

Progress in the Decade of Vaccines

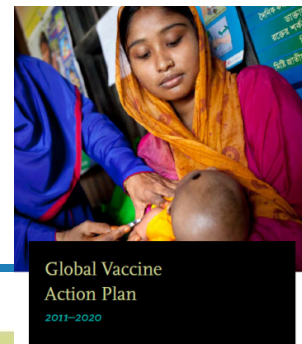
Thomas Cherian

2016 Global Vaccine and Immunization Research Forum
Johannesburg, South Africa



World Health
Organization

Goals for the Decade of Vaccines (2011-20)



Global Vaccine Action Plan
2011-2020

Achieve a world free of poliomyelitis



Meet global and regional elimination targets



Meet vaccination coverage targets in every region, country and community



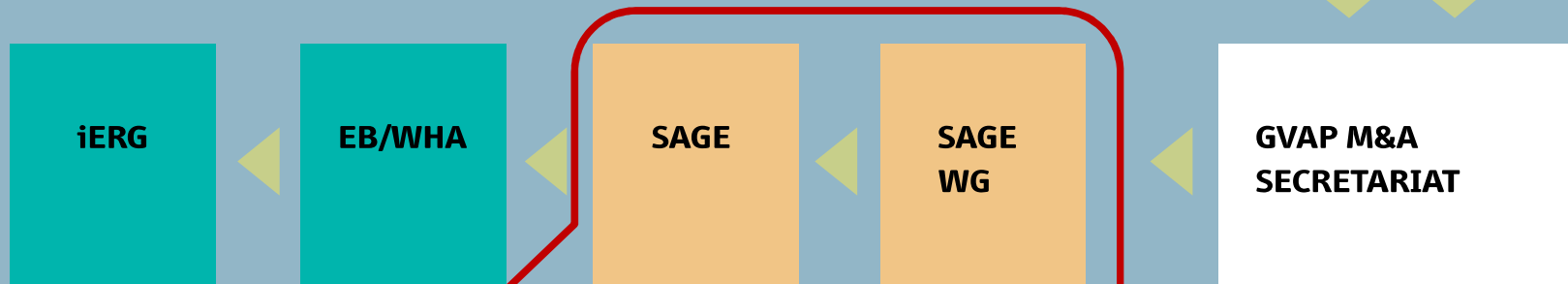
Develop and introduce new and improved vaccines and technologies



Exceed the Millennium Development Goal 4 target for reducing child mortality

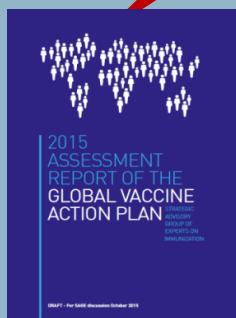
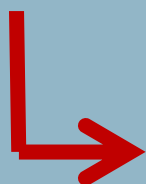


ANNUAL GVAP MONITORING FRAMEWORK



JRF | OTHER

Independent review



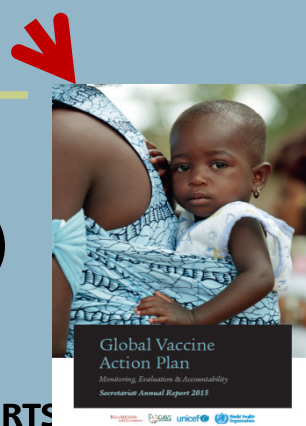
GLOBAL LEVEL INDICATORS E.G. R&D



REPORTS ON RESOURCES AND COMMITMENTS



ANNUAL REPORTS KEY STAKEHOLDERS



Reports available at: http://www.who.int/immunization/global_vaccine_action_plan/en/

The report card : GVAP mid-point targets

- **DTP3**: All countries >90% national coverage, and >80% in every district by **end 2015**

OFF TRACK

- **Polio**: transmission stopped by **end 2014**

OFF TRACK

- **Maternal and neonatal tetanus**: eliminated by **2015**

OFF TRACK

- **Measles**: eliminated in 4 regions by **end-2015**

OFF TRACK

- **Rubella**: eliminated in 2 regions by **end-2015**

OFF TRACK

- **Introduction of under-utilized vaccines**: At least 90 low or middle income countries to have introduced one or more such vaccines by **2015**

ON TRACK



Reported Measles Incidence Rate* and Countries with largest number of reported measles cases

Apr 2014 to Mar 2015 (12M period)

Georgia: 2,387

Egypt: 2,712

Nigeria: 3,736

Ethiopia: 14,923

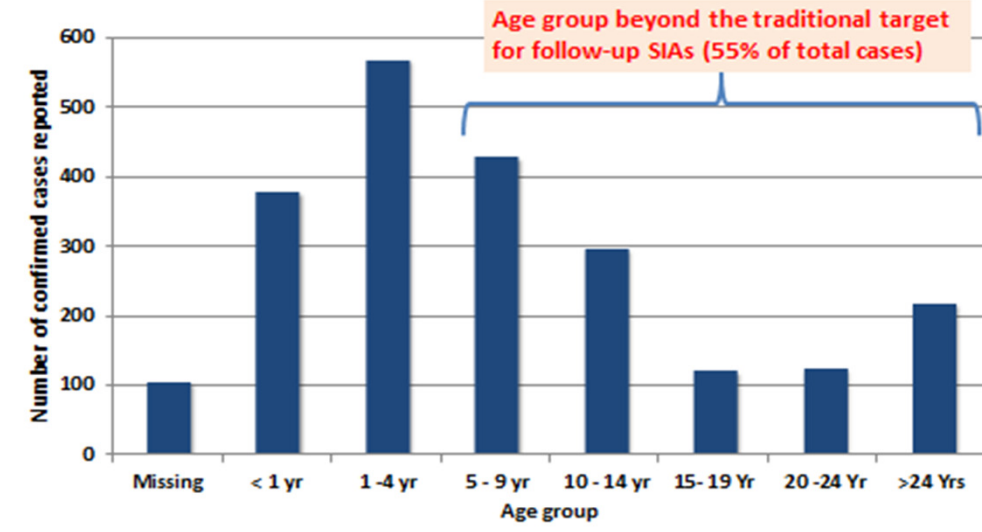
Somalia^b

DR Congo

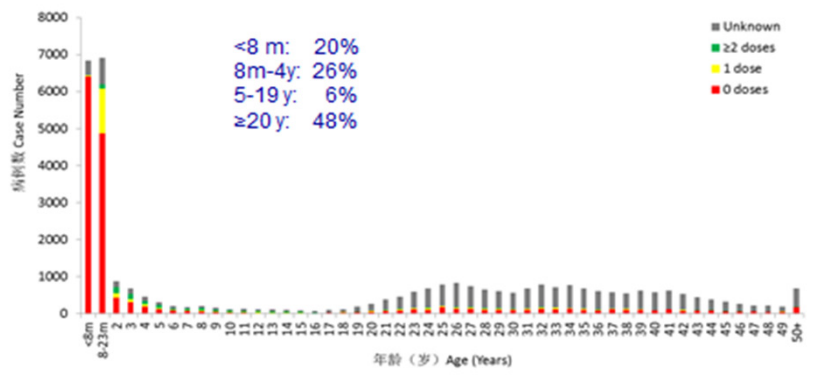
*Rate per 1'00

Data source:
 Monthly reporting
 Reported cases in yellow
 national bulletins or other
^a DR Congo Bulletin hebdomadaire
^b Somalia Weekly Polio Update, week 3, and week 10
^c India WHO UNICEF Joint Reporting Form for 2014 data

Age distribution of confirmed measles cases. Kenya (N=2230) . 2012



Age distribution of measles cases China, Jan-May 2014



Relatively narrow age-based risk groups to target for vaccination, It is much difficult to identify when a high proportion of adults are unvaccinated & primary vaccine failed or second vaccine failed, and many may still be susceptible to measles in China.

Indonesia: 6,959

Philippines: 19,773

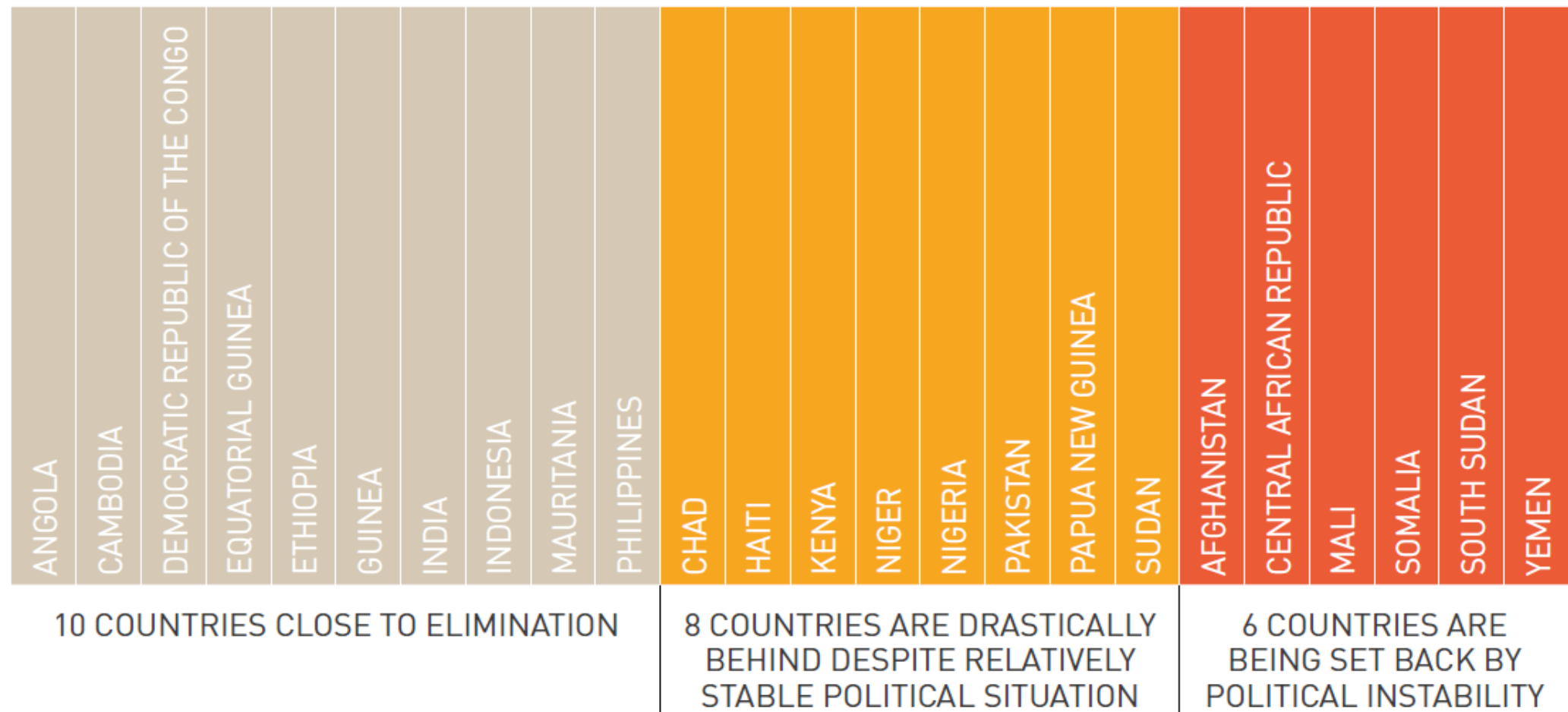
Papua New Guinea: 2,380

to WHO HQ
 Not applicable



MATERNAL AND NEONATAL TETANUS: 6

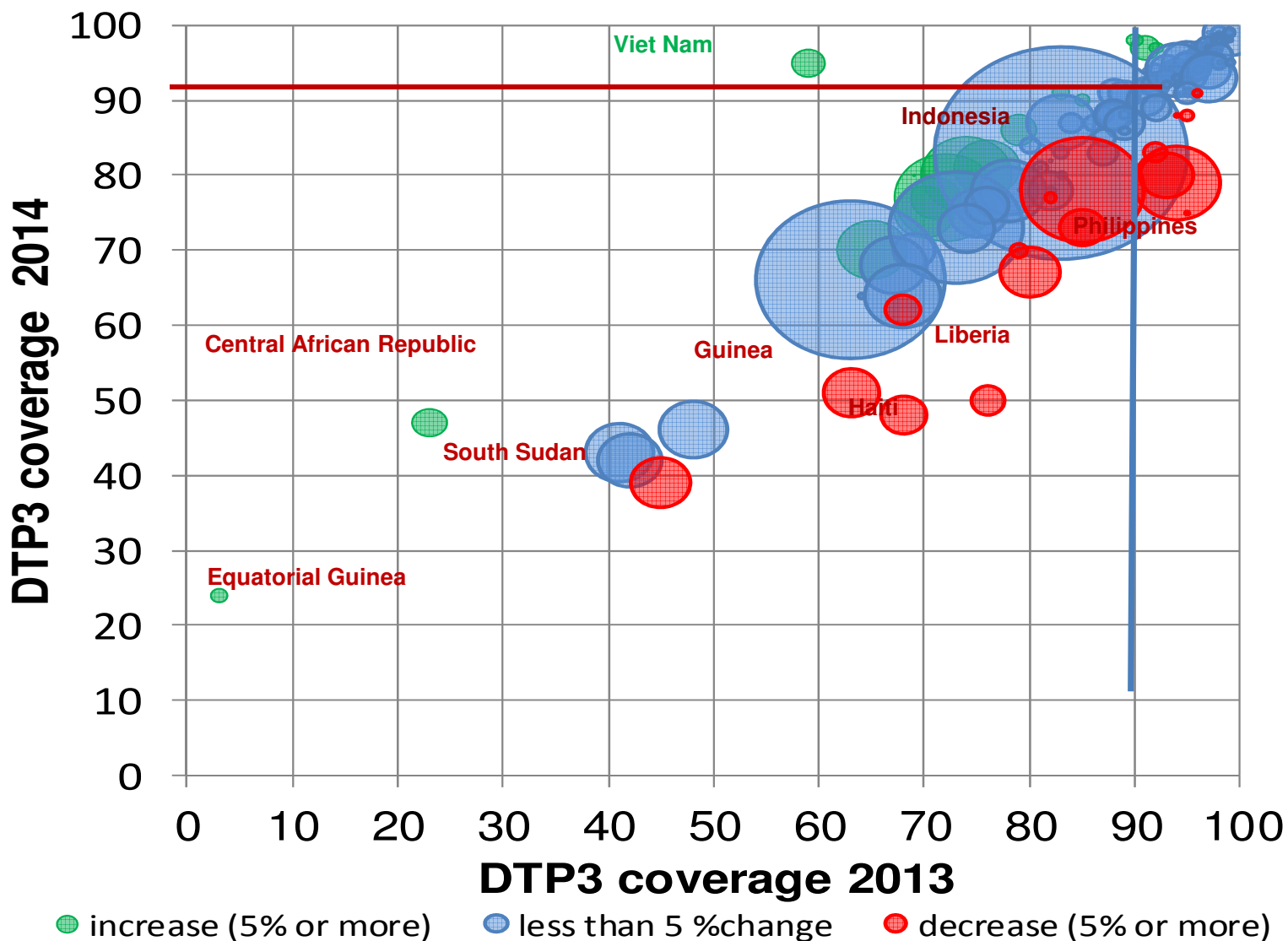
24 COUNTRIES YET TO ACHIEVE ELIMINATION IN 2014



***Cambodia, India, Madagascar and Mauritania were validated in 2015**



DTP3 coverage change 2013 - 2014 and size of under and unvaccinated infants in 2014



Source: WHO/UNICEF coverage estimates 2014 revision. July 2015 Immunization Vaccines and Biologicals, (IVB), World Health Organization. 194 WHO Member States.

Reasons for un- and under-vaccination: remain the same...

Community demand

- Lack of knowledge and awareness
- Reactogenicity of vaccines not addressed adequately
- False perceptions and vaccine hesitancy

Systemic weaknesses

- Inadequate human resources
- Inadequate financing
- Weak procurement and distribution
- Poor quality and use of data

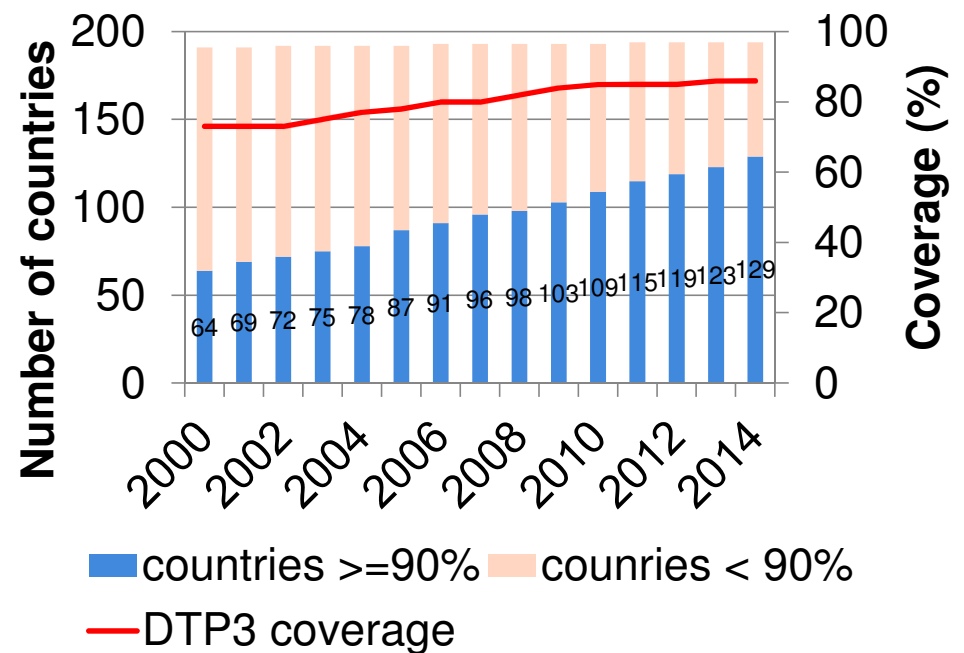
Access to services

- Remote, underserved areas
- Migrant and nomadic populations
- Displaced populations and those affected by conflicts and crisis



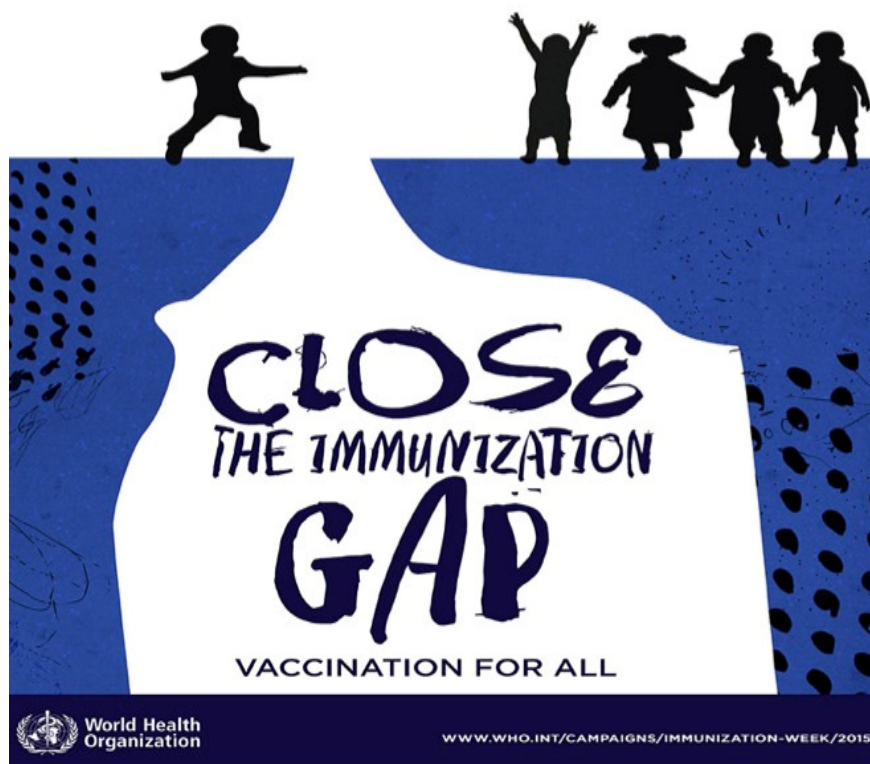
But, there is reason for optimism and clear indications that the targets are achievable

- An increasing number of countries are reaching and sustaining DTP3 coverage goal
- Regional of Americas validated to have eliminated rubella/ CRS
- Africa polio free for 1+ year
- India eliminated MNTE
- **THESE SUCCESSES HAVE TO BECOME THE NORM**



Number of countries that reached and sustained $\geq 90\%$ coverage with 3 doses of diphtheria, tetanus and pertussis (DTP) containing vaccines and global DTP3 coverage from 2000-2014

The way forward



- Strengthen health and immunization systems
 - From procurement to delivery and monitoring
- Greater country ownership and sustainable financing
- Improve the quality and use of data at all levels
 - **Analysis and use of data to target** efforts & maximize benefits
- Improved planning and accountability processes
- Strategies to sustain immunization during conflict and chronic disruption

The Global Vaccine and Immunization Research Forum
Promoting the Research Agenda of the
Global Vaccine Action Plan

Joachim Hombach
WHO Initiative for Vaccine Research

**Global Vaccine and Immunization
Research Forum**

March 15-17, 2016



Research as an integral part of the GVAP*

The guiding principle of innovation:

"The full potential of immunization can only be realized through learning, continuous improvement and innovation in research and development, as well as innovation and quality improvement across all aspects of immunization."



*http://www.who.int/immunization/global_vaccine_action_plan/en/



What can research contribute to the GVAP objectives?

Establishing new healthy child contact points: Immunization in the 2nd Year of Life

Driving demand for vaccination & overcoming vaccine hesitancy

Evolving global vaccine markets: how can we pro-actively address market challenges?

Africa's vaccine demand and supply situation

The measles/rubella agenda and the prospect of new delivery technologies

Where to invest?
Gavi's Vaccine Investment Strategy (VIS)



Where is the future of immunization moving to?

Progress in the development of vaccines against HIV, TB, Malaria, GAS, Schisto, Flu

Microbiome and rational vaccine design, long-lasting monoclonals in disease prevention

Optimizing complex systems and setting the right priorities: total systems effectiveness

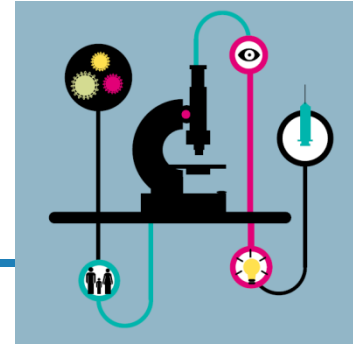
Integrated disease control strategies and moderately effective vaccines

What vaccines can contribute to the antimicrobial resistance agenda

Getting ready to better respond to infectious disease emergencies.



Develop and introduce
new and improved vaccines
and technologies



Research goal: Develop and Introduce New and Improved Vaccines and Technologies

- Indicator 1: Licensure and launch of vaccine(s) against one or more major currently non-vaccine preventable diseases.
- Indicator 2: Licensure and launch of at least one new platform delivery technology.

Strategic Objective: Country, Regional and Global R&D Innovations Maximize the Benefits of Immunization

- Indicator 1: Progress towards development of vaccines against HIV, TB and Malaria
- Indicator 2: Progress towards a Universal Influenza Vaccine protection against drift and shift variants
- Indicator 3: Progress towards institutional and technical capacity to carry out vaccine clinical trials

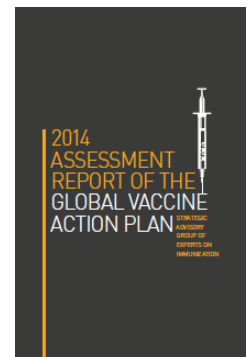
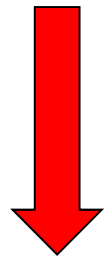
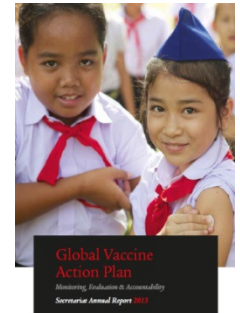


Reporting on R&D progress:

- Every second year, the GVAP Secretariat for Research (WHO+NIAID+B&MGF) prepares a “**GVAP Secretariat report**” on the basis of reviews and GVIRF discussions.
- WHO expert panel and SAGE GVAP WG then assess the progress made towards the achievement of the GVAP targets and provides recommendations.
- SAGE GVAP WG Assessment and Recommendations are gathered in the “**SAGE DoV GVAP assessment report**”

http://www.who.int/immunization/global_vaccine_action_plan/en/

- This report is assessed by the SAGE and then presented and discussed at the EB and WHA



Thank you!