



Implementation of ASMQ Brazilian experience

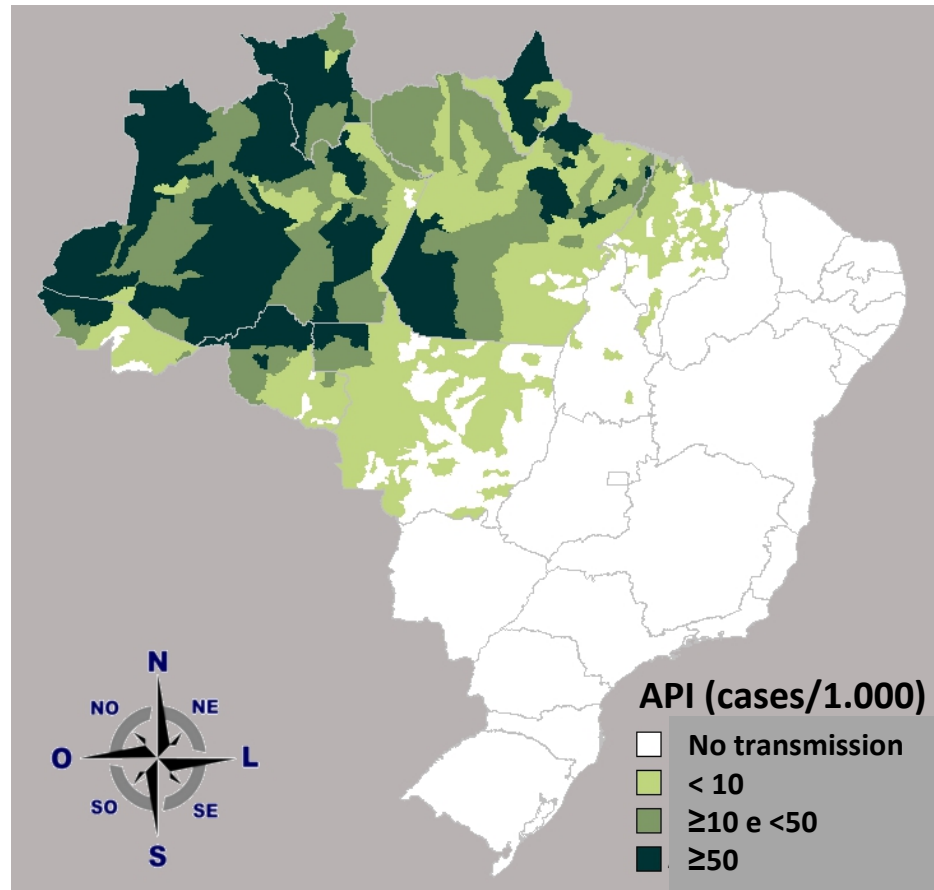
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National Malaria Control Program - Brazil

Malaria numbers – Brazil, 2009

- ▶ 49 million people in risk areas
- ▶ 2,6 million thick smears
- ▶ 310.000 confirmed cases
 - ▶ 86% *P. vivax* infection
- ▶ 4.623 hospitalizations
 - ▶ 13% in under five
- ▶ 79 reported deaths



Distribution of Malaria – Brazil, 2009

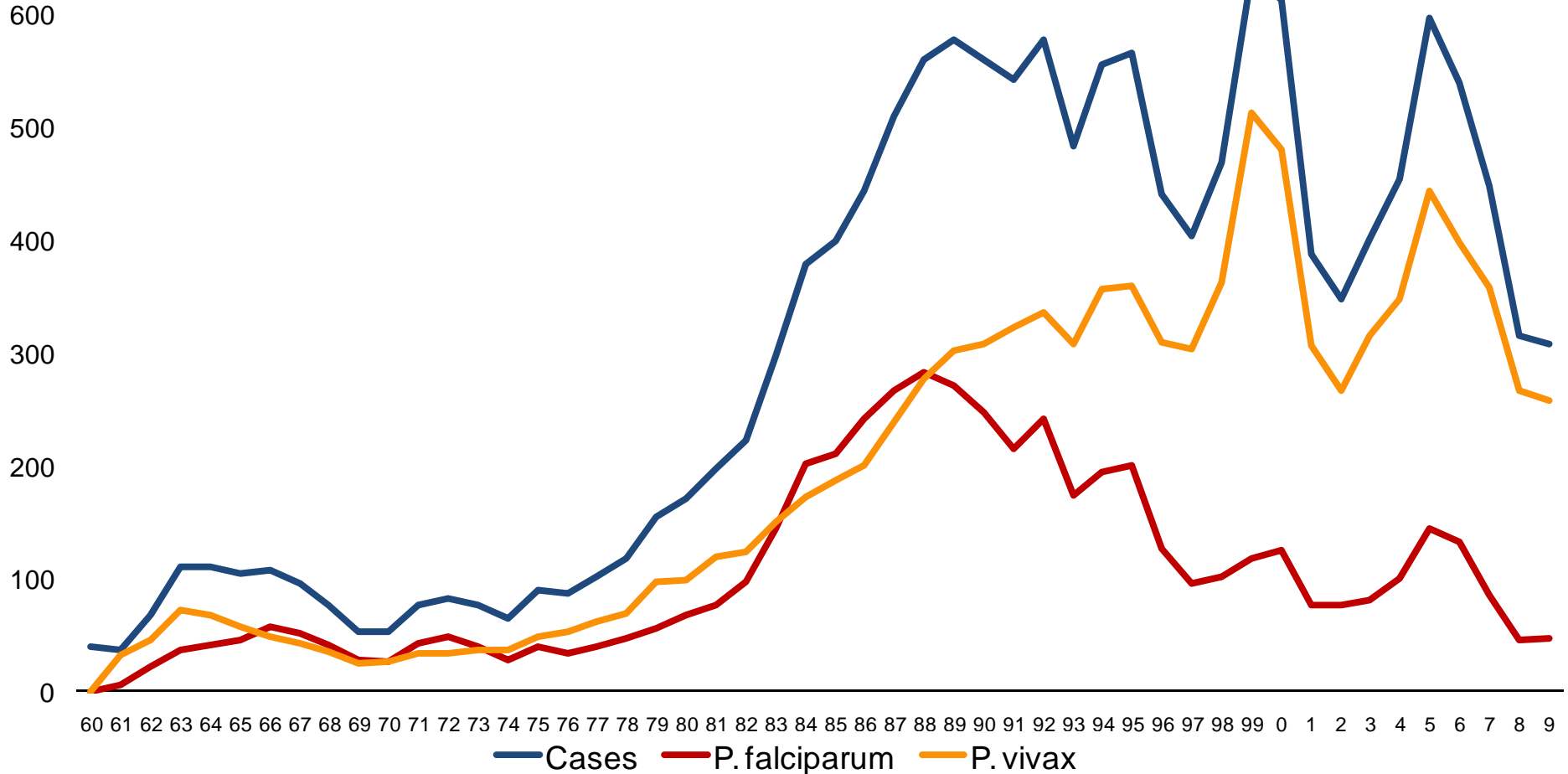


Data source: SIVEP-Malária/SVS/MS, created by Lapouble

API = Annual Parasite Incidence

Malaria Cases - Brazil, 1960-2010

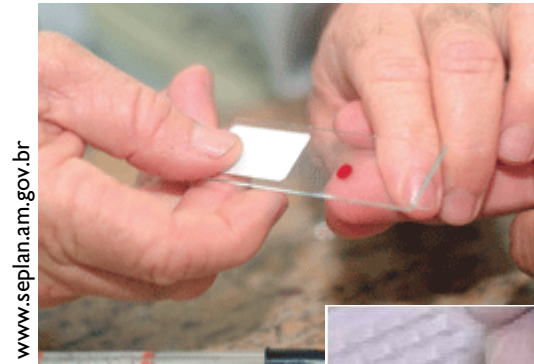
Cases x 1.000



Data source: SISMAL and SIVEP-Malaria/SVS/MS, recidives were excluded

Diagnosis and Treatment – Free of charge

- ▶ Diagnosis
 - ▶ Thick smear or Rapid Diagnostic Tests (RDT)
- ▶ Parasitological confirmation is required for treatment
- ▶ *P. vivax*
 - ▶ Chloroquine and primaquine
- ▶ *P. falciparum*
 - ▶ Artesunate + mefloquine
 - ▶ Artemether + lumefantrine
 - ▶ 1st trimester pregnancy: quinine and clindamycin
 - ▶ 80% treated with ACT in 2009



ACT = Artemisinin-based Combination Therapies

Farmanguinhos / Fiocruz



- ▶ Instituto de Tecnologia em Fármacos
 - ▶ Pharmaceutical lab linked to Ministry of Health
 - ▶ Created in 1956
- ▶ Part of Fundação Oswaldo Cruz (Fiocruz)
 - ▶ Scientific and technical unit
- ▶ > 1 billion medicines/year for Brazilian Government
- ▶ Over 50 types
 - ▶ Antibiotics, NSAIDs, painkillers, antiretrovirals, medicines for malaria, tuberculosis, diabetes, hypertension, cardiovascular and central nervous system

Partnerships

- ▶ Drugs for Neglected Diseases Initiative – DNDi
 - ▶ Development (2002)
 - ▶ Registration (2008)
 - ▶ Fixed-dose combination of Artesunate+Mefloquine (ASMQ)
- ▶ Cipla – India
 - ▶ Offers technology for ASMQ production
 - ▶ South-South collaboration



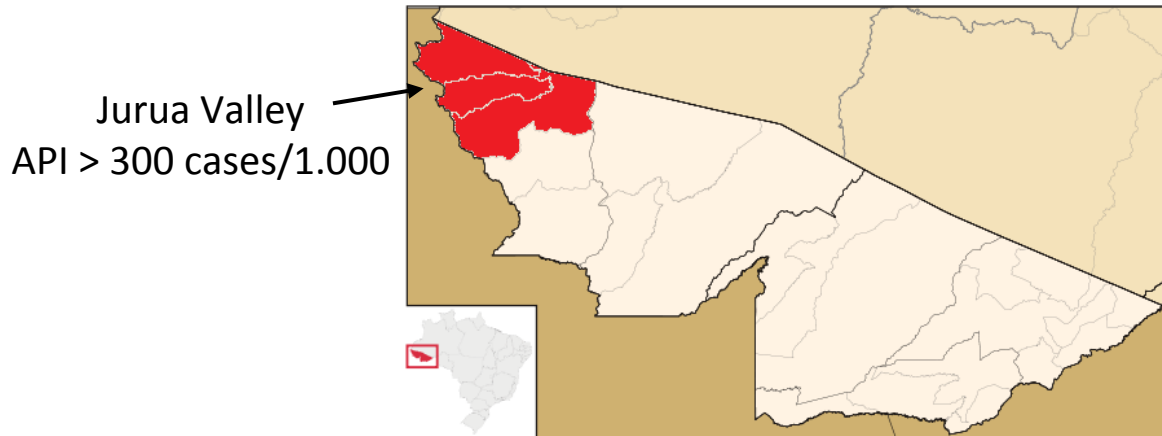
TDR/WHO = Tropical Diseases Research and Training, MSF = Médecins Sans Frontières

From Development to Implementation

- ▶ Controlled intervention in Acre State
 - ▶ Area 152,581 km² (58,912 sq mi)
 - ▶ Population 691,132
 - ▶ HDI (2005) - 0.751 - medium



Brazil



Jurua Valley
API > 300 cases/1.000

Acre State

HDI = Human Development Index

Intervention Study

- ▶ Jurua Valley
 - ▶ June 2006 – December 2008
- ▶ Previous 1st line treatment
 - ▶ Quinine and doxycycline
- ▶ 32,324 patients with falciparum malaria treated



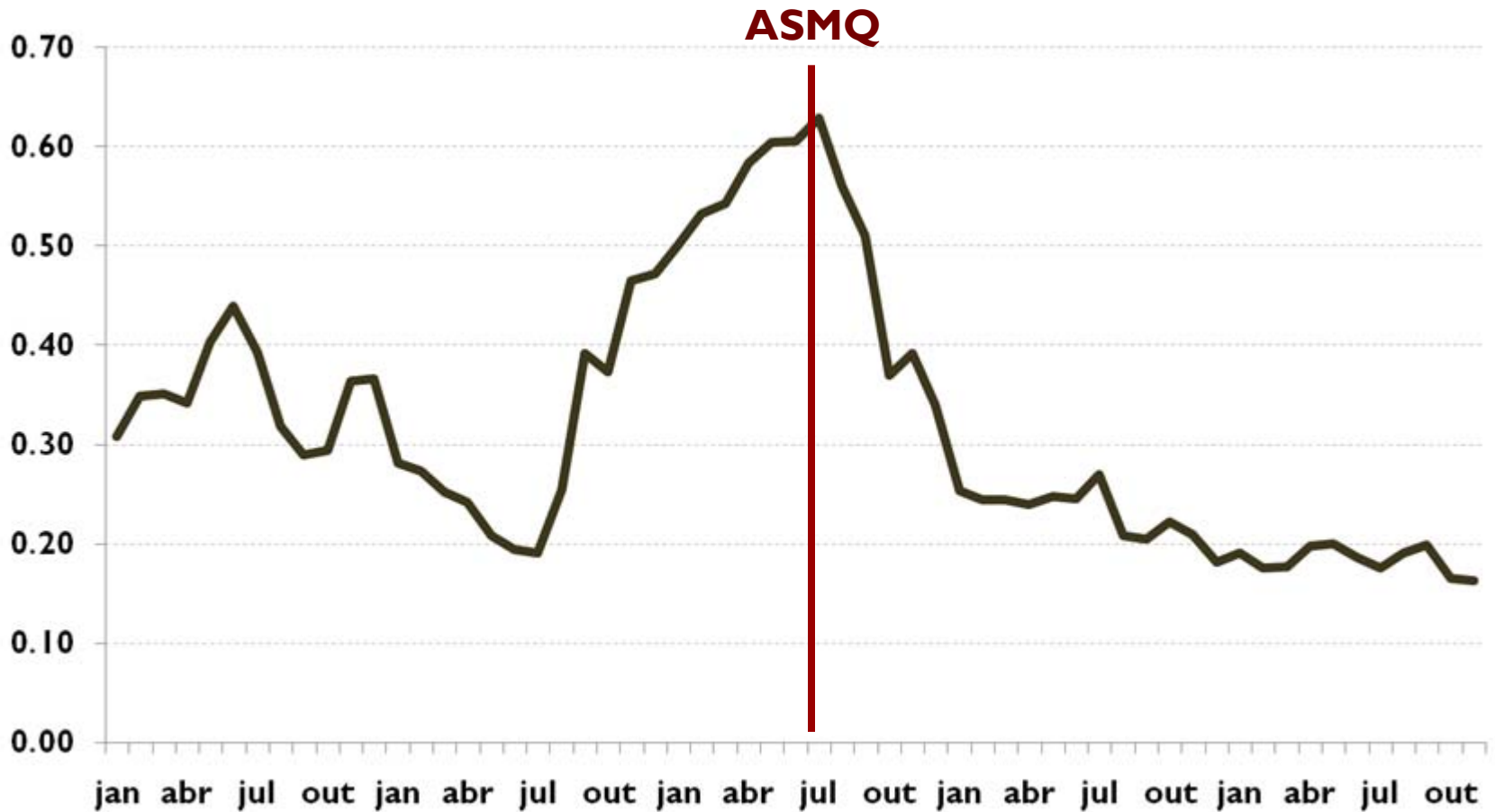
Edmundo Caetano

Malaria Control Program – Jurua Valley

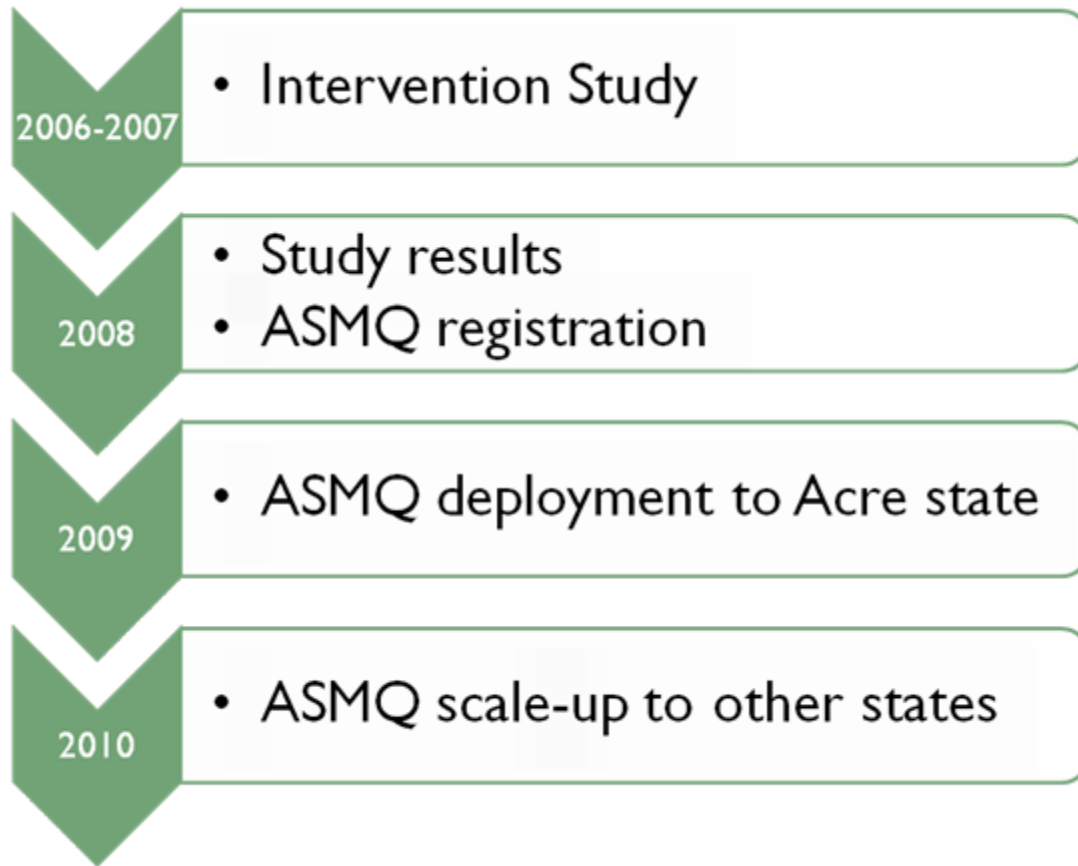
- ▶ 2005
 - ▶ Systematic screening included as routine for CHW
- ▶ 2006
 - ▶ Increase in number of diagnosis labs and human resources
- ▶ 2007
 - ▶ Improvements in medicines storage and inventory
 - ▶ Political and community involvement in malaria control
- ▶ 2008
 - ▶ 7,000 LLIN installation in 17 localities in Jurua Valley

CHW = Community-based Health Workers, LLIN = Long lasting insecticide impregnated nets

Pf/Pv ratio – Jurua Valley, 2004-2008



Progress of FACT in Brazil



■ States with ASMQ

Thank you

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Secretaria de
Vigilância em Saúde

Ministério da Saúde Governo Federal

Visite o site da SVS
www.saude.gov.br/svs



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