





HFG RAPID ASSESSMENT OF TB PAYMENT AND PFM SYSTEMS IN CAMBODIA: LESSONS LEARNED AND POLICY IMPLICATIONS



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The Health Finance and Governance Project

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ACRONYMS

- CENATNational Center for TB and Leprosy Control
- DPHI Department of Planning and Health Information
- DRG Diagnostic-Related Group
- HEF Health Equity Fund
- HEF-O Health Equity Fund Operators
- HFG Health Finance and Governance project
- MDR Multi-Drug Resistant
- MoEF Ministry of Economy and Finance
- MoH Ministry of Health
- NSSF National Social Security Fund
- NTP National TB Program
- OD Operational District
- PFM Public Financial Management
- PFMRP Public Financial Management Reform Program
- PHD Provincial Health Department
- PMRS Patient Medical Record System
- PPM Public-Private Mix
- SOA Special Operating Agency
- UHC Universal Health Coverage
- USD United States Dollar
- TB Tuberculosis
- URC University Research Company, LLC
- USAID United States Agency for International Development
- XDR Extremely Drug Resistant



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I. BACKGROUND

I.I Problem Statement

Despite substantial funding for tuberculosis (TB) prevention and treatment over the last 10 years, both by donors and governments, the worldwide incidence of TB remains troubling. Across lower- and middle-income countries, access to TB services is limited, and the quality of TB services is often substandard. Many countries face questions over the long-term financial sustainability of their efforts to prevent and treat the disease.

Cambodia has one of the highest rates of TB in the world, with prevalence and incidence rates sitting at roughly 660 and 437 per 100,000 people, respectively (WHO 2015). Meanwhile, donor funding for TB is declining, the government is struggling to generate new resources for TB, and out-of-pocket spending still accounts for a significant share of health and TB expenditures. Cambodia needs to identify mechanisms to improve the efficiency of TB spending (i.e., mechanisms for spending money wisely). In the short term, this may mean finding ways to improve outputs – such as access, use of services, and quality – for a given level of spending on TB. In the long term, Cambodia and countries facing similar challenges may be interested in finding ways to achieve better outputs with fewer resources.

Global evidence suggests that increased TB costs, inequitable access to care, lower rates of case detection and case holding, worse treatment outcomes, and an increased burden of disease due to TB – including the increasingly prevalent multi- and extremely drug resistant TB (MDR-TB and XDR-TB) – are often tied to gaps in the continuum of TB service delivery, inadequate coordination of policies across payers, and weak financial incentives for health care providers (Figueras et al. 2005, Langenbrunner et al. 2009).

I.2 General Activity Description

The Health Finance and Governance (HFG) project's TB strategic purchasing activity is intended to better target country health budgets and national health insurance funds toward priority TB services and the poor. The three health financing functions are revenue collection, pooling, and purchasing. Revenue collection concerns the source of funds and level of funding. Pooling is the accumulation of pre-paid revenues on behalf of a population, and purchasing is the transfer of pooled funds to providers on behalf of a population. Strategic purchasing focuses on the purchasing function, specifically provider payment and public financial management (PFM) systems. While not discounting private investment, the activity focuses on public funding, as it is critical for public health services (such as TB services). Public funding can be used to buy services from both public and private providers, and is best suited to increase access for the poor.

The HFG TB strategic purchasing activity contributes to increasing technical efficiency – that is, achieving the maximum possible improvement in outcomes from a set of resource inputs – and allocative efficiency, which refers to allocating resources in a way that maximizes the welfare of a society. The strategy achieves this by identifying ways, both globally and within countries, to improve financial incentives to providers, reduce PFM barriers, and increase provider autonomy. If the nature of provider payment and PFM systems creates conflicting financial incentives, or barriers to spending money wisely and improving TB service delivery, those conflicting incentives and/or barriers should be removed.



2. OBJECTIVES AND METHODOLOGY

2.1 Country Objectives and Outcomes

Cambodia was the subject of one of several country case studies linking strategic TB purchasing with improved efficiency and better outcomes. In May/June 2016, HFG conducted a brief but in-depth assessment of health purchasing/provider payment and PFM systems in Cambodia, to identify rigidities and barriers. The assessment had a twofold purpose:

- 1. HFG would observe and learn from key stakeholders in Cambodia, with the aim of synthesizing information on PFM barriers and provider payment bottlenecks.
- 2. Where these issues were not already being addressed, HFG would make recommendations for removing barriers and bottlenecks.

The following outcomes were to be achieved through this assessment:

University Research Company (URC);

Department of Planning and Health Information (DPHI), Ministry of Health (MoH)

- I. HFG learned from URC and DPHI about:
 - a. The benefits and limitations of the Health Equity Funds' (HEFs') existing provider payment system as it pertains to primary, outpatient, and inpatient services.
 - b. Gaps in TB service delivery that HEFs are currently targeting or would like to.
 - c. Improvements that HEFs are making in TB service delivery, and mechanisms by which public providers are being incentivized to make these improvements.
- 2. HFG assessed whether and to what extent
 - a. There is potential to refine the HEFs' provider payment system.
 - b. Improvements in the HEFs' provider payment mechanisms are needed to coordinate and align incentives among contracted public providers.
 - c. There is potential to improve the HEFs' information and operating systems (PMRS) which, through the collection of patient/provider data, are used to purchase TB services.

National Center for TB and Leprosy Control (CENAT), MoH

- I. HFG learned from CENAT about:
 - a. The benefits and limitations of TB financing in Cambodia, with a focus on PFM barriers to purchasing public or individual TB services. This would include purchasing mechanisms, level and flow of funding, budget formation, payments to and contracting of providers, and financial management.
- 2. HFG assessed whether and to what extent
 - a. Improvements could be made in how TB services are financed, with a focus on budgeting processes and purchasing.

Both DPHI and CENAT

I. Through meetings with development partners (e.g., URC) and health providers, HFG learned about:

- a. Conflicting roles of and relationships between CENAT and HEFs as they pertain to purchasing of TB services;
- b. The extent to which TB service purchasing mechanisms by CENAT and HEFs create gaps in the TB continuum of care and possible solutions for filling these gaps;
- c. The extent to which conflicting financial incentives stem from differences in CENAT and HEFs purchasing mechanisms and payment systems;
- d. Public providers' satisfaction with existing payment mechanisms and rates for TB services;
- a. Obstacles providers face with regard to existing payment mechanisms and information systems; and
- b. PFM and purchasing improvements that could help health care providers deliver higher-quality TB services more efficiently and effectively.

2.2 Methodology

Data for this assessment came from three sources:

- I. Key informant interviews
- 2. Policy documents
- 3. Secondary data

Key informant interviews were conducted with the MoH (DPHI and CENAT) and development partners. Data from public providers were also collected so as to better understand how issues associated with TB financing impact TB service delivery. Annex A provides the complete list of interviewed stakeholders.

Policy documents included guidelines and circulars published by the government, assessments conducted by development partners, and peer-reviewed journal articles related to TB purchasing in Cambodia. Sources of secondary data included TB and health expenditure data published in National Health Accounts reports as well as publicly available data from the World Health Organization and World Bank.



3. TB POOLING AND FUNDING FLOWS

3.I Overview

Risk pooling constitutes one of the three health financing functions. It refers to the consolidation of prepaid funds by individuals; that is, funds that are pooled prior to the point of service and ultimately used to purchase health services on behalf of the enrolled or covered population. There are several common modes of risk pooling for health: social health insurance; private health insurance; public financing (via general tax revenues) at national or locals levels; and community-based health insurance (WHO 2010). For many low- and middle-income countries, such as the Philippines, TB financing is also pooled by donors.

Pre-payment is an important component of improving financial risk protection and a critical component of Universal Health Coverage (UHC). UHC is intended to provide equity in coverage and efficiency in health spending (Boerma et al. 2014; McIntyre and Kutzin 2016). Pre-payment allows consumer payments for health care to be more predictable and spread across time, rather than incurred at the time of illness. Put another way, pre-payment increases the odds that lack of financial resources at the time of need does not cause people to forfeit care (Wagstaff et al. 2015; Wagstaff et al. 2014). Pooling can also spread financial risk across population groups and allow cross-subsidization between the rich and the poor, the healthy and the sick, and the employed and unemployed. Pre-payment and pooling can address equity and risk within a single risk pool, or across risk pools if the financing structure allows for this. The degree of equity enhancement and risk reduction depends on the particular arrangements of the financing mechanisms in place. Finally, more consolidated risk pooling can improve efficiencies by reducing administrative costs, fragmentation in purchasing, and prices for health services.

Table I presents total health expenditures, by source, in Cambodia from 2012 to 2014 (WHO 2015). Total health expenditures remained stable during the three-year period, rising from USD 1.032 billion in 2012 to USD 1.057 billion in 2014. This was driven by increased government spending (USD 199 million to USD 210 million) and out-of-pocket expenditures (USD 622 million to USD 658 million). Donor spending fell over this period (USD 209 to USD 188 million), as did private health insurance spending (USD 2.4 million to 0). However, as a percentage of total health expenditures, government spending remained between 19 and 20 percent, while the rise in out-of-pocket spending offset the decline in donor spending. Government spending is funded by both general tax revenue and social health insurance; the latter consists of HEFs for the poor and the National Social Security Fund (NSSF) for the formal, private sector. In addition to direct funding to the government, donors and NGOs also finance social insurance funds such as HEFs and community-based health insurance schemes.

	201	2012		2013		2014	
Source of Revenue	Amount (USD million)	Share of total (%)	Amount (USD million)	Share of total (%)	Amount (USD million)	Share of total (%)	
Government	199.10	19.3	218.20	20.5	210.00	19.9	
Donor and NGOs	209.00	20.2	183.00	17.2	188.70	17.9	
Out-of-pocket expenditure	622.20	60.3	662.30	62.3	658.50	62.3	
Health insurance	2.40	0.2	1.70	0.2	0.00	0.0	

Table I: Total Health Expenditures, by Year and Source

Total	1032.7	100	1065.2	100	1057.2	100

The sources and flow of funding to health care providers for TB are presented in Figure I. Public health care providers obtain funding that can be used for TB services from three sources: the MoH (via the National Tuberculosis Program, or NTP), HEFs, and out-of-pocket payments. The MoH (via the NTP) cover's Cambodia's entire public TB system and is the primary source of public financing for TB. In addition to funding, it provides technical assistance, drugs, supplies, and staff to public facilities. Public facilities also receive reimbursements from HEFs for TB and general health services delivered to enrolled members (the poor). Finally, public health facilities can collect user fees from non-TB patients and spend that revenue on TB service delivery (at the facility's discretion). Private health insurance, community-based health insurance, and the NSSF do not currently cover TB and are thus not included in the diagram below (MoLVT 2016).





Funds for TB only flow to private health care providers by way of patient out-of-pocket spending, which accounts for nearly all of a private facility's revenue. Because it is illegal for private facilities or pharmacies to deliver TB services or sell TB drugs, any formal TB treatment (post-diagnosis) must occur in the public sector. A 2014 CENAT report nonetheless suggests that roughly 75 percent of TB suspects first seek treatment for TB symptoms in the private sector (MoH 2014a). This figure may actually underestimate private sector TB utilization rates. Data from the same report highlight that the private sector contributed only 6 percent of all TB cases in operational districts (ODs), which are local governments (MoH 2014a). It is therefore likely that a substantial number of TB patients continue to receive treatment in the private sector, because they are never formally diagnosed with TB and referred to public facilities.

TB spending thus originates from three of the four primary sources cited in Table 1: donors, government, and out-of-pocket expenditures. As previously mentioned, with the exception of HEFs, health insurers do not cover TB. Data on total TB expenditures, by source, are limited and thus it is difficult to compare those expenditures with trends in total health expenditures. According to Figure 2, the NTP had a budget of roughly USD 8-9 million in 2013, USD 11-12 million in 2014, and USD 18.5 million in 2015. Only 10-20 percent of the NTP's budget comes from the MoH, while the remaining 80-90 percent of the budget comes from grants and donors (e.g., Global Fund) (WHO 2015). Financing for HEFs is also split between donors and government. Government spending on health overall accounts for 20 percent of total health expenditures; government spending on TB is therefore a lesser percentage of total TB spending, and donor funding for TB is a greater percentage. Out-of-pocket expenditures on TB are not known; they likely



account for a non-trivial portion of total TB spending given the large amount of undiagnosed TB care that occurs in the private sector as well as evidence from an upcoming URC study (URC 2016).





3.2 Issues

While risk pooling is not the focus of this report, the implications of risk pooling on TB purchasing, care coordination, and health system performance are likely significant. There are two issues of concern in Cambodia.

- Neither HEFs nor the MoH contract with private providers to deliver TB services or drugs, nor have they implemented comprehensive reforms to encourage private providers to refer TB patients to the public sector (this will be discussed later in the report). The absence of policies persists despite the fact that roughly 70 percent of all health care utilization occurs in the private sector.
- 2) Global evidence suggests that fragmented financing systems, including those involving TB, often result in provider payment systems that are not coordinated across payers (Langenbrunner et al. 2009; Gottret et al. 2008). Compared with some of its regional counterparts (e.g., the Philippines and Indonesia), Cambodia has fewer health insurers and public financing is less decentralized. Nonetheless, TB expenditures still vary across provinces and ODs given different priorities for where and how much is spent on TB. Such priorities will ultimately impact the incentives and capacity of public providers to deliver and coordinate TB services (Annear et al. 2013).

Moreover, the Ministry of Economy and Finance (MoEF), in collaboration with the MoH, Ministry of Labor, and Ministry of Social Affairs, is developing a Social Health Protection framework. Through this framework a short-, medium-, and long-term health financing strategy for achieving UHC will be developed. It is likely that other insurance schemes (e.g., NSSF) will be developed to cover specific populations, some of which may be tasked with covering TB. Such has been the path of neighboring countries, including Vietnam, Thailand, and the Philippines. Under such a scenario, Cambodia will need to carefully design these schemes to ensure that fragmented risk pooling for TB does not hinder key outcomes/outputs.

The absence of private sector engagement and fragmented risk pooling will likely have three effects on health system performance as it relates to TB. First, these issues could lead to conflicting provider incentives that accentuate inequities in access to and utilization of TB services. They may already be driving variation in case detection rates and treatment success rates. Second, if upcoming social health protection reforms do result in multiple insurers that cover TB and are not coordinated, inefficiencies in TB spending would almost certainly be created (Langenbrunner et al. 2009; Gottret et al. 2008). Finally, they probably

contribute to the growing share of out-of-pocket costs for TB care, which in turn can limit financial risk protection.



4. PUBLIC SECTOR TB FINANCING

4.1 MoH Roles and Responsibilities

4.1.1 Overview

The NTP covers Cambodia's entire public TB system, including CENAT, 25 provincial and city health departments, 82 ODs, and 1,325 health facilities (MoH 2014a). The latter include 86 referral hospitals and 1,215 health centers and health posts, as well as national hospitals. Leadership and managerial responsibility for the NTP lies with CENAT, which is responsible for developing policies and plans, training, supervision, monitoring and evaluating the NTP, drug procurement for the country, and coordinating with other partners supporting the NTP (MoH 2014a). Provincial governments are responsible for all TB services in the province, especially planning, training, coordination and supervision of the ODs, TB microscopy centers, and health centers. ODs are tasked with maintaining the OD TB registry; planning, training, coordinating, and supervising health centers; and interacting with the clinical TB teams. ODs have referral hospitals, which have TB units with beds, a few TB staff, and TB microscopy centers.

Public health facilities, which include health centers, referral hospitals, and national hospitals, are managed by the MoH (MoH 2014a). The MoH thus provides TB drugs, supplies, and staff salaries to public facilities (URC 2016). In general, public facilities must allocate resources by line item; that is, they are not allowed to shift resources across line items. However, the MoH has implemented a number of incentive schemes that are exceptions to this rule. They include:

- 1. To incentivize public providers to capture new TB cases and improve TB service delivery, the MoH had been offering salary bonuses to TB staff and supplemental funding for outreach initiatives. These pay-for-performance initiatives have largely disappeared (URC 2016). However, MoH guidelines allow public facilities to distribute 60 percent of their revenue as staff incentives. Facility revenue comes from user fees, insurance reimbursements, MoH budgets, and donors. Moreover, 39 percent of this revenue must be spent on improving health facility quality (e.g., infrastructure), while another I percent is given to the national budget. The MoH has provided a resource allocation formula for public facilities, though they also are free to determine their own formula. Guidelines stipulate only that incentives cannot vary across staff by more than 2-3 times (MoH 2014b). As such, variation exists across facilities in how funds are allocated.
- 2. In 2005, the MoH launched a Public-Private Mix (PPM) strategy to engage private providers and stimulate greater case detection rates and better care coordination across sectors (MoH 2014a). Specifically, in 2007, a Private-Public Mix Directly Observed Therapy, Short course (PPM-DOTS) was established in 35 ODs and in 16 garment factories. The first phase set up referral mechanisms for private facilities and pharmacies to refer TB suspects to the public sector for diagnosis and treatment. The second phase aimed to allow private providers to play a more active role in TB diagnosis and treatment.
- 3. In 2010, the MoH implemented a pilot whereby local governments from 20 ODs could internally contract with public health facilities. These local governments, called Special Operating Agencies (SOAs), have semi-autonomous status within the MoH; the MoH signs an agreement with provincial

health departments (PHDs), which in turn contract the SOAs. The SOAs then manage the performance-based contracts with public facilities. These contracts allow public facilities greater managerial autonomy to hire/fire staff and allocate finances, labor, and capital where needed.

Facilities must adhere to three constraints: no under-the-table payments, no pilfering of clients or conduct of private services in the public facilities, and no stealing of drugs and medical supplies from public facilities (Khim and Annear 2013). Financial incentives are paid by the SOA (i.e. OD) in full when the facilities' performance targets are achieved and are reduced when the level of achievement falls short. Unlike funding to standard ODs, funding to SOAs comes from three sources: MoH line-item budgets, user fees and HEF/community-based health insurance reimbursements, and a service delivery grant from donors. These account for roughly 50 percent, 10 percent, and 40 percent of total SOA funding, respectively.

4.1.2 Issues

- 1) Provider Autonomy: Initiatives such as SOAs and the staff incentive resource allocation formulas have proven highly successful in Cambodia. However, no steps have been taken to roll out SOAs nationally or to completely contract-out public service (Khim and Annear 2013). Most public facilities lack the managerial autonomy to move funds across budget line items and shift resources (e.g., hiring and firing staff, setting wages, procuring supplies). The implications of these restrictions are twofold: (a) public facilities face increased administrative and service delivery costs, which in turn drive inefficiencies in health spending; and (b) facilities cannot align capital and labor in ways that effectively meet patient demand (e.g., by delivering essential TB services and drug to patients). For instance, if a facility's budget for certain medical supplies has been spent, and demand for TB services that require the use of those medical supplies is high, facilities will not be able to use existing funds to purchase the needed supplies. In the absence of organizational and managerial autonomy, the clinical quality of TB services may decline and patient access to such services may be inhibited (Kutzin et al. 2010).
- 2) **Performance Incentives**: The MoH has designed and implemented a number of provider payment incentives aimed at improving the performance of public facilities. Unfortunately, no schemes exist that explicitly encourage public facilities to capture new TB cases and improve the quality of TB service delivery. Three examples highlight this point:
 - a) SOAs offer financial incentives to public facilities for achieving performance targets, but these targets are not specific to TB.
 - b) Pay-for-performance initiatives aimed at improving TB outreach have largely ended.
 - c) HEF reimbursements and user fees incentivize facilities to treat more patients; however, payments are not based on a patient's diagnosis and thus provide no incentive for facilities to target TB patients. (See Section 5.)
- 3) Public-Private Collaboration: Cambodia's PPM strategy addresses a critical obstacle to better TB case detection rates and should be expanded. However, the strategy does not include financial incentives to private providers for referring TB-suspect patients to public facilities. This has almost certainly limited the program's effectiveness, as has been noted in several, high-level presentations in Cambodia. Global evidence suggests that financial incentives can dramatically increase providers' willingness to refer patients (Langenbrunner et al. 2009). In the absence of such incentives, patient referrals will only reduce the total revenue brought in by those facilities. In the case of TB, providers will also be less active in searching for TB cases. Public and private health insurers in the Philippines, Indonesia, Vietnam, Thailand, and China have addressed this issue through provider payment reforms.



4) Purchaser-Provider Split: A purchaser-provider split is a joint health financing and service delivery model in which the payer (typically a third-party entity, such as a national health insurer) is kept organizationally separate from contracted health care providers. The purpose of this split is to improve competition among service providers and enhance purchasing incentives, which can lead to improved service delivery and achieve strategic objectives such as cost containment, better clinical quality and responsiveness, and greater efficiency and organizational/management autonomy (Tynkkynen et al. 2013; Gottret et al. 2008). While often applied to third-party payers, a purchaser-provider split model is equally relevant to public entities such as the MoH. Global evidence suggests that in the absence of this split, weak accountability mechanisms can further hinder the above health system objectives (Savedoff and Gottret 2008). In Cambodia, the MoH lacks both a purchaser-provider split and many of the necessary accountability mechanisms (audits, quality assurance systems). It is unlikely that such a split is politically feasible or technically desirable at present; however, it may become a growing concern as Cambodia's health care system matures (Bossert et al. 1998).

4.1.3 Recommendations



In regard to the first recommendation, greater financial autonomy would be a critical step toward both output-based purchasing and a purchaser-provider split in the public health sector. It would improve the efficiency of health and TB spending by allowing facilities to allocate inputs in a way that minimizes costs while maximizing service delivery outputs/outcomes. As discussed above, such reforms could also lead to improvements in the quality of and access to essential TB services. Nonetheless, experiences from neighboring countries (e.g., Vietnam) suggest that in the absence of adequate regulations, monitoring systems, or enforcement, public facilities with full management autonomy can behave in ways that hinder public health objectives (Somanathan et al. 2014). This includes risk selecting healthy or high-income patients, balance billing patients for services that should be free, and allocating inputs for only those health services that bring in the greatest revenue.

4.2 Public Financial Management and Budgeting

4.2.1 Overview

The MoEF has been undergoing major PFM reforms, officially called the Public Financial Management Reform Program (PFMRP), since 2004. It receives a substantial amount of technical assistance from the World Bank. The reform has multiple components. The first component was successfully achieved in 2008 and aimed to strengthen budget credibility (WYG International and Khmer Management 2015). The MoEF has since been implementing the second component, or the achievement of effective financial

accountability. The second component includes the rolling out of PFM reforms, such as program-based budgeting, to line ministries. The MoEF has considerable control over the MoH's expenditures against its approved budget. As has been mentioned, the MoH, like all line ministries, is only allowed to switch funds between activities within the same sub-program and within the same chapter without MoEF approval. Any other budgetary changes require the MoEF's approval. In 2012, the MoH accounted for 23 of the 173 approved applications (MoEF 2015). The MoEF has not yet begun to design or pilot components three and four of the PFMRP, which will include development of a performance-based budgeting system. Delays are largely due to political resistance and data limitations.

The MoH has therefore been piloting a program-based budget since 2008. This program-based budget accounts for roughly 20 percent of the MoH's total budget (MoEF 2015). Neither the MoH nor the NTP has begun developing or piloting performance-based budgets. A significant challenge for the MoH, as with the MoEF, is both political resistance and the lack of data to inform performance- or outcome- based budgets.

HFG was not able to meet with the MoH Department of Budget. However, per discussions with the MoEF, the World Bank, DPHI, and CENAT, budget allocations by the MoH for TB in the current year (t) are largely based on the previous year's budget (t-1) plus inflation. CENAT receives an annual budget from the MoH broken down by line item, but CENAT cannot shift funds across line items. The CENAT uses prevalence and other need-based data to allocate TB funds to PHDs and ODs. However, the availability of data is limited and the quality weak. For instance, utilization and encounter data may be based entirely on a sample of public, rather than both public and private, facilities.

NTP budget line items are presented in Figure 3; the primary categories are DOTS, MDR-TB, TB-HIV, PPM, Research/Other (WHO 2015). DOTS accounted for roughly 66 percent of the NTP's total budget in 2014, up from 45 percent in 2010-2011. The remainder of the budget is spent on PPM (25 percent), MDR-TB (5-10 percent), and TB-HIV (2 percent). Since 2007, the NTP's budget execution rate, defined as the percent of the total budget that was spent in a given year, has been close to 100 percent.



Figure 3: NTP Funding, by Line Item and Year

4.2.2 Issues

A dual approach is required to improve CENAT's budgeting process. One is analytical, while the other structural. Reforms to both areas are needed:

For the analytical approach, CENAT must assess the Cambodia's TB needs and identify gaps in the TB care continuum. This will help it identify where the budget should be spent, thereby improving value for money. Identifying TB needs and gaps requires quality, timely data. At present, CENAT, PHD,



and OD budgets are only determined by previous years' budgets and TB prevalence data. Such data is insufficient. The MoH needs a resource allocation model that accounts for additional variables, uses more data, and uses data of higher quality.

2) Structural reforms are also needed to improve CENAT's budget planning process. The current MoH and CENAT budgeting process prevents government agencies within the NTP from shifting funds across line items. For instance, if CENAT needs to allocate additional funding for TB drugs and less for technical assistance, it is unable to do so. These restrictions will impact the efficiency and effectiveness of the NTP's spending, which in turn can lower its budget execution rates and future years' budget from the MoH. CENAT must move towards program based budgets, which can ensure that budgets align with strategic priorities and the purchasing of health services. Such a model will enable health managers to switch their thinking away from funding infrastructure to financing based on need (and eventually performance).

4.2.3 Recommendations

Policy Recommendations for TB Budgeting					
CENAT should develop a more comprehensive, data-intensive resource allocation model that identifies TB needs and gaps in the care continuum;					
CENAT should undergo program based budgeting reforms, which will help it shift from budgeting by line item to budgeting by strategic priority (need and performance)					

5. TB STRATEGIC PURCHASING: HEALTH EQUITY FUNDS

5.1 Accreditation/Contracting

5.1.1 Overview

Cambodian laws require public and private health facilities to be accredited by the MoH in order to deliver services. Per interviews with URC and DPHI, as well as MoH circulars, HEFs contract with all public health facilities; in practice, this means that HEFs do not selectively contract with any public providers (MoH 2014b). HEFs are not allowed to contract with private health facilities. It is illegal for private facilities or pharmacies to sell TB drugs or deliver TB services. Thus, even if HEFs were allowed to selectively contract private facilities to provide general health services, the use of contracting would not impact TB financing or service delivery in the private sector.

5.1.2 Issues

Accreditation systems, when designed and implemented well, enable payers to selectively contract with health care providers that meet certain quality standards. Through key informant interviews, HFG was not able to assess the standards set by the MoH's accreditation system for public and private providers. It was also not able to determine whether the Royal Government of Cambodia has set or can successfully enforce regulations for providers that continue to deliver health services but do not meet these standards. Regardless, HEFs face two, critical issues related to contracting.

1) By law, HEFs are not permitted to contract with private facilities. Laws also prohibit private health care facilities and pharmacies from delivering TB services and selling drugs (URC 2016). There are likely political and regulatory constraints that have prevented the removal of these laws. Nonetheless, recent National Health Accounts data indicate that over 70 percent of health service utilization and expenditures occur in the private sector (MoH 2015). While some variation in use and expenditures exists across wealth quintiles, such trends hold among low-income households. Demand for private sector services remains strong despite the presence of free public health services and subsidized transportation/food costs.

From an equity perspective, HEFs were designed to increase financial protection for Cambodia's poor and expand utilization of essential health services, including TB. The inability to contract with private sector providers for TB and other health services hinders these objectives by limiting patient choice. Unlike out-of-pocket payments, payers – by wielding greater purchasing power and more nuanced payment mechanisms – are better able to shape provider incentives. In turn, these incentives can encourage better coordination of TB services across public and private sectors. They can also improve TB case detection rates, treatment success rates, and quality of care. For instance, at present, private providers have few financial incentives to identify TB-suspect patients or refer them to a public facility for further testing and treatment. Households only pay providers from whom they receive a service, whereas HEFs can split payments and include a referral fee to the referring facility.

2) General contracting, as discussed above, allows health care providers to access new, more stable revenue streams than out-of-pocket payments. However, general contracting is a blunt tool for



shaping provider incentives, because all accredited providers are eligible to receive HEF payments. On the other hand, selective contracting enables payers to strategically purchase health and TB services from only those providers that meet additional performance (quality or cost) standards. At present, HEFs contract with all public health facilities in Cambodia. While selective contracting can reduce access to health services by limiting the size of provider networks, it can also stimulate competition among health care providers. In turn, greater competition can improve efficiencies by lowering costs and improving quality of care.

5.1.3 Recommendations

Policy Recommendations for Contracting

The MoH should consider piloting reforms that will allow HEFs to selectively contract with private providers, while leaving public facilities open to general contracting.

Selective contracting with public facilities would require those facilities to compete on quality and cost grounds. This would be both challenging and impede reaching TB objectives, such as expanding access to and utilization of TB services. However, if HEFs were allowed to contract with only the best performing private facilities – which would be required to meet high-quality standards – access to health and TB services for the poor could be improved and better coordination across public and private providers achieved. Historical barriers between sectors would be broken down. Such a pilot could also as a model for future public-private partnerships in Cambodia and expanded over time.

5.2 Benefit Package

5.2.1 Overview

HEFs are health insurance schemes for the poor. Benefits include transportation and food subsidies for members at the point of care, as well as fully subsidized insurance coverage for health and TB services (MoH 2014c). DPHI has not yet developed a benefit package for services to be covered by HEFs; in theory, HEFs should cover any service received by its members from a public health facility. CENAT guidelines specify three distinct benefit packages for TB care that are free to individuals utilizing public health facilities: primary care, outpatient/inpatient care (TB DOTS intensive phase), and outpatient care (TB DOTS maintenance phase). In a sense, HEFs thus contract with public health centers and hospitals to deliver all three benefit packages (MoH 2014c).

The primary care package targets the "investigation of patients with TB symptoms who are or are not producing sputum." Primary care services include consultations (history exams), investigations (sputum tests, lab transport, and x-ray), treatments (antibiotics), counseling (overview of TB), and follow-up. The outpatient DOTS intensive phase covers all newly diagnosed TB patients and includes consultations (monitoring drug effects and physician consults), investigations (lab and sputum analysis), treatments (first line TB DOTS, drugs and inpatient admission where necessary), counseling (compliance), and follow-up (MoH 2014c). While labeled as an "outpatient" care package, it covers TB services delivered in both outpatient and inpatient settings. The outpatient DOTS maintenance phase covers patients who have completed the intensive phase; covered services are similar but focus on DOTS maintenance and compliance as per CENAT clinical guidelines. This phase technically includes care provided in an inpatient

setting, though in practice most TB care during the maintenance phase should be delivered in an outpatient setting.

Findings from a forthcoming study (URC 2016) indicate that, on average, roughly 87 percent of HEF operators (HEF-Os) and 71 percent of managers/directors at public health centers and public hospitals are aware of HEF benefits, including those for TB. Of particular importance, nearly 100 percent of HEF-Os and mangers/directors are also aware that poor TB-suspect patients are eligible for HEF benefits.

5.2.2 Issues

The TB benefit packages, as outlined in CENAT's benefit package circular (MoH 2014b), are not linked to the HEFs as they would for a traditional health insurer. However, the separation of TB services into three distinct benefit packages makes it easier for providers to submit claims to HEFs by care type (primary, outpatient, inpatient) and HEFs to reimburse facilities accordingly. The TB benefit package is generally clear and comprehensive; there are few gaps in what services are covered.

5.2.3 Recommendations

Policy Recommendations for the Benefit Package

- HEF guidelines should articulate that patients who are diagnosed with TB be covered for all related services rendered prior to diagnosis.
- The MoH should harmonize its independent TB benefit packages once HEFs begin reimbursing providers based on diagnostic conditions.
- 1) To improve financial risk protection for Cambodia's TB population, particularly the poor, HEF guidelines will eventually need to articulate that patients who are diagnosed with TB should be covered for all related services rendered prior to diagnosis. In many neighboring countries, benefit package guidelines for social health insurance schemes lack this clarity (PhilHealth 2012; PhilHealth 2014; Somanathan et al. 2014). As a result, providers frequently bill insured patients for primary, outpatient, and inpatient services delivered prior to TB diagnosis. This behavior accounts for a large share of TB out-of-pocket costs in developing countries (the other being utilization of health facilities that are not contracted by or included in a health insurer's network) (Kutzin et al. 2010; McIntyre and Kutzin 2016).

There is limited empirical evidence of this happening in Cambodia, in part because the HEFs' current provider payment mechanisms have not created the incentive to do so. HEFs use a simple, case-based payment system to reimburse health facilities, which disaggregates payments only by facility type and care type (e.g., outpatient, inpatient). Cases are not yet broken down by diagnostic condition. Public health facilities will therefore receive the same reimbursement for an inpatient care episode regardless of the patient's medical condition. As HEF provider payment models become more complex and cases are instead made by diagnostic group, providers will look for ways to bill TB patients for other conditions – unless benefit package guidelines/regulations are in place to prevent this from happening.

2) The MoH should harmonize its benefit packages once HEFs begin reimbursing providers based on diagnostic conditions. In failing to do so, providers will be more inclined to deliver only those services



that maximize revenue, which can fragment TB service delivery and weaken care coordination across providers. In the absence of a benefit package that spans the TB care continuum (from diagnosis through inpatient care), patients are more likely to shift care across private and public sectors for TB services/drugs (Langenbrunner et al. 2009). Multiple providers are unlikely to communicate with one another to ensure that the patient's care is timely, clinically appropriate, and not duplicated. Such behavior can thus lead to excessive health spending, poor quality of care, loss to follow-up, and possibly even increased MDR-TB rates due to uncompleted treatments (Langenbrunner et al. 2009; Figueras et al. 2005).

5.3 Provider Payment Mechanisms

5.3.1 Overview

The MoH has developed a case-based payment system to reimburse services provided at public health facilities (health centers; hospitals). HEFs will reimburse a health facility for each case, or patient or HEF member, treated by that facility. While most countries have developed multiple payment systems for care delivered in different settings (e.g., primary, outpatient, inpatient), Cambodia only uses one (MoH 2014b). Under this system, the MoH prospectively sets prices for a set of health services and reimburses health facilities after those services have been delivered. Case-based payments represent a type of prospective payment system, which has been rolled out in many lower- and middle-income countries. Governments have adopted these systems to contain costs and drive efficiencies in health spending (Langenbrunner et al. 2009, Gottret et al. 2008).

HEF case-based payments are completely bundled. Put another way, a single payment is expected to cover facility costs (clinical and administrative), physician/provider costs, and any other non-service related cost (e.g., drugs, lab tests). Per MoH guidelines, HEF reimbursements for the TB outpatient/inpatient DOTS intensive phase are released following the completion of treatment, or roughly 2-3 months (MoH 2014b). The same occurs for the outpatient TB DOTS maintenance phase in the event of a patient's death, treatment failure, or cure. HEFs will not reimburse a facility if its TB patient is lost to follow-up or treatment fails to align with CENAT protocols.

5.3.2 Issues

1. Many low- and middle-income countries interested in containing costs and improving efficiency have adopted case-based payment systems as an initial step. At the most rudimentary level, such payment systems bundle services at the highest level – each case or patient (Langenbrunner et al. 2009; Gottret et al. 2008). As these systems advance, cases will become more refined. In Cambodia, DPHI guidelines stipulate that public health facilities be reimbursed for each HEF member treated, regardless of their medical condition (MoH 2014b). As will be discussed in Section 5.4, reimbursement rates only vary by the setting under which a patient was treated (outpatient, inpatient) and the type of facility (hospital, health center). Countries like Cambodia are often initially unable to develop more complex casebased payment systems, such as diagnostic-related groups (DRGs), which set reimburse rates by a patient's diagnosis or medical condition at the time of admission. This is in large part due to a lack of data on patients' clinical conditions, utilization trends, and costs, which require more mature health information systems (Langenbrunner et al. 2009). Case-based payment systems that are more refined tend to result in payments that more closely reflect the actual cost of delivering a service. Because HEF case rates are not well refined, health facilities are likely to risk select healthier, less costly patients (Langenbrunner et al. 2009; McIntyre and Kutzin 2016). This results in greater inequities in access to health and TB services; it also hinders public health challenges, such as eradicating MDR-TB.

2. Insurers tend to adopt multiple payment mechanisms for care delivered in different settings (Langenbrunner et al. 2009; McIntyre and Kutzin 2016). By using many payment "levers," health insurers have greater ability to shape the behavior of health care providers, which can result in better health system performance and the achievement of critical policy objectives. While the exact mix of payment systems varies by country, there are common themes across them. For instance, insurers often adopt capitation-based payment models, whereby both prices are set and payments made before services are delivered, for primary care services, because the cost of such services is easy to predict (Langenbrunner et al. 2009; McIntyre et al. 2016). Alternatively, preventive care may be critical for addressing public health threats (e.g., HIV/AIDS and TB), in which case insurers may stimulate utilization of preventive services by adopting a fee-for-service payment model. In Cambodia, HEFs only use a case-based payment system. While appropriate for outpatient and inpatient care settings, the absence of alternative payment models limits the depth and breadth of incentives that HEFs can create for health care facilities.

5.3.3 Recommendations



If designed and implemented well, such reforms could have a significant, positive impact on case detection rates, patient out-of-pocket costs and financial risk protection, quality of and access to TB services, as well as the coordination of TB service delivery (Langenbrunner et al. 2009).

5.4 Prices

5.4.1 Overview

HEF reimbursement rates for a given case are adjusted only for facility type and care type. Specifically, risk adjusters for facility type include health centers, referral hospitals CPA1, CPA2, and CPA3, as well as national hospitals (MoH 2014b). Risk adjusters for care type include the average cost of an outpatient service, the average cost of an inpatient service, long-acting contraception (e.g., IUDs/implants), the average cost of a major surgery, and permanent contraceptive methods. Reimbursement rates are shown in Table 2 (MoH 2014b). HEFs make a single payment to the facility regardless of a patient's diagnosis (e.g., co-morbidities and clinical severity), discharge ward, services provided, or length of stay. In the case where members are admitted to a facility with multiple co-morbidities, the higher payment rate will be given to the facility.

Care Type	MPA (Health Center)	FDH (Health Center)	CPAI	CPA2	СРАЗ	National Hospital
Average Outpatient Cost	N/A	N/A	6,000	8,000	10,000	18,000
Average Inpatient Cost	60,000	60,000	60,000	100,000	I 20,000	300,000
Average Surgery Cost	N/A	N/A	N/A	320,000	400,000	1,120,000

Table 2: Case Rates by Care Type and Facility Type



MPA Services	2,000 to 4,000	2,000 to 4,000	N/A	N/A	N/A	N/A

5.4.2 Issues

- 1) Per key informant interviews, payment rates are likely far below the cost to public health facilities of delivering health and TB services. This is almost certainly the case for private facilities, whose costs almost always exceed those in the public sector. As HEFs (and possible other funds, such as NSSF) take on a greater share of TB financing, cost data from health facilities will become even more important, because they will shape the payment mechanisms used to purchase services and inform the rates at which HIV/AIDS and TB services are reimbursed. This is particularly true if social health insurers in Cambodia eventually decide to contract with private health care providers. Evidence from Indonesia, the Philippines, Thailand, and Vietnam suggest that without up-to-date cost data, public payers tend to set reimbursement rates that are below the actual costs needed to deliver services (Langenbrunner et al. 2009; Kutzin et al. 2010; Somanathan et al. 2014). In response, health care providers are either less likely to treat members insured by those funds or more likely to bring in supplemental revenue from other, less equitable sources (e.g., patient out-of-pocket costs).
- 2) The MoH has not applied any "advanced" modeling techniques to set HEF payment rates for primary, outpatient, or inpatient care. This includes the lack of risk-adjustment for patient case mix (diagnosis/clinical condition), geography (urban/rural), facility type (public/private), or other factors. Risk adjustment is a process by which the average price for a given service (e.g., 20,000 Riel) is adjusted to account for variations in provider costs. For instance, the underlying cost structure for a teaching hospital or urban health center is higher than the one for a non-teaching institution or rural facility delivering the same service. HEF reimbursement is adjusted only by generic facility characteristics (health center/referral hospital/national hospital) and type of service (OP/IP/surgery). The result is that some facilities have less or little incentive to treat patients or provide high-quality services, while others have greater incentive to do so (Langenbrunner et al. 2009).

5.4.3 Recommendations

Policy Recommendations for Pricing

- A third-party agency should conduct a new costing study of TB (or health) services from public and private facilities. This study, coupled with better communication between payers and providers, would inform new base payment rates and expedite the development of a DRG system for HEFs (and the NSSF).
- The MoH should be trained to apply risk-adjustment models to its base payments, to better match payments for health and TB services with the actual costs of delivering those services at different facilities.
- The MoH should initiate efforts to collect new patient and facility level data, as well as use existing data (e.g., PMRS), to inform risk-adjustment models (and thus HEF reimbursement rates).

5.5 Cost Sharing

5.5.1 Overview

CENAT guidelines specify that TB drugs and services at public facilities are free of charge for patients (MoH 2014c). However, public facilities may charge user fees for other health services. As a social health insurance scheme for the poor, HEF members are not required to pay premiums or other forms of cost-sharing (deductibles, co-pays, co-insurance) to receive benefits. As previously mentioned, HEF members also receive transportation and food subsidies for utilizing health and TB services. While TB- suspect patients, regardless of income, should receive free preventive TB services (e.g., tests) at public facilities, those facilities are allowed to charge hospitalized (inpatient) patients who have not yet received a TB diagnosis.

A recent URC (2016) study asked HEF-Os and public hospital directors/managers about user fees for TB services charged to all patients (not only the poor). Results indicated that 6 percent of public hospitals charge patients for TB testing, 62.5 percent charge for sputum negative x-rays, 53 percent for broad spectrum antibiotics, 6 percent for TB medications, 41 percent for TB-related lab tests, 82 percent for pre-confirmation inpatient care (hospitalizations), 6 percent for other TB services, and 24 percent for non-TB services to TB patients. No facilities charged user fees for TB patients receiving inpatient care. These findings suggest that public hospitals generally abide by MoH and CENAT guidelines for inpatient care, and do not charge patients for TB services once a TB diagnosis is given. However, a number of hospitals charge user fees to HEF and non-HEF members for TB services (e.g., tests) that should be free.

Similar questions were asked of HEF-Os and public health center directors/managers. On average, 23 percent charge user fees for TB-related services: 25 percent for TB testing, 5 percent for DOTS, 60 percent for other medications, 5 percent for TB-related lab tests, 5 percent for TB referrals, and 35 percent for non-TB services. Again, many of these services should, per CENAT guidelines, be free of charge for TB-suspect and TB patients, regardless whether or not they are poor. Quantitative data from the HEF's PMRS system suggest that findings from these interviews may slightly overestimate the percent of public facilities that charge user fees for TB services.

5.5.2 Issues

CENAT benefit package guidelines state that TB services should be free for all patients using public health facilities, regardless of income or payer status. This includes patients who have been clinically diagnosed with TB as well as TB-suspect patients. Nonetheless, URC (2016) data suggest that not all health centers and hospitals abide by these guidelines. These findings raise two issues for policymakers to address:

- 1) Once formally diagnosed with TB, the likelihood of a (non-poor) patient incurring user fees will vary by facility (hospital/health center) and type of service (primary/outpatient/inpatient). However, with the exception of inpatient services, the odds of a non-poor TB patient incurring user fees are greater than zero. Put another way, facilities are charging user fees for TB services across most of the TB care continuum. It is not clear whether this finding holds true for HEF members, who are technically exempt from all public sector user fees. User fees in the public sector erode financial risk protection for patients with TB and trust in the public health system. In turn, they will inhibit patients' access to and utilization of TB services; it is also likely that TB case detection and treatment success rates will be negatively impacted.
- 2) A significant portion of hospitals charge user fees for inpatient visits if patients have not yet been formally diagnosed with TB. Similarly, most health centers and hospitals charge users fees to patients



for primary care services, particularly when those services aim to diagnose or confirm a patient's TB status. As discussed in Section 5.2, health facilities will always look for ways to generate revenue. In the absence of clear benefit guidelines, public facilities will continue to charge patients prior to confirmation of TB status. The implications are that TB suspect patients are less likely to seek care at a public facility, which in turn reduces case detection, treatment success rates, and long term outcomes.

5.5.3 Recommendations

Policy Recommendations for Cost Sharing

☑ The MoH should identify strategies to better regulate and enforce TB user fees guidelines.

HEF guidelines should articulate that patients who are diagnosed with TB are to be covered for all related services rendered prior to diagnosis.

5.6 Claims/Reimbursement

5.6.1 Overview

MoH guidelines state that public facilities should submit claims to HEFs for TB patients who have been treated, particularly when HEF payments would fill the gap between MoH funding and the cost of TB service delivery (MoH 2014b). The guideline explicitly mentions inpatient TB services, for which this gap is likely to be positive and larger than for primary or outpatient TB services.

URC (2016) found that, on average, only 43 percent of hospitals charge HEFs for TB services delivered to HEF members. Broken down by clinical services, 24 percent of hospitals submitted a claim to HEFs for TB testing, 50 percent for sputum negative x-rays, 55 percent for antibiotics, 0 percent for TB medications, 55 percent for TB lab tests, 95 percent for pre-TB inpatient care, 8 percent for inpatient services for TB patients, 24 percent of public health centers, and 65 percent for non-TB services to TB patients. Similarly, only 29 percent of public health centers, on average, filed claims to HEFs for TB-related services: 25 percent for TB tests, 10 percent for DOTS, 16 percent for antibiotics, 5 percent for TB lab tests, 10 percent for non-TB services.

5.6.2 Issues

Per findings from the data and discussions with URC staff, the primary hypothesis is that public facilities (HEF-Os and administrators) do not understand MoH guidelines for when to submit a HEF claim for enrolled low-income TB patients (URC 2016). URC also stated that HEF-Os and facility administrators worry that their facility could be penalized by the MoH for submitting HEF claims. PMRS (encounter/utilization) data indicate that such issues have resulted in far fewer claims than would be expected given the actual utilization of TB services by HEF members. This tends to be the case more for outpatient than inpatient TB services. It is impossible to directly compare user fee and claims data for HEF members, because the former were only discussed for all TB patients, regardless of payer status or income group.

the long run as donors reduce (and eventually eliminate) their contributions. The benefit of this policy is that it increases both the referring and referral providers' incentives to coordinate care.

A more immediate concern is the policy that public hospitals receiving a referral patient will not be reimbursed by the HEFs without a letter from a health center. Depending on the relationship that the facilities have with one another, it may be difficult for a hospital to obtain this letter – and it could end up penalized for something that is out of its control. Health centers are only required to submit admissions forms for that patient in order to receive reimbursement; they have no financial incentive to write a referral letter to the hospital. The implications of this policy then are that hospitals may lack the incentive to accept and treat TB patients without an upfront letter from the health center. This could have profoundly negative effects on HEF patients' access to critical TB services and could worsen care coordination across health providers. It also increases the probability of TB patients being lost to follow-up, lower treatment success rates, and increased prevalence of MDR-TB.

5.7.3 Recommendations

Policy Recommendations for Referrals

- The MoH should develop or improve systems to monitor the behavior of health facilities and enforce regulations around referrals.
- The MoH should consider reforms that strengthen incentives for providers to refer TB-suspect and TB patients without compromising fund solvency and efficiencies.
- \checkmark The MoH should eliminate existing guidelines that prevent public hospitals from being reimbursed without a referral letter.
- 1) Monitoring and regulatory systems are critical for ensuring that patients have access to and are receiving TB services, are not incurring excessive out-of-pocket costs, and are not receiving care that is below quality standards. Examples of such systems include facility audits for quality assurance, or putting in place systems for managing patient grievances or complaints. These should be coupled with an increase in the collection and use of claims/encounter data to track patients, the care they receive, and the costs of delivering those services.
- 2) Globally, these tend to be reforms to provider payment mechanisms. Most public and private health insurers have policies in place to ensure that some portion of reimbursements is earmarked to the referring provider. In the Philippines, for instance, the facility receiving PhilHealth payments is required to forward a portion of the payment (e.g., 10-20 percent) to the referring provider (PhilHealth 2014).

ANNEX A: STAKEHOLDERS INTERVIEWED BY HFG

List of Interviewed Stakeholders

Ministry of Health, Department of Planning and Health Information

Ministry of Health, National Center for TB and Leprosy Control

U.S. Department of Treasury, Public Financial Management

University Research Company

GIZ

World Bank, Health Financing Unit

World Bank and Ministry of Economy and Finance, Public Financial Management



ANNEX B: BIBLIOGRAPHY

- Annear P.L., S. Ahmed, and C.E. Ros. 2013. "Strengthening institutional and organizational capacity for social health protection of the informal sector in lesser-developed countries: a study of policy barriers and opportunities in Cambodia." Social Science and Medicine 96: 223-31.
- Boerma, T., P. Eozenou, D. Evans, T. Evans, M.P. Kieny, and A. Wagstaff. 2014. "Monitoring progress towards universal health coverage at country and global levels." *PLoS Med* 11(9): e1001731.
- Bossert T., W. Hsiao, M. Barrera, L. Alarcon, M. Leo, and C. Casares. March 1998. Transformation of ministries of health in the era of health reform: the case of Colombia. *Health Policy Plan.* 13(1):59-77.
- Figueras et al. 2005. Purchasing to improve health system performance. European Observatory on Health Systems and Policy Series, World Health Organization.
- GIZ, on behalf of the Federal Ministry for Economic Cooperation and Development. 2014. Access to Public Health Services: Why do eligible households not make use of health equity fund benefits?
- Gottret, Pablo, George J. Schieber, and Hugh R. Waters. 2008. Good Practices in Health Financing : Lessons from Reforms in Low and Middle-Income Countries. Washington, DC: World Bank. https://openknowledge.worldbank.org/handle/10986/6442 License: Creative Commons Attribution CC BY 3.0.
- Khim K, and P.M. Annear. 2013. "Strengthening district health service management and delivery through internal contracting: lessons from pilot projects in Cambodia." Social Science and Medicine 96: 241-9.
- Kutzin, J., C. Cashin, and M. Jakab. 2010. Implementing Health Financing Reform: Lessons from Countries in Transition. European Observatory on Health Systems and Policies. World Health Organization.
- Langenbrunner, J., C. Cashin, and S. O'Dougherty. 2009. Designing and Implementing Health Care Provider Payment Systems: How-To-Manuals. Washington, DC: World Bank.
- McIntyre, D. and J. Kutzin. 2016. Health financing country diagnostic: a foundation for national strategy development. Geneva: World Health Organization.
- Ministry of Economy and Finance. 2015. Public Financial Management (PFM) Reform Program: PFM Evaluation in Cambodia.
- Ministry of Health. 2014a. National Strategic Plan for Control of Tuberculosis, 2014-2020. National Center for Tuberculosis and Leprosy Control.
- Ministry of Health. 2014b. Circular 3451: Standard Benefit Package and Provider Payment Mechanism for Health Equity Funds. HSSP2.
- Ministry of Health. 2014c. CENAT Diagnostic Guidelines: TB Service Package.
- Ministry of Health. 2015. Estimating Health Expenditure in Cambodia: National Health Accounts Report, 2012-2014 Data. Bureau of Health Economics and Financing of the Department of Planning and Health Information.
- Ministry of Labor and Vocational Training. 2016. Circular 109: Prakas on Health Care Benefits.
- Philippine Health Insurance Corporation. 2012. PhilHealth Circular 010: Implementing guidelines for universal health care primary benefit 1 (PCB1) package.



- Philippine Health Insurance Corporation. 2014. PhilHealth Circular 011: Release of payments for outpatient benefit packages in public health care institutions under the jurisdiction of DoH.
- Somanathan et al. 2014. Moving Towards Universal Coverage of Social Health Insurance in Vietnam: Assessment and Options. Washington, DC: World Bank.
- Savedoff, W., and P. Gottret. 2008. Governing Mandatory Health Insurance: Learning from Experience. Washington, DC: World Bank.
- Tynkkynen et al. 2013. "Purchaser-provider splits in health care the case of Finland." *Health Policy,* August, 111(3): 221-5.
- University Research Company. 2016, forthcoming. The Relationship Between the Health Equity Fund and TB and HIV/AIDS Patients. United States Agency for International Development (USAID).
- Wagstaff, A., and P.H.V. Eozenou. 2014. CATA meets IMPOV: a unified approach to measuring financial protection in health. Policy Research Working Paper Series. Washington, DC: World Bank.
- Wagstaff, A., D. Cotlear, P.H.V. Eozenou, and L.R. Buisman. 2015. *Measuring Progress Towards Universal Health Coverage With An Application to 24 Developing Countries*. Policy Research Working Paper Series. Washington, DC: World Bank.
- World Health Organization. 2010. World Health Report 2010. Geneva.
- World Health Organization. 2015. Tuberculosis Financing Profile: Cambodia. www.who.int/tb/data
- WYG International and Khmer Management Consulting. 2015. External Advisory Panel (EAP) to Review Progress of the Public Financial Management Reform Program.





BOLD THINKERS DRIVING REAL-WORLD IMPACT