The fight against malaria in Thailand: Subnational health system and community health worker data for malaria elimination

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22nd May 2023, 34th Meeting of the RBM Parnership, SMERG

Outline

- **Country Background**
- **Utilization of data at subnational level (provincial level)**
- **Community health volunteer data**

Country background: National Malaria Elimination Strategy

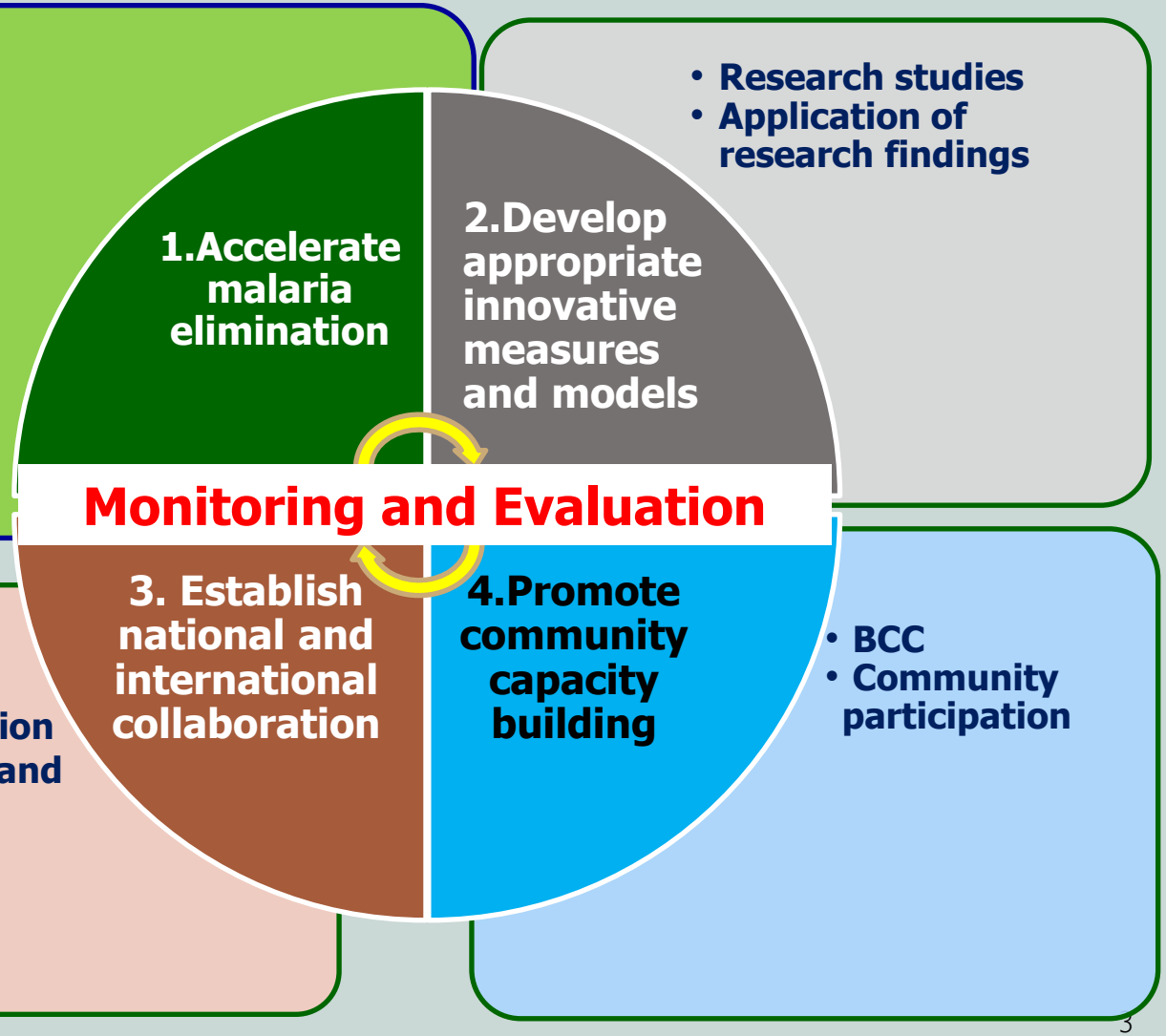
National Malaria Elimination Strategy, 2017-2026, Thailand

Targets:
2024: Thailand is free from malaria

2023: Pf Elimination

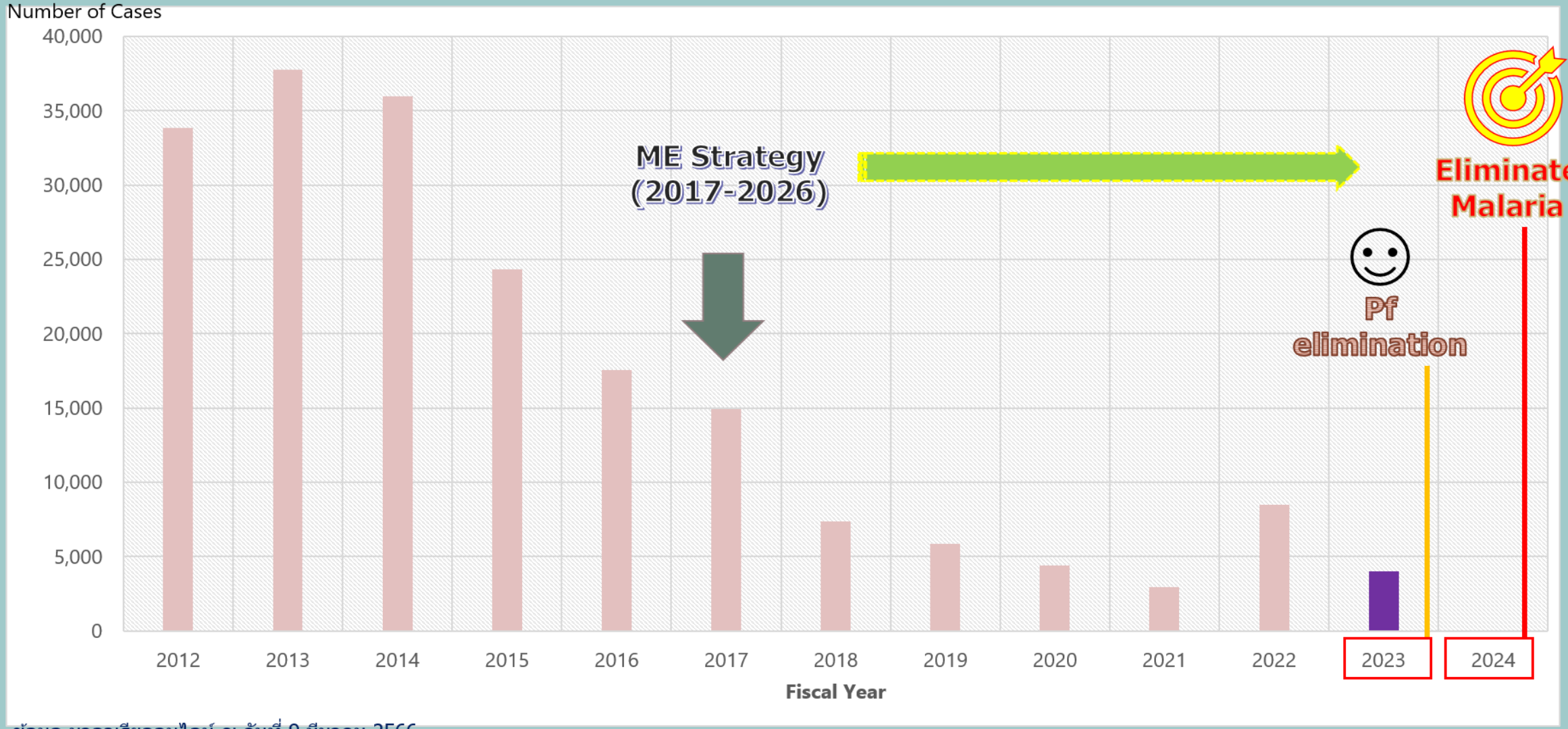
New interventions

- Prevention of reintroduction (PoR)
- Outbreak response
- Pf elimination
- School based intervention
- People centered approach (VHVs)



Country background: Timeline for ME

Timeline Of Malaria Elimination, Thailand



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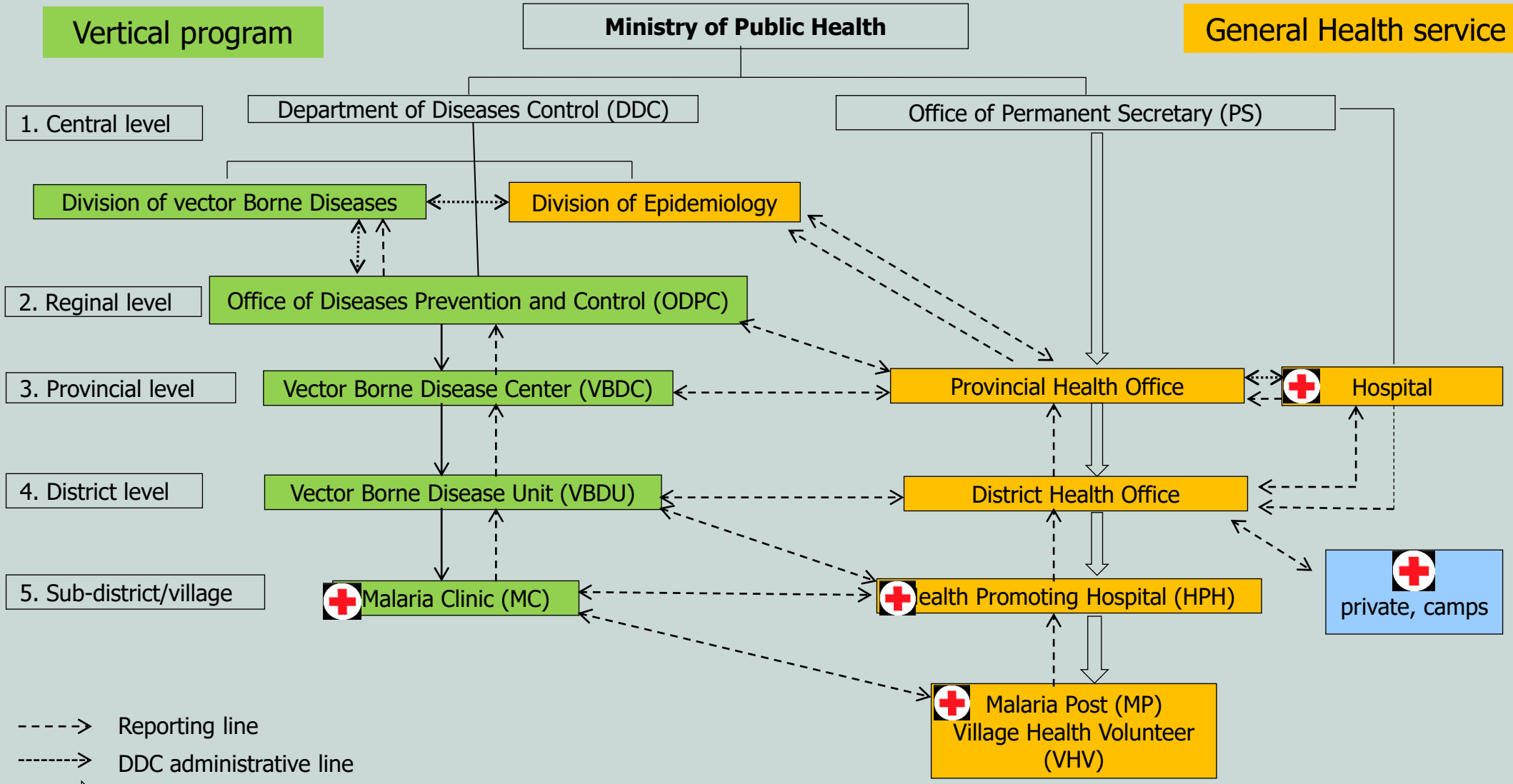
Country background: Case management services

Two Streams of Case Management Services for Malaria Patients



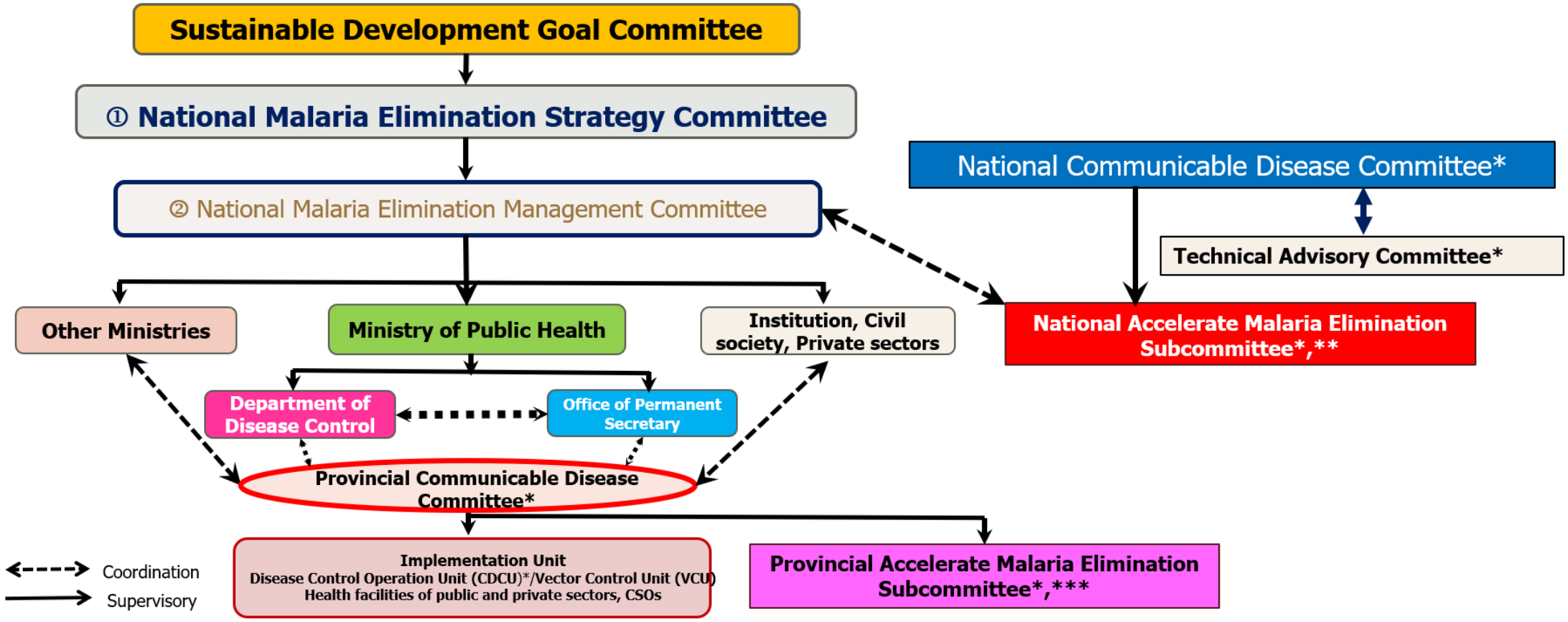
Country background: Malaria Program

Introduction to Malaria Program, Thailand

- Long history and strong performance of vertical malaria program services through malaria clinic (MC) since 1965
- Under Department of Disease Control (DDC), currently there are 175 malaria clinics (1 microscopist/mc) attached to Vector Borne Disease Unit (VBDU) at district level provide diagnosis with microscope, treatment, follow-up and health education.
- Vector control, entomological surveillance, malaria data entry into MIS are managed at VBDU supervised by VBDC and ODPC.
- Under PHO, there are 400 malaria posts at village level and 3,024 hospitals and HPH, provide diagnosis with RDT, treatment, follow-up and health education

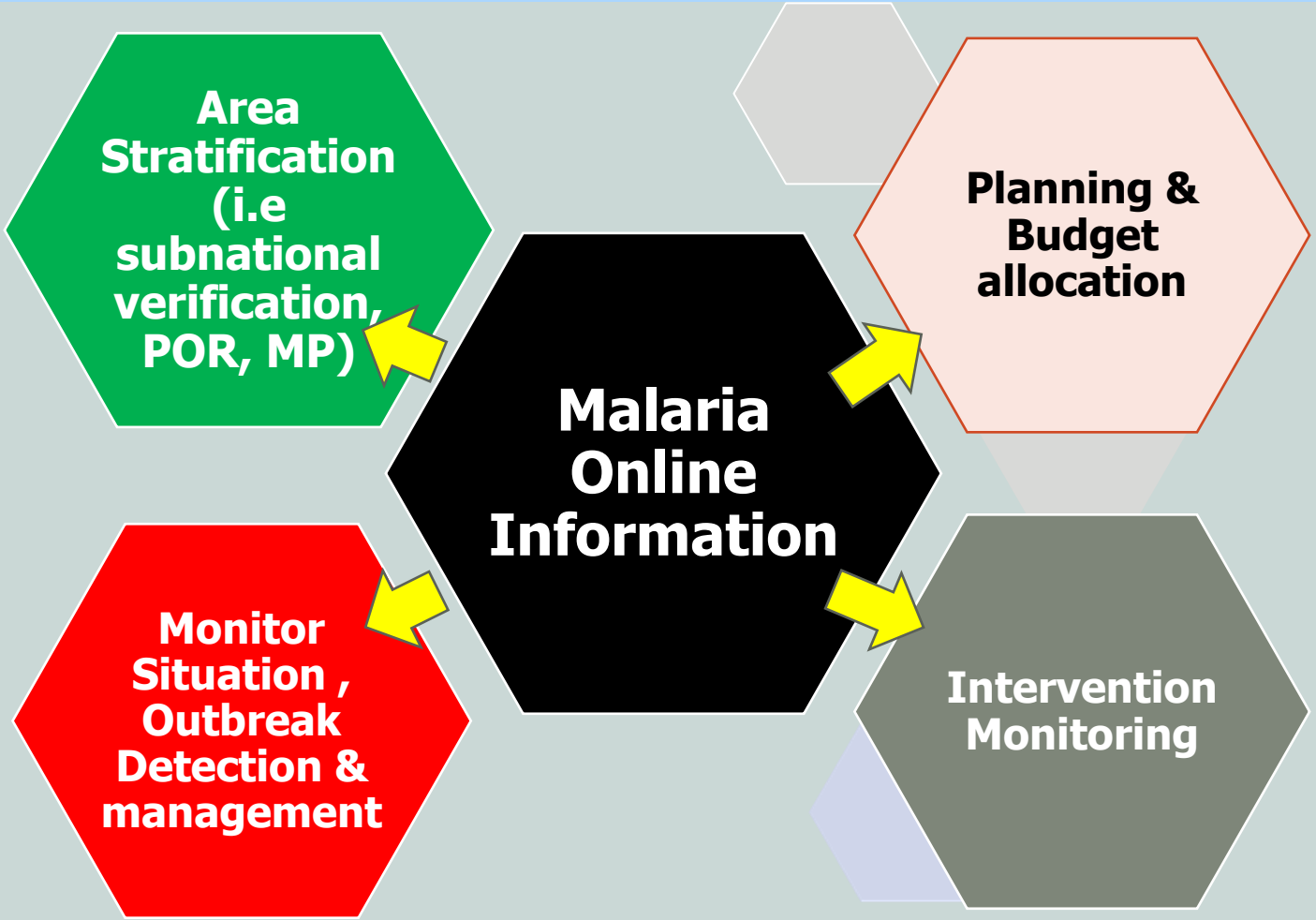
Country background: National Policy Mechanism

National Policy Mechanisms to Accelerate Malaria Elimination in Thailand



*Communicable Disease Act B.E.2558 (A.D.2015)
** establish on Jan 2023 for outbreak management
*** only in 6 provinces along the Thai-Myanmar border

Utilization of Malaria Surveillance Data for Programmatic Actions at subnational level (Provincial level)

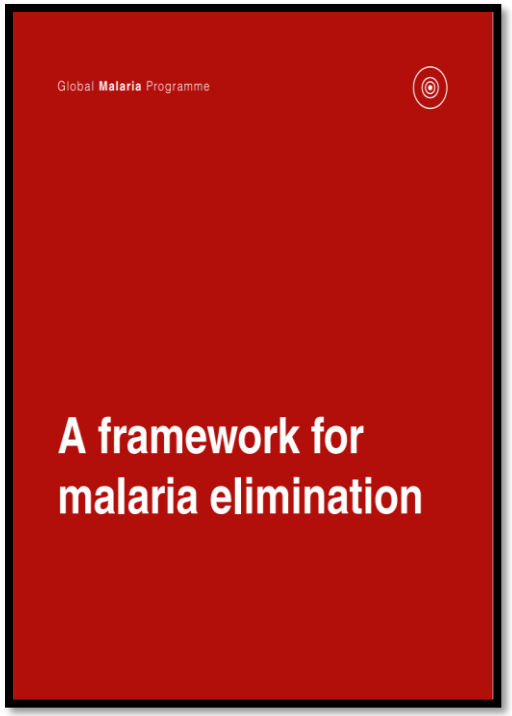


Subnational verification of ME : Utilization of data at provincial level

Subnational verification of malaria elimination - background

- **Subnational verification of malaria elimination has been started since 2017**
- **Objectives for implementation of subnational verification of ME**
  1. To verify provinces that have interrupted local malaria transmission for at least 3 consecutive years
  2. To prepare for country certification of malaria elimination in Thailand by 2027

Subnational verification of malaria elimination - Guideline

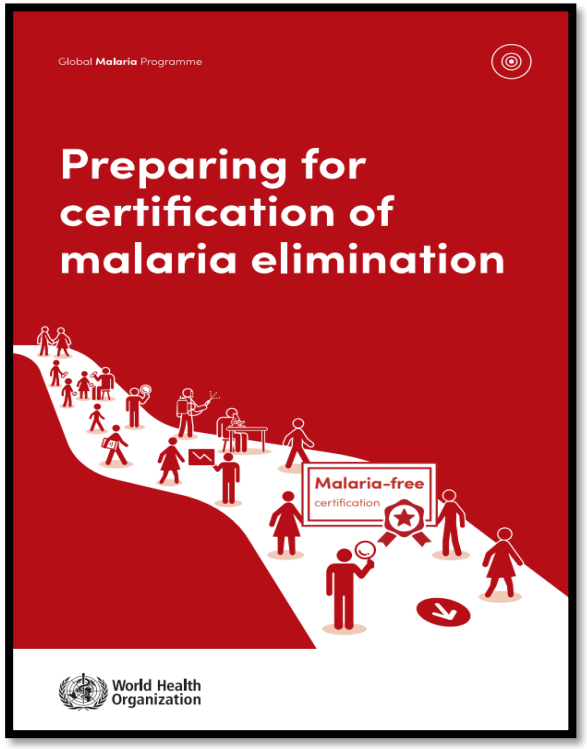


1. In 2018, 35 provinces were verified using the checklist prepared by Division of Vector Borne Diseases.

2. In 2019, 2 provinces were verified using the structured checklist modified from WHO.
(A Framework for malaria elimination)

➢ In addition, the national malaria elimination verification committee has been established.

Subnational verification of malaria elimination - Guideline



❸2020-2022, 11 provinces were verified with the adjusted tools that modified from WHO guideline. (Preparing for certification of Malaria Elimination)

SOP of subnational verification of malaria elimination

- The SOP (Thai language) for subnational verification is annually revised and updated.
- Data verification workshop is organized for staff at provincial level prior to desk review and site visit by committee.

Requirements of subnational verification of ME-Documentation

01	SERVEILLANCE SYSTEM	• Smart surveillance system • 1-3-7 intervention by indicators and quality • Foci Registry including completion of all interventions
02	CASE MANAGEMENT	• Primary care public health facilities with comprehensive services • Malaria medicine inventory to prevent stockout • Diagnostic testing system (quality control & RDT prevent stockout • Complete cure (Information of Follow up data & Referral System)
03	DISEASE PREVENTION AND CONTROL COMMITTEE	• Orders of committees at all levels (provincial, district and subdistrict) • Minutes of meetings of committees empowered to issue implement policies and guidelines on localized malaria elimination.
04	PREVENTION OF RE-ESTABLISHMENT PLANNING	• POR planning at Provincial levels ✓ risk stratification ✓ active case finding ✓ preparation of reserve stock ✓ refresher training staff
05	INTEGRATION	• Substantial resource mobilization and budget support from relevant entities

Process of Subnational Verification of ME, Thailand

1. DDC monitors the interruption of transmission using MIS. When data shows 3 consecutive years with zero indigenous case, PHO is officially informed.
2. PHO explores requirements for subnational verification of ME using updated SOP
3. DDC and PHO jointly confirm epidemiological data from MIS & HDC (2-days workshop)
4. PHO submits relevant documents to DDC requesting for subnational verification of ME
5. The **National Malaria Elimination Verification Committee** conducts desk review and site visit to the last focus
6. The Nat. committee makes final decision for the results of subnational verification of malaria elimination. An official letter is sent to PHO to inform the result
7. Certification of subnational verification is given to provinces that meet the requirements during WMD

Conclusions of subnational verification of ME-

1

- Subnational verification of malaria elimination – a process that gives **added momentum** in achieving malaria elimination targets.

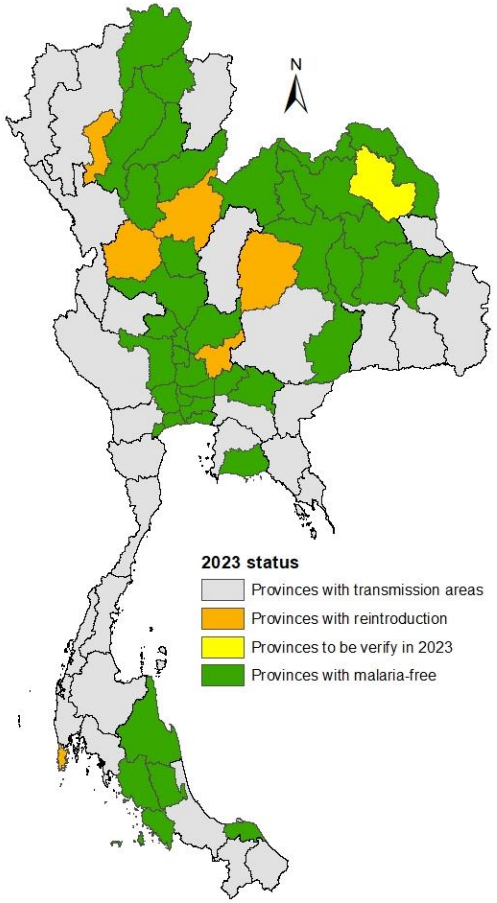
2

- Thailand has set up a **structured process** (teams and committee) to support the verification process.

3

- **Prevention of re-establishment (POR)** in areas where malaria transmission has been interrupted, it is needed to develop POR management plan at the provincial level.

Progress of Subnational Verification of ME, 2023



- **Over 2018-2022:** 48 provinces were verified and **46 provinces passed** the validation as malaria-free provinces (2 provinces: Phetchabun and Chon Buri did not pass the validation)
- **Six provinces with re-introduction of malaria transmission after validation) :** Phuket, Chaiyaphum, Phitsanulok, Kamphaeng Phet, Lamphun, and Saraburi
- **Three provinces** will be verified in 2023: Rayong, Prachinburi, Sakon Nakhon

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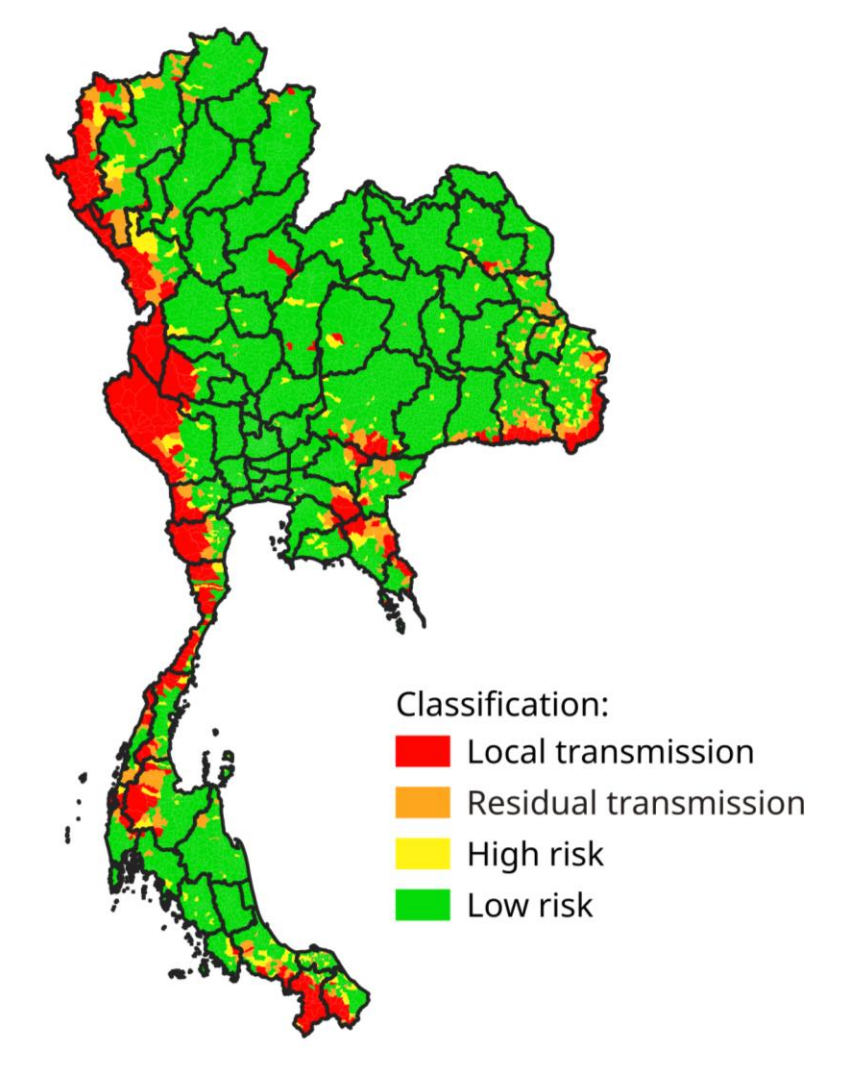
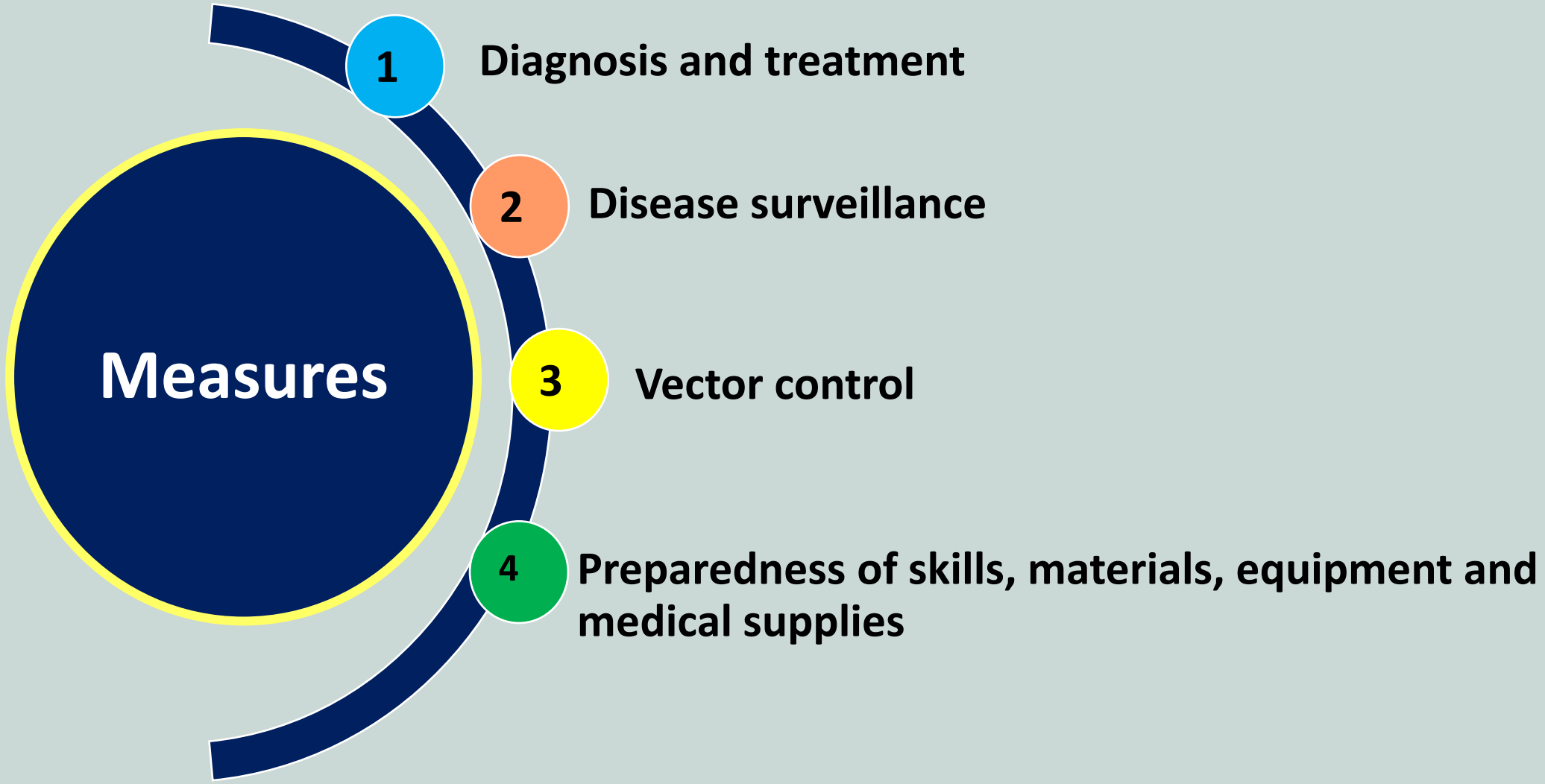
Prevention of Re-Establishment (PoR)



- ✓ **PoR Guideline has been developed**
- ✓ **Risk Stratification for PoR adapted from WHO criteria (receptivity and importation risks) to be applied for a specific PoR package for each stata**
  - Active transmission: 260 subdistrict
  - Non-active transmission: 272 subdistricts
  - No transmission with high risk: 261 subdistricts
  - No transmission with low risk: 6632 subdistricts
- ✓ **DVBD/APLMA and UCSF implemented 2 pilot project in Nakhon Si Thummarat and Satun provinces**

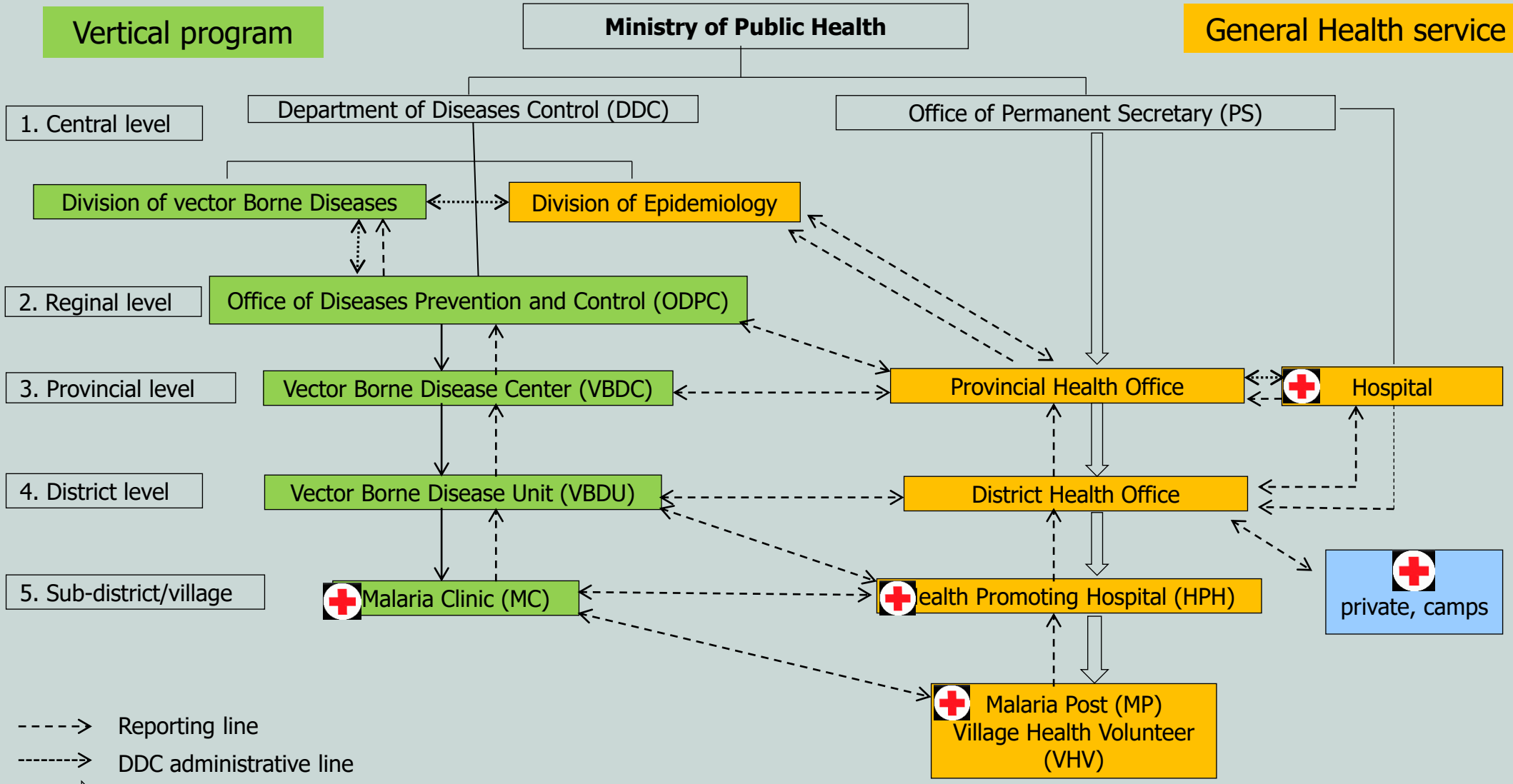
Measures to prevent re-establishment of malaria transmission



Data from community level: malaria post worker and village health volunteers (MP & VHV)

Country background: Case management services

Two Streams of Case Management Services for Malaria Patients



The Malaria Post (MP)

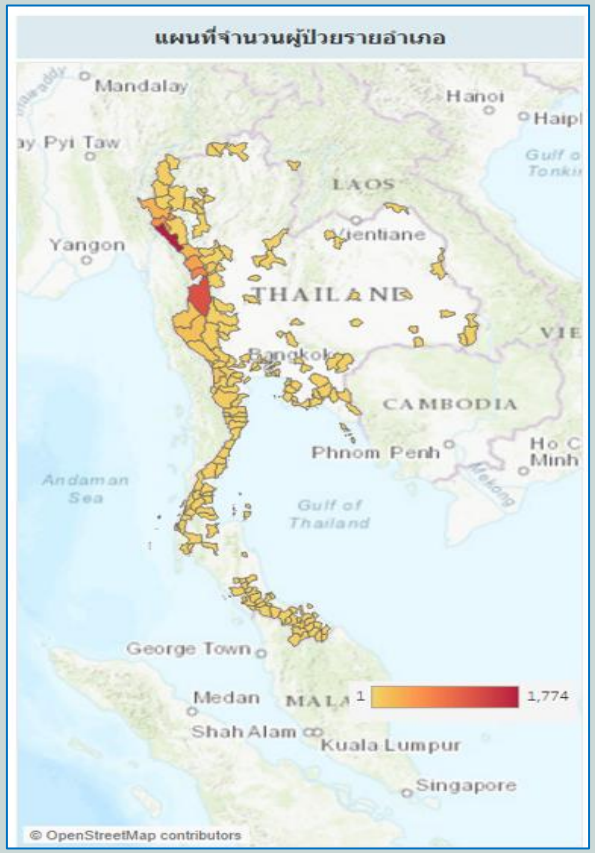
- The malaria post is established at the community level mainly located at border, remote and transmission areas and implemented by trained village-based workers or village health volunteer,
- The objectives of Malaria Posts are:
  - To reduce the malaria burden among the target population in the high transmission areas
  - To ensure maximum coverage and improved access to malaria services for both Thai and migrants and daily border crossers from neighboring countries.

Roles and Responsibilities of Malaria Post Workers

- Provide early diagnosis with RDT and prompt treatment for malaria cases with effective antimalarial drug,
- Support supervised treatment of uncomplicated malaria patients and support patient's follow-up to ensure patients are cured,
- Provide Behavior Change communication
- Distribute long-lasting insecticide treated nets (LLINs) to non-Thai migrants who received services at MPs

Increasing coverage and accessibility of malaria services targeting population at risks

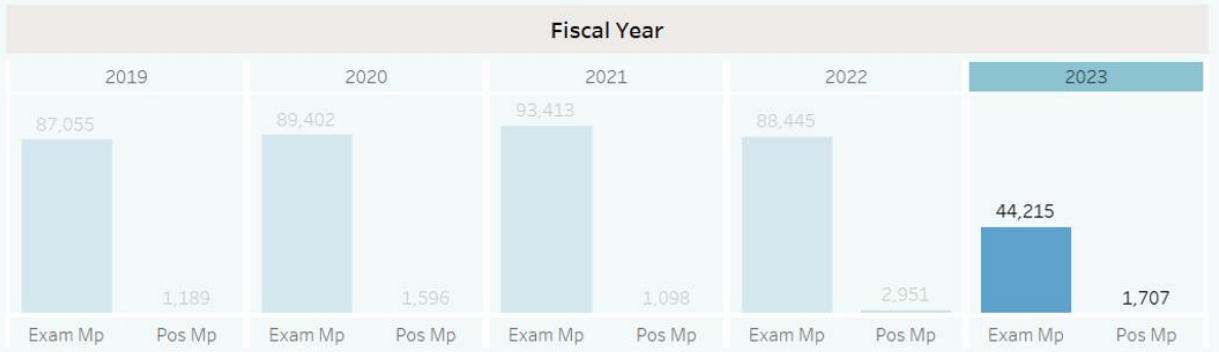
The location of MP

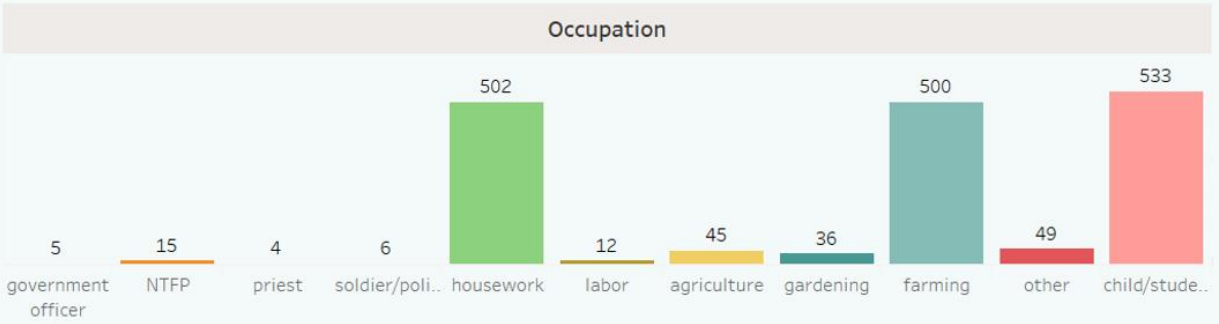


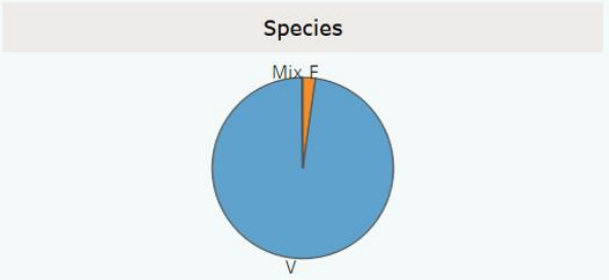
Malaria burden

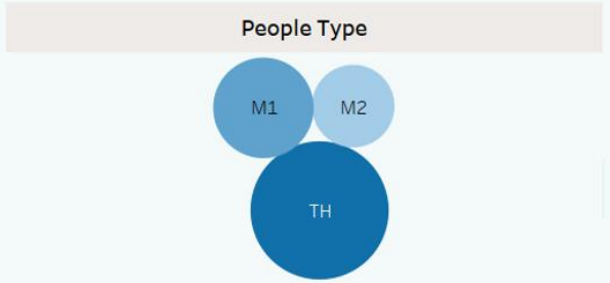
- of MPs are selected using epidemiological data, existing barriers to malaria services at other health facilities, and accessibility criteria such as distance from health facilities and transportation infrastructures
- A MP can be set-up or relocated from one village to another under a short time-frame, allowing for in a timely response using small resources

Malaria Data from Malaria Post are included in MIS









Thank you