

The Aid Debate

The Donors' Challenge in Cambodia's Health Care System

Harris School of Public Policy Studies International Policy Practicum

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Note on the Memo

The following memo was produced by University of Chicago graduate students in public policy, following 20 weeks of focused study on Cambodia, its health care system, and the delivery of development aid. After intensive classroom learning, the 12 seminar students traveled to Cambodia for field research in December 2009. The students assembled a cohesive “bird’s eye” perspective of the Cambodian health care system as they visited dozens of major international donors, governmental programs, community organizations, hospitals and local clinics throughout northern and southern central Cambodia. Their assessment of that landscape informs the findings, analyses and recommendations to follow. It is the authors’ sincere hope that these observations and suggestions will enable the Ministry of Health, donor organizations, as well as both foreign and local NGOs to best meet Cambodia’s pressing health needs.



The Harris School team in front of the Temple at Angkor Wat

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Map of Southeast Asia



Map of Cambodia



List of Acronyms

ADB	Asian Development Bank
CDC	Council for the Development of Cambodia
CCT(s)	Conditional Cash Transfer(s)
DHS	Demographic and Health Survey
HEF	Health Equity Fund
HSP	Ministry of Health's Health Strategic Plan (launched 2002)
HSP2	Ministry of Health's Health Strategic Plan 2 (2008 – 2015)
JICA	Japan International Cooperation Agency
KHANA	Khmer HIV AIDS NGO Alliance
MCH	Maternal and Child Health
MDG	Millennium Development Goal (World Bank targets by 2015)
MFI	Microfinance Institution
MoH	Ministry of Health
MPA	Minimum Package of Activities stipulated by the Ministry of health
NGO	Non-Governmental Organization
RACHA	Cambodia's Reproductive and Child Health Alliance (RACHA)
RHAC	Reproductive Health Association of Cambodia
TBA(s)	Traditional Birth Attendant(s)
WHO	World Health Organization
UNICEF	United Nations Children Fund
UNFPA	United Nations Population Fund
UNTAC	United Nations Transitional Authority in Cambodia
USAID	United States Agency for International Development
URC	University Research Center

Executive Summary

A complex and beautiful country, Cambodia lags behind its Southeast Asian neighbors in most Millennium Development Goal (MDG) measures, from poverty and hunger to health; the country's worst health indicators are in maternal and child health (MCH).

Challenges for the Donor Community

Cambodia's tumultuous history has resulted in the haphazard development of its public health care system, a void of well-trained Cambodian medical professionals, and a poor understanding of modern medicine by Cambodian health consumers. Further, funding within the health care system is too often donor-driven, which results in a misalignment of funding.

Donors can improve maternal and child health outcomes by taking strategic steps to address three major challenges for Cambodian health care: bolstering health system capacity, reducing barriers to access, and improving health-seeking behavior. Donors have much work to do together to improve their own impact on the system.

Health System Capacity

The Cambodian health care system suffers from poor financial and human resources, insufficient oversight and monitoring, and a dearth of regulation. In order to most effectively build the Cambodian health system's capacity to improve MCH outcomes, donor and development organizations should focus on funding initiatives that:

- (1) Cultivate long-term Cambodian skills, leadership, and vision,
- (2) Create mechanisms for internal administration, oversight and independent monitoring,
- (3) Increase medical training and education, and
- (4) Improve regulation of medical care.

Access to Quality Health Care

The major access barriers faced by Cambodians are limited financial resources, costly and limited transportation in rural areas, poor health infrastructure, and inadequate access to formal credit or insurance markets. To improve children's and mothers' access to health care, donors and development organizations should:

- (1) Boost the accessibility and reach of Health Equity Funds (HEFs),
- (2) Deliver complementary transportation services and health infrastructure, and
- (3) Partner to offer complementary livelihood programs.

Poor Health-Seeking Behavior

Four major behavioral challenges contribute to negative health outcomes: unhealthy behavior, a history rooted in traditional healing methods, a trust deficit between the people and the public health system,

and a narrow understanding of modern medicine. To improve health-seeking behavior in Cambodia, donors should seek to:

- (1) Improve health education through national awareness campaigns,
- (2) Invest in community-based education, and
- (3) Increase incentives for pro-health behavior.

Donor Coordination

The potential for Cambodian health care is vast but constrained by the fragmentation of the donor community. The onus is on donors to improve their strategy and coordination. Success can be achieved by engaging in the following approach: long-term (i.e., 20-30 year horizon) vision and strategic planning for the health care system as a whole; leveraging joint resources, programs, and knowledge to provide programs complementary to health care goals; realign aid to focus on demand-driven provisions.

Donor and development organizations have the necessary human capital, funding, and know-how to overcome these challenges. They need to work smarter, not harder, in cooperating to maximize joint impact and to improve the lives of Cambodians in the years to come.

I. SITUATION ANALYSIS

A complex and beautiful country, Cambodia lags behind its Southeast Asian neighbors in most Millennium Development Goal (MDG)¹ measures, from poverty and hunger to health. While the economy has shown promise in the last decade, Cambodia's citizens and institutions still bear indelible scars from 35 years of genocide, civil war and instability. The country's health care system—an agglomeration of well-meaning but uncoordinated foreign aid projects, underfunded governmental programs, and unknowing, poor Cambodian patients—is but one lens through which to understand the history and trajectory of the verdant Southeast Asian nation.

1.1 Introduction

In the past 40 years, Cambodia has undergone monarchy rule, a brutal civil war, bombing by the United States, the starvation and death of a quarter of its people under the Khmer Rouge, Vietnamese occupation, and finally, an internationally-mediated peace. This tumultuous history has left the country battered, beaten, and devoid of much of its precious human capital and the institutions that would otherwise smooth its transition into the contemporary world.

Undoubtedly, Cambodia's most disruptive and notorious regime began in the mid-1970s, overlapping and influenced by the war in neighboring Vietnam. The Cambodian communists who came to power under Pol Pot, the Khmer Rouge, eradicated most of the educated classes during their short and brutal reign (1975-1979). Those who did not flee were often murdered. Estimates count fewer than 60 doctors remaining in Cambodia at the dissolution of the Pol Pot regime—compared to over 500 beforehand.²

The void of health care professionals irreparably hurt the nation's attempts at rebuilding the health care system and attending to the day-to-day care for Cambodia's citizens. The next twenty years of foreign occupation, civil war and peacekeeping did not see active investment in rebuilding Cambodia's institutions. While the Ministry of Health (MoH) has taken significant steps with support from the development and donor communities to improve access to and quality of care in the past decade, the efforts still face dismal historical challenges.

The three main challenges for Cambodian health care involve improving the health system capacity, tackling barriers to access, and improving health-seeking behavior.

This memo examines lagging maternal and child health (MCH) outcomes, and uses the problem as a lens through which to explore the broader health issues in Cambodia. We seek to identify factors that contribute to this lag, organizing them around three areas of public health challenges which

¹ The Millennium Development Goals (MDGs) are eight international development goals that 192 United Nations member states and at least 23 international organizations have agreed to meet by 2015. Three of the goals directly involve health care: reducing child mortality, improving maternal health, and halting the spread of HIV/AIDS, malaria and other diseases. The latter is reported to have met reasonable success, and the reduction of child mortality is on track, but improvements in maternal health are below intended levels and require deeper and more coordinated donor attention (as reported by the MDG Monitor, Table 1).

² International Committee of the Red Cross, "Cambodia: massive aid effort planted seeds of recovery in former "killing fields," <http://www.icrc.org/web/eng/siteeng0.nsf/html/cambodia-interview-011209?opendocument> (Accessed January 18, 2010).

international donors should take as cues to redirect aid efforts. These challenges involve improving the health system capacity, tackling barriers to access, and improving health-seeking behavior.

1.2 Background on Cambodia

Today, Cambodia has an estimated population of 14 million, with about 79% living in rural areas.³ Most Cambodians consider themselves to be Khmer, descendants of the Angkor Empire that extended over much of Southeast Asia and reached its zenith between the 10th and 13th Centuries. The kingdom and its culture waned to the point of oblivion over the following centuries only to be rediscovered by French archaeologists in the 19th and 20th Centuries. In April 1975, the communist Khmer Rouge forces gained power, evacuating Phnom Penh and all other major cities, sending the entire population to work in the rice fields. Various reports suggest that about 1.5 million Cambodians died from execution, forced hardships or starvation during the Khmer Rouge revolution under Pol Pot. In December 1978, Vietnamese forces marched into Cambodia and drove the Khmer Rouge into the jungles. The Vietnamese occupation would last another decade and preside over ongoing civil war.

The 1991 Paris Peace Accords mandated democratic elections and a ceasefire. UN-sponsored elections in 1993 helped restore some semblance of normalcy under a coalition government, but factional fighting erupted again in 1997, leading to the collapse of the first coalition government. A second round of national elections was held in 1998, leading to the formation of a new coalition government and renewed political stability. Since 1998, the Cambodia People's Party (CPP) has been in power with Hun Sen serving as Prime Minister. The effects of such recent instability and the fear of its return can still be felt today.⁴

1.3 Overview of the Ministry of Health and Cambodia's Health Care Sector

Until 1995, the government was focused on installing at least one clinic in every commune, a hospital in every district capital, and a provincial hospital in each provincial capital. It soon became clear to the government, however, that its policies were failing to meet the needs of the Cambodian population. At the commune level, for example, most of these clinics never materialized; in those that did, health providers often lacked the basic skills needed to provide necessary care. At the district level, most hospitals functioned as smaller-scale health centers or clinics, and only a few of those hospitals were equipped to meet residents' needs for more complicated surgical procedures. Complicating matters further, the population covered by these clinics was often either too large for the clinics to handle, or too small to make economic sense.

In 1995, the MoH approved a new approach to the health care sector, meant to reorganize provincial health services by redefining criteria for the locations of these clinics and the basic minimum package of health services to be delivered at each level. The reformed health system now consisted of three levels:

1. *Primary Level*: This level established operational districts serving 100,000 – 200,000 citizens. Within each of these operational districts, the government installed a central referral hospital and a network of health centers within its vicinity. Each of these health centers covered a population of 8,000 – 12,000.

³ The Asia Development Bank, "Asian Development Bank and Cambodia Fact sheet," http://www.adb.org/Documents/Fact_Sheets/CAM.pdf.

⁴ For more information on Cambodia's history, please refer to Appendix 1.

2. Secondary Level: This level established a provincial health department a network of provincial hospitals, with each provincial health department responsible for overseeing the operational needs of its respective districts.
3. Tertiary Level: This level, the most central of the three, consisted of the MoH, the national institutes, national hospitals, programs and training institutions.

As of 2004, the government has been able to launch eight national level hospitals, 73 operational districts, 67 referral hospitals, and about 942 health centers. Only 823 (or about 87%) of these health centers, however, are currently providing the minimum package of activities approved by the government.

1.3.1 Overview of Cambodian Health Indicators

Although health care in Cambodia is substantially improving, it lags behind most of Southeast Asia in MDG and development indicators (see Table 1). Life expectancy, for example, was roughly 60 years in 2008; this marks an improvement of five years since 1990 but is a poor comparison to her neighbors Laos (67), Thailand (70), and Vietnam (74).⁵

Cambodia also boasts a major success story, one that has sent ripples throughout the developing world: efforts to combat the spread of HIV/AIDS in Cambodia are among the most successful in the world.⁶

Table 1. Cambodia: Development Indicators	
Non-MDG	
Population in millions	14.63 (2008)
Annual population growth rate (%)	1.9 (2006–2008)
Adult literacy rate (%)	76.3 (2007)
Percent of population in urban areas	20.9 (2007)
MDG	
Percent of population living on less than \$1.25 a day	40.2 (2004)
Percent of population living below the national poverty line	34.7 (2004)
Under-5 mortality rate per 1,000 live births	91 (2007)
Percent of population using an improved drinking water source	65 (2006)
MDG = Millennium Development Goal.	
Sources: ADB. 2009. <i>Basic Statistics 2009</i> . Manila. UNESCO. 2009. Institute for Statistics Data Centre. World Bank. 2009. World Development Indicators Online.	

The victory in this field has not automatically translated, however, to improved health indicators across the board. MCH indicators remain particularly alarming. The ramifications of unmet MCH needs will reach far into the future in terms of decreased human capital development and increased fertility rates, and if left unchanged, are expected to hinder overall economic development in the country for some time. Poor prenatal care, malnutrition, and infant mortality and morbidity are robbing the country of precious human capital even as Cambodia seeks to rebuild and enhance its regional influence. The MDGs that are not on course to be met by 2015 threaten the overall development of Cambodia, as well as the progress made in other health indicators. The development community must develop ways to better manage the billions of dollars directed toward health care in Cambodia, in order to reduce barriers to quality maternal and child health care. The snapshot below tells a real woman's story, highlighting how poverty interacts with the health care system to produce a sobering situation for MCH outcomes in Cambodia.

⁵ The World Bank, *World Bank Development Indicators (WDI) 2009*, <http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,contentMDK:21725423~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html>.

⁶ Interview with USAID in Phnom Penh, December 9, 2009.

Snapshot: Chanrithy*, a rural mother

Chanrithy is a 32-year-old Cambodian woman living in a remote rural village in the Kampong Chhnang province in central Cambodia. She lives a typical rural life, earning her income from a small rice field that she owns with her husband. They do not earn enough to feed their family and often rely on their neighbors for additional sustenance.

Chanrithy delivered her four children at home with the help of traditional birth attendants (TBAs) because she and her husband were not able to access the nearby health clinic in time, due to poor road infrastructure and prohibitive transportation costs. The typical cost of a delivery at the community health center was \$5.00, which was actually less expensive than TBAs. Two of her four children died in infancy.

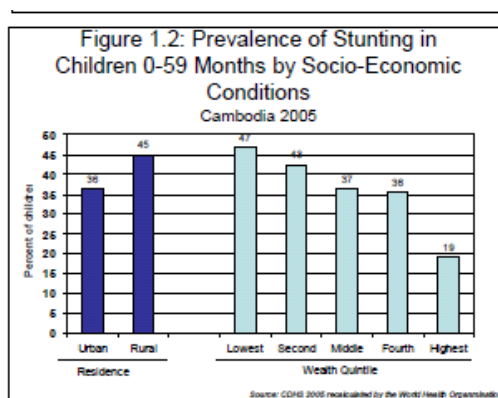
Today, Chanrithy and her husband collect their water from a nearby underground well. The family does not boil the water from this well, so even this fresh source of water is full of bacteria. As a result, the family has suffered from acute diarrhea and dehydration on many occasions. They continue to seek care from traditional healers over medical attention due to their financial limitations.

**As expressed during an interview with Chanrithy on December 16, 2009*

1.3.2 MDG #4: Child Health

The findings of the most recent national Demographic and Health Survey (DHS) in 2005 showed that child malnutrition remains a significant problem in Cambodia. The survey found that 44% of children below age five were affected by stunting (short for their age) – a sign of chronic under-nutrition. Some 18% of the children were severely stunted. The survey also found that 28% of the children were underweight (low weight for age). In addition, 8% of children below five years of age were wasted (thin for their height) – an indicator of acute malnutrition. Figure 1.2 shows that socio-economic conditions were strongly correlated with nutritional status. The prevalence of stunting was considerably lower in urban areas (36%) than in rural (45%). The divergence cuts across economic lines as well. Every second child in the lowest wealth quintile was stunted, compared to one child in five in the highest quintile.⁷

In Cambodia, 44% of children under five are affected by stunting.



⁷ National Nutrition Programme, "Nutrition in Cambodia 2008: an Analysis of Nutrition Status, Trends and Responses," The Ministry of Health, <http://wpro.who.int/NR/rdonlyres/7290A421-9624-4CD1-A0DE-A79AA67562A4/0/NutCom2008.pdf> (Accessed February 11, 2010).

Malnutrition contributes to suffering, death, and direct costs of medical care. It also induces a high financial cost on society. The productivity loss from malnutrition has been estimated at 2-3% of GDP. The logical corollary to this argument is that reduction in malnutrition can help accelerate poverty reduction. Investments in child nutrition are not only food for the soul; they make economic sense.⁸

Causes of death in children under-5

Distribution of causes of death among children under 5 years of age Cambodia, 2000-2003			Annual estimated proportions of death by cause for neonates Cambodia, 2000		
Causes	Deaths ^b (%)	Regional average (%)	Causes	Deaths ^c (%)	Regional average ^c (%)
Total neonatal deaths	100	100	Total neonatal deaths	100	100
Neonatal causes ^a	30	47	Neonatal tetanus	6	3
HIV/AIDS	2	0	Severe infection ^a	29	21
Diarrhoeal diseases	17	12	Birth asphyxia	27	26
Measles	2	1	Diarrhoeal diseases	3	1
Malaria	1	0	Congenital anomalies	5	8
Pneumonia	21	14	Preterm birth ^b	22	32
Injuries	2	7	Others	8	8
Others	26	18			

a. Includes diarrhoea during neonatal period
 b. Sum of individual proportions may not add up to 100% due to rounding.
 c. Sum of individual proportions may not equal 100% due to rounding.



⁸ Ibid.

Child mortality has improved in recent years, but numbers remain quite high. The under-five mortality rate in 2005 was 135.7 deaths for every 1,000 children for the lowest level of maternal education, and 53 deaths for every 1,000 children for the highest. The levels of under-five mortality also differ sharply across the countryside: 75.7 deaths per 1,000 children in urban areas and 111 deaths per 1,000 children in rural. Most child mortality occurs in infancy:⁹ Thirty child deaths out of 100 accrue from neonatal causes alone. Respiratory infections and diarrhea are the next leading contributors to the high mortality rates. From 2000 to 2007, 14% of Cambodian children were born at low birth weight, compared to just 7% in Vietnam. Low birth weight is mainly a consequence of maternal under-nutrition and carries important short- and long-term consequences for child health and development. (See chart on previous page.)¹⁰

1.3.3. MDG #5: Maternal Health

According to the DHS, maternal mortality in Cambodia was 540 deaths per 100,000 mothers in 2005¹¹ and the lifetime risk of maternal death was 1 out of 48¹² – one of the highest rates in Southeast Asia. According to a joint UNICEF and WHO analysis of prenatal care in developing countries, only 38% of Cambodian women reported one or more prenatal visits with a skilled attendant (doctor, nurse or midwife) during the late 1990s to 2001, compared to over 68% of Vietnamese women.¹³

Maternal mortality is 540 deaths per 100,000

1.3.4 MDG #6: HIV/AIDS

Cambodia has achieved the MDG goal of combating HIV/AIDS as there are currently 0.8% of people between the ages of 15-49 living with HIV in Cambodia.¹⁴

1.4 Sources of Under-Performance

Thus far, we hope to have shed some light on the urgency of shifting the attention and resources of the international donor community to MCH outcomes in Cambodia. We now turn our attention to the drivers for these poor health outcomes. The inspiration for (and evidence of) these drivers comes from the on-the-ground experiences of International Policy Practicum students in December 2009. Our experiences and extensive research led us to believe that substandard MCH outcomes are largely due to three central and critical factors: 1) insufficient health system capacity; 2) significant barriers to access;

⁹ A standard definition of an infant is a child up to 2 years (24 months) of age. See (<http://www.medterms.com/script/main/art.asp?articlekey=3966>).

¹⁰ World Health Organization, "Mortality Country Fact Sheet," http://www.who.int/whosis/mort/profiles/mort_wpro_khm_cambodia.pdf (Accessed February 11, 2010).

¹¹ The maternal mortality rate (*MMRate*), is found by dividing the average annual number of maternal deaths in a population by the average number of women of reproductive age (typically those aged 15 to 49 years) who are alive during the observation period. Thus, the *MMRate* reflects not only the risk of maternal death per pregnancy or per birth, but also the level of fertility in a population. See John Wilmoth, "The lifetime risk of maternal mortality: concept and measurement," *Bulletin of the World Health Organization*, <http://www.who.int/bulletin/volumes/87/4/07-048280/en/index.html> (Accessed February 10, 2010).

¹² The lifetime risk of maternal mortality describes the cumulative loss of human life due to maternal death over the female life course. See *Ibid*.

¹³ "Antenatal Care in Developing Countries: An analysis of trends, levels and differentials 1990-2001," WHO Report, 2003. See http://www.childinfo.org/files/antenatal_care.pdf (Accessed February 11, 2010).

¹⁴ See The MGD Monitor, "Tracking the Millennium Development Goals: Cambodia," UNDP (2007), http://www.mdgmonitor.org/country_progress.cfm?c=KHM&cd=116 (Accessed February 11, 2010).

The first point of contact for many Cambodians seeking health care is often a traditional healer or pharmacist. According to one international health expert, 51% of all interactions with private providers are hazardous in Cambodia. Further:

"Health-seeking behavior is dreadful in Cambodia. Cambodians love pills and injections but they have no idea what they are getting. In fact, blue and pink pills are more popular than white pills because they are seen as being more effective by the average Cambodian."

and 3) poor health-seeking behavior. At this critical point in time, international donors have the opportunity to go far in refocusing their efforts to combat these major challenges.

1.4.1 Health System Capacity

Even if families have beneficial health-seeking behaviors and can overcome existing barriers to access health care, there are still no guarantees for the quality of service that they will receive. Human capacity and financial resources are scarce in Cambodia's health care sector; staff members are often either poorly paid, poorly trained, or both. Historically, less than 15% of the Cambodia public sector health budget has gone toward staff salaries, while this number can reach 70% in other developing countries.¹⁵

According to a report issued by the UK Department for International Development, a typical government health care provider receives an average income of about US\$20 per month – far below the cost of living.¹⁶ As a result, many seek additional income from other sources, including private practices, while many more lack motivation and are frequently absent from the public clinics. In attempt to motivate and retain these workers in the public sector, donors have provided merit-based supplemental salaries based on a grading system that measures providers' performance. While these strategies provide some glimmer of hope, they have experienced mixed success in recent years, as many public health centers are still struggling to retain their staff. Making matters worse, a recent news article in the *Phnom Penh Post* reported that merit-based pay has been cancelled by the government in an effort to meet IMF wage bill targets; as of January 2010, donors will no longer be able to supplement civil servant salaries.¹⁷

1.4.2 Barriers to Access

Before Cambodians can even gain access to these substandard health services, they must first overcome a series of obstacles – namely, key infrastructural and financial barriers. These barriers present themselves in the form of poor road infrastructure, a limited number of clinics in rural areas, and a lack of affordable high quality health care alternatives. In addition to these barriers, many Cambodians still lack access to clean drinking water and sanitary facilities, putting a great portion of the population at risk of being exposed to constant and recurring diseases.

Only 15% of the health care sector budget pays staff salaries, while other developing countries average around 70%.

¹⁵ Donor Partner, Interview, December 10, 2009.

¹⁶ Cheri Grace et al., "Review and Recommendations on Salary Supplements to Government Workers Involved in the HIV/AIDS Programme in Cambodia," March 2002.

¹⁷ Robbie Corey Boulet, "NGOs slam supplement cuts," *Phnom Penh Post*, January 7, 2010, <http://www.phnompenhpost.com/index.php/2010010730692/National-news/ngos-slam-supplement-cuts.html> (Accessed on January 11, 2010).

This type of environment is typical in most of rural Cambodia, and by all standards is detrimental to the health and well-being of people living under these conditions, but it is particularly harmful and difficult to overcome these conditions during pregnancy or other medical emergencies that require immediate care and attention. It is typical in rural Cambodia for most children to tend their families' rice fields during the wet season, the time when children are most prone to illness and disease. Children are often injured in the rice fields and require immediate care to prevent infection or permanent injury, but are unable to access a local health center in time to receive the care they need.

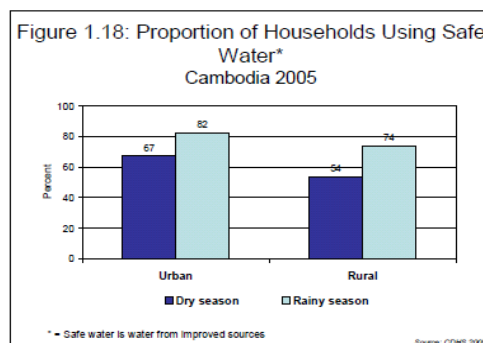
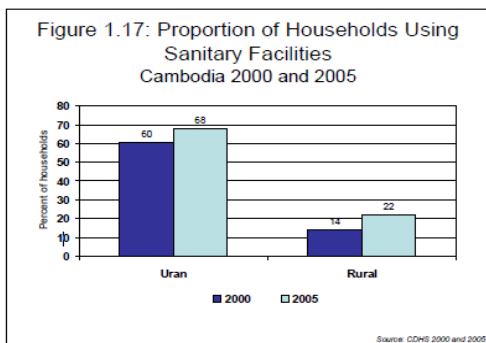
A typical family in rural Cambodia lives at least several kilometers away from the nearest health center, and the poor roads and unevenly distribution of health care providers and equipment mean that many of these families often wait too long before seeking care. Alternatively, the families that are able to seek immediate care are forced to spend large sums of money in order to access it. Many are forced to sell off their private property in order to afford such care.

According to the WHO and World Bank, the minimum package of activities (MPA) in Cambodia (i.e., the basic health care package) – which covers both preventive and curative services including immunization, family planning consultations, prenatal care, and the provision of micronutrients¹⁸ – should cost between \$10 and \$30 per person. However, the government of Cambodia spends just \$3 per person on health care, while private out-of-pocket expenses can amount to as much as \$33 per year for the average Cambodian.

The 2000 and 2005 DHS analyzed sanitary facilities in a survey of households. As seen in Figure 1.17, Cambodia experienced a slight improvement in the proportion of households using toilets between 2000 and 2005. Even so, the use remained low and suboptimal. In rural areas (where 79% of the total population resides) only 22% of households used toilets of any kind. The low use of facilities has helped facilitate the prevalence of diarrhea in rural areas, which in turn has contributed to the high prevalence of child malnutrition.¹⁹

In rural areas, only 22% of households use toilets of any kind.

Figure 1.18 shows the proportion of households using safe water for drinking (i.e., water from improved sources such as pipes, tube wells, protected wells and rainwater). Because of the high use of rainwater during the wet season, the use of safe water is higher during that season. On the other hand, during the dry season, almost half of all rural households used unsafe water, thus increasing the risk of diarrhea in



¹⁸ The World Bank, "Contracting Health Care Services for the Rural Poor," *Reaching the Poor with Health Services: Cambodia* (2007), <http://siteresources.worldbank.org/INTPAH/Resources/Reaching-the-Poor/RPPBriefsCambodiaREV.pdf> (Accessed February 11, 2010).

¹⁹ <http://www.wpro.who.int/NR/rdonlyres/7290A421-9624-4CD1-A0DE-A79AA67562A4/0/NutCom2008.pdf> (Accessed February 11, 2010).

young children. The survey, however, also found that 60% of the households boiled their drinking water (76% in urban areas and 57% in rural) and that several other water treatment techniques were used. Thirty-four percent of the households did not treat their drinking water at all.²⁰

1.4.3 Poor Health-Seeking Behavior

Along with the challenges the government must overcome to improve the capacity of the health care system, and the barriers that Cambodians must overcome to access quality care, Cambodians continue to exhibit poor health-seeking behavior.²¹ This, however, is a result of a combination of a long history of cultural norms and deficiencies in health awareness – particularly, inadequate health education. This lack of a better understanding of proper health standards often leads Cambodians to seek care from traditional healers (which is potentially harmful to the patient). In other instances, when Cambodians are finally able to access a health center or pharmacy, many are ill-advised and tend to make poor health expenditure choices, often taking incorrect or inadequate dosages of drugs.

Another common example of poor health-seeking behavior that we observed in Cambodia involved poor hand-washing practices. Both maternal and child health are linked to sanitary conditions and nutrition, and poor hand washing practices are proven to greatly contribute to the risk of diarrheal infection. One study by the Adventist Development and Relief Agency International found that just 25% of Cambodians practice appropriate hand-washing.²² The 2005 DHS also reported that only 37% of Cambodian children who have diarrheal infection are ever treated. The report also finds that only 28% of Cambodians have access to appropriate sanitation facilities, including safe water supplies and latrines. These hurdles are not easily overcome.

“It is a fantasy to think that the West could change complex societies with very different histories and cultures into some image of itself.”

- William Easterly, *The White Man's Burden*

In addition to these poor personal health habits, Cambodians seeking care will often pay ill-informed drug sellers, untrained healers, or freelancing government health providers for help – and the expenses have often forced people into acquired poverty.²³ As Indu Bhushan, Principal Project Economist for the ADB Mekong Department put it to us, “expenditure on health care is one of the main reasons people are pushed into poverty – they have to sell off assets to pay for services.”²⁴ In regions where the poor lack financial support in the form of Health Equity Funds (HEFs), at least 5% of the households are in debt for health care related expenses.²⁵

²⁰ Ibid.

²¹ This includes patient behavior in preventing illness, identifying disease and treating disease.

²² See “Hand washing a low priority among rural poor,” *Reuters*, posted by the Adventist Development and Relief Agency, <http://www.alertnet.org/thenews/fromthefield/219487/123074661551.htm> (Accessed February 11, 2010).

²³ Eric Van Zant, “Healing Cambodia's Health Care,” *ADB Review* (May-June 2004).

²⁴ Ibid.

²⁵ T. Jordan Wood et al., “Evaluation report: health equity funds implemented by URC and supported by USAID,” URC (2009).

1.4.4 The Role of Foreign Aid

As the government continues to struggle to meet the most basic health care needs of its population, the international donor community has stepped in to help fill this void.

"Cambodia is like a child with 10 different parents; it doesn't know which one to listen to."

- Rithy Chau, Director of Telemedicine,
Sihanouk Hospital Center for HOPE

Unfortunately, however, as the

flow of aid has increased in recent years, so has the government's dependence on aid. According to the U.S. Department of State, about half of the central government budget depends on donor assistance. In the last five years alone, Cambodia has received an average of \$600 million per year in development funds, half of which is provided by NGOs. Multilateral and bilateral donors have provided approximately 29% of total foreign aid, while the remainder has come from private donors.

The majority of these funds go directly through the government's national treasury, and while the role and participation of private donors in the policy-making process has expanded in recent years, their influence on the decision-making processes remains limited. Undermining this limited donor influence is the emergence of donors that provide "no-strings-attached" assistance in exchange for support on political objectives. China is one example of such donors.

This problem is further highlighted by the high levels of corruption in Cambodia, which ranks 158th out of 180 countries on Transparency International's 2009 Corruption Perceptions Index.²⁶ As aid continues to flow into the country, much of these funds are channeled into the pockets of corrupt officials before reaching their intended targets. With so much "unrestricted" aid flowing into the country, there is very little incentive for government officials to ensure that the funds reach their target.

Making matters worse, the Council for the Development of Cambodia (CDC)²⁷ estimates that 268 NGOs are currently operating in the country, working on at least 400 different projects across the various sectors of the economy – with about 70 NGOs operating on at least 84 ongoing projects in the health sector. With so many different stakeholders involved in the aid delivery mechanism, the government must expend much of its limited resources trying to coordinate the efforts of these donors to ensure that the aid reaches all the right targets. As a result of these poorly coordinated (but well-intentioned) efforts, the government and program directors incur great costs to meet the

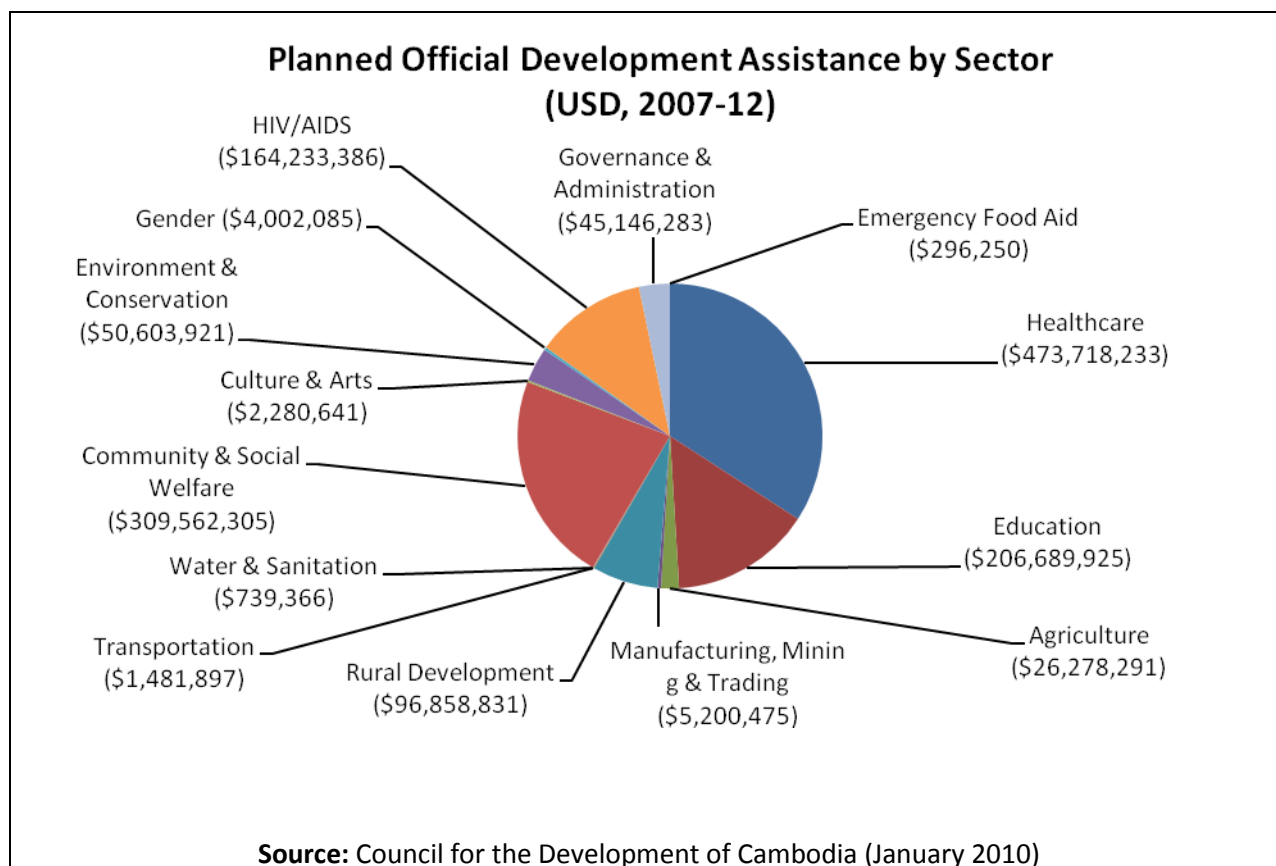
Cambodia ranks as the 9th worst country on the Corruption Perceptions Index.

various (and often overlapping) reporting and accounting requirements of the different donor agencies.

As of January 2010, the main recipients of foreign aid include the Health Care (34%), Community and Social Welfare (22%), and Education (15%) sectors. Meanwhile, the Rural Development and Water and Sanitation sectors have been largely forgotten, receiving just 7% and 0.05% of the total aid planned for 2007-2012, respectively.

²⁶ Transparency International, *Corruption Perceptions Index 2009*, http://www.transparency.org/policy_research/surveys_indices/cpi/2009/cpi_2009_table (Accessed February 11, 2010).

²⁷ The government created the Council for the Development of Cambodia as the in-country aid coordination focal point in an effort to improve the effectiveness of foreign aid.



The combination of such a large pool of donors with the government's low institutional capacity has adversely impacted the effectiveness of aid by raising transaction costs and even weakening Cambodia's ownership of the development process. The Brookings Institute reported in 2005 that the country's aid concentration index, measured by the Hirschman-Herfindahl Index (HHI), was lower than that of other developing nations like Lao, Zambia, Ethiopia and the Philippines. On the other hand, the aid fragmentation index (also measured by the HHI) stood at 0.08 from 1996-2005 – compared to 0.3 for all developing nations and 0.22 for Sub-Saharan Africa.²⁸ This is largely due to the fact that while the level of aid arriving into Cambodia has increased significantly since 1993, the number of foreign donors has also increased steadily – especially over the last five years.

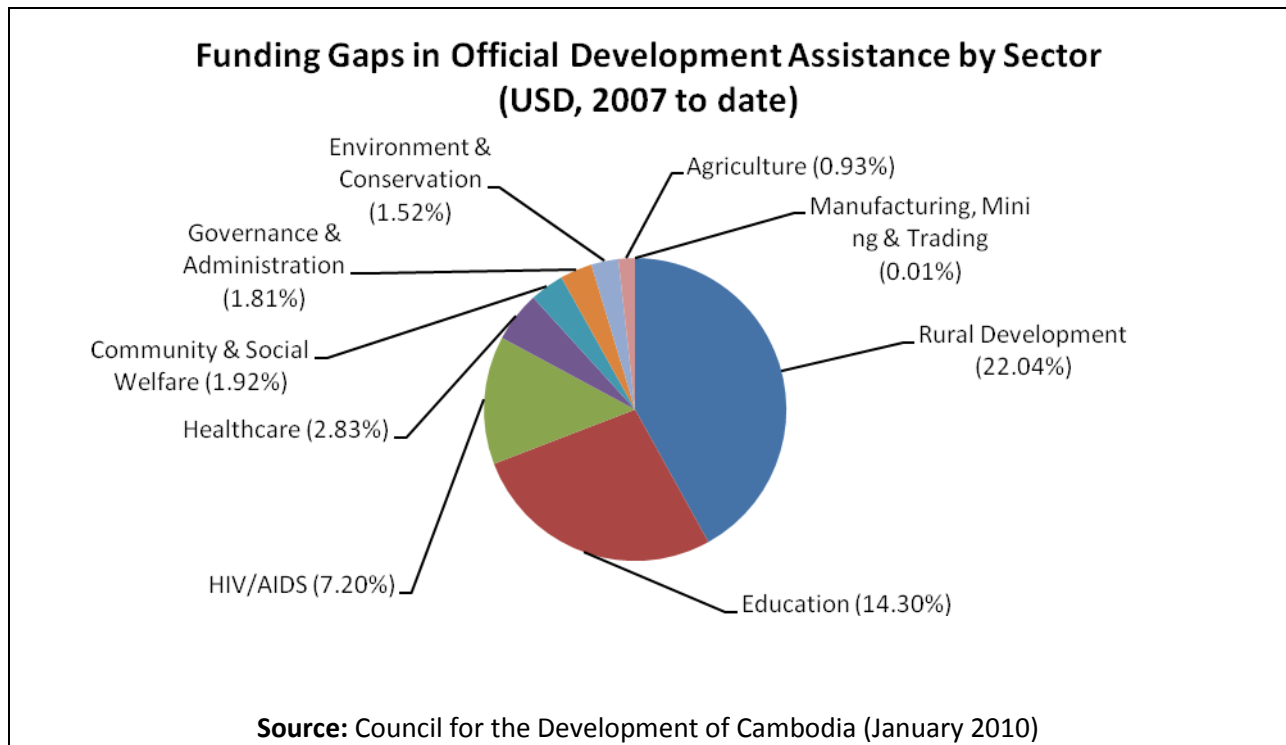
1.5 Health Outcomes: Impact on the Cambodian People

In addition to the fragmentation and coordination problems outlined above, the aid delivery mechanism remains highly volatile. To this end, the government's heavy dependence on foreign aid has not only been problematic for the development process, but also for the Cambodian people themselves – often left out of these discussions.

²⁸ Donor fragmentation and aid concentration, measure by the HHI, are calculated by squaring each donor's share of aid and then summing across all donors. $HHI = \sum_{i=1}^n (DS_i)^2$, where DS_i is the donor share of donor i , and n is the number of donors; higher values indicate more concentrated (and less fragmented) aid.

Funding has been largely unpredictable, and too often the amounts provided are not adequate to support the health sector's funding needs. Pledges of aid disbursements and planned project values are only indicative of the true value of assistance coming into the country, and the committed funds are rarely released on time. On the other hand, the international donor community continues to criticize the government's shortcomings and its inability to deliver the required health care indicators.

This volatility in health funding exacerbates the handicap of aid dependence. It weakens the capacity of the MoH and hinders its ability to outline a comprehensive strategic plan for the health care sector. When the government is unable to provide necessary social services to meet daily needs, the people suffer. The chart below illustrates the funding gaps in planned development assistance to Cambodia by sector since 2007.²⁹



1.6 Section Summary

MCH outcomes in Cambodia are in dire need of attention. These problems are deeply embedded in a health system characterized by a willing but poorly-funded MoH, an over-abundance of foreign donors and projects, and a lack of coordination between the two. Today's governmental capacity and the presence of foreign donor fragmentation is also a result of the country's sordid and tumultuous history. These issues contribute to poor health performance in some areas, and their gravity must be understood and addressed in order to comprehend the actions of the government and Cambodian citizens. The country's history cannot be easily brushed aside and should be considered carefully as health interventions and policies are designed and implemented in Cambodia.

²⁹ While the health sectors ranks fourth in terms of funding gaps, it is worth noting that many projects are taking place in other sectors that are overlapping with the MDG objectives that we focus on in this memo.

The following analysis examines in greater depth the main challenges presented above and outlines a number of recommendations to improve Cambodia's MCH indicators. Targeted, mutually reinforcing interventions in the three challenge areas of capacity, access, and health-seeking behavior can yield significant and substantive improvements in Cambodia's maternal and child health indicators.

II. CHALLENGES & RECOMMENDATIONS

This second section of the report examines the three most pressing challenges to improving maternal and child health in Cambodia in order of their importance: a constrained health system capacity, inadequate access to health care services, and poor health-seeking behavior. Funding within the health care system is too often donor-driven, which results in a misalignment of funding. Rather than targeting the gravest *needs* of the Cambodian people, aid is often driven by the priorities of and perception of feasibility by foreign aid organizations. Despite this challenge, there have been true success stories of foreign donors positively impacting Cambodian health outcomes. These occur where charismatic leadership and careful planning have created *committed, long-term resources* for finding solutions to true needs. We highlight some of these successes below and outline areas where donors can improve aid delivery. We pose several challenges to the entire donor community that, we hope, will inspire a coordination of efforts towards more efficient use of resources aimed at improving the lives of Cambodian mothers and children.

2.1 Challenge 1: Health System Capacity

Of the major challenges facing Cambodian health care, the lack of capacity in the health system belies all others. This deficit encompasses both human and infrastructural capacity: the capacity to deliver quality services, provide competent diagnoses and treatment, both implement and oversee programs (i.e., education, outreach), as well as physically accommodate patients seeking care. Efforts to improve Cambodians' health-seeking behavior and to mitigate geographic and financial barriers to care, which are treated later in this memo, are important parts of the health care equation – but without adequate system capacity, improvements in these areas will not lead to the dramatic improvement of outcomes the Cambodian people deserve. The personnel and facilities, administration and monitoring of services provided publicly and privately, human capital and the MoH's long-term vision for public health form the keystone of Cambodia's health care structure. Addressing these supply-side issues will take time, but strategic planning can help to establish appropriate steps toward achieving critical goals.

2.1.1 Section Overview

The following section addresses specific health system capacity challenges that directly impact maternal and child health (MCH) outcomes. The Cambodian health care system suffers from poor financial and human resources, insufficient oversight and monitoring, and a dearth of regulation. These challenges create or exacerbate further problems for health care, including the absence of long-term (i.e., 20-30 year horizon) vision and strategic planning for the health care system as a whole; inadequate incentives for health care professionals to fully attend their jobs, receive regular training, invest in education, and treat all patients equally; and inconsistent NGO efforts to train local partners to ensure program sustainability. While each is a significant hurdle to overcome, these issues are also feasible opportunities for improvement. In order to most effectively build the Cambodian health system's capacity to improve maternal and child health outcomes, donor and development organizations should focus funding initiatives that (1) cultivate long-term Cambodian skills, leadership, and vision, (2) create mechanisms for internal administration, oversight and independent monitoring, (3) increase medical training and education, and (4) improve regulation of medical care.

Brief History of the Cambodian "Health Care System"

As with most aspects of development in Cambodia, understanding the magnitude of the challenge in delivering quality health care starts with understanding the effects of the Khmer Rouge era. While estimates vary slightly, it is believed that fewer than sixty of the country's medical doctors remained in Cambodia in 1979.³⁰ It is not an exaggeration to say that the health system, like many government institutions, had to rebuild from ground zero in the last thirty years. Following the fall of the Khmer Rouge, the West isolated the government of Vietnamese-occupied Cambodia, exacerbating the country's lack of resources while the country tried to recover. While this rebuilding took place, the country was ripped apart by a twenty-year civil war that ended in 1999.

The government made its first steps toward building a functioning public health system in the years following the civil war. The fragmented government elected to contract with NGOs to manage health services in five randomly chosen districts throughout the country. NGOs were selected through a bidding process and were required to provide a Minimum Package of Activities (MPA) stipulated by the MoH. This package included all preventive and curative health care services, as well as important maternal and child health services.³¹ The ministry implemented two models of contracting – referred to as “contracting in” and “contracting out” – which were tracked carefully to determine differences in outcomes compared to areas with no contracting.

In the *contracting out* model, NGOs were fully and solely responsible for the employment and oversight of staff, the delivery of services and program management.³² The *contracting in* model differed in that NGOs provided support services to Cambodian health workers, but were given no authority to hire or fire employees. This experimental program was widely viewed as successful, particularly in reducing employee absenteeism through salary top-ups and performance incentive programs with regular monitoring. The *contracting out* districts outperformed the *contracting in* districts in most measures. Perhaps the greatest success of this program was the improvement in health care access for the poorest citizens, who saw a significant reduction of their financial burden (out of pocket costs): private out-of-pocket health care expenditures by the bottom half fell by 70% during the contract period.³³

Despite the success of *contracting out*, the model was deemed by the MoH to be unsustainable: the government could not pay outside organizations to provide public health services forever. Further, if Cambodia were indeed seeking self-sufficiency, Cambodians would need to be prepared to take over these programs at some point in the future. Therefore, contracting out was replaced with an internal contracting model.

³⁰ International Committee of the Red Cross, “Cambodia: massive aid effort planted seeds of recovery in former “killing fields,” <http://www.icrc.org/web/eng/siteeng0.nsf/html/cambodia-interview-011209?opendocument> (Accessed January 18, 2010).

³¹ Bloom, Erik et al., 2006, “Contracting for Health: Evidence from Cambodia,”

http://www.economics.harvard.edu/faculty/kremer/files/Contracting_for_Health_6NOV06.pdf (Accessed February 11, 2010).

³² Bhushan, Indu, Keller, Schwartz, “Achieving the Twin Objectives of Efficiency and Equity: Contracting Health Services in Cambodia,” Asian Development Bank, ERD Policy Series Brief, No.6 (2002).

³³ Ibid.

Ministry of Health's Health Strategic Plan 2

In April 2008, the MoH put forth the second Health Strategic Plan (HSP2), following the initial Health Strategic Plan (HSP) launched in August 2002. HSP2 is a seven year plan (2008 – 2015) that identifies strategic priorities to advance public health in Cambodia, and specifically, to achieve Cambodia's health-related MDGs. HSP2 focuses on five strategic areas: health service delivery, health care financing, human resource for health, health information system and health system governance in order to achieve the three main goals of the plan. These goals are 1) Reduce child, newborn and maternal mortality and morbidity with improved reproductive health; 2) Decrease HIV/AIDS; tuberculosis and malaria mortalities (as well as other communicable diseases); and 3) Reduce the burden of other non-communicable diseases and health issues.³⁴

The objectives outlined in HSP2 regarding improved child and maternal health are of particular interest and importance. To achieve these goals, the government has identified the following MCH-related priorities for the MoH as well as other donors and stakeholders:

1. Improve the nutritional status of women and children
2. Improve access to quality reproductive health information and services
3. Improve access to essential maternal and newborn health services and better family care practices
4. Ensure universal access to essential child services and better family care practices

The following chart outlines MoH programs currently in development:³⁵

HSP2 Strategy	Key Components and Interventions
Health Service Delivery	<ul style="list-style-type: none"> • Joint monitoring and supervision of facilities by integrated technical teams • Align ancillary services to reproductive, maternal, newborn and child health needs; including laboratory services, medical supplies and equipment, pharmaceuticals, improvement of blood services provision • Contracting policy and scale up
Human Resources for Health	<ul style="list-style-type: none"> • Full implementation of the recommendations made by the Midwifery Review and the High Level Midwifery Taskforce • Strengthen technical skills and competencies at the minimum package of activities and complementary package of activities level through quality, comprehensive training, education, retention and licensing and registration systems

³⁴ Kingdom of Cambodia Ministry of Health, "Health Strategic Plan 2008 – 2015."

³⁵ Ibid.

Health Information Systems	<ul style="list-style-type: none"> • Increase the completeness of vital statistics through the expansion of Maternal Death Reviews, introduction of Perinatal Death Reviews, and integration of birth registration into the health system
Health System Governance	<ul style="list-style-type: none"> • Clear guidelines and regulations for workforce conduct • Policies for staff management, including remuneration • Policy for Community Health Workers, including dispensing guidelines

HSP2 contains commendable targets and recommendations for a more efficient health sector. In reality, multiple factors impede health sector growth, and the lack of funding and human capacity is principle among them. At the root of many of these problems are poor governance and a lack of transparency, which is discussed in-depth in the following sections.

2.1.2: Causes of Inadequate Health System Capacity

Lack of Financial and Human Resources

The government spends approximately three dollars on health per person per year. Perhaps only forty cents of that expenditure per person ever reaches the rural population. Personal expenditure on health care is however over US\$33 per capita.³⁶ In 2005, donor organizations spent twice as much on health care in Cambodia as did the government.³⁷ The WHO estimates that government spending on the most minimum health care bundle should be at least US\$12 per person per year.³⁸ It is not clear whether this disconnect between needed and actual spending is due to under-spending by the government, inappropriate diversion or allocation of funds, or a real lack of resources. Cambodia is one of the highest foreign aid recipients in the region.³⁹ But, as the director of a major urban hospital explained, Cambodia does not yet have a consistent pool of funds to support the public health system beyond the revenue from outside donors: “At the end of the day, there is simply not enough money in the system.”⁴⁰ There is no robust taxation system and very little insurance in place to pool public money for government health care spending, and staff and medical professionals at health care facilities cannot earn sufficient wages to support their families.

One of the most damaging direct results of this lack of resources is the extremely low salaries, as low as US\$10 - \$30 per month,⁴¹ paid to public sector medical workers. Interviews with in-country NGO’s and aid organizations suggest salaries are now closer to \$50 per month, but it is still difficult for a doctor to support his or her family on a government salary alone; it is even more difficult for nurses and midwives, who are paid even less. Any system in which employees are not paid enough to support their families will fail in

“At the end of the day, there is simply not enough money in the system.”

³⁶ See World Bank, “The World Bank, “Contracting Health Care Services for the Rural Poor.”

³⁷ Kingdom of Cambodia Ministry of Health, “Health Strategic Plan 2008 – 2015”

³⁸ World Bank, *World Development Report (1993,*

<http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/EXTWDRS/0,,contentMDK:20227703~pagePK:478093~piPK:477627~theSitePK:477624,00.htm>(Accessed February 11, 2010).

³⁹ Lum, Thomas, “US Foreign Aid to East and South Asia” CRS Report for Congress, October 2008

⁴⁰ Bill Houseman. Interview. December 16, 2009.

⁴¹ Van Zant, Eric, “Healing Cambodia’s Health care” ADB Review, May – June 2004.

predictable ways. To supplement their salaries, doctors often operate their own, private clinics where they can charge higher fees. This can create “absenteeism” in the public sector: medical professionals collect the government salary while spending much of their time in a private practice. Worse yet, there exists the potential for resources to be diverted away from the public clinic, or that patients may be directed to come back later to the private clinic where they face higher user fees for the same services. This not only detracts from the level of care provided at public clinics, but it also creates a financial barrier to quality care. Only patients with reasonable income are able to afford the private practice fees.

In addition to a lack of sustainable revenue and proper financial incentives, Cambodia's health system also faces a shortage of qualified staff at many levels. The lack of education and training resources for medical professionals hinders the development of the system and its ability to meet patient needs. Improvement on this front requires a serious, long-term investment in human capital. In order for such an investment to pay off, the effort must also seek to improve salaries and incentives to keep trained professionals in the public health sector, and to consider carefully the consequences of diverting resources from short term projects.

A second important barrier to strengthening the human capacity of Cambodia's health sector is the cultural prevalence of patronage. Educational enhancement and professional development are not always merit-based. During in-country interviews, bribes were reported as a common way to get a better grade in school, an employment position or a professional license. In the health care sector, this translates into a lack of human capacity among government administrators, in local health centers, and within the private sector. Doctors, nurses and midwives who have inadequate training are capable of doing more harm than good. For example, one study of private practitioners in Phnom Penh sent trained researchers into clinics reporting TB symptoms; in 24 of 25 cases, the doctors gave advice that was potentially hazardous.⁴²

Insufficient Oversight and Monitoring

The lack of an institutionalized accountability system for health care providers, pharmacists and MoH employees manifests itself in several different ways. Absenteeism, as discussed above, may be a product of the medical worker's need to support their families, but its abuses stem from the ambiguity in, or absence of, regulation defining the relationship between public health care facilities and private practices. Performance based incentives have proven successful for some health contractors in district level programs in Cambodia already. Similar mechanisms are necessary to keep employees at work all day and to evaluate the work they do.

At the administrative level, program evaluation is a critical analytical tool in many sectors. While there are high-quality analysts and administrators within the MoH, there are far from enough to track and evaluate the system from the top down. Resources cannot be aligned properly without first appraising the effectiveness of major investments.

Although external monitoring and performance based incentives yielded promising improvements during the contracting in/contracting out project, a shortfall of organic expertise and human capacity – as well as some political resistance – has prevented the MoH from adopting these practices internally. Such tools undercut the political influence of ranking party members and their ability to disburse

⁴² David J. Wilkinson, “Linking HIV and TB—Underlying issues to consider when scaling up integration of HIV and TB services in Cambodia,” Report prepared for International HIV/AIDS alliance, Phnom Pehn, Cambodia (December 2001).

funding to personal projects, depreciating the value of individual relationships. For this reason it is important for the donor community to continually seek points of leverage to impel the MoH to adopt these measures in a comprehensive manner, and to provide the requisite technical assistance to enable performance monitoring programs.

Inadequate Regulation

The pharmaceutical industry epitomizes the need for stronger health sector regulation in Cambodia. There exists no robust education, training and licensing mechanism for Cambodia's pharmacists. There is also little quality control over the actual drugs that are imported and distributed. The consequences are frightening. Many pharmacists and patients alike do not understand basic drug interactions. Pharmacists often fail to dispense or prescribe, or patients may fail to take, the full course of antibiotic treatments. This contributes to increased drug-resistance, particularly in bacterial infections, tuberculosis, and malaria – three prevalent categories of Cambodia's poor health outcomes.

A secondary effect of the lack of pharmaceutical regulation is the problematic health-seeking behavior it enables. As we will explore in a later section of this memo, Cambodians' poor health-seeking behaviors can lead to patients making uninformed and unhealthy demands, which drug sellers or pharmacists accommodate because of the lack of countervailing pressures from regulation. Many Cambodians feel dissatisfied with their trip to a doctor or pharmacist if they walk away empty handed. They generally have a strong preference for lots of medications, colorful pills and intravenous drips. To satisfy this demand, Cambodians are often provided with vitamin shots or glucose – treatment that makes them feel better for a day or two, but does nothing to address the underlying health problem. An experienced health care consultant in Cambodia aptly described the free-for-all among drug-sellers and pharmacists as “pharmaceutical anarchy.”

Pharmaceutical Anarchy on the Thai-Cambodian Border

The AP reported in December 2009 that a “spot on the Thai-Cambodian border is home to a form of malaria that keeps rendering one powerful drug after another useless. This time, scientists have confirmed the first signs of resistance to the only affordable treatment left in the global medicine cabinet for malaria: Artemisinin.”¹ In response, USAID in collaboration with national malaria programs, the WHO, the Kenan Institute of Asia, and other partners has launched a program to regulate the quality and usage of anti-malarial drugs. Counterfeit drugs are leading to increased resistance to the disease. This study found that weak regulation enabled the significant distribution of these counterfeit drugs.

Source: Raymond, Christopher, “USP DQI Antimalarial sample delivery to Vietnam NIDQC from Thai-Cambodia Cross Border Study, and meetings with Cambodia DDF and USAID.” Phnom Penh, Cambodia June 10-11, 2009.

One mother interviewed in a rural village described the typical practice of “shopping around” for health information: getting advice from traditional healers, drug sellers, and the local public health clinic, and then choosing which advice to follow based on which prognosis seems most appealing. Deciding which advice to follow often depends on shifting perceptions of who has the “strongest medicine.” There exists no reliable informational resource for patients. Because no regulatory body ensures that care is standardized from doctor to doctor or pharmacy to pharmacy, this behavior persists.

2.1.3 Recommendations

Implementing institutional change is challenging – particularly when a country's top leadership lacks traditional incentives (e.g., accountability through transparency and taxation) to improve the health care system beyond what is needed to keep donor funds flowing into the country. While this environment creates added pressure to design strategies and tactics that avoid governance problems, there are many responsible, motivated people working tirelessly within the MoH, NGOs, and private sector organizations to improve health outcomes. Effective development programs will be those that can find ways to take advantage of those dedicated individuals and to leverage aid dollars effectively.

In order to most effectively build the Cambodian health system's capacity to improve maternal and child health outcomes, donor and development organizations should focus funding on programs and strategies that (1) cultivate long-term Cambodian skills, leadership, and vision, (2) create mechanisms for internal administration, oversight and independent monitoring, (3) increase medical training and education, and (4) improve regulation of medical care.

Below, we outline our recommended strategies *to make aid effective in building health system capacity*, along with some tactical examples.



Recommendation: Cultivate Long-Term Cambodian Skills, Leadership, and Vision

If the ultimate goal of development work is to improve Cambodian health system capacity to the point that it is able to stand on its own, without the support of foreign donors and NGOs, then short-term strategies and tactics must be developed with this long-term objective in mind. To that end, it would be helpful for donors and development organizations to work with the MoH to articulate a long-term vision that describes the type of health care system they would like to develop. This vision need not be at a granular level of detail like the medium-term HSP2 plan, but it should lay out basics such as whether the system will be based on health care facilities owned and operated by the government like in many European countries, a network of private health care facilities plus a mix of private and public insurance like in the U.S., or some other type of system. At the moment, some aspects of the system in Cambodia are moving towards the European model, while the prevalence of private sector provision and the recent emergence of private insurance points towards a U.S. approach. The existence of a long-term vision could help temper some of the current problems related to donor fragmentation and coordination, and would allow each stakeholder to design strategies that build towards the long-term sustainability of the system.

The government's midwifery program provides a good example of the need for such long-term vision. There is currently competition between the trained midwives at the local health care centers and traditional birth attendants (TBAs). A variety of different strategies could encourage more women to give birth with trained midwives. Indeed, a number



Improving vision sometimes can be as simple as providing glasses. Here, a rural woman has just received a pair of eyeglasses. Photo courtesy of Ziad Muasher.

are used today. For example, providing cash incentives to TBAs to refer pregnant women to health centers, training TBAs as midwives and employing them at health centers, or establishing legal penalties for botched deliveries by untrained TBAs are all reasonable approaches. Selecting the best strategy is in part dependent on what type of health care system Cambodia hopes to develop in the long run. Given the extent of the health care challenges and high levels of maternal and childhood mortality in Cambodia today, multiple tactics will often need to be deployed simply to improve outcomes in the short term without putting too much weight on the possible unintended long-term consequences. There will also be occasions when two different strategies have similar short-term benefits but different long-term implications. In these cases, a sober vision for the future of health care system will enable the selection of the strategy that is best aligned with those goals.

The incentives within the system must be addressed as well. With only a few dollars spent per capita on health care by the government, underfunding helps create many of the incentive problems that plague the system. In an ideal future, the government would enlarge the tax base to bring more revenue into its health care budget, thereby providing doctors, nurses and midwives with a living wage without having to resort to soliciting bribes or diverting patients to private practices. In the meantime, donors and NGOs can help by working with the MoH to find creative ways to top-up or otherwise augment salaries (this may be difficult given the recent regulation prohibiting salary supplement programs,⁴³ but is still worth pursuing). A recent initiative to pay midwives US\$15 for each baby delivered at the health center is a good example of a program that both increases compensation and provides the correct incentives to medical professionals; concerns about the proper way to handle high-risk pregnancies and complications do still need to be addressed. Finding similar opportunities for encouraging prenatal checkups, providing oral rehydration tablets, and educating families about malnutrition, sanitation and hygiene should be investigated.



Recommendation: Create Mechanisms for Independent Monitoring

Developing an appropriate level of oversight, monitoring, and administrative competency is a critical part of improving Cambodian health care provision. However, addressing issues of oversight and monitoring is a delicate maneuver. Such programs may pose risks to high-level MoH and government employees. On the other hand, improving the competency of administrators does not pose the same degree of risk to those very stakeholders. Focusing on administrative capacity might therefore allow for more straightforward approaches.

Enabling national self-sufficiency is perhaps the most critical and longest-lasting legacy of development aid. With HSP2 and its adoption of a “contracting-in” model for NGO-related health care provision, the MoH has made clear its desire to achieve self-sufficiency in administering and implementing programs. One way development agencies can make a concrete impact on health system capacity is to include budgets for technical assistance to health professionals and train them to take over program implementation and monitoring roles in the future. This idea is not new – it was implemented with great success by USAID in its establishment of the organization now known as RACHA (see text box) – yet many of the organizations we interviewed acknowledged that foreign NGOs do not always follow this model. The funds to hire and train Cambodians—as educators, leaders and administrators, not just program volunteers—need to be included *within initial project budgets*. In this way, the follow-on personnel receive appropriate training in contract oversight, technical issues and project management,

⁴³ The Phnom Penh Post, “NGOs Slam Supplement Cuts,” Robbie Corey Boulet, January 7, 2010 (<http://www.phnompenhpost.com/index.php/2010010730692/National-news/ngos-slam-supplement-cuts.html>)

enabling important health service and education programs to become sustainable fixtures in the health care system, rather than a temporary band-aid. This type of model compliments both the HSP2 as well as the expressed MoH desire to increase self-sufficiency on the ground.

Capacity-Building Success Story: RACHA

Cambodia's Reproductive and Child Health Alliance (RACHA) was formed by USAID in 1996, and began operating its targeted community education and outreach programs at the provincial level in three operational districts. A key component of the USAID mission with this program was "capacity building" – that is, specific efforts to train and educate local Cambodian employees and volunteers – which turned out to be critical to the organization's ongoing success.

In 2002, USAID was told that RACHA funding would not be supported in the next foreign aid bill. In the space of 18 months, foreign and local staff worked feverishly to ensure a smooth turnover, particularly in terms of technical support – but thanks to eight previous years of side-by-side capacity building work, the transition was successful. RACHA became fully Cambodian run and operated in 2003, and is highly regarded as an authority on localized approaches to reproductive and child health issues. They now serve more than 2,329 villages across 16 operational districts, reaching more than two million Cambodians with community health programs. Capacity building remains an important part of RACHA's mission: in addition to community education, RACHA supports and seeks to improve capacity at MoH health centers in eight provinces. Their website provides 49 capacity building articles, guidelines and studies, from internal RACHA libraries and other NGOs, discussing approaches to training, performance improvement, quality improvement and institutional development.

In addition to coordination efforts with the MoH, as discussed above, increasing coordination among donors will help to better target MCH challenges and improve outcomes. In December 2009 interviews, multiple organizations expressed that much of their focus and talent has been directed toward HIV/AIDS programs, because so much aid money is earmarked for that work. Donors could make a significant improvement in MCH outcomes by supporting those programs at a similar level, providing incentives for the some of the most talented Cambodians to focus on MCH rather than HIV/AIDS. Simply put: resources attract talent.

Finally, the need for better oversight and monitoring is clear. While this would be best addressed by the development of an independent Cambodian oversight agency within the government, it is difficult to imagine any such truly independent organization emerging in today's Cambodia. An NGO could attempt to create one alongside the government, but it would be easy for the government to frustrate the efforts of such an organization by withholding information or by simply ejecting the NGO from Cambodia. Global Witness suffered such a fate in 2003 (Global Witness had been acting in the role of independent monitor of the forestry sector).⁴⁴ The long-term donor and development agency strategies that are most likely to succeed in creating an independent oversight and monitoring function will do so from within the Cambodian government. Key elements of this strategy could include:

⁴⁴ Global Witness, "Cambodian government terminates independent forest monitoring," http://www.globalwitness.org/media_library_detail.php/291/en/cambodian_government_terminates_independent_forest (Accessed January 20, 2010).

1. Demonstrating to rank-and-file MoH staff the benefits of independent oversight, by citing concrete examples of success in projects that allow such a role (e.g., the contracting-in/contracting-out program);
2. Embedding best practices in individual projects whenever possible; and
3. Continuing to build support for oversight and monitoring within society.

Ultimately, the government will begin to address this issue when enough pressure is brought to bear from within the MoH (especially as lower-level staff advance to positions of authority) and through political demands from the people.



Recommendation: Increase Formal Medical Education

A sustainable health care system will require improvements in the incentives and training of doctors, nurses, midwives, and pharmacists – and, importantly, improvements in the initial and continuing medical education of health care professionals. The Khmer Rouge actively persecuted highly-educated Cambodians, torturing academics and driving them to leave. Further, the ensuing Vietnamese regime did not actively invest in “Western” (read: non-Communist) forms of higher education, neglected exposure to modern medical techniques and discouraged study in English. As a result, Cambodian medical students were largely unable to study “Western,” modern medicine from 1974 until 1993. Those well-trained doctors that *did* exist often found they could not support themselves in their profession because of low salaries and left the profession or the country. Most of Cambodia’s medical professionals have very little or no formal medical education. While “training” has improved, there is no concerted effort to address the underlying issue: a lack of formal medical education.

International NGOs do what they can for the short term, working to improve training and education by providing cash incentives for attending seminars. This may help medical professionals identify and treat certain, specific diseases (e.g., TB, malaria, AIDS). However, it also exacerbates the absenteeism problem for public servants. In meetings with rural health care providers, we often heard that they had “too much training to remember,” though very few of them had attended a medical school or completed a degree program.⁴⁵

The long-term solution is to bolster the country’s formal medical education system, and this is a continuing unmet need that, as of yet, no international donor is actively pursuing. In the short-term, organizations can improve the situation by 1) offering conditional scholarships for Cambodians to attend medical schools abroad; 2) supporting the training programs of private hospitals (e.g., Angkor Hospital for Children and Sihanouk Hospital Center of HOPE); 3) expanding their offerings of health programming to complement existing public services; and 4) focusing on longer-term, less-frequent training programs for which there is monitoring to reduce repeat attendance.

⁴⁵ Although we could not find statistics on the Cambodian case, Banerjee, Deaton, and Duflo find in Rural Rajasthan that “41 percent of those who called themselves ‘doctors’ do not have a medical degree, 18 percent have no medical training whatsoever, and 17 percent have not graduated from high school.” We suspect that the numbers are much higher in Cambodia, given its history. *The American Economic Review* (May 2004).

In particular, funding a large number of scholarships to allow promising students to attend medical school outside of the country could help raise the standards for medical education by exposing incoming medical professionals to high-quality, professional training. The existence of such scholarships could provide an incentive for young students to pursue multiple avenues of educational and professional development and for parents to put additional pressure on local elementary and high schools to improve quality. Scholarships would be contingent upon the students' return to Cambodia to practice medicine, similar to World Bank scholarships for students in developing countries.

Expanding on existing private hospital training programs would also help to improve medical care in Cambodia. Hospitals such as the Sihanouk

Hospital Center of HOPE and Angkor Hospital for Children provide excellent care to patients as well as high-quality training and development of medical professionals. These hospitals operate with an almost entirely Cambodian staff supported by a handful of Western-trained physicians and administrators, and each accepts a number of public-sector doctors for rotations to build skills. These facilities are exceptional and should be supported, but it is unrealistic to propose simply replicating them throughout the rest of Cambodia. Rather, funding should be provided to support a more robust program to rotate public sector professionals through those hospitals for several months at a time. Based upon our conversations at rural clinics, the typical doctor, nurse or midwife attends a series of one or two week trainings after completing formal medical education. By providing a program of less frequent but longer training in an environment with a proven record of success, health centers will be better able to rearrange work schedules and employees will improve skills for the long-term.



Recommendation: Improve Regulation of Medical Care

As described earlier, nowhere are the negative effects of inadequate regulation more evident than in Cambodia's pharmacy sector. The existing "pharmaceutical anarchy" not only leads to patients receiving unneeded or harmful medications, but can perpetuate misinformation about health issues. It is impossible to conceive of a truly effective health care system in Cambodia without pharmacies and drug

Angkor Hospital for Children Satellite Facility

The Angkor Hospital for Children (AHC) is currently building out a satellite facility in the Sotnikum district, forty-five minutes from the main hospital in Siem Reap, adjacent to an existing public hospital. The satellite clinic is being built to expand the reach of AHC, reducing the transportation burden on rural families, but it was also designed to assist the public hospital next door. AHC is installing a water filtration system and will share some of the clean water with the public hospital. In a departure from the practice at the main hospital, the AHC clinic is planning to charge a small fee to each patient who is able to pay, and will donate all collected fees to the public hospital. Finally, because of their expertise with children and newborns, the AHC clinic is preparing to take on the most challenging pediatric cases, reducing the burden on the public hospital.

While the current plans for the AHC clinic do not address oversight and monitoring directly, further expanding the concept of "leadership-sharing" along with resource sharing could be possible once the benefits of the public-private cooperation are apparent. Private hospitals like AHC provide good examples of internal oversight and lack of corruption. By further integrating operations and cooperating at the administrative level, and constantly demonstrating the link between sound administrative practices and improved patient health outcomes, the culture, attitudes, and expectations of public hospital management could be influenced over time.

sellers being regulated in some way. Yet the current government shows little interest in this pressing problem. Even NGOs, many of whom conceded in interviews that it was indeed a problem, are not focused on fixing it. Part of the problem is an improper “demand” for pharmaceuticals, which is a behavioral issue that should be simultaneously addressed through education campaigns; Section 2.3 of this paper describes this intervention in more detail. On the “supply” side, donors and development agencies should work with pharmaceutical suppliers to develop a system industry standards and self- or peer-regulation outside of the government. They should match these efforts by strengthening the education and licensing standards for individual pharmacists. Such a regulatory body can induce better behavior, reward those who are compliant in their administration of drugs, and increase the risks and punishment of non-compliance with “good” pharmaceutical behavior.

*Self-Regulation in the Cambodian
Microfinance Industry:*

Although outside the realm of health care, Cambodia boasts an international success story in its ability to form a voluntary membership association of microfinance institutions (MFIs), from which lessons can be learned for application in the health care sector. In the late 1990s, MFIs found that they were experiencing an increase in delinquent loans due to individuals “over prescribing” to loans across different lending institutions. There was no governmental regulatory body or market-based system such as credit bureaus that exist in many more developed economies to solve this challenge. In January 2005, seven MFIs came together to form the non-profit Cambodian Microfinance Association to create their own solution. There, the competing institutions come together to share information and “regulate” the lending industry within their own country. The association has become a model for other developing countries that face the same challenges.

More effective regulation of the pharmaceutical industry in Cambodia is in the long-term interest of patients, doctors, and the country's economy (with the development of healthy human capital) – and even drug manufacturers. Current practices not only contribute to drug resistant infections, but will also likely lead to a long-term reduction in Cambodians' trust in medicines as a solution to their health problems. Drug companies, assisted by development organizations, have the expertise to develop certification programs and the power to enforce it through their control of the drug supply. While it would be difficult to transform today's anarchy into a well-regulated and controlled system overnight, starting with basic standardized processes and supporting a universal “pharmaceutical code of conduct” could help to set the right foundation for future development.

A short training program that educates drug sellers about the basics of what each medication is for, how it should be used, and the dangers of mixing or misusing drugs would be a dramatic improvement over the status quo. For example, the use of oral rehydration tablets could help avoid a large number of childhood deaths from diarrhea. If drug sellers were educated about their benefits and when they should be administered, children throughout Cambodia would benefit. Further, because many Cambodians also go to

pharmacies and drug sellers for medical advice and information, the training could help to provide basic instruction on maternal and child health issues where it is otherwise lacking. For example, drug sellers could be taught to refer pregnant women to the health center for a prenatal checkup and could then be the woman's source for iron supplements. Other systems of private-sector led regulation can be found around the world (see text box).

2.1.4: Summary: Bolstering Health System Capacity

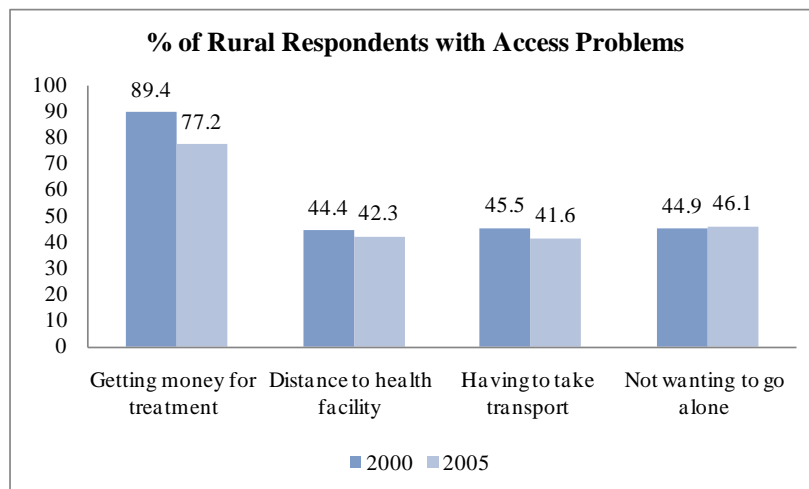
Strengthening health system capacity is essential to improving overall Cambodian health care and MCH outcomes. Efforts to improve access to quality care and health-seeking behavior will be futile if well-maintained hospitals and clinics, competent and properly incentivized medical professionals, and effective oversight are absent from the equation. Cultivating long-term Cambodian skills, leadership, and vision; creating mechanisms for internal administration, oversight and independent monitoring; increasing medical training and education; and improving regulation of medical care are four significant, concrete steps that NGOs and donor organizations can take to help create a strong, functional foundation for Cambodia's health care system.

2.2 Challenge 2: Access to Quality Health Care

For the majority of Cambodia's population, the desire for improved care is met with prohibitive financial and geographic realities. Cambodia's population is largely rural and more than 40% live on less than US\$1.25 per day.⁴⁶ The cost of medical care (including clinic visits and medication), and the transportation costs to reach a clinic, create barriers to access which delay care and can force families into poverty. Long distances and poor roads mean mothers in labor may be unable to reach the nearest clinic before delivery; more than 50% of births in Cambodia were not attended by skilled health staff in 2004.⁴⁷ Children may not be treated for simple conditions like malaria and diarrhea because families cannot afford to pay for a doctor's visit. These simple ailments can quickly escalate into life-threatening conditions without medical attention. In cases where families do seek treatment, medical costs can force families into acquired poverty. An Oxfam study in 2000 observed that more than 40% of people who had recently lost their land lost it as a direct result of health care payments.⁴⁸ Addressing the underlying access problems created by poor infrastructure and high costs is critical to improving MCH outcomes.

2.2.1 Section Overview

Barriers to access are oftentimes responsible for inequitable health outcomes (especially for rural and ultra-poor communities), fatalities resulting from maternal and child health emergencies, and sub-optimal demand for preventative care. The major access barriers faced by Cambodians are limited financial resources, costly and limited transportation in rural areas, poor health infrastructure, and little to no access to formal credit or insurance markets (see table below). In order to most effectively support efforts to improve children's and mothers' access to health care, donors and development organizations should: (1) boost the accessibility and reach of Health Equity Funds (HEFs),⁴⁹ (2) deliver complementary transportation services and health infrastructure, and (3) partner to offer complementary livelihood programs.



⁴⁶ 2004 figure, <http://go.worldbank.org/NT2A1XUWP0> (Accessed February 11, 2010).

⁴⁷ See <http://go.worldbank.org/NT2A1XUWP0> (Accessed February 11, 2010).

⁴⁸ L. Gollogly, "The dilemmas of aid: Cambodia 1992-2002," *The Lancet*, Vol 360 (2002).

⁴⁹ Health Equity Funds are used in Cambodia to pay the health care costs of poor people who cannot afford it. There are different variations in design and coverage of these funds and will be discussed later in the section.

2.2.2 Causes of Limited Access

Limited Financial Resources

Limited financial resources reduce access to health care services for poor women and children. An overwhelming 82.9% of pregnant mothers in rural areas delivered at home in 2005. The predominant reason for deliveries at home is that women are poor and cannot afford to pay health care costs. There are two major components of this cost: the service fees (including prenatal visits, delivery, and medication) and transportation costs to health centers. The 2005 DHS reveals the gravity of this issue; more than 77% of rural women had concerns about “getting money for treatment;” 40% were concerned about long distances to health facilities and associated transportation costs. As one prominent analyst of the Cambodian health market put it, “[p]aying for health care, particularly secondary or tertiary care, is ... a major cause of destitution among the poorest sections of the community.”⁵⁰ The few who are able to pay for these services are often pushed into poverty because of health-related expenditures.

An overwhelming 82.9% of pregnant mothers in rural areas delivered at home in 2005.

As Indu Bhushan, Principal Project Economist at the Asian Development Bank's (ADB) Mekong Department, said, “expenditure on health care is one of the main reasons people are pushed into poverty—they have to sell off assets to pay for services.” These assets are often income-generating and their loss greatly reduces future earnings.

Poor Transportation and Health Infrastructure

Poor roads and costly transportation to the nearest health facility are common and significant barriers to health care in rural areas. It can take up to a day for an expectant mother to reach a health center and longer to reach a provincial hospital in the event of a complication.⁵¹ These difficulties are multiplied in the rainy season when dirt roads are washed away or flooded. For some communities on the Tonle Sap, a large lake dominating the center of the country, intermittent visits from a floating lake clinic represent their only access to quality health care. Van Chivorn, the associate executive director of Reproductive Health Association of Cambodia (RHAC), claimed that improving rural transportation would be one of the [more] effective methods of reducing maternal mortality.⁵²

Poor water and sanitation infrastructure also contribute to health care problems. According to the ADB, 10,000 Cambodians die each year as a result of poor hygiene and sanitation. The majority of these are children.⁵³ Just 20% of Cambodians have access to sanitation and only 50% have access to clean water.⁵⁴

Kampong Chhnang province along the Tonle Sap is home to many water communities. These communities reside in floating domiciles on the lake that are secured to pylons driven into the mud during the dry season. During a visit to one of these lake communities, commune leaders explained that

⁵⁰ Wilkinson, David, John Holloway, and Pierre Fallavier, “The Impact of User Fees on Access, Equity and Health Provider Practices in Cambodia,” Report prepared for Health Economics Task Force, MoH/ WHO/ Health Sector Reform Phase III Project. Phnom Penh, May 2001.

⁵¹ E. Riddell, “Indigenous women working towards improved maternal health: Ratanakiri Province, Cambodia.” *Health Unlimited* (2006).

⁵² Van Chivorn, Associate Executive Director RAHC, Interview, December 14, 2009.

⁵³ K. Bloom, “ADB and the health sector in Cambodia: A briefing note,” (2009).

⁵⁴ *ibid*

many health problems resulted from the people and livestock defecating in the same water used by families for eating, drinking and cleaning. Most families do not boil their water and community water filters have only recently been introduced through grants by organizations like the ADB. The health risk is readily apparent. Once sick, some families have to travel as far as ten kilometers in order to reach the community's only health clinic. That is no small feat for a poor member of a waterborne community where boats, let alone the petrol to run them, are a high value resource.

Limited Access to Formal Credit and Insurance Markets

Rural poverty is widespread in Cambodia, and an estimated one-third of the country's population lives below the poverty line. The country's financial sector is characterized as underdeveloped, lacking rural development banks and a weak rural finance network. The Asia Resource Center for Microfinance estimates that the total demand for credit by micro and small business entrepreneurs could amount to US\$100-125 million, and only 45 to 55% of this amount is provided by existing providers.⁵⁵

While traditional credit markets have been growing in Cambodia over the past 15 years, widespread rural poverty and generally poor roads mean that big banks have little incentive to reach out to Cambodia's rural areas. Microfinance and microcredit institutions (MFIs) have been growing to meet this market need, and Aleda Bank has been particularly successful in rapid expansion across rural areas.

Only 45 to 55% of the total demand for credit by micro and small business entrepreneurs is being met.

The need for more capital does constrain the ability of MFIs to lend. One of the major barriers for MFIs is gaining the trust of their clients to deposit money into their banks, which would allow the banks to make more loans. Bun Mony of Sathapana Ltd. said that several microfinance institutions attempted to increase savings deposits within their banks through a national media campaign promoting savings within microfinance institutions. Although the campaign was successful in increasing deposits, those deposits went disproportionately to the corporate banks, not microfinance institutions.

The potential of microfinance and microinsurance institutions to provide protection against adverse shocks like death, disease and others is largely unrealized. The absence of these services leads to deepened poverty because poor families cannot invest in business development or hedge against shocks such as high health care costs or extreme weather that devastates crops, land, or animals.

2.2.3 Recommendations

Addressing the challenges of poverty, transportation and health infrastructure, as well as access to credit markets, is difficult and may seem out of the purview for international donors attempting to improve health outcomes. However, there are specific strategies in which donors can engage that are both *necessary* and *achievable*. To improve maternal and child health outcomes, donor and development organizations should 1) boost HEF accessibility and reach, 2) incorporate transportation solutions into each and every health project, and 3) partner with other donors to provide key health infrastructure such as sanitation and clean water projects and to provide complementary livelihood building programs. The following recommendations include strategies to make aid effective in improving access to quality health care.

⁵⁵ "Cambodia Country Profile," Asia Resource Center for Microfinance. Accessed online 4 February 2010 at http://www.bwtp.org/arcm/cambodia/I_Country_Profile/cambodia_country_profile.htm.



Recommendation: Boost the Accessibility to and Reach of Health Equity Funds (HEFs)

Health Equity Funds (HEFs) can be an effective tool to improve access to health care services for poor women and children. HEFs are intended to cover major health-related costs incurred by the poor who cannot afford to pay for medical services. HEFs in Cambodia generally cover the costs of medical care, transportation and food for the poor. The process involves pre-identifying the poor and providing means-tested exemption of health care costs. Projects to institute standardized identity cards indicating income level have met with varying success.

HEFs have been operating in Cambodia for more than a decade and have grown substantially in the last few years. Multiple evaluation studies reveal that HEFs have been successful in improving poor people's

A remarkable 70% of women covered by Health Equity Funds gave birth at health centers or referral hospitals.

access to health services (evidenced through increased utilization of government health services) and reducing health-expense induced poverty. The recent evaluation of USAID-supported HEFs by University Research Center (URC) showed a promising picture; the 22 HEF schemes evaluated, which cover one-third of all operational districts in the country, witnessed a sharp increase in health care utilization by the pre-identified poor, indicating increased access. A remarkable 70% of women pre-identified as poor and covered by HEFs gave birth at either health centers or referral hospitals. HEFs have also reduced indebtedness due to health-related reasons.⁵⁶

Other studies have also produced similar results. A 2001 evaluation of HEFs used in Phnom Penh by the Urban Health Project also revealed that the "project effectively protected the poor against the high costs of health care, and also prevented people from falling into poverty as a consequence of high health care costs."⁵⁷ Another evaluation of HEFs in the Sotnikum district in Cambodia concluded that the funds "improved equity in access to health services by not discriminating in the provision of care between the poor and the non-poor."⁵⁸

Donors should support the government by striving to replicate the remarkable success of HEFs on a national scale to improve maternal and child health outcomes. While pursuing this goal, however, **four** important considerations need to be taken into account. First, very few HEFs provide coverage at the health center level; most HEFs cover district hospitals which are longer distances away from the rural poor. Second, the witnessed increase in health center utilization has been concentrated in child-delivery services; this means rural families are not utilizing health centers for pre-delivery checkups, child diseases and other consultation services. Third, the increase in referral hospital utilization has been concentrated in in-patient services; there is only modest utilization of referral hospitals out-patient services. Fourth, there are exclusion errors in HEF pre-identification schemes, resulting in some poor being mistakenly identified as "not poor," thereby being restricted from access to medical services.

1. The first consideration highlights a discrepancy between the services covered by HEFs and the services most needed and utilized by HEF participants. Public health centers are the first point of contact with patients and are geographically closer to rural populations rather than larger

⁵⁶ Grundmann, Jordanwood, and Pelt, "Evaluation Report: Health Equity Funds Implmeneted by URC and Supported by USAID." University Research Co., LLC (2009).

⁵⁷ Bitran, Damme, Meessen and Turbat, 7.

⁵⁸ Ibid, 7.

referral hospitals. But, HEFs have only recently begun to cover health center utilization. The first health centers to come under HEF coverage began in late 2005. This area deserves far greater support.

2. Very modest growth in utilization rates of health center consultation services could also improve from greater HEF coverage. Currently, utilization rates are slightly greater than 5%. The implications of greater utilization of consultation services for maternal and child health are clear: improved access would increase the frequency of prenatal visits for pregnant women and the treatment of childhood diseases.
3. Exclusion error in pre-identifying the poor is one of the largest hurdles to HEF success. The URC report indicates that "questions about perceptions of the pre-identification process revealed that ... 25.7% of respondents felt there were exclusion errors."⁵⁹ The implication is reduced access to health services for a sizable number of people.

Currently, only 5% of the population utilizes Health Equity Funds.

All these limitations must be addressed while also pursuing an expansion of HEFs. The monitoring of pre-identification regimes is a suitable place for NGO intervention and technical assistance. Such an intervention, coupled with health awareness programs, could yield significantly higher utilization rates over the medium term. This should be complemented by larger NGOs and donors injecting more funds into HEFs.

HEFs provide another key advantage for improving access to health care: generating income for public health facilities. Because medical fees are paid by the government or donors, HEFs can create a favorable incentive mechanism for the medical staff to treat the poor. In this way, doctors no longer must face the difficult choice between treating the poor or practicing financial discrimination to meet their operating costs and salaries, or going for private practice as discussed earlier.⁶⁰

Even though HEFs are successful in improving access to medical services for the poor, they must be coupled with programs to increase health awareness and improve health-seeking behavior. The improved provision of, access to and knowledge of rural health center services would thereby yield greater utilization of both delivery and non-delivery services.



Recommendation: Fund Complementary Programs in Transportation and Public Health Infrastructure

In order to improve access to health care in Cambodia, donors and development organizations will need to support initiatives which improve roads, distribute health sector resources equitably, and provide clean water and sanitation to rural communities.

Decreasing the average amount of time and distance to basic health care is essential to improving MCH outcomes. A first step towards this goal is to support the implementation of rural road and emergency transportation projects. Donors should provide financial and technical support to projects where communities have recognized transportation as a major barrier to visiting a health clinic. At the national

⁵⁹ Grundmann, C., Jordanwood, T., and Pelt, M. 2009. Evaluation Report: Health Equity Funds Implemented by URC and Supported by USAID. University Research Co., LLC (URC)

⁶⁰ Bitran, Damme, Meessen and Turbat, 3.

level, the government's primary tactic for sustainability of the national and rural road network is to pilot the outsourcing of three primary road contracts and the development of overload programs. However, according to the government's own 2008 Cambodia Aid Effectiveness Report the "absence of a directive on this subject is making it difficult to translate the vision on road maintenance into actions."⁶¹ As such, development partners should attempt to work with commune level leadership for project implementation in rural areas while providing technical and advisory support to national projects.

Donors should also support government initiatives that aim to more equitably distribute trained health care professionals across the country. According to a study in Bangladesh, the probability of a mother employing a trained midwife dropped by half when the distance between the home and the midwife was more than a kilometer.⁶² While a major goal of the MoH is to have a secondary midwife assigned to each of the country's health clinics,⁶³ there is a consistent shortage of midwives in rural areas due to poor retention. As such, donors should support programs that provide financial, geographic and promotional incentives to midwives who stay in rural locations.

Clean Water on the Tonle Sap

Both the Asian Development Bank (ADB) and the Reproductive and Child Health Alliance (RACHA) have helped to establish clean water projects in Tonle Sap communities with varying degrees of success. The ADB's Tonle Sap Sustainable Livelihoods Project provided US\$18 million in grants for clean water and sanitation projects. The project, which began in 2006, depends heavily on community involvement. Commune leadership is essential to assessing need and determining the final location of ADB funded infrastructure. This infrastructure includes tube wells, combined wells, rainwater collection tanks, filtered community ponds, community water purification systems, and iron reduction units. The project is expected to provide 568,000 people with safe water by the time it is completed in 2010.

While providing over half a million people with safe water is a clear improvement, not every project can be seen as a success. Both the ADB and RACHA have experimented with floating water purification systems. These systems, while relatively expensive, are often underutilized by the community they were intended to help. In Kampong Chhnang province, the ADB provided a US\$17,800 grant for a single floating water purification system that produced 20 liter containers of clean water for 8 cents apiece. However, nearby residents continued to pay for bottled water delivered to their doorstep in order to avoid the inconvenience and added expense of boating to the purification house. RACHA's project faced a similar problem when they were forced to sell their water for more than their competitors in order to cover costs.

⁶¹ Council for the Development of Cambodia: Royal Cambodian Government, "The Cambodia aid effectiveness report 2008," P.49 (2008).

⁶² ICDDR, B. Centre for Health and Population Research, Bangladesh. "Posting of trained birthing attendants: a comparison of home- and facility based obstetric care," (2005).

⁶³ Dr. K. Lorn. Ministry of Health. Interview, December 10, 2009.

Clean water and sanitation are necessary components of a primary health care system, and should also be addressed with complementary infrastructure projects. Donors and development organizations should be proactive in supplying access to clean water and sanitation in every area in which they work. This can be achieved by incorporating water and sanitation projects into their own health initiatives or strategically partnering with other organizations, like the ADB. Solving problems of access must include thoughtful, purposeful programmatic design which considers appropriate sequencing of programs as well.



Photo courtesy of David Wickstrom

Taking time to consider whether a road should be built *before, during, or after* construction of a rural clinic is essential. Donors would do well to consider complementarities and sequencing, and partnering with other organizations to meet these needs.

Innovative solutions to transportation barriers:

Innovative solution to the transportation barrier in a village near Kompong Thom Provincial Town

BuildCambodia is a U.S.-based not-for-profit organization which is currently funding an innovative transportation arrangement in the village of Lvea Choum; the village is a 20 minute ride from the provincial town. In January 2009, based on community participation, the villagers have elected three reliable persons owning motorbikes to provide transportation services for patients to reach health centers. Build Cambodia provided mobile phones to the four elected people to coordinate their efforts and pays each of them \$40 a month. Average monthly expenses of \$330, including transportation and repairs are reimbursed to resource persons by Build Cambodia. Management costs of hiring a local coordinator for the program come to \$330 per month. The grand total comes to \$880 per month.

The program has been successful in reducing transportation barriers and improving access to health services. On average, riders make 450 trips per month to health centers. Everyone in the village is using these services, including women delivering babies. Build Cambodia's staff observed that most pregnant mothers are opting to use this service.

A quick calculation reveals that each trip costs less than \$2 and provides transportation access for the poor to health centers. Benefits include safer deliveries, improved maternal and child health. Thus, benefits greatly outweigh costs and are suggestive of the importance of home-grown solutions in addressing barriers to health care provisions.

Often, effective programs that complement public health efforts can, and should, be executed as "micro-projects" at the most local level. Specialized training for rural health care providers to diagnose and treat waterborne diseases, for example, reinforces preventative care measures like hygiene education. Incentives can be provided to commune leaders to run simple sanitary surveys and encourage community involvement in the construction of water and waste systems.⁶⁴ Although many rural communities in Cambodia may not be in the position to pay user fees or a local tax to support water and sanitation systems, innovative solutions that encourage ownership in the development and maintenance of health infrastructure are key to the long term viability of these systems.

⁶⁴ World Health Organization. "Primary health care: report of the international conference on primary health care," Alma Ata, USSR, 6-12 September, (1978), Geneva: (1978).



Recommendation: Partner to Improve Livelihoods and Access to Credit

As discussed, HEFs are effective in improving access to health care services, but the underlying problems of poverty and limited financial resources remain. The alleviation of poverty, which causes and is caused by poor health, is an essential component of long-term health initiatives.

Globally, microfinance services have been effective in reducing poverty and improving living standards, which contribute to improved health outcomes. Donors and the Cambodian government should encourage development of the microfinance sector (microcredit and microinsurance), setting conditions for more robust capital markets and microfinance institutions. An analogous example can be found in the Financial Inclusion Program established by the central bank in Pakistan. To promote inclusive growth and access to financial services for the poor, including savings, credit and insurance, the Pakistani government developed a “flexible regulatory regime” to encourage the growth of microfinance banks, improved access to capital for stakeholders interested in providing agricultural finance, agri-insurance coverage for farmers in catastrophic times, and development of credit scoring systems.⁶⁵ Donors can work with the Cambodian Microfinance Association to undertake similar measures to promote the development of a stronger microfinance sector in Cambodia. It may be necessary to work with and through the government to implement such a system; in this case, donors and the Cambodian Microfinance Association should be the champions for such a program.

While *microcredit* provisions enable poor households to access funds for productive purposes and engage in income-generating activities, *microinsurance* provisions reduce income volatility triggered by adverse shocks related to health, life, agricultural production and catastrophes. VisionFund Cambodia, a microfinance organization, has been very successful in providing microcredit services to the poor, reaching 80,000 clients and a loan value of more than US\$17 million. A 2004 study of their operations revealed that VisionFund has been successful in reducing poverty by moving more than 70% of their clients from the category “poor” to “not-so-poor”.⁶⁶ Clients’ personal accounts reveal that microcredit has contributed to business growth, adequate food provision for children, improved housing structures against inclement weather, and increased educational attainment by children.

It is pertinent to say here that the microfinance sector in Cambodia has grown strongly in recent years with a few players like VisionFund leading the way. Currently, microfinance services are provided in all Cambodian districts with more than 800,000 borrowers and loan portfolio of approximately US\$300 million in December 2009.⁶⁷ However, microfinance services have been largely focused on microcredit

Sky Health Insurance Program

GRET, a French NGO active in Cambodia since the 1980s, has pioneered the creation of health microinsurance products for the poor in Cambodia. Based on voluntary participation, families in the community pay monthly fees and receive free health care services at public health centers. The NGO pays public facilities for these medical services. The program has been successfully implemented in four rural areas in Cambodia and has been recently expanded in Phnom Penh.

On a broader scale, however, regulatory frameworks are nascent and need to be developed aggressively to achieve significant scale in the microinsurance sector.

⁶⁵ State Bank of Pakistan, <http://sbp.gov.pk/MFD/FIP/index.htm> (Accessed February 11, 2010).

⁶⁶ VisionFund Cambodia website, http://www.visionfund.com.kh/site/who_we_are.html (Accessed February 11, 2010).

⁶⁷ Cambodia Microfinance Association Information Exchange, <http://www.cma-network.org/> (Accessed February 11, 2010).

loans and need to be expanded to include microinsurance and savings services. Microinsurance and savings mitigate the impact of adverse shocks on poor families; particularly, micro-health insurance can be used as an effective tool in improving access to medical services and MCH outcomes. For example, VisionFund provides micro-life insurance to its microcredit clients, which have been used to pay off household debts and cover funeral expenses, in case of death. At the same time, these services reduce the risk of delinquencies for microfinance organizations.

The microinsurance sector in Cambodia remains in its infancy. The legal framework is weak in providing support to microinsurance organizations, and the establishment of this framework is critical. The broader success of microinsurance is dependent on its effective interaction with public health facilities, partnerships with government programs and other community-based initiatives. Therefore, donors/government should implement policies that encourage the future development of this sector, along with continuous encouragement for expansion of microcredit.

Partnerships should be formed between microfinance organizations and NGOs to address the most vulnerable and disadvantaged populations. We can again learn from VisionFund's example of partnering with the Khmer HIV/AIDS NGO Alliance (KHANA) to provide microfinance services to HIV- and AIDS-affected families. These families have been able to increase their incomes and thereby improve antiretroviral therapy. Similarly, VisionFund has partnered with the International Labor Organization to provide microfinance loans to child laborer families, in order to encourage children to continue receiving education.⁶⁸

The illustrations discussed above are just a few examples of cooperative approaches to integrating microfinance with other development activities, which can go far in improving health outcomes. Donors and development organizations should partner with microfinance organizations to provide loans to families in need of MCH services, including emergency loans. Taking a more long-term view, the microfinance platform should be used to educate poor families about the benefits of good health care to encourage positive health-seeking behavior.

⁶⁸ VisionFund (Cambodia) Annual Review 2008.

An Innovative and Successful Solution to the Water & Sanitation Problem:

Orangi Township in Karachi, Pakistan and the Centrality of Community Participation

The Orangi Pilot Project (OPP) was established in 1980 to explore people's problems in Orangi Township, with a population of more than million. In discussion with the community, OPP identified sanitation as the most pressing problem. With the city government unwilling to invest in sanitation infrastructure, OPP organized the community to build and pay for their own water and sanitation infrastructure leveraging technical assistance from OPP-Research and Training Institute (RTI). The process went as follows:

"OPP-RTI held meetings in the lanes of Orangi and informed the people that if they formed a lane organization, and elected, selected or nominated a lane manager, then the OPP-RTI would provide them with technical assistance in building their underground sewage system. Financial and health related advantages of the system were also explained. Residents themselves identified that sewage flowing in their lanes was damaging the foundation of their houses. Once a lane organization was formed, the OPP-RTI technical staff surveyed the lane and established benchmarks with the help of the lane manager. A map and an estimate for the work was prepared and handed over to the lane manager. The lane manager collected money from the people and organized work while the OPP-RTI supervised the process. At no time did the OPP-RTI involve itself in money matters of the lane organizations. Since a lane consists of only 20 to 40 houses, the organization was cohesive and there were no major problems of mistrust and disagreement."

"There are 7,256 lanes in Orangi containing 104,917 houses. Of these, 6,082 lanes containing 91,531 houses have built their sewage systems. The houses have also built latrines and 409 collector sewers have been constructed. The people have invested US\$1.5 million in this effort. If the government had done this work, the cost would have been at least seven times more."

The success of this initiative highlights the potential for collaboration between communities and technical professionals in achieving grassroots development.

2.2.4 Section Summary

Overall, there are major barriers to accessing health care in Cambodia which contribute to increased morbidity and mortality, especially in rural areas. Surmounting these barriers will require sustained commitments from donor organizations, and any initiative focused on improving mother's and children's access to health care must jointly consider financial, geographic, and infrastructural barriers. The onus is on development organizations to develop projects in a complementary manner with proper sequencing and community input and engagement. Project facilitators should take it upon themselves to be proactive in seeking partnerships to provide infrastructure and complementary livelihood programs. By keeping these values central to project design, development projects will boast higher levels of success, better health outcomes, and longevity in their impact.

2.3 Challenge 3: Health-Seeking Behavior

Health care begins with the patient. In order to improve outcomes in the area of maternal and child health it is necessary to understand the behavior of the patient; in this case, most often the mother. Improving MCH outcomes requires that mothers know what steps to take to prevent and treat diseases. It requires that they trust the health care system, and that they can distinguish appropriate and that which can do harm. These actions, broadly characterized as “health-seeking behavior” are influenced by Cambodians’ cultural beliefs, education, and the health system’s physical and financial accessibility. Behavioral change is challenging, especially in a country deeply rooted in tradition and folk knowledge, but improved health-seeking behavior is a critical step to improved outcomes.

2.3.1 Section Overview

The direct effects of Cambodian mothers’ poor health-seeking behavior are readily apparent: malnutrition and stunting, high rates of diarrhea (especially in children), high rates of maternal mortality, poor prenatal care, ineffective and harmful healing practices encouraged by traditional healers. There are three major challenges that cause these negative outcomes: unhealthy behavior, a history rooted in traditional healing methods, a trust deficit between the people and the public health system, and a narrow understanding of modern medicine. In order to improve health-seeking behavior in Cambodia, donors should seek to (1) improve health education through national awareness campaigns, (2) invest in community-based education, and (3) increase incentives for pro-health behavior.

2.3.2 Causes of Poor Health-Seeking Behavior

Poor health comes at a high price in Cambodia. On average, Cambodians spend US\$33 per person each year to treat sickness, compared with government health expenditure of just US\$2 per person. They often pay ill-informed drug sellers, untrained healers, or freelancing government health workers for help—and the expense often destroys families, homes, and lives.⁶⁹

– Eric Van Zant, “Healing Cambodia’s Health Care”

Unhealthy Behavior

In 2004 the BBC World Service Trust⁷⁰ sponsored a survey of women’s behavior in caring for children under five years old. The survey was carried out in 21 of Cambodia’s 24 provinces and asked what things people can do to keep babies / children healthy. Less than 40% of the mothers knew that simple steps such as washing hands, boiling water, or breastfeeding newborns immediately were important for a child’s health. A striking 27% did not even know what to answer, and an extremely low 12% knew about the importance of hand washing. In the area of women and children’s health, Cambodian mothers appear to know little about the most effective preventative measures in fighting disease.

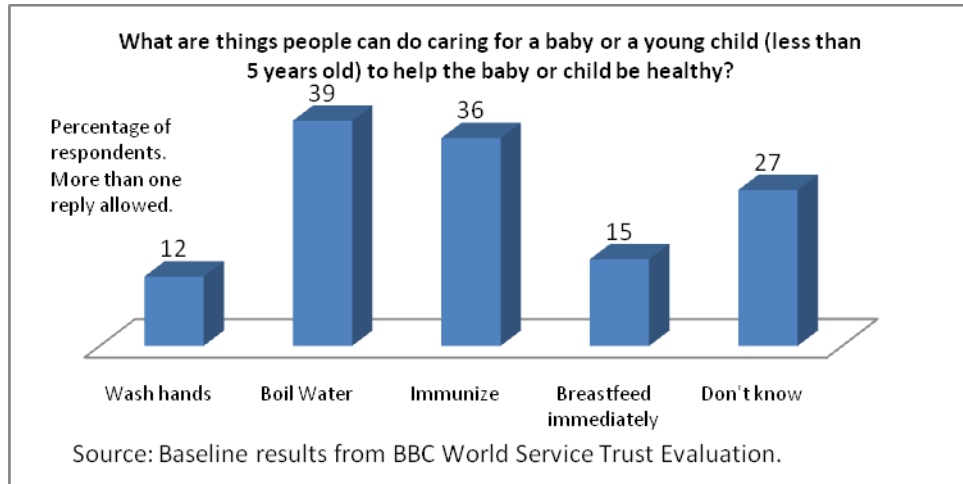


Mother nursing her child.

Photo courtesy of Ziad Muasher.

⁶⁹ Van Zant, Eric. “Healing Cambodia’s Health Care.” *ADB Review*, May-June 2004.

⁷⁰ See World Service Trust, *BBC*, <http://www.bbc.co.uk/worldservice/trust/> (Accessed February 11, 2010).



The challenge goes beyond preventative health, however. There is a general lack of awareness of the importance of proper nutrition. For example, *colostrum* (the milk that mothers secrete immediately after giving birth) is particularly rich in antibodies and generally known to be very good to feed newborn children. In Cambodia, however, newborn infants are often only fed water and *not* the nutrient-rich milk because it is viewed as “stale milk” and discarded. Similar behaviors continue throughout breastfeeding: Cambodians believe that water should be consumed to purify whatever other food or drink is ingested and they typically give babies (dirty) water to “wash out” the breast milk.⁷¹ When a child moves to solid foods, mothers prefer to feed their children rice porridge several times a day. Rice porridge by itself is not particularly nutritious, but poor rural families in particular cannot afford to add meat or other fresh vegetables to add nutritional value to the food. In field visits, there appeared to be little appreciation of the nutritional inadequacy of rice porridge, the need for more frequent feeding, or of supplementing the porridge with vegetables or other protein-rich foods.

From 2000 to 2005, the prevalence of diarrhea in children jumped two percent—this during a period that access to improved water sources increased around 30%.

An additional challenge concerns proper cleanliness and sanitation practices, especially surrounding the prevention and treatment of diarrhea. Between 2000 and 2005 the prevalence of diarrhea in children less than five years old increased from 18.8% to 21.4%. However, according to UNICEF, 65% of the population had access to improved drinking water sources in 2006, versus only 30% in 2000.⁷² Thus it is clear that improving access to health infrastructure – such as installing water pipes and sanitation projects – is not sufficient in itself to improve health outcomes.

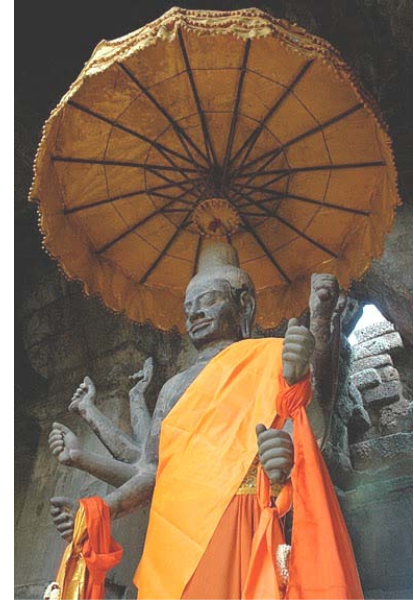
A History Rooted in Traditional Healing Methods, Not Modern Medicine

⁷¹ As reflected by the percentage of mothers who give breast milk and plain water only to children smaller than 6 months (22.5% in 2005 according to CDHS). The percentage is still 18.5% for children less than 2 months. BBC World Trust has a video educating about the erroneous practice of giving water after breastfeeding: http://www.bbc.co.uk/worldservice/trust/whatwedo/where/asia/cambodia/2008/04/080407_cambodia_hivaidis_mch_project_no_water_video.shtml (Accessed February 11, 2010).

⁷² Sources for 2006: UNICEF basic statistics. http://www.unicef.org/infobycountry/cambodia_statistics.html. Sources from 2000: UNICEF report. “Safe Drinking Water D7341Insert_English.pdf. Both statistics refer to access to improved water, defined as household connection, public standpipe, borehole, protected dug well, protected spring or rain water collection

Traditional healing is a significant part of the Cambodian people's history and current way of life. Traditional healing has long been an accepted form of health provision in Southeast Asia, but Cambodia has a unique history that inhibited modern medical practices from taking root alongside traditional healing. The Khmer Rouge explicitly persecuted educated people (including doctors) during the late 1970s, and the succeeding Vietnamese regime made it difficult for the "Western" influence of modern medicine to be taught and practiced until 1993. The *British Medical Journal* reported in 1995 that "although the [Vietnamese] regime... tried to train large numbers of health workers quickly, the training was not accredited to international standards and its quality was untested and questionable."⁷³ Further, the Vietnamese did not allow doctors or nurses to study in English, the dominant language for medical research and publication. In short, modern medicine has not been allowed to develop the trust of the Cambodian people.

Traditional healing, on the other hand, has enjoyed a long history and the faith of the Cambodian people. These practices provide a source of physiological, psychological, and spiritual relief to many Cambodians. A large component of traditional healing is closely linked to the religious beliefs prevalent in Cambodia. Ninety-four percent of the population is Theravada Buddhist – a religion that is at its core spiritual.⁷⁴ Traditional healers incorporate spiritualism into their practices of treating ailments of the body and the mind. (See the text box below which describes belief in spirits in Cambodia.⁷⁵)



*Buddhist Statue at Angkor Wat.
Photo courtesy of Griffin Murray.*

These beliefs, coupled with poor public health education, allow many people believe that disease originates from evil spirits, bad karma, and other spiritual causes. According to Van De Put of *Medecins San Frontieres*,⁷⁶ "the distinction between natural and supernatural contributes to the non-acceptance of the biomedical paradigm." People often believe that *natural causes* predispose people to certain illnesses, but the manifestation of the ailments themselves are due to *supernatural factors*. Thus, for many Cambodians, healing comes only with the addressing of *both* the physiological outcome and the underlying supernatural factors—the latter of which "modern" doctors fail, or refuse, to treat. While modern medicine is accepted as *one* cure, it not seen as the *only* cure to illness in the country. Cambodians normally resort to private practitioners alongside home remedies and traditional healers when they get sick—and not necessarily in that order.

In 2000, the Reproductive and Child Health Alliance (RACHA) conducted a study on the pattern of care Cambodian parents seek to treat their sick children. The results are reported in the table below. Traditional healers and private practitioners were often sought first and hospitals last. Yanagisawa⁷⁷

⁷³Heng, Mam Bun and PJ Key. "Cambodian Health in Transition." *British Medical Journal* 311: 7002 (Aug 1995): 435-437.

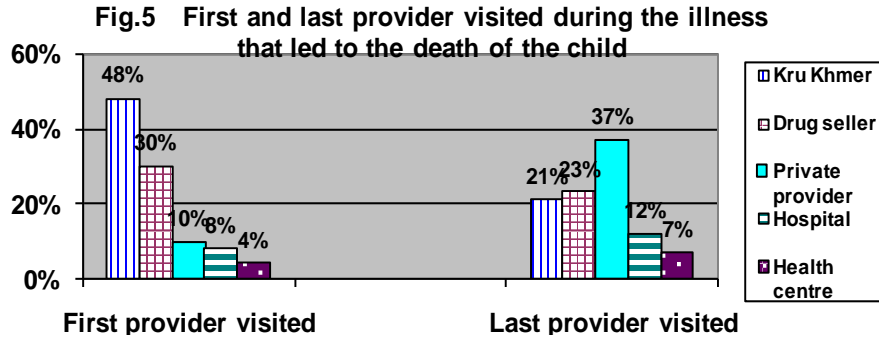
⁷⁴ CIA, "The World Factbook," Available online at: <https://www.cia.gov/library/publications/the-world-factbook/geos/cb.html> (accessed January 20, 2010)

⁷⁵ Bertrand, Didier, "The Names and Identifies of the 'Boramey' Spirits Possessing Cambodian Mediums." *Asian Folklore Studies* 60:1 (2001): 31-47.

⁷⁶ Van de Put, W., "Empty Hospitals, Thriving Children: Utilization of Health Services and Health Seeking Behavior in two Cambodian districts," *Medecins Sans Frontieres*, Holland/Belgium (1995).

⁷⁷ Yanagisawa, S., V., Mey, S. Wakai: "Comparison of health-seeking behaviour between poor and better-off people after health sector reform in Cambodia," *Public Health*, 30 (2004): 118-21.

finds that a similar pattern applies to adults as well, where home remedy and private drug sellers are the first option. There are various causes for the low usage of health facilities, but the reasons central to poor health-seeking behavior include lack of trust in modern medical facilities and cultural beliefs.



Source: "The Pathway to Child Health," RACHA studies #8

The same survey reported that 96% of the home remedy constitutes tried the practice of "coining." Coining is a traditional practice that involves scraping the skin with a coin edge using a liquid balm with menthol, camphor and other ingredients until red welts form, which is believed to release the cause of illness. Some other popular traditional treatment methods include herbal remedies, sprinkling holy water on the patient, prayer, and massages.⁷⁸

Traditional medical treatments give comfort to the patient, but in many cases they are also harmful. An example in maternal health is the practice of cutting the umbilical cord with a bamboo stick, which is symbolic of life and longevity. Mothers can obtain a potentially fatal tetanus infection from the bamboo.

Another set of harmful practices is based around the belief that mothers lose heat from their bodies during delivery; several traditional "solutions" are used to replenish this heat, all of which are harmful. First, mothers are often given alcohol during labor to replenish heat. A second dangerous practice is "roasting," in which new mothers are wrapped in warm clothes and rest for several days on a bed under which a charcoal fire burns.⁷⁹ Roasting carries the risk of edema – swelling from accumulation of fluid in body tissues – and it is harmful for women with high blood pressure and at risk of bleeding. Even women who deliver at the health centers attempt to go home as soon as possible, often just a few hours after delivery, in order to practice roasting. This choice puts them at risk of hemorrhaging far away from the health center.

⁷⁸ US Library of Congress, "Health and Welfare in Cambodia," Available at: <http://countrystudies.us/cambodia/53.htm> (Accessed January 20, 2010).

⁷⁹ Kruey, Kim Hour, Chan Born, Sokco Uy, Helen Pickering. "Post Partum Heating Practices in Cambodia. Are they harmful?" <http://rc.racha.org.kh/download.asp?file=/resources/documents/1-100/41-60/42/postpartum.doc>.

These practices are not limited to uneducated women. Highly educated women still practice roasting, supplementing it with injections of drugs considered “hot” in the cultural belief, such as Vitamin C and calcium.⁸⁰ In this case, education does not automatically prevent women from continuing to practice harmful traditions; cultural roots run deep and are difficult to change. Lack of education does, however, seem to be relevant to the frequency (or lack) of prenatal care. While 90% of women with secondary education or higher have at least one prenatal care visit with a doctor or a health professional, the percentage reduces to less than 50% for mothers with no education.⁸¹ As such, cultural practices are not only diverting attention away from modern medicine, but also causing harm to patients.

Fifty percent of mothers with no education do not receive any prenatal care.

“Research on ‘Boramey’ Spirits Possessing Cambodians”
An Excerpt, by Didier Bertrand (2001)

FOR ABOUT THREE YEARS, I lived with and participated in the lives of Cambodians and took part in the activities and ceremonies that constitute their social life. During this time I interviewed about one hundred people who are the so-called representatives (snang) or physical bodies (rup) that become possessed by spirits. While spirits possessed Cambodians, I interviewed the spirits as well. In the process of these interviews, over three hundred boramey names were collected...

It is said that there are about 10,000 boramey in Cambodia. They are often identified with distinct mythical and historical people well known to Cambodians. These people are known for their distinctive clothes, and they use instruments characteristic for their identity. When an individual is possessed by a boramey, his or her behavior while in a state of trance, particularly his physical and verbal expressions, provides further insight into the character of the boramey...

[The “representatives”/ snang] are not professional mediums, but they regularly visit their master (kru), and seek advice or protection from more famous boramey. They participate in ceremonies and pilgrimages, and usually help in the preparation of offerings. The small boramey work with the greatest ones; many snang help their master as apprentices and later usually remain close to them. Others apprentice themselves to a boramey in order to acquire spiritual powers and then detach themselves to operate on their own. This sometimes creates competition and animosity between the persons concerned...

The Trust Deficit in the Public Health System

The distrust of modern health facilities also contributes to Cambodian resistance to seeking out modern care first. Wilkinson⁸² finds that the lack of trust in health facilities originates mostly from the perceived rudeness of health practitioners and their slowness in treating the patient. Another qualitative study by Matsuoka⁸³ confirms this, showing that women complained mainly about how rude and anonymous the health centers and hospitals were. Many Cambodians are not only uneasy with the manner in which they are treated at health centers but have a rather strong desire to follow their traditional practices.

⁸⁰ Cambodian culture categorizes different vitamins and nutrients as either “hot” or “cold.” For more information, see Hoban, Elizabeth. “Reproduction, childbearing and motherhood: a cross-cultural perspective,” by Pranee Liamputtong. Nova Science Publishers (2007).

⁸¹ Cambodia Demographic and Health Survey (2005 CDHS), National Institute of Public Health, Cambodia. <http://www.measuredhs.com>.

⁸² Wilkinson, David. “Promotion of appropriate health service utilization in Cambodia” Prepared for MoH/WHO Health Reform Phase III project, (2001).

⁸³ Matsuoka, Sadatoshi, Aiga Hirotsugu, Lon Chan Rasmey, Tung Rathavy, Akiko Okitsu,. “Perceived Barriers to Utilization of maternal health services in rural Cambodia” Health Policy, In press (2010).

Similar stories were common throughout our interviews with local villagers; many Cambodians described the rudeness of practitioners.

This dissatisfaction with treatment at health facilities creates a vicious cycle, encouraging many Cambodians to revert back to their old ways of dealing with illness: traditional healers, home remedies, and private clinics.

Limited Understanding of Modern Medicine

In any market, consumer demands influence the supply of goods and services. In Cambodia, this demand has caused the proliferation of antibiotics, injections and intravenous infusions.

After seeking traditional healing methods, Cambodians typically seek treatment at the pharmacy. Pharmacists, who often have little medical training, dispense bags of multi-colored pills and infuse patients with sugar water (like the glucose drip pictured at right). The distribution of medicines by pharmacists was described as “pharmaceutical anarchy”⁸⁴ in *The Lancet*. Cambodians can easily request and receive medicines and other controlled substances that should not be available without trained medical prescription and clear directions for usage. This allows Cambodians to self-prescribe a specific drug regardless of its utility to treat their illness. The problem is endemic to the medical community, because if one doctor refuses to prescribe a drug, Cambodians engage in “shopping around”—visiting other doctors or drug sellers until they receive the desired prescription. Rather than getting sound medical advice, Cambodians often demand quick-fix solutions such as IVs, steroids, or vitamin injections. This behavior is usually based on their preferences or beliefs, past experiences, and advice from their peers. Self-prescription can be particularly harmful when the general attitude towards modern medicine is that “something is better than nothing,” or “the more medication, the better.”



A family of four leaving a private clinic, with the daughter holding her IV drip. Cambodians seek placebos like glucose drips so commonly that these contraptions are easily found on motos and tuk-tuks (moto-pulled taxis).

Poor MCH outcomes are directly linked to sub-optimal health-seeking behavior. Cambodians’ poor health-seeking decisions result from their lack of awareness of healthy behavior, their overreliance on traditional healing practices, their lack of trust of the health system and their narrow understanding of the role of modern medicine. Below we discuss recommendations that will *improve donor effectiveness in promoting positive health-seeking behavior*.

2.3.3 Recommendations

Overcoming deeply rooted cultural beliefs in order to change behavior is a long and challenging process. However, successful health education campaigns and programs exist in Cambodia and throughout the world. In order to improve health-seeking behavior in Cambodia, donors should seek to (1) improve health education through national awareness campaigns, (2) invest in community-based education, and (3) increase incentives for pro-health behavior.

⁸⁴ Gollogly, L: “The dilemmas of aid: Cambodia 1992–2002” *Lancet* 360 (2002): 793-798.



Recommendation: Improve Health Education through Nationwide Awareness Campaigns

Improving basic health education requires a long-term nationwide awareness campaign. In the past, broad-based awareness campaigns in Cambodia have resulted in improved behavior where they focused on changing *specific* pro-health behaviors, such as breastfeeding. With the support of UNICEF, the European Commission and the BBC World Service Trust, the MoH led a very successful campaign to increase the percentage of women who breastfed their children. The campaign launched in 2004 with a TV series, songs on the radio and advertisements. The campaign was designed to reach Cambodians seven times a day for three consecutive weeks. Data from UNICEF indicate that the percentage of women who breastfeed rose from 30% in 2000 to 66% in 2005.⁸⁵ Similar efforts to improve nutrition and sanitation practices, particularly hand washing and water boiling, are essential for changing behavior.

Three organizations partnered with the Ministry of Health to increase breastfeeding by 30 points in five years.

These efforts are targeted to reach and communicate a message through a saturation process. Repetition of the same message and with original means such as songs and radio messages will be useful to spread the message and be sure that the right practices are known by the mothers. Saturation also has a downside though: saturating with too many messages is hard and can become confusing. The message has to be clear and present in mind, but too many messages will confuse and dilute the effect. Media campaigns are a precious tool that should be targeted precisely and with no more than a few messages at a time.



Recommendation: Invest in Community-Based Education

Cambodians' health-seeking behaviors are influenced and reinforced by the information they receive in their local community. Although media campaigns are an external force that is imposed upon the community, it is nevertheless important to include grassroots elements. Local community members and leaders should play an integral role in weighing priorities and against means. As stakeholders in the community, they own the greatest interest in the success of a health education program. These community leaders understand local problems and can more accurately appraise the potential of local programs. Community-based education is particularly significant in the Cambodian context because it addresses the trust deficit between the people and government institutions which exploded after the Khmer Rouge and subsequent years of war.

Further, these projects give the community a sense of proprietorship. Having a stake in the outcome increases the incentives to execute the program well. Community-based efforts should be focused on developing an educated base of community leaders and on developing innovative schemes to deliver pro-health messages.

In order to weave the social fabric to support good health-seeking behavior, the development community should focus its investments on educating and supporting community leaders to deliver pro-health messages. Strong and dedicated leadership is an important element for success in involving the community in any health care improvement efforts. As a first step, it is necessary to invest in finding, and then retaining, the right leadership through the provision of motivational and financial incentives. In

⁸⁵ Viorica Berdaga, MD. Chief, Child Survival and Development.

this regard, Save the Children Australia (SCA) has taken the lead as a great role model. In helping Cambodians affected by HIV and AIDS, SCA has targeted Buddhist pagodas with highly respected monks as the vehicle through which to provide food parcels, transportation to medical care, access to education, and counseling.⁸⁶ In Kampong Cham, the organization established a performance-based incentive scheme to financially motivate its staff in addition to designing an effective community feedback program. Every two months, the commune chief, village chief, and the villagers themselves meet with the health staff to voice their concerns. With strong leadership, the two programs work hand in hand to integrate the community in health efforts.

Innovative Approaches

Innovative communication methods should be a key component to facilitate engagement and internalization of the messages. Standard health education lectures at village meetings are often ineffective because community participation and information retention are low. We recommend that the donor community focus on innovative ways to communicate health messages and give primary basic health education, and, that organizations evaluate the different approaches quantitatively. Examples of innovative methods include giving away toys or gadgets to remind people of what they learned, or creating community gardens where nutritional education can be accompanied by hands-on learning and the provision of those agricultural goods.

RACHA COMEDY TOUR

RACHA (Reproductive and Child Health Alliance) is an NGO dedicated to maternal and child health. It was created in 1996/1997, and primarily works through village health programs. It also provides support to MOH with capacity building and performance-based contracts.

ANGKOR HOSPITAL FOR CHILDREN VEGETABLE GARDEN

The Angkor Hospital for Children keeps a vegetable garden where outpatients can receive classes on nutrition, cooking and basic sanitation that are critical for healthy child development.

Amongst their many activities, RACHA has developed a “Comedy for Health” group, which provides a great case study on the use of innovative communication methods for community engagement. On a weekly basis, the group organizes a pantomime – a musical comedy – containing pro-health messages. In this manner, the group teaches basic health knowledge/skills such as how to prepare oral rehydration salts, how to administer home care for diarrhea, how to identify sickness to be able to refer a child to a health center, etc. By utilizing humor and entertainment to deliver health messages, RACHA has increased community participation in health improvement efforts.

Promoting Education of Women

The correlations between good health and higher educational attainment are well-documented, although it is more difficult to identify which direction the causal impacts flow. Anne Case, who studies the relationship between women’s education and health status, finds that “in both developed and

⁸⁶ Save the Children Australia, “Health and Well-being Programs in Cambodia,” Available at: <http://www.savethechildren.org.au/current-programs/cambodia/138-health-and-well-being.html> (accessed on January 20, 2010).

developing countries, a strong correlation exists between schooling and good health, whether measured using mortality rates, morbidity rates, or self-reported health status. Each additional year of schooling for men in the U.S. is associated with an 8% reduction in mortality, a result consistent with those found in many European countries.” In surveys conducted in both the developed and developing world, people with greater levels of schooling report themselves to be significantly healthier.⁸⁷

Although the extent to which the relationship between education and health is actually causal is still the object of debate, Heckman et al. reviewed the literature and conducted an original study, concluding with convincing evidence of causality.⁸⁸ One of the most obvious ways in which education affects health is the relationship of education to higher incomes.⁸⁹ Education also improves individuals' understanding of and use of sanitation and hygiene, navigation of the health care system, and ability to adopt and use new health innovations.⁹⁰ In the southern U.S., Hoyt Bleakley found that hookworm eradication led to an increase in literacy rates in the individuals affected, despite the fact that there was little or no improvement in number of school days attended.⁹¹ Thus, both the *quantity* and *quality* of education are improved with better health.

There is enough evidence to point to a role for key educational interventions to improve women and children's health. Commitment to primary and secondary school completion, especially for girls, should not be ignored. In the recent years in Cambodia the bulk of aid has been shifting from primary education to health. While investing directly in health is necessary and urgent, shifting resources from health to education may backfire in the future. Although international organizations focused on health may be reluctant to promote programs much outside this narrow goal, we recommend that donors consider long-term, educational promotion campaigns as a necessary investment for improving health outcomes. If donor organizations are not large enough to house both education and health projects, they should take the initiative to partner with other education-oriented programs to complement their health offers. If organizations are able to hand-in-hand and leverage resources, it will be possible to spur improved health outcomes that would have been otherwise unreachable by health interventions alone.



Recommendation: Increase Incentives for Healthy Behavior

Basic health education is important, but may not be enough to change behavior, especially in the short term. Long term efforts such as focusing on schooling are necessary to internalize and ingrain healthy behavior, but they may take time to manifest. Incentives can be a powerful remedy, and can impel women to adopt healthy behavior for themselves and for their children. Financial and motivational incentives for healthy decision-making will hasten the improvement in health outcomes.

⁸⁷ Case, Anne. "The Primacy of Education", in *Understanding Poverty*, edited by Abhijit Banerjee, Roland Benabou, Dilip Mookherjee, 269-284. Oxford: Oxford University Press, (2006).

⁸⁸ See Heckman, James. "Skill formation and the economics of investing in disadvantaged children", *Science* 312, 5787, (2006): 1900-1907; as well as Heckman, James. "The economics, technology, and neuroscience of human capability formation", *Proceedings of the National Academy of Sciences* 104, 33, (2007): 13250-13254.

⁸⁹ Although The gradient between education and health is just as dramatic in the UK, with a national health system, than in the USA, suggesting that income may not be a major channel for developed countries. Banks, James, Michael Marmot, Zoe Oldfield, James Smith. "The SES Health Gradient on both sides of the Atlantic", NBER working paper #12674 (2006).

⁹⁰ Grossman, Mark. "The demand for health: a theoretical and empirical investigation". National Bureau of Economic Research book, (1972).

⁹¹ Bleakly, Hoyt. "Disease and Development: Evidence from Hookworm Eradication in the American South." *Quarterly Journal of Economics* 122 (2007): 73-117.

We propose the adoption of a large scale Conditional Cash Transfer (CCT) Program in Cambodia focused on health, nutrition and education. The MoH and the World Bank are potential partners for this project. Conditional Cash Transfer programs are innovative because they directly affect behavior and they are scalable. One example of a CCT implemented on a small scale is the one managed by the Japan International Cooperation Agency (JICA), which gives scholarships for continuing education to girls who are doing well in school.



Mothers awaiting free (South African) rice and baby formula from the World Health Program. Direct cash transfers might make them better off.

CCTs are a widely used policy instrument for incentivizing positive behavior in developing countries. They have been implemented successfully in Mexico (Progres/Oportunidades), Brazil (Bolsa Familia and Bolsa Escola)⁹², Nicaragua (Red de Proteccion Social)⁹³, Jamaica (Program of Advancement through Health and Education)⁹⁴ and Ecuador.⁹⁵ In a typical CCT program, the mother receives a cash transfer if her child complies with some condition, typically attending school and/or attending health exams.

CCTs are increasingly seen as a “magic bullet”⁹⁶ for development because they pursue the double objective of alleviating poverty with income, while encouraging human capital accumulation in children through positive behavioral change. Some programs such as Progres or Red de Proteccion Social include a considerable child nutrition component. Progres includes an unconditional food fortification component, maternal health and preventive health checkups for children, as well as nutrition education.⁹⁷

CCTs could be successful in Cambodia because they address two problems concurrently: a lack of financial resources for poor Cambodians and poor health-seeking behavior.⁹⁸ Although CCT programs are expensive, the analysis so far suggests that the disbursement is cost effective—due, in part, to their

⁹² Veras Soares, Fabio, Tatiana Britto, Marcelo Medeiros, “Targeted Cash Transfers in Brazil: BPC and Bolsa Escola”, International Policy Center for Inclusive Growth Working Paper 46 (2008). <http://www.ipc-undp.org/pub/IPCWorkingPaper46.pdf>.

⁹³ Maluccio, John, Rafael Flores. “Impact Evaluation of a conditional cash transfer program”. Research Report #4, International Food Policy Institute, Washington DC. <http://www.ifpri.org/publication/impact-evaluation-conditional-cash-transfer-program-1>

⁹⁴ D. Levy, “Evaluation of Jamaica’s PATH program: Final Report”. UNDP poverty center document available at <http://www.undp-povertycentre.org/publications/cct/JamaicaPATH.pdf>.

⁹⁵ Schady, Norbert, Araujo, Maria Caridad. “Cash Transfers, Conditions, School Enrollment and Child Work: Evidence from a Randomized Experience in Ecuador” Policy Research Working Paper # 3930, World Bank, Washington DC. http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2006/05/30/000016406_20060530155839/Rendered/PDF/wps3930.pdf.

⁹⁶ Hyun son, “Conditional Cash Transfers: an effective tool for poverty alleviation?” ADB, ERD Policy brief #51 (2008). http://www.adb.org/Documents/EDRC/Policy_Briefs/PB051.pdf.

⁹⁷ Fernald, Lia, Paul Gertler, Lynette Neufeld: “10-year effect of Oportunidades, Mexico’s conditional cash transfer programme, on child growth, cognition, language, and behaviour: a longitudinal follow-up study”, *Lancet* 374 (2009): 1997-2005.

⁹⁸ Leroy Jef, Marie Ruel, and Ellen Verhofstadt, “The impact of conditional cash transfer programmes on nutrition: a review of evidence using a programme theory framework,” *Journal Development Effectiveness* 1 (2009): 103-129.

long-term effects.⁹⁹ Positive behavioral change yields benefits long after each individual dollar is spent. Furthermore, CCTs are thought to be more effective than non-conditional transfer payments.¹⁰⁰

We recommend that CCTs be given to women within the household – mothers, aunts, or grandmothers. A growing literature suggests that income or assets in the hands of women are associated with larger improvements in child health and larger shares of household spending on nutrients, health, and housing than are resources in the hands of men.”¹⁰¹ Duflo finds that transfers to grandmothers in South Africa improved the nutrition of young girls, as measured by weight for height of all girls and the height for age of the youngest girls, and it had no discernible effect on boys. More importantly, a large transfer had no effect on the health of children if it was received by a man.¹⁰²

2.3.4 Conclusion

Sub-standard health outcomes are closely related to Cambodians' decisions in preventing, identifying and treating illness. Cambodians make poor health decisions as a result a lack of awareness of pro-health behavior, a history rooted in traditional healing methods, an absence of trust in the public health system, and a limited understanding of modern medicine. Overcoming these challenges is difficult, especially in a country deeply rooted in tradition and folk knowledge, but it is a critical step towards improving health outcomes. To improve health outcomes, donors should focus their efforts on improving education through national awareness campaigns, community-based education, innovative delivery techniques and increasing incentives for pro-health behavior.

99 Paul Schultz, “School Subsidies for the poor: evaluating the Mexican Progresa poverty program,” *Journal of Development Economics* 74 (2004): 199-250. See also Lagarde, Mylene, Andy Haines, Natasha Palmer, “Conditional cash transfers for improving uptake of health interventions in low- and middle-income countries: a systematic review,” *Journal of American Medical Association* 298 (2007): 1900–10.

¹⁰⁰ Todd Wolpin and Kenneth Wolpin, “Assessing the impact of a school subsidy program in Mexico: Using a social experiment to validate a dynamic behavioral model of child schooling and fertility,” *American Economic Review* 96 (2006):1384-1417.
101 Duncan Thomas, “Intra-household resource allocation: An inferential approach,” *The Journal of Human Resources* 25, (1990): 635—664; Duncan Thomas, “Like father, like son; like mother, like daughter: Parental resources and child height,” *The Journal of Human Resources* 29, (1994): 950-988

¹⁰² Esther Duflo, “Child health and household resources in South Africa: Evidence from the Old Age Pension program,” *The American Economic Review* 90, (2000): 393-398.

III. CONCLUSION

Cambodia's tumultuous history has resulted in the haphazard development of its public health care system, a void of well-trained Cambodian medical professionals, and a poor understanding of modern medicine by Cambodian health consumers. Donors can improve maternal and child health (MCH) outcomes by taking strategic steps to address three major challenges for Cambodian health care: bolstering health system capacity, reducing barriers to access, and improving health-seeking behavior. The top ten themes that donors should keep at the forefront of their health care projects are recapped below.

Access to Quality Health Care

The Cambodian health care system suffers from poor financial and human resources, insufficient oversight and monitoring, and a dearth of regulation. In order to most effectively build the Cambodian health system's capacity to improve MCH outcomes, donor and development organizations should focus [on] funding initiatives that:

- (1) Cultivate long-term Cambodian skills, leadership, and vision,
- (2) Create mechanisms for internal administration, oversight and independent monitoring,
- (3) Increase medical training and education, and
- (4) Improve regulation of medical care.

Access to Quality Health Care

The major access barriers faced by Cambodians are limited financial resources, costly and limited transportation in rural areas, poor health infrastructure, and little or no access to formal credit or insurance markets. To improve children's and mothers' access to health care, donors and development organizations should:

- (5) Boost the accessibility and reach of Health Equity Funds (HEFs),
- (6) Deliver complementary transportation services and health infrastructure, and
- (7) Partner to offer complementary livelihood programs.

Poor Health-Seeking Behavior

Four major behavioral challenges cause negative health outcomes: unhealthy behavior, a history rooted in traditional healing methods, a trust deficit between the people and the public health system, and a narrow understanding of modern medicine. To improve health-seeking behavior in Cambodia, donors should seek to:

- (8) Improve health education through national awareness campaigns,
- (9) Invest in community-based education, and
- (10) Increase incentives for pro-health behavior.

A Challenge to Donors

The potential for Cambodian health care is vast but constrained by the fragmentation of the donor community. The onus is on donors to improve their programmatic strategy, cross-organizational coordination, and internal mission to better align with the needs of the communities served.

Donors and development organizations would do well to measure the success of each program—indeed, the success of their entire mission—by rising to meet the following three challenges.

- (1) Together with the MoH, articulate a long-term (i.e., 20-30 year horizon) vision and strategic plan for the health care system as a whole. Within that vision, define your organization's role and commitments. All parties should *sequence* their programs according to a sensible growth plan.
- (2) Collaborate constantly with your peers, the government, and the Cambodian people to leverage joint resources, programs, and knowledge. Offer programs that complement health goals, reduce poverty, and invest in the human capital of Cambodia. To do this, you must first *know* your peers within the aid community.
- (3) Be introspective, and work for change from within your organization. Hold your institution accountable given the realities on-the-ground, and realign aid to focus on demand-driven provisions.

Donor and development organizations have the necessary human capital, funding, and know-how to overcome these challenges. They need to work smarter, not harder, in cooperating to maximize joint impact and to improve the lives of Cambodians in the years to come.

Appendix 1: Timeline of Cambodia's History

- 10th-13th century: Angkor period—the “Golden Age” of the Khmer civilization. Under the rule of Jayavarman VII, the Angkorean Empire won many wars against its close enemies. It was during this era that the kingdom was at its peak of political power and cultural richness. After Jayavarman VII's death, however, the empire gradually began to decline, especially due to the deterioration of its irrigation system that had allowed for rice surpluses, and constant attacks by neighboring countries. In 1431, Thai/Siamese forces finally captured the Angkorean capital, Angkor Thom.
- 15th-19th century: Cambodia fell prone to power struggles between Thailand and Vietnam. This was a period of territorial decline.
- 1863-1953: French colonial period—Cambodia sought French protection in 1863, which eventually grew into colonial domination; the kingdom became part of the French colony of Indochina by 1887. After the Japanese occupation during World War II, Cambodia gained full independence in 1953. However, there remained much French influence on Cambodian politics including its constitution and government administration.
- 1950s-1970s: Sihanouk's administration – This period saw the rise of communist parties and French education of the party elite. Cambodia was neutral and enjoyed relative prosperity in the 50's and 60's. In March 1970, Prince Sihanouk was removed from power by a coup d'état. The then Defense Minister, General Lon Nol, seized power and pushed Cambodia toward an alliance agreement with the U.S.. U.S. and South Vietnamese forces invaded Cambodia pursuant to this agreement in order to intercede North Vietnamese supply routes. In October (1970?), the Cambodian monarchy was abolished and the country was renamed the Khmer Republic.
- April 1975: After five years of growing Communist insurgency aided by support from the communists of Northern Vietnam, the Khmer Rouge successfully captured Phnom Penh.
- 1975-1979: Khmer Rouge Era—the Khmer Rouge sent the entire urban population to work in the countryside to formulate the agrarian society envisioned by Pol Pot, resulting in great suffering, starvation, and death. In December 1978, the Vietnamese drove the Khmer Rouge into the country-side and began its ten-year occupation. This brought the fall of the Khmer Rouge.
- 1979-1989: Vietnamese Occupation – After capturing Phnom Penh, the Vietnamese set up an independent government in Cambodia and the country was renamed the People's Republic of Kampuchea (PRK). Its leading officials were Cambodians who had lived in Vietnam since the 1950's as well as Democratic Kampuchea (DK) military officers who had defected during the rule of the Khmer Rouge. Although the PRK was pragmatic and less oppressive compared to the previous regime, it was unable to garner widespread trust and tens of thousands of Cambodians left the country. Isolated fighting with DK factions ensued throughout the decade and continued even after the Vietnamese withdrawal in 1989.

- 1989: Vietnam announced withdrawal of troops from Cambodia.
- 1991: UN-sponsored Paris Peace Accords signed, which mandated democratic elections and a ceasefire.
- 1992: UNTAC began implementation of the terms of the Paris Peace Accord.
- 1993: UN sponsored a national election to form a democratic coalition government with two prime ministers. In September, Cambodia established a new constitution.
- 1997: The coalition government is dissolved after the eruption of new factional fighting throughout the country. As a result of factional fighting, the first coalition government came to an end.
- 1998: In the second round of national elections, Hun Sen is elected Prime Minister.
- Oct 2004: King Norodom Sihanouk abdicated throne to Prince Norodom Sihamoni... who continues to hold the throne to this day.