Assessing operational efficiency of the integrated social health protection schemes of Kampong Thom province

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Abbreviations

AFH	Action for Health
BMZ	German Federal Ministry for Economic Cooperation and Development
CBHI	Community-based health insurance
CME	Continuing medical education credit
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
HC	Health centre
HEF	Health equity fund
HSSP2	Health Sector Support Project II
ISHPS	Integrated social health protection scheme
MHI	Micro health insurance
MOH	Ministry of Health
NSSF	National Social Security Fund
NSSF-C	National Social Security Fund for Civil Servants
NSHPF	National Social Health Protection Fund
OD	Operational [health] district
PHD	Provincial Health Department
P4P	Pay for performance
SHPA	Social Health Protection Association
UHC	Universal health coverage
URC	University Research Corporation
VE	Voluntary enrolment
WHO	World Health Organization

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Contents

1. Introduction

Even as Cambodia has made significant progress in the last several decades in a number of human development indicators, its health outcomes still lag behind its Southeast Asian neighbours. Making health care accessible and affordable for its population and improving the quality, affordability, and equity of the health care system, especially for the poor, has thus been a significant priority for the Royal Government of Cambodia.

A high percentage of the Cambodian population lives in poverty and a significant proportion of the economically active, nearly 70% of the population, work in the informal sector (Bitran, 2014). As a result, efforts to move toward universal health coverage (UHC) are slowed by a small tax base and limited public resources for health care. Out-of-pocket spending accounts for nearly two-thirds of all health expenditures.

Although average health care utilisation trends in Cambodia have improved in the past ten years and gaps between different wealth categories have reduced, inequities in health care use persist between the poor and non-poor (Dingle, Powell-Jackson, & Goodman, 2013). Beginning with contracting models in the late 1990s, the government and development partners have been testing, and increasingly investing in, innovative financing interventions to help improve health care access and affordability for the poor (Bhushan, Keller, & Schwartz, 2002). Social health protection schemes such as health equity funds (HEFs), cash transfers, vouchers, input-based subsidies, and voluntary insurance schemes have been implemented in Cambodia in various forms and combinations, and have been largely but not exclusively focused on the poor (Peter Annear, 2010; Bitran, 2014; Jacobs & Price, 2006; Sadiq, Biacabe, & Bayulken, 2007; Soors, Devadasan, Durairaj, & Criel, 2010).

HEFs, as the most notable social health protection mechanism in Cambodia, are limited by design to serve only the poorest segment of Cambodia. The programme remains a prime example of a segmented 'opt-out' approach that prioritises limited public resources to a specific group. As universal health coverage (UHC) gains greater attention from policymakers, development partners like the German Federal Ministry for Economic Cooperation and Development (BMZ) are exploring financing mechanisms that integrate financing across multiple segments of Cambodian society. On behalf of BMZ and the Cambodian Ministry of Health, the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ) is implementing an integrated social health protection mechanism that enables both the informal sector non-poor and the economically poor to participate in a social protection mechanism, whereby the vulnerable groups pay a subsidised price for coverage while the poor receive full subsidisation of direct medical costs as under standard HEFs. The strategy is an 'opt-in' approach to iteratively add numbers to a universal financing mechanism.

In the Cambodian context, given the high proportion of the population engaged in the informal sector and the generalised poverty, distinctions between poor and non-poor households can be the difference between one meal a day. For instance, Ir and colleagues found that both poor and non-poor households had similar proportions of indebtedness (71% and 64%), sales of assets to pay for health care in the previous 12 months (12% and 16%), and lack of sufficient food at least one day in the previous 12 months (81% and 68%) (Ir, Decoster, Hardeman, Horemans, & Van Damme, 2008).

In addition, non-poor households remain at risk of falling back into the poorest category. In a recent report, the World Bank noted that although overall poverty has dramatically declined in Cambodia, the new non-poor remain vulnerable to re-experiencing poverty (Arias-Vazquez et al., 2014). This also supports the observation that transient or intermittent poverty is much more common than chronic poverty in many emerging economies (Thorbecke, 2004). Furthermore, it supports the argument that households in need could be more cheaply and easily targeted if health services were made free for all, or as a first step, if non-poor households were allowed to voluntarily purchase the HEF package of care.

Within an economically similar population such as rural Cambodia, an opt-in model is likely to be a more efficient targeting strategy (Meessen, Van Damme, Tashobya, & Tibouti, 2006). It could also produce a more equitable outcome without unnecessary concern about negative

cross-subsidisation (PL Annear, Bigdeli, & Jacobs, 2011). The few 'rich' residents in rural areas would likely opt out of the available free services, given an observed preference for private health care.

An integrated social health protection scheme (ISHPS) similar to a former strategy called Linkages is built from two well-known financing approaches in Cambodia: voluntary payment of micro health insurance (MHI), sometimes incorrectly categorised as community-based health insurance (CBHI), and HEFs (Becker et al., 2012; Guidelines for the Implementation of Integrated Social Health Protection Schemes for the Informal Sector [DRAFT], 2013; Walsham, 2013). ISHPS does not serve as an insurance pool, and instead accepts adverse selection as a desirable mechanism to provide social protection subsidies to households that cannot afford to go to private providers and yet are not poor enough to qualify for HEF. ISHPS also holds the potential to be highly efficient, by using the same operator to implement the voluntary enrolment mechanism (VE) in tandem with the HEF. VE members receive a clearly priced, prepaid package of medical care, while HEF members continue to receive subsidised services without the stigma of participating in a 'poor-only' scheme. Integrating the operations of the two components of the scheme under a single operator with common management is intended to generate economies of scale and scope, and improve the quality of care in public facilities by leveraging the negotiating power of the scheme operator and giving clients channels for post-service feedback.

With the support of the German Government through GIZ, Linkages have been implemented in two operational health districts (ODs): Kampot OD in Kampot province since 2008, and Kampong Thom OD in Kampong Thom province since 2010. However, only the Linkage scheme in Kampong Thom was designed and implemented under the principles of ISHPS, and also attempts in the medium term to integrate complementary mechanisms, such as vouchers for reproductive health which are also supported by the German government. In 2013, the ISHPS in Kampong Thom OD was extended to neighbouring Stong OD.

On the purchasing side, ISHPS contracts a broad package of outpatient and inpatient services from public health centres (HC) and referral hospitals (RH), as well as transport and food allowances for ISHPS members who qualify under HEF. Under the provider payment method (PPM), providers are reimbursed on a pay-for-performance basis that combines output payments adjusted by objective quality scores and client satisfaction (Song, 2014). The mechanism links with existing health system governance structures to improve the scheme's likelihood of success. The purchasing arrangements are similar to contracts used in other health financing initiatives, such as the HEF and reproductive health voucher programmes.

To generate greater awareness of eligibility, ISHPS engages leaders in target communities to conduct outreach with non-poor households interested in purchasing coverage through the VE mechanism. VE also provides a common, non-stigmatised health financing experience for the HEF poor, as their participation in ISHPS is indistinguishable from the non-poor, self-paying VE members at the point of care. In addition, routine community outreach can have an empowering effect on the HEF segment of the ISHPS population, who are reminded of their right to seek care with their ISHPS benefits package. The contracted scheme operator supervises the administration of a client satisfaction survey through village volunteers (village health support groups). This mechanism attempts to verify actual provision of services and identify 'ghost patients' by randomly selecting 30 users from each health centre every quarter, which represent approximately 900 clients from all the participating health centres. In addition, 240 clients are interviewed at the district referral hospital level. The survey is likely to reinforce members' sense of empowerment, at least among interviewed beneficiaries, as they can see their feedback is considered important.

The ISHPS strategy is a transitional approach toward UHC which builds, over time, the capacity for the greater systematic complexity that would be required for a national social health insurance model. Ensor (1999) studied the feasibility of introducing and expanding social health insurance in emerging economies of Asia and ranked Cambodia as one of the most difficult countries to introduce social health insurance (Bitran, 2014; Ensor, 1999). With that in mind, ISHPS may be viewed favourably as a first attempt to begin covering the informal sector in a cost-effective and equitable manner.

2. Background & Methods

As part of the 2013 ISHPS baseline survey in Kampong Thom province, GIZ commissioned Population Council researchers to conduct an organisational assessment of the ISHPS in Kampong Thom OD and Stong OD in order to:

- Identify strengths and weaknesses of the scheme;
- Recommend ways to improve efficiency and effectiveness;
- Recommend strategies for scaling up the project and ensuring long-term sustainability.

The researchers reviewed project documents, interviewed key stakeholders at the central, provincial and OD levels, visited a pair of health centres and referral hospitals, and conducted two focus group discussions with rural households, including HEF and VE members. This was not intended to be a comprehensive assessment of impact or effectiveness, but rather to highlight issues to improve the quality of the current project. The sample of health facilities and households in this assessment was very small and cannot be taken as representing a reliable cross-section of ISHPS beneficiaries.

2.1 Project Progress

In February 2013, the ISHPS in Kampong Thom province expanded to Stong OD, joining the existing HEF scheme with the new VE initiative under the management of a single operator, Action for Health (AFH). The Stong OD expansion followed a difficult period of transition between operators, and disbursement delays in 2012 that were mainly due to changes in the standard HEF benefits package, which included substantial increases in prices and put at risk the financial sustainability of the VE approach that until then was not directly subsidising the medical costs of VE members. In 2014, components of ISHPS, such as pay-for-performance and associated local accountability structures,[1] were extended to Baray Santuk OD, the last of the three ODs in Kampong Thom province.

The ISHPS approach has undergone a conceptual transformation from earlier ideas of community-based health insurance (CBHI), including the Linkage model initially promoted in Kampot OD. The earlier challenges of CBHI, with adverse selection and limited pools, are not a concern in ISHPS given that the objective is no longer to prove the financial self-sufficiency of the scheme, but rather to provide subsidised coverage to low-income households who opt into the fund because of need (Ekman, 2004). Earlier qualitative assessments of the Linkage and integrated approaches in Kampot and later in Kampong Thom OD have shown that the integrated model may have positively affected health care services, as demand for services has increased particularly among the segment of the population that could not afford health care fees in the absence of the scheme.

1 This is demonstrated by the routine performance reviews conducted by health center management committees of client satisfaction survey results.

Figure 1: Theory of action: How ISHPS leads to the anticipated population outcomes.

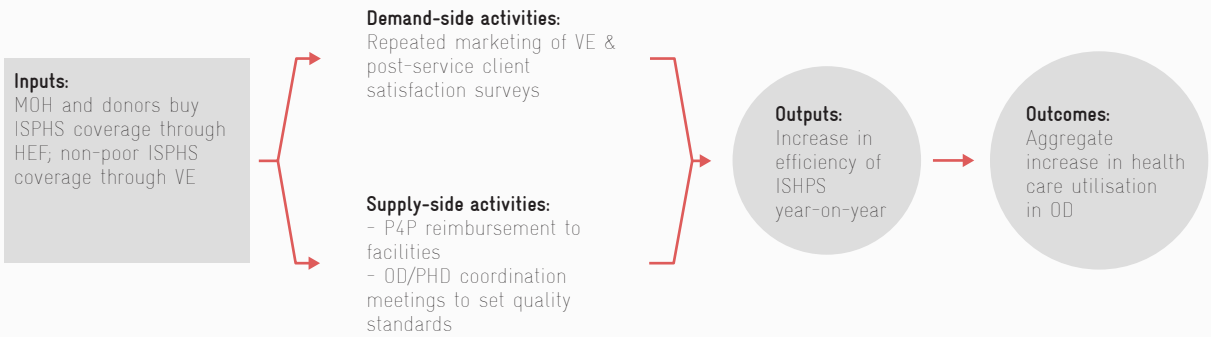
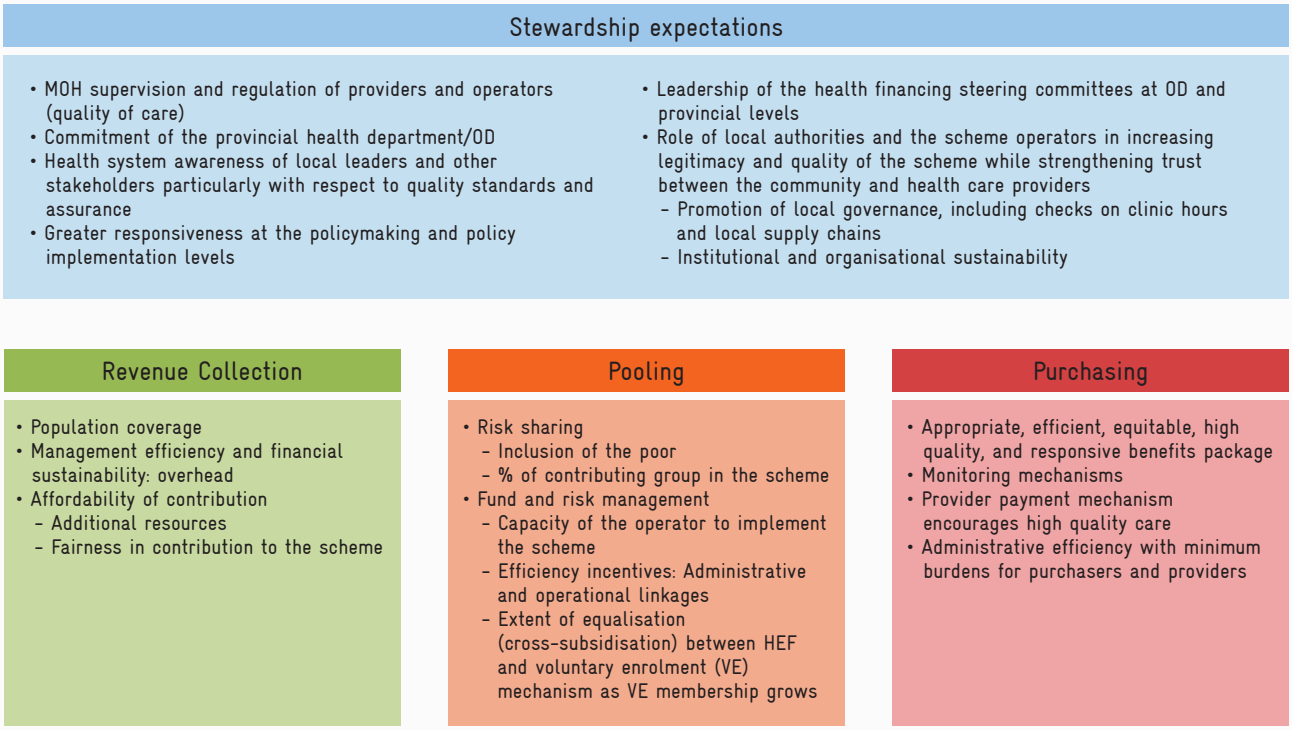


Figure 2: Finding greater efficiency in the core functions of health care finance.



The ISHPS model is viewed as a transitional strategy to gradually move the health system toward UHC. As ISHPS matures, several key characteristics would likely emerge in the period before a nationwide universal coverage system is implemented. Namely, a large-scale ISHPS will likely have a single pool for the poor and non-poor, revenue derived from a mix of taxes and below-market premiums, a market-driven pool operator (purchaser), a forward looking regulator (steward) that anticipates market inefficiencies and potential fraud, and providers who can give high quality services. This pre-UHC system would be characterised by high membership rates and high retention year-to-year, as more households in the informal sector take up the coverage. ISHPS is a transitional notion towards a future UHC scheme, where a single fund would cover both informal and formal sectors.

The reality of the ISHPS is described in the rest of the report, but summarised here. It has two separate pools managed by one operator in Kampong Thom province. The regulator or stewardship function is distributed between national, provincial, district and local community bodies and, as such, the attention to health market management is diffused as well. HEF regulation is undertaken by formal structures supported by donors (URC as the HEF implementer, and the HSSP2 structure) and the government (national quality and standards, national and provincial level human resources in public facilities, etc.). However, there are more succinct regulatory checks in place for the VE market segment.

Using functional categories for social health insurance as detailed elsewhere (Carrin & James, 2004), this report discusses potential efficiency gains to be found in the core functions of the ISHPS of Kampong Thom province: stewardship, revenue collection, pooling and purchasing mechanisms (see Figure 2).

3. Stewardship

Government stewardship, one of the six critical building blocks of health systems identified by the World Health Organization (WHO), is intended to guide the rational use of resources in the health system. Health system stewards ensure that strategic policy frameworks are in place and are effective in coalition building, regulation, and system design, with mechanisms to enhance accountability.

ISHPS has several organisations that serve as stewards at the national, provincial, OD, and community level. Stewardship activities include setting regulations, enforcing quality standards and quality assurance, and generally ensuring that service delivery is financed efficiently and effectively.

3.1 Regulation of the supply of health services

At the national level, the Ministry of Health (MOH) is charged with regulating the quality of care at public facilities and supervising HEF operators through the Second Health Sector Support Project (HSSP2). Provincial health departments (PHDs) and ODs have a commitment to improve quality and coverage of health services in their respective administrative catchment areas.

In Kampong Thom, the PHD holds a 16-member monthly provincial technical working group meeting that includes OD leadership, the scheme operator (AFH) and other NGOs in the province, where key stakeholders meet to review trends in health service provision and discuss recent operational challenges. At the OD level, the OD chief also holds a monthly technical meeting with village HC chiefs and NGOs in their district. It was unclear what takes place in the technical meetings or whether the monthly schedule is adhered to. At the commune level, the commune chief chairs the health centre management committee meeting. At many communes in Kampong Thom, the committee does not meet regularly due to lack of support. In a few places, there is support from NGOs and they can meet regularly.

In spite of the overlapping layers of stewardship, there are several instances of misunderstanding at the operational level that constrain service delivery. For example, as a cost containment strategy, the ISHPS pay for performance (P4P) mechanism has a maximum of two contacts per member per year at each facility. Health centres are paid the maximum amount even if they exceed the average of two contacts per member. This mechanism is designed to discourage supplier-induced demand and, to some extent, reduce the financial risk to the pool. Although training has been provided on this issue, a few providers complained about this to the OD, under the mistaken impression that patient contacts were strictly limited to two contacts per year, when in reality it was a target fixed on an average number of contacts for that health centre. In fact, the contracts with health centres allow the limit to be increased on a case-by-case basis if it can be verified that utilisation consistently exceeds the upper limit. Educating providers about the rules of the scheme may be needed on a more regular basis. An alternative solution may be to reimburse health centres on a more frequent basis, as utilisation is not consistent over time, and health centres may experience gaps in operating capital during brief periods of peak volume. The phenomenon of scarce operating capital in private health facilities was nicely documented in Ghana and Kenya, where periods of limited funds would complicate routine management concerns like monthly salary payments and supply procurement (Burger, Kopf, Spreng, Yoong, & Sood, 2012). Although the facilities seeing ISHPS clients in Cambodia are public, their reliance on user fees and claim reimbursement makes them resemble private facilities in many ways.

Another concern is the hospital requirement that VE and HEF patients appear with a referral letter from their primary care health centre, although this requirement is waived in emergencies. In this situation, health centres play a 'gatekeeping' role, referring HEF clients who seek non-emergency hospital care. Referral hospitals complain of an increase in walk-ins; patients who appear with their HEF or ISHPS card but without a referral, seeking care. Non-emergency ISHPS clients are sometimes told to return to their health centre to receive a referral letter. HCs could do more preventive work (ANC, vaccinations) and train the population or community health workers to seek routine care at health centres first. Especially with prenatal maternity care, women may be more likely to seek normal delivery at the HC and not the hospital.

3.2 Good stewards ask about demand

At the Kampong Thom Referral Hospital, the Financing Committee is working to improve financial management and indirectly get patient feedback via the ISHPS operator. Through this mechanism they receive feedback from patients on different aspects of hospital services and gauge client priorities. The goal is to make the patients and providers satisfied with services. The hospital also gets negative feedback that can be used to prioritise improvements in services.

In line with the referral hospital seeking client feedback via the ISHPS operator, the health system governance activities of GIZ are being piloted in 10 HCs in Stong OD, five HCs in Baray Santuk OD, and 10 HCs in Kampong Thom OD. Local authorities have begun to think more about their accountability and the need to provide services. The OD coordinates with local authorities to help educate the general population on health and the benefits of health insurance.

Client satisfaction is one metric that Action for Health (AFH), as the Kampong Thom ISHPS operator, uses to rank health centres on a quarterly basis. A bonus is paid to health centres for any client satisfaction score above the minimum, and in reality all but one HC has received the quarterly bonus since the initiative began.

When asked about quality, facility administrators were at times matter-of-fact that the non-poor prefer services at private facilities and don't see a need to participate in schemes that restrict health care access to the public sector (e.g., VE and HEF). In fact, some poor HEF beneficiaries channel their limited disposable income to private providers as public sector costs are covered by HEF. Quality remains limited in the public sector. However, the hospital directors had additional thinking about how to improve quality of care. The Kampong Thom RH Director noted that he would like to improve the staff's medical knowledge. The Stong RH Deputy Director noted that there are measures to upgrade skills via continuing medical education (CME), but they are not linked with ISHPS. He suggested that staff participating in P4P ought to be required to earn CME credits every year as a condition of receiving performance payments.

Recommendations

- On the supply side, PHDs and ODs have two broad options to improve quality of service provision: stronger enforcement of operating regulations; and incentives for meaningful quality improvements. For instance, if the operator increases the threshold for the minimum client satisfaction score on the quarterly assessment, the OD or PHD leadership would likely feel a need to strive for higher quality in underperforming facilities.

- Attention to details in the service delivery chain is critical to performance. The PHD and RH directors noted, in particular, a need to ensure that health staff at management and facility level respect working hours, are on duty, and generally meeting the expectations of their respective posts. Sanctions for poor performance or bonuses for superior performance could be considered.

- Health care utilisation trends are not consistent over time, and health centres may experience shortfalls in operating capital during periods of peak volume. Reimbursing health centres on a more frequent basis may avoid complaints about the ISHPS limit of two contacts per member per year on average at each health centre.

4. Revenue Collection

HEF contributions come from the HSSP2 secretariat, and are worth about US$ 7 to US$ 8 per household per year (US$ 1.30 – $US 1.60 per capita per year). This forms the majority of the social protection budget for direct costs incurred in ISHPS, given the much larger number of HEF members in the current scheme. In ISHPS, a second revenue source is derived from the contributions made by VE members that buy into the scheme. The current average annual contribution for VE members is US$ 3.50 per person, which is a subsidised price with the difference financed by donors. From a public perspective, this subsidy is a direct and efficient way to benefit the population in need, as beneficiaries self-identify and enrol, in contrast to the HEF where a whole socio-economic tier of society is enrolled and subsidised whether they use the service or not. Three key issues ought to be considered when looking for improvements in revenue collection process: population coverage, scheme management costs (efficiency), and the affordability of the VE member contribution.

Revenue collection will continue to be a challenge, however, so long as the Cambodian economy is dominated by informal sector employment, which by definition is beyond the regulation of formal structures including revenue collection authorities. In other low-income settings, informal economy activity can become formal as mechanisms, like mobile money platforms, facilitate record keeping of economic transactions. In this way, previously 'unbankable' households build a transaction history that can be used to assess credit risk. Similarly, health sector stakeholders (e.g., regulators and government officials) and health care producers (e.g., health management organisations, facilities and individual medical practices) can facilitate revenue collection through mobile or electronic means to stimulate the uptake of technologies that reduce barriers to economic transactions. One example in Madagascar focused on the role of mobile money platforms to facilitate demand-side incentives for health care clients (Corby, 2011). As another example, an IFC report noted that consumers in Thailand identified purchasing health insurance as a desired future service for mobile money (IFC, 2011). In Cambodia, mobile network providers are already selling life insurance, having acquired microinsurance licenses from the government (Bima Mobile, 2014). It would be worthwhile for ISHPS, or perhaps the Social Health Protection Association (SHPA), to consider the extent to which mobile money and electronic financial services in the Cambodian health sector could improve the efficiency of various functions including revenue collection.

4.1 Population coverage

With ISHPS, future growth in enrolment will largely take place in the VE segment of the covered population, as the size of the HEF segment is fixed by government policy. Even critics note that if integrated schemes could cover larger numbers of VE members, the risk of 'negative cross-subsidisation' from donor funds would be avoided (PL Annear et al., 2011). Population coverage could be improved by considering changes to operational processes.

In the first two years of the scheme, it was common to find AFH staff in the morning at their assigned health facilities to collect claims and review any issues with services; by the afternoon, they were going to neighbouring communities to collect contributions and market the value of the VE scheme. Yet more recently, AFH has had to cut back on support staff in the catchment areas. Because of budget constraints and a focus on greater cost savings, AFH has cut their staff ratio to one staff member per three facilities and now, with the 2013 expansion to Stong OD, AFH also has a larger area to cover. This can negatively affect enrolment unless there is successful leveraging of local leaders and other communication channels (radio can be quite effective) that can take on a greater role in marketing and, to some extent, enrolment. Interestingly, the Stong OD Deputy Director felt that the operator could increase demand for VE through better marketing and communications. It would also help to have more regular meetings between AFH and Stong Referral Hospital, to synchronise messaging for potential VE members. There was also advice when talking about demand generation to avoid overly high expectations regarding service quality and package scope.

Currently, infrequent enrolment opportunities (twice a year) may further restrict VE membership. From a scheme management perspective, the concern with a limited

enrolment timeframe is that it limits a useful external source of revenue. Although continuous enrolment was discontinued due to high costs in an earlier project phase, returning to an open enrolment process throughout the year could boost VE numbers, and could perhaps be done differently than before to keep costs lower (e.g., there could be targeted enrolment campaigns throughout the year, and in between open enrolment could be permitted at key locations but not actively pursued). Demand for ISHPS support is likely to come from households facing immediate needs for medical care. Limiting enrolment to a few months of the year is a significant barrier for households that only need ISHPS once a member falls ill. In fact, by restricting enrolment ISHPS may inadvertently force some households to borrow funds to cover medical expenses (Ir, Jacobs, Meessen, & Van Damme, 2012).

In a classic insurance scheme, longer enrolment periods reduce the risk of adverse selection by avoiding easy entry and exit of the risk pool. However, ISHPS is not insurance and should be less concerned with adverse selection, although shorter enrolment periods have a lower probability of covering any unanticipated, secondary health care needs and begin to resemble point of care copayments. Shorter enrolment periods would also make it easier for beneficiaries to opt-out of the scheme at the first bad experience, and fails to give them an opportunity to have positive experiences with the services.

When ISHPS was introduced, the scheme needed an accounting mechanism that could track both revenues and expenditures. For expediency, the project introduced fixed coverage periods and fixed enrolment periods. That link between fixed coverage periods and fixed enrolment periods is administratively simple, but if the enrolment times could be lengthened, there is an opportunity to increase enrolment without shortening the coverage period. The success of that approach would be dependent on the operator.

The PHD and OD leadership can play an important role in boosting VE buy-in during enrolment periods, if safeguards against non-voluntary enrolment practices are followed. The PHD Director noted that the village chiefs in other schemes pushed for VE too hard, and villagers complained to the media that they were forced to join. AFH pays a commission to the village chief, which in one focus group discussion seemed to be an effective mechanism for marketing VE. Of course, the opposite scenario, where apathetic local leadership does not promote ISHPS membership, also results in a loss for the community, as potential VE members never learn about the benefits of membership.

In another interview, it was noted that AFH used mobile speakers, radio messages, village meetings, information, education and communication (IEC) materials, and door-to-door outreach with a target of at least five houses per day. The lack of success of these methods was credited to the low quality of health services being offered. People were not interested in VE because they didn't want public sector services. Ultimately, a balance will be found between the proportion of the village population that finds ISHPS services valuable and those that prefer to seek health care elsewhere. That balance will shift over time as quality improvement trends become more apparent in the public sector.

4.2 Management efficiency

Efficiency gains are commonly understood as favourable improvements in a given input-output ratio (Hollingsworth, 2008). In this case, resources put into the health system are expected to result in health service outputs. The ISHPS operator has available data on inflation-adjusted scheme expenses (inputs) and service utilisation (outputs) from 2010 to 2013.

Figure 3 shows the 2013 monthly average direct costs per case in VE and HEF populations in Kampong Thom OD. Over 12 months, the direct costs for HEF were generally higher and averaged US$ 3.75 per case compared to average direct costs of US$ 3.03 per VE case (23% lower). It was also interesting that the monthly average direct costs varied substantially throughout the year. Although not shown here, VE costs were concentrated among inpatient services averaging US$ 32.12 per case at the district referral hospital compared to HEF inpatient costs of US$ 14.14 per case at the same district referral hospital. This makes sense as VE members enrol due to their own perceived needs, and many are likely ill.

Tables 1, 2 and 3 present the efficiency ratios for ISHPS with aggregate and disaggregated efficiency for the VE and HEF components. In this efficiency data, the 'total activities index (A)' is a ratio of the total ISHPS inpatient and outpatient cases in the current year over the previous year. It is not a rate (number of cases per year), but a ratio. ISHPS analysts have termed it an index.

Figure 3: Month-to-month average direct costs per case by VE and HEF status, Kampong Thom OD, 2013.

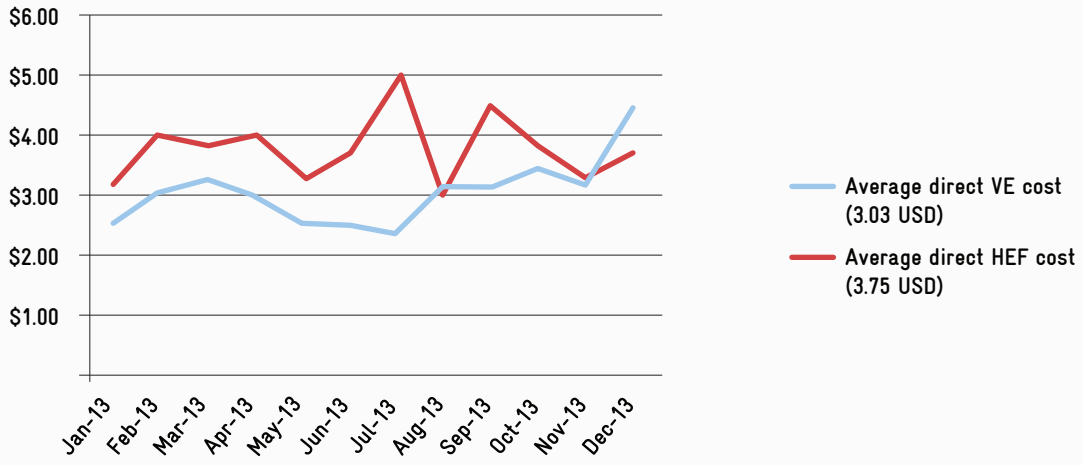


Table 1: Annual efficiency ratio for ISHPS, combined VE and HEF components).

Efficiency Index Calculation	2010-2011	2011-2012	2012-2013
Total activities index (A)	3.999	1.047	0.835
Total operating expenses index (B)	1.408	1.347	0.932
Pay and price index (inflation index) (C)	1.028	1.028	1.03
Expenses index (B) / inflation index (C) = (D)	1.369	1.310	0.905
Efficiency index (A/D)	2.921	0.799	0.923
	Efficiency gain	Efficiency loss	Efficiency loss

Table 2: Annual efficiency ratio, VE component only.

Efficiency Index Calculation	2010-2011	2011-2012	2012-2013
Total activities index (A)	1.761	1.123	0.772
Total operating expenses index (B)	1.423	1.186	0.757
Pay and price index (inflation index) (C)	1.028	1.028	1.028
Expenses index (B) / inflation index (C) = (D)	1.384	1.154	0.736
Efficiency index (A/D)	1.273	0.974	1.048
	Efficiency gain	Efficiency loss	Efficiency gain

Table 3: Annual efficiency ratio, HEF component only.

Efficiency Index Calculation	2010-2011	2011-2012	2012-2013
Total activities index (A)	8.413	1.016	0.865
Total operating expenses index (B)	1.390	1.333	1.007
Pay and price index (inflation index) (C)	1.028	1.028	1.03
Expenses index (B) / inflation index (C) = (D)	1.352	1.296	0.978
Efficiency index (A/D)	6.223	0.783	0.884
	Efficiency gain	Efficiency loss	Efficiency loss

The 'total operating expenses index (B)' similarly is a ratio of the total operating expenses in the current year over the previous year. The 'pay and price index (C)' reports the inflation rate for the current year and is used to adjust the annual total ISHPS operating expenses index to allow for comparable expenses across the years. The efficiency index (A/D) finally is a ratio of ratios, namely the outputs index (i.e., total inpatient and outpatient cases this year compared to the previous year) over the inputs index (i.e., inflation adjusted ratio of expenses this year compared to the previous year).

A value greater than one means that more output was achieved per unit of input this year compared to the previous year (i.e., an efficiency gain). A value less than one means that less output was achieved per unit of input this year compared to the previous year (i.e., an efficiency loss).

The tables show that the scheme as a whole was inefficient in 2013, although it improved compared to the prior year (Table 1). When the VE and HEF components are disaggregated (Tables 2 and 3), the efficiency gains in 2013 are concentrated in the VE component. From the data these gains seem to be due to containment of prices paid to facilities and to decreased management costs.

4.3 Affordability of contributions

High enrolment of the chronically ill, the elderly, and other segments of the informal sector faced with high out-of-pocket health care costs is an important factor in the ultimate success of the ISHPS approach. Setting the right price for the contributions for informal sector households can have a significant impact on population coverage. When asked about the affordability of their contributions in recent focus groups, VE members generally agreed that it was a reasonable amount. However, to increase coverage and participation it may be useful to consider allowing clients to purchase coverage on less than a six month basis. Currently, ISHPS charges contributions on a biannual (six month) or annual (one year) basis. For some families that cannot afford to pay for six months, instalments for fewer months could boost membership. The risk is that it exacerbates cash flow for the scheme by allowing individuals with existing conditions to purchase fewer months of coverage and be treated for an expensive inpatient treatment immediately (adverse selection of a slightly different form). This approach was tried in a previous phase with monthly contracts, but discontinued due to administrative burden. Attempting this again would require rethinking the approach with perhaps a more limited service package used to keep the administrative burden low. Taking this idea to its extreme and reducing 'membership' to a fixed co-payment at point of care illustrates the compromises made with shorter enrolment periods.

Recommendations

- Encourage the operator to optimise the field staff to facility ratio with a focus on generating new VE members. The ratio could be modulated over time based on market conditions and administrative costs. The operator could be encouraged to find efficiencies in staffing, perhaps through incentives or performance contracting. Output-based contracts in HSSP2 allow such flexible arrangements for management and staffing.

- Look for new ways of marketing VE to the segment of the general population that think public health care services are valuable. Alternatively, contract private providers at full or partial subsidy to VE members. It would likely improve the participation in VE membership.

- Consider extending the open enrolment windows and possibly sell a shorter term package of care. Demand for ISHPS is likely to come from households facing immediate need for medical care. Limiting enrolment to a few months of the year is a significant barrier for households that only need ISHPS once a member falls ill.

- Staff participating in P4P schemes ought to be required to earn continuing medical education (CME) credits each year as a condition of receiving performance payments.

- Focus local and regional leaders and the scheme operator on increasing VE membership, with the goal of improving the ratio of VE members to HEF members. A fund that draws significant revenue from beyond the HEF will likely be more sustainable with fewer concerns from policymakers about the direction of subsidy flows.

- It would be worthwhile for the ISHPS or perhaps the SHPA to consider the extent to which mobile money and electronic financial services in the Cambodia health sector could introduce greater efficiency in various functions including revenue collection.

5. Pooling

Pooling entails two related concepts: risk management and risk sharing across socioeconomic and demographic groups. In ISHPS the single operator, AFH, is responsible for risk management: identifying, assessing, and prioritising potential risks to successful implementation of the ISHPS strategy. There is some organisational experience and resources that can be applied between the VE, HEF and vouchers that AFH manages in Kampong Thom that could be explicitly linked under fraud control measures (e.g., verification of service delivery, claims management, and beneficiary poverty status). Moreover, there remain a number of parallel functions (e.g., database management) and project-specific activities (e.g., demand creation for voucher services) that ought to be pooled across the entire ISHPS.

5.1 Risk sharing

In the traditional sense of social health protection through insurance mechanisms, risk sharing is possible by enrolling a diverse mix of the sick and the well, the old and the young, the rich and the poor. This risk sharing is supplemented, if necessary, by public subsidies. Risk sharing, as such, in ISHPS does not take place. HEF funds do not support the VE mechanism, and the VE contribution revenue is not sufficient to cover its own costs, which then requires donor support to operate. However, ISHPS does pool funds within the individual funds (VE and HEF) under management. In the case of VE, subsidies are provided, although these are derived from donors and not the government's general revenue. ISHPS is valuable to demonstrate to donors and the government that households at risk of health expenditures can self-identify and enrol in a social health protection scheme more efficiently than being passively enrolled by the government.

5.2 Risk management

The draft form of the national health financing policy has proposed that, in the future, the three national funds that cover the private, public and informal labour markets will be distinct but connected into one functional pool by equalisation mechanisms that ensure resources are shared across funds. In this scenario, government general revenues would cover any deficits. ISHPS needs to make a decision on whether to pursue a strategy of separate, parallel funds for the different components, or a pooled fund. Short of immediately creating a single pooled fund, it may be easier for policymakers to consider a pilot equalisation mechanism in Kampong Thom merging HEF, VE and perhaps vouchers. As AFH is the only operator, it would simplify scheme implementation and give the relevant stakeholders their first experience with the concept in Cambodia.

Recommendations

- Implement greater standardisation in AFH demand creation activities across its multiple funds in Kampong Thom province. For instance, the same teams that sell vouchers could be selling VE to the non-poor and enrolling HEF members. The voucher and ISHPS schemes both assume it is efficient to target subsidies to beneficiaries who self-select. The beneficiary identification procedures are likely to be very similar, and would be a good way to increase operational efficiency.

- Consider integrating database management functions. Currently, the ISHPS operator, located on the premises of the referral hospital, maintains three computer terminals where claims can be entered and verified against the separately managed databases for each fund.

6. Purchasing

Emerging in the 1990s from a long period of conflict, Cambodia seemed like an unlikely place to begin experimenting with health care contracts. However, by the early 2000s, the country was quickly accumulating experience in contracting mechanisms and the health equity fund model, purchasing health services in the public sector on behalf of the poor, became established. ISHPS takes this concept further by pooling health care purchases beyond HEF beneficiaries. It also innovatively incorporates quality by linking payment to the results of client satisfaction surveys and local governance structures.

6.1 Appropriate benefits package

There is a perception among some providers that the VE in ISHPS generates additional visits and more revenue to their facility as each visit is now paid with regularity by ISHPS. Although these are public facilities, the VE covers health care fees that the non-poor would have paid out-of-pocket previously.

The National Social Security Fund for Civil Servants (NSSF-C) and the reproductive health voucher programme both contract private and NGO providers. For ISHPS, it was said that contracting private providers is not allowed because MOH prefers ISHPS funds and revenues to be directed to public facility maintenance and upgrades, and there are fears that private providers would charge too much or be engaged in dual practice. However, it would be worthwhile exploring whether private providers (those not engaged in dual practice) would be willing to decrease prices for higher patient volumes. Alternatively, it may be interesting to consider whether private providers would take a partial subsidy payment and charge the client a transparent, reasonably priced co-payment.

The majority of people voluntarily enrol in ISHPS because of their own perceived risk of hospitalisation. If ISHPS could offer a package that includes coverage at a national referral hospital or private facilities, it may be more attractive to new clients. The downside is that it would likely increase the costs of the scheme. ISHPS ought to explore whether there could be an option to sell different levels of benefits packages (e.g., basic and premium packages) to attract a higher number of members.

The benefits package could also be expanded to take on the services subsidised through the reproductive health voucher programme. ISHPS contracts benefits provision for its members. Expanding the scheme to include voucher services would allow for greater efficiency in scale, and fits conceptually with the opt-in notion of services for the beneficiary.

6.2 Monitoring mechanisms

Monitoring provider payments in the Cambodian health sector has undergone changes since contracting pilots were initiated in the late 1990s. For instance, as contracting efforts grew in scale, individual level performance contracts between management and providers quickly gave way to contracts between management and facilities (Soeters & Griffiths, 2003).

Monitoring activities under purchasing involves observing trends in scheme performance and client satisfaction. Monitoring scheme performance relies on information from external consultants, spot checks from the donor and government, and routine financial and technical reports from the operator. Client satisfaction monitoring can be built into the operator's contract to perform routine checks on client opinions at facility exit. Such information can help to identify problematic facilities and may provide the first data necessary to conduct follow-up for underperforming facilities. In the ISHPS guidelines, an operator is obliged to perform the following monitoring and evaluation activities:

- Participation in daily hospital meetings with scheme representatives;
- Spot checks of discharged patients;
- Patient exit surveys at the hospital and client satisfaction surveys at health centre;
- Presence of hospital access facilitator/social worker to be assured and controlled;

- Routine hospital ward visits to members, performed by the access facilitator/social worker;
- Community feedback sessions conducted by ISHPS Operator.

6.3 Provider payment mechanism

The monitoring activities should provide feedback to the provider in the form of quality improvement measures. Similarly, provider payments can serve as extrinsic motivation for higher performance if the performance indicators are well designed and the options and risks with each choice of payment modality are understood. Fee-for-service payments encourage oversupply and reward high volumes without regard to client well-being. On the other hand, capitated payments may discourage service provision.

A combination of incentives for relatively low rates of client dissatisfaction and quality-adjusted output payments may move the scheme toward a more balanced approach, where high quality and high volumes can be maintained. Rather than rewarding high rates of satisfaction, ISHPS could focus on low rates of dissatisfaction with respect to similar facilities, which would emphasise the importance of reducing complaints and make the comparison between peer facilities explicit. Only the best facilities among peers should be recognised as high quality facilities. Allowing every facility to pass a given threshold defeats the purpose of paying a bonus based on performance quality.

6.4 Administrative efficiency

Administrative efficiency is the underlying logic of ISHPS, which combines the management structures of informal sector health care financing and HEFs to improve health care coverage. ISHPS in Kampong Thom province has a single operator administering the HEF and VE components in a shared office, and relies on staff to use a duplicated database to track claims. Although enrolment and quality monitoring for VE require field staff that are not needed for HEF, the two components function as one scheme. For providers, the project components appear similar.

Recommendations

- Explore offering a cost-effective package that includes cover at a national referral hospital or private facilities. Nationally, referrals to major hospitals in Siem Reap and Phnom Penh may need to be coordinated by a single operator to reduce costs and simplify reimbursement procedures. This underscores the need for a beneficiary information system that is accessible by operators in all ODs that participate in such a scheme.
- ISHPS should explore whether an option between basic and premium benefit packages would attract a higher number of members.
- Explore whether private providers would be willing to decrease prices for higher patient volumes. Alternatively, consider whether private providers would take a partial subsidy payment and charge the client a transparent, reasonably priced co-payment.
- Rather than rewarding high rates of satisfaction, ISHPS could focus on low rates of dissatisfaction with respect to comparable facilities, which would emphasise the importance of reducing complaints and make the comparison with peers explicit. Only the best facilities among peers should be recognised as high quality. Allowing every facility to pass a given threshold defeats the purpose of paying based on performance quality.

7. Conclusions

The Cambodian health sector is highly fractured and dominated by the large informal sector and, as a result, MOH sees the need for an aligned social health protection strategy that creates a mechanism to coordinate the private sector National Social Security Fund (NSSF), National Social Security Fund for Civil Servants (NSSF-C), and the National Social Health Protection Fund (NSHPF) proposed for the informal sector. These coordinated social health protection funds, with equalisation mechanisms, would be capable of purchasing services from public and private providers for all citizens, many of whom would contribute to NSHPF through purchase of health insurance premiums and taxes.

A cohesive social health protection mechanism remains a long-term goal that will be achieved through alignment of resources at the policy and operational level. The focus on this report is to propose improvements at the operational level that can align resources for greater efficiency.

Operationally, ISHPS should integrate the various community networks, outreach and promotion teams, monitoring and evaluation activities (including the management information systems), and steering committee activities, and perhaps consider a coordinator at the provincial level, standardise costs, and incorporate private providers to increase demand for services and make higher voluntary contributions worthwhile (or negotiate a discount of less than 100% of the out-of-pocket costs at private facilities).

Ultimately, ISHPS is Cambodia's first iteration of what could become the national social health protection fund for the majority of the country. Or perhaps in less grandiose language, there is an opportunity now to pilot, in the ISHPS, the concepts that will structure the future NSHPF. Beyond the immediate operational efficiencies to be gained, it is hoped that ISHPS will take this opportunity to pilot equalisation mechanisms and inclusion of private providers as strategies that will demonstrate their practicality and value to policymakers.

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