

REGULATORY AFFAIRS – THE PROBLEMS WE FOCUS ON



Discovery and clinical development

- Confusing processes for product developers involving regulatory agencies and ethics committees, for example
 - lack of clarity of roles between regulatory authorities and ethics committees
 - misaligned application requirements
 - overall lack of capacity / capabilities

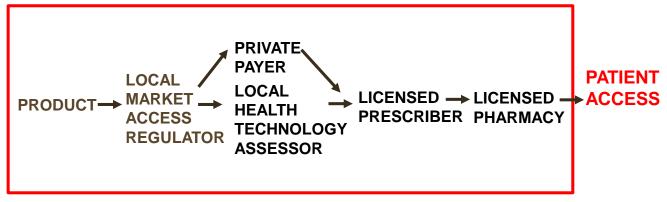
Registration & Licensure

- Rx/Vx: well established "3step" process, but slow and redundant, retarding timely country introduction of needed global health products
- <u>Dx</u>: unpredictable processes with lack of agreed-upon standards, multiple quality assurance mechanisms, and slow registration and uptake of novel technologies

Delivery and surveillance

- Limited pharmacovigilance capacity in a context of increasing number of vaccines and drugs for focus country introduction
- Increased inflow of counterfeit and substandard products, including fakes of products in which Foundation has invested heavily in their development

GENERAL PROCESS IN HIGH INCOME COUNTRIES



"Closed", highly regulated, proscribed system

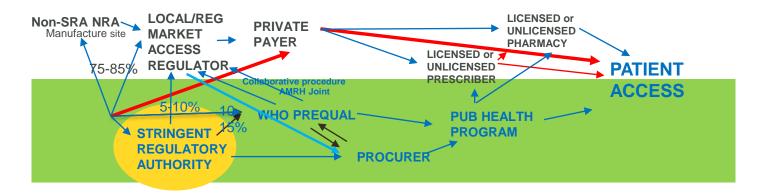
Helps assure product quality, safety, efficacy and supply chain security

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GENERAL PROCESS IN LOW INCOME COUNTRIES

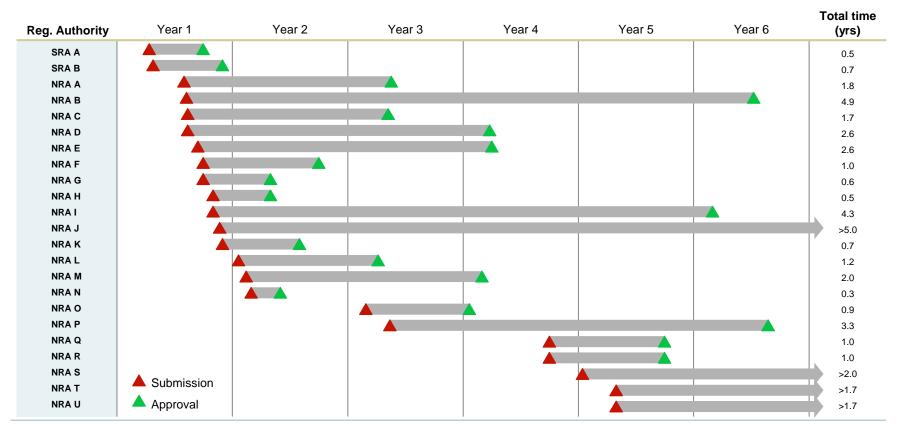
PRODUCT



"Open", loosely (if at all) regulated, multifaceted, complex system Helps assure products of uncertain quality, safety, efficacy and supply chains that are insecure

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THE PROBLEM: EXAMPLE OF LONG SUBMISSION SPREADS



Source: BMGF Regulatory Strategy study

VISION AND KEY STRATEGIC AXES

Accelerate access to GAVI/UNICEF Vaccines and **GFATM/UNITAID** products in priority countries, by reducing registration timelines by 50% in 5 years

Focus on value added activities

Improve manufacturer inputs / regulatory processes

Decrease complexity

RELIANCE

(PQ, regional regulatory authorities, NRAs, "facilitated pathways")

RE-ENGINEERING

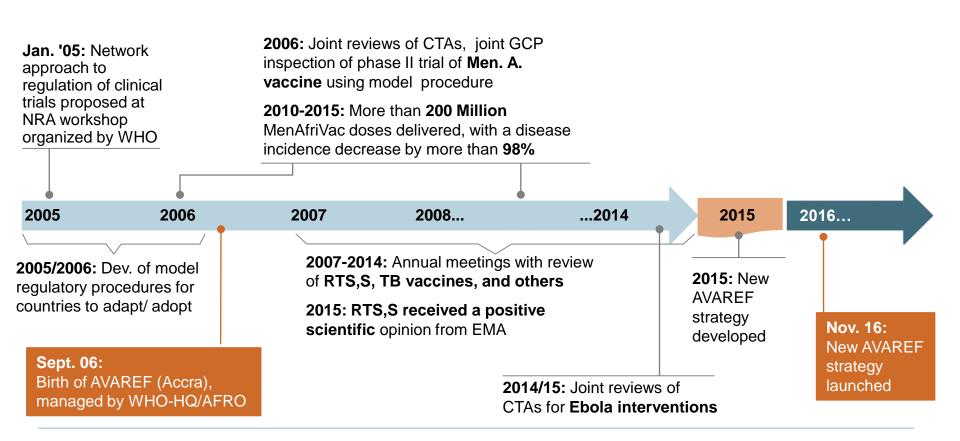
(PQ Dx, PQ VC, consolidated program)

REGIONALIZATION (AMRH, AVAREF, CRS)

IMPACT IN EAST AFRICA

- Harmonized standards (technical guidelines and requirements) developed and approved at the EAC ministerial level in 2014
- Implementation started with two pilots (7 products) of regional review and registration with
 - 40-60% reduction in timelines
 - Eliminated spread in time of manufacturer submissions to NRA
- Full implementation on track
 - Launched regional EAC product registration in Jan. 2015 Expression of Interest approach
 - To-date 4 joint review sessions, 32 products reviewed (non previously PQed) 4 positive opinion, 2 provisional approval, 26 awaiting manufacturer responses
 - Manufacturers: Sandoz (13), Mylan (5), Roche (4), Hetero (3), Bayer/Janssen/Merck (1 each), EAC-based (4)
 - Disease Category: HIV (2), TB (1 Bedaquiline), NCDs (17), Cancer (7), Antibiotic (2), others (3)
 - GMP assessments desk reviews, or <u>single</u> joint inspections; big 3 paying for their staff travel
- Expanding to other product streams (Vaccines) and regulatory functions (Pharmacovigilance)

AVAREF HISTORY



KEY ELEMENTS OF NEW AVAREF STRATEGY

Goal

To strengthen clinical trials regulatory authorization and oversight in Africa by increasing system's efficiency and building an optimal clinical trial regulatory infrastructure

Key objectives

- Develop harmonized clinical trial application (CTA) requirements
- Develop guidelines for joint review of CTAs for vaccine and drug candidates
- Develop a formal accelerated regulatory pathway for CTAs in emergencies

PHARMACOVIGILANCE LANDSCAPE IN LMICS

Overview of PV landscape in LMICs

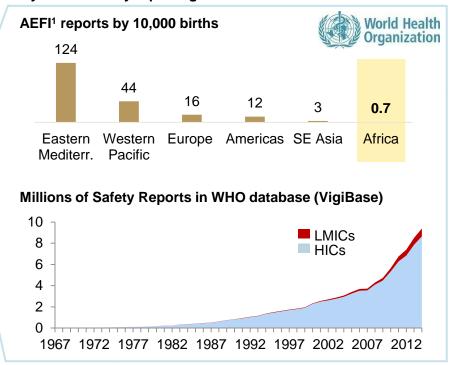
Main strengths

- Most LMICs with established national PV center for data collection and upload to WHO Safety Database
- Strong willingness to improve PV systems

Main challenges / limitations

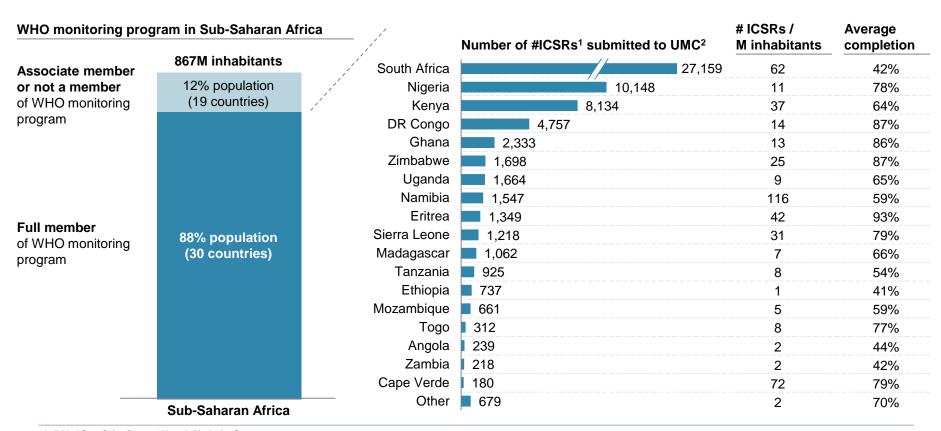
- A. Limited reporting: Spontaneous reporting methodology used in developed countries not helpful / appropriate in LMICs
- B. Low local capacity / capability to analyze data collected
- C. Low NRA capacity / capability to take action from alert signals received: Only a small fraction (3 in 55 according to 2008 survey by WHO) of the NRAs regularly take specific actions from signals received and most of these decisions are a replication of what was done by the SRAs

Very limited safety reporting from LMICs





OVERVIEW OF REPORTING FROM SUB-SAHARAN AFRICA



¹ Individual Case Safety Report; 2 Uppsala Monitoring Centre Source: WHO, Uppsala Monitoring Centre