



JOINT LEARNING NETWORK

For Universal Health Coverage



CLOSING THE GAP

Health Coverage for Non-Poor Informal-Sector Workers

JULY 2015

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Health Coverage for Non-Poor Informal-Sector Workers

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CLOSING THE GAP

Health Coverage for Non-Poor Informal-Sector Workers

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EXECUTIVE SUMMARY

In recent years, an increasing number of low- and middle-income countries have pursued universal health coverage (UHC). However, a “missing middle” has emerged because social health protection is usually provided to the poor (through tax-financed insurance) and to workers in the formal employment sector (through compulsory employer-based insurance) but not to those who fall between those groups. Coverage is often lacking for non-poor informal-sector workers and their families because of the relative difficulty of identifying and enrolling them and in financing their coverage in an efficient and equitable way. This paper, which is based on a literature review and in-depth interviews with country experts, synthesizes the experiences of selected countries in covering the non-poor informal sector as part of an effort to achieve UHC.

In designing an approach to increasing coverage of non-poor informal-sector workers, countries face the difficult decision of whether to offer universal entitlements or use another coverage mechanism, such as voluntary or mandatory national health insurance. Countries must balance policy objectives of achieving coverage against whether to obtain revenue from the non-poor informal sector, while also taking into account practical considerations related to integrating the non-poor informal sector into the broader health financing reform, such as developing processes for identification and enrollment and aligning and integrating financing mechanisms. If opting for mandatory insurance, the success ultimately depends on effective enforcement, which is difficult to carry out.

Funding for social health protection for non-poor informal-sector workers typically comes from general government revenues—through either full or partial subsidies—or from mandatory or voluntary contributions from enrollees.

The choice of approach depends on the country context and policy objectives. When voluntary contributions are the main source of financing, coverage of the non-poor informal sector tends to remain low. This is true even when partial subsidies are provided.

South Korea is an example of a country that relies on enrollee contributions as a main source of funding for its national health insurance program, but several features of the South Korean context would be difficult to replicate in other countries, such as a relatively homogenous population, a centralized government structure, rapid economic growth, and a relatively small informal-to-formal population ratio. Other countries, such as China and Thailand, have largely or completely abandoned the contributory approach in favor of general government revenue financing to quickly expand coverage. Where health insurance contributions are collected, evidence shows that affordable premiums and flexible and convenient payment options lead to greater participation among non-poor informal-sector workers.

Adequate health coverage requires substantial entitlements and access to quality health services. In social and national health insurance schemes, benefits packages can be uniform across populations or tailored to the needs of the non-poor informal sector. In either case, the ideal approach is to offer a benefits package that is attractive to that population and meets their needs. In addition, a well-functioning system of high-quality health care that is perceived as having value for workers and families is important to expanding and ensuring adequate coverage. Whichever approach is used, targeted efforts to inform eligible populations about their coverage options and benefits are essential. ■

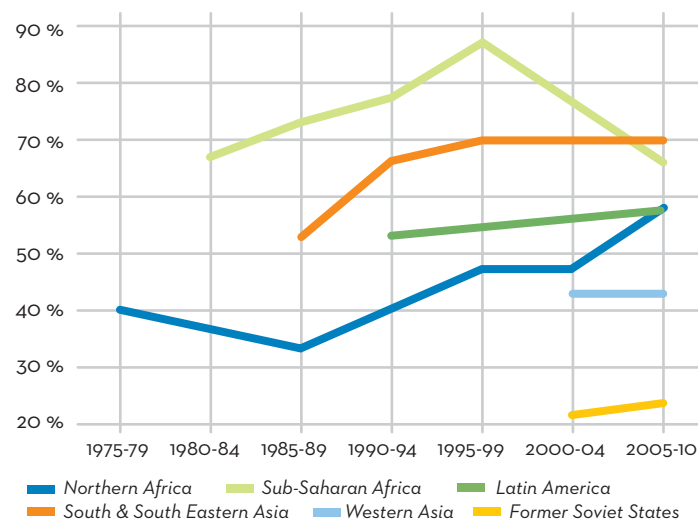
Introduction

In recent years, an increasing number of low- and middle-income countries have pursued universal health coverage (UHC). However, a “missing middle”¹ has emerged because social health protection² is usually provided to the poor (through tax-financed insurance) and to workers in the formal employment sector and to civil servants (through compulsory employer-based insurance) but not to those who fall between those groups. Coverage is often lacking for non-poor informal-sector workers and their families because of the relative difficulty of identifying and enrolling them and in financing their coverage in an efficient and equitable way.

Informal-sector workers often fall through the cracks of countries’ social security systems, despite being at risk and vulnerable (Lund & Srinivas, 2000). Working conditions in the informal sector (especially in agriculture, construction, manufacturing, domestic work, and transportation) are associated with greater levels of illness and injury than in the formal sector because workers are exposed to more hazards (Rosenstock, Cullen, & Fingerhut, 2006). In addition, children of non-poor informal-sector workers may suffer from health issues directly related to their parents’ work—for example, lead poisoning due to home-based battery manufacturing or asthma among street vendors’ children who go to work with their parents.

There is general agreement that the size of the informal sector is significant, accounting for about 40% of global nonagricultural employment and 50-80% of GDP in developing countries in Asia and Africa (Steel & Snodgrass, 2008).³ Over the past four decades, informal employment has grown as a share of total employment in four of the six regions of the developing world (Charmes, 2012). (See Figure 1.)

Figure 1. Share of Informal Employment in Total Nonagricultural Employment by Region



Source: Charmes, 2012. Adapted from Bitran, 2014.

The definition of the informal sector adopted by the International Labour Office (ILO) in 1993 states that the sector is composed of entities engaged in the production of goods or services with the main objective of generating employment and income (ILO, 2014). These entities tend to operate at a low level of organization, with little or no division between labor and capital, and on a small scale. Labor relations are based mostly on casual employment, kinship, or personal and social relations, not on contractual arrangements with formal guarantees.⁴ Many definitions of the informal sector exist (see Box 1), but they often include: (1) absence of formal contracts or protections for employees, (2) irregular income, (3) lack of outside government regulation or taxation, and (4) lack of health coverage through employers.

1 Many countries seeking to improve financial health protection for the “missing middle” still strive to ensure adequate coverage for the poor, or other vulnerable groups and hard-to-reach groups as well. This term is not intended to imply that all individuals who are poor or formal workers are effectively covered.

2 According to the GTZ-ILO-WHO Consortium on Social Health Protection, social protection for health is often the leading strategy that countries use to improve financial access to health care and work toward UHC. Countries have various options for health financing (such as tax-funded health financing and social health insurance) and organizational arrangements for pooling funds and purchasing health services. An important aspect of social health protection is financial risk sharing and risk pooling, often by using subsidies within or across financial risk pools (GTZ, 2007).

3 The share of the population working in the agricultural sector and the contribution of agriculture to GDP is high in many developing countries relative to other types of informal employment (Bitran, 2014). Researchers and analysts often exclude agriculture when examining data and trends related to the informal sector.

4 According to the ILO, informal-sector production units have the following characteristic features of household enterprises: (a) fixed and other assets used belong not to the production units but to their owners; (b) units cannot engage in transactions or contracts with other units, nor incur liabilities on their own behalf; (c) owners must raise needed financing at their own risk and are personally liable, without limit, for any debts; (d) expenditure for production is often indistinguishable from household expenditure; and (e) capital goods (buildings, vehicles, and so forth) may be used indistinguishably for business and for household purposes.

The definition of the informal sector used in this paper assumes these four characteristics and comprises the poor, near-poor, and non-poor in both rural and urban areas as well as migrant and temporary workers. For simplicity, the terms *informality*, *informal sector*, *informal-sector worker*, and *informal employment* are used synonymously in this paper. In addition, the term informal-sector worker encompasses the family that depends on the individual worker for income.

The non-poor are typically those who do not meet country thresholds for poverty status. They encompass those who are near the poverty line, typically referred to as the near-poor, and the well-off. There is no clear consensus on a definition

or an absolute income threshold for the near-poor. The ILO classifies the near-poor in low- and middle-income countries as having an income of US\$2-4 per day (Kapnos & Bourmpoula, 2013). Definitions of the non-poor and near-poor informal sector at the country level vary, particularly within the context of UHC reforms.

While countries have taken different approaches to tackling the complex issue of providing health coverage to the informal sector, successfully reaching the non-poor within this sector remains a challenge in many countries. This paper, which is based on a literature review and in-depth interviews with country experts, synthesizes the experiences of selected

Box 1: Definitions of the Informal Sector

While the concept of an informal sector has existed for decades, in 1993 ILO statisticians drafted the first consensus approach on measuring the sector, using the following definition:

The informal sector is composed of entities engaged in the production of goods or services with the main objective of generating employment and income. These entities tend to operate at a low level of organization, with little or no division between labor and capital, and on a small scale. Labor relations are based mostly on casual employment, kinship, or personal and social relations, not on contractual arrangements with formal guarantees. (ILO, 2014)

The World Bank offers a narrower, government-perspective definition:

The informal economy refers to activities and income that are partially or fully outside government regulation, taxation, and observation. (World Development Report on Jobs, 2013)

At a 2013 workshop on expanding access to health services and financial protection for people outside the formal employment sector, Resilient and Responsive Health Systems (RESYST) provided this definition:

People who do not receive health coverage through formal employment arrangements including those who

work for unregistered or small enterprises, in subsistence agriculture, are unemployed or are not economically active. The definition also includes people who are poor and unable to afford financial contributions to the cost of health care.

Women in Informal Employment: Globalizing and Organizing (WIEGO), a nongovernmental organization, uses what may be the broadest definition, which encompasses all employment unprotected by the government:

The informal economy is the diversified set of economic activities, enterprises, and workers that are not regulated or protected by the state. Originally applied to self-employment in small unregistered enterprises, the concept of informality has been expanded to also include wage employment in unprotected jobs. (WIEGO Working Paper No. 1, 2012)

Individual countries may also use their own definitions. For example, in Malaysia the informal sector is described as follows (Baharudin et al., 2011):

1. All or at least some of the goods or services produced are meant for sale or barter transaction;
2. Non-registration of the enterprise with the Companies Commission of Malaysia, Local Authorities, or other professional bodies; and
3. The number of employees are less than 10.

countries in covering the non-poor informal sector as part of an effort to achieve UHC. The impetus for producing the paper was the High Level Forum on Expanding Coverage to the Informal Sector, which was held in Yogyakarta, Indonesia, in October 2013. In response to a request from the Indonesian Ministry of Health, the Joint Learning Network for Universal Health Coverage (JLN) Population Coverage Initiative collaborated with the Government of Indonesia, AusAid, and GIZ to plan the forum and, in particular, to organize an

expert panel with representatives from India, the Philippines, Rwanda, South Korea, Thailand, and Vietnam to share experiences in covering the non-poor informal sector. Building on the information shared during this event, JLN produced five country case studies describing different paths to reaching informal-sector workers (JLN, 2015b). The lessons from the case studies specific to the non-poor informal sector are synthesized in this paper. ■

Financing Coverage for the Non-Poor Informal Sector

Funding for social health protection for the non-poor informal sector typically comes from general government revenues—through either full or partial subsidies — or from mandatory or voluntary contributions from enrollees. The choice of which approach to adopt, or whether to combine the two, depends on the country context and policy objectives. Country evidence shows that it can take countries decades to develop and implement effective financing mechanisms; this has implications for the non-poor informal sector, who are oftentimes the last to be reached.

Using General Government Revenues

One way to finance coverage for the informal sector is to use a universal, or population-based, approach to subsidize coverage or exempt an entire population from having to pay for health services through direct contributions. Funding for universal entitlements typically comes from general tax funds and enables access to publically financed health services. Malaysia, for example, offers many services to all people at low or no cost and provides waivers for the poor for additional services (JLN, 2015b). This type of universal entitlement can enable access for all, regardless of wealth or type of employment, and has relatively low administra-

tive costs for implementation and monitoring. The major challenge with universal entitlements is that significant public resources are required to implement and sustain this approach, particularly because health costs rise faster than other costs. This poses difficulties for resource-constrained settings. In addition, in order to provide effective coverage, this approach must pay for services that are sufficiently comprehensive and of good quality.

For countries that use mandatory social health insurance systems for formal-sector workers, one way to achieve high coverage for the whole population is to link coverage with citizenship or national residency and to use government revenues to pay for everyone outside the formal sector or for a subset of those in the social health insurance system. Countries with social health insurance schemes that have financed non-poor informal-sector health coverage from general revenues have higher coverage rates compared to countries that use other financing approaches. For example, Thailand introduced its Universal Coverage Scheme (UCS)⁵ in 2002 and achieved a coverage rate of about 98% by 2007 (JLN, 2015a). The Philippine government passed a Sin Tax Law, which taxes alcohol and tobacco and secured sufficient revenue to fully subsidize the insurance needs of 14.7 million people, or 30-35% of the population, encompassing both

⁵ The UCS is a tax-funded health scheme seeking to cover 47 million people who were not covered by the existing mandatory-contribution formal-sector programs, the Civil Servant Medical Benefit Scheme (CSMBS) and Social Security Scheme (SSS).

the poor and a portion of the near-poor (Philippine Department of Finance, 2013; Domingo, 2014). Sin tax revenues are scheduled to increase until 2018, allowing the subsidy to cover a larger portion of the population each year (Philippine Department of Finance, 2013).

Other countries with national health insurance programs, such as China, Hungary, and Moldova, moved from contributory systems to the use of general revenues to cover informal-sector workers (Wagstaff, Lindelow, Lun, Ling, & Juncheng, 2009; Kutzin, Cashin, & Jakab, 2010). General tax-based financing (when based on income or asset-based tax) is more progressive than social health insurance⁶ because contributions for the latter are usually proportional to current income (subject to a cap) or are a flat rate (Kwon, 2009).

A general tax financing approach has notable limitations, however. First, the treasury might not adequately fund coverage, and with budgets negotiated every year, funding may be unpredictable. In Thailand, the National Health Security Office (NHSO) has had annual negotiations with the Ministry of Finance, with the latter reluctant to fully fund the capitation budget (Hanvoravongchai & Hsiao, 2007). Also, the Thai scheme does not have an endowment or other tax (i.e., dedicated, earmarked, or hypothecated taxes) from which it can draw, aside from the Thai Health Promotion Foundation, which is responsible for public health promotion and disease promotion and is financed with a tax on alcohol and tobacco. The government has relied in part on encouraging higher-income groups to seek medical services elsewhere to lower the costs to be met by the health schemes (Harkins, 2010).

In addition, evidence from countries with mandatory formal-sector social health insurance schemes shows that tax financing for the informal sector leads to an increase in informal employment. If health coverage for informal workers is provided at no or low cost, employers and workers have an incentive to maintain or switch to informal arrangements to avoid paying mandatory contributions. This effect has been seen in several countries. In Colombia, researchers

attributed an increase in informal employment of between 2 to 4 percentage points to the design of the health sector reform⁷ (Camacho & Conover, 2009). A study on Thailand's experience suggested that universal coverage increased informal sector employment by two percentage points, reaching 10% of the workforce over three years (Wagstaff & Manachotphong, 2012).

Using Contributions from Non-poor Informal Sector Workers

Some countries choose to collect contributions from non-poor informal-sector workers. Workers who make contributions gain coverage, and those who do not must pay for health care services at the time of need. The contributory approach tends to be used when the general government budget has insufficient funds to subsidize coverage for this population. In cases where countries have national or social health insurance schemes, contributions from non-poor informal-sector workers are typically premium payments or pre-payments for health insurance.

Some countries partially subsidize premiums to make participation more attractive and affordable. China, for example, subsidizes 85% of premiums for farmers under the New Rural Cooperative Medical Scheme (NRCMS)⁸ (Zheng, 2012). Partly due to the high subsidies, health insurance coverage for rural residents rose dramatically between 2003 and 2008, from 13% to 93% (Barber & Yao, 2010). Similarly, national health insurance schemes in the higher-income countries of Japan, South Korea, and Taiwan partially subsidize premiums for non-poor informal-sector workers (Kwon, 2011).

In addition to generating revenue, a contributory regime, with or without partial subsidies, has other advantages: (1) it creates a sense of participation and ownership among informal workers, (2) it empowers contributors to demand better-quality service, and (3) it does not encourage informality because membership in the informal sector does not mean that one can avoid paying contributions altogether.

6 In practice, however, the progressivity of income tax is not certain, due to tax evasion in many low-income countries (Kwon, 2011).

7 See Bitran, 2014, for more information on the design of the reform, which used an Enthoven-like managed competition model but included subsidized premiums for the poor and non-working populations.

8 The NRCMS is a "voluntary" health insurance program for rural residents that was piloted from 2003 to 2005 and rolled out between 2006 and 2013.

However, this approach has disadvantages as well, including that (1) contributions can pose a barrier to enrollment, which can ultimately keep coverage rates low and (2) the cost of identifying who among the informal sector qualifies as non-poor and then enrolling them and collecting contributions (on an ongoing basis) can be high, given the mobility and often fluctuating incomes of this population.

In addition, if a country chooses to implement a differentiated premium, it is difficult to assess the real income of informal-sector workers—the basis on which contributions would be set. Rwanda’s social service system, Ubudehe, employs village-based staff to report wealth attributes to create subsidy categories: Very Poor own no land and have a poor diet, Average Means own land and produce food, and Rich own significant land and employ others (Buhura, 2011; Rwandan Ministry of Health, 2012). This system, implemented in 2011-12, is considered more equitable than the flat-rate premium used previously, but the initial assessment and later updates have been expensive to conduct. Also, the tiers might not be precise enough because those of “average means” still struggle to pay premiums (de Wolfe, 2013).

South Korea has had the greatest success with a mostly contributory scheme. Approximately 32% of the population is self-employed, and the entirety of the self-employed population is subscribed to the National Health Insurance (NHI).

Self-employed beneficiaries pay a contribution based on a point system, which is partially subsidized by the government (20% subsidy from a combination of general government and earmarked tobacco tax revenues). Despite this impressive rate of coverage, nearly 25% of the informal sector is behind in paying their contribution, which may indicate an inability to pay or a problem with the contribution or enforcement mechanisms. Certain features of the South Korean context that would be difficult to replicate might be critical to its success: South Korea has (1) a relatively homogenous population, (2) a centralized government structure, (3) rapid economic growth, and (4) a relatively small informal-to-formal population ratio. Other countries, such as China and Thailand, have largely or completely abandoned the contributory scheme in favor of tax financing to quickly expand coverage.

Various equity concerns arise from using a contributory vs. non-contributory system for non-poor informal sector workers. In a contributory system, informal sector workers with income close to a cutoff point for contribution assistance (oftentimes referred to as the “near-poor”) may be required to pay a full contribution, particularly if they experience a slight increase in household income or per capita household expenditure. Where informal workers are already susceptible to impoverishment, the burden associated with contributions could then be greater for this group relative to others such as

Table 1. Benefits and Challenges of Contributory and Non-Contributory Systems

	Benefits	Challenges
Contributory	<ul style="list-style-type: none"> • Less burden on the tax base • Politically more palatable to have burden shared between government and workers • Population awareness of cost of health schemes and solidarity 	<ul style="list-style-type: none"> • Low coverage • Significant transaction costs (identifying population, setting subsidies, enrolling, renewing, collecting contributions) • Tailoring differentiated subsidies to appropriate groups
Non-contributory	<ul style="list-style-type: none"> • High coverage • Lower administrative and transaction costs 	<ul style="list-style-type: none"> • Must have a sufficient tax base to extend coverage to non-poor informal sector • Must have appropriate political climate to allocate general government revenues to cover non-poor informal sector • Potential reduction in relative size of formal economy • Annual cost pressures on health budget and crowding of fiscal space

formal workers whose contribution will be partly paid by the employer. If, however, all informal workers were to be covered by government funds, another equity issue emerges: people with the same ability to pay would be treated differently based on their employment status; the formal sector having to pay the contributions at least partly themselves and the informal sector getting their contribution completely subsidized by the government.

Table 1 (on page 7) summarizes the benefits and challenges associated with contributory and non-contributory approaches to financing health coverage for the non-poor informal sector. The following sections describe how various countries have tackled the challenges associated with a contributory system. ■

Identifying and Enrolling Informal-Sector Workers

Countries face the challenge of identifying informal-sector workers, particularly those able to contribute to the costs of health care, and enrolling them in a health protection or coverage program. Decisions on how to reach the non-poor informal sector are made within the context of the existing reform and are shaped by past decisions and existing structures and mechanisms. The country context and situation affects how health insurance schemes reach the non-poor informal sector, while also ensuring their integration with the broader health financing reform.

A wide array of terminology and criteria are used to define non-poor informal-sector members who are eligible for subsidized health insurance schemes. (See Table 2.) For example, eligibility for China’s NRCSM is determined based on residency in rural areas, which therefore encompasses both poor and non-poor workers living in rural zones. In Mexico, Popular Health Insurance (also referred to as Seguro Popular) provides coverage for all groups not covered by Social Health Insurance, which includes non-poor informal workers and their families, among other target groups (e.g.

Table 2. Health Insurance Programs that Subsidize Coverage for the Non-Poor Informal Sector

COUNTRY and Scheme	Eligible Population	Government Subsidy	Contribution Amount
CHINA <i>Urban Resident Basic Medical Insurance (URBMI)</i> <i>New Rural Cooperative Medical Scheme (NRCMS)</i>	<p>Voluntary scheme for permanent residents of urban areas who are not eligible for the employment-based scheme (UEBMI) because they are not salaried by the government or private firms—this encompasses informal sector workers, in addition to temporary adult workers, underemployed adults, unemployed adults, retirees without pensions, students, and children under 18</p> <p>NRCMS is a voluntary health insurance program for rural residents that was piloted from 2003 to 2005 and rolled out between 2006 and 2013. All individuals with a rural permanent address are eligible, therefore including the poor and non-poor residents</p>	<p>URBMI contributions are from general revenues and are determined annually by China’s State Council. In 2009 the subsidy rate was 61%</p> <p>NRCMS contributions are from general revenues and are determined annually by China’s State Council. In 2011, the subsidy rate was 85%</p>	<p>Contributions are a flat amount determined by county/city, with minimum contribution set by central government. (The pilot amount was 236 RMB / US\$38.27 for adults and 97 RMB / US\$15.73 for children) (Tang, 2013)</p> <p>Contributions are a flat amount determined by county (20-60 RMB / US\$3.24-9.72) (Liu & Zhao, 2012)</p>

COUNTRY and Scheme	Eligible Population	Government Subsidy	Contribution Amount
SOUTH KOREA <i>National Health Insurance (NHI)</i>	<i>Membership Group – Self-Employed:</i> Mandatory health insurance for self-employed daily workers employed less than one month per year, military personnel, elected public officials without a monthly salary, part-time workers who work less than 80 hours a month, temporary workers, employees without a fixed work location, and employees with contracts of less than 24 months	Subsidy for the self-employed is 20% of total expected health insurance revenue: 14% of contributions are from general revenues, and 6% are from earmarked tobacco tax revenues	Household contributions for the self-employed are calculated using a point system that draws on both taxed income and estimated income based on property assessment. (The average monthly contribution per person in 2007 was 24,065 KRW / US\$23.) (JLN, 2015b)
MEXICO <i>Popular Health Insurance</i>	Voluntary health insurance for all residents who are not eligible for any other social security scheme—encompasses non-poor informal sector workers, underemployed, unemployed, other non-salaried workers	86% of the program's budget is from central general revenues, 14% is from state general revenues; a formula determines central and state contributions for each state	Effectively a non-contributory scheme, although a legal framework exists for contributions
PHILIPPINES <i>PhilHealth</i>	<i>Membership Group – Sponsored Program:</i> Mandatory health insurance for the near-poor, who are defined as the second income quintile, and other vulnerable populations are included in PhilHealth's Sponsored Program, which also includes other vulnerable groups, such as abandoned minors, disabled people, and the elderly <i>Membership Group – Informal Economy:</i> Mandatory health insurance for non-poor informal sector workers, and heads of household who do not qualify for any other programs: farmers; fishermen; non-salaried earners; employees of civic, religious, and international organizations; unemployed; and migrant workers	100% by local government, Department of Social Welfare and Development (DSWD), or other sponsor No government subsidies	No contributions paid by members Members pay full contribution (2,400 PHP / US\$52). (JLN, 2015b)
VIETNAM <i>Social Health Insurance (SHI), post- 2009</i>	<i>Membership Group – Vulnerable Populations:</i> Mandatory coverage for poor, ethnic minorities in disadvantaged areas, elderly over age 80, children under age 6, near-poor <i>Membership Group – Remaining Voluntary Members:</i> Mandatory coverage for rural near-poor, farmers, fishermen, forestry workers, dependents of non-army informal laborers and cooperative members	Provincial general government revenues provide a partial subsidy to most of the informal sector, ranging from 30% to 100%.	Contributions are paid in person at the Vietnam Social Security (VSS) offices and are a flat percentage of the regional minimum wage (3% for students, 4.5% for others) minus subsidies, which are determined by enrollment group

the unemployed). And in the Philippines, the Philippine Health Insurance Corporation (PhilHealth) offers different membership categories and criteria for near-poor informal workers (who are fully subsidized by the Sponsored Program) and non-poor informal sector workers (who are required to pay a contribution to receive coverage under the Individual Economy Membership).

After determining which populations are eligible for subsidies, officials need a method to distinguish each individual (or family, depending on the lowest unit of enrollment). This challenge is not unique to informal-sector workers, but it is critical for expanding coverage. The non-poor informal workers are particularly difficult to identify and enroll because the huge amount of heterogeneity of this population makes it administratively difficult to reach them. Countries must often-times tailor their identification and enrollment processes and develop specialized efforts to reach groups of non-poor informal sector workers, particularly those hard-to-reach, such as migrant workers and fisherman and farmers in remote areas.

As individuals change their work or income levels, their eligibility for social welfare programs may shift. In many countries, health insurance schemes (e.g. PhilHealth in the Philippines, RSBY in India and MSBY in India's Chattisgarh State, Seguro Integral de Salud in Peru) use lists established by the Ministries of Social Development for targeting subsidies. Usually these lists are only updated every couple of years due to the high costs involved. Some countries such as China and Thailand have adopted a single identity number system that distinguishes individuals across all social security and health programs. The single identity number can track enrollees across schemes, thereby helping to identify and prevent duplicate enrollment of informal sector workers in multiple schemes, particularly if they enter into formal employment and are eligible for employer-based health insurance coverage. In 2015, Vietnam plans to begin issuing unique 12-digit ID numbers that will be used for a similar purpose, with the aim of covering the entire country by 2020 (ID numbers, 2013).

In Thailand, a strong information technology system and synchronized enrollment records across schemes have been instrumental in tracking enrollment and coverage among

non-poor informal workers. The country has made substantial progress towards universal coverage using three health insurance programs: the Social Security Scheme (SSS) for private formal-sector employees; the Civil Servant Medical Benefit Scheme (CSMBS) for government employees, retirees, and their dependents; and a universal coverage program for the remainder of the population, including the non-poor informal sector. The latter was the last program to be implemented and faced several challenges. The government struggled to identify those who were uninsured because there was no database for CSMBS beneficiaries. In response, it created and has managed a comprehensive information system since 2002 using a government registration database to avoid the duplication of health insurance benefits across different population groups. More than 50 million beneficiary records have been created (Hanvoravongchai & Hsiao, 2007). Today, the centralized database covers the entire Thai population and is updated twice a month (ILO, 2013).

In China, everyone has a unique social security or enrollment scheme number. Each person or family (depending on the scheme) has a computerized enrollment record. Many areas are issuing ID cards to validate enrollment, with some doing it as a public-private partnership with local banks (Liang & Langenbrunner, 2013). In the Philippines, PhilHealth assigns members a permanent and unique PhilHealth Identification Number (PIN). An individual member data record is established for each enrollee, and members receive cards containing their PIN (Basa, 2005).

Some countries that do not yet have a single identification number, such as Indonesia, assign a unique identifier at the program level to each individual or family enrollment unit. These identifiers are not centrally maintained, so there is a greater chance of duplicate enrollment as beneficiaries migrate from one program to another.

Voluntary vs. Mandatory Enrollment

Mandatory enrollment is more efficient than voluntary enrollment, given that the risk pool includes both healthy and unhealthy people and is not subject to adverse selection¹⁰

¹⁰ Adverse selection refers to an undesirable self-selection phenomenon in which individuals who are sickest opt in and healthier beneficiaries opt out, thereby making the risk pool unsustainable.

(Kwon, 2009). Indeed, voluntary enrollment for insurance schemes in low- and middle-income countries is typically low and may be related to perceived quality or availability of care as well as cultural factors, rather than to the actual availability and quality of care (Acharya et al., 2012). Another key consideration for mandatory enrollment is that it can facilitate cross-subsidization for the non-poor when a scheme covers both higher-income and lower-income groups. However, while mandatory enrollment is preferable, the question remains as to whether it can be effectively enforced. Success ultimately depends on effective enforcement, which is difficult to carry out.

While China's NRCMS is a voluntary scheme in name, the economic incentive to enroll is strong because of high government subsidies. In 2010, the annual premium was 120 RMB (about US\$18), with subsidies of 50 RMB each from the central and local government, leaving beneficiaries to contribute only 20 RMB (Barber and Yao, 2010). NRCMS comes with specific enrollment targets for local Communist Party officials that make it a *de facto* mandatory scheme (Liang & Langenbrunner, 2013). Other countries may not have a similar ability to "encourage" enrollment.

In Vietnam, the voluntary Vietnam Health Care Fund for the Poor achieved only 60% countryside enrollment within three years of its inception in 2003 (Wagstaff, 2010). In Thailand, voluntary expansion of coverage to informal-sector workers was attempted with the Voluntary Health Card Scheme (VHCS) in 1991. A key reason that the VHCS program was eventually replaced was its voluntary nature, which led to adverse selection and system abuse. Not only did VHCS beneficiaries use health services more often than the general population, but they also tended to join the program following a diagnosis (of pregnancy, chronic diseases, and so forth). Consequently, by 2001, the program was phased out (Hanvoravongchai & Hsiao, 2007).

The Philippine government made enrollment in the National Health Insurance Program mandatory in 1995, and an amendment to the law in 2012 extended subsidies to support this mandate. The National Health Insurance Program's Sponsored Program relies on local government units to identify the poorest 25% of the population. The near-poor informal workers, who are defined as the second income quintile, are

eligible for coverage in the Sponsored Program. Revenue to subsidize coverage for the poor and a portion of the near-poor comes from taxes on alcohol and tobacco, and this revenue is expected to increase through 2018 with the aim of subsidizing a larger portion of the population over time.

The Filipino Indigent Program targets poor families through a centrally managed poverty identification system within the Department of Social Welfare and Development (Domingo, 2014). A 46-point proxy means test determines income levels and generates a list of eligible heads of household to PhilHealth. Heads of household who do not qualify for any other program are mandated to enroll in PhilHealth's Informal Economy Membership and pay 100% of their contributions. However, due to lax enforcement, informal worker membership has been *de facto* voluntary and enrollees are mostly chronically ill and have higher utilization rates than the average PhilHealth beneficiary (Tangcharoensathien et al., 2011; Government of the Philippines, 2012; PhilHealth, 2015).

Rwanda's community-based health insurance for the poor and the informal sector, Mutuelles, shifted from voluntary to mandatory enrollment in 2005-2006. Local government units are responsible for enrollment. The central government uses enrollment targets and financial incentives to encourage local governments to enroll members. To ensure accountability, top-level government officials, including the president, review performance on achieving enrollment targets (Rwandapedia, 2014).

Enrollment Process and Location

Barriers to insurance uptake among poor and non-poor informal-sector workers include difficulties related to the enrollment process and location. In Nicaragua, a study found that enrollment at the central office of the voluntary health insurance program for informal-sector workers was higher than through decentralized microfinance intermediaries (MFIs). People reported confusion, difficulty locating branches of MFIs, and time constraints as reasons for not enrolling, even when coverage was subsidized. Qualitative data indicated a strong preference for a more direct and convenient registration process to eliminate travel costs and reduce the time associated with taking photographs and making copies of ID cards. Individuals enrolling at either

the Nicaraguan Social Security Institute (INSS) central office or at an MFI were required to provide photocopies of their government ID cards, two passport-size photos, and the birth certificates of all beneficiaries. They also had to complete a registration form and then travel to the INSS or MFI office and wait in line to register in person. According to a survey, this process took about one day's time, a substantial cost for small business owners who would need to find someone to watch their market booth or forgo a day's revenue (Thornton et al., 2010).

In China, local party officials often go door-to-door to sign up households and explain the benefits of coverage (Liang & Langenbrunner, 2013). In India, under the new public-private Rashtriya Swasthya Bima Yojana (RSBY) scheme—India's health insurance for the poor—private insurance organizations are assigned geographic areas and go into communities to enroll beneficiaries using mobile enrollment camps. Other health insurance schemes in India serving the non-poor, such as Mukhyamantri Swasthya Bima Yojna (MSBY) in Chhattisgarh State, partners with RSBY to leverage identification and enrollment processes. Insurers are paid according to the number of families they enroll and thus have an incentive to maximize enrollment while minimizing costs. Another innovative element of the RSBY enrollment procedure is the smart

card that is issued at the point and time of enrollment. These are electronic cards with fingerprints, photographs and additional information of the card holder and family members. Empanelled hospitals use smart card readers and computers with software that link them to district servers to identify beneficiaries (JLN, 2015b).

Units of Enrollment

The commonly used units of enrollment are the household, the individual, and the group. (See Table 3.) In South Korea, the spouses, descendants, siblings, and direct lineal ascendants of self-employed workers who live in the same household comprise one unit of coverage. This household-based membership has contributed to the rapid expansion of coverage in South Korea in its move toward universal health care (Kwon, 2009). Using the household as the unit of enrollment can also reduce adverse selection. Dependents who live separately or can be considered employed insurees must pay separate contributions (Mathauer & Xu, 2009). The South Korean National Health Insurance Service (NHIS) understands that while family-based membership worked well to extend coverage when most self-employed households had a single breadwinner, many households now have multiple earners. Thus, there is discussion about transitioning

Table 3: Units of Enrollment

Units of Enrollment	Advantages	Disadvantages	Examples
Household	<ul style="list-style-type: none"> • Convenient • Rapid coverage expansion 	<ul style="list-style-type: none"> • May lead to overlapping coverage of insurees in households with multiple earners 	South Korea, China (NRCMS), Philippines, Rwanda
Individual	<ul style="list-style-type: none"> • Most precise level of enrollment—useful in households with multiple earners 	<ul style="list-style-type: none"> • Higher administrative costs than for signing up families or groups • Higher risk of adverse selection 	Students in Vietnam (VSS), non-salaried urban population in China (URBMI), Mexico, Nicaragua
Group	<ul style="list-style-type: none"> • Convenient • Rapid coverage expansion • Lower risk of adverse selection 	<ul style="list-style-type: none"> • Informal employees who are not in any particular group will not be enrolled • Different group markers (occupation, social or culture group) increase probability of overlaps 	Vietnam, Philippines (Individually Paying Program [IPP] / Informal Economy Membership)

to individual enrollment to avoid overlapping or redundant coverage (Kwon, 2013).

Many countries' enrollment practices look similar to those of South Korea. In the Philippines, each of the three membership categories of PhilHealth for the informal sector entitles the legal dependents of the principal member to standard benefits. This includes the spouse and all children under age 21, as well as parents over age 60 and children or parents of any age who have physical or mental disabilities (Obermann et al., 2006; Government of the Philippines, 2012). Likewise, China's NRCMS typically uses household enrollment (Wagstaff, Lindelow, Lun, Ling, & Juncheng, 2009); no evidence of adverse selection has been seen since this scheme was rolled out (Chen & Yan, 2012). East Asian and Pacific countries that have successfully expanded social health insurance have typically placed a strong emphasis on family-based enrollment (World Bank, 2012). Countries such as Mexico and Rwanda also have used household-based enrollment (Kurowski & Villar-Urbe, 2012; de Wolfe, 2013).

Individual enrollment in coverage schemes can be used for a whole population, or for certain subpopulations, such as students in Vietnam and the non-salaried urban population in China under the URBMI scheme (Lieberman & Wagstaff, 2009). The main drawbacks of individual enrollment are the threat of adverse selection, as witnessed consistently with URBMI in China and in Indonesia, as well as higher costs to the government to enroll these individuals, as seen with the Vietnam Social Security (VSS) program (Chen & Yan, 2012; Yip et al., 2012; Lieberman & Wagstaff, 2009). As a result of these disadvantages, Indonesia and Vietnam are considering switching from individual to family enrollment (Langenbrunner, 2014; JLN, 2015b). Mexico, on the contrary, used family-based enrollment from 2003-2010 and transitioned to individual enrollment in 2010 to account for an unexpectedly high number of individuals and small families (JLN, 2015b).

Group-based enrollment requires the individual to enroll in an insurance scheme on a household, community, or other type of defined membership basis. The rationale for group enrollment is compelling: it is easier to administer and allows

for faster expansion of coverage. It also reduces administrative costs and limits adverse selection if all members of a given group are enrolled. Given the nature of their work, informal-sector workers may be less likely to be members of occupation-based groups or associations than community-based organizations such as women's groups, self-help groups, streetcar vendors' groups, credit and savings groups, or religious groups (Mathauer, Schmidt, & Wenya, 2008).

Several countries have attempted to tap into the potential of community-based groups. In Vietnam, the VSS program sells voluntary insurance to everyone not eligible for mandatory insurance; an important target group for this scheme is the informal sector. The VSS has focused on enrolling organized groups, including students and members of mass organizations such as farmers' and women's unions (Nguyen & Knowles, 2010). Nearly all of the voluntary enrollees are students—an indication that the VSS has yet to establish a mechanism for selling insurance to the general population, including the informal sector.

The Philippines has been successful in enrolling formerly uncovered segments of the population by using organized groups to identify non-poor informal-sector workers (Obermann et al., 2006). However, even using this approach, non-poor informal-sector workers continue to be the least covered population group, with coverage below 60% (PhilHealth, 2014). In 1999, PhilHealth launched the Individually Paying Program (IPP) to extend social health insurance to all non-poor informal-sector workers. PhilHealth has changed the name of IPP to Informal Economy Membership, and in practice it is the only individual membership option for the non-poor informal sector. PhilHealth also targets organized groups with iGroup (initially called the KaSAPI Program), which primarily covers institutions that provide microfinance¹¹ services to the informal sector (Weber, 2009; Domingo, 2014). As an incentive for organizations to participate, iGroup offers value-added services such as a primary care benefits package, an electronic health record system, and benefits that depend on the size of the group (e.g. premium discounts, no balance billing) (Philippine Health Insurance Corporation, 2013). ■

¹¹ PhilHealth signed Memoranda of Agreement with two of the largest microfinance institutions in the country, the Center for Agriculture and Rural Development Mutual Benefit Association Inc. (CARD MBA) and Taytay sa Kauswagan (TSKI), or Bridge to Progress (Basa, 2005).

Contributions

Not only is the enrollment of all informal-sector workers challenging, but so is the regular collection of contributions from enrollees. Unlike formal-sector workers, who typically pay their social security contributions through automatic payroll deductions, informal workers must proactively pay premiums and continue paying them over time. Evidence shows that flexible and convenient payment options lead to greater participation of non-poor informal-sector workers in such health insurance schemes.

In contributory health insurance schemes, a key challenge for policymakers is determining enrollees' contribution amount. The program can require a uniform payment for all enrollees or can base the contribution on income level, with government subsidies covering the gap.

Income-Based Contributions

The informal sector is heterogeneous and comprises many income groups—including the non-poor, poor, and other vulnerable groups—who have varying capacity to pay contributions. For example, the fixed annual premium of PhilHealth's Informal Economy Membership is relatively inexpensive for self-employed professionals but prohibitively expensive for many farmers and other workers in the informal economy (Obermann et al., 2006). One solution is to segment health insurance to reflect payment capacities across population groups (Pauly, 2008). This requires some kind of assessment, often costly and inaccurate, of income or assets to determine the capacity to pay (Bitran, 2014).

South Korea has an income-based contribution system for the self-employed: contributions are calculated through a point system based on both taxed income and estimated income and drawing on property assessments, car tax payments, and other factors (Kwon, 2013).

At a more macro level, the social health insurer can try to incrementally segment the informal sector by occupation type for the purpose of differentiating premiums (Kwon, 2009). Differentiation can also be based on group characteristics (Mathauer, Schmidt, & Wenya, 2008) or geographic location. In Vietnam, premium rates for the SHI range from US\$3 in rural areas to US\$21 in urban areas (Ekman et al., 2008). However, determining capacity to pay can be a

cumbersome process, requiring accurate data and analysis, and it can lead to high administrative costs or corruption, similar to other aspects of tax collection policies and practices. Therefore, countries that have a large informal sector often implement a flat premium contribution to make the system more feasible—at least at the start—as is the case with China's NRCMS and the Philippines' Informal Economy Membership.

Collection Methods

In order to have an effective contributory system for the non-poor informal sector, the contribution site and mechanism must be convenient for users to ensure that they can make their payment. Where contributions are collected from the non-poor informal sector, various payment locations are used by countries, including program offices, community offices and town halls, post offices, or local kiosks. Collecting contributions is particularly challenging in rural areas; promising approaches to reaching rural areas include individual home-based visits (e.g. Vietnam), leveraging organized community groups (e.g. Ghana), and using technologies (e.g. computer-based enrollment and on-site printing of smart cards by India's RSBY and mobile-based premium collection by mutuelles in Mali, described below).

Administrative costs for collecting and monitoring premiums from the informal sector are usually quite high, especially in remote areas. Countries are therefore using innovative approaches and mechanisms to collect contributions, for example working with intermediary institutions. Organized groups and associations of non-poor informal workers, such as cooperatives, can be used to collect contributions. The Vietnam Social Security program works with the local commune government or community nominee to collect contributions, which are paid annually and in person at local VSS offices (Kham, 2013). The Philippines' iGroup uses organized groups with 30+ members in rural areas to serve as marketing, enrollment, and collection agents for the Informal Economy Membership Program. As an incentive for organizations (including microfinance institutions, banks, and cooperatives) to participate, iGroup offers convenient and easy enrollment and a flexible payment schedule (Philippine Health Insurance Corporation, 2013).

Existing mechanisms for collecting contributions from non-poor informal-sector workers for other social security programs can also be used to collect health insurance premiums. This is the case in most western European countries. In South Korea, the NHIS collects all social insurance contributions, including those for long-term care, pensions, unemployment, and workplace injury (Kwon, 2013). Colom-

bia successfully linked its national health insurance to the pension scheme for the purpose of contribution collection and in an effort to “reduce evasion and elusion” of payments¹² (Bitran, 2014).

Table 4 summarizes country experiences with various collection methods.

Table 4. Country Experiences with Contribution Collection Methods

Source: Mathauer & Xu, 2009

Country (Scheme)	Collection Methods	Challenges	Strategies
Philippines (<i>PhiHealth</i>)	Contributions collected by PhilHealth regional offices or contracted partners or through iGroup's partner groups.	Two-thirds of informal-economy members are not paying their premiums on a regular basis.	PhilHealth has public-private partnerships (PPPs) with banks and money transfer companies to make premium payment accessible to the informal sector.
South Korea (<i>NHIS</i>)	90% of collection is through banking systems; 60% of that is automated payments. Some contributions are paid directly at NHIS branch offices, convenience stores, or post offices. Alternative collection methods, such as automatic bank transfer and Internet payment via credit card, are also offered to increase collection rates.	25% of self-employed households are in arrears on payments; the NHIS is considering flat rather than graduated premiums.	Contributions can be paid on a monthly or quarterly basis; households can apply for a waiver for late payments.
Mexico (<i>Popular Health Insurance</i>)	Only one state has enforced premium collection; across the country, less than 1% of those required to pay have actually paid.	States have waived premium collection to boost enrollment, making the program effectively 100% subsidized	Increasing contribution collection is not a priority.
Vietnam (<i>VSS</i>)	Payment at VSS local offices or through household visits.	Individuals provide only 60% of SHI revenue; the rest is from the government.	VSS works closely with local commune governments to collect contributions.
China (<i>URBMI and NRCMS</i>)	Large-scale social mobilization and household visits.	High administrative costs associated with household visits, particularly in counties with weak capacity.	Provinces that reached the enrollment threshold received central government subsidies.

¹² “In Colombia, the government decided to link workers' health contributions to their pension contributions in order to reduce evasion and elusion. Since pension funds are individual and not pooled, the amount of money that individuals will receive from their pension fund is proportional to the money they put in. Therefore, individuals do not have an incentive to substantially under-declare their income. In contrast, the health benefits that individuals received in the Contributory Regime were the same irrespective of their declared income. By linking pension and health payments, the Colombian government was able to reduce evasion and elusion of SHI.” (Bitran, 2014)

Payment Schedules

Irregular and varying income among informal-sector workers complicates the collection of regular contributions. To accommodate workers' payment capacity, it is useful to allow flexibility in the frequency of premium payments. In fact, this flexibility is often more important to informal-sector workers than the amount of the payments (Jowett & Hsiao, 2007). In Kenya, informal-sector workers had to make up-front annual payments to obtain coverage under the National Hospital Insurance Fund (NHIF). Focus groups showed that members of this population had a strong preference for more frequent and smaller contributions (Mathauer, Schmidt, & Wenya, 2008). More flexible collection schedules could thus help increase compliance. For informal-sector workers in agriculture, the ability to pay is greatest right after harvests and lowest just before them. Structuring payment schedules around the agricultural cycle can address their willingness and capacity to pay. For instance, just as agricultural cooperative fees are typically deducted from sales of outputs at harvest time, so too could health coverage contributions so they are part of the same safety-net system. More flexibility in contribution payment options (e.g. monthly, seasonal, annual, or per harvest payments) might however also have greater cost implications.

Working with partner organizations (banks and money transfer companies), PhilHealth has sought to offer greater payment flexibility to its enrollees: payments for the Informal Economy Membership Program can be paid quarterly, semi-annually, or annually. Even so, two-thirds of members are delinquent on payments (PhilHealth, 2012; Jowett & Hsiao, 2007). Members need to have paid for three of the previous six months in order to receive benefits (Philippine Health Insurance Corporation, 2013).

In South Korea, the NHIS sends self-employed households a monthly invoice but enrollees can choose to pay contributions on a monthly or quarterly basis (Mathauer & Xu, 2009). Still, more than a quarter of all informal-sector workers are in arrears with their payments. Most of these workers are unable to keep up with payments, but some choose not to pay because there is little penalty for skipping payments (Kwon, 2013). South Korea has at times informally offered waivers to delay payments, but this has been controversial

due to concerns about moral hazard and has at times been politically motivated (Kwon, 2013). The spread of mobile money, discussed below, has opened up options such as contribution collection from SMS reminders and automatic payments deducted from mobile phones.

Mobile Payments

One innovative approach for reaching the informal sector is through mobile phone-based payment platforms, commonly known as *mobile money*. Mobile money applications can be used to deposit, withdraw, or transfer funds from an account associated with a mobile phone. In June 2013, there were more than 203 million mobile money accounts worldwide, with the majority in Sub-Saharan Africa (Penicaud & Katakam, 2014). Mobile money services continue to expand globally both in terms of reach and products offered, helping to bring financial access to populations that are not served by formal financial institutions.

Mobile money provides a flexible and convenient mechanism for collecting premium payments from the non-poor informal sector in rural or hard-to-reach areas. Kenya's NHIF has forged a partnership with Safaricom Limited, a leading telecommunications company in Kenya, to use its highly successful M-PESA payment platform to facilitate premium remittances from informal workers. An incremental payment option allows funds to be transmitted to NHIF as they become available over the course of a payment period, accommodating the often fluctuating income of informal workers. M-PESA has also helped workers minimize travel to NHIF offices and reduce time spent away from income-producing activities.

Since the introduction of M-PESA, NHIF has seen its revenue from contributions grow from KES 1 million (US\$10,800) per month at the end of the 2011 to an average of KES 35 million (US\$380,000) per month in 2013 (Taddese, 2014). In a similar example from Mali, mobile money is being used to collect premiums from members enrolled in community-based health insurance programs (also known as *mutuelles*), many of which are located in rural and remote areas. The use of mobile money for collection of premium payments in Mali's *mutuelles* was inspired by the experience of Kenya's NHIF.

Finally, BayadLoad, a mobile payment platform launched in the Philippines in 2013, allows subscribers to pay for government social benefits, including PhilHealth, using mobile phone airtime credit (Banzon, 2013; CGAP, 2013). However,

the program has had low uptake due to lack of awareness and understanding of electronic financing among informal-sector populations and high fees associated with use of the payment service (Haas et al., 2013). ■

Benefits

Research shows that there are important issues to consider related to benefits design for the near-poor informal sector (as opposed to the non-poor as a whole) (Bitran, 2014). Benefits packages can be uniform across a national health insurance program so the near-poor informal sector and everyone else have access to the same coverage, or they can differ based on enrollees’ ability or willingness to pay and other preferences. (See Table 5.) In voluntary schemes with multiple packages from which to choose, informal-sector workers may be more willing to enroll with a tailored package that meets their needs rather than a uniform package. Another variant allows higher-income informal-sector workers (such as doctors, lawyers, and architects) to buy into the social insurance scheme and its bigger benefits package—especially if they are willing to do so as a group (e.g., through their professional associations) as a way to protect against adverse selection. A more restricted benefits pack-

age could then be offered to the near-poor informal sector at a lower contribution rate. However, in cases where unequal benefits are offered to different population groups, it is important to consider the implications for equity and other possible unintended effects, such as the creation of incentives and disincentives for enrollment and service use. Also, once having established different benefit packages, it might be very difficult and a lengthy process to potentially reverse this and establish the same benefit package for the whole population. Whether a uniform or distinct package is used for the near-poor informal sector, changes may be required over time to respond to changes in beneficiary need and demand, rising health costs, and other factors.

Looking at demand among informal-sector workers in China, Baerninghausen (2007) found that “they do not value the Basic Health Insurance¹³ as a mechanism to recover the

Table 5. Distinct vs. Uniform Benefits Packages for the Near-Poor Informal Sector

	Distinct Benefits Packages	Uniform Benefits Package
Pros	<ul style="list-style-type: none"> • Packages can be tailored to the needs and priorities of each population • Attractive packages may encourage enrollment 	<ul style="list-style-type: none"> • Reduces inequities in benefits available to population • Uniform and shallow package across populations can facilitate rapid expansion of benefits (e.g., South Korea)
Cons	<ul style="list-style-type: none"> • Packages that do not meet needs or demands may discourage enrollment • Attractive packages may lead to an increase in informal employment (e.g., Mexico) • Weaker benefits coverage for certain population groups may lead to equity issues • Risk of fragmentation if benefits for non-poor informal sector are offered in a separate scheme 	<ul style="list-style-type: none"> • Governments face fiscal constraints in subsidizing benefits package for non-poor informal sector, particularly with meaningful coverage • Package may not meet the needs or demands of all population groups (e.g., Vietnam)

relatively frequent, but small financial losses associated with common illnesses, but because it protects against the rare but large financial losses associated with catastrophic care.” Likewise, in Vietnam, an alignment with the needs and wishes of the target group is recommended in order to increase demand for voluntary health insurance (Ekman et al., 2008). In Mexico, inequalities exist between the benefits packages of the Popular Health Insurance scheme, which serves informal workers and their families, and those of other social security programs. The latter cover more high-cost tertiary services and have better health outcomes for similar services,

suggesting inequity in access to high-quality care (Bonilla-Chacín & Aguilera, 2013).

Some countries offer a uniform package. South Korea’s National Health Insurance (NHI) program is more limited in scope than programs in most other high-income countries, but the modest package allowed the government to rapidly enroll the self-employed sector (Kwon, 2009). A criticism of this design is that as incomes rise and the population ages, the demand for health care will increase, along with pressure to provide more extensive benefits and cover a greater proportion of costs (Mathauer & Xu, 2009). ■

Supply-Side Strengthening

Quality health services are essential to providing effective health coverage. Where financial health protection programs exist, lack of trust in the quality of health services poses a barrier to enrollment and participation for users and may limit utilization of services. Lack of trust arises from poor quality of care and lack of transparency on health services and pricing. In Cambodia, one reason for low coverage among voluntary community-based health insurance (CBHI) schemes¹⁴ is the perception of low health care quality in government health facilities (Bitran, 2014). Similarly, in Vietnam, one set of informal-sector workers (the “treatment group”) in a randomized study received subsidies and information about the health benefits of enrolling in the new insurance scheme while a control group did not. Those in the treatment group were no more likely to enroll than those in the control group because the value of health insurance was not perceived to be commensurate with the cost (Nguyen et al., 2013).

In contributory systems, informal workers may be reluctant to pay if they do not feel they receive value for their money, especially in terms of benefits packages and healthcare providers (Mathauer, Schmidt, & Wenya, 2008). To make

paying contributions worthwhile for non-poor informal workers, a functioning health services infrastructure must be in place. Improving the quality of care is essential to inducing informal workers to pay contributions. The improvements must go beyond medical and technical quality to also include responsive care and reduced travel and wait time. Hence, to expand membership, a highly visible increase in the quality of participating clinical facilities should be part of any attempt to roll out health insurance schemes, including possibly giving enrollees the option to choose either government or private providers (the latter sometimes being perceived as offering better quality care, especially in terms of respect and sensitivity shown to service users) (Van der Gaag & Stimac, 2012).

Supply-side readiness to achieve effective coverage is crucial in schemes financed through government revenues. Government financed contributions are not a substitute for the necessary substantial increase in allocation of funds to establish the readiness of the supply side in many settings. International evidence, e.g. from Thailand, underlines the importance of investing in health infrastructure, human resources and suitable provider payment mechanisms for covering non-poor informal workers and reaching effective UHC. ■

¹³ China’s central government introduced a social health insurance scheme for urban formal-sector workers in 1998 called Basic Health Insurance (BHI). Municipal governments can opt to offer voluntary participation in the BHI to informal sector workers.

¹⁴ The CBHI schemes aim to cover the non-poor informal sector. They are implemented in several districts and rely exclusively on government health care providers. CBHI has shown limited success in enrolling the informal sector; coverage is at only 2% of the population.

National and Subnational Harmonization

Extending social protection may be difficult without the strong involvement of provincial and district governments and the harmonization of efforts on the national and subnational levels (Tangcharoensathien et al., 2011). Subnational schemes can make national schemes less effective at sharing financial risks by fragmenting risk pools, which can lead to inefficiencies and higher administrative costs. Therefore, in the case of decentralized government-initiated schemes, central government regulation and leadership could help achieve a certain degree of harmonization.

The most notable country experience related to national and subnational harmonization is that of China's NRCMS, which has relied on strong guidance from the central government to fulfill the objectives of financial protection and inclusion of the low-income population as mandated in the scheme design. In places without clear targets, implementation progressed slowly and eventually came to a halt (Carrin,

2002). In response, the central government increased its portion of premiums, with provincial and district governments providing only a minimal match of funds. Insurance funds are pooled locally, and local health officials are authorized to assign reimbursement levels, designate participating providers, and define the benefits package on the basis of local needs and resources (Babiarz et al., 2010). The management of pools of funds at local levels further strengthens local interest in the performance and outreach of the health system.

A single national pooling mechanism can achieve better efficiency and equity compared to multiple subnational pooling mechanisms (Kwon, 2011). National pooling of health risks can improve financial stability, better target health funds, and increase equity, although some form of local independence in benefit design and modes of delivery could help win acceptance among the population (Obermann et al., 2006). ■

Outreach and Education

Educating health users about available programs and services – and the processes to use them – is a critical step for all countries working to provide health protection and access to health services. In Kenya, the most important factor preventing enrollment is informal workers' lack of awareness of the NHIF (Mathauer, Schmidt, & Wenya, 2008). Communication campaigns and strategies are used by countries to inform members of the non-poor informal sector on their options for financial health protection and health services, enrollment processes, where and how to seek care, and how to use their benefits. In Thailand, attempts to promote demand for insurance have been made primarily through radio and television awareness campaigns (van Lente, Pujiyanto, & Thiede, 2012). For rural residents in China, media advertising promotes enrollment in the voluntary NRCMS scheme. Reimbursement of claims for individual patients is posted on village bulletin boards to publicize tangible monetary benefits of the health insurance program (Liang & Langenbrunner, 2013).

In Indonesia, the Informal Economy Study (IES) found that the main barrier to accessing health protection is lack of information about the health protection options (Bappenas, 2012). This has prevented people from enrolling and from using the services to which they are entitled. Nearly a quarter of the informal workers questioned in the IES stated that they had never heard of any of the Indonesian health protection programs, and about 38% did not know how to enroll in a health protection program. Briefly informed about health and social protection programs, non-poor workers explicitly stated that their willingness to enroll in such programs would increase if they had more access to information and had more confidence in the benefits.

Evidence from several countries suggests that proximity to health insurance carriers has a positive effect on outreach. PhilHealth, for example, operates a large network of regional offices. Originally conceived as extension offices for claims processing, they now serve a wider purpose: they manage

contributions, conduct marketing campaigns, and perform local operations research (Oberman et al., 2006). Likewise, the single payer of South Korean health insurance uses local branches for enrollment and premium collection (Kwon, 2009).

However, outreach and communication efforts may have limited impact on enrollment and utilization of services if the benefits and/or services offered are not sufficiently attractive to populations. Experiences in Vietnam suggest that visibly improving the quality of care is as important as providing more information and improving convenience. A study testing

the effect of an educational video highlighting the importance of health insurance on voluntary insurance uptake in Vietnam found no significant impact (Nguyen, Wagstaff, Dao, & Bales, 2013). The study's authors hypothesized that this was primarily due to quality issues in the Vietnamese health system. Another study in Vietnam undertook a similar randomized control trial to raise enrollment in government-run insurance schemes with subsidies for informal-sector workers and their families (Wagstaff, Nguyen, Dao, & Bales, 2014). It found that information leaflets and/or subsidies of 25% did not have an appreciable impact on enrollment, except when beneficiaries were already in poor health. ■

15 The leaflets described the Vietnamese government-run health scheme and the concept of health insurance.

Conclusion

The country experiences examined in this paper include a variety of approaches to covering the non-poor informal sector to achieve universal health coverage. Despite the challenges, countries such as Mexico, Thailand, China, South Korea and the Philippines have made significant progress in covering the non-poor informal sector. These country examples, among the others referenced in this paper, illustrate why this population is considered the hardest to reach. The mixed results among countries indicate that while some approaches are promising, no single “recipe for success” exists. However, the following factors can contribute to success:

- **Countries that have achieved a high coverage rate of the non-poor informal sector use high levels of subsidy, typically financed by general government revenue.** In most systems that rely on direct contributions as a main source of financing, coverage of the non-poor informal sector remains low. South Korea is one of the most successful countries that has achieved high coverage rates while maintaining a mostly contributory scheme, but some

factors that have been critical to its success would be difficult to replicate in other settings: (1) a relatively homogeneous population, (2) a centralized government structure, (3) rapid economic growth, and (4) a proportionally smaller informal to formal population ratio. Other countries, such as Thailand, have largely or completely abandoned the contributory scheme in favor of tax financing to quickly expand coverage.

- **When direct payments for health insurance are collected from the non-poor informal-sector workers, and particularly the near-poor, the contribution amount is mostly low and (in theory) mandatory.** However, the success of a mandatory coverage approach depends on effective enforcement, which is difficult to carry out. If opting for contribution collection, the contribution collection systems must make payments convenient and easy for the non-poor informal sector. More flexibility in contribution payment options might, however, also have greater cost implications.

- **Health insurance schemes use a variety of approaches and mechanisms to identify and enroll the non-poor informal sector.** Countries with strong information technology systems and national unique identification systems oftentimes link these with their insurance schemes, whereas countries without unique national identification numbers assign unique program identifiers to beneficiaries. Inconvenient or burdensome processes for enrollment can inhibit participation from the non-poor informal sector in health insurance, because time and travel costs oftentimes represent a loss of income for them. Sites for enrollment should be easily accessible. Commonly used enrollment sites include program offices, community offices and town halls, malls and other highly trafficked areas. Many countries (e.g. Philippines, Nicaragua) leverage existing structures and organized groups within the informal sector to reach this population. For hard-to-reach areas, promising strategies include outreach efforts (e.g. mobile enrollment camps in India) and use of technologies (e.g. premium collection via mobile money in Mali).
- **Communication and education efforts are essential to ensure that the non-poor informal sector is aware of available options for health coverage and services.** In addition to educating populations on available options for coverage and health services, there is a need to provide information on the processes related to enrollment, seeking care, and submitting payments, among others, to ensure that the non-poor informal sector are informed about how to use health services and benefits appropriately. Commonly used communication strategies include national and local level communication campaigns (using radio, print media, and/or television) and leveraging

existing networks and groups (e.g. worker cooperations, community centers) to channel information through them to reach their members.

- **A well-functioning system of high-quality health care that is perceived as having value for workers and families is crucial for expanding coverage to the non-poor informal sector and for ensuring adequate coverage.** Lack of trust in the quality of health services poses a barrier to enrollment and participation in financial health protection programs and limits utilization of services. International evidence (e.g. from Thailand) underlines the importance of investing in health infrastructure, human resources and suitable provider payment mechanisms for covering non-poor informal workers and reaching effective UHC. Government financed contributions are not a substitute for the necessary substantial increase in allocation of funds to establish the readiness of the supply side in many settings. Ultimately, governments must make investments simultaneously for financial protection and in strengthening the supply side as part of their broader reforms to achieve UHC.

No single approach will provide the answer to a country's issue of covering the non-poor informal sector, but the strategies above may help a country achieve its goal of closing the coverage gap for the non-poor informal sector to achieve UHC. The decision to use one or more of these approaches depends on country context and policy objectives. Each country must consider its current situation, barriers faced, and the resources available in order to employ the most effective strategies toward achieving its goal. ■

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