14th Stakeholders’ Meeting
Steady progress towards malaria elimination: Interventions for today and tomorrow
Denpasar, Bali | 11 – 12 October 2017
Marcus Lacerda, Fiocruz
Brazil’s malaria elimination programme
When I think of Brazil...
Yesterday
An. gambiae elimination in Northeastern Brazil

Frederick Soper (1893-1977)
Shrinking the malaria map
Brazil has actually shrunk a lot the map
Rolling back malaria in Brazil
Fatality rates achievements

- **Worldwide**: 1 child dies every 2 minutes
- **Brazil**: 1 person dies every 10 days

**Determinants:**
- Single-dose primaquine for Pf
- Artemisinin derivatives for severe malaria since 1995
- 90% of cases treated before 48 hours of symptoms
Today
Pf elimination goal set in 2015

Pf in 2016
Tomorrow
When do we move towards *P. vivax* malaria elimination?
What happens when we stop?

Cohen et al. Malaria Journal 2012 11:122
Assumption that all the information needed was available

- **Neglect of research and history**: inability to connect with past policies
- **Eradication became a belief system**, not needing empirical observation

“We have the tools. We know what needs to be done. It is simply a matter of going out to do it”

Marcolino Candau (1955), launched the GMEP at the World Health Assembly
The renewed response

1. All countries can accelerate efforts towards elimination through combinations of interventions tailored to local contexts.

2. Country ownership and leadership, with involvement and participation of communities, are essential to accelerating progress through a multisectoral approach.

3. Improved surveillance, monitoring and evaluation, as well as stratification by malaria disease burden, are required to optimize the implementation of malaria interventions.

4. Equity in access to services especially for the most vulnerable and hard-to-reach populations is essential.

5. Innovation in tools and implementation approaches will enable countries to maximize their progression along the path to elimination.
Politicians lessons
Brazilian Science of Eradication

Instituto ELIMINA

WP1: Serological biomarkers of recent exposure
WP2: MDA/SSAT efficacy and social sciences
WP3: Clinical trials
WP4: Antimalarial resistance
WP5: Transmission blocking trials
WP6: Health economics
WP7: Pharmacogenetics
WP8: Drugs discovery
WP9: Parasite biology – in vitro cultures
Surprise effect

D-DAY
JUNE 6, 1944
Old drug

- 7 days? 10 days?
- Supervise? Hospitalize?
- Bigger pill?
- Smaller pill?
- More tasty? More juicy?
- Make it cheaper?
- Pay patients to take it?
- Eliminate all the evidence of severe hemolysis?
- Make its use safer?
Product pipeline

G6PD Diagnostics Pipeline

Available


In Development

Quantitative test for G6PD and hemoglobin

Qualitative test for G6PD
Brazilian NMCP meeting
Distribution of malaria in the American continent according to the Annual Parasite Index in 2012

Malaria in the Region of the Americas by Annual Parasite Incidence (API) – 2016

* Data used at administration level 1 (ADM-1) for Guyana and Ecuador, ADM-3 for Bolivia, Peru and Haiti, foci for Argentina, Belize, Costa Rica, El Salvador, Paraguay and Suriname.

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Source: Annual Country Reports to PAHO/CHA/VT/Malaria.
'Buridan effect'
Other public health priorities...
MMV board visit to Manaus (2008)