Evaluation of Subsidy Schemes under Prakas 809 to Support the Ministry of Health of Cambodia to Achieve Universal Social Health Protection Coverage

REPORT

December 2011

Chean R. Men
Por Ir
Peter L. Annear
Iyong Sour

Table of Content

ACKNOWLEDGEMENTS **2**

ABBREVIATIONS **3**

EXECUTIVE SUMMARY **4**

1 BACKGROUND **8**

1.1 Introduction 8
1.2 Health Equity Funds and social health protection in Cambodia 8
1.3 Description of government subsidy schemes or SUBO 10
1.3.1 Institutional arrangement *12*
1.3.2 Identification of beneficiaries *13*
1.3.3 Benefit package *14*
1.3.4 Provider payments *14*
1.3.5 Administration and finance *14*
1.3.6 Reporting *15*
1.3.7 Monitoring *15*

2 METHODOLOGY **16**

2.1 Data collection 16
2.1.1 Secondary data review *16*
2.1.2 Primary data collection *16*
2.2 Data analysis 18
2.3 Consultative workshops 18

3 FINDINGS **19**

3.1 Legal framework, policy guidance and regulations of SUBO 19
3.2 Awareness and knowledge of SUBO 19
3.3 Actual coverage and utilization of SUBO 20
3.4 Practices and constraints in SUBO management and administration 22
3.4.1 SUBO management structure and practices *22*
3.4.2 Third party purchser *24*
3.4.3 Beneficiary identification *25*
3.4.4 Benefit package *27*
3.4.5 Financial management, claims processing and provider payment *27*
3.4.6 Monitoring and reporting *28*
3.5 Impacts of SUBO 29
3.5.1 Impact on quality of care *30*
3.5.2 Impact on health seeking behavior and health service utilization *31*
3.5.3 Impact on OOP expenditures and coping strategies *35*
3.6 Cost of SUBO 35

4 CONCLUSIONS AND RECOMMENDATIONS **37**

REFERENCES **41**

ANNEXES **42**

Annex 1: Terms of Reference 42
Annex 2: The informal translation of the Prakas 809 49
Annex 3: Post-identification questionnaire 51
Annex 4: List of people consulted 54

Acknowledgements

First and foremost, we, the evaluation team, would like to express our deep gratitude to the Ministry of Health and the Belgian Technical Cooperation for giving us the opportunity to do this evaluation. This evaluation would not be possible without financial support from the Belgian Technical Cooperation.

Our special thanks go to Dr Lo Veasna Kiry, director of the Department of Planning and Health Information, Dr Sok Kanha, deputy director of the Department, Mr Ros Chhun Eang, chief of Bureau of Health Economics and Financing of the Department, and Dr Dirk Horemans, technical advisor of the Belgian Technical Cooperation for tireless support and facilitation throughout the process of the evaluation, including data collection and organization of the consultative workshops.

We would like to thank all key stakeholders of relevant institutions and organizations who agreed to give their valuable time providing important information, in particular the National Hospital, Provincial Health Department, Operational District and Referral Hospital directors for their participation in the interviews in a very open and helpful manner. We would also like to extend our sincere thanks to all respondents, including health staff, patients and local authorities who dedicated their valuable time and energy for providing important information.

Abbreviations

BTC : Belgian Technical Cooperation
CBHI : Community-Based Health Insurance
CC : Commune Councils
CPA : Complementary Package of Activities
DPHI : Department of Planning and Health Information
EAC : Equity Access Card
FGD : Focus Group Discussion
HC : Health Center
HCMC : Health Center Management Committee
HEF : Health Equity Fund
HFSC : Health Financing Steering Committee
IPD : In-patient
KII : Key Informant Interview
MEF : Ministry of Economy and Finance
MG : Monitoring Group
MOH : Ministry of Health
MOU : Memorandum of Understanding
NGO : Non-Governmental Organization
NH : National Hospital
NMCHC : National Maternal and Child Health Center
OD : Operational Health District
OOP : Out-of-pocket
OPD : Out-patient
PHD : Provincial Health Department
Post-ID : Post-identification
Pre-ID : Pre-identification
RH : Referral Hospital
SHI : Social Health Insurance
SHP : Social Health Protection
SUBO : Government Subsidy Scheme
URC : University Research Co., LLC
VHSG : Village Health Support Group

Executive Summary

Background

Despite substantial progress in improving the health of the population, access to effective and affordable health care remains a major problem for Cambodian population, especially the poor and vulnerable. They face numerous barriers to accessing health care, both on the supply side and demand side, mainly financial barriers caused by user fees, transportation cost and other health care-related expenses. Those who can obtain care often must sell their land or become heavily indebted because of health care cost, known as iatrogenic impoverishment.

To address this problem, several health financing mechanisms have been developed. These include direct tax-funded health services plus user fees for the non-poor and exemptions for the poor, performance-based contracintg, Community-Based Health Insurance (CBHI), Health Equity Funds (HEFs) and vouchers. HEFs are a social health protection (SHP) mechanism specifically designed to remove financial barriers for the poor to access public health services and prevent poor households from iatrogenic impoverishment. The management of the fund is entrusted to a third party, usually a local non-governmental organisation. HEF beneficiaries are identified according to eligibility criteria, either at the community before health care demand (pre-identification or pre-ID) or at the public health facilities through interviews once there is an episode of illness (post-identification or post-ID). At the health facility, the eligible poor patients get full or partial support from HEF for the cost of user fees, transport cost, food allowance and other costs during hospitalisation. Available evidence suggests that HEF is effective in improving access to public hospital services for the poor and has the potential for protecting poor households from iatrogenic impoverishment.

The Government Subsidy Scheme, known as SUBO, is a form of HEF in which government budget is used to directly reimburses public health facilities for user fee exemptions for poor patients. It is administered by and through the Ministry of Health (MOH) and has no independent third party operator and/or implementer. Following the issue of the inter-ministerial *Prakas 809* on 13 October 2006, SUBO was introduced as a pilot in six national hospitals (NHs) and 12 Operational Districts (ODs) that include twelve sub-national referral hospitals (RHs) and 152 health centers (HCs). Due to weaknesses in the reporting and monitoring system, very little routine information and data are available on the functioning, the costing and the performance of the different SUBO schemes. Therefore, the MOH with technical and financial support from the Belgian Technical Cooperation (BTC) commissioned this evaluation of the SUBO schemes, which took place in August 2011.

The general objective of the evaluation is to provide the MOH with evidence required for policy decisions in the field of health financing and more specifically with regards to development of a standardized approach for SHP mechanisms for the informal sector. More specifically, the objective of the evaluation is to provide information on the functioning, results and impact of the SUBO with reference to the National Equity Fund Implementation and Monitoring Framework and in comparison with other HEF models.

Methodology

Data for this evaluation were collected in two ways: secondary analysis of existing data and primary data collection and analysis. The secondary analysis included reviewing existing documents and other literature on health financing in Cambodia, reviewing records of SUBO health facilities, and extracting routine data from the MOH's web-based HIS system. Primary data collection employed both qualitative and quantitative methods. To collect qualitative

information several methods were used, including key-informant interviews, focus group discussions and cross-checks of SUBO beneficiaries at home. Exit interviews and bed census surveys were used to collect quantitative data on utilization and health care expenditures. Quantitative data were analyzed using SPSS software and qualitative data were analyzed to identify themes and patterns related to the research questions. The findings were also validated with key stakeholders in two separate workshops.

Key findings

The legal framework and policy for the SUBO exist, mainly in the form of *Prakas 809*. The implementation of SUBO is mostly based on the *Prakas*. Other key documents, including the HEF Guideline and Financial Manual, have not been made available or have not yet been introduced to most SUBO implementing facilities. In many cases, training for implementation of SUBO has not been completed. As a result, the institutional arrangement and management structure of SUBO is currently only loosely organized and is not effectively implemented according to the HEF Guideline.

The administrative requirements for financial claims were different among SUBO facilities and often invovled a long and complicated process of documentation to get approval at different levels, which often experienced delays of three to six months. The claim documents are unnecessarily repetitive and cause a heavy burden for health facilities, especially for HCs where reimbursement is low. The costs of administration for SUBO are significant in terms of staff time and complex administrative procedures for reimbursement, but they are not included in the SUBO budget and are therefore a hidden cost that is not taken into consideration.

There is no effective monitoring of SUBO implementation. The absence of effective monitoring of SUBO implementation means that there is no control over potential or actual leakage of funds from the SUBO scheme. Possible over-reporting on claims (so-called ghost patients) was negligible in some hospitals but appeared to be significant in others.

The evaluation highlighted a number of SUBO design and policy issues. These relate to the absence of third-party status, the costs of administration and the incentives created by the scheme. The absence of food and transport costs from the SUBO benefit package means that the poor continue to face financial barriers to access to health services, which is a disincentive to use SUBO by the beneficiaries. The flat rate per case quarterly reimbursement is administratively simple but is perceived as too low for IPD cases at NHs and some CPA 3 RHs if compared with user fees (perceived by the provider as ‘loosing’), too low for OPD cases at HCs if compared with the cost of preparing the paperwork required, and the disbursement is sometimes delayed. The low rate of the case-based payment and the irregular reimbursement process is a further disincentive to providers who prefer user charges or other SHP schemes like HEF and CBHI. These disincentives limit the efficient and effective implementation of the SUBO scheme.

Coverage of facilities by SUBO is incomplete in the piloted six NHs and twelve 12 ODs. Not all NHs or ODs (especially at the HC level) fully implement the SUBO and there is sometimes overlap with existing SHP schemes such as HEF. For a number of reasons, many NHs and CPA3 RHs downgrade their SUBO activities and two thirds of the HCs designated for SUBO never began or stopped implementing the scheme. These reasons include the unnecessarily repetitive, burdensome and costly administration and paperwork required by SUBO and the absence of a budget for administrative costs, and competition from the more complete benefit package and the higher provider reimbursement rate of the overlapping HEF

and other SHP schemes. Especially at the HC level, where the costs of administration and paperwork are higher than the value of the SUBO reimbursement, there is little incentive to use SUBO.

Almost all key informants from the MOH at all levels and development partners were aware of the existence and operation of SUBO, but almost all local authorities, community representatives and patients did not know about SUBO as it is defined by the *Prakas* 809. However, many of them, especially those involved in the pre-ID process and those who hold an EAC, knew about the user fee exemption policy for the poor.

Many key informants from NHs, PHDs, ODs, RHs, HCs, local authorities and community representatives found SUBO to be useful for public health facilities, as it provides additional funding and helps to motivate public health providers (as 60% of the income from SUBO is to be used for staff incentives) and consequently to improve the quality of health services and increase service utilisation by the poor. It appears from comments made by some key informants that the additional revenue provided by SUBO reimbursements to the facility provided extra income for facility staff, the quality of care improved slightly and service utilization increased in few facilities after the introduction of SUBO. However, the broader evidence collected in this evaluation revealed no particular effect of SUBO implementation on the quality of services or utilization overall.

The available evidence also suggests that the SUBO schemes have a limited effect on access to services and protection from health costs. Access is restricted mainly because, in addition to user fees (which are exempted under the SUBO), the poor face a number of remaining barriers, including the costs of food and transport, that prevent their use of health services. SUBO beneficiaries are still paying significant OOP costs for user fees and other medical costs (including laboratory cost, additional drugs and other extras). In some ODs there was also evidence of a decrease in SUBO utilization over time where other SHP schemes (like HEF) existed in the same facility (mostly because the incentives to patients and to providers are less through the SUBO).

Conclusions and recommendations

The initiative of the RGC to use tax funding through the SUBO to compensate public health providers for user fees foregone for exemptions to poor patients was supported by the key stakeholders. This is a significant and important initiative that reflects the government's commitment to helping poor people to access quality health care. This commitment to budget support for providing access to health services for the poor is a vital contribution to sustainable financing of health care for the poor and the improvement of the health of the Cambodian people and should be maintained and expanded in line with the fiscal resources available to the health sector (either through the SUBO structure or in other ways).

There are, however, a number of gaps and challenges associated with the design and implementation of SUBO in its current form, which consequently undermine the SUBO in achieving its objectives of improving quality of public health services and promoting the use of these services by the poor. These design issues, implementation gaps and constraints with the current status of SUBO can severely undermine the effectiveness and efficiency of the scheme. There is a need to redesign the SUBO scheme and also to reform the SUBO implementation process to overcome these problems.

At the time of this evaluation, there was an ongoing discussion about the future of the HEFs. Any decision about the future of the SUBO must be made within the context of RGC's plan to

extend HEFs to national coverage and to make a more significant financial contribution to HEFs alongside donors.

With these issues in mind, there are two broad alternatives for the future of the SUBO scheme: (1) maintain the SUBO as a separate scheme with an improved design as recommended in the Guideline for the Implementation of Health Equity Funds and in a way that is complementary to existing HEF and CBHI arrangements; or (2) continue budget funding for the scheme through the integration of SUBO with HEFs, in which the government subsidy would pay for user fees whereas donor funding would pay for patient transport and food costs and the operating cost of a third-party implementer; or (3) replace the present SUBO schemes by HEF and use the present SUBO budget under a new (to be created) government budget line for SHP to co-finance these HEF schemes together with donor funds.

Considering the current policy direction and efforts to consolidate the existing fragmented SHP schemes into one single and uniform SHP system for different Cambodian population groups, in particular for the informal sector, it is wise to consider integrating SUBO into general HEF. By doing so, SUBO will automatically benefit from the better design and more complete institutional arrangements of HEF and will thus be more effective and efficient. However, the integration will not solve all the design issues and implementation constraints of SUBO. The current reimbursement rates of SUBO are too low if compared with those of HEF. For effective integration these rates should be increased.

Moreover, because the process of integration may take some time, some immediate measures should be taken to address the design issues and implementation constraints of the current form of SUBO. These measures would also prepare the SUBO for integration with HEFs at some future point. These include:

- Revise the current physical coverage of SUBO which overlaps with other SHP schemes, in particular with HEF
- Adapt the current Guideline and Financial Manual, translated into Khmer, and introduce them to all SUBO facilities;
- Conduct an extensive information and education campaign on SUBO with local authorities, community representatives and eligible patients;
- Develop and implement a practical but effective monitoring system for SUBO;
- Revise and simplify administrative and financial procedures to avoid unnecessary repetitive and heavy burden of paperwork, and provide training on the revised administrative and financial procedures to all SUBO facilities;
- Increase the current budget for SUBO through negotiation with the MEF and related government authorities; improve planning procedures in order to increase budget for SUBO and use a proportion of the funding for administration cost and transportation.

1 Background

1.1 Introduction

In October 2006, the Ministry of Economy and Finance (MEF) and the Ministry of Health (MOH) jointly issued a *Prakas 809*, which authorized the use of government budget to directly reimburses public health facilities for user fees exempted for poor patients. The scheme was designed to be operated by and through the MOH without an independent third party operator and/or implementer, and has become known as SUBO. To date SUBO has been piloted in six national hpspitals (NHs) and 12 Operational Districts (ODs) which include twelve sub-national referral hospitals (RHs) and 152 health centers (HCs).

Due to the inadequate reporting and monitoring system, very little routine information and data are available on the functioning, the costing and the performance of the different SUBO schemes. Therefore, the MOH with technical and financial support from the Belgian Technical Cooperation (BTC) commissioned an evaluation of the SUBO schemes, which took place in August 2011 (see the Terms of Reference in Annex 1).

The MOH expects this evaluation to provide a better understanding of the functioning, the effectiveness and efficiency of these schemes. During 2011 the MOH is conducting a Mid-Term Review of the second National Health Strategic Plan 2008-2015. Findings and recommendations of this SUBO evaluation are expected to contribute as evidence to the health financing component of the review.

The general objective of the evaluation is to provide the MOH with evidence required for policy decisions in the field of health financing and more specifically with regards to development of a standardized approach for Social Health Protection (SHP) mechanisms for the informal sector. More specifically, the objective of the evaluation is to provide information on the functioning, results and impact of the SUBO with reference to the National Equity Fund Implementation and Monitoring Framework and in comparison with other Health Equity Fund (HEF) models.

The main content of this report is divided into four chapters. In Chapter 1, after the introduction, we will provide a short background on HEFs and SHP in Cambodia and theoretical description of SUBO schemes. Chapter 2 will be about methods of the evaluation. The findings will be presented in Chapter 3. Based on the findings, we will then draw some conclusions and make some recommendations for further improvement and scaling-up of SUBO (Chapter 4), followed by references and annexes.

1.2 Health Equity Funds and social health protection in Cambodia

Social health protection is defined as a series of public or publicly organized and mandated private measures against social distress and economic loss caused by the reduction of productivity, stoppage or reduction of earnings, or the cost of necessary treatment that can result from ill-health. The main aim of SHP is to ensure that financial barriers do not prevent people from accessing health services they need, and that they do not suffer from financial hardship because they have to pay for these services [1]. A body of evidence shows that direct payments, in any form, prevent the poor from accessing essential health services they need and cause financial hardship or impoverishment–iatrogenic impoverishment–for those who obtain the services [2-4]. Direct out-of-pocket (OOP) payments for treatment and illness-related income loss can make a non-poor household poor, and push a poor household into destitution [5]. Extending SHP coverage means reducing financial barriers to access to

effective health services by establishing prepayment and risk pooling mechanisms, which reduce the burden of user fees and other forms of OOP payments and prevent catastrophic health expenditures, thereby contributing to poverty reduction.

Over the past decade, Cambodia has made substantial progress in improving the health of the population, as evidenced by the changes in key indicators highlighted in the Cambodian Demographic and Health Surveys of 2000 [6] and 2005 [7] and 2010 preliminary report [8]. However, access to effective and affordable health care remains a major problem for Cambodian population, especially the poor and vulnerable. Several studies have identified various barriers to accessing health care, both on the supply side and demand side, mainly financial barriers caused by user fees, transportation cost and other health care-related expenses [9-11]. More than two thirds of the relatively high total health expenditure is direct OOP payments. A number of studies showed that many poor households in Cambodia lost their land and went to heavy indebtedness because of illness [12-14].

To address this problem, the Royal Government of Cambodian (RGC) has taken the first tentative actions to initiate SHP coverage. Since the introduction of new Health Coverage Plan in 1996, several health financing mechanisms have been developed to promote access to effective and affordable health care for the population, especially the poor and vulnerable. These include direct tax-funded health services plus user fees for the non-poor and exemptions for the poor, performance-based contracting, Community-Based Health Insurance (CBHI), HEFs and voucher schemes. The Strategic Framework for Health Financing 2008-2015 [15] and draft Master Plan for Social Health Protection indicate that Cambodia will gradually develop a unified SHP system, combining the existing health financing schemes. In addition to further improvement of tax-funded government health services to guarantee the supply of a comprehensive package of quality services nationwide, several health financing mechanisms will be used to ensure effective financial access to these services: mandatory Social Health Insurance (SHI) for civil servants and private sector employees; CBHI for the not-so-poor who have no formal employment; and HEFs and other targeted subsidy schemes for the poorest part of the population. In line with this policy, the MOH would like to develop a standard model for SHP system for the informal sector by the end of 2011. This model would require a commonly defined type of operator, the linkage between HEF and CBHI, the benefit package, the funding mechanism, the monitoring and reporting system, the oversight structure and the involvement of local communities.

HEFs are a SHP mechanism that are specifically designed to remove financial barriers for the poor to access public health services and prevent poor households from financial hardship or iatrogenic impoverishment. Within a context where unfunded user-fee exemptions at public health facilities were inadequate to provide access for the poor, especially at hospital level, HEFs were introduced by non-government organizations (NGOs) in 2000. The district-based HEFs are a demand-side financing mechanism designed to identify the eligible poor patients, to reimburse facilities for user fee exemptions and to meet patient food, transport and other costs related to access. Thanks to positive results of the early pilot projects, in 2003 HEFs became an integral component of the Health Sector Strategic Plan 2003-2007, the National Poverty Reduction Strategy 2003-2006, and later the National Strategic Development Plan 2006-2010. HEFs are also an important element of the new Strategic Framework for Health Financing 2008-2015 [16], the draft SHP Master Plan and the second Health Strategic Plan 2008-2015 [15].

In general, there are three forms of HEFs: (1) general HEFs, which will be hereafter called HEF (see Box 1), (2) government subsidy schemes or SUBO, which will be described in more detail in Chapter 1.3, and (3) HEFs linked with CBHI in the form of premium subsidization for the poor. Since the first pilots in 2000, the number of HEFs has increased significantly. To

date, there are 66 HEF schemes, including 46 general HEF schemes, 18 SUBO and two HEF-CBHI linkage schemes, being implemented in 58 ODs[1] in 23 provinces and Phnom Penh municipality in Cambodia. In total, all the six NHs, 58 (73%) of the 79 RHs and 361 (36%) of the 992 HCs are covered by one or more of these three forms of HEF.

Box 1: Key features of general HEF schemes

- HEF has triple objectives: improve access to public health services, reduce out-of-pocket expenditures and promote patients' rights for the poor;
- Funding is mainly provided by development partners, either directly to the fund operator or through the MOH's Health Sector Support Project;
- Management of the fund is entrusted to a third party operator, usually a national non-governmental organisation, supervised by an international organisation, known as implementer;
- HEF beneficiaries are identified according to eligibility criteria, either at the community before health care demand (pre-identification) or at the public health facilities through interviews once there is an episode of illness (post-identification);
- Health services providers are public health facilities, selected and contracted by the fund operator and/or implementer;
- Benefit package provided to the eligible poor patients at the health facility include full or partial support for the cost of user fees, transport cost, food allowance and other costs during hospitalisation.

Source: adapted from Ir et al [17].

Evidence from several studies suggests that HEF is effective in improving access to public hospital services for the poor and has the potential for protecting poor households from iatrogenic impoverishment through reducing their OOP payments and health care-related debts [10,17-21]. However, the impact of SUBO and HEF-CBHI linkage remains to be assessed. A recent study by Annear et al suggested that without careful design and implementation, linkage of HEF with CBHI could lead to negative cross-subsidization from the poor to the non-poor and make HEF scheme more expensive than it would be implemented alone [22].

1.3 Description of government subsidy schemes or SUBO

According to the Strategic Framework for Equity Funds [23] and the National Equity Fund Implementation and Monitoring Framework [24], government subsidy schemes or SUBO are generally considered as a form of HEFs. As stated in the framework, "*Another possibility is that the MOH can directly reimburse the hospitals based on their waivers claim, without involvement by a third party. This model is currently implemented at Calmette Hospital*".

The issue of the inter-Ministerial *Prakas 809* in October 2006 provided a legal framework for the use of government budget to reimburse public facilities for user fees exempted for poor patients. The *Prakas* which has eight articles provides guidance and key principles for the implementation of SUBO and refers to the MOH and other implementing institutions to work out the practical details, including tools and methods for identification of poor patients and monitoring (see the informal translation of the *Prakas* in Annex 2). As stipulated in Article 1 of the *Prakas*, the aim of SUBO is to improve the quality of public health services and to promote poor people to use these services.

[1] Two general HEF schemes and government subsidy schemes are overlapping in two ODs

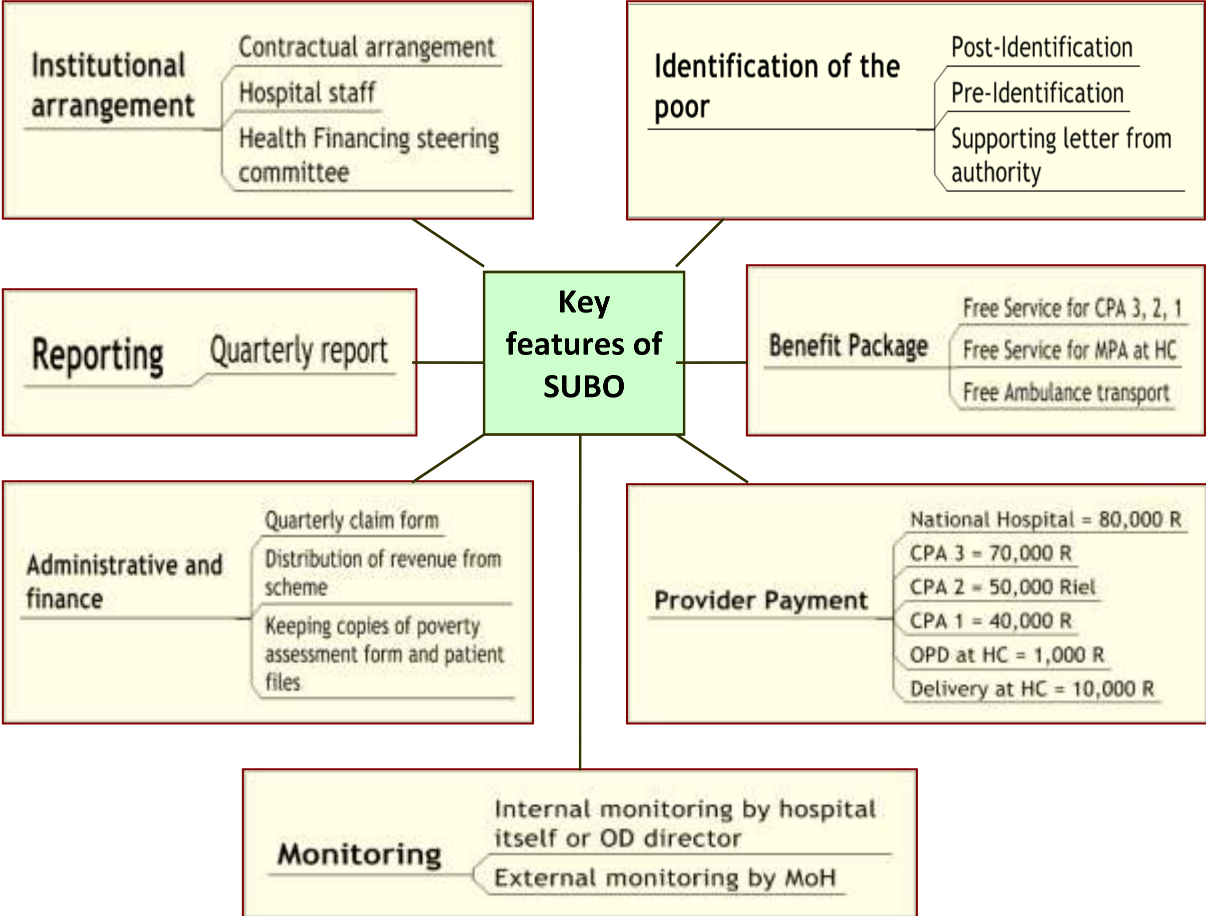
Although the *Prakas* does not limit SUBO coverage to any particular areas, in 2007 the MOH decided to pilot it first in the six NHs and nine ODs lacking a HEF. In 2011, three more ODs were added, taking the number of ODs implementing SUBO twelve in total (see Table 1).

Table 1: Theoretical coverage of SUBO by health facility, OD and province

Province/ Municipality	No	Name of OD/NH	Health facilities implementing SUBO	
			Hospital	HC
Kampot	1	Kampong Trach	1	12
	2	Angkor Chey	1	10
	3	Chouk	1	17
Prey Veng	4	Kampong Trabek	1	11
Svay Rieng	5	Romeas Hek	1	9
	6	Chi Pou	1	8
Kampong Speu	7	Kampong Speu	1	22
Kampong Chhnang	8	Kampong Chhnang	1	15
Kandal	9	Takmao	1	15
	10	Ksach Kandal	1	12
Pailin	11	Pailin	1	6
Takeo	12	Daun Keo	1	15
			12	152
Phnom Penh	1	National Paediatric Hospital	1	
	2	Ang Dong Hospital	1	
	3	Khmer-Soviet Hospital	1	
	4	Kossamak Hospital	1	
	5	Calmette Hospital	1	
	6	NMCHC	1	

To provide guidance for planning and implementation of the different schemes that aim to facilitate access to appropriate health care for poor people, in particular HEFs, in 2009 the MOH developed the Guideline for Implementation of Health Equity Funds [25] and later the Financial Manual for Health Equity Fund [26]. These policy documents provide relevant guiding principles and practices of HEFs, set practical standards for the organization, administration, management, reporting and monitoring of HEF schemes; and allow harmonization of implementation arrangements of different schemes to achieve unified administration and promote efficient use of resources. The Guideline highlighted four groups of HEF schemes, including group 1 and group 2 for SUBO at NHs and ODs respectively. Key design and impementation aspects of SUBO at NHs and ODs, including institutional arrangements, identification of beneficiaries, benefit package, administration and finance, reporting and monitoring, are clearly explained in the guideline from page 16 to 23, which can be summarized as in Figure 1.

Figure 1: Key features of SUBO schemes

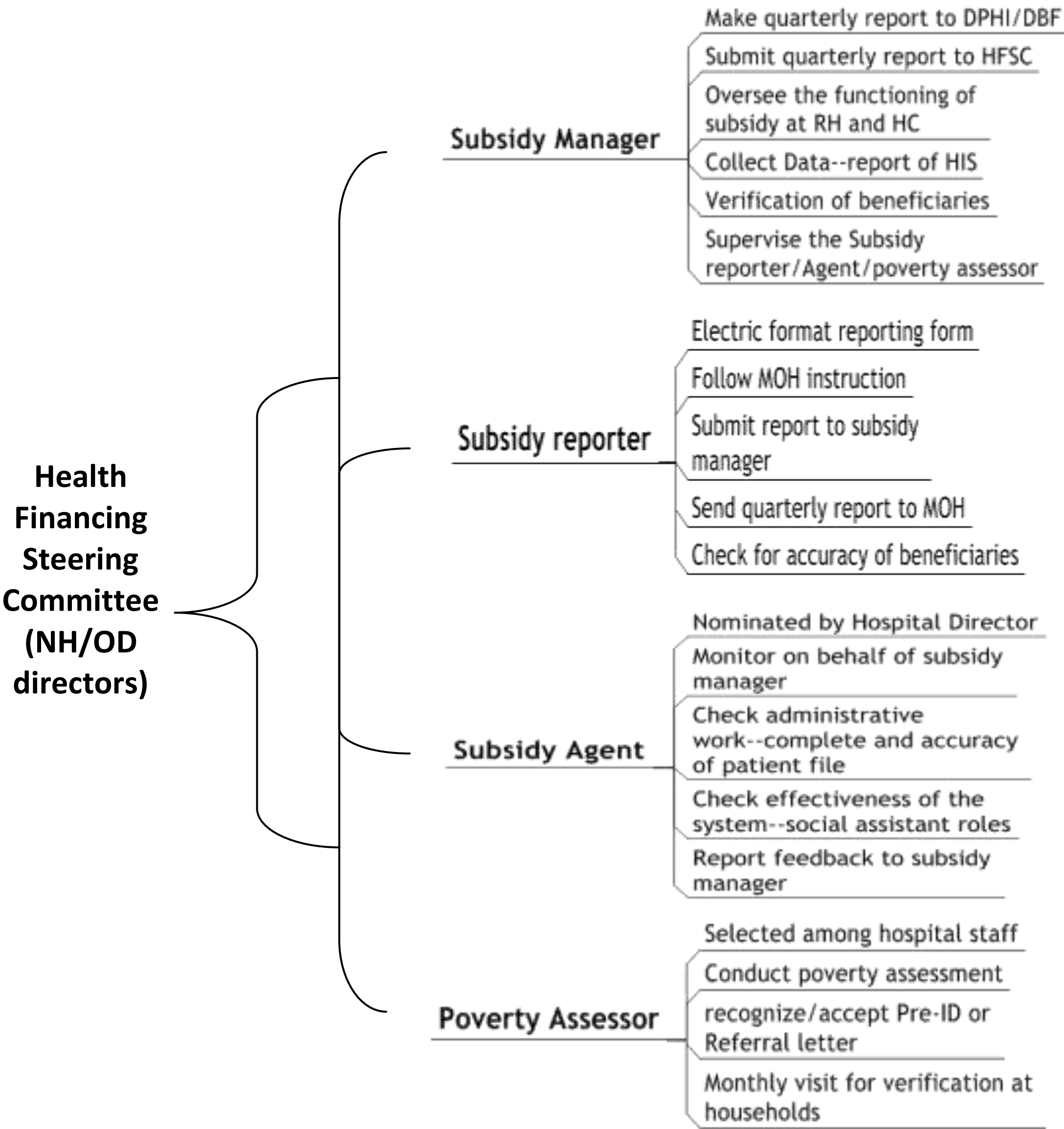


1.3.1 Institutional arrangement

As indicated in the Guideline, the MOH, represented by the Department of Planning and Health Information (DPHI), should make a contract or memorandum of understanding (MOU) with individual NHs and ODs implementing SUBO. All details about services to be provided by the contracted NHs and health facilities in these ODs, reporting requirements and benefit packages should be described in the contract or MOU.

In addition to the contractual arrangements, the Guideline also stated that the directors of contracted NHs and ODs should assign staff to take up four key functions: one subsidy manager, one subsidy reporter, one or more subsidy agents and three to five poverty assessors. Their detailed responsibilities and tasks are summarized in Figure 2. In addition to these key functions, a local multi-sectoral Health Financing Steering Committee (HFSC) should be created to oversight the management of SUBO through the directors of NHs and ODs.

Figure 2: Management structure of SUBO schemes



1.3.2 Identification of beneficiaries

Like HEF, identification of beneficiaries or eligible poor patients for SUBO is done in two ways: pre-identification (pre-ID) and post-identification (post-ID). The pre-ID of poor households is done at the village level prior to the use of health services. It is organized nationally through the Ministry of Planning (MOP), using local government, commune councils and village network for the implementation of the whole process, including dissemination of information, generating list of poor households in village, conduct the interview, verifying results and distribution of Equity Access Card (EAC), known as the Poor Card, by the MOP to the identified poor households. The EAC contains information on household identification number, name of household members, poverty level of the household (poor 1 or poor 2), and actual photo of all household members.

Post-ID is done at the health facility through interviews with patients who are in need of financial assistance to pay for user fees. The interviews should be conducted by trained poverty assessor, using the post-ID form developed by the MOH (see the post-ID form in

Annex 3). Patients who carry an EAC and those meeting the post-ID eligibility criteria can benefit from SUBO –user fee exemption.

1.3.3 Benefit package

The benefit package is clearly laid out in the Guideline. At SUBO facilities, all eligible poor patients are entitled to free care (user fee exemption). At the NHs and RHs, the benefit package includes: ambulance transport, patient registration and administration, medical examination, medical treatement, blood transfusion, hospitalization (bed), nursing care, diagnostic test, provision of necessary medicines and medical materials by the hospital, and upon discharge, for outpatients or referral patients: a cost-effective generic prescription in case of chronic disease requiring continued medication, if there is no free public provision through a national program. At HC level, the benefit package include all minimum package of activities, especially delivery and referral services. Unlike HEF, SUBO does not cover cost for private transportation, food allowance and other social support.

1.3.4 Provider payments

The amount of user fees charged by public health facilities vary from one to another according to the level of care and local agreement. This makes the cost of user fee exmeptions different across health facilities. However, the provider payments, as defined by the *Prakas 809*, is a flat rate case-based payment according to health facility and level of care it provides (Table 2). In exchange for the benefit package, SUBO health facilities get reimbursed quarterly for the user fees exempted for the poor based on a flat rate per case.

Acording to the *Prakas*, the revenue generated from SUBO must be distributed as follows: 60% to top up the income of all health staff as incentive (but 5% of these 60% should be allocated to OD staff as incentive to run the scheme), and 40% to improve quality of health services, including purchase of essential drugs and medical materials which are in short supply for eligible poor patients.

Table 2: SUBO reimbursement rates by health facilities and level of care

Type of health facilities	Reimbursement rates by SUBO	
	Rates in Riels	Rates in USD
National hospitals and national centres: inpatient	80,000	20.00
Referral hospitals: inpatient		
CPA 1 (Referral hospital without surgery)	40,000	10.00
CPA 2 (Referral hospital with surgery)	50,000	12.50
CPA 3 (Referral hospital with all specialization)	70,000	17.50
Health centres		
Inpatient	10,000	2.50
Outpatient	1,000	0.25

1.3.5 Administration and finance

The administration of SUBO involves conducting post-ID, preparing financial claim forms, distributing funds, preparing monthly and quarterly reports, compiling and keeping patient records and documents, conducting verification of beneficiaries and carrying out internal

monitoring. As indicated in the Guideline, the administration of SUBO is placed under the responsibility of the directors of NHs and ODs. However, the administrative tasks can be assigned to their staff to work, but the quarterly reports must be signed by the NH and OD directors.

Unlike HEF, there is no additional budget allocated for the administrative work for SUBO scheme. However, the Guideline indicates that 5% of revenue generated from SUBO can be taken out from the 60% of budget to be used for OD staff as incentive to run the scheme; but it does not indicate as administrative cost.

1.3.6 Reporting

The subsidy managers at the NHs and ODs are responsible for producing the required reports to the MOH. For the NHs, the assigned subsidy reporter is responsible for filling out the MOH quarterly report according the MOH instructions and format. The quarterly report should be signed by the subsidy manager and submitted at the end of each trimester to DPHI in both electronic and hard copies. The required reports include: MOH quarterly report and trimesterial claim report, monthly claim and internal and external reports. At the OD level, the reporting of SUBO is placed under the responsibility of subsidy manager and subsidy reporter. The required reports include: RH and HC activity reports, MOH quarterly report and trimesterial claim report, monthly claims, internal monitoring report, external monitoring report to sub-monitoring group and HFSC, and external monitoring summary report.

As pointed out in the Guideline, all reports and health information should be kept in both electronic and hard copies, which can be made available to the HFSC for review and for the monitoring purposes.

1.3.7 Monitoring

The monitoring of SUBO consists of internal and external monitoring. The internal monitoring is carried out by the NHs and ODs themselves, whereas the external monitoring is done by the Monitoring Group (MG), nominated by the multi-sectoral HFSC. The internal monitoring is done for the daily management of the scheme by using the monitoring system developed by the facilities themselves to verify whether the hospital personnel are aware and respect all aspects of the SUBO. The subsidy agent has the main responsibility and authority to carry out this internal monitoring. At the HC level, the subsidy agent can use spot checks to determine every month the accuracy of HC record that use subsidy for claiming exemption of poor patients. A standardized report form of spot check is used to inform the HFSC of the results.

For the NHs, the external monitoring is done by the MOH MG composed of staff from DPHI and members from the HFSC, to monitor the use of subsidy every three months. The results of the reports are then used to make recommendations for improvement of the effectiveness and efficiency of SUBO. The MOH MG is in charge of providing immediate feedback to the NHs on the results of the monitoring.

For the ODs, the external monitoring is done by the district MG which is composed of one staff from the OD that nominated by the Provincial Health Department (PHD) and four staff nominated by the district HFSC. The role of the district MG is to carry out the actual monitoring on a continuous basis inside the OD. The specific tasks involved in the monitoring include: spot checks of relevant documents and data produced by the health facilities; visits every three months to RHs and HCs to check the activities and compare them with the

reported activities and quality of services; visits to beneficiary's home for verification and to get feedback on patients' experiences with the public health care system; quarterly meeting with health care providers in order to discuss the scheme and to solve various problems; check the financial report prepared by the health care providers; and monitor the quality of pre-ID of the poor. The external monitoring of SUBO at the OD level is also done by the MOH MG.

2 Methodology

2.1 Data collection

Data for this evaluation were collected in two ways, secondary data review and primary data collection, using both qualitative and quantitative methods.

2.1.1 Secondary data review

In order to determine whether there is adequacy of guidance and regulations provided by legal, policy and strategy documents on SUBO, we carefully reviewed existing documents and other literature on health financing in Cambodia. These include HEF documents, reports, policy documents, the *Prakas 809*, the Strategic Framework for Equity Funds, the National Equity Fund Implementation and Monitoring Framework, the Strategic Framework for Health Financing 2008-2015, monitoring and evaluation reports on health financing from DPHI and other evaluation reports by NGOs on HEFs.

SUBO claims were collected from the SUBO records in the six NHs and 12 ODs to measure SUBO utilization. In addition, routine data on total number of outpatients (OPD), inpatients (IPD) and births as well as user fee exemptions in all public health facilities from 2006 to 2010 were extracted from the MOH's web-based health information system. These data were stratified by group of SUBO, HEF facilities and others to assess the trend of health service utilization and exemptions.

Furthermore, to determine the cost of SUBO, routine and secondary data were collected from all SUBO facilities and different agencies implementing other health financing schemes. Operational plan, budget plan, technical and financial reports by SUBO staff, terms of reference and contracts were carefully examined and necessary costing data were extracted. We also collected costing data of other HEF scheme implemented by URC and BTC to allow comparison with SUBO and estimate some virtual operational and other non-user fee costs of SUBO.

2.1.2 Primary data collection

We used several methods to collect primary qualitative and quantitative data. Table 3 summarizes the selected sample and sites and how they were selected.

Qualitative methods such as direct observations, key-informant interviews (KIIs), focus group discussions (FGDs) and cross-checks of SUBO beneficiaries at home were used to collect information on the functioning, administrative and financial management, organizational structures, management systems and practices, fund flows, system of verification and accountability arrangements and SUBO payments to health providers and barriers for poor people to access to public health services.

Direct observations were made at selected health facilities we visited for bed census survey and exit interviews. This method allowed us to observe the interaction and personal

communication between SUBO staff and beneficiaries to explore the working environment and how it functions on a daily basis.

We conducted in-depth interviews with key stakeholders (see list of people consulted in Annex 4). All directors of NHs, Provincial Health Department (PHD), ODs, RHs and key personnel working on SUBO, if any, were interviewed to get their views and perceptions on the various aspects of SUBO such as the institutional arrangements, tasks and administrative works, targeting method and process, the benefit packages provided and its limitation, financial management, method of verification and accountability of the payment, monitoring and evaluation of the scheme. In addition, purposively selected policy makers in the MOH, the MEF, NGOs and development partners were interviewed to understand issues and concerns of the SUBO schemes as well as to explore their views on the advantages and disadvantages in terms of cost, function, targeting, benefit package, accountability etc. of SUBO schemes compared with other SHP schemes. At the community level, interviews were conducted with relevant local authorities, in particular commune councils, village chiefs, Health Center Management Committee (HCMC) and Village Health Support Group (VHSG) to explore their awareness of the existing SUBO schemes in their areas and what roles and responsibilities they play, if any, in the implementation of the scheme.

FDGs were conducted with selected poor villagers in SUBO coverage areas to explore factors related to access to and utilization of health care services as well as knowledge and awareness of SUBO, health-seeking behavior and access barriers.

Cross-checks of SUBO beneficiaries at home were done to mainly verify whether those beneficiaries recorded in the book were indeed existed or not and whether they were entitled to SUBO support or not. We randomly selected SUBO beneficiaries from the health facility records and went to find them at their respective given addresses. Questions on whether they really went to use the services and exempted from payment of user fees as indicated in the facility report and their perception on staff attitude and quality of services were administered to those beneficiaries we found.

In addition to the above-mentioned qualitative methods, a number of quantitative methods were used to measure the potential impact of SUBO in terms of access to and utilization of health care services, household OOP expenditures and quality of services.

Patient exit interviews at ten selected SUBO HCs to collect quantitative data on illness episode, knowledge and awareness of SUBO, patient satisfaction, and entitlement to user fee exemptions or SUBO scheme. All patients visiting the health centers in one morning were invited for interviews.

Other quantitative data from SUBO beneficiaries and non-beneficiaries were collected through bed census surveys among IPDs in four selected ODs and two selected NHs. A census of all patients staying in the facilities at the day of our visit was done and a structured questionnaire on illness episodes, poverty status and their entitlements to HEF (using HEF post-ID tool) was administered to all or some selected IPDs depending on the number of IPDs in the hospitals, with a maximum of around 50 patients per hospital. This method allowed us to collect information from both SUBO eligible non-users and SUBO beneficiaries in a given time and it provides quantitative data for analysis to measure the performance and effectiveness of SUBO scheme.

Considering the operational constraints and feasibility, we apply the above-mentioned methods to some randomly selected study sample and sites only, except KII with directors of NHs, PHDs, ODs and RHs.

Table 3: Sampling and site selection for primary data collection

Method	Study subject /site/institution	Sampling	Sample size
Key informant interviews	Policy makers from MOH (DPHI), MEF	Purposive	4
	Managers of NGOs/donors (JPIG)	Purposive	8
	Directors of all SUBO NHs, PHDs, ODs, RHs	Systematic	38
	SUBO staff in 12 ODs	Purposive	18
	HC chiefs in 10 selected SUBO HCs	Random selection	10
	CCs or village chiefs and VHSG or HCMC in 7 selected SUBO ODs	Purposive	28
FGDs with poor villagers	7 selected SUBO ODs	Random selection: 2 villages per OD	14 groups of 7-10 people
Cross-checks of SUBO beneficiaries at home	7 selected RHs	Random selection	271
HC patient exit interviews	10 selected SUBO HCs	All patients visiting the facility in one morning	10-30 per HC Total=232
Bed census survey and hospital inpatient interviews	7 selected SUBO hospitals (5 RHs and 2 NHs)	Purposive selection of hospitals, but random selection of patients	All patients in RHs and 1/3 in NHs

2.2 Data analysis

Quantitative data collected from bed census surveys and exit-interviews were entered into the SPSS software program for analysis. We used Chi-square test to compare proportions between the two groups and significance was determined at the 5% level ($p<0.05$). Means of normally distributed data between the two groups were compared, using Independent-Samples t-tests. For skewed data, a non-parametric test (Mann-Whitney) was applied.

Qualitative data was captured on paper and audio tapes and later typed into text files for analysis. A qualified researcher trained in qualitative research carried out analysis of the data collected from the KIIs and FGDs, identifying themes and patterns related to the research questions. The description and analysis of the data was distinguished between SUBO NHs and ODs, and within the SUBO OD between SUBO RHs and HCs.

2.3 Consultative workshops

The preliminary results of this evaluation were presented to key stakeholders in two separate consultative workshops: one with development partners and one with related government institutions. Participants to these workshops are listed in Annex 4. Relevant feedback and comments are incorporated into the final report.

3 Findings

3.1 Legal framework, policy guidance and regulations of SUBO

The three key documents that provide the legal framework, policy guidance and regulations for SUBO are the Inter-Ministerial *Prakas 809* jointly issued in October 2006 by the MEF and MOH as well as the Guideline for Implementation of Health Equity Funds and the Financial Manual for Health Equity Fund developed by the MOH in 2009. These policy documents lay out relevant guiding principles and practices and set practical standards for the organization, administration, management, reporting and monitoring of SUBO.

These documents are relatively well known by some MOH policy makers and development partners at central level. Unfortunately, interviews with directors and key staff at NHs, PHDs, ODs, RHs and HCs revealed that they knew only *Prakas 809*, which they had received as a signed copy in Khmer. Some said they had received SUBO introductory training provided by the DPHI, mainly on the key principles and the post-ID process. Although the training was very helpful, it was not considered adequate for implementation of SUBO. Many, especially those from new SUBO facilities, had never received such training.

Many key informants from NHs, PHDs, ODs, RHs and HCs had never heard of the HEF Guideline and the Financial Manual. Few were aware of these two policy documents, and others complained that the documents were so far available only in English and had not been made available for SUBO implementing facilities. Moreover, the provincial RHs that were recently removed from the OD management structure and put under direct PHD management were not captured in these policy documents. Therefore, the only SUBO policy document that has been used as guidance for the implementation of SUBO at health facilities is the *Prakas 809*, without following the institutional setup laid out in the Guideline.

3.2 Awareness and knowledge of SUBO

Almost all key informants from the MOH at all levels and from development partners were aware of the existence of SUBO as it is defined in *Prakas 809*. Many of them considered SUBO a form of HEF. Many Cambodian stakeholders called SUBO "Government HEF". However, almost all local authorities, community representatives and patients did not know about SUBO as defined by the *Prakas 809*. However, many of them, especially those involved in the pre-ID process and those who hold an EAC, knew about the government user fee exemption policy for the poor (Table 4).

Table 4: Awareness of SUBO as a government user fee exemption policy for the poor among different groups of patients

	Percent aware			Remarks
By different methods	Overall	at home	at the health facility	
SUBO beneficiaries cross-checked at home	53%	-	-	-
Bed census hospital inpatients interviewed	69%	22%	78%	Higher % among those holding EAC
HC patient exit interviews	45%	84%	16%	Higher % among those holding EAC

3.3 Actual coverage and utilization of SUBO

As described in Chapter 1.3, to date six NHs and 12 ODs (where there are 12 RHs and 152 HCs) have been selected to pilot the SUBO scheme. Our assessment found that all six NHs have actually implemented SUBO but at different levels of performance and scope of activities. Only a few of the 12 ODs have fully implemented SUBO. One of them (Daun Keo OD) has never implemented SUBO. Many other ODs have implemented SUBO only at the RH. Many HCs in these ODs currently do not implement SUBO: some never started SUBO and some stopped it after a few months of implementation. In total, only 47 (31%) of the total 152 HCs currently implement SUBO partially (for inpatients and delivery only) or fully. Four of these ODs have vouchers and four others have HEF and/or CBHI. Table 5 provides an overview of the current status of SUBO implementation by province, OD and health facilities and other SHP schemes.

Table 5: Health facilities currently implementing SUBO by province and OD

Province/ Municipality	No	Name of OD/NH	Start year	Health facilities implementing SUBO		Other SHP scheme
				NH/RH	HC (all HCs)	
Kampot	1	Kampong Trach	2006	1	12 (12)	Vouchers
	2	Angkor Chey	2007	1	10 (10)	Vouchers
	3	Chouk	2010	1	17 (17)	Vouchers
Prey Veng	4	Kampong Trabek	2008	1	7 (11)	Vouchers
Svay Rieng	5	Romeas Hek	2008	1	0 (9)	
	6	Chi Pou	2010	1	0 (8)	
Kampong Speu	7	Kampong Speu	2007	1	0 (22)	
Kampong Chhnang	8	Kampong Chhnang	2008	1	1 (15)	HEF
Kandal	9	Takmao	2007	1	0 (15)	CBHI
	10	Ksach Kandal	2007	1	10 (12)	
Pailin	11	Pailin	2008	1	0 (6)	
Takeo	12	Daun Keo	Never	0	0 (15)	HEF, CBHI
				11	47 (152)	
Phnom Penh	1	National Paediatric Hospital	2007			
	2	Ang Dong Hospital	2007			
	3	Khmer-Soviet Hospital	2007			HEF, CBHI
	4	Kossamak Hospital	2007			
	5	Calmette Hospital	2000			
	6	NMCHC	2007			

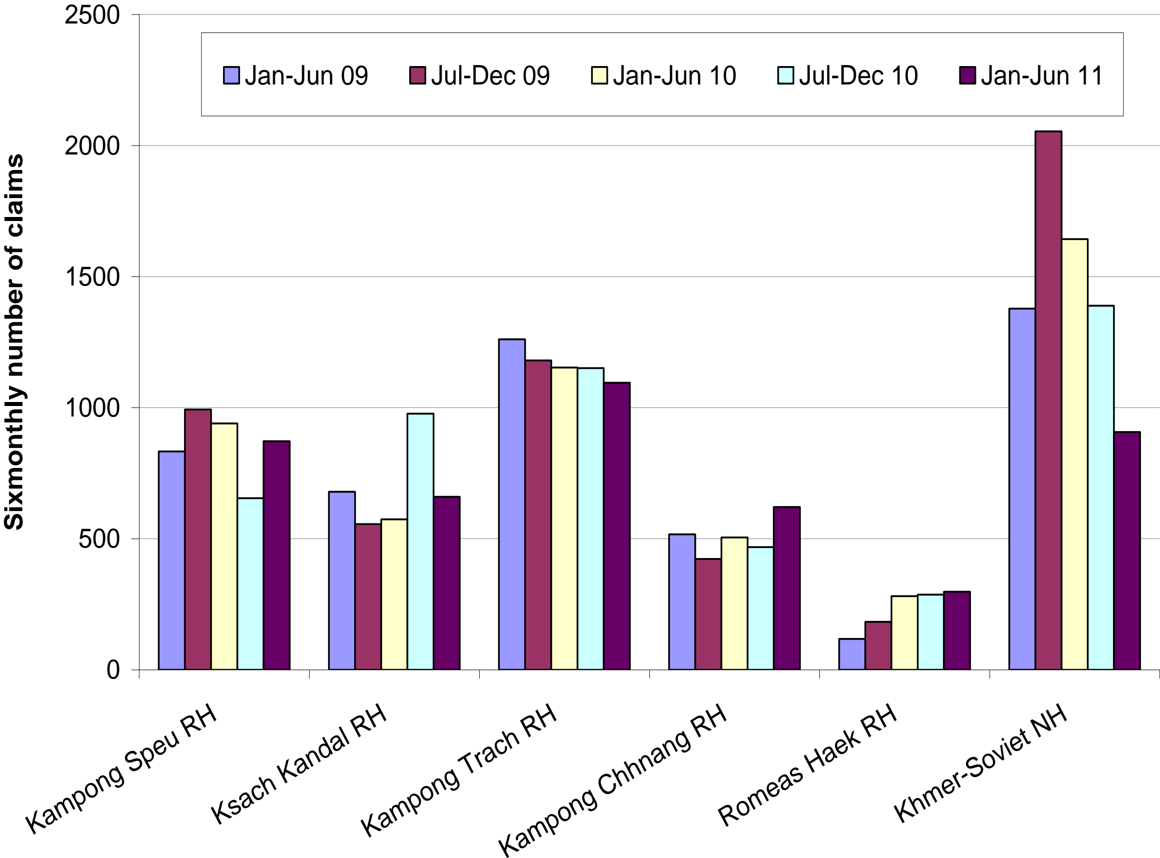
There are two main reasons why many of these SUBO designated health facilities never started or stopped implementing SUBO: (1) the presence of other SHP scheme, particularly

HEF, which provides more attractive, and competitive benefit package and provider reimbursement rate, which is the case confirmed by Daun Keo provincial RH; and (2) the unnecessarily repetitive, burdensome and costly administration and paperwork caused by SUBO in the absence of budget for administrative cost, especially at HC level where the costs of administration and paperwork are higher than the value of the SUBO reimbursement. Many HC key informants complained that in order to claim 1,000 Riels, they have to pay for about 2,000 Riels for copies of paper proof, including the completed post-ID form.

Our findings show that there is a disincentive for HCs and to a larger extent for NHs and some CPA3 RHs to implement SUBO, as SUBO cases are perceived as loss-making by these facilities relative to the amount of user fees they could charge. This is a significant departure from the original SUBO objective, which was to provide an incentive to public health workers and consequently to improve the quality of public health services and increase utilization of these services by the poor.

Despite some efforts by our evaluation team to collect data on the utilization of SUBO (claims), we could not get a complete picture of SUBO utilization rates or reimbursed exemptions in the SUBO health facilities. Figure 3 presents the six-monthly number of SUBO claims in six hospitals between January 2009 and June 2011. While key informants from some NHs and RHs claimed that the hospital utilization rate (including SUBO beneficiaries) has increased following introduction of SUBO, the figures from these six hospitals suggests that in general utilization at SUBO facilities did not increase. The trend in the Khmer-Soviet Friendship Hospital showed a decrease in utilization, which may be partly explained by the increasing presence of HEF and CBHI at this hospital.

Figure 3: Number of SUBO claims in six hospitals between Jan 2009 and Jun 2011



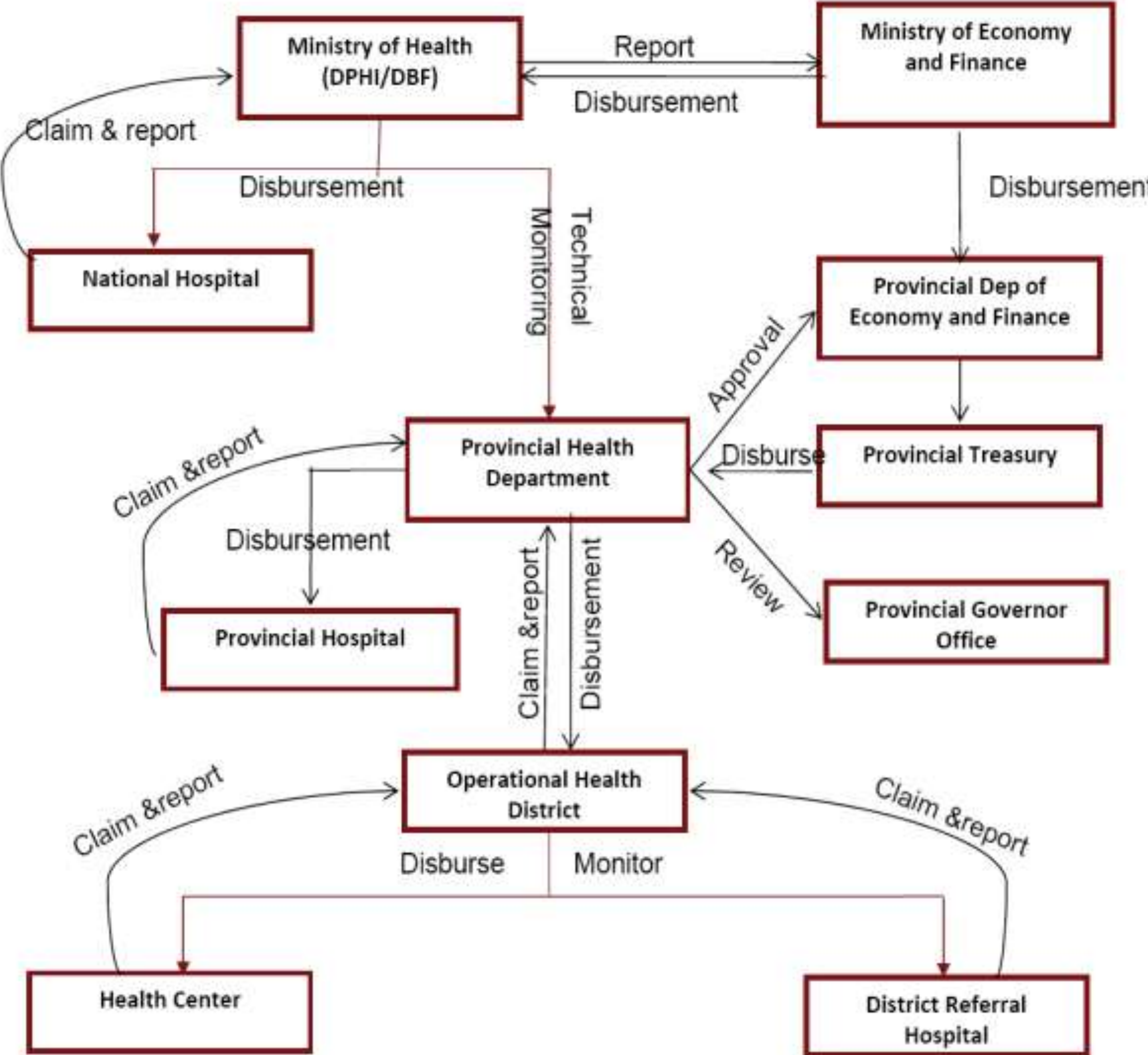
According to the bed census surveys, 39% of the interviewed inpatients in seven SUBO NHs and RHs reported to have been totally exempted from payment of user fees. Patients exit interviews revealed an average 25% exemption rate at SUBO HCs. Although we could not identify how many of these exemptions were actually reimbursed by SUBO (SUBO beneficiaries), these exemption rates seem to be quite acceptable if compared with the currently estimated poverty rate in Cambodia.

3.4 Practices and constraints in SUBO management and administration

3.4.1 SUBO management structure and practices

The management structure of SUBO is clearly laid out in the Guideline for Implementation of Health Equity Funds and Financial Manual for Health Equity Fund. In practice, SUBO is simply one of the government budget lines to support health sector activities. Therefore, the practical management and organisation of SUBO follows more or less the way the MOH manages the government budget for running costs. Based on information provided by key informants, the management structure of SUBO can be summarised as in Figure 4.

Figure 4: Practical management structure of SUBO



According to key informants, so far no particular institutional arrangements for SUBO as recommended in the Guideline have been developed by the SUBO facilities. There is no contract or MOU between the DPHI and NHs or ODs. Our assessment did not discover any paticular HFSC (except existing health financing committee in some hospitals) or MG being established in these SUBO facilities. Morevover, most NHs and ODs have not assigned a subsidy manager, reporter, agent(s) or poverty assessor as recommended in the Guideline. Key informants at these facilities said that they had not received any instructions or guidance about the instutional arrangements, which created additional costs and an administrative burden for them, and they had not received any budget to cover such administrative cost.

However, some practical arrangements have been developed to cope with the management and administration of SUBO at different levels. At the PHD level, the PHD director and the accountant are mainly involved in the financial management of the scheme, assisting the OD to develop Annual Operational Plan (AOP), reviewing and approving the claim and disbursement of the fund to the OD. The PHD plays little or no role in supervision and monitoring of the scheme. At the OD level, the role of OD director is mostly involved in financial management by approving, submitting and reimbursing the fund to health facilities. No minimal routine supervision and monitoring of the scheme has been done by the OD. Moreover, there is no community facilitator who plays a role in keeping records on HC services utilization by the pre-ID poor and reporting to the OD on the monthly number of pre-ID patients per village of origin in catchment area and on number of actual referrals of poor patients to the RHs.

Most of the SUBO activities occur at the RH level, where the daily management and operation of the scheme are being done by various health staff. The hospital director takes the role of scheme manager but his role is limited to the overall operation, making sure that the scheme is being implemented appropriately. Given that the hospital director also has the responsibilities in the overall operation of the health facilities, he has limit of time availability to fully manage the SUBO and thus leaving much of the SUBO activities to hospital administrator and/or accountant to manage, which mostly relates to financial matters. For the role of poverty assessor, no specific staff were made responsible for conducting the post-ID of beneficiaries; rather, the poverty assessment could be done by any health staff and was often done by the accountant, hospital receptionist or staff in different wards. The role of the health financing committee is simply to give approval and make verification, but in actuality this was rarely being done. Moreover, there has never been any visit to beneficiaries' homes by the poverty assessor or the health financing committee to verify the poverty status of the beneficiaries. Furthermore, among all SUBO schemes evaluated, there was no subsidy agent who was responsible for ensuring the completeness and accuracy of patient files, and who took responsibility for communication with beneficiaries and follow-up regarding their feedback.

Similarly, at the HC level, the management structure of the SUBO is not well organized, and the roles and responsibilities of the staff in the implementation and operation of the scheme are not defined. Most of activities related to SUBO are the post-ID of beneficiaries and preparation of documents of SUBO beneficiaries for user-fee reimbursement claim. There were no subsidy agents or community facilitators who provided social assistance to the beneficiaries.

Clearly, the management structure and key features of SUBO in its current form are far from what was described in the Guideline for the Implementation of Health Equity Funds and are different from those of the HEFs. Table 6 compares key features of SUBO with those of the HEFs. All key features of HEF, particularly the third party purchaser, benefit package, and provider payemnts, are different from those of SUBO. In the following sub-sections, we will

further discuss the practices and constraints on third party purchaser, beneficiary identification, benefit package, claims processing and provider payment, and monitoring.

Table 6: Comparison of key features between SUBO and HEF

Key features	SUBO	HEF
Objectives	▪ Improve quality of services ▪ Promote utilization by the poor	▪ Improve access to health services for the poor, ▪ Provide them financial protection, ▪ Promote their rights as consumers
Funding sources	▪ Exclusively government	▪ Development partners with government contribution
Third party purchaser	▪ No third party purchaser ▪ The health facility plays a role as SUBO operator, often without clear task assignments	▪ By a third party operator and/or implementer, usually NGOs with clear task assignments
Beneficiary identification	▪ Pre-ID by the MOP and/or post-ID, using MOH post-ID questionnaire	▪ Pre-ID by the MOP and/or post-ID, using MOH post-ID questionnaire
Benefit package	▪ Medical benefit, mainly user fee exemption ▪ No non-medical benefit	▪ Medical benefit includes free for all services available at the facility ▪ Non-medical benefit, including transportation cost, food allowance
Claims processing and provider payments	▪ Reimbursement quarterly for user fees exempted for eligible poor patients with rates as defined in the *Prakas* through national and provincial treasury ▪ No operational and administrative cost	▪ Reimbursement monthly by operator for a pre-defined payment rates and methods through bank transfer ▪ A sum or percentage of operational cost to cover administration, field spot checks, health education and other social activities
Monitoring	▪ No internal monitoring ▪ Limited external monitoring by MOH MG ▪ No monitoring indicator, except the number of SUBO cases	▪ Internal monitoring by HEF operator and external monitoring by HEF MG and HEF implementer ▪ A set of core indicators on management, health service utilization and costs

3.4.2 Third party purchser

According to some key informants, the absence of an independent third party operator and/or implementer for SUBO makes it simple and cheap and consequently enhances financial sustainability. But there are a lot of disadvantages, including the lack of clear purchaser-provider split and absence of activities that are crucial for the effectivess of SUBO.

Most key-informants agreed that having a third-party, be it with NGOs and/or the community, is necessary for the well-functioning of HEFs. An independent third party can play a role as a health system watch dog to monitor the performance of health care providers and in providing social assistance to the beneficiaries and communities. The third party payer also helps ensure quality of care, as one key informant NGO stated:

> *The absence of third party may not ensure quality of care, as from what we have learned, a HEF operator implements a number of measures for quality assurance, such as putting some quality conditions in the contracts, spot checks, regular meetings with the community and hospitals, and daily ward rounds to see HEF beneficiaries; the absence of third party and pre-identification creates risk for nepotism and inclusion errors.*

Moreover, an independent third party operator can help protect consumers' rights and improve budget disbursement. Unlike HEFs, there is no mechanism within SUBO facilities to protect poor patients when they are confronting problems at the health facilities.

3.4.3 Beneficiary identification

A combination of pre-ID and post-ID are used by SUBO facilities to identify eligible poor patients for SUBO. Table 7 summarizes methods of identification of poor patients being used by SUBO facilities.

Table 7: Methods of identification of poor patients practiced by SUBO facilities

No	Province	Name of OD		Methods of identification poor patients
1	Kampot	1	Kampong Trach	-
		2	Angkor Chey	Post-ID + community support letter
		3	Chouk	-
2	Prey Veng	4	Kampong Trabek	Post-ID
3	Svay Rieng	5	Romeas Hek	Pre-ID + Post-ID + community support letter
		6	Chi Pou	Pre-ID + Post-ID + community support letter
4	Kampong Speu	7	Kampong Speu	Post-ID + community support letter
5	Kampong Chhnang	8	Kampong Chhnang	Post-ID + community support letter
6	Kandal	9	Takmao	Post-ID
		10	Ksach Kandal	Post-ID + community support letter
7	Pailin	11	Pailin	Post-ID + community support letter
8	Takeo	12	Daun Keo	Not implement SUBO
	National Hospital			
1	National Pediatric Hospital			Pre-ID and Post-ID
2	Ang Dong Hospital			Pre-ID and Post-ID
3	Khmer-Soviet Friendship Hospital			Pre-ID and Post-ID
4	Kossamak Hospital			Pre-ID and Post-ID
5	Calmette Hospital			Pre-ID and Post-ID
6	NMCHC			Pre-ID and Post-ID

Post-ID was reported to be used in all SUBO facilities. Post-ID conducted through interviews at health facility using the MOH's post-ID form is time consuming and requires some skills to appropriately administer the form. It was reported that for a big NH or PH it may take up one full-time person to conduct such interviews systematically every day. Since there is no assigned and trained person to do this work in most hospitals, many eligible poor patients were not interviewed and exempted. It is much harder to expect staff to interview patients at HCs for a payment of 1,000 Riels, which was reported to be lower than the cost thay have to pay for copies of invoices and paper proof for the claim. It was also stated that the current post-ID form is not relevant to the urban poor. This problem was confirmed by our team during the bed census surveys in which post-ID form was administered to selected inpatients at NHs. We did not, however, find a similar major problem with the post-ID form for patients at RHs.

In areas where pre-ID is in place, it is much easier for health facilities to just identify patients holding an EAC and grant them exemption. In addition to the EAC issued by the pre-ID, many health facilities also accept a letter of verification of poverty status from community representatives such as village chiefs, CCs, HCMC and/or VHSG. However, issues remain with poor patients who have not received an EAC and those who have received one often do not bring it when they come to health facilities.

The results from our interviews with hospital inpatients using the MOH post-ID form during the hospital bed census surveys show that many eligible poor patients reported to have paid for user fees, including those holding an EAC, whereas few non-eligible patients got exempted (Table 8). Of the 242 inpatients eligible for SUBO (having post-ID score between 0-18), 57% (including 13% EAC holders) reported to have paid partially or fully for the hospital user fees, whereas 15% of the non-eligible for SUBO (those having post-ID score 19 or above) reported to get exempted by the hospital. If we exclude NHs (for which the post-ID form appears to be problematic), the proportion of eligible poor who were not exempted was 45% and the non-eligible poor who got exempted was 18%. This high proportion of the eligible poor paying for user fees could be because they did not ask for assistance (and those holding an EAC did not present it to the hospital) or were not interviewed and therefore not identified.

Table 8: Results from SUBO eligibility assessment of hospital inpatients using MOH post-ID form

NHs + RHs	Exempted	Paying user fees	Total
Eligible for SUBO	105	137 137/242=**57%**	242
Non-eligible for SUBO	19 19/124=**15%**	74	93
Total	124	211	
RHs only	Exempted	Paying user fees	Total
Eligible for SUBO	55	45 45/100=**45%**	100
Non-eligible for SUBO	12 12/67=**18%**	32	44
Total	67	77	

Our assessment found that no routine verification of the accuracy of the identification of poor patients is done. Home visits to verify patient eligibility status in case of doubt with post-ID

has never been performed as expected in the Guideline. Only very limited verification by MOH MG was carried out in the beginning of SUBO.

3.4.4 Benefit package

The benefit package of SUBO is limited to only medical benefit (exemption from all user fee payments). Unlike HEF, there is no non-medical or social benefit to cover the cost of transportation, food allowance or funerals. The absence of these benefits was considered by many key informants to be a weakness of SUBO and remains a barrier to access to health services for the poor.

Results from the bed census surveys show that 61% of interviewed inpatients reported to have paid for user fees with a median amount of USD12 for EAC holders and USD15 for non-EAC holders, and 91% of them reported other expenses with a median amount of USD25 for EAC holders and USD22 for non-EAC holders. Among the non-user fee expenses, 50% was for food, 26% for transport, 16% for buying medicines outside the hospital, 5% for under-the-table payments, and 3% for extra medicines and services in the hospital. Interviews with HC patients found that 75% of them had paid for user fees with a median amount of USD0.25, whereas 26% of them reported other expenses, mainly payment for transport with a median amount of USD0.60.

In theory, all eligible patients get a full exemption from user fees. In practice, it seems that many eligible poor patients in SUBO health facilities, including those holding an EAC, still fully or partially pay for user fees. As presented above, many of the eligible poor were simply not identified and thus not exempted from paying user fees. Results from cross-checks of 271 selected SUBO beneficiaries at home show that 30% reported paying for user fees with a median amount of USD10. It is important to note that some key informants from NHs and RHs understood that the benefit package of SUBO covers only the user fees but not the cost of medicines, laboratory test and other medical costs, for which poor patients still have to pay.

3.4.5 Financial management, claims processing and provider payment

SUBO is financed through a government budget line (No. 65.71) to support health sector activities. According to a key informant from MOH budget and finance department, this line is not specifically for SUBO expenses, but is also for some other expenses including hospital ambulance costs. All SUBO facilities need to include this budget in their AOP and get it approved as with other budget lines for recurrent cost. It was reported that for some SUBO facilities the approved budget was often not enough for a whole year of SUBO operation, while others appear to be over budgeted. Since the budget flow and tracking mechanism of SUBO is not well established, some SUBO facilities have remaining budget at the end of the year while others use up all the available budget in the first quarter.

Claims processing can be different among SUBO facilities (NHs, RHs and HCs). In general, the hospital or OD accountant prepares a summary report of the number of eligible poor patients exempted and the amount to be claimed and sends it to the MEF and national treasury through MOH for NHs and to provincial department of economy and finance and provincial treasury through PHD for RHs and HCs (see Figure 4). To be eligible, three supporting documents must be attached to the report: patient admission and discharge letters approved by the hospital director and the completed post-ID form. Once approved, the reimbursement of the claims is done on a quarterly basis from either the national or provincial treasury to the concerned health facilities through the structure as indicated in Figure 4. Many key informants from SUBO facilities complained that the disbursement is often delayed by three to six months and the documentation for claiming is unnecessarily repetitive and causes a

burden due to the lack of clear guidelines on the number of copies and the responsibility hierachy.

Reimbursement is based on flat rate per case by type of health facility and level of care as defined in *Prakas 809* (Table 2). However, Calmette Hospital had arranged a special rate (USD33 per case), which is higher than the other five NHs (USD20). According to key informants from the MEF, this is because Calmette Hospital provides specialised and expensive care such as heart survery and it is equiped with expensive diagnostic investigation tools such as CT-scan and MRI. While many key informants found the flat rate case-based payment to be simple and easy to implement, others said that it was not practical and the payment rate should be organized in a few categories of cases such as general admission, delivery, emergency and surgery. There is no reimbursement for OPDs at NHs and RHs.

Moreover, the current reimbursement rates are in general not appropriate. Although RHs at CPA1 and CPA2 level seem to be happy with the current reimbursement rates, NHs and PHs at CPA3 level and HCs complained that the current rates defined in the *Prakas* are too low. For NHs and CPA3 PHs, these rates are much lower than the average of their posted user fees. Moreover, according to key informmants, the reimbursement is often delayed by around three months for NHs and six months for RHs. The budget deficit, the relatively low flat rate reimbursement and delay in payment could increase the risk that the hospital tends to limit exemptions to those patients for which the posted user fees are equal to or lower than the SUBO reimbursement rates. Moreover, for similar reason, some facilities may reject SUBO and choose alternative SHP schemes such as HEF, CBHI and vouchers if they are available.

At the HC level, the reimbursement rate set in *Prakas 809* (1,000 Riels for an OPD case and 10,000 Riels per delivery case) is rather problematic. All key informants considered the reimbursement rate for OPD to be very low. This is not because the rate is lower than the average of posted user fees, but rather compared to the administrative burden and cost for claiming, which includes conducting post-ID, preparing patient files and beneficiary reports, and making several photocopies of the documents (one to be kept by the health center, one for the OD, one for the PHD, and the original copy for treasury). Thus, the cost of photocopying the documents and the travel cost to go to photocopy shop is more than 1,000 Riel without including the staff time and other administrative work. For this reason, many HCs in all SUBO sites had not begun or stopped implementing SUBO.

As indicated in *Prakas 809*, 40% of the revenue generated from SUBO reimbursement can be used for operational cost and 60% for staff incentives. However, many SUBO facilities do not follow this rule and decide to allocate this revenue according to their situation, e.g some NHs use a formula of 50:50 for operational cost and staff incentives. This suggests that the proposed formula may not be appropriate for all facilities.

3.4.6 Monitoring and reporting

It is expected that SUBO implementation be monitored internally and externally on a routine basis by MOH, PHD and OD MGs. According to key informants, there has been limited monitoring by the central MOH, and monitoring by the PHD and OD at the health facility level was mostly related to financial review. Monitoring at community level is often done by integrating it with the general monthly monitoring activity. In general, the monitoring and feedback mechanism from central to provincial level is considered ineffective.

Inflating the records for remunerated activities is one of the major risks of output-based financing without an effective monitoring system [27]. SUBO is an output-based financing mechanism. Given the poor monitoring system of SUBO, the potential leakage by falsifying

cases of exemptions is not deniable. Our findings from the cross-check of SUBO beneficiaries at home show that 74 (27%) of the 271 SUBO beneficiaries selected from five hospitals could not be found at the given address (Table 9). Apart from a few of them having doubled names and addresses, reporting to have changed address and being absent from home during the visit, the large majority of these unfound patients were potentially ghost patients. However, this figure does not seem to be very high.

Table 9: Results of cross-checks of SUBO beneficiaries at home

Hospital	Covered period	Total patients	Selected patients	Found and interviewed	Not found
Kampong Speu RH	Jan-Mar 2011	51	51	34 (67%)	17 (33%)
Ksach Kandal RH	Jan-Jun 2011	691	68	56 (82%)	12 (18%)
Kampong Trach RH	Jan-Jun 2011	1,038	63	51 (81%)	12 (19%)
Kampong Chhnang RH	Jan-Jun 2011	38	37	15 (41%)	22 (59%)
Romeas Haek RH	Jan-Mar 2011	105	52	41 (79%)	11 (21%)
Total	3-6 months	1,923	271	197 (73%)	74 (27%)

In theory, the subsidy managers at the NHs and ODs are responsible for producing the required reports to the MOH, MEF and treasury. The required reports include MOH quarterly report and trimesterial claim report, monthly claim and internal and external monitoring reports. In practice, the quarterly report sent to DPHI is very limited. The SUBO financial report is often integrated into the overall health financing report. Apart from the number of SUBO beneficiaries and claims, there is no other indicator for monitoring. The management of information of SUBO beneficiary records and reports is still inefficient due to low capacity of staff in using computers and in filing in addition to the lack of IT equipment. Electronic data are often missing.

3.5 Impacts of SUBO

While *Prakas 809* did not limit SUBO implementation to particular coverage areas, the MOH started SUBO in selected ODs as a pilot to test the approach. But, no particular study design and data collection has been carried out for this purpose. Therefore, we cannot rigurously assess the impact of SUBO in this way. We did, though, analyze the available data on health service utilization and user fee exemptions as well as primary data collected through hospital bed census surveys and health center patient exit interviews, combined with qualitative data from key informants, to assess the 'potential' impact of SUBO on quality of care, health seeking behaviour and health service utilization, health expenditure, and financial protection.

Many key informants, especially those from NHs, PHDs, OD, RHs, HCs and the community, found SUBO to be useful for public health facilities and health providers. They saw SUBO as an expression of the commitment of the RGC to the poor. RHs in particular appreciate SUBO's contribution to financial sustainability. SUBO compensates public health facilities for user fees foregone for exemptions to the poor, provides additional funding and tends to motivate the providers (as 60% of the income from SUBO is to be used for staff incentives); it therefore tends to improve the quality of health services and increase service utilization by the poor. Some SUBO facilities claimed that the quality of care in their facilities had improved and utilization had increased after the introduction of SUBO.

However, it seems that design issues and implementation constraints undermine the effectiveness and efficiency of SUBO. This is clear for the case of SUBO at HC level and

some NHs and CPA3 PHs where there is a disincentive to use SUBO–the more they exempt the poor the bigger their loss of income in user fees exempted. Therefore, in the following sub-sections we will further assess the impact of SUBO on improved quality of care, increased health service utilization, reduced health expenditure and risky coping stratgies, focusing mainly on SUBO RHs.

3.5.1 Impact on quality of care

Improving quality of care at public health facilities is a main objective of SUBO indicated in the *Prakas*. It is thus important to assess the impact of SUBO in achieving this objective. However, measuring the impact of SUBO on the quality of care requires a robust research method and takes time. Therefore, we tried to assess the 'potential' impact of SUBO on quality of care through analysis of the imlementation process and patient satifaction. If some meaures to ensure or improve quality have been taken by the SUBO facilities and if patients who received care in those facilities are satisfied, we can assume that SUBO potentially had impacted on the quality of care.

A study of HEFs by Medicam found that operators and implementers use quality control measures to ensure a minimum quality of care, such as: setting pre-conditions for participating health facilities; establishing some golden rules in their contracts with health facilities (24-hour services and 4 NOs: no cheating data, no under-the-table payments, no embezzlement of drugs or medical materials of the hospital and no poaching hospital patients to private practices); carrying out regular hospital ward rounds and spot checks by HEF staff, exit interviews, external quality assessment or auditing and participation of HEF personnel in different meetings at HCs, RHs, OD and PHD offices [28]. Moreover, regular quality assessments are carried out in many HEF facilities and results are used to link up with HEF payments to the facilities. Our assessment of SUBO facilities did not find such measures being taken after the introduction of SUBO other than quality control mechanisms routinely practiced by many hospitals, such as morning hand-over meeting, weekly and/or monthly hospital technical meeting.

However, many key informants from PHDs, ODs, hospitals and HCs claimed that the quality of care in their facilities to some extent had improved after the introduction of SUBO, as the reimbursement for user fees exempted provided additional income to the facilities and health staff. Moreover, data from different sources showed that almost all the interviewed patients found the staff attitutde as well as quality of care good or fair (Table 10). This figure is similar to that of HEF facilities. This suggests that quality of care, from users' perspective, at SUBO and HEF facilities is somehow comparable.

Table 10: Patients' perception on staff attitude and quality of care at SUBO and HEF facilities by different sources

	Staff attitude			Quality of care		
Data collection method/source	Good	Fair	Not good	Good	Fair	Not good
SUBO beneficiaries cross-checked at home	39%	53%	7%	40%	56%	3%
SUBO health centre patients interviewed at exit	44%	54%	2%	41%	58%	1%
SUBO hospital inpatients interviewed during bed census	41%	55%	4%	44%	54%	2%
HEF hospital inpatients interviewed at home	41%	53%	3%	46%	47%	3%

3.5.2 Impact on health seeking behavior and health service utilization

We assess the impact of SUBO on appropriate health seeking behavior through three indicators: duration between the onset of the disease and admission, care and treatment received before admission and referrals by HCs. It is hypothesized that eligible poor patients entitled to free care at government health facilities would come straight to the facilities, mainly HCs, without shopping around in the private sector. Table 11 compares the three indicators between EAC holders (the poor eligible for SUBO) and non-EAC holders (the non-poor) taken from the bed census surveys. There is no significant difference between the two groups for the first and second indicator. Although EAC holders are more likely to be referred by a HC (Table 11) and to seek care at public health facilities (Table 12), this could result from the fact that poor people have no money to shop around but go straight to public health facilities, mainly HCs for minor health problems. However, this method of assessment is not robust enough to draw firm conclusion.

Table 11: Health seeking behaviors prior to hospital admission

	EAC holders	non-EAC holders
Duration between the onset of the disease and admission (median)	5 days	7 days
Duration between the onset of the disease and admission (medicine and pediatric only)	5 days	6 days
Received care/treatment before admission (% of the patients)	60%	61%
Referred by a HC	**23%**	**8%**

Table 12: Sources of treatment received prior to admission

Source	EAC holders	Non-EAC holders
Self-medication	3 (5%)	8 (5%)
Traditional healer	0 (0%)	4 (3%)
Private pharmacy/drug seller	9 (15%)	24 (16%)
Private medical provider (cabinet, clinic, hospital...);	19 (31%)	77 (52%)
Public medical providers (HC or other hospital);	28 (47%)	36 (24%)
Others	1 (2%)	0 (0%)
Total	60 (100%)	149 (100%)

It is expected that the introduction of SUBO increases the utilization of services of the implementing health facilities, mainly by the poor. We assessed the trend of annual number of OPDs, IPDs and birhts in SUBO health facilities between 2006 and 2010, compared with the same trend in HEF and other health facilities (Figure 5, Figure 6 and Figure 7). The figures show that the trend of OPDs, IPDs and births in SUBO and other facilities does not significantly increase, while the trend in HEF facilities increases considerably. A similar trend is observed for the proportion of user fee exemptions and HEF beneficiaries (Figure 8 and Figure 9). Although the increasing trend in HEF facilities could be partly attributed to other interventions, such as performance-based incentives in special operating agencies, the relatively stable trend of annual number of OPDs, IPDs and births in SUBO health facilities

between 2006 and 2010 suggests that the introduction of SUBO does not increase health service utilisation.

Figure 5: Total OPD cases at HC by OD group between 2006 and 2010

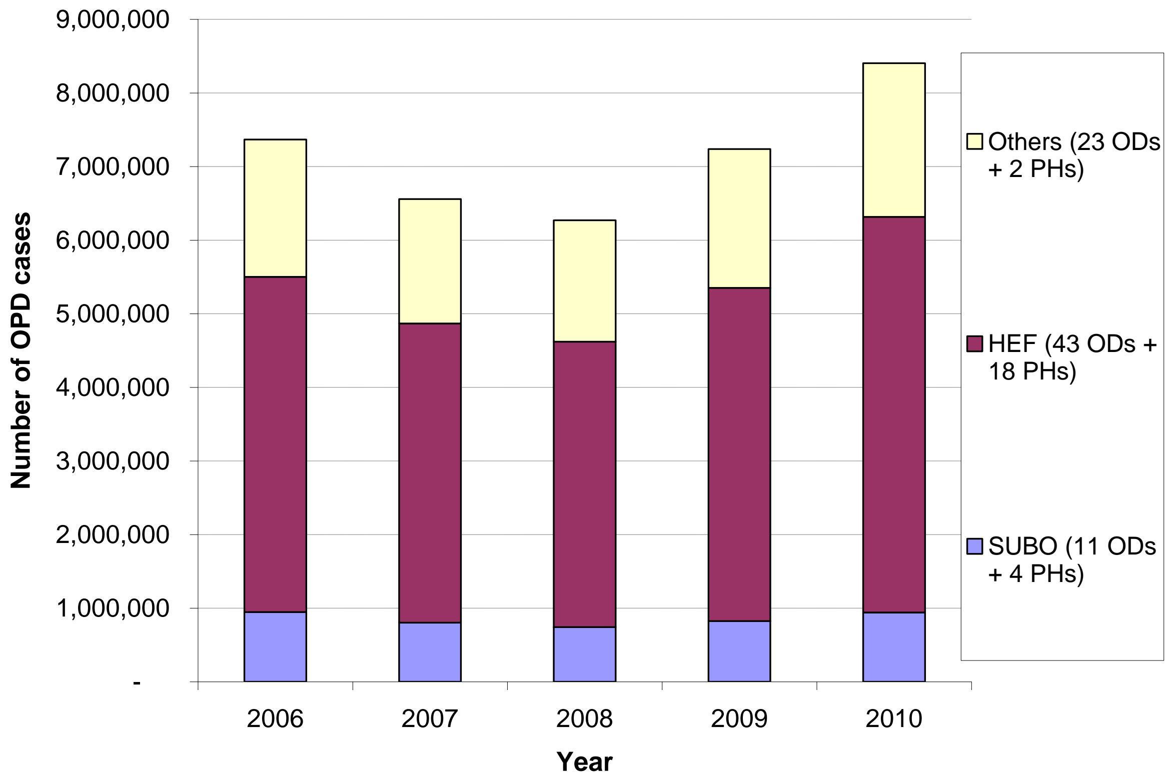


Figure 6: Total IPD cases at RH and HC by OD group between 2006 and 2010

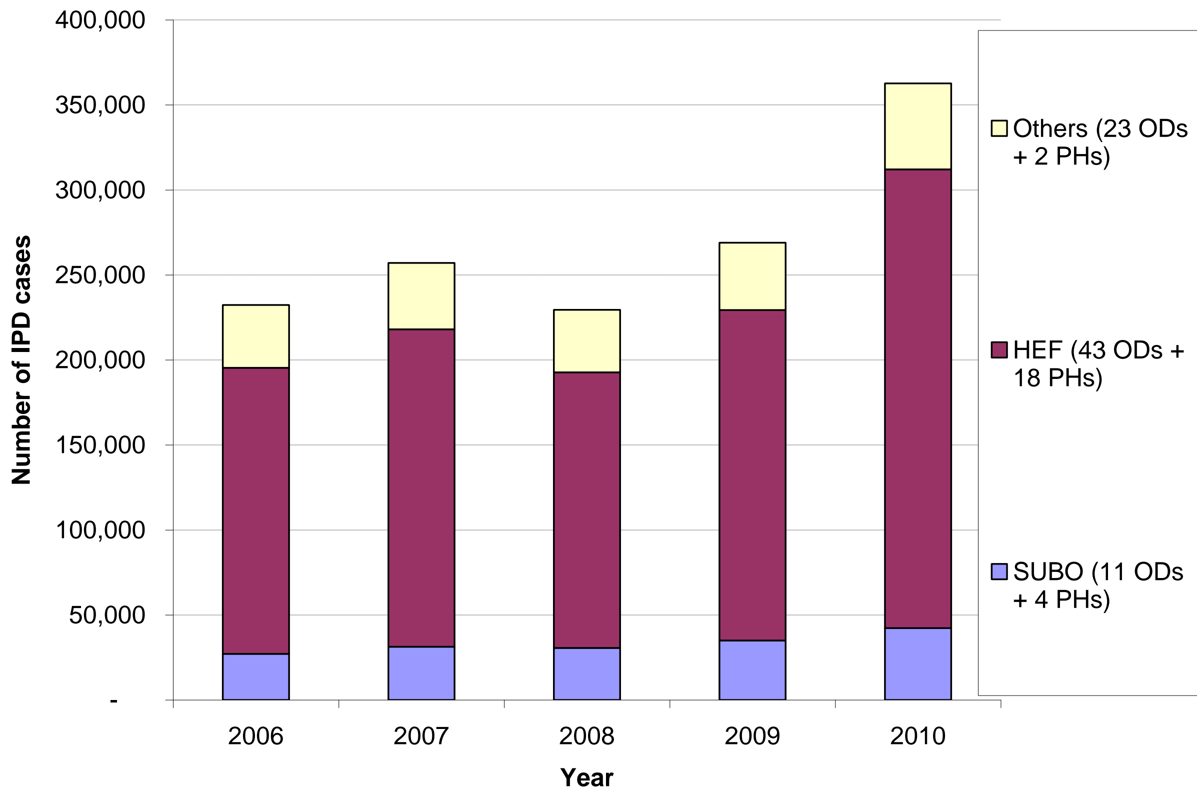


Figure 7: Total births at HC and RH by OD group between 2006 and 2010

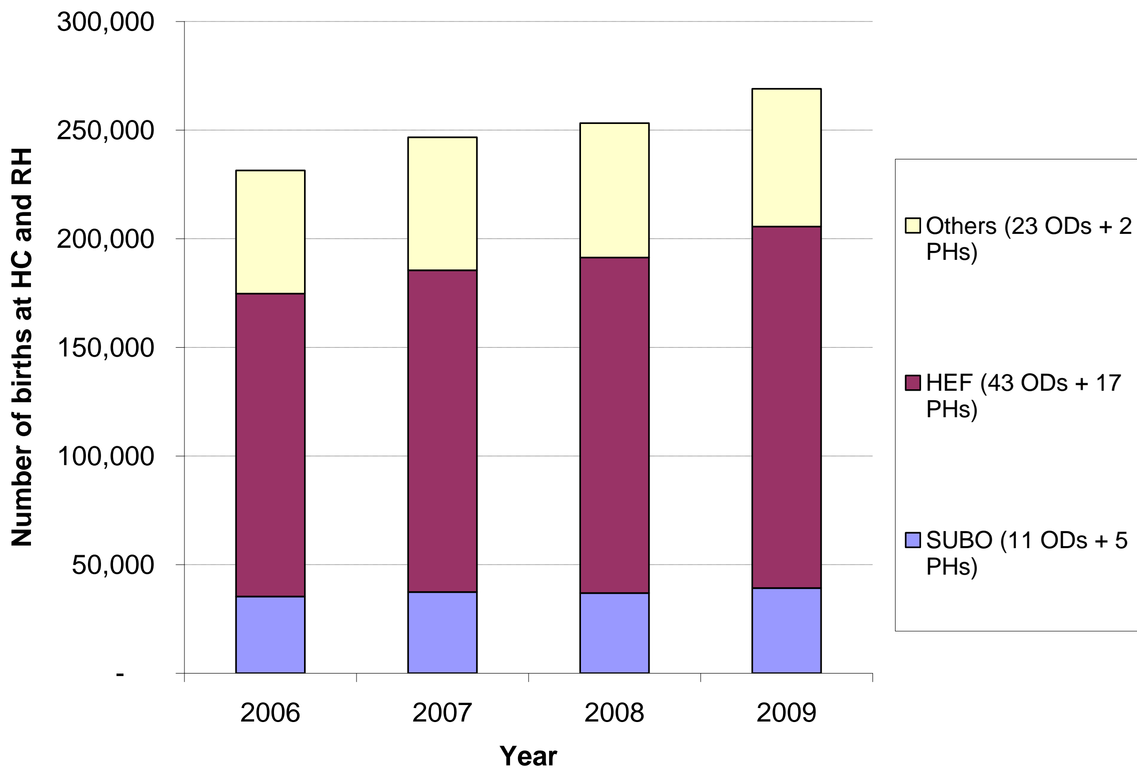


Figure 8: Proportion of user fee exemptions and HEF supported OPD cases at HC between 2007 and 2010

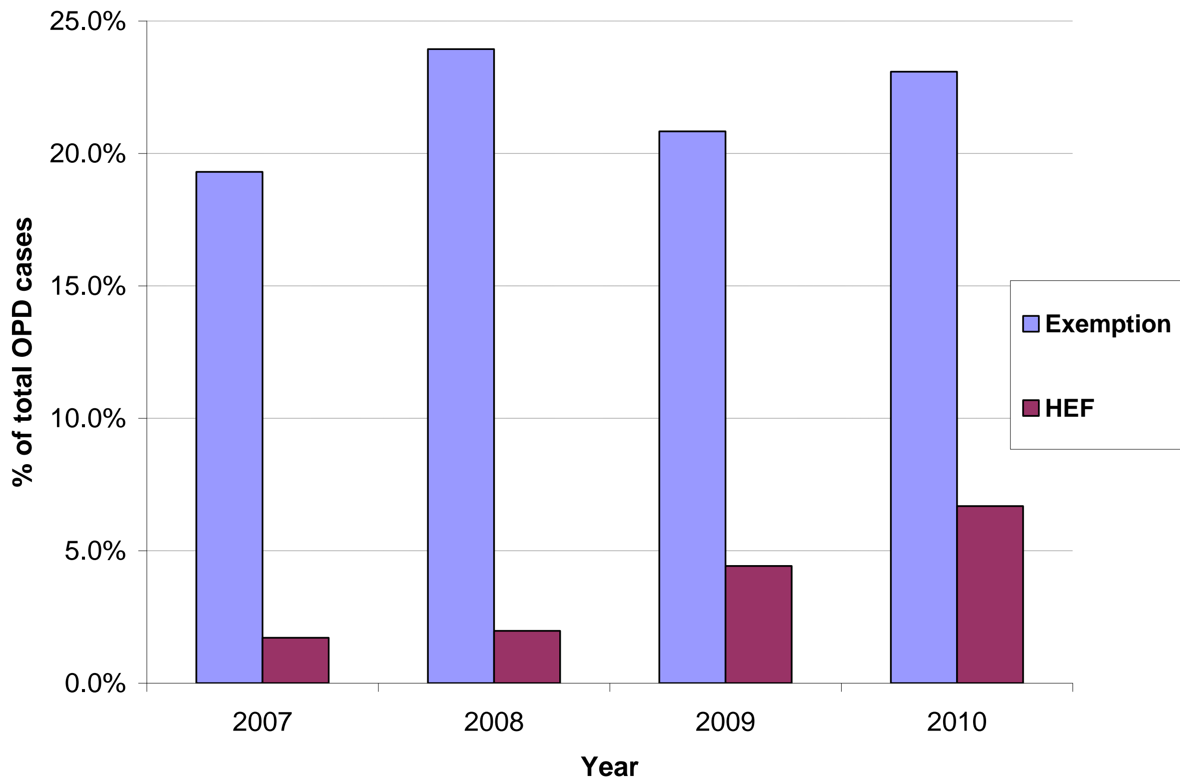
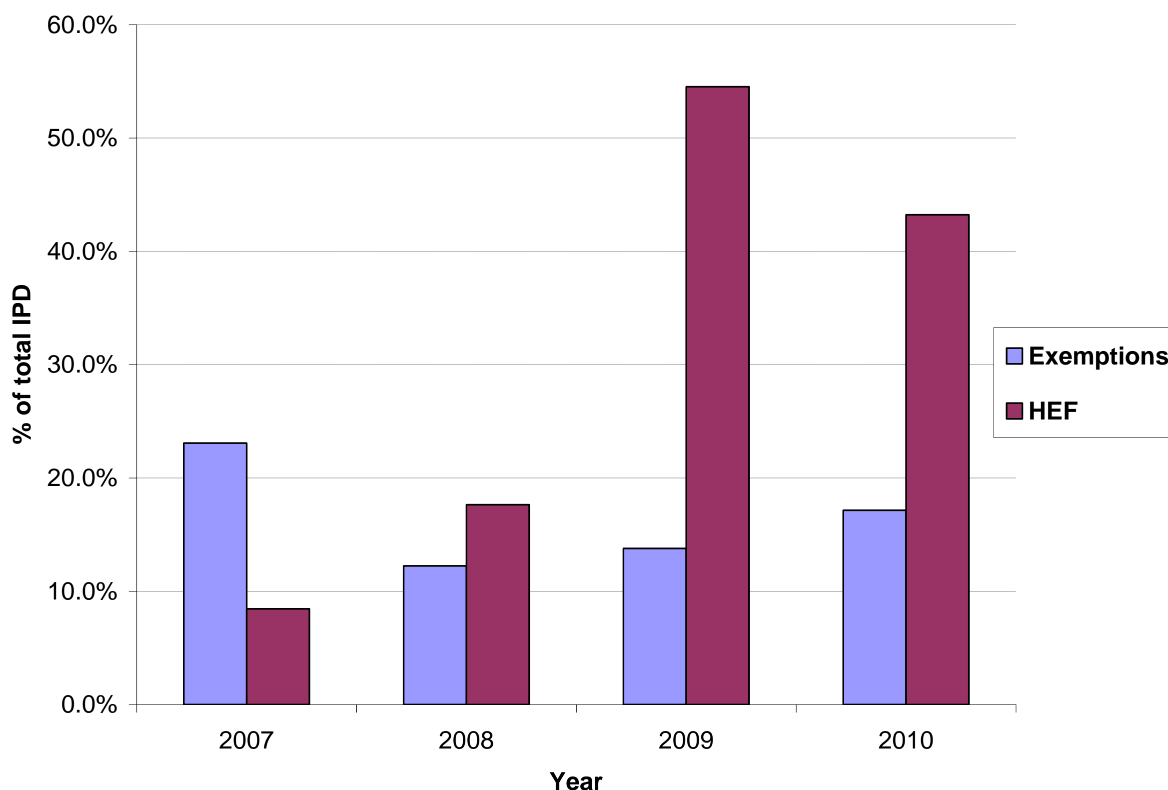


Figure 9: Proportion of user fee exemptions and HEF supported IPD cases at HC and RH between 2007 and 2010



Findings from FGDs with poor villagers show that, apart from user fees, poor patients (who are in principle eligible for SUBO) still face numerous other barriers to accessing health services at government health facilities. The following are the repoted barriers:

- financial barriers, including formal and informal fees, transportation and other costs during hospitalisation. Most of them said that they often have no or not enough money to pay for these costs;
- physical barriers, including distance between home and the facility with difficult road access, and absence of post-delivery room at HCs for deliveries;
- knowledge about the available services and user fee exemptions as well as SUBO. many of the villagers were unaware, or if aware, uncertaint about user fee exemption/SUBO in their area;
- limited scope of services available at public health facilities, especially HCs, as compared to private services. Some villagers complained that they often get the same treatment and medicines for different kinds of diseases and health problems at HCs;
- poor staff bevaiour and stigmatization toward the poor. Some villagers said that they did not go to public health facilities because they fear of some staff bad behaviour and of being stigmatized by the health staff as being poor.

These findings, which are similar to what have been found in the previous studies [9-11,18] further suggest the limited potential of SUBO, as it is now, in improving access to and utilisation of public health services by the poor.

3.5.3 Impact on OOP expenditures and coping strategies

In order to assess the impact of SUBO on out-of-pocket expenditures, we compared the out-of-pocket expenditures by EAC holders (the poor and eligible for SUBO) with those by non-EAC holders (the non-poor). The median expenditures of EAC holders on user fees (USD12) seem to be lower than non-EAC holders (USD15), but their median other expenses (USD25) are higher than those of non-EAC holders (USD22). The total out-of-pocket expenditures for both groups are equally USD37 (Table 13).

Table 13: Comparison of OOP expenditures by EAC holders and non-EAC holders during hospitalization

	EAC holders	Non-EAC holders	All cases
User fees payment			
Minimum	8,000	5,000	5,000
Maximum	860,000	3,200,000	3,200,000
Median	45,000 ($12)	60,000 ($15)	60,000 ($15)
Mean	125,769	162,596	160,327
Std. Deviation	231,506	318,839	313,858
Other expenses			
Minimum	4,000	500	500
Maximum	6,000,000	4,000,000	6,000,000
Median	100,000 ($25)	90,000 ($22)	90,000 ($22)
Mean	306,419	238,152	257, 856
Std. Deviation	738,690	452,016	549,994

Comparison of coping strategies among these two groups does not show any significant difference. Of the EAC holders interviewed, 58% reported to have borrowed money with interest to pay for the health care expenditures, slightly higher than the non-EAC holders (51%), but the difference is not significant. Equally, 13% of both groups reported selling important assets to meet the expenditures.

3.6 Cost of SUBO

The actual cost of SUBO is limited to the expenditures for flat rate case-based reimbursement of public health providers for user fees exempted for poor patients at SUBO facilities (medical benefit), which can be reflected by the claims. However, we could not get complete data about the claims from all SUBO facilities. According to available reports by SUBO facilities, the average amount of money actually claimed every month by each SUBO facilities is approximately USD5,000 per NH, USD2,000 per CPA3 RH, and USD1,500 per CPA1/CPA2 RH.

According to report from the DPHI, of the total SUBO budget for 2010 (about USD600,000), about USD500,000 (80%) was spent (see the details in Table 14).

In fact, the real cost of SUBO is greater than the medical benefit cost for user fee reimbursement. Delivering this medical benefit to the beneficiaries also has a cost, which is actually borne by the SUBO facilities and their staff. Although no operational cost is allocated within the SUBO budget, it was reported that SUBO facilities and staff spent a considerable amount of their time and money to cover the administration cost, mainly for identification of the poor and preparing reports and supporting documents for claims. Some SUBO facilities,

mainly HCs and some NHs and CPA3 RHs, decided to stop or downgrade their SUBO activities because they could not bear this cost. We could not estimate the exact amount of this cost. According to HEF data, the operational cost (including administrative cost) varies across schemes, depending on their activities and performance. In general, HEF operational cost ranges from 10% to 20% of the total cost. Some key informants from the SUBO implementing facilities suggested that with the current design, it would be enough if 5%-10% of the SUBO budget were allowed to be used for operational and administrative cost.

Table 14: Budget and expenditures for SUBO in 2010

Province/ Municipality	Name of OD/NH	Budget (in USD)	Expenditure (% of budget)
Kampot		72,439	72,439 (100)
	Kampong Trach		31,707
	Angkor Chey		23,659
	Chouk		17,073
Prey Veng	Kampong Trabek	29,268	16,333 (56)
Svay Rieng		7,805	7,763 (99)
	Romeas Hek	-	5,402
	Chi Pou	-	2,361
Kampong Speu	Kampong Speu	60,976	22,366 (37)
Kampong Chhnang	Kampong Chhnang	14,634	14,634 (100)
Kandal		73,171	73,093 (100)
	Takmao		57,707
	Ksach Kandal		15,385
Pailin	Pailin	24,390	5,354 (22)
Takeo	Daun Keo	-	-
Phnom Penh	National Paediatric Hospital	60,854	55,727 (92)
	Ang Dong Hospital	8,951	5,249 (59)
	Khmer-Soviet Hospital	40,244	27,571 (69)
	Kossamak Hospital	51,220	8,820 (17)
	Calmette Hospital	153,146	159,525 (104)
	NMCHC	8,507	8,507 (100)
	GRAND TOTAL	**605,605**	**477,381 (79)**

Source: DPHI, MOH

The cost of SUBO would be much higher if it were to be made more effective by increasing the current reimbursement rates and adding other non-medical or social benefits such as transportation and food. The comparison of average cost (medical benefit cost) per case between SUBO and HEF shows that the reimbursement rates of HEF are much higher than those of SUBO (Table 15).

Table 15: Comparison of average cost per case between SUBO and HEF by facility and level of care

Type of health facilities	SUBO flat rate/case (in USD)		HEF average cost/case (in USD)	
	IPD	OPD	IPD	OPD
NHs and national centers	20.00	0	85.00	3.90
CPA3 RHs with all surgery and specialization	17.50	0	27.49	$2.11
CPA2 RHs with surgery	12.50	0	18.96	
CPA1 RHs without surgery	10.00	0	14.40	
HCs	2.50	0.25	-	0.45

For further improvement of SUBO, we adjusted these reimbursement rates to the current average of user fee prices at these health facilities (Table 16).

Table 16: Adjusted reimbursement rates for SUBO

Type of health facilities	SUBO flat rate/case	
	IPD (in USD)	OPD (in USD)
NHs and national centers	35.00	3.50
CPA3 RHs with all surgery and specialization	30.00	3.00
CPA2 RHs with surgery	20.00	2.00
CPA1 RHs without surgery	15.00	1.00
HCs	10.00*	0.50

** including HC deliveries*

4 Conclusions and recommendations

The initiative taken by the RGC to introduce the SUBO to compensate public health providers for user fees foregone for exemptions of poor patients at public health facilities and to meet these costs from the health budget has been recognised and supported by the key stakeholders. This is a significant and important initiative that reflects the RGC's commitment to helping poor people to access quality health care. Budget support for providing access to health services for the poor is a vital contribution to sustainable financing of health care for the poor and the improvement of the health of the Cambodian people and should be continued and expanded in line with the fiscal resources available to the health sector.

Many key informants from NHs, PHDs, ODs, RHs, HCs, local authorities and community representatives found SUBO to be useful for public health facilities, as it provides additional

funding to public health facilities and potentially motivates public health providers (as 60% of the income from SUBO is to be used for staff incentives) and consequently to improve the quality of health services and increase service utilisation by the poor.

There are, however, a number of gaps and challenges associated with the design and implementation of SUBO in its current form, which consequently undermine the effects of SUBO in achieving its objectives of improving quality of public health services and promoting the use of these services by the poor. These gaps and challenges can be described as follows:

- The approved institutional arrangements for implementation of the SUBO have not been developed according to the established guidelines and adequately implemented at the PHD, OD, hospital and HC level. The legal framework and policy for the SUBO exist, mainly in the form of *Prakas 809*, but these are not sufficient to provide operational guidance at PHD, OD and health facility levels. The HEF Guideline and Financial Manual that support SUBO implementation are not well known to the PHD, OD, NH, RH or HC staff and in many cases training for implementation of SUBO has not been completed. As a result, the management structures for SUBO at the hospital and HC level are not well organized.

- The administraion requirements for financial claims are perceived as too complicated, causing heavy burden for health facilities, especially for HCs where reimbursement is low. The costs of administration for SUBO are significant in terms of staff time and complex administrative procedures for reimbursement, but they are not included in the SUBO budget and are therefore a hidden cost that is not taken into consideration.

- There is no effective monitoring of SUBO implementation. The absence of effective monitoring of SUBO implementation means also that there is no control over potential or actual leakage of funds from the SUBO scheme. Possible over-reporting on claims (so-called ghost patients) was low in some hospitals but appeared to be significant in others.

- While the absence of a third-party purchaser (which is present in other HEFs) may appear theoretically to make the SUBO simple and low-cost from an administrative point of view, it was seen by key informants as undermining the effectiveness of the SUBO, where in any case the real costs of administration were hidden.

- The absence of food and transport costs from the SUBO benefit package means that the poor continue to face financial barriers to access to health services, which is a disincentive to use SUBO by the beneficiaries.

- The flat rate per case quarterly reimbursement is administratively simple but is perceived as too low for IPD cases at NHs and some CPA 3 RHs if compared with user fees (perceived as loosing), too low for OPD cases at HCs if compared with the paperwork, and the disbursement is sometimes delayed. The low rate of the case-based payment and the irregular reimbursement process is a further disincentive to providers who prefer user charges or other SHP schemes like HEF and CBHI. These disincentives limit the efficient and effective implementation of the SUBO scheme.

- OPD cases at NHs and RHs are not covered by the SUBO reimbursements. Poor patients requiring specialised consultations will therefore need to be hospitalized incurring higher and unnessary expenses for the scheme.

- Coverage of facilities by SUBO is incomplete in the piloted six NHs and twelve 12 ODs. Not all NHs or ODs (especially at the HC level) fully implement the SUBO and there is

sometimes overlap with existing SHP schemes (such as HEF or CBHI). Because of the unnecessarily repetitive, burdensome and costly administration and paperwork caused by SUBO in the absence of budget for administrative cost, especially at HC level where the costs of administration and paperwork are higher than the value of the SUBO reimbursement, and competitive benefit package and provider reimbursement rate of the overlapping HEF and other SHP schemes, many NHs and CPA3 RHs downgrade their SUBO activities and two thirds of the SUBO designated HCs never start or stop implementing SUBO.

- Although almost all key informants from MOH at all levels and development partners were aware of the existence of SUBO and knew about SUBO. But, almost all local authorities, community representatives and patients did not know about SUBO as it is defined by the *Prakas 809*. However, many of them, espcially those involved in the pre-ID process and those who hold an EAC, know about government user fee exemption policy for the poor.

- While the additional revenue from SUBO reimbursements seems to provide extra income for facility staff, from the evidence collected in this evaluation there was no particular effect of SUBO implementation on the quality of services provided. Although it seems that quality of care slightly improved and service utilization increased in a few SUBO facilities after the introduction of SUBO, as is claimed by some key informants, our assessment based on available data did not find any firm evidence on the impact of SUBO on improved quality and increased utilization of health services in SUBO facilities.

- The available evidence also suggests that the SUBO schemes have a limited effect on access to services, utilization and protection from health costs. Access is restricted mainly because, in addition to user fees (which are exempted under the SUBO), the poor face a number of remaining barriers, including the costs of food and transport, that prevent their use of health services. SUBO beneficiaries are still paying significant OOP costs for user fees, other medical costs (including laboratory cost, additional drugs and other extras). In some ODs there was also evidence of a decrease in SUBO utilization over time where other SHP schemes (like HEF) existed in the same facility (mostly because the incentives to patients and to providers are less through the SUBO).

These design issues and impementation gaps and constraints with the current status of SUBO can severely undermine the effectiveness and efficiency of the scheme. There is a need to redesign the SUBO scheme and to reform the SUBO implementation process to overcome these problems.

At the time of this evaluation of the SUBO scheme, there was also an ongoing discussion about the future of the HEFs. Any decision about the future of SUBO must be made within the context of RGC's plan to extend HEFs to national coverage and to make a more significant financial contribution to HEFs alongside donors.

With these issues in mind, there are two broad alternatives for the future of the SUBO scheme: (1) to continue as a separate SUBO with an improved design as recommended in the Guideline for the Implementation of Health Equity Funds and in a way that is complementary to existing HEF and CBHI arrangements; or (2) to continue budget funding through integration of the SUBO with HEF, in which the government subsidy would pay for user fees whereas donor funding would pay for patient transport and food costs and the operating cost of a third-party implementer; or (3) replace the present SUBO schemes by HEFs and use the present SUBO budget under a new (to be created) government budget line, for SHP to co-finance these HEF schemes together with donor funds.

Considering the current policy direction and efforts to consolidate the existing fragmented SHP schemes into one single and uniform SHP system for different Cambodian population groups, in particular for the informal sector, it is wise to consider integrating SUBO into general HEF as the above-mentioned option (2) or (3). By doing so, SUBO will automatically benefit from the better design and more complete institutional arrangements of HEF and will thus be more effective and efficient. However, the integration will not solve all the design issues and implementation constraints of SUBO. The current reimbursement rates of SUBO are too low if compared with those of HEF. For effective integration these rates should be increased. Our estimated reimbursement rates as shown in Table 16 could be an example, although the appropriate reimbursement rates may need to be further calculated by experts. Moreover, the process of integration may take some time.

In the meantime, some immediate actions should be taken to address the above design issues and implementation constraints of the current form of SUBO. These include:

- revise the current physical coverage of SUBO which overlaps with other SHP schemes, in particular with HEF and decide on the role of SUBO in these areas and on whether to keep or stop SUBO accordingly. It is clear that as long as HEF is present, there is no role for SUBO in Daune Keo provincial RH. However, it could be different for Kampong Chhnang provincial RH where SUBO is being used in the presence of HEF;

- adapt the current Guideline and Manual, translated into Khmer and introduced them to all SUBO facilities. At the same time, conduct an extensive information and education campaign on SUBO with local authorities, community representatives and eligible patients;

- develop and implement a practical but effective monitoring system for SUBO, starting with the revitalization of the MOH MG;

- the MOH, especially DPHI and Department of Budget and Finance (and if necessary in consultation with related departments of the MEF) to revise and simplify the administrative and financial procedures to avoid unnecessary repetitive and heavy burden of paperwork, and provide training on the revised administrative and financial procedures to all SUBO facilities; and

- SUBO is currently financed through a budget line (65.71) which is not limited to it. Negotiation with the MEF and related government authorities and better planning could help increase this budget line and allow using part of it for administration cost as well as for transportation and food. This will make a step forward toward effective integration of SUBO into HEF.

References

1. *Social health protection. An ILO strategy towards universal access to health care*. Geneva: International Labour Office, Social Security Department, ILO; 2008.
2. Meessen B, Zhenzhong Z, Van Damme W, Devadasan N, Criel B, Bloom G: **Iatrogenic poverty.** *Trop Med Int Health* 2003, 8: 581-584.
3. Xu K, Evans DB, Kawabata K, Zeramdini R, Klavus J, Murray CJ: **Household catastrophic health expenditure: a multicountry analysis.** *Lancet* 2003, 362: 111-117.
4. Xu K, Evans DB, Carrin G, guilar-Rivera AM, Musgrove P, Evans T: **Protecting households from catastrophic health spending.** *Health Aff (Millwood)* 2007, 26: 972-983.
5. McIntyre D, Thiede M, Dahlgren G, Whitehead M: **What are the economic consequences for households of illness and of paying for health care in low- and middle-income country contexts?** *Soc Sci Med* 2006, 62: 858-865.
6. *Cambodia Demographic and Health Survey 2000*. Phnom Penh, Cambodia: National Institute of Statistics, Ministry of Planning; Directorate General, Ministry of Health; ORC Macro; 2001.
7. *Cambodia Demographic and Health Survey 2005*. Phnom Penh, Cambodia: National Institute of Public Health; National Institute of Statistics; ORC Macro; 2006.
8. *Cambodia Demographic and Health Survey 2010: Preliminary Report*. Phnom Penh, Cambodia: National Institute of Statistics, Ministry of Planning; Directorate General for Health, Ministry of Health; 2011.
9. Annear PL, Wilkinson D, Chean RM, Van Pelt M: *Study of financial access to health services for the poor in Cambodia. Phase 1: Scope, design and data analysis*. Phnom Penh, Cambodia: MOH, WHO, RMIT University; 2006.
10. Hardeman W, Van Damme W, Van Pelt M, Por I, Kimvan H, Meessen B: **Access to health care for all? User fees plus a Health Equity Fund in Sotnikum, Cambodia.** *Health Policy Plan* 2004, 19: 22-32.
11. Matsuoka S, Aiga H, Rasmey LC, Rathavy T, Okitsu A: **Perceived barriers to utilization of maternal health services in rural Cambodia.** *Health Policy* 2010, 95: 255-263.
12. Kenjiro Y: **Why Illness Causes More Serious Economic Damage than Crop Failure in Rural Cambodia.** *Development and Change* 2005, 36: 759-783.
13. Oxfam: *Health and Landlessness*. Phnom Penh, Cambodia: Oxfam; 2000.
14. Van Damme W, Van Leemput L, Por I, Hardeman W, Meessen B: **Out-of-pocket health expenditure and debt in poor households: evidence from Cambodia.** *Trop Med Int Health* 2004, 9: 273-280.
15. *Health Strategic Plan 2008-2015: Accountability, Efficiency, Quality, Equity*. Phnom Penh: Ministry of Health; 2008.
16. *Strategic Framework for Health Financing 2008-2015*. Phnom Penh, Cambodia: Ministry of Health; 2008.
17. Ir P, Bigdeli M, Meessen B, Van Damme W: **Translating knowledge into policy and action to promote health equity: The Health Equity Fund policy process in Cambodia 2000-2008.** *Health Policy* 2010, 200-209.
18. Bigdeli M, Annear PL: **Barriers to access and the purchasing function of health equity funds: lessons from Cambodia.** *Bull World Health Organ* 2009, 87: 560-564.
19. Jacobs B, Price N: **Improving access for the poorest to public sector health services: insights from Kirivong Operational Health District in Cambodia.** *Health Policy Plan* 2006, 21: 27-39.

20. Noirhomme M, Meessen B, Griffiths F, Ir P, Jacobs B, Thor R *et al.*: **Improving access to hospital care for the poor: comparative analysis of four health equity funds in Cambodia.** *Health Policy Plan* 2007, 22: 246-262.
21. Van Pelt M, Morineau G: When slum dwellers seek health care: Exploring a community-based Health Equity Fund's impact on indebtedness for health care and on utilisation of health services. Antwerp: Institute of Tropical Medicine; 2008:491-518.
22. Annear PL, Bigdeli M, Jacobs B: **A functional model for monitoring equity and effectiveness in purchasing health insurance premiums for the poor: Evidence from Cambodia and the Lao PDR.** *Health Policy* 2011 (In press).
23. *Strategic framework for equity funds: promoting access to priority health services among the poor.* Phnom Penh: Ministry of Health, Government of Cambodia; 2003.
24. *National Equity Fund Implementation and Monitoring Framework*. Phnom Penh, Cambodia: Ministry of Health; 2005.
25. *Implementation of Health Equity Funds Guideline*. Phnom Penh: Ministry of Health; 2009.
26. *Financial Manual for Health Equity Fund*. Department of Planning and Health Information, Ministry of Health; 2010.
27. Meessen B, Kashala JP, Musango L: **Output-based payment to boost staff productivity in public health centres: contracting in Kabutare district, Rwanda.** *Bull World Health Organ* 2007, 85: 108-115.
28. *Good Practices in Health Financing. Lessons from reforms in low-and middle-income countries*. Wahsington DC: World Bank; 2010.

Annexes

Annex 1: Terms of Reference

Background

Cambodia faces many challenges of widespread poverty, high mortality and fertility with a heavy disease burden that limits the nation's efforts to achieve economic and social development. The government's ambitious reform program of the nineties reorganized the public sector health system to improve accessibility, particularly in rural areas. Health financing reforms were initiated to control high prices of medical care resulting from unofficial charges, extremely low salaries of health staff and lack of access to budgetary allocations. Other major efforts included reconstruction of the public health workforce, measures to improve their management capacity, improving the supply and distribution of drugs and medical supplies to the periphery and implementation of strong national disease control programs.

Despite major reductions in the prevalence of certain diseases, the price of medical care remains a barrier to accessing priority services and high health expenditures have pushed the poor further into poverty and destitution. Official fee systems, established through the introduction of the Health Financing Charter, have contributed to enhanced revenue and improved access at primary care levels. However although the establishment of an user fee exemption scheme, for many poor the access to health services, in particularly to hospital-based care, remains very difficult and does often result in catastrophic health expenditure.

Poverty reduction is at the center stage of Cambodia's development efforts with support from the highest level of government. There is attention and commitment towards promoting equity in access to cost-effective health and education services. The Ministry of Health, in consultation with donors and with the Ministry of Economy and Finance and the Ministry of

Planning, has developed a Strategic Framework for Equity Funds (MOH September 2003). These Health Equity funds have as main objectives a) to enable very low-income and the poor to be protected against catastrophic expenditures, b) to ensure access to priority care and c) to improve quality of health services and regulation of service providers.

The Strategic Framework for Equity Funds allowed for a rapid expansion of the number of HEFs and their coverage of the ‘poor’ population. The main model used was the traditional model of a HEF with an NGO operator and an implementer, described in the Strategic Framework for Equity Funds as model 3 & 4. In parallel the Cambodian Government established the Government Subsidy Schemes for National Hospitals and for a number of ODs (model 1 & 2). In these Government Subsidy Schemes, also called SUBOs, the management and administrative responsibilities are taken up by the National Hospitals themselves and the OD offices.

As of now, there are some significant experiences with Health Equity Fund schemes in Cambodia. A total of 52 Operational Districts and 6 National Hospitals are covered under various models of Equity Fund Schemes. Amongst those, 12 ODs and 6 National Hospitals have Government Subsidy Schemes (Source: Annual Health Financing Report – 2009: MoH Publication March 2010). They are listed in the table below.

List of Government Subsidy Schemes		
Operational Districts Subsidy Schemes		
	Province	**Name of OD**
1	Kampot	Kampong Trach
2		Angkor Chey
3		Chouk (new 2010)
4	Prey Veng	Kampong Trabek
5	Svay Rieng	Romeas Hek
6		Chi Pou (new 2011)
7	Kampong Speu	Kampong Speu
8	Kampong Chhnang	Kampong Chhnang
9	Kandal	Takmao
10		Ksach Kandal
11	Pailin	Pailin
12	Takeo	Daune Keo (not active)
National Hospital Subsidy Schemes		
	Province	**National Hospitals**
1	Phnom Penh Municipality	National Pediatric Hospital
2	Phnom Penh Municipality	Ang Dong Hospital
3	Phnom Penh Municipality	Khmer-Soviet National Friendship Hospital
4	Phnom Penh Municipality	Kossamak Hospital
5	Phnom Penh Municipality	Calmette Hospital
6	Phnom Penh Municipality	NMCHC

In its efforts towards Universal Health Coverage the Cambodian Government is finalizing the Cambodian Social Health Protection Masterplan. This Masterplan foresees a SHP system based on three main pillars, firstly a compulsory Social Health Insurance mechanism for the

Civil Servants, secondly a compulsory Social Health Insurance mechanism for the workers of the private sector and thirdly an SHP protection mechanism for the informal sector. This SHP mechanism for the informal sector would cover the self employed, the unemployed and the poor through a combination of Voluntary Health Insurances and Health Equity Funds.

The MOH would like to develop a standard model for the SHP scheme for the informal sector by the end of 2011. This model would have to define the type of operator, the linkage between HEF and voluntary insurance, the benefit packages, the funding mechanisms, the monitoring and reporting systems, the oversight structures and the involvement of local communities.

Some stakeholders regard the administrative costs of NGO HEF operators as expensive and wasteful. Other stakeholders insist on the importance for HEFs to have a third party payer independent from the provider. Government Subsidy Schemes were expected to have lower administrative costs as the operator functions are carried out by the hospital or the ODO. They are however not independent. Initially the NGO administrative cost represented up to around 35 % of the total cost of HEFs. This share has now come down to on average 9%. The main reason for this is that utilization and user fees have gone up while the administrative costs, mostly fixed costs, have not changed over the years.

Proposed evaluation of Government Subsidy Schemes

The MOH is proposing to conduct an evaluation of Government Subsidy Schemes under *Prakas 809* (known as SUBO). At present, because of a deficient reporting and monitoring system, very little information and data are available on the functioning, the costing and the performance of the different Government Subsidy Schemes.

The MOH expects this evaluation to provide a better understanding of the functioning, the effectiveness and efficiency of these schemes. During 2011 the MOH is conducting a Mid Term Review of the second National Health Strategic Plan 2008-2015. Findings and recommendation of this Government Subsidy Schemes evaluation are expected to contribute as evidence to the Health Financing component of the review.

Objectives of the evaluation

General Objective

To provide the MOH with evidence required for policy decisions in the field of health financing and more specifically with regards to development of a standardized approach for Social Health Protection mechanisms for the informal sector.

Specific Objective

To provide information on the functioning, results and impact of the Government Subsidy Schemes with reference to the *National Equity Fund Implementation and Monitoring Framework* (MOH September 2005) and in comparison with other HEF models.

Services to be provided

1. To describe in general the functioning, administrative and financial management and organizational structures of the SUBO, describing management systems and practices as well as fund flows, including the effectiveness of verification and accountability arrangements for SUBO payments to health providers.

2. To provide information on the utilization data of the SUBO schemes
3. To provide information on the costing of SUBO scheme
4. To assess results of the SUBO schemes and their impact on the following HEF objectives:
    - Access to hospital and health centre care for the poor:
    - Decreased household out-of-pocket expenditures, if feasible catastrophic health expenditure
    - Contribute to improved quality of services
    - Represent HEF beneficiaries with regards to their patient rights
5. To compare utilization, costing and impact of SUBO and other HEF models
6. To provide recommendations for the improvement of the functioning of SUBO schemes
7. To provide recommendation on the place of SUBO schemes in the overall SHP landscape in Cambodia

Whenever pertinent the consultant will differentiate between OD SUBO schemes and National Hospital SUBO schemes. Within the OD Subsidy schemes he/she will distinguish between SUBO support at referral hospital level and health center level.

Methodology

1) Literature study of HEF documents, reports, policy documents, legislation (see a not exhaustive list of documents in annex Xx)
2) Analysis and interpretation of routine SUBO and facility utilization data in MOH reports and records of SUBO/Health Facilities/ODO/PHD (registers, reports, funding requests, AOP, Budget, etc.)
3) If pertinent secondary analysis of different CDHS and CSES
4) Collecting additional qualitative and quantitative data through observation, interviews and possibly focus group discussions with different stakeholders and their analysis and interpretation.
    - observation of functioning SUBO offices in the health facilities
    - interviews with SUBO beneficiaries, interviewed at home;
    - focus group discussions with SUBO beneficiaries in facilities
    - focus group discussion with SUBO eligible non-users from each SUBO
    - interviews with personnel and directors of the SUBOs, National Hospitals, RHs, ODs, the PHD
    - interviews with personnel and directors of the DPHI, DBF and other relevant departments and authorities of the MOH
    - interviews with relevant authorities in the Ministry of Economics and Finance and Ministry of Planning
    - interviews with relevant local authorities (governor, commune, village chiefs, etc.) and HCMC or VHSG

5) Interviews and discussions with other relevant organizations (NGOs, bilateral, international) active in the field of SHP, HEF and/or poor-identification and of interest to this mission's objective (GTZ, URC, WB, MEDICAM, MSF-F, WHO, RHAC, Unicef, BTC, etc.)

The consultant team will look at available data of all SUBO schemes and institutions covered by them. The team will visit all SUBO ODs and National Hospitals and conduct interviews with SUBO and HF staff and local authorities. The interviews and focus group discussions with SUBO beneficiaries and SUBO eligible non-users will be limited to the following 7 institutions: 3 National Hospitals, and 4 OD SUBOs. OD Chouk (Kampot) and OD Chi Pou

(Svay Rieng) will not be considered for the selection of 7 institutions because their SUBOs have only been established very recently. OD Daune Keo (Takeo) is equally excluded as its SUBO is inactive.

Important aspects to be addressed

Based on the list of services to be provided the consultant will define specific aspects, dimensions and question to be addressed through this evaluation. The list below contains a number of aspects and questions which should be certainly included. This list does not intend to be exhaustive.

- Adequacy of guidance and regulations provided by the present legal, policy and strategy documents on Government Subsidy Schemes.
- Estimate the administrative cost of the SUBOs taking possible opportunity costs into consideration.
- Awareness amongst the public and authorities about the existence of the SBO scheme and the awareness amongst eligible poor household about their entitlement for SUBO support
- The Identification methods used by the SUBO schemes
- The Benefit package provided by the SUBO schemes
- Absence of contributions for transport, food and other non-userfee health expenses
- Which health expenses at the public health facilities do SUBO beneficiaries still pay out of their pockets (drugs, medical supplies, technical examinations, interventions, specific diseases, ambulance transport, blood transfusion, etc.)?
- Administrative paper work workload and cost required for claiming reimbursements by health facilities and SUBOs
- How, for who, why and to what extent are user fee exemptions still provided by health facilities with SUBO.
- What is the out of pocket health expenditure of SUBO beneficiaries and their indebtedness situation
- How do SUBOs represent the beneficiaries when they are confronted with poor quality of care, rude staff, delays unavailability of drugs and request for under table payments?
- Do SUBO schemes follow up on the quality of services provided to their beneficiaries, which aspects and how? How do SUBO schemes contribute to improvement of the quality of the health services in general?
- How often did the Health Facilities with SUBO schemes undergo Quality Assessments and what was their score? Did they reach the minimal score required for HEF support?
- Describe the presence of data collection, monitoring and evaluation system and auditing? What are the procedures? What are the practices/
- How is the interaction and collaboration with other Social Health Protection Schemes (HEF, VHI, Vouchers, etc.) in the same geographical areas?

Expected Outputs

1. On day 4 of the consultancy the consultant will submit a work plan to the DPHI and BTC. The work plan will be drafted in collaboration with the DPHI and will be shared with the "SHP group". The work plan will clearly indicate the process of consultations, interviews, focus group discussions with the different stakeholders and proposed dates for submitting the draft report, for the consultative workshops and for submitting the final report.

2. On day 35, a Draft Final Report on the results of the evaluation, submitted to the DPHI and BTC for comment and consideration.

3. On day 40, a Final Report on the results of the evaluation.

Schedule of the assignment

The mission is expected to start end of May. The overall duration of the assignment is expected to be 40 working days. The final report is to be submitted not later than the end of July.

Reporting

The consultant will report and work under the direction of the Deputy Director (or Director) of the DPHI in charge of the Bureau of Health Economics and Financing and the BTC Health Advisor. The DPHI will be the recipient of the report and will be responsible for following up on the findings of the report. The language of the report will be English.

Minimum professional staff inputs required

This evaluation will require a multidisciplinary team, a team leader with international experience supported by local consultants. The team should have the necessary capacities to assure:

- Coordination of the evaluation and the team
- Make appointments and organize meetings
- Study of documents, reports and available data in English and Khmer
- Analyzing socio-economic data, household expenditure data and poverty studies
- Developing the data collection tools
- Conducting the interviews and focus group discussions with different target groups: English and Khmer speakers, health and development, professionals, central level authorities, urban and rural communities and authorities
- report writing to assure that evaluation to
- Data entry, analysis and interpretation of the qualitative and quantitative data
- Report writing in English
- Conducting a consultative WS

Required qualifications of the team leader:

- University degree in health related sciences, public health, health economics or equivalent background
- Qualifications in health systems and health financing evaluation, particularly in the field of social health protection
- Minimum five years experience in health systems and health financing in a developing country context
- Familiarity with the Cambodia health system.
- Good understanding of the South East Asia context and sensitivity to the cultural and political context
- The team leader needs excellent communication skills and fluency in speaking and writing in English as the working language of the assignment will English.

Administrative information

The consultant will be responsible to make the required transport arrangements for him/herself and for the team.

The consultant will be also be responsible to organize office space, laptop computers and other equipment required by the team and him or herself.

Partners

The expert team will work closely with the Ministry of Health and the Belgian Development Cooperation:

- Ministry of Health (MOH) through its Department of Planning and health Information
- Belgian Development Cooperation through the Belgian Development Agency (BTC);

Annex 2: The informal translation of the Prakas 809

Annex 2: Kingdom of Cambodia
Nation Religion King
--------* --------

Ministry of Health
No. 809

Phnom Penh, 13 October 2006

Inter-Ministerial Directive
on Support for Poor Patients

The Minister of Health and the Senior Minister, Minister of Economy and Finance

- Having seen the Constitution of the Kingdom of Cambodia;
- Having seen Royal Decree no. 05SN/RKT/0704/124 dated 15/07/2004 on the appointment of Royal Government of the Kingdom of Cambodia;
- Having seen Royal Kram no. NS/RKM/0169/02 dated 24/01/1996 promulgating the Law on the Establishment of the Ministry of Health;
- Having seen Royal Kram no. NS/RKM/0196/18 dated 24/011996 promulgating the Law on the Establishment of the Ministry of Economy and Finance;
- Having seen Sub-Decree no. 67 ANKR-BK dated 22/10/1997 on the organization and functioning of the Ministry of Health;
- Having seen Sub-Decree no. 04 ANKR-BK dated 20/01/2000 on the organization and functioning of the Ministry of Economy and Finance;
- Having seen Royal Sub-Decree no. 78 ANKR-BK dated 18/12/2004 on the additional and revised departments of the Ministry of Economy and Finance; and
- As required for poverty reduction policy,

Decide

Article 1: It is allowed to use national budget as part of the budget of the Ministry of Health (MOH) to cover the fees exempted for health services used by the poor at the national hospitals, national centers, referral hospitals and health centers in order to improve quality of public health services and to promote poor people to use health services at public facilities

Article 2: The per case reimbursement of user fees exempted for the poor are defined as followed:

1. National hospitals and national centers
-Hospitalization = 80,000 Riels

2. Referral hospitals: for patients hospitalized until recovery
- Complementary Package of Activities level one (CPA I)
(Referral hospitals without surgery) = 40,000 Riels
- Complementary Package of Activities level two (CPA II)
(Referral hospitals without surgery) = 50,000 Riels

- Complementary Package of Activities level three (CPA III)
(Referral hospitals with all specialization) = 70,000 Riels

3. Health centres
- Inpatient = 10,000 Riels
- Outpatient = 1,000 Riels

Article 3: The MOH is responsible for development of mechanisms to identify poor people based on appropriate criteria, which ensure equity, justice and transparency (the identification criteria will be provided as Annex).

Article 4 Implementing agencies are responsible for preparing all necessary documents for evaluation of poor patients as indicated by the Annex in Article 3 to be submitted to the MOH for requesting budget from the Ministry of Economy and Finance;

Article 5: Funds will be released on a quarterly basis through payment voucher after proper documents in accordance with financial rules are received.

Article 6: The generated funds from this user fee reimbursement as indicated in Article 2 will be managed within the concerned facilities as follows:
-60% for incentives of health workers
-40% for recurrent costs to support the routine activities of the facilities in order to improve the quality of health services

Article 7: The Ministry of Economy and Finance, the Ministry of Health and related institutions should closely monitor and evaluate the implementation of this Directive, mainly the fund management and related activities

Article 8: Directorate General, Secretary General, Departments, Provincial Health Departments, Provincial Departments of Economy and Finance, National Treasury, National Hospitals, referral hospitals, health centers and other related institutions under the MOH and Ministry of Economy and Finance are held responsible to implement this Directive, from the date of signature.

Senior Minister Minister of Economy and Finance Signature and stamp	Minister of Health Signature and stamp
HE Keat Chhon	HE Dr Nut Sokhom

Copies for:
- Secretary General of Senate
- Secretary General of National Assembly
- Cabinet of the Prime Minister
- Council of Ministers
- Ministry of Health
- All Provincial/Municipal Governor Offices for information and implementation as in Article 8
- Archive

Annex 3: Post-identification questionnaire

Kingdom of Cambodia
Nation Religion King
****

MINISTRY OF HEALTH

Referral Hospital of:..

Post- Identification Questions for Equity Fund Beneficiaries

Date of Interview: …………/……………/200…
Name of Interviewer:………………………………

I. Biography of the Patient

Name of the patient………………… Age………Sex…………..Nickname…………………Marital status…………………………………
In case the patient is not able to be interviewed, Name of Interviewee……………………..Relationship to the Patient……………………
Date of Hospitalization………………..Section/Department………….Bed number………………..Number of patient………………………
Address of the Patient………

II. Socio-Economic Status

1-Number of family Members							
Name	Nick Name	Age	Sex	Relationship	Occupation	Education	Others
1-							
2-							
3-							
4-							
5-							
6-							
7-							
8-							
9-							
10-							

Q2-House	Descriptions		Code #
A-Roof	Thatched/Leave/Tent		0
	Tiled/Zinc/Tin sheet		1
B-Wall	None/Leave/Bamboo		0
	Wood		1
	Cement		2
C-Floor	None		0
	Bamboo		1
	Wood		2
	Cement/Tile		3
D-Condition	Worst		0
	Good		1
	Best		2

Q3-Electronic		Code #
A-None , Radio		0
B-Tape/TV (Black & White)		1
C-TV (Color)		2
D-ICOM Radio (Base)/Hand phone		3

Q4-Electricity		Code #
A-None, Kerosene		0
B-Battery < 50 Ampere		1
C-Electric buying		2
D-Owner ship of generator		3

Q5-Transportation		Code #
A-None		0
B- Bike/ Small Boat		1
C-Horse/Ox cart		2
D-Motor boat/Motorbike/Motoring		3
E-Vehicle/Power Tiller		4

Q6-Productive Lands		Code #
6-1-Size		
A-None		0
B-< 01 Hectare		1
C- 01-02 Hectares		2
D- >02 to 05 Hectares		3
E- > 05 Hectares		4
6-2-Quilities (Land category)		**Code #**
A-Third Category		0
B- Second Category		1
C- First Category		2

Q7-Farm Assets		Code #
A-None		0
B- Plough……		1
C- Dragging Cows/ Buffalos and Horse		2
D-Water pump		3
F-Tractor/ Tiller machine		4

Q8-Livestock		Code #
A-None		0
B-An adult pig/<30Chickens/Ducks		1
C-02 Adult pigs/>30Chickens/Ducks		2
D- Goat more than 02 One cow/oxe /buffalo		3
E-More than 02 of Oxes/ buffalos/ houses		4

Q9-Cash Income/Person (Per day)		Code #
A-<2,000R		0
B-2,000R to 4,000R		1
C-4,100R to 8,000R		2
D-8,100R to 16,000R		3
E- >16,000R		4

Q10- Number of dependent members and vulnerable.		Code #
A-Elderly/Disable/Orphan (>02)		0
B-Elderly/Disable/Aphelion (01)		1
C-None		2

Q11-Length of severe illness in last one year		Code #
A->30 days		0
B-15-30 days		1
C-5-15 days		2
D-<5 days		3

Q12-Health costs (Combined family members in last one year)		Code #
A->500,000Riel		0
B-200,000 to 500,000Riel		1
C-<200,000Riel		2

Q 13. Has your family ever borrowed money when your family member(s) was/were sick?		Code
A. Has borrowed		0
B. Never		1

III. Evaluation of the Interviewer

Total Scores: The result of interview shows that the patient is: Extreme poor [ ] Poor [ ]

Date:........../............./200......
Signature of Interviewer

I, undersigned, claimed that all the answers provided by me above are correct. If there were incorrect, the EFH has the right to postpone all assistance and I promised to reimburse all the expenditure provided by EFH.

Thumb or Signature of the Patient/ Relationship

Note:

A- Score from 0 - 10 : Extremely poor
B- Score from 11 - 18 : Poor
C- Score equal or above 19 : Non-poor and rejected

Annex 4: List of people consulted

Methods	Position and institution	Name
Key informant interviews	Policy makers from MOH (DPHI), MEF	Dr. Sok Kanha (MoH) Mr. Ros Choung Eng (MoH) Dr. Khun Thovary (MoH) Dr. Veng Ky (MoH) Mr. Srey Vuth (MoEF)
	NGOs	Dr. Sin Sumony (MEDiCAM) Ms. Maryam Bigdeli (WHO) Dr. Long Lang (AFH) Mr. Tapley Jordenwood (URC)
Technical meeting	Technical experts	Dr. Christopher Grundmans (URC) Dr. Timothy Johnson (World Bank) Dr. Dirk Horemans (BTC) Dr. Benjamin Lane (WHO) Dr. Wim van Damme (ITM) Dr. Chan Sorya (AFD)
Directors of all SUBO NHs, PHDs, ODs, RHs	Provincial Health Departments	Mr. Sok Sambath (PHD Kandal) Dr. Oum Vannatheary (PHD Kompot) Dr. Keo Rattha (PHD Svey Rieng) Dr. Prak Vun (PHD Kampong Chhang) Dr. Ov Vanthane (PHD Kampong Speu) Dr. Hem sareth (PHD Takeo) Dr. Seng Ron (PHD Pailin) Administrator (PHD Prey Veng)
	Operational Districts	Dr. Lim Phalla, (Ksach Kandal) Dr. Daravuth, (Kampong Trach) Dr. Neo Sosotta, (Romeas Hek) Dr. Ke Rathavuth (Chhouk) Dr. Tae Teiny (Daunkeo) Dr. Eang Sung (Kampong Speu) Dr. Sour Soknary (Chipu) Dr. Lang Siv Ngang (Kampong Chhnang) Dr. Nhem Thorn (Kampong Trabek) Dr. Thang Say (Khandal) Dr. Hen Rithy (Angkor Chey)
	Referral Hospitals	Dr. Say Sok (Ksach Kandal) Dr. Pov Sary (Kampong Trach) Dr. Mok Chanthon (Angkor Chey) Dr. Kong Sam Art (Kampot) Dr. Ream Satha (Romeas Hak) Dr. Thap Sovichet (Pailin) Dr. Sorn Sopheap (Soviet Hospital) Dr. Thim Thany (Kampong Speu) Dr. Sorindy Ravuth Dy (Kg. Chhnang) Dr. Moun Sothea (Prey Veng) Dr. Kong Chunly (Khandal) Dr. Thorn Sokhean (Kossamak) Dr. Say Sengly (Soviet hospital)

		Dr. Kdan Yuvatha (N. Pediatric Hosp)
Health Center Directors	Ksach Kandal	Mr. Tep Sary, (Vihear Sour HC) Mr. Keo Sophon, (Koh Charam HC)
	Kampong Trach	Mr. Mao Vansaly (Boeng Sala HC) Mr. Kim Kea Thun, (Reusey Srok HC)
	Kandal	Mr. Chin Lay (Prey Slock HC)
		Tep Saray (Ksach Kandal HC)
		Chhorn Theara (Siem Reap HC)
	Kompot	Tha Sothea (Tany HC)
		It Narith (Chhouk HC)
	Pailin	Chea Yon (Phnom Prel HC)
	Prey Veng	Som Sarik (Prasat HC)