



**TECHNICAL BRIEF**

# MALARIA CONTROL IN CAMBODIA: Private Sector Engagement

Most Cambodian patients with malaria-like symptoms seek care first in private sector outlets—far more numerous than public health facilities—so this sector is a key actor in any effort to improve malaria prevention, diagnosis, and treatment.

One goal of Cambodia’s National Malaria Control Program (CNM) is to leverage the private sector’s strengths, limit its weakness, and link public and private resources in order to:

- Increase the percentage of patients receiving early, accurate diagnosis;
- Increase the percentage of malaria cases receiving appropriate, effective treatment;
- Contain existing drug resistance; and
- Prevent the emergence of additional drug-resistant parasite strains.

Cambodia’s national policy provides that private providers in Malaria Containment Zone 1, which has areas where resistance of Plasmodium falciparum to artemisinin has been documented, may diagnose malaria but must refer all cases to village malaria workers (VMWs), the nearest public health center or hospital, or a referral hospital, depending on the risk to the client and the severity of symptoms. Containment Zone 2 is a “buffer area” surrounding Zone 1; resistant parasites are feared likely to spread to Zone 2 but have not yet been formally detected there. Private providers in these areas may diagnose and treat most cases of malaria, but they must refer complicated cases to the public sector.



A private provider receives a letter of appreciation

## The URC-MCC Approach

URC-MCC launched a two-phase approach to effectively engage the private sector in malaria control, first assessing the situation and then pilot testing an innovation to improve such engagement, as follows.

### Rapid assessment of the private sector

Phase one of URC-MCC’s support to the CNM’s Public-Private Mix (PPM) strategy was a rapid assessment in 2009 of private providers in Pailin and Battambang in Containment Zone 1 and Oddar Meanchey in Zone 2. The project surveyed 103 private outlets— pharmacies, and mobile providers—to assess the types of antimalarials sold and the practices used to prescribe them.

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Between the two zones, retailers reported widely variant averages of the number of malarial clients seen during the week before the survey. Those in Zone 1 reported seeing only one or two patients that week, while those in Zone 2 reported seeing nearly two patients a day.

Surveyors found that diagnostic equipment was not widely available but was nevertheless still obtainable. Several outlets in each area offered microscopy, and rapid diagnostic tests (RDTs) were somewhat more readily available than microscopy in both zones.

While antimalarials were less prevalent in Zone 1 than Zone 2, they were widely available in both. While artemisinin-based combination therapies were relatively plentiful, monotherapies persisted in both zones. When asked who chooses the antimalarial a patient receives, a large majority of retailers said that they – not their clients – decided. Nearly a third of the retailers failed to identify the nationally recommended first-line treatment for falciparum malaria.

### Pilot to engage private provider in malaria control

In phase two, URC-MCC piloted PPM activities in Pailin Province, which has a high prevalence of malaria and where multidrug resistant malaria has been documented. The pilot aimed to engage private sector providers in malaria control efforts, improve diagnosis and prescribing behaviors, and increase malaria case surveillance.

URC-MCC mapped 104 private outlets, in the whole Pailin. A mapping of VMWs, and health center catchment areas in Pailin was also done to facilitate a referral system for suspected malaria patients by the private sector. In line with national policies, most private providers said they did not treat malaria but instead referred those cases to public facilities. Very few pharmacies had antimalarial drugs, such as chloroquine and malarine; those who did mostly had let the drugs expire. However, private providers were not convinced that clients would go to public facilities after being refused treatment: they suspected the clients would simply go to another private sector source.

As part of the pilot, URC-MCC sponsors quarterly workshops for private providers that are also attended by VMWs, health center staff, and other key stakeholders. The workshops give private providers opportunities to express their views, concerns, or problems encountered during the past three months. Also, the private providers who have referred the most cases receive a letter of appreciation from CNM.

The Malaria Control in Cambodia (MCC) Project, implemented by University Research Co. LLC (URC), is a community-based malaria control and prevention project that aims to reduce malaria in western Cambodia, home to drug-resistant malaria. Funded by the United States Agency for International Development Regional Development Mission for Asia (USAID/RDMA) since October 2007, the project provides technical assistance and support to Cambodia's National Malaria Control Program (CNM), in collaboration with Partners for Development and other non-governmental organizations working to control malaria.

URC-MCC staff worked with operational district staff to organize regular monthly follow-up visits to private providers. Completed referral slips are collected from private providers and compared with those from VMWs and health centers to see if all referred patients reached a VMW or the health center. In addition, the supervision team provides technical support to private providers, VMWs, and health center staff.

### Pilot Test Results

Trained private providers referred 45 suspected malaria cases to the public sector in July through December 2010; of those, 34 visited a VMW or health facility, and of those 18 cases were confirmed: 7 were *P. falciparum*, 7 were *P. vivax*, and 4 were a mixed infection. All 34 were successfully treated.

### Ongoing Challenges

The main challenges in strengthening private sector services and linking them with public services were private providers' other priorities and their reluctance to refer suspected cases, releasing a possible source of income. Most private drug outlets in the remote areas are not registered and so are reluctant to link with government facilities; others were reluctant to become engaged because some antimalarials have been banned from the market due to emerging drug resistance, and no compensation is provided to providers to dispose of their stock. In addition, during the rainy season when transportation is more challenging, some referred patients could not reach VMWs or health centers.

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