

# DTD strategy

This document was prepared as a pre-read for the meeting of the PAHO Malaria Technical Advisory Group and is not an official document of PAHO/WHO



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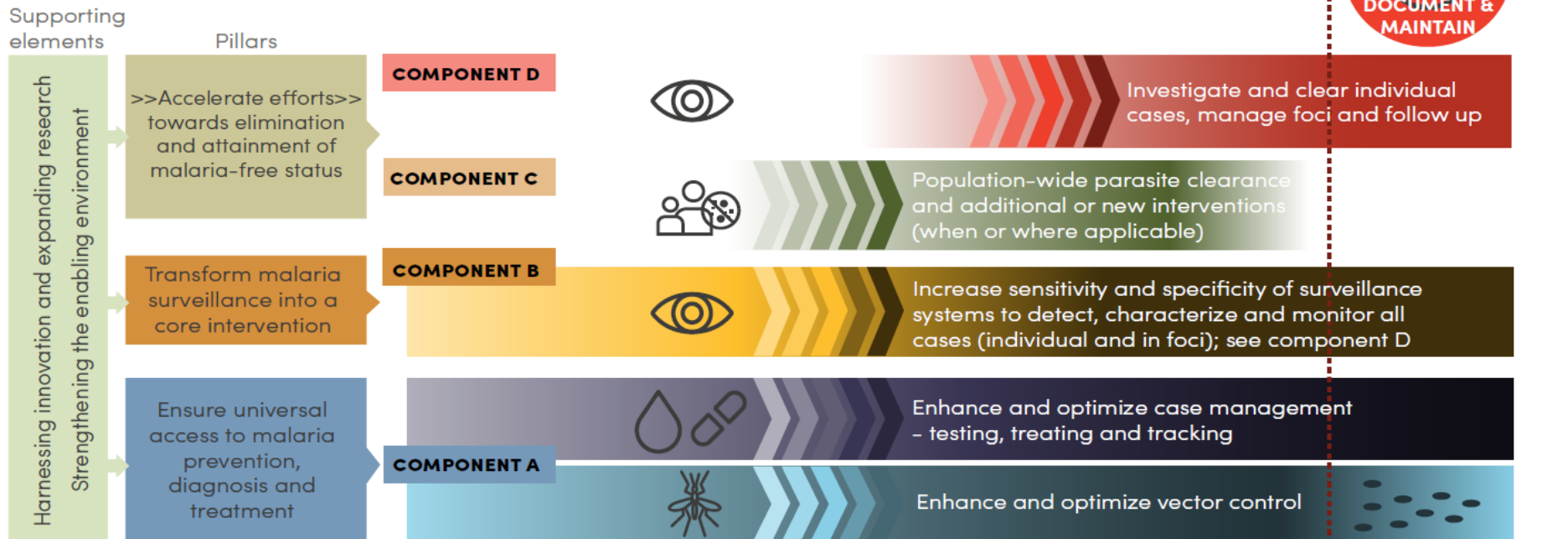
Meeting of the Malaria Technical Advisory Group  
PAHO-HQ Washington DC, Room C  
7 - 8 June 2017

# Background

A framework for malaria elimination



## Global technical strategy for malaria 2016–2030



Increase sensitivity and specificity of surveillance systems to detect, characterize and monitor all cases (individual and in foci); see component D

Enhance and optimize case management – testing, treating and tracking

...without proper diagnosis, there is no proper treatment of patients, no case investigation, no prompt response, no knowledge of the malaria distribution, no way to stratify the risk, no guidance for vector control, ... there is no surveillance.

- Importance of universal diagnosis and treatment to reduce morbidity and mortality.
- Every case should be tracked in the surveillance system.
- ACD **always** conducted when **new cases and foci** in low and very low transmission settings.
- When triggered by a case: ACD=RCD.
- Rational of RCD: at low transmission intensity, cases are highly aggregated.
- Timely response may reduce complications and transmission.

# Evidence regarding RCD

- **2016 systematic review:**
  - ✓ HH members had 5 times more chance to have malaria.
  - ✓ Average contacts screened to detect one case: from 2 to 216
  - ✓ Benefits of RCD not clear: efforts and resources invested.
  - ✓ However, different diagnostic methods, different contexts, different parasites, different radius, not clear timing.
- **2016 study in Brazil:**
  - ✓ PCR detected more than double
  - ✓ More cases in HH members when RCD at day 0 and 30.
  - ✓ At day 60 and 180, the positivity rates similar among HH members and the neighbours <3km.
- Information about cost-effectiveness of RCD is not available.

# Other experiences

- **1,3,7 Strategy of China:** from more than 26,000 in 2008 to 2,716 in 2012 (only 243 indigenous).
- Emphasis in the timelines of activities.
- Clear procedures to conduct RCD with RDT and PCR.
- Combination with vector control activities when needed.
- **Sri Lanka:** recently eliminated malaria focussed its efforts on early diagnosis, detection and RCD.
- All countries that have eliminated have done RCD.

# Rational of DTD strategy

- Propose more tools based on WHO recommendations and the experience of other countries.
- Key message: "diagnosis- treatment - investigation - response" as core elements of the elimination strategy.
- Actions do not stop after testing and treating a case: **Diagnose-Treat and Detect** more cases.
- DTD must be translated in concrete activities in the field.
- DTD must be able to be followed and monitored.
- Easy to understand at local level: **communication strategy key**

# Aim and objectives of DTD

**Aim:** To detect, diagnose and treat all malaria cases promptly, to reduce morbidity, mortality and transmission.

## Objectives:

- To place DTD in the **centre of the malaria programs**.
- To highlight the Importance of a **local and routine** process of DTD.
- To **guide countries on the implementation** of the DTD strategy, (programmatic, strategic and policy framework in place).



# Components of DTD

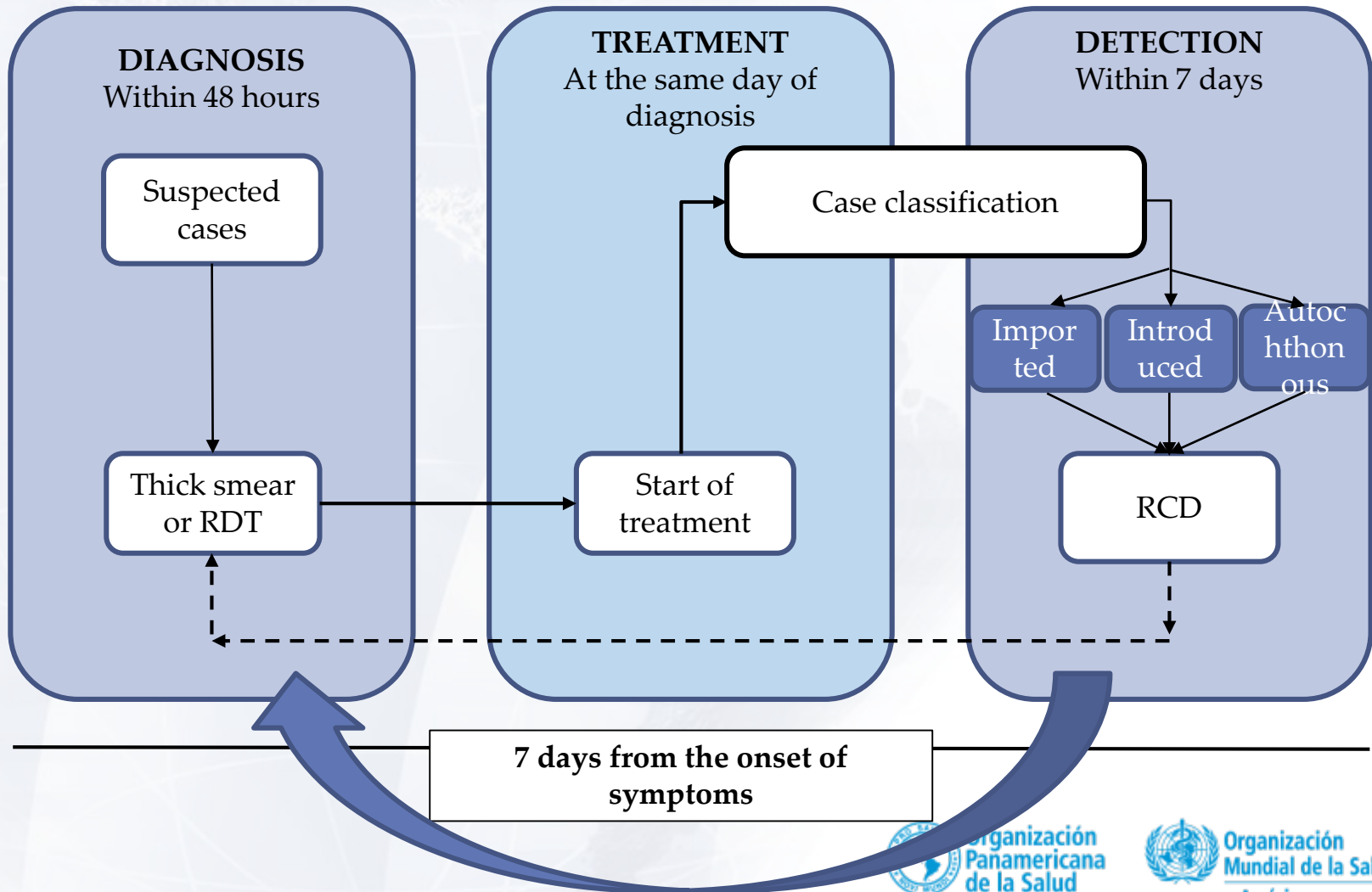
- **Diagnosis:** Every suspected malaria case must be diagnosed using microscopy or RDT within the first 48h from onset of symptoms.
- **Treatment:** Every confirmed case must receive appropriate treatment based on the national protocols, starting the same day of the diagnosis.
- **Detection:** Every case (1-3 cases/week at a health facility), or cluster cases should trigger a basic action to promptly detect and treat other possible related cases within 7 days.

- Irrespective of indigenous or imported case: RCD at least among HH members (symptomatics and asymptomatics).
- The same person/team that diagnosed the index case and started the case investigation can/should conduct the RCD without waiting for a larger team to arrive.
- In a context of limited resources and high number of malaria cases, less labour intense approaches can be followed.

- The RCD must be conducted using RDT or microscopy. PCR when possible (exceptional).
- When doing RCD: sensitize about use of LLITN/IRS.
- If just few malaria cases: intensive case investigation, focus investigation and response. Several rounds of RCD with PCR if available.

- Response to new cases and foci: RCD + Vector Control.
- Ensure and **maintain** optimal coverage of ITN/IRS in receptive and vulnerable strata.
- Vector control not necessary included in the basic DTD because of operational reasons: different actors in different areas.
- **DTD must be a set of actions operationally feasible to be executed in the shortest time by the basic local team.**
- Start response with RCD to avoid delays.
- Continue with more extensive focus investigation if needed.

# Diagnose-Treat and Detect



# Diagnose-Treat and Detect

## DIAGNOSIS

Every suspected malaria case must be diagnosed by a health worker within 7 days from onset of symptoms in transmission settings. Is this unrealistic? Always in the first 7 days from onset of symptoms.

## TREATMENT

Every confirmed case must receive

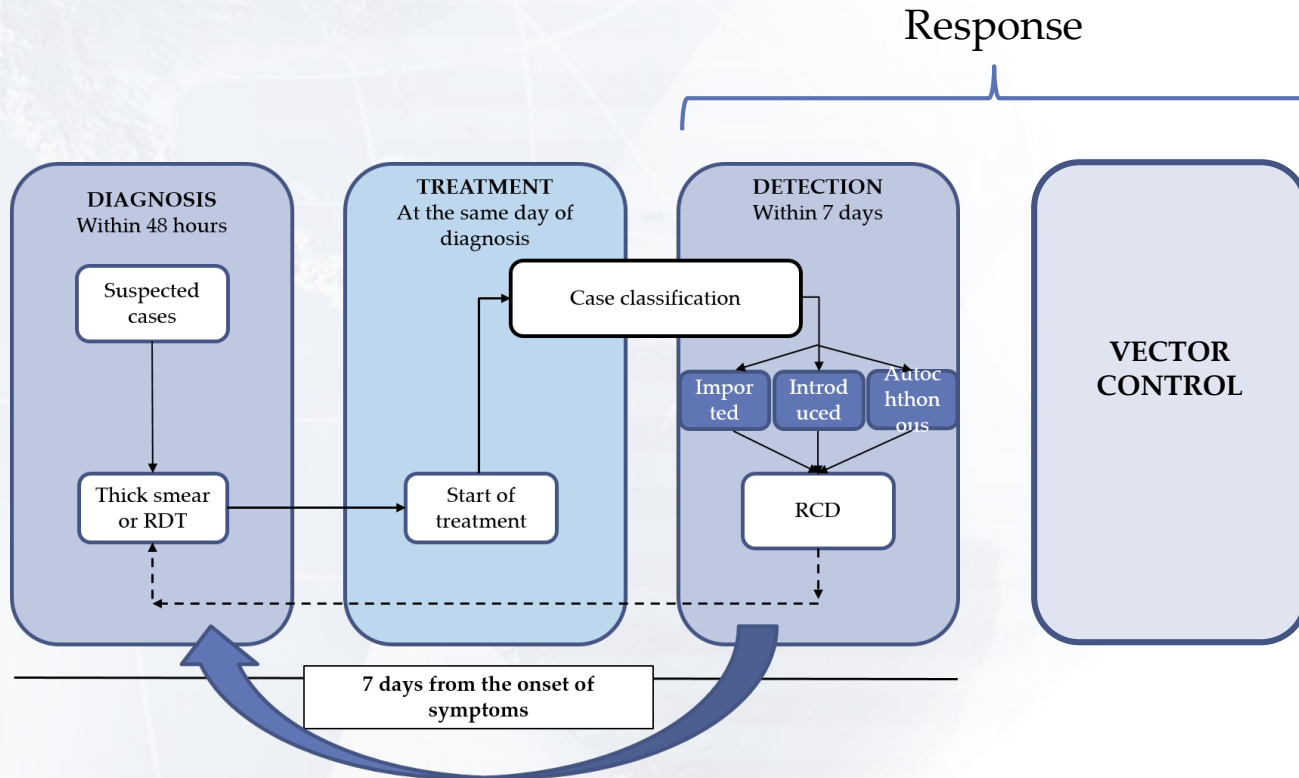
## DETECTION

Every case or cluster of cases should trigger a

**DTD must be a set of actions operationally feasible to be executed in the shortest time by the basic local team.**

7 days from the onset of symptoms

# Diagnose-Treat and Detect



# Communication strategy

...without proper diagnosis, there is no proper treatment of patients, no case investigation, no prompt response, no knowledge of the malaria distribution, no way to stratify the risk, no guidance for vector control, ... there is no surveillance.



# Questions for the TAG

- Because there are still critical gaps in EARLY case detection and treatment PAHO is designing a communication and programmatic strategy to position this topic as a core intervention for all the endemic countries. Does the TAG support this initiative?
- Should this strategy be presented only as an inspirational guidance or recommend specific programmatic parameters?
- Any advice on how to proceed?

# Thank you

[www.paho.org/malaria](http://www.paho.org/malaria)  
[malaria@paho.org](mailto:malaria@paho.org)



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