Decade of Vaccines
Global Vaccine Action Plan
SAGE Progress report 2014

GVAP Secretariat report 2014

Dr Thomas Cherian on behalf of
the DoV GVAP Secretariat

SAGE, Geneva, 21st October 2014

BILL & MELINDA GATES foundation

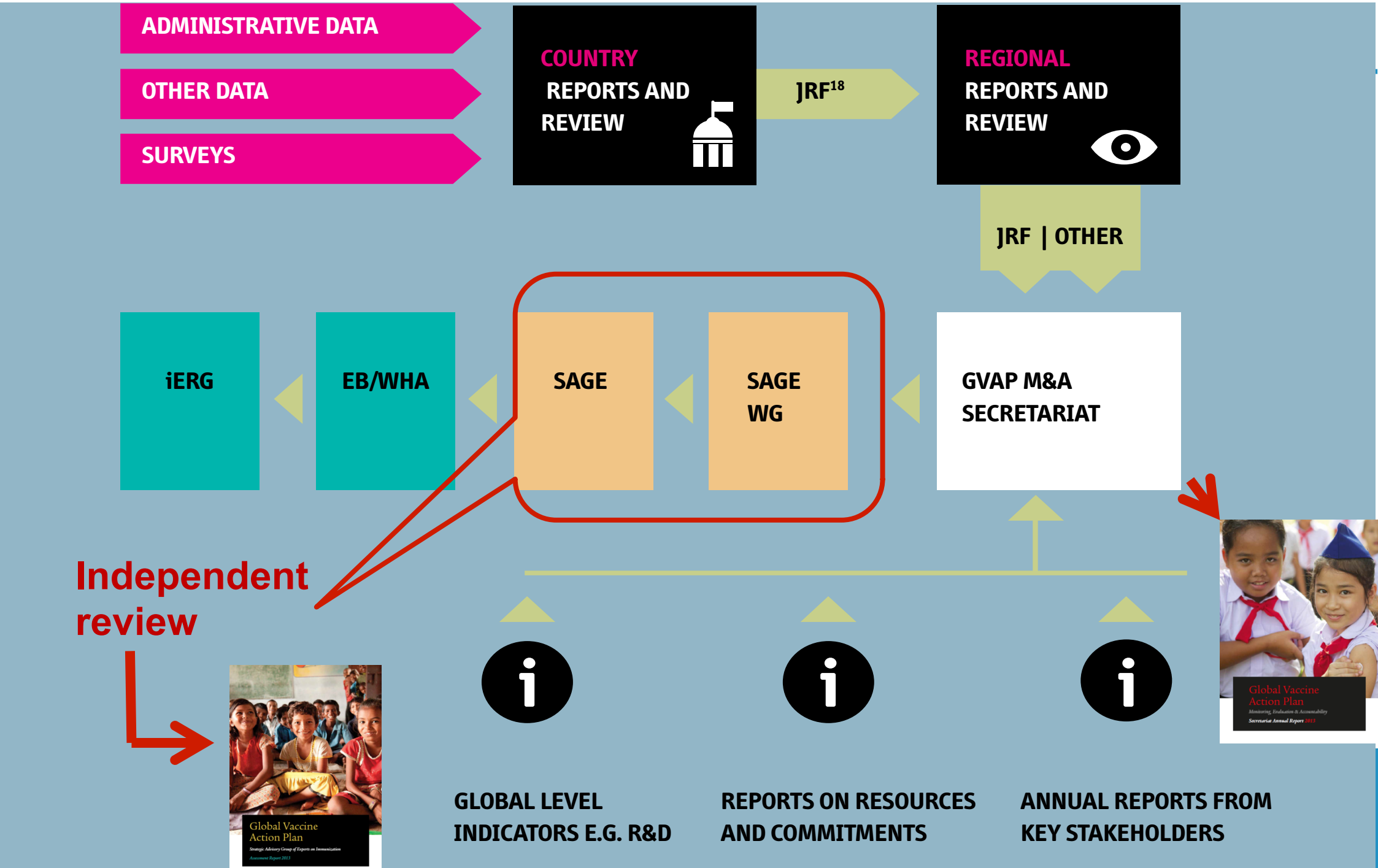
Gavi The Vaccine Alliance

NIH National Institute of Allergy and Infectious Diseases

unicef

World Health Organization

ANNUAL GVAP MONITORING FRAMEWORK



Feedback from 67th WHA, May 2014

- **54 speakers** including 50 representatives from Member States took the floor.
- Delegates **commended SAGE** on immunization assessment report and **took note of the recommendations**, particularly on the need to improve **data quality**.
- Member States raised the following issues:
  - Access to **affordable and uninterrupted supply** of vaccines
  - **Technology transfer** to ensure vaccine security
  - **Guidance to improve data quality**, including use of new ICT
  - Assistance with **risk communication** following serious AEFI and to counter the influence of anti-vaccine groups
  - Support with **economic analysis** to make informed choices

Process to develop and review the 2014 progress report

- **Face-to-face meeting of DoV WG** in February 2014
- **Global Vaccine and Immunization Research Forum**: platform to review progress with R&D indicators, March 2014
- Development of **secretariat progress report** starting in February 2014, with completion in August 2014
- **Review by SAGE WG**
  - Progress against eradication/elimination and R&D indicators via teleconference
  - Remaining indicators at face-to-face meeting in September 2014
- **Independent consultant** engaged throughout the review process to prepare the assessment report

SAGE GVAP WG face-to-face meeting, February 2014

- **Process and format for 2014 report**
- **Improving data quality**
  - Case studies: Uganda, Sudan, Chad,
  - Electronic Immunization Registries: experience from the Americas
- **Issues, challenges with meeting elimination & coverage targets**
  - Case studies on challenges with measles elimination:
  - UK: vaccine hesitancy
  - China: changing epidemiology (age distribution)
  - Sudan: issues with data quality
- **Review of indicators**
  - Revisions & new indicators
- **Design of a "dashboard" for presenting results**

Review of indicators

- **Fully Immunized Child / Infant**
  - Reviewed in February and again in September 2014
  - Indicator before its time and currently difficult to monitor
  - Derived estimates do not provide useful information
- **Immunization Safety** (AEFI Pharmacovigilance Systems)
  - Several options developed
  - Review by GACVS to short list the indicator(s) for pilot test and then select final indicator(s)
- **Vaccines Stock Out**
  - Indicator monitoring national level stock-out was accepted and initial results reviewed as part of 2013 progress
- **Integrated service delivery**
  - Two options considered
  - WG recommended indicator that tracked coverage with vit A and measles vaccine
  - Recommended further work to track and report on "missed opportunities
- **Indicators that were dropped**
  - Indicators to be included in the narrative of the overall coverage Indicators
    - 3 years sustainability of DTP3 national coverage > 80%
    - DTP1-DTP3 dropout rate for national coverage

2014 GVAP Secretariat report

- **First report on** progress towards **Research and Development** goals and strategic objectives
  - Jointly developed by: B&MGF+NIAID+WHO
  - Global Vaccine and Immunization Research Forum (GVIRF) 2014 served as the platform for discussions and development of the reports

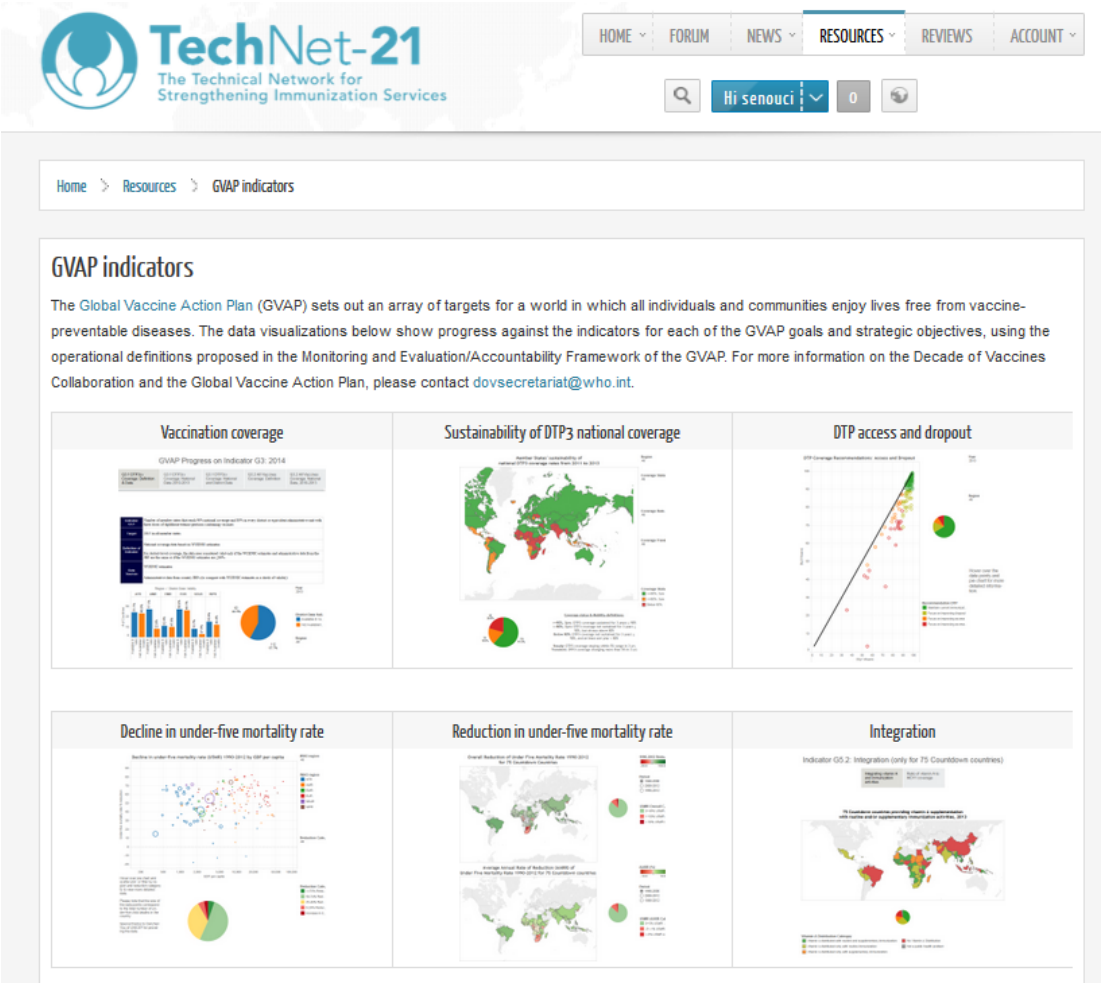
    http://www.who.int/immunization/research/forums_and_initiatives/gvirf/en/
  - Final GVAP Secretariat Report R&D: 60 pages for 7 Indicators

2014 GVAP Secretariat report - 2

- **New indicators:**
  - **Vaccine Stock out**
  - **Integration** of immunization services with other primary health care interventions
- **New independent contributions:**
  - **CSOs** through the "GAVI CSOs constituency" coordinated by Amy Dietrich (IFRCRC) with WHO support
  - **Manufacturers:** IFPMA, GSK
- **New SAGE DoV WG member**
  - **Marie-Yvette Madrid** (in place of Shawn Gilchrist, Canada who resigned)
- **Support of Independent Consultant**
  - Facilitate the independent development of SAGE Assessment report: **Paul Rutter**

New Features in 2014 GVAP Secretariat report: Data Visualization

- **Interactive charts** and maps using **Tableau Public©**
- Ability to **see additional information** behind the graphs and maps
- Ability to **filter data** and generate new graphs
- On **Technet21** Platform



http://www.technet-21.org/resources/gvap-indicators

World Health Organization

Filter data by region and country

Download the generic report or a tailored made report and print

Filter data by region and country

Filter Data | Download Report | Figures Only

Global Vaccine Action Plan Data Visualization Dashboard

World Health Organization

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Global Vaccine Action Plan
Assessment Report 2014

As requested by the SAGE (GVAP Assessment Report 2013) and some Member States (WHO EB January 2014), the GVAP Secretariat is proposing to develop a platform to present countries' data using a new approach. The approach is to present countries' data in a dashboard-type platform using dynamic data visualization tools.

GOAL 1
Achieve a world free of poliomyelitis.

GOAL 2
Meet global and regional elimination targets.

GOAL 3
Meet vaccination coverage targets in every region, country and community.

GOAL 4
Develop and introduce new vaccines and technologies.

GOAL 5
Exceed the Millennium Development Goal 4 target for reducing child mortality.

Filter data by goal

http://dev.hyphegesis.com/mugs/who-gvap/2014/
Username: who-user
Password: measles

2

Meeting Global and Regional Elimination Targets

Indicator 2.1: Measles Elimination

TARGET

Four WHO regions by 2015
Five WHO regions by 2020

Milestones

AMR: eliminated measles in 2002 (two years after the 2000 goal)

WPRO: measles elimination by 2012

EURO: measles elimination by 2015

SEARO: 95% reduction in measles mortality by 2015

EMRO: measles elimination by 2015

AFRO: measles elimination by 2020

Definition of Indicator

as defined in the 'Framework for Verification of Measles Elimination'.

Measles elimination: The absence of endemic measles transmission in a defined geographical area (e.g. region or country) for ≥12 months in the presence of a well-performing surveillance system.

Measles eradication: Worldwide interruption of measles virus transmission in the presence of a surveillance system that has been verified to be performing **WELL**.

Note: Verification of measles elimination takes place after 36 months of interrupted endemic measles virus transmission.

Data Sources

WHO-UNICEF joint reporting forms (JRFs) [#]

WUENIC coverage data [#]

Progress in global control and regional elimination of measles, 2000–2011, WER 18 January 2013 [http://www.who.int/wer/2013/wer8803.pdf]

Progress reports from regional verification commissions for measles and rubella elimination in AMR and WPRO [#]

Interactive visualisations by country, region

2

Meeting Global and Regional Elimination Targets

Indicator 2.1: Measles Elimination

Figures

Figure 3: Measles Incidence Per Region and Country per 100,000 people in 2013

Figure 4: Measles National Coverage (MCV1)

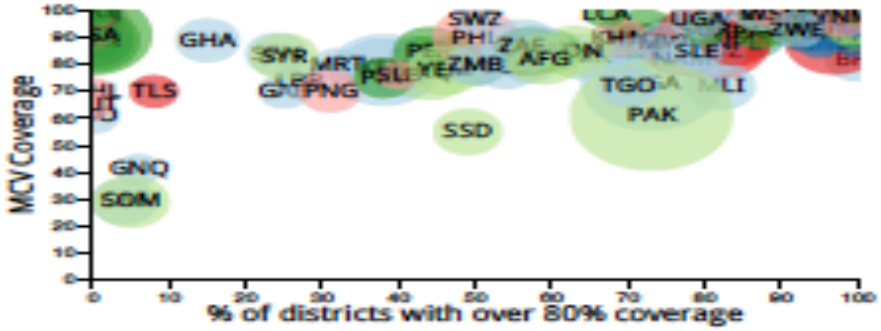


Figure 5: Surveillance Data On Cases Per Category

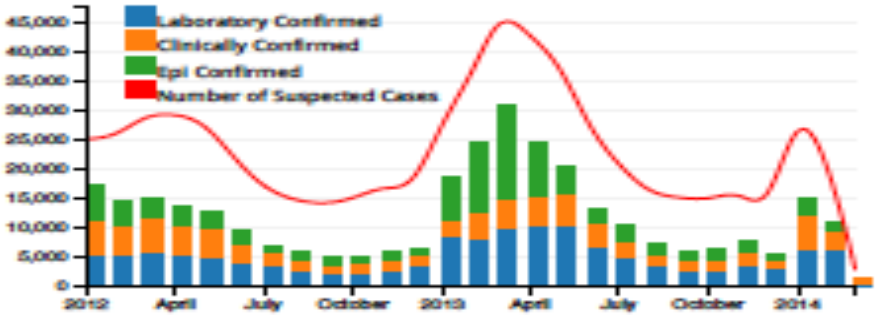


Figure 6: Measles National Coverage (MCV1) (comparison of case

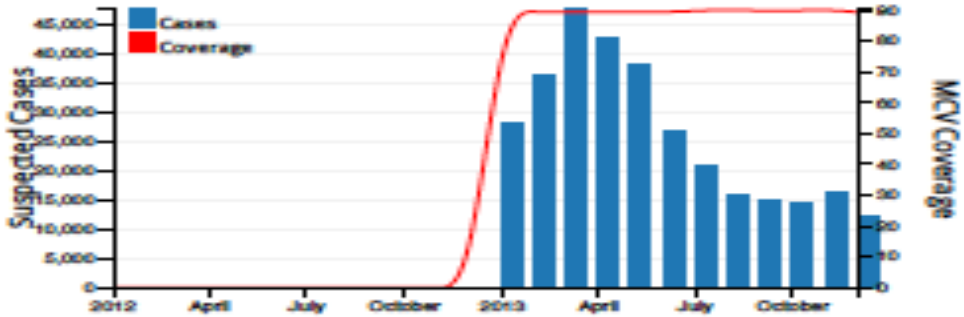


Figure 7: Confirmed Measles Cases By Age & Vaccination Status

RDC Dashboard

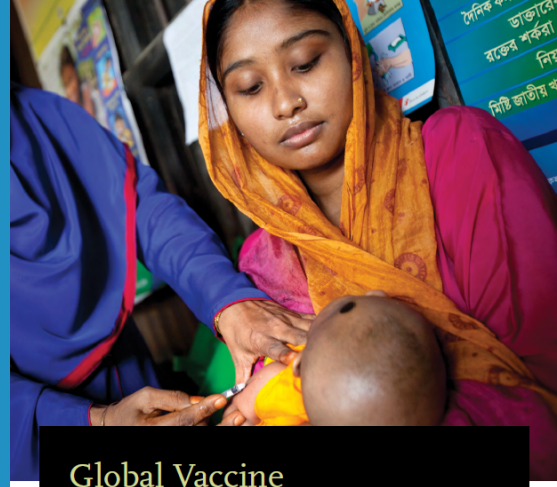
2014 ASSESSMENT REPORT OF THE GLOBAL VACCINE ACTION PLAN

STRATEGIC ADVISORY GROUP OF EXPERTS ON IMMUNIZATION

<1 page executive summary

IN BRIEF

The GVAP aims to expand the great benefits of vaccination to all people on earth by the end of the decade. Five end-2015 targets assess progress.

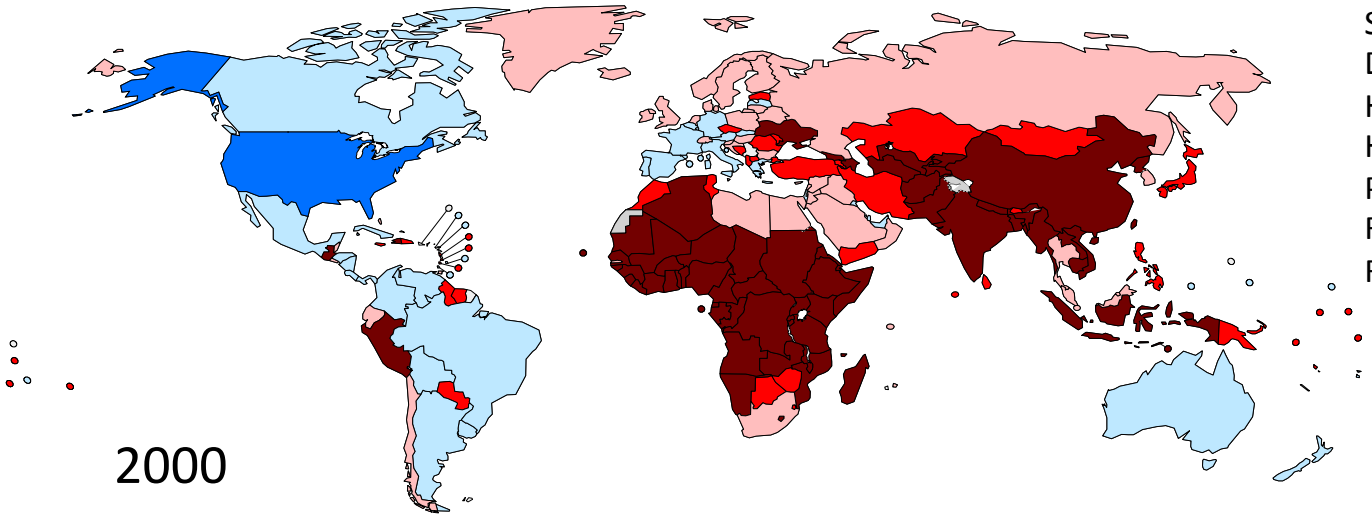


http://www.who.int/immunization/global_vaccine_action_plan/en/

EXTRA SLIDES

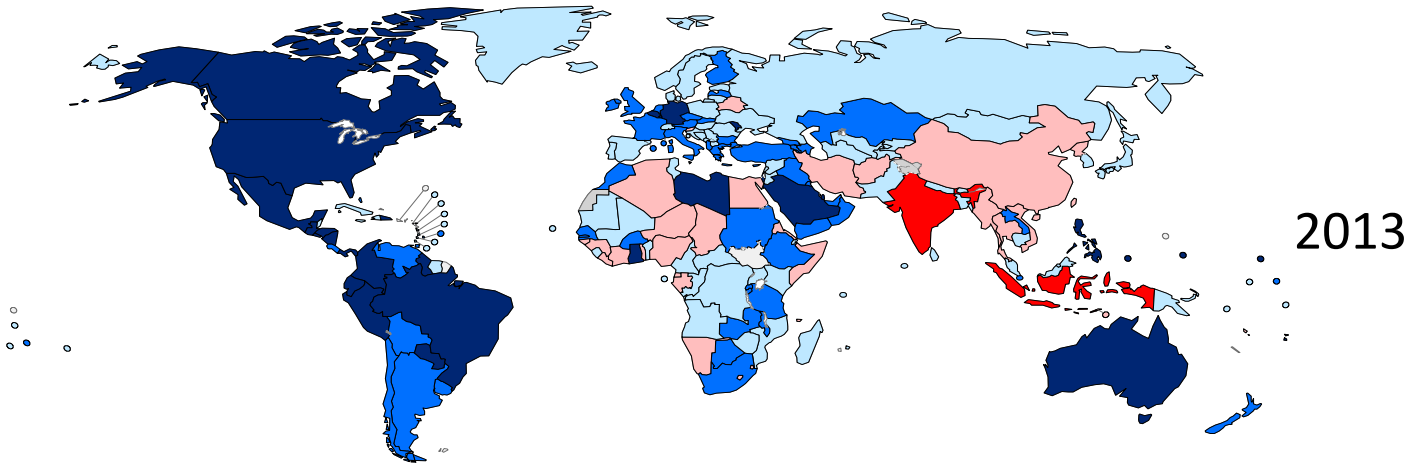
Number of Vaccines/Antigens Introduced Nationwide in Immunization Schedules - 2000 compared to 2013

Increasing diversity in national immunization schedules



Selected antigens are :
Diphtheria, Tetanus, Pertussis, Measles, Polio - universal use
Hepatitis B,
Heamophilius Influenza type B,
Pneumococcal conjugate
Rotavirus
Rubella

- 5 antigens (DTP, Measles and Polio)
- 6 antigens
- 7 antigens
- 8 antigens
- 9 antigens
- 10 antigens
- Not applicable
- Not available



Data Source: WHO/IVB Database, as at 08 July 2014

Map production: Immunization Vaccines and Biologicals, (IVB), World Health Organization

Date of slide: 04 September 2014

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.
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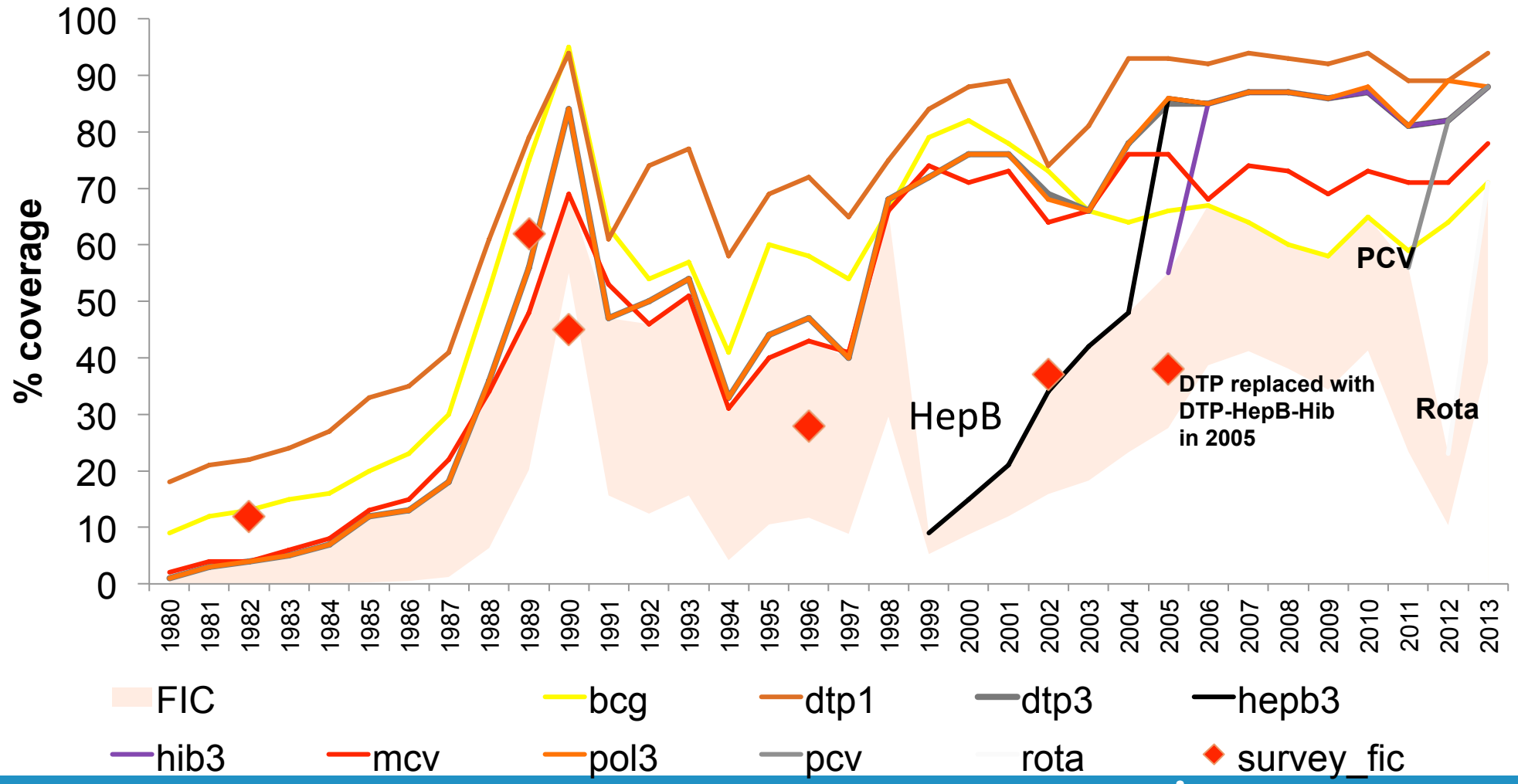
Where we left it in February: Questions to SAGE WG

What we did since February

Age criteria	❑ X By 12 month of age ❑ By 24 month of age ❑ By 59 month of age ❑ By 15 years of age ❑ By 65 years of age
Antigens/dose criteria	❑ X National immunization schedule ❑ X Smallest common set of vaccines among all member states ❑ X WHO recommended vaccines for universal use ❑ WHO recommended vaccines including regional recommendations ❑ GVAP specific stipulated list X
Delivery strategy	❑ Routine services only ❑ Any strategy
Accommodating changing recommendation over time	❑ X Established at baseline / No changes over time ❑ Follows antigen dose recommendations (age, antigen criteria) ❑ GVAP specific stipulated criteria
Value determination	❑ X Measurement (administrative system, survey) ❑ Estimate (covariant, range based on dependency independency) ?
Purpose of the indicator	❑ Monitoring compliance with WHO recommendations ❑ Monitoring performance of national immunization system

Coverage from vaccines recommended in national immunization schedule, and proportion of infants fully immunized by 12 moths, 1980-2013



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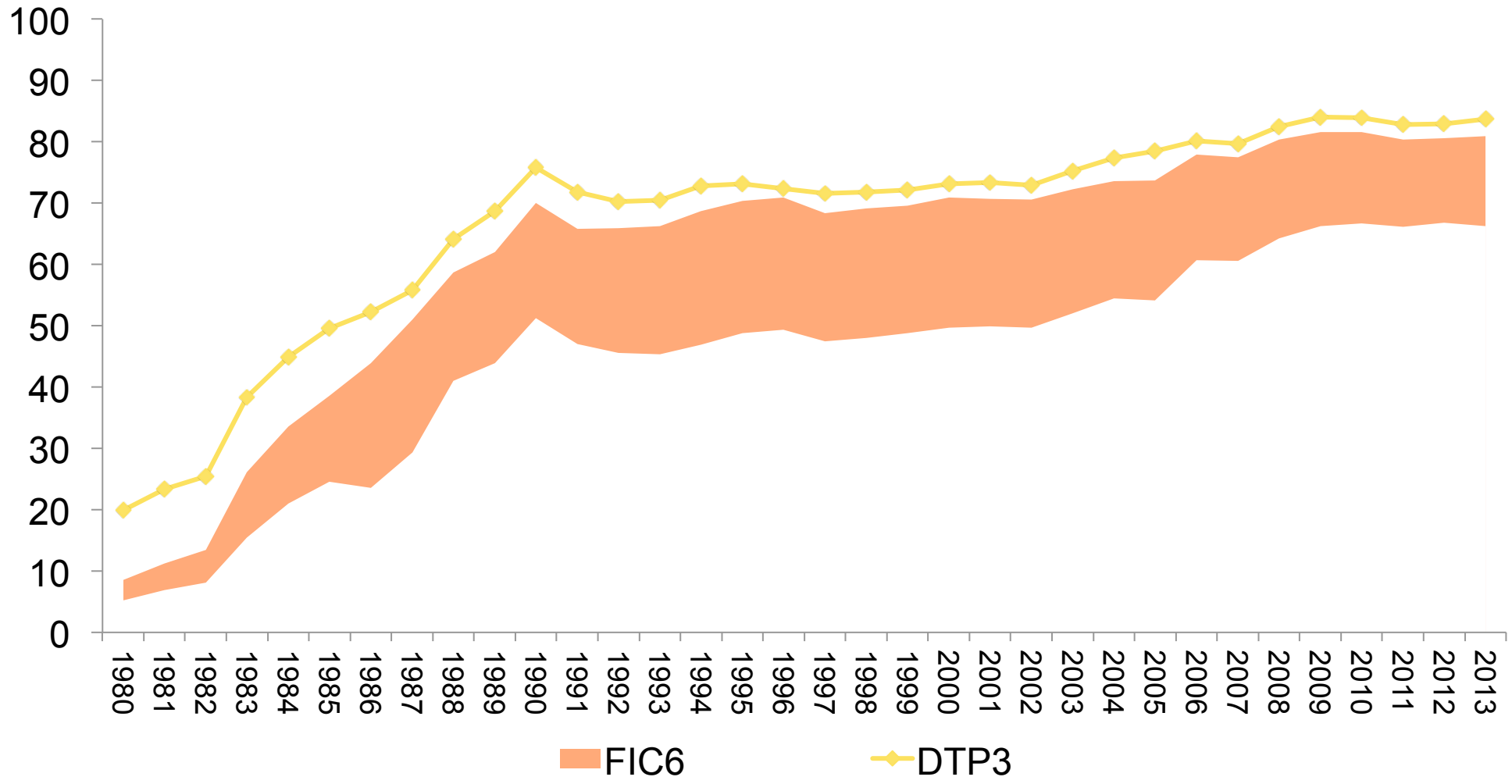
DTP3 and FIC coverage
FIC based on 6 basic antigens
BCG, 3 doses of DTP containing and polio, 1 dose of measles



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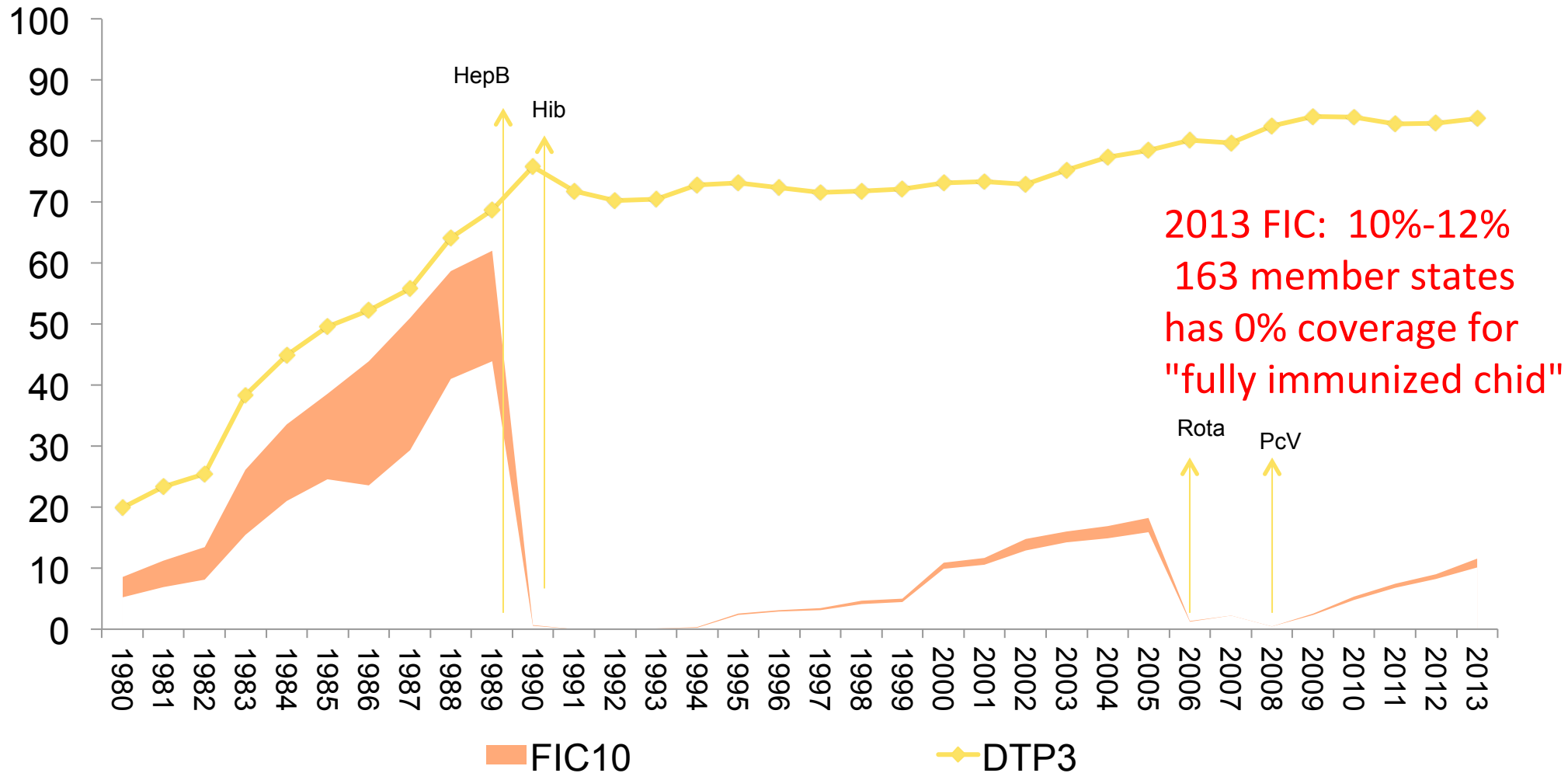
DTP3 containing vaccines and FIC coverage FIC based on 10 antigens

BCG, 3 doses of DTP, HepB, Hib , pcv rota and polio, 1 dose of measles



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Indicators for safety surveillance

- **THREE CATEGORIES OF INDICATORS CONSIDERED**:

A. To monitor the **performance of** AEFI surveillance **system**

B. To monitor **quality of AEFI reporting**

C. To monitor **response to serious AEFI**

A. Indicators for surveillance performance

- Two kinds of indicators are being considered
  i. Standard overall indicator
  ii. Hierarchy indicators
    a. Critical Indicators: These are the indicators that are “minimally” required by countries
    b. Benchmark Indicators*: These are indicators for countries with advanced AEFI surveillance systems.

*All countries should strive to reach the benchmark indicators. These indicators will be the “gold standard” of performance that can be achieved

A.i. Standard overall indicator

Serious* AEFI reporting rate from an area/ locality per year. This is calculated as

$$\text{Serious AEFI reporting rate per 10,000 births per year} = \frac{\text{Number of serious* AEFI cases reported from an area/ locality per year}}{\text{Total number of live births in the same area/ locality per year}} \times 10{,}000$$

* Death, Hospitalization or prolongation of existing hospitalization, Persistent or significant disability or incapacity, congenital anomaly/birth defect or life-threatening

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B. Indicators to monitor AEFI reporting

- **Zero reporting rates** of serious AEFI
  - This is for countries that have “zero” reporting for AEFI surveillance

- **% of AEFI report forms with completed critical* information**
  - *Patient identifier, Date of birth (or age), Location (address), Medical History, Primary suspect vaccine name (generic), Batch number, Date and time of vaccination, Date and time of AEFI onset, Adverse event, Outcome of AEFI

- **Timely reporting** of serious AEFI
  - Time taken between identification of the serious AEFI to the time of reporting.

- **Percent** of AEFI cases **line-listed**

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C. To monitor the response to serious AEFI

- Onset of symptoms to the date reported for death cases
- **Percent** of Serious AEFI cases **reported on Time***
- **Percent of Serious AEFI** cases for which **investigation was initiated on Time***
- **Percent** of Serious AEFI cases **with completed** investigation**

*Time needs to be specified by parameters set in the country /region
**Complete investigation needs definition by the national committee

Next Steps

- Finalise indicators at GACVS Dec 2014
- Pilot standard overall indicator in countries with good reporting system
- Review after 6 months to a year and finalise

Indicators for integration

- **Proposed indicators**
  - **Delivery of vitamin A supplements** with routine immunization and supplementary immunization activities
    - Number and % of 75 high child mortality countries
    - Comparison of coverage: DTP3 and Vit A
  - **Comparison of coverage between rotavirus vaccination and ORS and exclusive breast feeding**
    - Limited by availability of data
    - Coverage with ORS and exclusive breast feeding not available on annual basis
    - Plan to establish a baseline and then have another assessment later in the decade
- **Working group recommendation**
  - **Utilize only indicator for integrated delivery of vitamin A, but compare coverage of Vitamin A and Measles first dose**