# PRIVATE SECTOR DATA INTEGRATION INTO THE NATIONAL MALARIA SURVEILLANCE SYSTEM:

Lessons from Southeast Asia



Project Director, Health Security, PSI / Asia

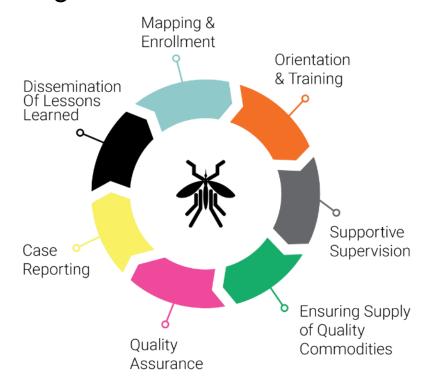
RBM SP&DQ Webinar, November 2023



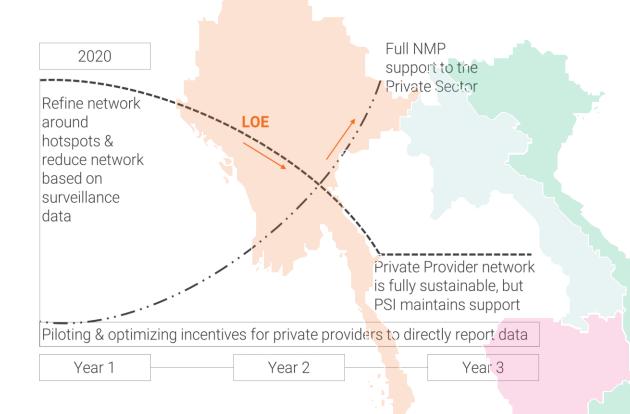


### GEMS: GREATER MEKONG ELIMINATION OF MALARIA THROUGH SURVEILLANCE

Scaling the network: 2016 - 2019

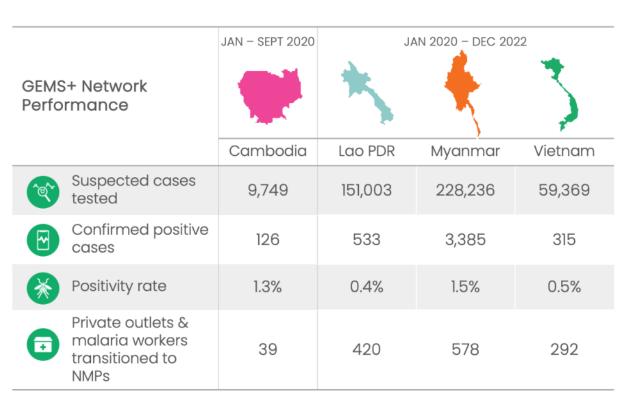


Transition: 2020 - 2022





#### NETWORK PERFORMANCE DURING GEMS+ TRANSITION PHASE



#### GEMS+ Contribution to National Testing & Caseload Data

Reported by National Programs  Reported by GEMS+	Cambodia	Lao PDR	Myanmar <sup>2</sup>	Vietnam²
Cases tested (national)	628,691	2,065,282	7,561,430	4,437,716
Proportion of total national tests reported by PSI private sector outlets & malaria volunteers	1.6%	7.3%	3.0%	1.3%
Confirmed positive cases (national)	7,897	9,807	241,467	2,306
Proportion of total national caseload reported by PSI private sector outlets & malaria volunteers	1.6%	5.4%	1.4%	13.7%

<sup>&</sup>lt;sup>1.</sup> National network performance data (testing, caseload, and positivity rate) updated to reflect published data; GEMS+ national contribution to testing and caseload data adjusted to in accordingly to national network performance updates.

<sup>&</sup>lt;sup>2</sup> National testing and caseload numbers for Myanmar and Vietnam include preliminary data for Jan-Nov 2022.

# ENGAGING PRIVATE SECTOR PROVIDERS AND LEVERAGING DIGITAL SOLUTIONS FOR COMPREHENSIVE MALARIA SURVEILLANCE

#### Private sector malaria case reporting

- 1. Establishing reporting requirements and procedures
- 2. Going Digital: malaria case surveillance app
- 3. Simplifying Reporting: social media chatbots

#### Integrating private sector data in national surveillance systems

- Incorporating private sector surveillance data in the national HMIS
- 2. Sustaining Government ownership



### ESTABLISHING REPORTING REQUIREMENTS & PROCEDURES (2016–2017)



Worked with the NMP (CMPE) to adapt reporting forms for "PPM" outlets, aligned with national guidelines

Trained providers on case surveillance and reporting

Initially, only paper registers used by clinics and pharmacies, with low reporting rates and delays in reporting

### GOING DIGITAL: ADAPTING THE MALARIA CASE SURVEILLANCE "MCS" DHIS2 APP (2017-2018)

- Many providers owned smartphones (Android): introduction of mobile app connected to DHIS2
- Pictogram-based, custom-built Android application
- Connection between PSI and MoH (HMIS) DHIS2 instances
- PSI project team to verify data before monthly "push" to HMIS





48% reported via the app 52% reported via paper form

### MAKING MALARIA CASE REPORTING EASIER: MOVING TO SOCIAL MEDIA CHATBOTS (2019–2022)



Initial chatbot developed in Facebook Messenger, connected to DHIS2



Designed based on national malaria case surveillance reporting requirements



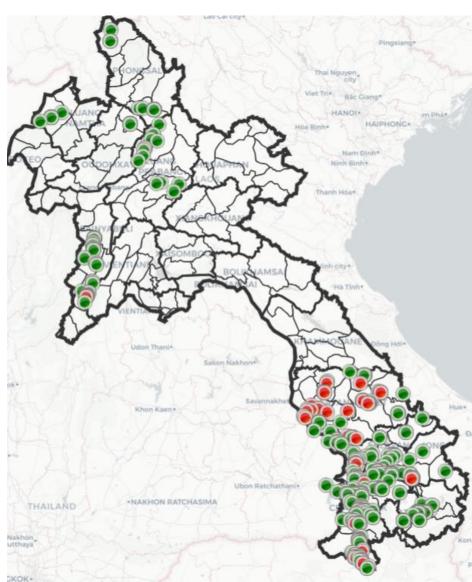
Real-time data submission, using any device, with providers' own user account



Updated in 2021 to report aggregate malaria testing and commodities data, and to incorporate automated reminders and notifications

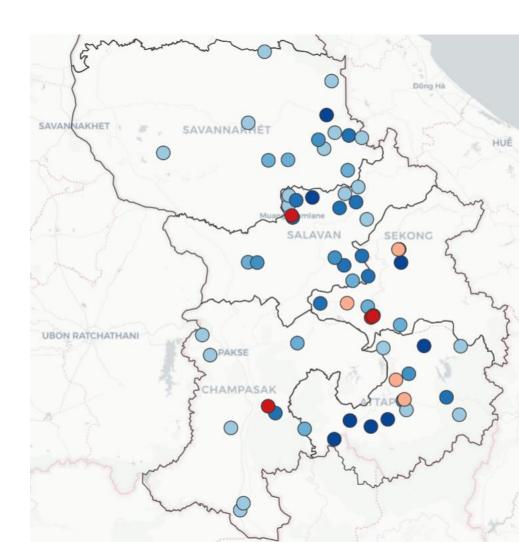
### INTEGRATING PRIVATE SECTOR REPORTING IN THE NATIONAL HMIS

- A collaborative effort, working in partnership with multiple MoH units:
  - The NMP and wider Communicable Disease Control Department (DCDC)
  - Department of Planning and Cooperation (HMIS),
  - Food and Drug Department,
  - Department of Healthcare and Rehabilitation
- 429 PPM clinics and pharmacies were added to the national HMIS as "organization units"
- Following the transition of network management, CMPE updated protocols for private sector reporting, with district officers in charge of PPM surveillance data reporting



## SUSTAINING THE TRANSITION: GOVERNMENT OWNERSHIP OF PRIVATE SECTOR MALARIA SURVEILLANCE

- Private sector engagement for malaria elimination is included in the Lao National Strategic Plan for Malaria Elimination 2021-2025
- The Ministry of Health now recognizes the value of private sector disease surveillance data integrated into the national HMIS
- Sustained PPM reporting managed by District Health Offices continued throughout 2023
- Malaria surveillance paved the way for expanded disease surveillance through the private sector, now covering private hospitals and other diseases



#### A FEW LESSONS LEARNED

- Multi-sectoral disease surveillance involving community-level private healthcare providers contributes to improved decision-making
- Developing private provider willingness and changing behaviors requires tapping into provider motivation
- Fit-for-purpose digital tools make reporting easier for providers, and improve surveillance and response by local health authorities
- Providers and public health officials alike need initial technical support and training, supportive supervisions, while **data quality** must be monitored and continually improved
- Building **trust** in private sector data is necessary before integrating it into public systems

   but this takes time

