

REVIEW OF HEALTH OUTREACH POLICY AND IMPLEMENTATION IN CAMBODIA



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Executive Summary

Cambodia has made impressive gains in the coverage of a number of preventive services in the last 10 years. These changes have been seen in both access to services and in mother and child caring behaviors. Coverage of antenatal care and skilled assistance of delivery have more than doubled, while the percentage of children who are fully vaccinated has risen from 40% to 79%, and exclusive breastfeeding of infants under 6 months has jumped from 11% in 2000 to 74% in 2010¹.

In spite of these promising reports, there are increasing concerns that the pace of improvements in coverage may be slowing, and in some cases, they may even be declining. Alarming, in 2010, the majority of Ministry of Health targets for preventive services were not met. Moreover, there is evidence that those who fail to receive these key services are among the most vulnerable populations: the remote, mobile and very impoverished.²

Outreach is a core activity of health centers, and the dramatic improvements in coverage described above have been attributed to increased accessibility through outreach. By bringing services to the community, outreach is among the most equity-oriented of the routine health activities. It brings services within reach of those who least likely to seek care from fixed site services. A review was conducted to better understand how these downward trends might be linked to existing policy, and whether equity-oriented improvements could be made using community-level outreach. This report provides the key findings of a two-week review mission conducted in June and July, 2011.

Findings: The Health Outreach guidelines appear to have a strong equity focus. Guidelines on budgeting are based on actual costs, and guidelines advise that a comprehensive package of preventive services be provided at more remote communities while services in nearby areas remain limited to a core set of preventive activities. The guidelines seek to promote a service package that balances the greater cost and need of outreach services in remote areas, while also maintaining sufficient capacity at the health center in order to ensure adequate functioning of facility-based services.

Implementation of outreach appears to be a priority activity at most health centers; it requires (and receives) a substantial proportion of staff time and health center budget. Outreach appears to be routinely implemented, and visits are frequent in all but the most remote visits. The impressive gains in vaccination coverage over the previous decade are routinely attributed to the success of the outreach approach to service delivery.

However, the review found ongoing policy and implementation challenges. While they do note provision of micronutrients to postnatal women, the guidelines do not explicitly include postnatal care services in either the basic or the expanded package of services, nor do they address provision of outreach services in urban settings. At the same time, budgetary limitations and the current allocation of resources undermines many of the equity and efficiency safeguards set forth by the guidelines. While outreach is delivered in high frequency and density in accessible communities, this coverage is achieved at the expense of remote communities who, by virtue of reduced access to the fixed site services, arguably have a greater need of outreach. Routine outreach also fails to deliver the complete package of

¹ CDHS, 2010

² Health service access among poor communities in Phnom Penh, UNICEF, 2009

preventive services outlined by the MOH guidelines. In fact, outside of vaccination, there is little evidence of any activity being conducted – be it health education, disease surveillance or provision of other basic preventive health care services. While it seems that efficiencies can be gained at little cost, there are a number of structural barriers that may prevent health staff from delivering a comprehensive package of services at the community level. These include:

- Competing and more profitable demands for midwife services at the Health Center;
- The existence of user fees for services delivered at the HC, but not during outreach;
- Parallel sources of funding for implementation of disease surveillance and treatment (Malaria and TB);
- Encouragement from both the government and supporting NGOs to transition to fixed site service provision.

Recommendations: Given the lack of a strong government directive to increase and improve preventive service delivery at the community level, and the strong financial incentives associated with providing these same services at the health center, it is likely that any short-term improvements to outreach will be at the margins. These can best be achieved by:

- *Empowering outreach workers to deliver a more integrated package of health services at the community as per the current Health Outreach guidelines.*
- *Provision of explicit guidelines on prioritizing services.* This should include a minimum coverage of all communities, both in terms of frequency of visits and services provided.
- *Enhance links within vulnerable communities and sub-communities.* This will require regular mapping and pro-active attempts to establish liaisons within dynamic communities, including mobile and densely populating urban slum communities.
- *Establish a flag for declining service utilization.* Many health centers anticipate a gradual transition to fixed-site service delivery. This process needs to be carefully monitored and checks put in place to ensure that should utilization levels decline too far, outreach campaigns are re-initiated.

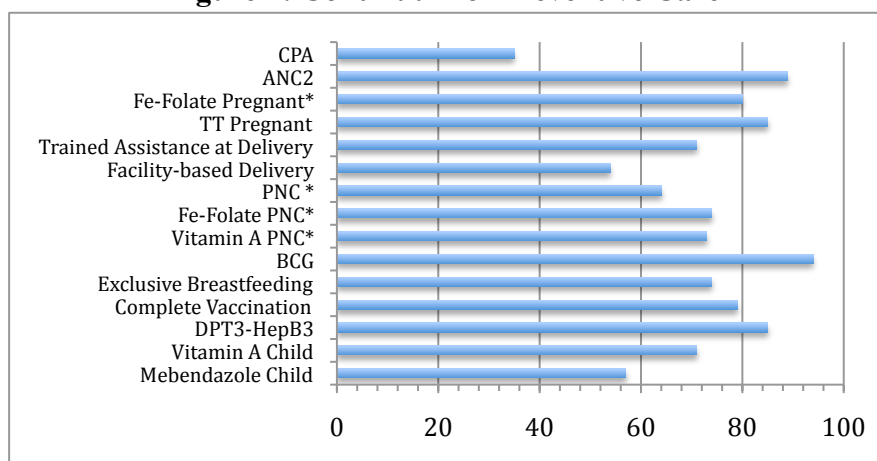
Existing guidelines outline a best-case scenario, which is broadly acknowledged to be infeasible in light of existing budgetary constraints. Health centers receive little or no guidance on making up for shortfalls or prioritizing funds, resulting in wide variance in implementation norms across facilities. In the medium term, improvements in data availability will be crucial to identifying unreached pockets of the population in need of additional resources and to ensuring that the seemingly inevitable transition to fixed-site service provision is actively monitored and managed.

Background

There have been impressive gains in the coverage of preventive health services in Cambodia. Antenatal (ANC) and postnatal (PNC) care services, skilled attendance at delivery and vaccination have all doubled – or better – since 2000. However, these rapid gains, which characterize the first part of the millennium, appear to be declining. According to a recent annual progress report for the second Health Sector Support Programme (HSSP2), Iron-folate for pregnant and post-partum women, Vitamin A for post-partum women, ANC2 for pregnant women and DPT3-HepB and measles vaccination of children all failed to reach 2010 targets. Moreover, according to routine health data, provision of iron-folate and ANC for pregnant women and DPT-HepB3 coverage of infants have each declined by 3 percentage points in the past year.³

Additional concerns relate to the variations in the coverage of different services. Figure 1 provides an overview of the continuum of preventive care in Cambodia. The data suggest a high variance in the delivery of services – including those that are traditionally provided as a package, such as Vitamin A and Mebendazole to children, or iron-folate and the ANC coverage. Among the services that might be delivered at the community level, PNC and the associated postnatal services, in particular, appear to have lower coverage than other preventive care services.

Figure 1: Continuum of Preventive Care⁴



An assessment of outreach was commissioned to investigate whether these gaps in preventive services might be improved during routine outreach activities. Specifically, a policy analysis was initiated to assess the implications of existing guidelines on the efficiency and equity of services provided at the community level. This analysis was complemented by a series of field visits to better understand how potential bottlenecks affect implementation.

³ Routine data provides slightly different estimates from CDHS data. For the three indicators listed, routine data finds drops between 2009 and 2010 of: 83% to 80% for Fe Folate, 83% to 80% ANC, 95%-92% for the DPT-HepB3 combo.

⁴ Data is from 2010 CDHS, unless indicated by asterisk. Those noted by asterisk are from 2010 HIS.

Methodology

The health outreach review was conducted between June and July, 2011. The assessment took a stepwise approach, with a policy review and interviews with key stakeholders at the central Ministry of Health first conducted in Phnom Penh. Following this, field visits were conducted in difficult access (remote and floating) communities in Kampong Chhnang and urban poor (slum) areas of Phnom Penh to observe the effects of the policy on implementation. Initial findings were drafted and shared with the Ministry of Health and UNICEF for validation and input prior to a second field visit to Battambang province to confirm the initial findings and follow up on issues raised during the initial dissemination.

Limitations

A number of limitations are acknowledged in this review. Key among these is the limited number of health centers and outreach visits observed. Time constraints limited the field visits to health centers in 2 provinces outside of Phnom Penh, and only a small number of outreach visits were observed. Given the observed and reported variability of outreach between health centers, additional observations would have enabled more confident extrapolation. In particular, none of the ODs visited had the status of Special Operating Agency (SOA). SOAs have been noted to achieve higher coverage, and their inclusion in the study might have yielded additional insights on effective management of limited budget.

Another key issue relates to weaknesses in real time data. Although substantial improvements have been made in recent years, there are ongoing challenges in interpreting routine health data in Cambodia. Uncertain population estimates undermine denominators, while a recent overhaul of the database resulted in gaps in data availability during the consultant's visit. The latter issue is, to some degree, moderated by the availability of recent DHS information.

Outreach Policy

Overview

Health Outreach guidelines were first introduced in 2001, and have since been updated twice – first in 2003 and again in 2008. The guidelines provide information on the package of services to be included in outreach, frequency of outreach, and cost norms. The guidelines stress “efficiency” in service provision, as opposed to “equity”. However, efficiency is never clearly defined and the budgeting process outlined appears equity-focused in being responsive to the higher cost of providing services in remote and vulnerable communities. Remote villages are defined according to travel time, rather than absolute distance, which acknowledges the additional constraints to reaching services faced by populations with poor infrastructure or difficult geography.

Service Package

The guidelines provide a detailed list of activities including vaccination and distribution of micronutrients (Vitamin A, Iron folate); health education, promotion and counseling; distribution of ORS⁵; birth spacing; deworming; follow-up and referral for TB and leprosy cases; and disease surveillance. Although the guidelines advise facility-based provision of the full ANC services, basic services such as micronutrient provision and checking for some risk

⁵ A more recent MoH circular also authorizes Zinc distribution during outreach sessions

signs can be done during basic outreach. In remote communities, additional guidance is provided on provision of complete ANC and birth spacing services.

Table 1: Overview of Guidelines on Services Offered at Outreach

Basic Package of Services	Expanded Package of Services
<ul style="list-style-type: none"> • Vaccination, including TT for pregnant women • Iron-Folate to pregnant and post-partum women • Mebendazole for pregnant women (after 3rd month) • Vitamin A for post-partum women • Birth spacing education and referral • ORS and surveillance of diarrhea, Leprosy, TB • Nutrition counseling • Health Education (as needed) • Vitamin A & Mebendazole for children 2 times per year 	<ul style="list-style-type: none"> • All activities in basic package • Full ANC services (including blood pressure and weight check, physical exam) • Full birth spacing services (including distribution of FP supplies)

Although HIS data suggests that coverage of PNC is lower than that of other preventive health services, comprehensive postnatal care services are not included in the guidelines for either basic or expanded health outreach.

Team composition and Frequency

The guidelines categorize villages as near or remote based on the time required to travel to communities, with one hour being the cut-off. Teams of 2-3 health workers are to visit the villages either one time per month (for near villages) or every other month (for remote villages). Guidelines advise that the health staff making the visits rotate and that midwives attend outreach if possible – especially to provide the expanded package of services.

Budgeting

The guidelines advise the following standard rates to aid health centers in budgeting outreach activities:

- 8,000 Riels per person per day per diem;
- 15,000 Riels per person per day food in areas further than 10 km;
- 40,000 Riels per person per overnight in areas further than 40 km;
- Actual ice and transportation costs.

Review and adaptation process

The emerging prioritization of fixed site services is visible in the guidelines. It is notable that the policy makers seemed to anticipate an increasing reliance on facility-based provision of vaccination services: “[P]eople living in the nearest villages should be encouraged to use the fixed site services *especially routine immunization*.⁶” [Italics added.] In response to this, the guidelines advise a systematic review to occur every two years.

The most recent review of outreach occurred in 2008, the current focus appears to be on providing structured guidance on fixed site services. When the possibility of drafting a single comprehensive set of guidelines for providing preventive and promotive services at health centers (including both outreach-based and fixed site services) was raised, time constraints and the pressing need to provide guidance on fixed site services were cited as a key barrier. It was explained that updated fixed site guidelines are expected to result in substantive and time consuming revisions to existing outreach guidelines. In the meantime, the Minimum Package of Activities (MPA) for Health Centers includes a detailed, albeit slightly out of date,

⁶ 2008 Guideline for Outreach from Health Center: English Version

description of outreach activities as well as the full list of services to be provided at the health center. While providing a comprehensive overview of the activities conducted by health centers, the MPA does not advise on the appropriate balance of facility- versus outreach-based services, nor does it comment on the appropriate mix of preventive versus curative services.

Guidelines on Outreach in Urban and Unregistered Villages

Existing guidelines appear to emphasize access to services for the rural poor and vulnerable populations, however the same cannot be said of their responsiveness to the urban poor. Indeed, guidelines explicitly state that all “villages inside the catchment area are covered by the outreach activity, except the village where the health center is located.” Unregistered villages, on the other hand, do not receive any mention. Thus, while outreach is not ruled out, these populations, which are often mobile and widely considered to be among the most vulnerable, do not receive explicit protection under the guidelines.

Conclusions regarding outreach policy

- Overall, guidelines on rural health outreach appear pro-poor and responsive to the needs of remote communities. They outline flexible budgeting and the minimum activities for both remote and accessible communities is sufficient to ensure high levels of coverage;
 - Although postnatal care has lower coverage than other preventive health services, guidelines do not include provision of comprehensive postnatal services at either basic or expanded outreach;
 - The guidelines do not explicitly highlight outreach in hard-to-reach, vulnerable communities such as unregistered villages, floating villages, migrant workers engaging in seasonal agricultural work. While the guidelines do not countermand outreach in these communities, not mentioning these vulnerable communities leaves them at risk of exclusion;
 - The current policy environment is not supportive of implementing urban outreach on a routine basis. Urban outreach for the poor settlements (slums), however, is under consideration with an operational pilot implemented in Phnom Penh municipality;
 - Guidelines on fixed site services are forthcoming. It is expected that existing guidelines will be updated in the medium term to reflect changes in policy due to an increasing emphasis on fixed site service provision;
 - Providing a unified set of guidelines (including outreach and fixed site, urban and rural) appears to be low on the policy agenda.
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Outreach in practice

Overview

However facilitative they may be in theory, guidelines cannot be implemented without sufficient personnel and budget. The guidelines do appear to create an enabling environment for reaching out to the remote communities, however budget gaps and inefficient allocation of resources appear to undermine their effectiveness in many areas. Delivering outreach services beyond the minimum package of immunization services seems to be heavily reliant on outside support.

Service Package and Delivery Strategy

Table 2 provides a summary of observed outreach-based activities.⁷ In brief, the observed visits were focused on providing vaccination to children and pregnant women, with little evidence of other services being offered. Health workers called Village Health Support Groups (VHSGs) to announce visits ahead of schedule. In one case, the health worker

⁷ Note: The outreach visit observed in Battambang was special growth monitoring session supported through a World Vision project. As this was not routine outreach, observations of the activities conducted during this visit are not included in the findings. It is of note that, in this case, the health center staff referred to routine outreach as “Vaccination Outreach,” as distinct from the nutrition outreach that they conducted separately.

provided a list of the women and children who were expected for vaccination. The VHSG informed the families the evening before. In this instance, a number of pregnant women were mobilized by the VHSG to attend the outreach, but were dispersed without receiving services when it was learned that no midwife was able to attend. This appears to be associated with a relatively strict distribution of tasks according to position within the health center, an issue which will be discussed in more detail in the section on team composition and frequency. While there was a visible effort to mobilize women and children in the communities, the survey team did not identify any special attempt to identify and reach particularly vulnerable populations during routine outreach.

Most health workers noted a uniformly high coverage of services. Universal facility-based delivery was reported at one health center, while full coverage of vaccination and nearly universal ANC were reported at other points. However, these assurances are somewhat undermined by descriptions of the additional efforts associated with CIP campaigns when health workers recruit additional volunteers from within especially vulnerable communities. This process was noted to be crucial for identifying women and children who are not well integrated into the community network, either due to mobile or very remote residence. This suggests that health workers are aware of existing pockets of poor coverage, and it seems that the extra effort of reaching these individuals is relegated to vaccine-oriented campaigns.

As an important note, none of the health centers visited reported conducting expanded outreach. Although the health centers visited had been purposively selected for covering remote locations, the size and accessibility of the health center catchment areas varied. In one case, the most remote community was 13 kilometers on a good road from the health center. In another, the most remote community was a floating community 2-4 hours from the health center, depending on the type of boat. While staff reported visiting this community less frequently and spending more time there, there was no indication that the complete list of services was offered. Discussions with the health center staff suggested that communities within catchment areas are becoming increasingly accessible either because of better roads and infrastructure or, in one case, because of the completion of new health centers, which substantially reduced the burden on the original center.

Table 2: Observations on Services Offered during Outreach

Activity	Observations
Immunization services	Conducted efficiently. Health workers contacted VHSGs prior to visiting and provided a list of children and women to be seen. Forms appeared to be carefully filled out. In the floating community, the HW waited several hours to ensure that women had an opportunity to arrive. In other villages, the session was shorter.
Vitamin A supplementation for children 2 times per year for children, 6 months to 11 months and 12 months to 59 months	NA, however the service appears to be regularly provided.
Vitamin A supplementation for the post partum women within 6 weeks of delivery	Not observed. Did not observe any effort to visit post-partum women, although there was an apparent effort to see pregnant women. Health workers did routinely carry Vitamin A.
Health education Not required at every outreach session, "Health staff should take opportunity to provide education as needed based on the evident situation."	No health education was observed. While the guidelines do not require health education, during each outreach, discussions with health staff suggest that this activity was not an outreach priority. Rather, health education is most often conducted in conjunction with meetings of village officials and VHSGs. No IEC materials were in the outreach kit.
ORS/Zinc distribution to children with diarrhea	Not observed. The health workers did not seek out children with diarrhea and did not carry ORS/Zinc.

Distribution of Iron-Folate to pregnant women and encourage them to go to health center for ANC	It appears that women are referred to the HC for ANC. However, iron folate was not carried in the outreach kit or distributed. In the case that a midwife attends, she may distribute iron folate. In one visit observed, pregnant women had been notified of the outreach by the VHSG, and arrived in the morning for antenatal services. Upon notification that the midwife was not present, they dispersed without any counseling or care. This was the only observation of pregnant women being mobilized to attend outreach.
Birth spacing services	Not observed, birth spacing materials were not carried in the outreach kit.
Periodic deworming twice a year in March and November for children from 12 to 59 months	NA, however the service appears to be regularly conducted.
Deworming any month for pregnant women (after first quarter of pregnancy) and post partum women	Not observed, mebendazole was not carried in the kit, although distribution of mebendazole was noted by HWs to be distributed during outreach. While some outreach visits appear to mobilize pregnant women, mobilization of post-partum women was not observed.
Follow-up of defaulters of TB and Leprosy patients and active referral of TB and Leprosy suspects	Not observed. Health staff reported that these activities were conducted in parallel, with separate funding sources.
Counseling on exclusive breast feeding for 6 months and supplement nutrition	Not observed, but may occur.
Diseases surveillance in the community	Not observed, OD and PHD staff note that this is a low priority among many competing activities.

Team Composition and Frequency

Health centers in Kampong Chhnang consistently reported outreach teams of 2 persons, and the health center in Battambang noted 3-person teams.⁸ All health centers reported that midwives were members of the core outreach team, and were regularly scheduled to attend outreach. Broader discussion suggests that this is unusual, and that the health centers visited by the team were among a minority which have more than 1 midwife on staff. Despite these promising reports, each of the routine outreach visits seen were conducted by a single outreach worker, which was invariably a male EPI staff. With the exception of a growth monitoring visit to a village in Battambang (supported by separate NGO project funds), there was limited evidence of the midwife participating in the outreach. While the Ministry of Health reports that EPI staff have received training in distribution of micronutrients and should be able to perform blood pressure checks and weight gain monitoring, it appears that staff are hesitant to provide these services at outreach. This may be linked to the clear distribution of duties within the health center – according to the Minimum Package of Activities (MPA) for health centers. midwives are responsible for all ANC activities.

All of the villages visited by the assessment team were reported to receive monthly outreach, and discussions with VHSGs suggested that visits are, indeed, regularly conducted. In Kampong Chhnang, health center staff called ahead with a list of all women and children expected, while the health center in Battambang had a regular schedule, with each village visited on the same day of each month (i.e., the village which the assessment team visited received outreach on the 8th of every month). In the health centers visited, outreach coverage appears to be fairly comprehensive. In villages described as large, health staff reported setting up two sites for services. When asked, health workers described “large” villages as spreading 2 km or more. In one area visited, two outreach teams (each composed of a single health worker) had set up in villages approximately 3 km apart. By car, the villages were less than five minutes apart and were 15-20 minutes away from the health center on a good road. In

⁸ With outside financial assistance, the health center in Battambang reported 3 person teams during outreach.

terms of distance from the health center, the villages were described as being “in the middle,” neither near nor far, from the health center. In Battambang, it was reported that the remote villages (10-13 kilometers) received outreach on two consecutive days. When asked for more details on these consecutive visits, health staff reported delivering the same (basic) package of services offered in other villages, and the villages were not noted as being especially large. Health staff did not spend the night in the villages, but rather arrive in the morning and left shortly after lunch. While not directly contrary to the guidelines themselves, such high density appears to be contrary to the intention of rationalizing resources. For example, the guideline recommendation that outreach not take place in the home village of the HC, which was frequently defined as an area between 5-10 kilometers from the center – an area far larger than the 2 km spread to which health workers report providing separate outreach sites.

Nonetheless, such practices appear to be common. In the case of the latter example, the catchment area of the health center had recently been divided in half, and the HC went from having 12 to 6 villages in its domain (compared to 10 and 21 villages in the catchment areas of the two HCs in Kampong Chhnang). The assessment team visited the older HC, which had originally had responsibility for all 12 villages in the catchment area. Attempts to maximize the outreach opportunities were revealed when it was noted that the village in which the old HC stood was officially part of the catchment area of the new health center. Thus, the village received monthly outreach, but not from the staff of the local health center.

The only example provided of a village receiving less than monthly outreach was a remote floating community in Kampong Chhnang. This community received quarterly outreach, which staff noted to be longer in duration. While no health centers reported inaccessible or un-serviced communities in their own catchment areas, they did acknowledge that communities elsewhere might be missed, due either to remoteness or mobility of the population. Unvaccinated children in their own catchment area were consistently described as being the children of mobile families, who had failed to receive proper vaccination when traveling elsewhere and “had not caught up yet.” The 2010 EPI report commissioned by WHO seems to confirm this information. The team found very high vaccination rates (90%) even among highly vulnerable populations; however, among the children who were not vaccinated, nearly half (48%) were mobile, and a further 42% were either from remote or ethnic minority communities.⁹ Given the strong external support for attaining high coverage of vaccinations and the consistently lower coverage of non-immunization preventive services, expanding the assessment to a broader set of preventive services would likely identify even larger gaps among these populations.

Based on the health center descriptions of the catchment areas, it seems possible that there are few communities who do not receive services. Despite the fact that health centers were purposively selected to provide insights on conducting outreach under difficult conditions, health center maps of the catchment areas suggested that the most remote villages were relatively nearby: generally less than 1 hour, and within approximately 2 hours in all cases. It is possible that there are known pockets of the population with insufficient access to outreach, but if so, health workers were unwilling to discuss the challenges during the visit. Given the small sample and limited discussion on this issue, it is difficult to assess the true reach of the outreach without more systematic information.

⁹ WHO: EPI Review Cambodia, 2010

Budgeting

Discussions highlighted several funding options used for outreach, which were generally designated at the OD level. The ODs all reported a heavy reliance on a combination of government and HSSP2 funds for outreach, with individual health centers sometimes receiving specific additional support from NGOs. The degree of reliance on government funds appears to vary by the amount of HSSP2 funding allocated to the province and the level of outside support.

Health centers in the two provinces described different budgeting processes. Staff in Kampong Chhnang reported using the government guidelines on outreach in producing the Annual Operational Plan (AOP). OD staff reported having attended a training workshop in Phnom Penh for developing plans for HSSP2 funds, and noted that HSSP2 and government guidelines are the same. They reported three budget categories related to outreach:

- Less than 10 km: 4\$ per diem (2\$ each for 2 staff) and actual cost of transport;
- 10-40 km: 4\$ per diem, 7.75\$ for food and actual cost of transport;
- Greater than 40km: 4\$ per diem, 7.75\$ for food, 10\$ accommodation and actual cost of transport.

While health centers in the area reported providing an initial budget based on these guidelines, one OD noted that the 10\$ accommodation fees were often removed prior to submission to the PHD. This was, they said, because the accommodation budget fell under a budget line requiring additional documentation for approval, and was very rarely approved.

Staff in Battambang, in contrast, were unaware of the existence of specific guidelines on budgeting outreach, and reported utilizing a combination of Ministry of Economy and Finance (MEF) and NGO guidelines, with MEF cost norms used for per diems at a rate of 4\$ per outreach as above, and NGO guidelines to fill in other activities according to an expected budget ceiling. For example, at the health center visited, World Vision provided additional funds to support fuel costs and per diems to VHSGs, as well as additional per diems to staff for supplemental nutrition outreach. Until 2009, health centers in the area which did not receive external funding budgeted a flat amount of 4\$ per outreach from either HSSP2 or government allocation. Since 2009, they have begun requesting additional transportation costs for outreach funded by HSSP2, although not for those funded by the government. Transportation is budgeted at 500 Reil/km, and was described as having been added in response to specific lobbying on the part of the PHD – i.e., the perception was that provision of transportation costs was being allocated as a special allowance rather than as a part of the system.

In all cases, budgetary realities defined the activities which could ultimately be implemented. In the first case, the guidelines resulted in unrealistic budget requests, and activity plans had to later be amended to reflect the actual budget allocations. In the latter case, health centers put together their activity plans based on the expected budget. While arguably more efficient, it was noteworthy that health centers, ODs and even the PHD were unaware of the government guidelines on outreach. As a result, they were unaware of the available government support – however limited it may be in actuality – for outreach. Staff were not aware, for example, that government funds could be requested to cover the cost of transportation or food for outreach.

Designation of Funding Sources

Regardless of the source of funds, PHDs noted that the AOPs are the only consolidated document to come out of the planning and budgeting process, and that this document is

submitted to the MOH. Discussions at all levels described a process wherein HCs develop plans and operational districts are responsible for validation and compilation prior to sending them on to the PHD. PHDs provide the final validation and compile AOPs from all ODs before sending them to the MOH. While the budgeting process described above represents important variations in the preparation of the AOP at the health center level, the validation and compilation steps were consistent in all ODs and PHDs visited.

The PHD in Battambang reports a transition to a fully electronic system. In the past, AOPs were drafted by hand at the HC and entered into electronic forms by the OD, but from this year forward, health centers will receive a soft version of the template which includes the expected activities and relevant cost norms. Health centers are then responsible for filling in the details of the form, including the expected funding source (government, HSSP2, or other NGO funding source). The PHD reported that they submit the complete AOP to the MOH, who then compiles all activities listed to receive government budget. The PHD was not aware of any process through which the AOP might be translated to correspond with MEF budget envelopes.

As described, identification or selection of funding sources occurred through a consultative process between the ODs and health centers. There was a clear hierarchy of funding sources, with NGO funds considered most preferable, followed by HSSP2 fund, and then government budget.¹⁰ Health centers with additional NGO support are responsible for ensuring it is reflected on the AOPs. It appears that HSSP2 budget is first allocated to those activities perceived most important to the government agenda. However, the setting of this agenda may vary by province. One OD in Kampong Chhnang noted that HSSP2 funds had to be used on “higher profile” activities, such as the maternal death audit. In this case, the prioritization of activities was perceived to occur in the higher level of the health system (the OD in question asserted that the Maternal Death Audit was a priority activity of the central Ministry of Health), and as such, there were insufficient HSSP2 funds to cover outreach in this OD. In contrast, the PHD of Battambang noted that ODs had the authority to designate the preferred allocation of HSSP2 vis à vis government funding. Thus, other than setting minimum requirements, this prioritization process does not seem to follow predictable or traceable communication from the Ministry of Health. While some PHDs may be more prescriptive in setting priorities than others, it is likely that allocation of HSSP2 funds is based on precedent rather than a needs assessment.

Management of budget shortfalls

Given the limitation of existing funds, the vast majority of health centers in Cambodia are forced to make difficult decisions on how best to allocate these resources. ODs and health centers in Kampong Chhnang reported gaps of 40-50% between requested and granted budgets for health outreach. It appears that no guidance is provided to health centers on how to manage the funds when they fall short guideline recommendations; when asked about this issue, one OD expressed an “inability to resolve the issue,” and delegated responsibility to the health centers.

Upon review, a number of mechanisms for handling the budgetary shortfalls were identified during the field visit:

¹⁰ Both government and HSSP2 funds are provided on a reimbursement basis, but HSSP2 funds were described as more likely to be reimbursed in full and punctually. Health center staff also noted a less cumbersome verification process for HSSP2 funds, wherein village chiefs could sign off on reports in lieu of commune chiefs, whose signature is required for reimbursement of government funds. NGO funding is perceived as more flexible and more likely to cover the full costs of implementation.

- Coverage Improvement Plan (CIP): Health centers and ODs both highlighted the importance of CIP funds in supplementing outreach budgets. These funds target areas with low vaccine coverage, and are mainly supported by GAVI. The program has sufficient funds to pay per diems to volunteers, and guidelines enable health workers to go door to door in vulnerable areas. Thus, these funds were considered to be an extremely effective way to provide services to those most in need. However, the funds are an explicit tool of the immunization program. *Other preventive and promotive services are not routinely offered at the same time.*
- Some health centers used a portion of user fees to make up for budget shortfalls. *This is likely to be least manageable for poorer health centers and those who collect fewer user fees due to low levels of service utilization. These health centers are more likely to cover poor and at risk communities than wealthier health centers.*
- Health workers cover several communities per day. *This strategy limits the amount of time health workers are able to spend in a given community, and appears to contribute to an exclusive emphasis on vaccination.*
- Health workers provide outreach without receiving per diems, and may even cover the cost of fuel themselves.
- Health workers reduce the coverage of outreach. In an effort to maximize savings, this strategy tends to focus on reducing outreach in the more remote and expensive communities to cover. *Thus, communities for whom facility-based services are the most inaccessible are the most reliant on them.*

Reimbursement process

Both HSSP2 and government payments are based on reimbursements. Although reimbursements were not noted in the World Vision-supported health center, NGO funding mechanisms are likely to vary. Government reimbursements required the signature of the commune chief, whereas HSSP2 payments were based on village chief signatures. The latter was noted to be logistically simpler and, thus, preferable.

Health workers noted that government payments were more likely to arrive late, or fall short of the requested or expected amount. Although not encountered in the field, stakeholders at the central level noted that uncertainties around reimbursement undermine staff commitment to providing outreach. As the two sources of funds were reported to share budget norms, the simpler logistics and greater certainty around reimbursement were the main reasons given for preferring HSSP2 to government funds.

Table 3: Detailed Description of Budgeting and Planning

Findings from Kampong Chhnang
<p>Health centers in Kampong Chhnang reported following the national guidelines, and submitted the budget request to the OD. The OD validated the number of villages and distance. In contrast to the health centers, one OD noted that they do not submit budget requests for overnight outreach, as they are certain that the request will be rejected. Although this was not encountered in any discussions at the field, discussions at the Ministry of Health highlighted the fact that overnight trips required special permission, and were budgeted as “mission,” rather than routine outreach. This may explain the ODs hesitancy to include overnight stays in the plan, and certainly represents an important barrier in conducting outreach to truly remote communities.</p> <p>Upon receipt of the budget, the PHD reports distributing a fixed amount per outreach visits proposed. In general, this amount is approximately 5\$ per visit, 4\$ to be spent on per diems (2\$ per 2 health workers) and 1\$ for fuel per visit. The OD reported a similar pattern, distributing 5\$ per outreach numbered in the annual operational plan. Neither reported any effort to adjust allocations based on either the total requested budget nor on health data such as coverage rates. <i>Note: this mechanism for budget distribution is likely to most adversely affect the health centers with high average costs per outreach visit: those with remote and floating communities who are at high risk for epidemic outbreaks and least likely to access health services at the health center.</i></p>

Health centers report distributing either a fixed budget or a fixed amount of fuel per quarter. Staff appear to be left to their own devices as to how to best allocate these resources. There are no clear minimum requirements for frequency of outreach in the guidelines, although quarterly visits appears to be the established norm. A number of mechanisms to cope with budget shortfalls were identified, and are described elsewhere.

The main reported challenges were associated with providing outreach for mobile populations or communities with low acceptance of services. While high coverage was generally reported, immunization rates as low as 60% were suggested in one ethnic Vietnamese community less than 1 kilometer from the health center. There was no clear prioritization of this or other vulnerable communities in implementing outreach. On the contrary, mobile communities were visited less frequently than non-mobile neighbors, and the staff seem at a loss as to how best to reach out to ethnic Vietnamese populations.

Findings from Battambang

The PHD in Battambang reported 2 distinct funding flows: national budget and donor funds. In both cases, the desired sources are indicated in the AOP. The HC sends the AOP to the OD and on up the system. Donor requests are sent to the HSSP2 secretariat, who reviews the request and releases the funds according to pre-established guidelines. The OD was described as having the power to decide whether to request HSSP2 or government budget for a given activity.

PHD, OD and HCs were unaware of the government guidelines on planning and budgeting outreach, but reported using a combination of donor guidelines and MEF guidelines. There was a perception that the government guidelines provided only for per diem costs (a flat, fixed amount of 4\$ per visit), with no allocation made for transportation or food costs, and officials advised adding transportation costs to the guidelines in the future. The PHD acknowledged that this was a serious impediment and noted that they had successfully lobbied to allow transport costs to be covered on a per kilometer basis for outreach funded through HSSP2.

According to the PHO, health workers in Battambang worked off of expected budgetary allocation rather than starting with government activity and budgeting norms. The most important tool noted was an AOP template, which was provided to each health center. The template included the expected activities and unit costs; health centers were expected to fill in the appropriate frequency and total cost, as well as the expected source of funding.

Only one health center was visited in Battambang. The staff there confirmed the PHD's information regarding the budgeting process and, like the PHD, were unaware of the national guidelines regarding budgeting of outreach. The health center receives substantial NGO support, and utilized the NGO's guidelines in budgeting the activities supported by them. Nonetheless, the HC also used what government budget was understood to be available. Thus, government per diems for outreach were included as a budget line while transportation and food allowances were listed under specific NGO support

With NGO support, the health center which was visited received sufficient budget to conduct monthly visits in each of the 6 villages in the catchment area, all of which were less than 15 kilometers from the HC. The PHD and OD, however, reported that some health centers in the area must reduce the number of visits to remote and 'expensive' villages.

Outreach in Urban Settlements and Unregistered Villages

Urban slums and unregistered villages have both been identified as housing dense concentrations of disadvantaged populations. Through either exclusion or neglect, existing guidelines leave both vulnerable. In discussions with health officials, the definition of the health center's home village generally described an area within between 5 and 10 kilometers of the health centers. As the vast majority of the urban very poor live sufficiently close to the health center to exclude outreach, this policy is the most frequently cited barrier to providing outreach to urban slum communities – although it is invariably noted that the ultimate barrier is a lack of financial resources.

Meanwhile, neither of the PHDs visited reported that unregistered villages were ineligible to receive government support for outreach, however health centers in Kampong Chhnang provided mixed responses on their ability to provide outreach to these villages. One health worker asserted that he did not know whether villages in his catchment area were registered

or not, but that it was his duty to provide services if the village was accessible. Some health workers were confident that lack registration status of the village did not prohibit outreach, while others seemed less sure. During one discussion, a health worker acknowledged that a large community around a Chinese farm was not receiving outreach due to its lack of registration, but stated that this was in the catchment area of another health center. In some cases, these villages might be treated as offshoots of the original village of the inhabitants. Providing an example, the Kampong Chhnang PHD noted that one community had traveled 20 km for the planting season. In this case, the health worker was expected to receive confirmation of an outreach visit from the village chief at the original location. In this way, while outreach is not precluded, the cost in time and fuel is substantially higher. Policy around the recruitment and retention of VHSGs, which will be discussed later, may play an equally, if not more, important role in mobilizing these communities than the lack of clear guidelines on outreach.

Thus, policy prohibitions are a key impediment to providing outreach in urban slums, but do not seem to be the main constraint in limiting outreach to new or mobile communities. With regards to the latter, a number of challenges were cited. As many of these settlements are in remote areas, the main impediments were the cost and time required to reach the villages, a lack of clear data on the population, and the lack of a volunteer network to mobilize community members for outreach. Similar challenges were noted by each of the PHDs visited.

Additional Enabling & Inhibiting Factors

There are a number of issues which critically impact the effectiveness and equity of outreach services, but are not explicitly related to the existing guidelines on outreach.

Financial incentive structures

Financial incentive structures play an important role in determining how and when health workers provide services. Current incentive structures emphasize facility-based delivery of services, which may undermine motivation to offer these same services through outreach. Even if no midwife is present, health outreach provides an important opportunity to provide micronutrients, deworming and birth planning services to women, as well as a partial check for risk signs such as high blood pressure. In one outreach observed, pregnant women who had arrived at outreach expecting a consultation with the midwife were dispersed when she canceled at the last minute in order to attend a delivery at the health services. It is unclear why no services were provided, and it is possible that the remaining health worker, a male, did not feel empowered to provide the services. An alternative explanation may have to do with the inconsistent user fee structure; although a user fee is charged for ANC delivered at the health center, services delivered through outreach are expected to be free. While not large (1,000 Reil in the health centers visited), this amount may be sufficient to dis-incentivize its provision at the community level. This possibility seems to be supported by a comment made at the OD: when asked why local NGOs were providing funding to bring women to the health center rather than supporting the (arguably cheaper and more efficient) transport of the health worker to the village, the OD stated that the NGO did not wish to affect the health center's intake of user fees.

It is also of note that, though midwife participation in outreach is recommended by the guidelines, it seems to be rarely achieved in reality. The health centers visited were unusual in that they each had two midwives on staff. Although this was asserted to facilitate the attendance of midwives at outreach, no midwife was present at any of the three routine

outreach visits observed. Currently, midwives receive 15\$ per facility-based live birth. At nearly 8 times the per diem for attending outreach, this creates a powerful incentive to stay at the health center rather than attend outreach, as was indeed the case during the visits observed, in spite of the fact that VHSGs in these communities reported making an effort mobilize pregnant women in preparation for the midwife's visit. Given these findings in well-staffed health centers, it is considered highly unlikely that many outreach visits include midwives. Ministry and provincial health authorities appear to concur with this assessment.

Community Links and Mobilization

Solid links with the community was noted to be key in successful outreach. Health staff note that VHSGs are key in identifying and mobilizing individuals for services, whether delivered through outreach or at the health center. Similarly, the support of commune chiefs was noted to play an important role in building trust in health campaigns. The lack of a functioning volunteer network was listed as a key barrier in working in mobile communities, as well as urban slums, and health workers commented that the payment of an incentive to VHSGs in the CIP campaigns plays a critical role in the initiative's success while noting the lack of incentive for routine outreach to be a serious obstacle.

Even in the absence of incentives, examples of good practices were seen. In one case, outreach workers provided the VHSG with a list of all women and children expected for follow up in advance of outreach. The VHSG notified each of the families the evening before the planned outreach, which allowed for a quick and efficient visit by the staff. In the same village, the VHSG noted that he was also served as an intermediary for another VHSG in nearby village, who did not have a mobile phone.

It is important to note that, while strong ties with VHSGs and the village authorities are critical for mobilizing the general population in villages, they may not be sufficient to mobilize vulnerable sub-populations within the catchment areas. VHSGs are often relatively high-ranking community members, and thus have limited contact with the poorest or most vulnerable populations, who may not be permanent residents or live somewhat outside of the main village cluster. Meanwhile, due to a lack of "village" status, these communities are unable to recruit their own VHSGs – an issue which also affects unregistered villages. Thus, health workers often recruit additional volunteers for CIPs. While not an official part of the VHSG network, these volunteers are members of the hard-to-reach communities, and are critical in assisting health workers to identify eligible women and children.

The importance of community links was also emphasized when the discussion shifted to fixed site service provision. An important side effect of frequent outreach is a familiarization of the health worker with the community, and vice versa. As visits become less frequent, this connection breaks down. The target population for preventive services is constantly changing as infants age and women become newly pregnant, and the importance of a strong promotive team at the village level is noted to play an increasingly important role as more services are offered through fixed site.

Existing support

Despite the small number of health centers visited, substantial variation was identified in the implementation of outreach. While some differences were attributed to factors such as the staffing of the health center and the size and accessibility of the catchment area, outside donor support was found to play a large role in a health center's capacity to regularly implement integrated outreach. The additional financial resources associated with NGO support were unambiguously important. Health center staff repeatedly noted a lack of funds

for fuel, and some reported covering the transportation cost of outreach out of their own pockets. In addition to covering the basic cost of outreach, outside NGO resources were also more flexible than government or HSSP2 funds, and could cover additional costs. In Battambang, for example, NGO support was used to provide incentives to VHSGs. NGO support was also considered helpful in the planning process, in building the technical capacity of the staff, and in working with the staff to identify and respond to priority community issues, thus strengthening the trust between the health staff and community. An example of this was seen in Battambang, where support from World Vision enabled staff to regularly conduct separate outreach visits including growth monitoring, cooking demonstrations, and nutrition education. Discussions with stakeholders also suggest that outreach visits in Special Operational Areas (SOAs), where incentivized payment is contingent upon achieving pre-determined coverage thresholds, services have consistently stronger coverage.

Conclusions regarding outreach planning and implementation

- There are large and consistent gaps between budget needs outlined by the guidelines and the budget available to health centers;
 - Financing models such as the SOAs may be more likely to result in provision of a comprehensive set of services at outreach. NGO funding sources are described as being more flexible and provided in sufficient amount to enable more frequent visits by larger teams and to more hard-to-reach areas;
 - Although the guidelines specify that budget should reflect the varying costs of outreach, funds were allocated evenly on a per event basis. Thus, health centers with the most inaccessible catchment areas are disproportionately affected by budget shortfalls, while areas with a larger number of nearby/accessible communities can spread the gap in resources;
 - Health workers receive no guidance on how to manage the shortfalls in budget. Although several coping mechanisms were identified, each undermines the target of equitable (universal) access to a comprehensive set of preventive services;
 - Strong community links, often referred to in the form of either VHSGs or Village chiefs, are key to both identifying and mobilizing eligible members of the general population for outreach services;
 - Community mobilization for outreach was a pro-active process, in one case a complete list of names provided to the VHSG in advance;
 - In addition to VHSGs, health workers note the importance of working with mobilizers from within the hard-to-reach populations in vaccination campaigns. Although critical for achieving coverage in the general population, an over-reliance on village authorities and VHSGs is likely to result in incomplete information and mobilization from more vulnerable sub-communities during routine health outreach.
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Conclusions and Recommendations

The importance of outreach in achieving high coverage of core preventive services was emphasized several times during the review. However, even as the deadline for achieving the Millennium Development Goals nears, improvement of these key indicators is waning. At the same time, the health outreach approach to service delivery is undergoing an important period of transition as many within the health system turn to fixed-site service delivery. Discussions with policy makers highlight a clear ambivalence to expanding outreach. The director the National Immunization Program (NIP) noted that the amount spent on outreach drops by 1% annually, while health staff reported a perception that outreach suffers from a low profile, making it the first item to be cut when funds are short. These budget shortfalls seem to disproportionately affect remote communities

The review found that efficiencies can be gained at relatively little cost. Distributing the budget to reflect variations in the cost per service and empowering all health workers to

provide basic ante- and post-natal services to women are two areas of low-cost improvements. Other attempts at rationalizing resources, while relatively inexpensive, may be structurally and logistically more complicated to implement. For example, several vertical programs currently support community outreach and mobilization. These include tuberculosis and malaria activities, as well as catch-up campaigns run through the National Immunization Programs. While dedicated outreach campaigns are important to the success of these programs, there is scope for greater integration into the routine activities

A priority challenge moving forward is clearly the lack of real-time data. Given the high overall coverage of the services in coverage, effective advocacy will require reliable data tracking utilization rates among vulnerable and under-served sections within catchment areas. By and large, health workers reported coverage of services to be high throughout their coverage areas and stated that implementation of fixed-site services does not seem to be reducing coverage. However, the field visit did confirm reports of hidden pockets of uncovered populations despite this generally high coverage rate. Notably, a floating Vietnamese community within 1 kilometer of the health center was reported to have coverage rates of 50-60%. Health staff confirmed that other hidden areas of low utilization might exist – due to the relative inaccessibility of such communities, it is even likely that health workers would have limited awareness of the health situation of these groups. Given the sensitivities around the process, and the impending deadlines for attaining a number of high profile government objectives – including vaccine and ANC coverage – active monitoring and management of the process is key.

Priority Actions:

1. Seek a more efficient and equitable utilization of existing resources

While many examples of good practice were identified during the course of the short field visit, a number of inefficiencies were also identified. Key among these was the budget allocation process, which was sometimes found to be both inequitable and contrary to the intention of the guidelines.

- Distribute budget to reflect variations in the cost per outreach: Both the PHD and the OD reported distributing budget according to the number of outreach activities listed. ODs and HCs should work to document the variations in actual costs of conducting outreach between health centers and, even in the case the full budget requests are unavailable, managers should distribute funds according to this variation.
- Empower all health workers to provide basic ante- and post-natal services to women: All staff should have been trained to provide micronutrients and are able to conduct basic routine health checks, including blood pressure checks and weight monitoring. Yet observations suggest that, with the exception of tetanus vaccination, the EPI staff who conduct outreach hesitate to provide ANC services. The implications of this are most vividly seen in the difference between coverage of Vitamin A at PNC (73%) and the provision of a birth dose of BCG (93%), despite the fact that each of these services should be given at the same time.¹¹
- Set and attain a minimum outreach by community: Very high density coverage of health services in accessible communities is being achieved at the expense of the most vulnerable communities: the remote and the mobile communities. A minimum coverage for all communities needs to be established, with an emphasis placed on more even coverage of health center catchment areas.

¹¹ 2010 HIS and 2010 CDHS, respectively

The existing high coverage of key preventive services is evidence of the strong political support and intensive efforts of health workers throughout the country. Future improvements will require a continuation of these efforts – including clear and regular communication within and between all levels of the health system.

2. Seek better engagement with vulnerable communities

Health workers frequently noted a lack of engagement with vulnerable communities. High mobility, difficult access and language barriers make it difficult for health workers to establish strong ties with highly vulnerable groups. A lack of “village” status means that many communities do not have an official VHSG, while in the cases that the community is merged with a larger group for administrative purposes, the VHSG often has the same difficulties connecting with the community as the health worker. As indicated by the CIP results, appropriately linking in with these communities can dramatically increase uptake of services.

- Map vulnerable communities: Health workers often know of vulnerable communities, but this knowledge is not systematically documented. Each health center is responsible for mapping their catchment areas; these can be updated to be better registers of vulnerability. Mobile communities, in particular, should be indicated on maps. Other indicators of vulnerability may include floating or very remote villages, or ethnic minority communities. In this process, an emphasis should be placed on identifying known or suspected areas of low coverage.
- Establish a health liaison in vulnerable communities: In each vulnerable community noted, a liaison should be identified who can communicate with the health staff and assist in monitoring the changes in the community, including in- or out-flux of pregnant women and children.

3. Establish a Flag for fixed-site services

Transitioning to fixed site service delivery is likely to result in decreased coverage of preventive services. Guidelines should include minimum acceptable coverage rates which can be updated annually and can act as flags. Should coverage rates drop too far, the flags provide the notice to resume outreach-based services.

4. Further research and analysis

Most stakeholders accept that additional efforts need to be made to reach vulnerable, high-risk populations, and outreach offers an effective means of doing so. However, the generalized lack of actionable data in Cambodia remains an important challenge in improving outreach. While efficiencies which can currently be implemented have already been described, reaching the most vulnerable communities is likely to take additional resources. Thus, the question of *what* should be done *for whom* must be answered.

Ultimately, the goal of data collection is to enable policy makers to identify areas in need of high impact outreach. By providing information on who the most vulnerable groups are, where they are located, and what is the most effective package of services, it is expected that additional information would facilitate the government and its partners in effectively responding to the community’s needs for preventive health services.

A variety of data sources exist. Large surveys are conducted every 5 years, while HIS can provide quarterly data with only short lags. Financial reports and monitoring reviews for large projects, such as HSSP2, also provide important data, and the commune database represents a massive effort to compile a variety of information from every commune in the country.

- a. “Who and Where” – There is a need for better identification of populations who fail to access health services

Proposed indicators (all at the commune level):

- i. Coverage of preventive services by commune (Coverage of preventive services among vulnerable communities)
- ii. Presence of vulnerable (mobile, remote, floating, ethnic minorities) communities by commune
- iii. Availability of support to the HC(s) in the commune
 1. Presence of NGOs working in health
 2. SOA status (yes/no)

While the continued presence of un-reached populations is well documented, identifying them can be difficult. Routine and survey data both suggest high coverage of preventive services. Indeed, the 2010 EPI Assessment in Cambodia found very high coverage (90%) even in populations generally considered to be vulnerable. The EPI Assessment reported challenges in identifying unvaccinated children, and health workers in both Kampong Chhnang and Battambang echoed this assertion. WHO plans to conduct a mapping of vulnerable populations over the coming months. However, with 48% of unvaccinated children described as mobile,¹² maintenance of an up-to-date database of at-risk communities is likely to be a challenge which might best be achieved by using the Commune Database.

As noted by the EPI Review, utilization rates have increased to the point that traditional definitions of at-risk populations are no longer selective markers of poor coverage. Given the apparent importance of external support to Health Centers, information on whether NGOs work in the area would assist in identifying areas at risk of low coverage. It would also enable better coordination with these NGOs, which may yield further insights into localized challenges.

- b. “What and How” – There is need for a review of how the implementation of outreach affects coverage of services

Proposed indicators (all at commune level):

- i. Coverage of preventive services by commune (Coverage of preventive services among vulnerable communities) – same as above
- ii. Frequency of outreach
 1. Percentage of villages in commune receiving less than 0-3 annual visits
 2. Percentage of villages in commune receiving 4-5 villages
 3. Percentage of villages in commune receiving 6-9 visits
 4. Percentage of villages in commune receiving 10-12 visits
- iii. Mapping of outreach

¹² WHO: 2010 EPI Review in Cambodia

1. Number of villages receiving more than 1 outreach visit (or more than 1 outreach visit within a radius of the village)
- iv. Composition of outreach teams
 1. Percentage of outreach visits including 2 or more health staff
 2. Percentage of outreach visits including midwife
- v. Reliance on fixed site services
 1. Number of villages relying on fixed site services
 2. Coverage of preventive services in villages relying on fixed site services

Outreach is considered to play a key role in delivering services with an increased focus on equity. However, providing regular outreach in difficult-to-access communities has substantial budgetary implications and the cost of delivering outreach in strict accordance with the guidelines is not currently feasible. Given this reality, an assessment of the optimal mix of services is warranted; especially as no assessment of the optimal team make-up and delivery schedule has been identified and, given the high density of outreach seen in some areas, there is likely to be a point of diminishing returns.

Data collection for this need not be nation-wide, but should include diverse areas (in terms of coverage rates, community characteristics and outreach activities). In combination with the coverage data by commune, it should be possible to seek correlations between coverage rates and outreach characteristics.

A detailed investigation of available data sources was beyond the scope of this report, but an emphasis has been placed on data which could be collected through routine systems and a minimization of additional indicators: thus, a combination of HIS and financial reports may provide much of the data on the frequency of health services, while the commune database provides information on coverage. Additions to the commune database might include frequency of outreach and reliance on fixed-site services. Additional qualitative research would be particularly helpful to (i) better understand the variance in outreach services due to external support or SOA status and (ii) better understand the optimal mix and frequency of services at the community level.

5. Review and update existing guidelines on outreach

The planned introduction of guidelines on fixed site services will necessitate a complementary review of outreach services. This process provides an important opportunity to review and update existing guidelines.

Activity	Comment
Review package of services included in outreach; identify priority areas of improvement	Outreach guidelines describe a number of activities. Efforts to improve outreach will first require agreement on priority activities. With its existing focus on commodities, improvements in ANC and PNC are likely to be easiest to achieve. Moreover, HMIS data suggest that improvements in these areas – especially PNC – are lagging.
Review guidelines on density of outreach; confirm or update existing guidelines based on findings	Current guidelines countermand implementation of outreach within 5-10 kilometers of a health center. Available information suggests that such guidelines inhibit staff from responding to known gaps in coverage, and the high density of outreach in non-home villages (with teams set up less than 2 kilometers apart or teams extending outreach additional days) suggest that staff are adjusting to the reduction in coverage in the home village by

	increasing coverage in other nearby villages. Guidelines on density of outreach should emphasize coverage in areas with low utilization rather than setting fixed guidelines based on distance.
Review guidelines on frequency of outreach; confirm or update existing guidelines based on findings.	Current guidelines provide a schedule which is rarely implemented in the absence of outside donor assistance. In areas without such outside assistance, high coverage in accessible villages is often achieved at the expense of more remote villages. Reducing the frequency and density of coverage in nearby communities is likely to free up resources, allowing health centers to provide more comprehensive services in remote communities.

Any review should emphasize a minimum package of services as well as provide guidelines for prioritizing activities in the event of a budget shortfall.

Annex 1: Meeting and Field Visit Schedule

Time	Activity	Participants
27 June 2011		
08:30 – 10:30	– Briefing MNCH-N team	– MNCH-N team
15:00 – 16:00	– Meeting with Dr Khuon Eng Mony, Deputy-Director, Preventive Medicine Department (PMD)	– MoH <ul style="list-style-type: none"> ○ Dr Khuon Eng Mony, DD, PMD – UNICEF <ul style="list-style-type: none"> ○ Ms Chantelle Boudreaux, Outreach Consultant ○ Mr Chum Aun, MNCH Officer
28 June 2011		
08:30 – 09:30	– Meeting with Dr Richard Duncan, WHO Medical Officer in charge of EPI	– WHO <ul style="list-style-type: none"> ○ Dr Richard Duncan, Medical Officer, EPI – UNICEF <ul style="list-style-type: none"> ○ Ms Chantelle Boudreaux, Outreach Consultant ○ Mr Chum Aun, MNCH Officer
13:30	– Departure to Kampong Chhnang province	– Ms Chantelle Boudreaux, Outreach Consultant – Mr Chum Aun, MNCH Officer
15:00 – 16:30	– Meeting with Kampong Chhnang PHD (also with the OD Kampong Chhnang and staff from the Department of Preventive Medicine)	– KCN PHD <ul style="list-style-type: none"> ○ Dr Prak Von, Kampong Chhnang PHD Director ○ Mr Som Mesa, EPI PHD officer – UNICEF <ul style="list-style-type: none"> ○ Ms Chantelle Boudreaux, Outreach Consultant ○ Mr Chum Aun, MNCH Officer
29 June 2011		
08:00	– Meeting with Boribor ODO	– Boribor OD <ul style="list-style-type: none"> ○ Mr Sokhan, NIP and Cold Chain Officer – KCN PHD <ul style="list-style-type: none"> ○ Ms Pal Dary, NIP officer – UNICEF <ul style="list-style-type: none"> ○ Ms Chantelle Boudreaux, Outreach Consultant ○ Mr Chum Aun, MNCH Officer
09:30:	– Visit health centre Chhnok Trou – Meeting with HCMT of health centre Chhnok Trou	– Boribor OD <ul style="list-style-type: none"> ○ Mr Sokhan, NIP and Cold Chain Officer – KCN PHD <ul style="list-style-type: none"> ○ Ms Pal Dary, NIP officer – UNICEF <ul style="list-style-type: none"> ○ Ms Chantelle Boudreaux, Outreach Consultant ○ Mr Chum Aun, MNCH Officer
10:30 – 12:00	– Visit Chhnok Trou floating community and observe outreach activities	– Boribor OD <ul style="list-style-type: none"> ○ Mr Sokhan, NIP and Cold Chain Officer – KCN PHD <ul style="list-style-type: none"> ○ Ms Pal Dary, NIP officer – UNICEF

		<ul style="list-style-type: none"> ○ Ms Chantelle Boudreaux, Outreach Consultant ○ Mr Chum Aun, MNCH Officer
13:00	<ul style="list-style-type: none"> - Visit to another health center with normal access. - Return to Kampong Chhnang (KCN) provincial city 	<ul style="list-style-type: none"> - Boribor OD <ul style="list-style-type: none"> ○ Mr Sokhan, NIP and Cold Chain Officer - KCN PHD <ul style="list-style-type: none"> ○ Ms Pal Dary, NIP officer - UNICEF <ul style="list-style-type: none"> ○ Ms Chantelle Boudreaux, Outreach Consultant ○ Mr Chum Aun, MNCH Officer
30 June 2011		
07:30	<ul style="list-style-type: none"> - Departure from the provincial town to Cheap health center (45 kilometers from the provincial town) 	<ul style="list-style-type: none"> - KCN PHD <ul style="list-style-type: none"> ○ Ms Pal Dary, NIP officer - UNICEF <ul style="list-style-type: none"> ○ Ms Chantelle Boudreaux, Outreach Consultant ○ Mr Chum Aun, MNCH Officer
08:30 – 12:00	<ul style="list-style-type: none"> - Visit remote community in OD Kampong Chhnang and observe outreach activities 	<ul style="list-style-type: none"> - KCN PHD <ul style="list-style-type: none"> ○ Ms Pal Dary, NIP officer - UNICEF <ul style="list-style-type: none"> ○ Ms Chantelle Boudreaux, Outreach Consultant Mr Chum Aun, MNCH Officer
14:00 – 15:00	<ul style="list-style-type: none"> - Meeting with HCMT of one remote health centre in Kampong Chhnang OD 	<ul style="list-style-type: none"> - KCN PHD <ul style="list-style-type: none"> ○ Ms Pal Dary, NIP officer - UNICEF <ul style="list-style-type: none"> ○ Ms Chantelle Boudreaux, Outreach Consultant ○ Mr Chum Aun, MNCH Officer
15:30	<ul style="list-style-type: none"> - Return to PNH 	<ul style="list-style-type: none"> - KCN PHD <ul style="list-style-type: none"> ○ Ms Pal Dary, NIP officer - UNICEF <ul style="list-style-type: none"> ○ Ms Chantelle Boudreaux, Outreach Consultant ○ Mr Chum Aun, MNCH Officer
1 July 2011		
08:30 – 09:00	<ul style="list-style-type: none"> - Visit urban poor in PNH: Meeting with PNH PHD Deputy-Director, and MCH Manager 	<ul style="list-style-type: none"> - PNH PHD <ul style="list-style-type: none"> ○ PHD DD ○ MCH Manager - UNICEF <ul style="list-style-type: none"> ○ Ms Chantelle Boudreaux, Outreach Consultant ○ Mr Khiev Pharin, Health Officer, PNH Zone
13:30 – 14:30	<ul style="list-style-type: none"> - Visit urban poor village in the catchment area of HC Samrong Krom, OD Lech, PNH 	<ul style="list-style-type: none"> - OD/HC <ul style="list-style-type: none"> ○ - UNICEF <ul style="list-style-type: none"> ○ Ms Chantelle Boudreaux, Outreach Consultant ○ Mr Khiev Pharin, Health Officer, PNH Zone
15:00 – 16:30	<ul style="list-style-type: none"> - Meeting with Prof Sann Chan Soeung, Deputy-Director General for Health, Manager of National Immunization Program (NIP) (MP: 012933344) 	<ul style="list-style-type: none"> - MoH <ul style="list-style-type: none"> ○ Prof Sann Chan Soeung, DDGH, Manager of NIP - UNICEF

		<ul style="list-style-type: none"> ○ Ms Chantelle Boudreaux, Outreach Consultant ○ Mr Khiev Pharin, Health Officer, PNH Zone
2 July 2011 (Saturday)		
3 July 2011 (Sunday)		
	<ul style="list-style-type: none"> - Consolidation of the findings - Preparation for the debriefing with stakeholders 	
4 July 2011		
09:00 – 10:00	<ul style="list-style-type: none"> - Meeting with Dr Sok Srun, Deputy-Director, Hospital Services Department (HSD), Focal Person for MPA Guidelines (MP: 012912122) 	<ul style="list-style-type: none"> - MoH <ul style="list-style-type: none"> ○ Dr Sok Srun, Deputy-Director, HSD - UNICEF <ul style="list-style-type: none"> ○ Ms Chantelle Boudreaux, Outreach Consultant ○ Mr Khiev Pharin, Health Officer, PNH Zone
5 July 2011		
14:30 – 17:00	<ul style="list-style-type: none"> - Debriefing meeting with relevant stakeholders to discuss on the issues and to share lesson learnt from Lao PDR 	<ul style="list-style-type: none"> - MoH - UNICEF MNCH-N Team - UNICEF PNH Zone staff
6 July 2011		
07:30	<ul style="list-style-type: none"> - Departure to Battambang (BTB) 	
15:00 – 16:30	<ul style="list-style-type: none"> - Meeting with BTB PHD Director (including Dr Nhek Bun Chhub, Battambang OD Director and EPI Manager) 	<ul style="list-style-type: none"> - PHD <ul style="list-style-type: none"> ○ Dr Nhek Bun Chhub, PHD Director - UNICEF <ul style="list-style-type: none"> ○ Ms Chantelle Boudreaux, Outreach Consultant ○ Mr Ros Thoeun, Nutrition consultant
7 July 2011		
07:30	<ul style="list-style-type: none"> - Departure to HC Chark Roka, Samlot district (OD battambang) with the OD staff. 	<ul style="list-style-type: none"> - Ms Chantelle Boudreaux, Outreach Consultant - Mr Ros Thoeun, Nutrition consultant
09:00 – 14:00	<ul style="list-style-type: none"> - Visit HC Chark Roka, Samlot district (OD battambang), discuss with HC staff and observe outreach activities in on remote community (if available on that date) 	<ul style="list-style-type: none"> - Ms Chantelle Boudreaux, Outreach Consultant - Mr Ros Thoeun, Nutrition consultant
15:00	<ul style="list-style-type: none"> - Return to BTB provincial city 	-
8 July 2011		
08:00 – 12:00	<ul style="list-style-type: none"> - Join UNICEF health team meeting 	-
13:00	<ul style="list-style-type: none"> - Return to PNH 	-