incentives were given to encourage development of private hospitals and clinics in remote areas. Pilot programmes were established with non-physician providers, to address the problem of mal-distribution of physicians. Thailand, similarly, had many years of building up the

health care infrastructure across the country, though emphasising the extension of the public network of facilities.

Once infrastructure is in place, remaining issues largely concern the access of groups who are marginalised or excluded, for whom special efforts may be necessary. For example in Thailand, the registration process presents difficulties to people who are very mobile, and who are often the poorest (Pannarunothai in press). In some settings women may be especially disadvantaged.

## **7. Contextual factors opening up policy space for universal coverage<sup>6</sup>**

There is very limited information for middle income countries on what contextual factors support the pursuit of universal coverage. Clearly there are economic aspects which strongly influence progress, such as the proportion and rate of increase of the work force in the formal sector for mandatory insurance, and the rate of economic growth, for both tax and insurance systems. However, these conditions tend to be facilitatory – they do not explain why countries at similar income levels might make different choices with respect to speed of progress to universal coverage.

A limited number of papers have highlighted the main aspects of the context in specific countries which explained progress towards universal coverage. The political regime seems to be influential but not necessarily its complexion: the military regime in Korea initiated progress towards universal coverage by introducing SHI (Kwon 2002), whereas successive military regimes in Thailand opposed SHI (Pannarunothai in press). Rapid progress in Thailand was made when a populist regime chose the extension of financial protection to the uncovered as part of its election platform (Nitayarumphong 2006). This was underpinned by many years of experimentation and gradual progress led by public health bureaucrats.

Both Thailand and Malaysia have a history of building up public provision, but whereas in Thailand health financing relied heavily on user fees in public facilities, in Malaysia there was strong emphasis on a universal welfare model with minimal fees (Barraclough 1999). This paradigm in Malaysia was increasingly challenged in the 1990s, with a frequently expressed desire to reduce the role of the state in welfare provision (as well as the economy at large) and to encourage savings, private insurance and employer-funded coverage. In fact both Malaysia and Thailand pursued strong free market-based policies in economic sectors, but Thailand managed a more balanced position with respect to the health sector, allowing private providers to expand but keeping control over financing. Yet despite the language of reform, change in Malaysia has happened very slowly and the government still has a major role in health financing and provision, though private insurance is expanding rapidly. This stability of the public sector may indicate another important dimension of the context: where strong interests have been built up in state funding and provision over many decades, it is not easy to change that model. Though the example of Singapore, which has moved from a largely tax-based and publicly provided health system at independence in 1965 to one where only 25% of total health care expenditure comes from government (Lim 2004), demonstrates it is not impossible.

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<sup>6</sup> issues relating to sections 7 and 8 are addressed in more detail in a companion paper on actors and actor management

Although economic growth provides a conducive environment, the Thai experience demonstrates how a financial crisis can provide a window of opportunity for change. In the Thai case, the impact of the crisis on households, and the fact that many employees lost their jobs and hence their insurance coverage, highlighted the need for a comprehensive financing reform.

Social solidarity has been highlighted as a key enabling factor behind European risk protection arrangements (Criel 1998), and in the creation and expansion of Japanese voluntary health insurance (Ogawa et al 2003). Cultural influences have been cited both as an explanation for the maintenance of equity goals (the FSU for example: Ensor 1999), and for the maintenance of very high levels of copayment in national health insurance (the tradition of family responsibility in Korea; Mills 1998).

External influences might be expected to be influential, given the role of the international and regional banks in funding health reform programmes and providing technical advice. In the context of middle income countries, donor funding only contributes at the margin, so more important is likely to be the engagement in technical debates. However, at least in the reformist countries such as Colombia and Mexico, it is not clear that the role of external actors has been key: in both cases the national reform protagonists have been vocal exponents of reform rationales both within and outside their countries. In a lower income context, the language of a basic package provided at an affordable price to everyone does appear to have been influenced by external agencies, though with few marked successes in terms of implementation.

## **8. Drivers of reforms**

Achieving universal coverage requires action on a number of fronts; hence a coalition of actors is likely to be crucial. In Thailand, for example, technical experts and government bureaucrats worked with civil society groups and political parties to influence the adoption and implementation of reform. One lesson from Colombia and Mexico is that it is important to look for win win solutions – for example reform to unpopular aspects of the social insurance systems provided the opportunity to extend coverage to the poor. This avoided extension of coverage being the sole purpose of the reform, and brought together a coalition of supportive interests.

In some settings external agencies have sought to influence reforms in favour of improved coverage, but often with limited success. For many years in China, agencies such as the World Bank have provided evidence on the inequities which have followed the collapse of the commune system, but to apparently little effect. Continuing advice to Thailand and the Philippines has sought to encourage them to expand the SHI coverage to dependents of the workers, but with no progress.

An important issue bears on the nature of the forces supporting social health insurance. The International Labour Organisation, which supports the development of social security throughout the world, embodies a partnership between employers, employees, and governments. This partnership is enshrined in the governance arrangements of social health insurance – for example the leading role played by

Ministries of Labour not Health, and the involvement of trade unions in scheme governance. SHI arrangements can thus function to protect worker interests, which are not identical to those of the population at large.

An opposite example is seen in the FSU, where the concept of universality was inherited from the Soviet era, and the introduction of SHI implies a disentitlement of the population in favour of the entitlement of employees. Ensor argues that while it would be more effective to provide a minimum package to all and fund additions with contribution-related insurance, there are ‘immense political ramifications involved in overturning a long history of free services’ (Ensor, 1999: 875). He points out that

*“In Latin America social insurance expanded entitlement to services free at the point of delivery funded on the basis of income related (rather than risk rated, as with private insurance) contributions. In transitional Asia most countries begin from a universal entitlement based on citizenship. Payroll insurance has two possible implications. One is to dis-entitle people from universal coverage and demand that they re-register through their employment, purchase individual cover or qualify as socially protected to be covered from the public budget. The second possibility is to retain universal entitlement and to treat the payroll contribution as a tax on those unfortunate enough to work for enterprises liable (in theory and fact) for payment. However, in this case, there is little incentive to pay the contribution since it provides no additional benefits.”*

Kyrgyzstan is an exception in managing to implement a policy of a minimal package to all and funding additions with contribution related insurance, thus explicitly accepting a tiering of benefits by population group. Good donor coordination appears to help explain the relative success of the policies (European Observatory on Health Systems and Policies 2004).

Professional interests are often a complication in developing universal coverage arrangements, especially given their interest in payment methods. Countries in East Asia have struggled to obtain agreement to a move away from fee-for-service to case based payment, and separating drug dispensing from primary medical care is another common area of conflict.

Both Mexico and Thailand exemplify the role that evidence derived from research can play in both preparing the way for reforms and pointing to solutions to problems. In both countries, substantial efforts went into documenting inequities in payment for and access to care (Frenk 2006; Pannarunothai in press). In both countries expert researchers worked very closely with bureaucrats and politicians to provide evidence. In Thailand, for example, this role was crucial in demonstrating that universal coverage would be affordable.

Thailand also demonstrates the important role that elements of civil society can play. These included academics and social activists, and were aided by an informed and engaged media.

## **9. Implications for policy and action**

The above review highlights a number of key choices and questions facing countries in their progress towards universal coverage.

- Financing sources:

- What is the most desirable and feasible way of increasing mobilisation of compulsory revenues for health services? What is the preferred mix of general tax and mandatory insurance?
- Does increased funding require greater mobilisation of funds, or is the taxation system raising adequate funds, and there is a case for a greater share to be allocated to health services?
- How can the role of direct payments in the overall financing mix be minimised?
- Should either or both of private voluntary insurance and community based insurance play a role in the financing system?
- Pooling: how widely can funds be pooled, to minimise inequities in payment and benefits between pools
- Purchasing: how can the purchasing role be strengthened, in order to improve equitable and efficient access to health services? What are the relative advantages of targeting subsidies to specific individuals, funding a local purchasing agency, or channelling funding direct to providers?
- Provision of care:
  - Should countries provide a choice between public and private providers (assuming that payment methods can be put in place to control utilisation and costs)
  - Should benefits be comprehensive, or focused on a most cost-effective package, or on services most likely to be financially catastrophic to households?
  - What should the balance be between breadth of coverage (including as high a proportion as possible of the population) and depth of coverage (a large benefit package)?
  - Is one single benefit package feasible, or is it better to aim at a basic package and additional elements for better-off groups?
  - How can a benefit package be specified and applied?
  - How can the needs of especially disadvantaged groups be met?
- Structure of arrangements
  - Should countries gradually expand a single scheme, or develop multiple arrangements and then seek over time to harmonise them?
  - Is the introduction of competition desirable either in choice of insurer, or choice of provider?

From an equity perspective, the evidence suggests that at least in the early years of universal coverage, a system which depends mainly on mandatory insurance is likely to achieve a lower degree of equity in financing than one based on general tax revenue, though this conclusion needs testing with information from a wider range of countries. Regardless of the main source of funding, a reduction of direct payments is vital to improve equity of financing.

In terms of provision, the evidence suggests that the key issue is ensuring good physical access to health services so that people can make use of their entitlement to care. Other aspects of access may also be important, but evidence is thin on their significance relative to physical access.

Even if countries inherit a universal system segmented into different schemes, or choose to develop separate schemes to cover hard-to-reach groups, it is important to

plan for a process that will harmonise contributions and benefits over time. If richer groups are allowed to opt out, or differences between schemes allowed to become excessively institutionalised or to increase over time, it can be very hard to challenge vested interests and almost impossible to level up benefits to achieve equitable arrangements for the whole population.

Of countries that recently achieved universal coverage, their rapid progress started when they were already lower-middle income countries (Carrin and James 2004). Promoting universal coverage in low income countries is very difficult given their limited ability to raise sufficient revenues; these issues are further discussed in McIntyre et al (2005) and McIntyre (2006). In a low income context, the following mixes of financing are likely to be found:

- Public funding to a network of public facilities, boosted by donor funding to varying degrees
- Formal and or informal fees at public facilities
- Very small scale compulsory health insurance in the formal employment sector (5-10% of population in SSA) (Waelkens et al)
- Small scale community based health insurance, though rapidly growing in some settings (eg in West Africa from 76 active schemes in 1997 to 366 in 2003)
- Innovations such as equity funds, targeted cash transfers and/or vouchers for subsidised care for specific population groups (e.g. the poorest, households with orphans, refugees).

Key financing issues in such settings include how best to gradually increase risk pooling arrangements over time, and how to ensure that the poorest and most socially disadvantaged receive priority in having their health care costs covered.

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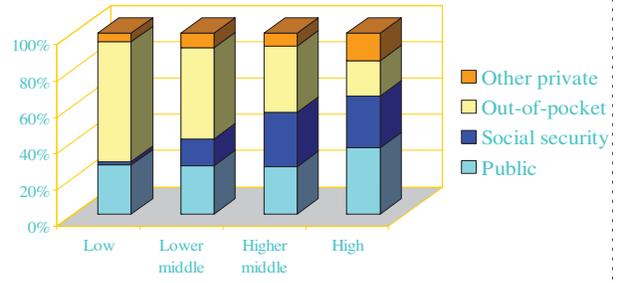
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**Figure 1: Out of pocket payments as share of total health financing (data from Gottret and Schieber 2006)**



**Table 1: Share of different financing sources in total health financing, and overall incidence of health financing, selected Asian countries**

Country	General tax %	SHI %	Direct payments %	Concentration index*
Hong Kong (1999-2000)	56	0	31	0.5590
Indonesia (2001)	33	3	58	0.4704
Japan (1998)	33	54	13	0.2553
Korea Rep (2000)	16	34	50	0.3108
Philippines (1999)	40	6	45	0.6020
Sri Lanka (1996-7)	50	0	50	0.4724
Taiwan (2000)	9	52	30	0.2341
Thailand (2002)	56	61	33	0.5929

\* Range is -1 to 1; positive (negative) value means rich (poor) contribute a larger share of income than the poor (rich); zero means everyone pays the same share

Source: O'Donnell, van Doorslaer, Rannan-Eliya et al 2005a

**Table 2: Relative advantages and disadvantages of social health insurance and tax funding as the core approaches to financing universal coverage**

Aspect	Tax funding	Mandatory social health insurance funding
Source of funding	Pools money from all who fall within the tax net (both direct and indirect taxation)	Employers and employees in formal sector
Equity of financing	Generally progressive	Less progressive since progressivity likely to encourage under reporting of salaries and remuneration in kind
Population coverage	No limitations in theory	Absolute number of beneficiaries and growth normally tied to size and nature of formal sector
Coverage of hard to reach groups	No barriers in principle	Needs additional mechanisms and usually tax funding
Health care benefits	No required link between payment and benefits	Contributions and benefits closely linked
Demands on management	Does not require a beneficiary-specific system, hence lower management costs	Requires system for collecting revenue, identifying beneficiaries, paying for their care
Political	Share to health dependent on political decision-making process	Income earmarked for health
Economic implications	Dependent on taxation structure; does not need to be tied to employment	Increases cost of employment

**Table 3: Cross subsidies in Costa Rica**

Regime	Ratio of premiums to costs
Salaried	1.88
Self-employed	0.29
Pensioners	0.39
Uninsured, indigents etc	0.02
Average	0.90

Source: Saenz-Pacheco (2005).

**Table 4: Distribution of public health care subsidies to poorest and richest 20% of individuals (%)**

Country	Hospital care		Non hospital care	Total subsidy
	Inpatient	Outpatient		
<b>Poorest 20%</b>				
Hong Kong	39	39	38	39
Indonesia	3	6	20	13
Sri Lanka	21	21		21
Thailand	21	18	31	20
<b>Richest 20%</b>				
Hong Kong	6	11	12	7
Indonesia	52	46	18	31
Sri Lanka	52		38	46
Thailand	20	15	5	17

Data for other countries in Table 1 not available

Source: O'Donnell, van Doorslaer, Rannan-Eliya et al 2005b

## Annex 1

### Terms of Reference:

#### Paper A2: Strategies to achieve universal coverage

##### Overall requirements

1. Provide a comprehensive but succinct report on the agreed topic. The body of the report should be 20-40 pages, and generate lessons for senior policy-makers, donors and civil society groupings.
2. Within this report, explain the nature of the evidence base used, and how/why evidence was identified and selected. Further guidance on writing the report is provided in the accompanying generic guidelines to authors (Guideline to authors\_Health Systems KN.doc), which should be considered part of these terms of reference.
3. By end September 2006 submit a draft for comment.
4. Incorporate comments by mid-January 2007.

##### Guidelines for the writing of the report

These specific guidelines should be read in conjunction with the generic guidelines for authors in the accompanying document (Guideline to authors\_Health Systems KN.doc).

In addressing your theme, it is important that you:

- 1) focus on health *equity* not simply addressing basic health needs and bring a gender perspective to equity;
- 2) focus not only on the available evidence but on the *conclusions* that can be drawn from this evidence;
- 3) move beyond describing/delineating experiences, problems and challenges, to identifying/considering strategies for taking forward *action*, the institutional mechanisms for action and the enabling conditions, facilitators and barriers to such action;

##### Priority issues of concern (depending on the availability of evidence as well as time constraints):

- What is meant by the term '(equitable) universal coverage'? (Discussion of the principles that underpin the term (e.g. cross-subsidy) and the different forms of coverage, including financial, geographic, type and quality of service etc.)
- What is the current experience of financing options, or mixes of options, for achieving universal coverage in low- and middle-income settings? Include a discussion of tax, insurance and user fees, especially with respect to the different degrees of cross-subsidy achieved and the impact on access to care. Reflect on the implications of levels of government spending for achieving universal coverage (and the role of donor financing and debt cancellation in augmenting government efforts).
- What is the current experience of delivery options for achieving universal coverage in low- and middle-income settings? (Reflect on the use of different types of providers, and the inclusion of different types of services/packages, commenting also on tiering and the quality of care. What is the role of primary health care in achieving universal coverage?)
- What are specific actions to provide financial risk protection and access to services for difficult-to-cover groups (the unemployed, informal sector workers, the elderly, children, ?women)?
- What contextual factors have opened up the policy space for countries to implement policies directed towards universal coverage? (Reflect on the array of features listed in the generic guidelines to authors, most particularly the history of collective financing, the degree of social solidarity, and other social factors.)

- In these countries, who were the main actors involved in the formulation, implementation or contestation of universal coverage policies? What was their influence, and how was it managed by policy-makers in pushing through reform? Who were the main drivers of reform? (Include, where possible, a discussion of government actors, private health sector actors, trade unions, civil society groups, political parties and politicians. Also reflect on whether reform was driven by politicians or bureaucrats.)
- What mechanisms are successful in cost-containment in order to keep universal coverage affordable? How can these mechanisms ensure that the quality of care is maintained? Include a discussion of payment mechanisms and different types of provider.

Other papers pertinent to this paper:

- Strategies for achieving universal coverage in Thailand (Paper C12)

Disclaimer

Near the beginning of your paper you must place the following disclaimer:

“This work was carried out on behalf of the Health Systems Knowledge Network established as part of the WHO Commission on the Social Determinants of Health. The work of this network is funded by a grant from the International Development Research Centre, Ottawa, Canada. The views presented in this paper are those of the author(s) and do not necessarily represent the decisions, policy or views of IRDC, WHO or Commissioners [or, in the case of work that has not been reviewed by the KN, the Health Systems Knowledge Networks].”

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Where the KNs, WHO or the CSDH use the paper, authorship will be acknowledged through citation of references. It will remain the prerogative of the Centre for Health Policy not to use the products of this work.

## Annex 2: The supplementary literature review<sup>7</sup>

### Search strategy

The supplementary literature review was as systematic as possible given substantial time and money constraints, and was designed to complement the initial literature review which drew on the author's experience, contacts and files. The supplementary literature review especially targeted regions and countries which had been poorly covered in the initial review, namely North Africa, the Middle East, and the countries of the former Soviet Union. The primary databases searched were PubMed, Ingenta, ELDIS, JSTOR, IBSS and ISS Web of Knowledge. Online searches were performed using Google Scholar and the websites of WHO, World Bank, Abt Associates and European Observatory for Health. The search terms included 'universal coverage' and 'health' alone and in combination with 'developing country', 'Africa', 'Maghreb', 'sub-Saharan Africa', 'Former Soviet Union', 'Moldova', 'Kyrgyzstan', 'Kazakhstan', 'Uzbekistan' and 'Latin America'; 'cobertura universal' and 'salud'; 'couverture universelle' and 'santé'; 'universal healthcare' in combination with 'Africa'; 'universal access' and 'health' alone and in combination with 'Jordan', 'Morocco', 'Tunisia', 'Egypt'; 'health insurance' and 'developing countries'.

The search included peer-reviewed academic literature and grey literature (i.e. internal, external and non-reviewed reports) in English, French and Spanish published between 1990 and 2006 and was conducted in December 2006. Manual searches of the bibliographies of published papers were undertaken. Titles and abstracts of 4,472 articles and reports were read.

Those articles and reports which focused on universal coverage and methods to achieve it, in Africa and the Former Soviet Union, in individual middle- and low-income countries, or which offered a review of middle- and low-income countries experiences, were kept. Articles which focused on high-income countries, individual middle-income countries in Asia or Latin-America, community based health insurance and its variants (*mutuelles*, community insurance) or simply outlined advantages and disadvantages of various financing mechanisms without providing any innovative analysis, were excluded. A total of 31 articles and reports were included of which 15 were peer-reviewed and 16 were grey literature.

A further non-systematic search was undertaken for the countries included in Annex 3 using the same primary databases and websites. Search terms used included the names of the countries in combination with 'health' and 'policy', 'cost containment', 'financing', 'actors')

### Overview of searches for supplementary literature review

#### 1. Google scholar

Universal coverage AND Africa AND health: 807 recent articles  
    Universal coverage AND health AND Sub Saharan Africa: 621 articles  
    Universal coverage AND health AND Maghreb: 15 articles  
    Universal coverage AND Algeria AND health: 62 results  
Universal coverage AND health AND Former Soviet Union: 485 articles  
  
    *Universal coverage AND Moldova AND health: 46 entries*  
    Universal coverage AND Kyrgyzstan AND health: 66 results  
Universal coverage AND Kazakhstan AND health: 73 results  
    Universal coverage AND Uzbekistan AND health: 55 results  
Universal healthcare AND Africa: 187 entries  
Universal access AND Jordan AND health: 166 entries  
Universal access AND Morocco AND health: 92 entries  
Universal access AND Tunisia AND health: 67 entries  
Universal access AND Egypt AND health: 166 entries  
Cobertura universal AND salud: 356 entries  
Couverture universelle AND santé: 47 entries

#### 2. JSTOR

Universal healthcare: 11 articles

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<sup>7</sup> Undertaken by Nouria Brikci

Universal coverage and health: 338 articles

3. Abt Associates

Universal coverage: 62 reports

4. ELDIS

Universal coverage AND health: 37 articles

**5. PubMed**

Universal coverage AND health: 22 articles

Health insurance AND developing countries: 171 articles

Health insurance AND Africa, North: 24 articles

**6. IBSS**

Universal coverage: 18 articles

**7. Ingenta**

Universal coverage AND health: 89 articles

    Universal coverage AND health AND developing country: 3 articles

    Universal coverage AND middle income country AND health: 3 articles

    Universal coverage AND low income country AND health: 3 articles

Universal healthcare: 93 articles

8. ISS web of knowledge

Universal care AND health AND Latin America: 6 articles

Cobertura universal AND salud: None

Universal coverage AND health: 217 articles

**Annex 3 Summary of evidence from selected middle income countries in Asia and Latin America which have recently achieved universal coverage (UC), or are committed to achieving it relatively soon**

**South-East Asia**

Indicator/issue	Thailand	Philippines <sup>i</sup>	Korea	Taiwan
UC arrangements	3 main schemes; scheme for general population (30B scheme) least well funded	SHI plus voluntary enrolment of individuals and encouragement to cooperatives and microfinance groups to act as intermediaries	Single fund (recently merged); SHI-based; contribution rates vary by group	National health insurance; single fund
Population coverage	Close to 100%	70%, includes only 17% of informal sector; aim is UC by 2010	Close to 100%	>97% <sup>ii</sup>
Government health expenditure per capita at international dollar rate <sup>iii</sup> (2003)	160	76	531	c500/800 (depending on method of calculation)
GNI per capita (2003-Current international US\$)	7,340	4,670	19,210	12,572 <sup>iv</sup>
Main cross-subsidies	Tax funding to 30B scheme (tax subsidies also to SSS and CSMBS)	From private employees to indigents	Tax subsidies to self-employed	From tax payers to low-income families
Financing mix	Tax, user fees (minor), payroll tax	Payroll tax, general tax, copayments	Payroll tax, general tax, high copayments	Payroll tax, general tax, copayments
Benefit package	Reasonably comprehensive	Favours hospital care	Limited to specified elements <sup>v</sup>	Comprehensive covering preventive and medical services, prescription drugs, dental services, Chinese medicine and home nurse visits <sup>vi</sup>
Provider types	Mainly public for 30B; public and private for others	Public and private accredited hospitals	Compulsory contracts with all facilities; 50% hospitals for	Mix of public-private delivery system (35% of beds in hospitals are public, 65% are private <sup>vii</sup> )

Indicator/issue	Thailand	Philippines <sup>1</sup>	Korea	Taiwan
Provider payment	Capitation for ambulatory care, DRG/global budget for inpatient care	Providers set fees and PhilHealth reimburses up to fixed amounts	Fee for service and experimenting with DRG and RBRV (Resource based relative value <sup>viii</sup> )	Original FFS for hospitals changed to global budget (Wagstaff, 2005). 63% of physicians paid on salaried basis, some receive bonus payments based on productivity, remainder are FFS private practitioners <sup>ix</sup> . First level clinics are paid FFS, DRG system used for 50 most common diseases to be extended <sup>x</sup>
Access differences	Reflecting demand and supply side factors	Access to accredited hospitals good only in large cities	For uncovered services	NHI greatly reduced differences, but middle class benefit most in absolute terms
Tiering/quality of care differences	Between CSMBS, SSS, 30B	Little evidence but differences between rural and urban	Little evidence but high OOP for all uncovered services must produce difference in quality of care between those who can afford to pay and those who cannot	Free choice; no rationing <sup>xi</sup>
Role of primary care	Gate keeping for 30B scheme	Not covered	No gate-keeping; strong hospital role	Large hospitals increasingly dominant source of care
Efforts to cover specific groups	Tax funding so targeting not needed; long term policy of extending public infrastructure; recent efforts to strengthen PHC; exemptions for unregistered	Means testing to identify indigent; enrolment funded by central and local governments; encouragement to local insurance schemes	Self employed contribution based on both income and property and subsidised	Incentives for providers to practice in remote areas introduced; Organization and encouragement of mobile services for remote areas; poor and those living in remote areas exempted of cost sharing <sup>xii</sup>
Cost containment measures	Capitation (SSS); Capitation plus global budget (30B)	None	Capitation (OP) and DRG within global budget (IP); PC gatekeeper	Global budget <sup>xiii</sup> Introduction of Cost Sharing and single payer system <sup>xiv</sup>
Contextual factors opening up policy space for UC	High economic growth; financial crisis; high OOP	Strong political commitment to universal coverage	High economic growth; competition with North Korea	High economic growth, high level of income
Main actors/drivers of reform	Populist government; strong support from public health leaders and policy analysts	Government	Military regime to get political legitimacy; subsequent governments as part of social	Political pressure from opposition party and dooming elections in 1995 pushed the then President Lee to decree operational the National

Indicator/issue	Thailand	Philippines <sup>†</sup>	Korea	Taiwan
			development; employers to help manage funds (self-employed negative)	Health Insurance Law <sup>xv</sup>

Latin America <sup>xvi</sup>

	<b>Brazil</b>	<b>Chile</b>	<b>Costa Rica</b>	<b>Mexico</b>	<b>Colombia</b>
<b>UC arrangements</b>	Multiple: Federal government, states, municipalities, private insurers	Multiple: FONASA (public sector insurance), ISAPRES (competing private sector insurers)	Based on SHI; social security manages arrangements for all	3 public insurance schemes: govt employees, private employees, others (popular health insurance) (voluntary)	Compulsory insurance for employed; subsidised scheme for others; Competitive insurers Single Solidarity Fund (FOSYGA) seeks to ensure that contributory regime works as much as possible as single risk pool
<b>Population coverage</b>	Goal of 100% (no consolidated data on coverage of public and private agents at the primary care level) <sup>xvii</sup>	86% <sup>xviii</sup>	90% in 2000	Aim is 100% by 2010	Aim is 100% but in 2000 42.6% at least of the population was not insured <sup>xix</sup>
<b>Government health expenditure per capita at international dollar rate<sup>xx</sup> (2003)</b>	270	345	486	270	439
<b>GNI per capita (2003-Current international US\$) <sup>xxi</sup></b>	7,470	9,850	8,770	9,140	6,590
<b>Main cross-subsidies</b>	From tax payers to lower income and rural families	From the state to lower income families.	From employed to informal sector and elderly	From tax payers to lower income families	From taxpayers to lower income insured, plus 1% wage contribution from compulsory insurance scheme. From tax payers to uninsured through supply side subsidies <sup>xxii</sup> .
<b>Financing mix</b>	General tax revenues at central, states and	Payroll tax (17%), general tax (28%),	Payroll tax (54%), general tax (11%)	Payroll taxes (30%); general tax (15%);	Payroll taxes (49%); general taxes (34%); 10% out-of-

	<b>Brazil</b>	<b>Chile</b>	<b>Costa Rica</b>	<b>Mexico</b>	<b>Colombia</b>
	municipality level <sup>xxiii</sup> (46%), out-of-pocket (35%), others, incl. tax on financial transactions (19%).	copayments (27%), other (28%)	Out-of-pocket (34%)	52% out-of-pocket, 3% other	pocket, 7% other
<b>Benefit package</b>	Basic care package established in 1988	Public sector: similar care, including 56 interventions defined in 2003 <sup>xxiv</sup> . Private care: level of benefit varies according to premium paid and medical risk of the insured person.	Basic primary care package	Comprehensive primary and secondary care; gradual increase in coverage of high cost care for popular scheme	Comprehensive package for compulsory insurance. Only services provided at first level of care for subsidised insurance (Rosa and Alberto, 2004: 137).
<b>Provider types</b>	Public and private contracted institutions	Public and private accredited or independent contracted institutions	Public and private contracted institutions (mostly social security providers (Caja Costarricense)	State health systems Social security (IMSS and others) Private providers	Public and contracted private institutions
<b>Provider payment</b>	Capitation	At secondary and tertiary levels, limited use of DRG and prospective payment for services and continued use of historical budgets <sup>xxv</sup> . At primary level, proposed use of per capita payment.	Fee for first level services and hospital production units for hospital services <sup>xxvi</sup>	Capitation	Capitation payment for primary care; FFS and case based payment for hospital care
<b>Access differences</b>	Inequalities in terms of coverage between rural and urban areas <sup>xxvii</sup>	Not in theory but in practice better care available to those who can pay and waiting lists hamper access <sup>xxviii</sup>	Geographical differences as not all services are similarly available throughout the country (Vargas et al, 2002: 14 <sup>xxix</sup> )	No data found but difficulty in access for the poor who want to go beyond the essential health package or live in underserved areas (Laurell, 2001 <sup>xxx</sup> )	No data in terms of access found. In terms of insurance affiliation, more than 60% of the population in the first income decile do not have any health insurance, while almost 4% of those in higher income

	Brazil	Chile	Costa Rica	Mexico	Colombia
<b>Tiering/quality of care differences</b>	Basic and more complex public care not available everywhere although private services available to those in private schemes (82% of which belong to the four highest income deciles and only 2.2% to population using public scheme) <sup>xxxv</sup> . Strong in some provinces, particularly Northeastern Brazil ones such as Ceara <sup>xxxiv</sup>	Public sector: similar care in theory. Private care: level of benefit varies according to premium paid and medical risk of the insured person. Problem of cream skinning. Since 1990 Chile has been implementing a Primary Care approach focused on community and family <sup>xxxv</sup>	Not found in literature	Although private providers are legally required to offer care to those unable to pay, loopholes are exploited creating a two-tier system between the poor and wealthy <sup>xxxiii</sup> . At the public level, quality of care may have decreased <sup>xxxiii</sup> .	deciles have one or more forms of insurance (Rosa and Alberto, 2004: 137) Different services provided to those in compulsory insurance and in subsidised scheme. Plans to equalise care between two groups by 2001 not achieved (Rosa and Alberto: 2004:137).
<b>Role of primary care</b>			Strong	Not very strong: although the second generation of health reforms were based on primary care (from 1970s), the third generation from 1990s refocused on purchaser-provider split etc away from PHC goal. Result is that poor and wealthy choose private sector <sup>xxxvi</sup>	Hospitals appear to play major role in primary care
<b>Efforts to cover specific groups</b>	Funrual programme caters for rural workers and their families; Programa de Pronia Acao for the needy and population with no formal link with Welfare; National Committee for health of black population <sup>xxxvii</sup>	Protection of indigents; special agreement with temporary workers	Family membership made compulsory in 1956 Specific attention given to children and teenagers, disabled people, elderly groups and indigeneous migrants <sup>xxxviii</sup>	Highly subsidised voluntary enrolment for those outside formal sector and for the poor (families in the lowest income deciles <sup>xxxix</sup> )	Subsidised insurance for lower income households identified through a means test.
<b>Cost containment measures</b>	Market regulation of prices to rationalize health	Focus on limited number of interventions	Rationalisation of tertiary level care	Focus on cost-effective public health interventions	No. Health expenditure has skyrocketed since introduction

	<b>Brazil</b>	<b>Chile</b>	<b>Costa Rica</b>	<b>Mexico</b>	<b>Colombia</b>
	expenditures.	in public sector; use of co-payments	provided <sup>xl</sup>		of reform in part because of lack of incentives for efficiency <sup>xli</sup> . Continuing supply side subsidies and tariffs higher than costs of health service production (Rosa and Alberto, 2004: 133)
<b>Contextual factors opening up policy space for UC</b>	Economic crisis, structural reforms, persistent poverty then transition to democracy (hence obligation to incorporate excluded population in social system) and need to improve efficiency and effectiveness of health system <sup>xliii</sup>	Economic crisis and resistance to involvement of international institutions, renewed interest in the 'social' in the 1990s, economic growth thereafter.	High economic growth <sup>xliii</sup> , democracy <sup>xliiv</sup> , political legitimacy of Figueres <sup>xliiv</sup>	Comparative evidence on inequitable health system	Constitutional pillar of inalienable right of all citizens to health (Art 48) (Rosa and Alberto, 2004: 131), result of civil movements requests, political negotiations between different actors (Hernandez M, 2002 <sup>xliiv</sup> )
<b>Main actors/drivers of reform</b>	Traditional elite, emergent political forces, national social organisations <sup>xliivii</sup>	Government	Extensive MoH research, presidential push <sup>xliivii</sup>	New government; research on problems; evaluation of solutions	

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- <sup>vii</sup> Lu J F R and Hsiao W C (2003:78) Does Universal Health Insurance Make Health Care Unaffordable? Lessons from Taiwan, *Health Affairs*, Vol 22 (3): 77-88
- <sup>viii</sup> 'RBRV determines relative fees of physicians on the basis of resource costs required to produce services: total work (time and intensity) of the physician, practice (overhead) costs and the opportunity costs of speciality training' (Kwon S (2003:86).
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