



The enduring dilemma of 20 million unvaccinated children: *Equity and access solutions in IA2030*

Dr. Kate O'Brien, IVB Director

GVIRF Plenary 3: Shaping the Future: Equitable Access for All | 24 February 2021



THE WORLD HAS BEEN TAKING A SERIOUS LOOK AT EQUITY



**LEAVE
NO ONE
BEHIND**

14 of 17 Immunization Related

Sustainable Development Goals | 2015 – 2030

“Endeavor to reach the furthest behind first”

Universal Health Coverage | GOAL 3.8

“Achieve universal health coverage... for all”

IA2030 | 2021 – 2030 MISSION

“A world where everyone, everywhere, at every age, fully benefits from vaccines for good health and well-being”

Gavi 5.0 | 2021 – 2025 MISSION

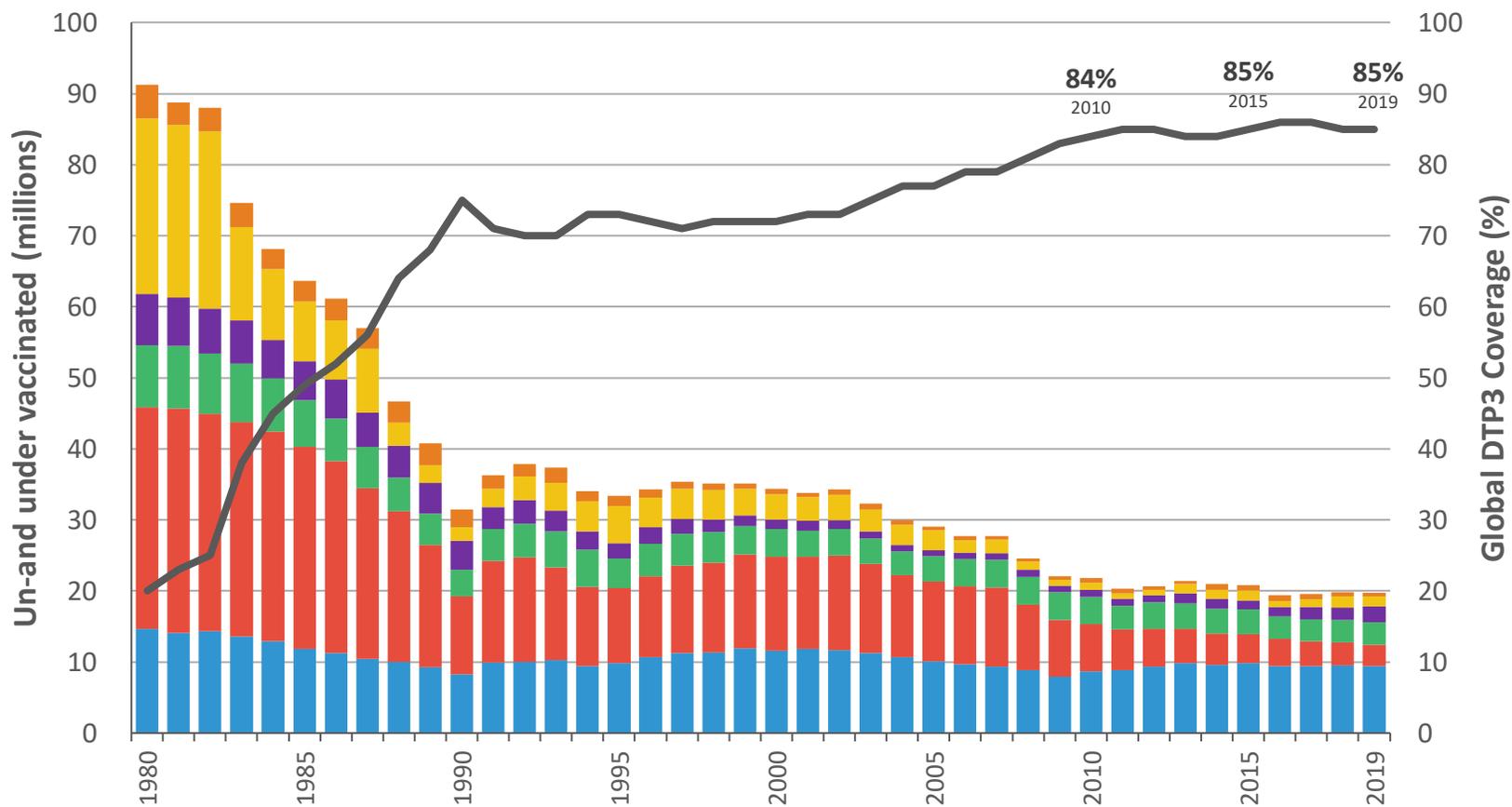
“To save lives and protect people’s health by increasing equitable and sustainable use of vaccines”

Equity and Access

Solutions in IA2030

- 1** **Observations 2020** 
- 2** IA2030 
- 3** Targeted Action 
- 4** Gaps and Research 

Almost 9 out of 10 children reached in 2019, but almost 20 million children un-or under vaccinated



19.7 million un-and under vaccinated children in 2019, by WHO region



Immunization Agenda 2030 goal....

Vaccination available to everyone, everywhere, by 2030.

Challenge.....

Coverage has plateaued since 2010

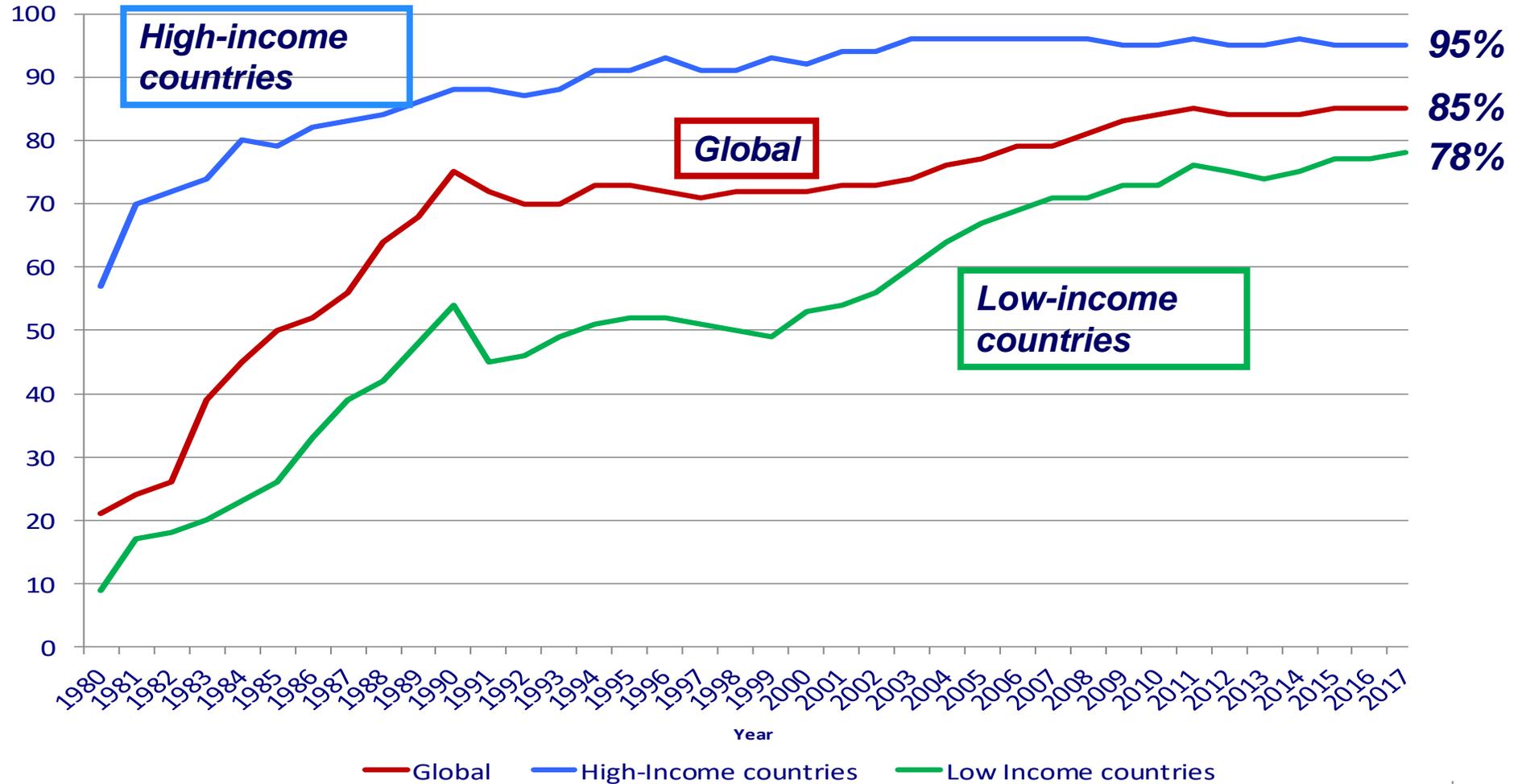
14 million zero-dose children.

Nearly half live in the African Region.



Equity: Vaccine coverage persistently differs by income level

Coverage with DTPcv3, by country income levels, 1980-2017



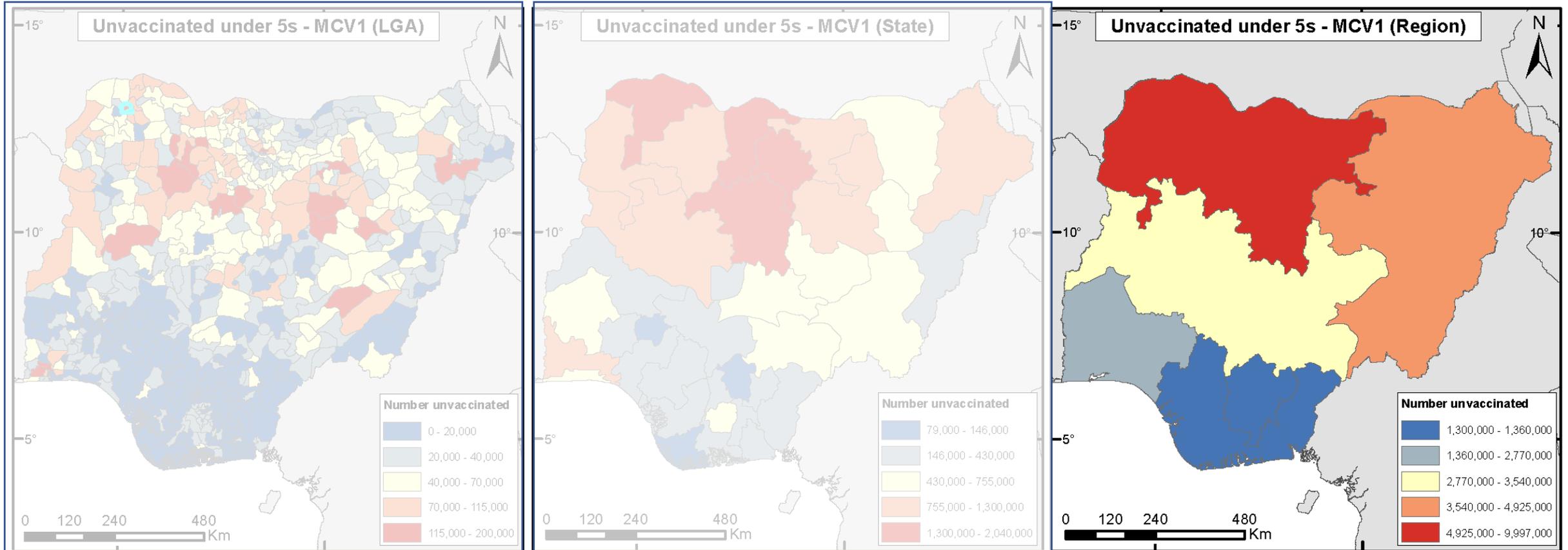
Source: WHO/UNICEF coverage estimates 2017 revision, July 2018, and Country Income Categories (World Bank), as of June 2018.

Income classification not available for: Cook Islands and Niue

Immunization Vaccines and Biologicals, (IVB), World Health Organization.

194 WHO Member States. Date of slide: 16 July 2018.

Nigeria: Zero dose children not randomly distributed

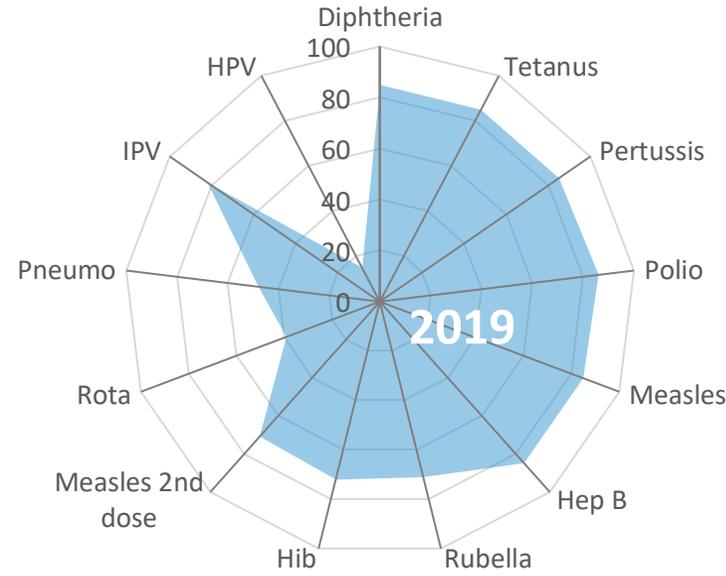
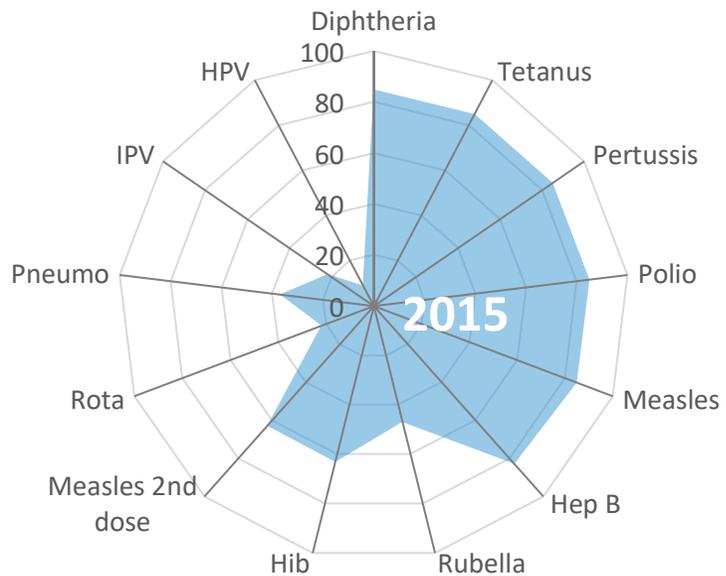
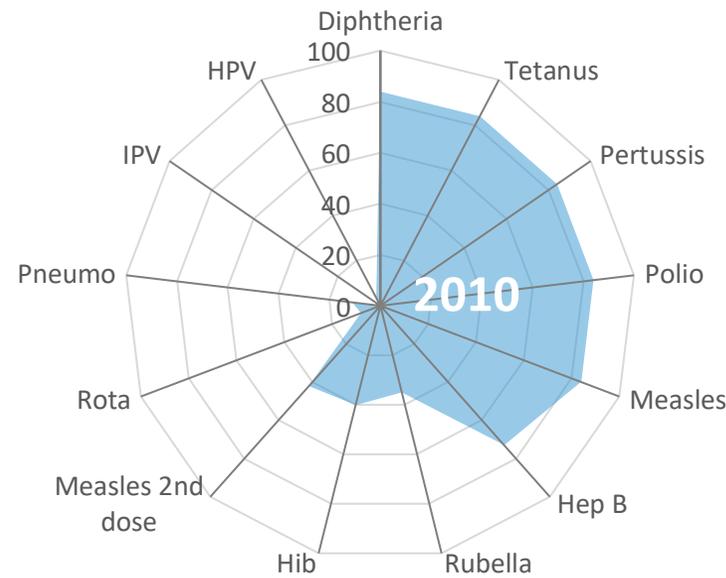
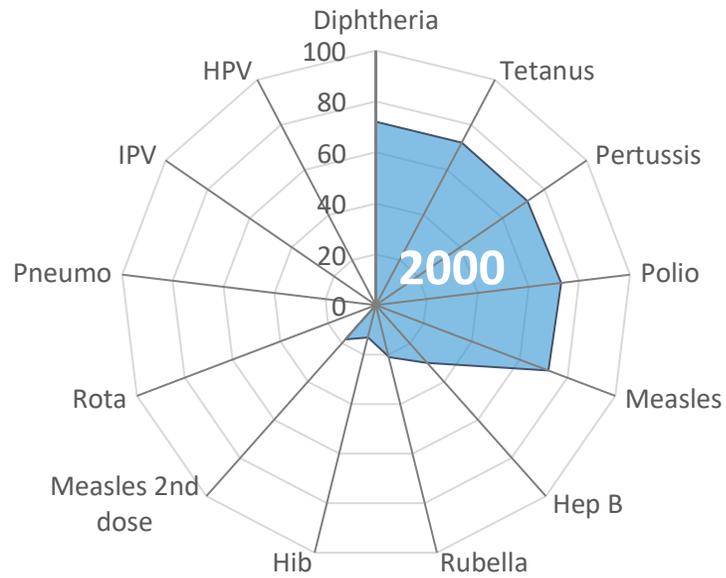


Note: MCV1 coverage in children aged 9-35 months was used as a proxy for coverage in U5s in the calculations shown here.

Breadth of protection for those immunized has expanded well beyond improvements in accessing all children (coverage)

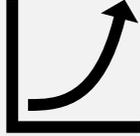
After 2010, no real progress has been achieved with expanding vaccination coverage to un- and under served populations,

However, those that are reached have benefitted from a wider portfolio of vaccines and are protected against many more diseases.



Equity and Access

Solutions in IA2030

- 1 Observations 2020 
- 2 **IA2030** 
- 3 Targeted Action 
- 4 Gaps and Research 



A world where **everyone, everywhere, at every age...**

... **fully benefits from vaccines...**

... for **good health and well-being**

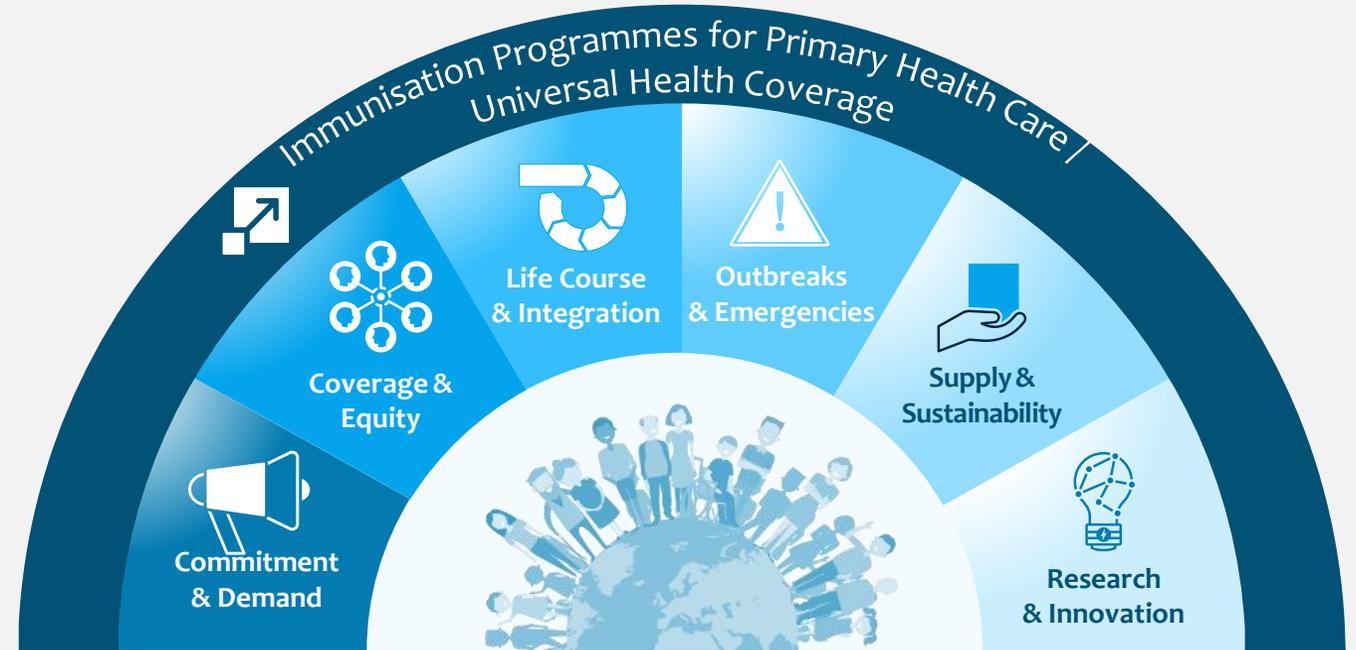
Immunization Agenda 2030

A world where everyone, everywhere, at every age, fully benefits from vaccines for good health and wellbeing

7 strategic priorities

informed by

4 core principles



People-Focused



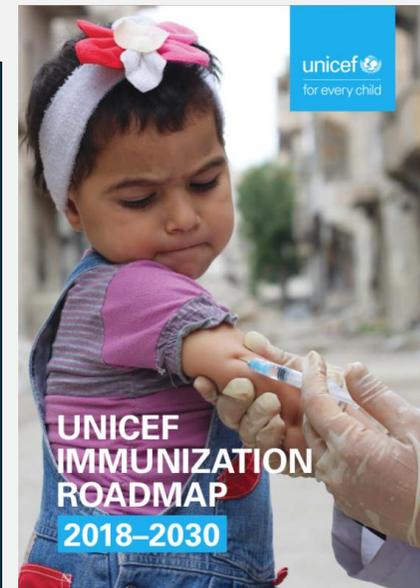
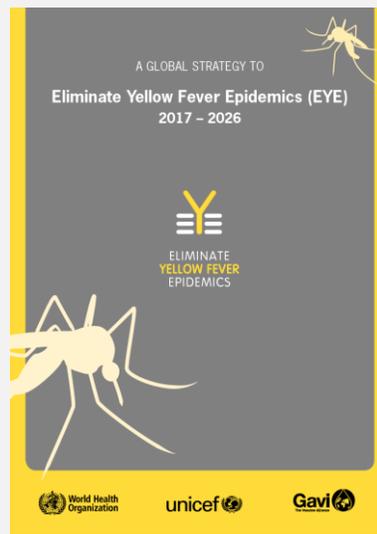
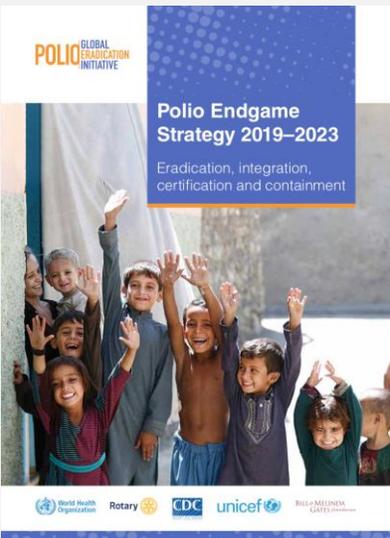
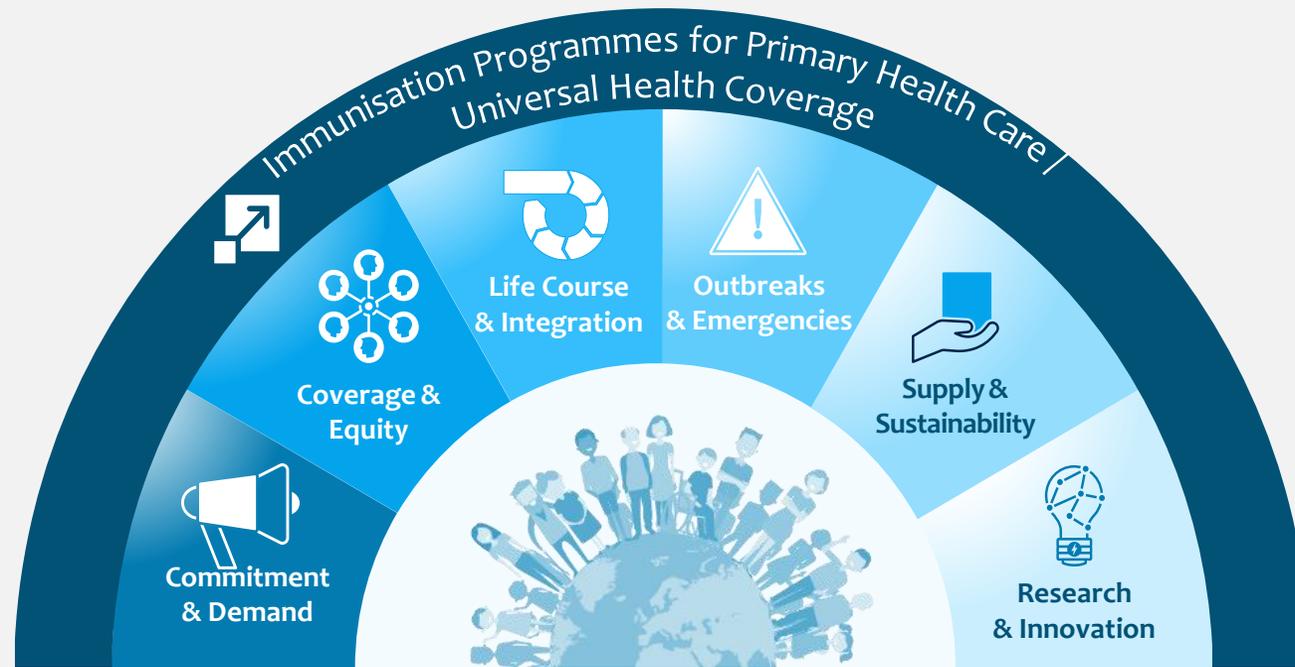
Country-Owned



Partnership-Based



Data-Guided



FOUR PRIORITY AREAS OF IMMUNIZATION INEQUITY



REMOTE RURAL
Challenging to access

URBAN
Difficult to track

**AFFECTED BY
CONFLICT**
Dangerous or Blocked

GENDER
Impacts access

Measles is a tracer of inequality

- Measles requires very high coverage to stop transmission
- Measles comes back **faster & hits harder** in vulnerable settings where there is a confluence of inequity
 - Fragile, conflict, vulnerable states
 - Vulnerable groups including refugees
 - Impact of poverty, malnutrition, Vitamin A deficiency

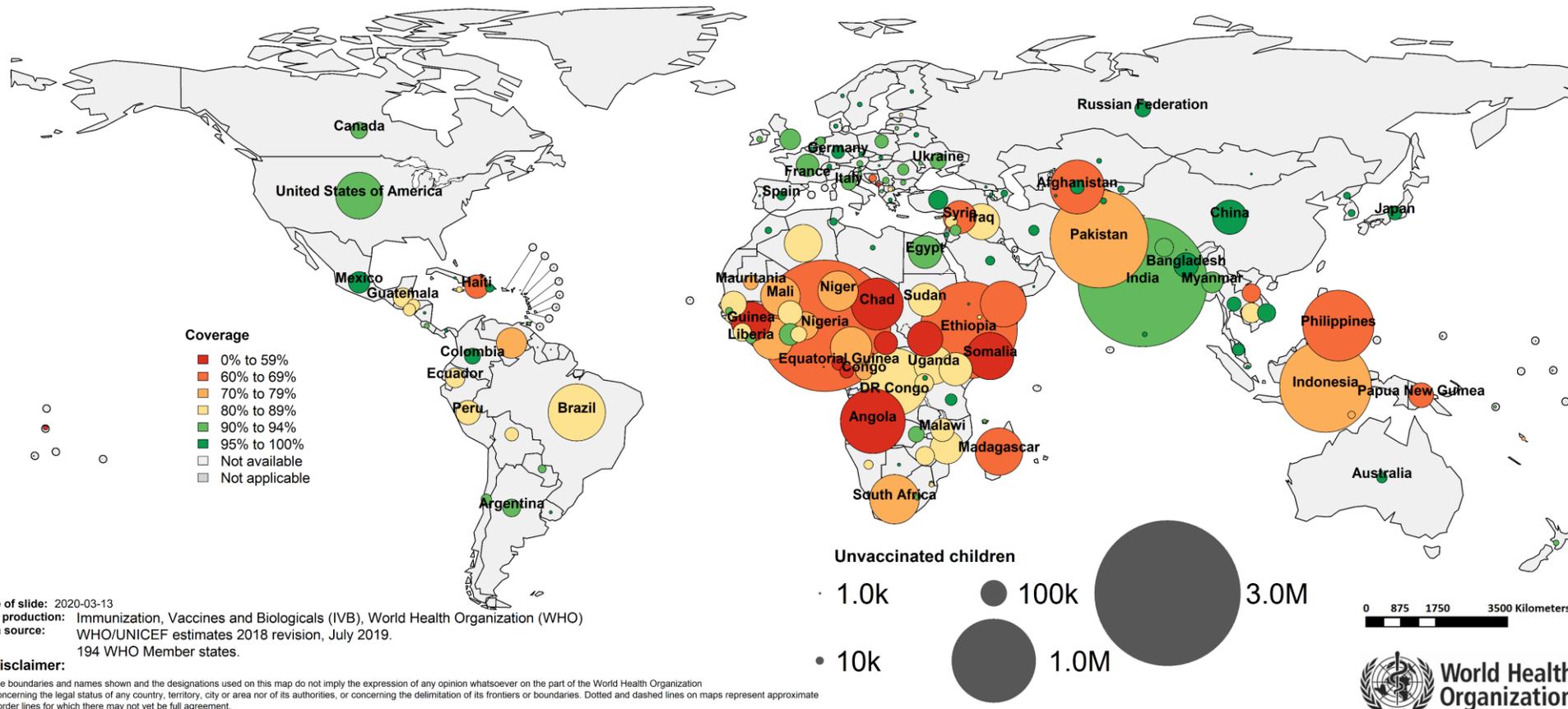


Measles is the canary in the coal mine

Where are the 19.2 million children without measles first dose in 2018? Also “zero” dose

Coverage and Unvaccinated Children for MCV1

2018



Equity and Access

Solutions in IA2030

- 1 Observations 2020 
- 2 IA2030 
- 3 Targeted Action** 
- 4 Gaps and Research 

RECOMMENDATIONS

FOR THE GLOBAL IMMUNIZATION COMMUNITY

Ambition

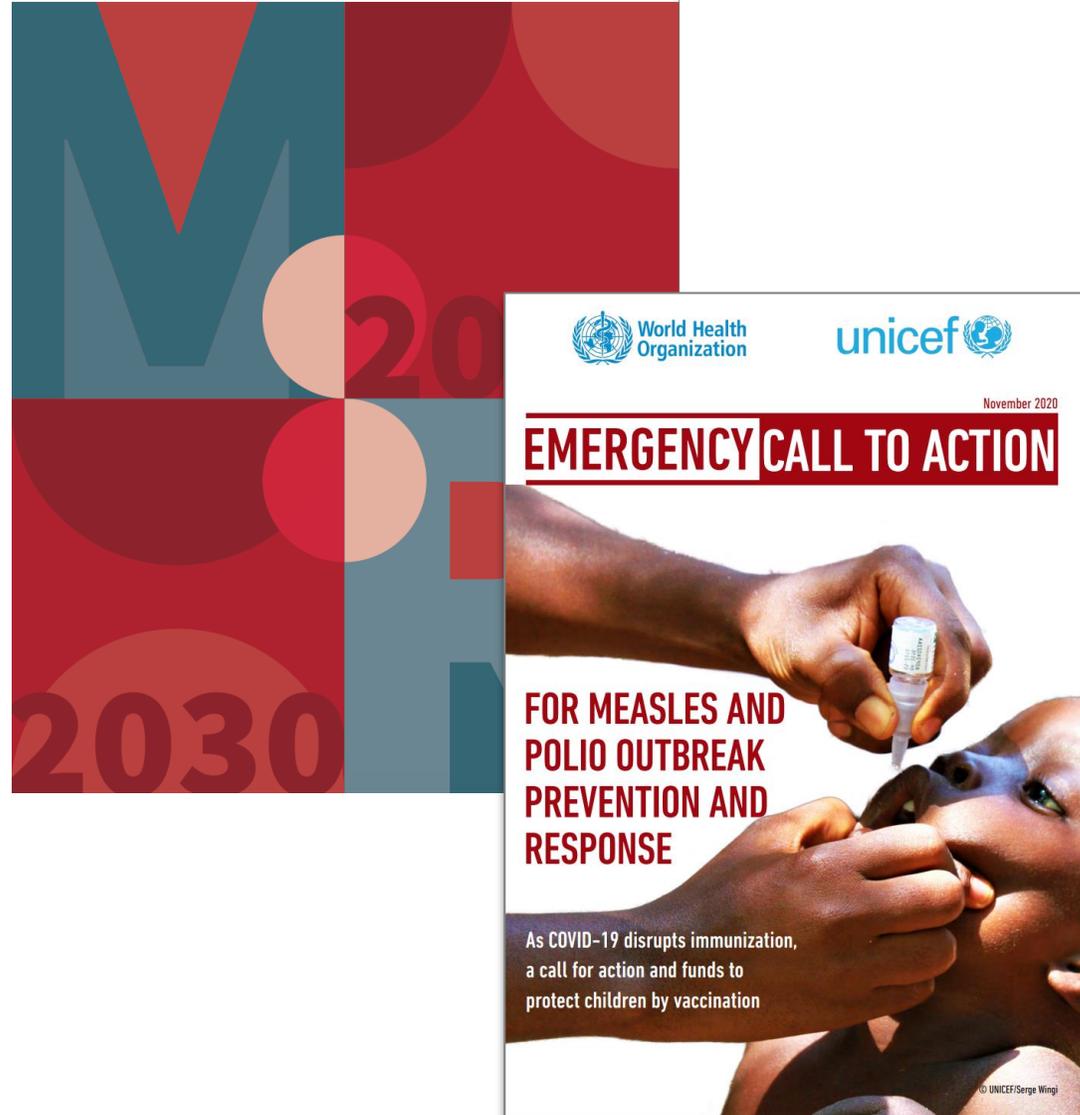
Measurement

Identification and
Programmatic
Targeting

Wider Links with
PHC and UHC

Emergency call to action for measles & polio outbreak prevention & response

MEASLES & RUBELLA
STRATEGIC FRAMEWORK
2021-2030

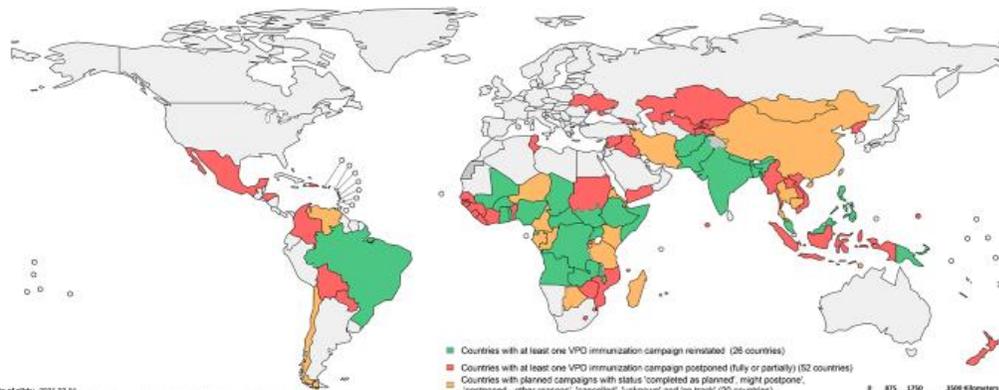


- Risk losing hard won gains on measles & polio
- To increase equity, **building system resilience** is more important than ever
 - Strengthen routine immunization including second year of life platform
 - Reach zero dose children for measles vaccine
 - Prevent, detect, respond to & recover from measles outbreaks
 - Strengthen Laboratory surveillance

Continuous monitoring of disruptions and coverage

- VPD Campaign tracker
- eJRF 2021
- DTP3 monthly doses as a tracer
- Regional data collection processes
- Monthly surveillance data
- Periodic EHS polls
 - Results of more recent one expected in March 2021
- UNICEF supply data
- “Sentinel” sites, in the context of COVID learning agenda
- [TechNet-21 repository of papers](#) on the subject

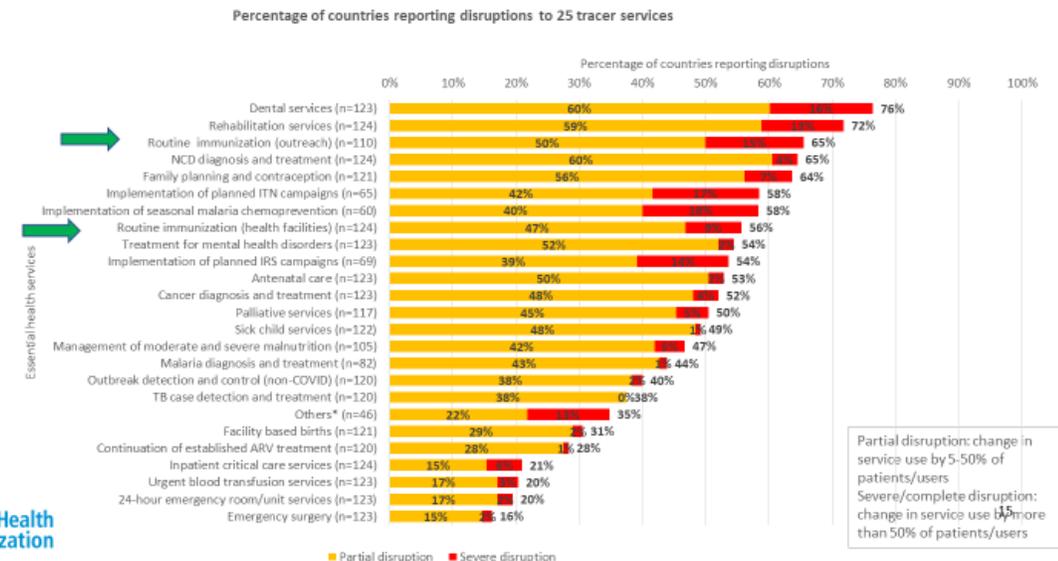
VPD campaigns postponed due to COVID-19: 52 countries with at least one VPD campaign postponed, 1 February 2021



Data of atlas: 2021-02-01
Map production: Information, Statistics and Biostatistics (ISB), World Health Organization (WHO)
Data source: WHO/EIS Repository, 1st February 2021
Disclaimer: The countries and names shown and the designations used on this atlas 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. World Health Organization, WHO, 2021. All rights reserved.



Essential Health Service (EHS) Poll of tracer services



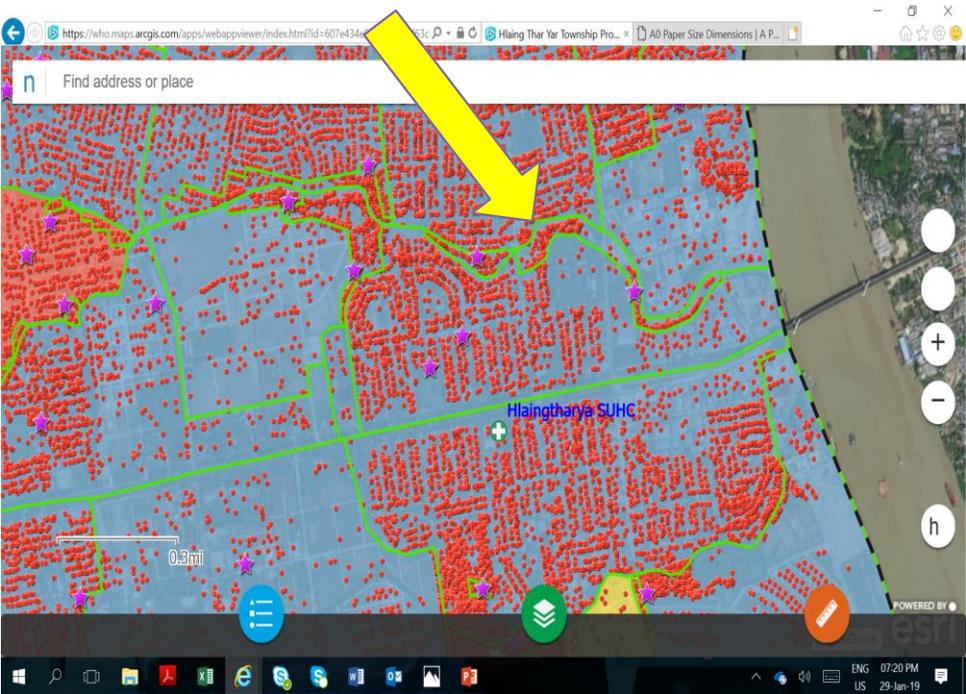
Use of GIS to identify new settlements

New settlements identified between traditional demarcation of catchment areas in Myanmar

Geospatial mapping identified 87 new migrant communities

- include in micro-planning
- Health facility distribution modified

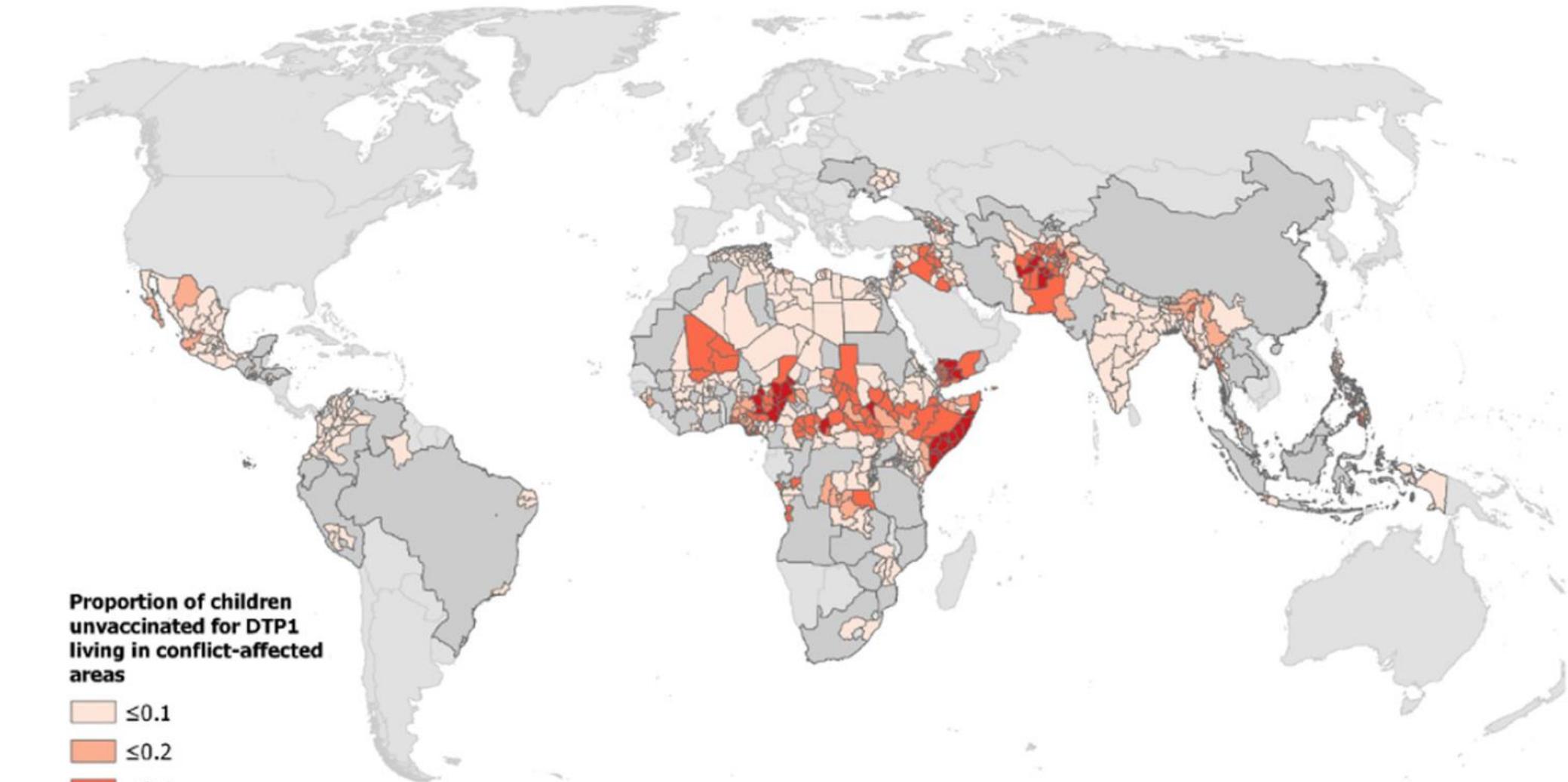
Programmatic Innovation using GIS technology to find the unreachable



Red dots – populations newly identified

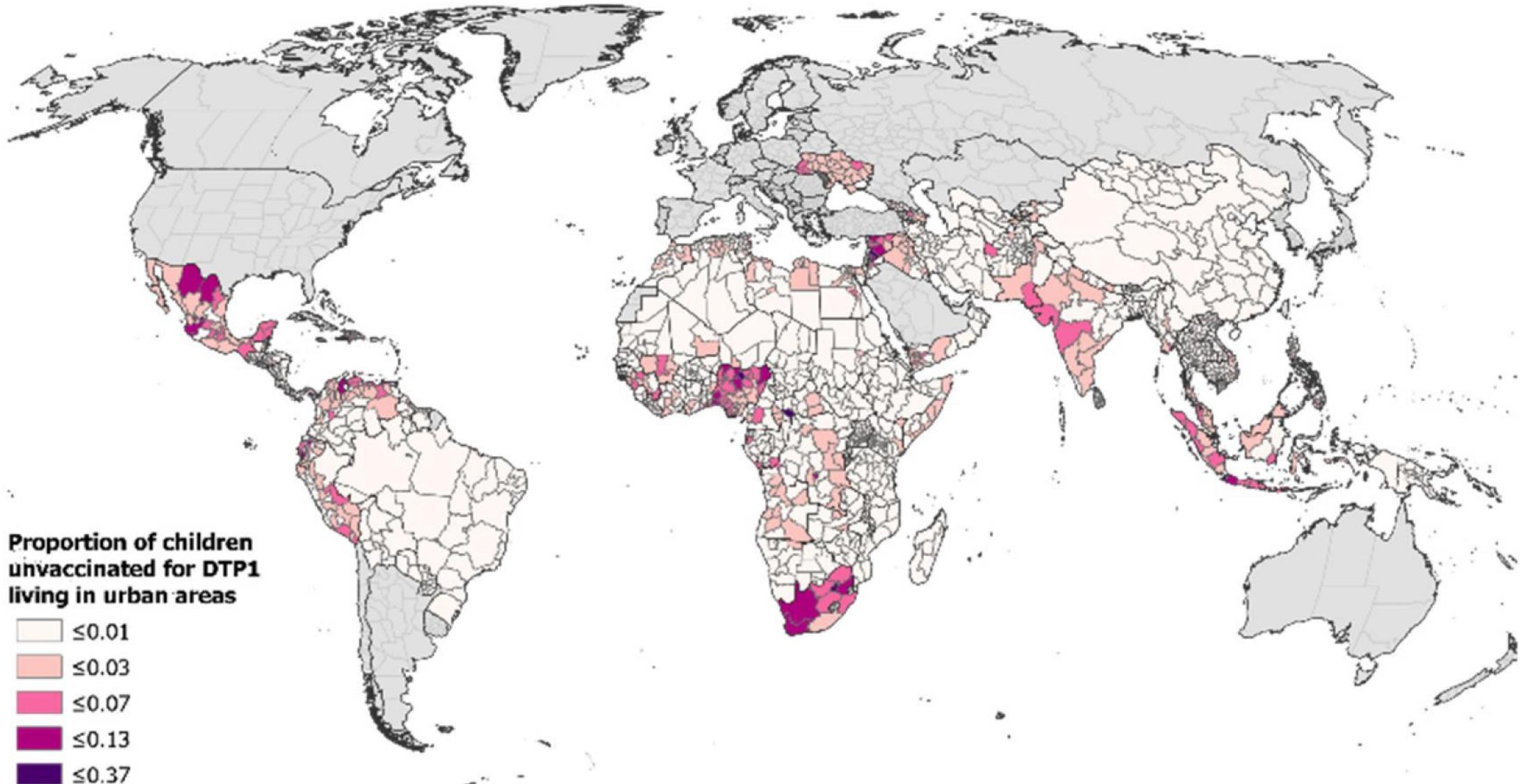
Zero dose children concentrated in conflict settings

Require operational know-how



Urban slums across wide geographies, and expanding

Requires new engagement and access



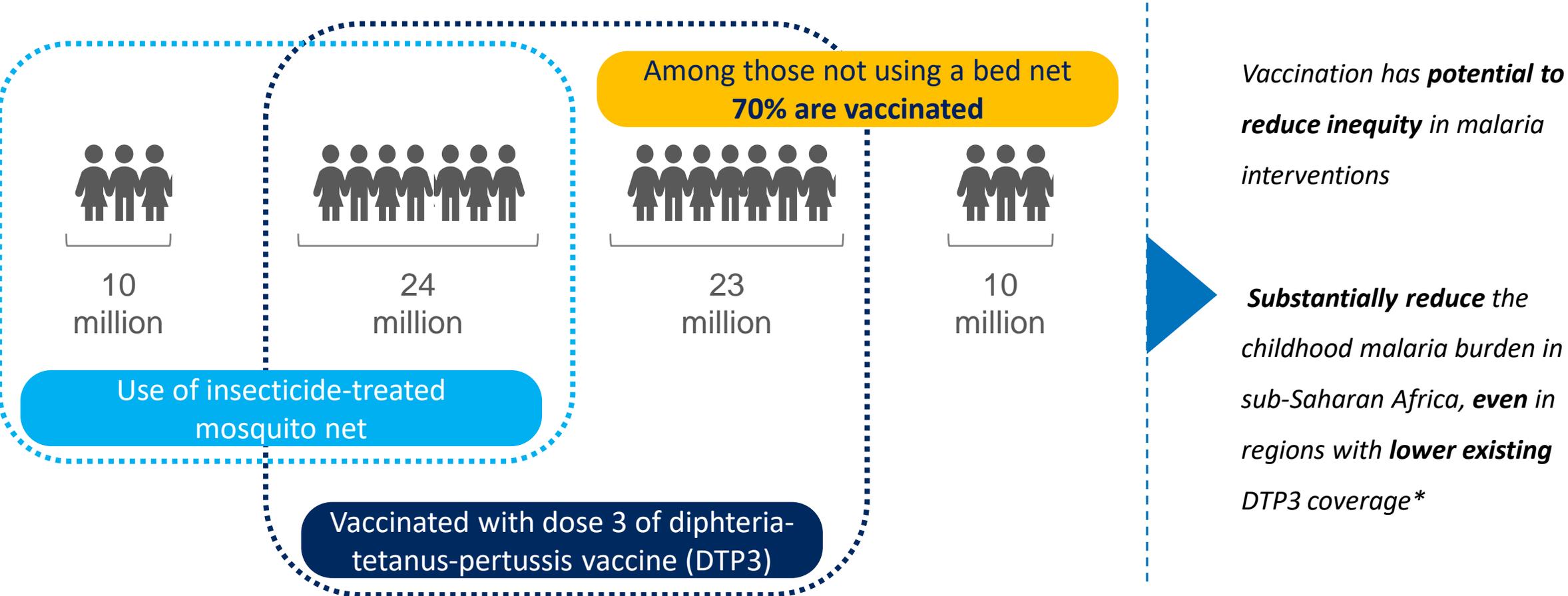
Remote rural children common across many countries

Requires delivery strategies with new technologies



Integration: RTS,S potential to reduce gaps in malaria intervention coverage

Use of insecticide-treated mosquito net & vaccination in children aged 12–59 months at risk of malaria in 20 African countries



Source: *Unwin et al. Analysis of the potential for a malaria vaccine to reduce gaps in malaria intervention coverage. Preprint available on medRxiv Oct 2020

Multi-antigen campaigns: Integration of bOPV in MCV SIAs

- Reaching more children, with less cost
- Reduce “community fatigue” with polio SIAs
- Cost Savings
 - **8 countries** (including Nigeria, Ethiopia, DRC and Angola), with an estimated target population of over **66 million** and estimated **\$18 million cost savings**



Equity and Access

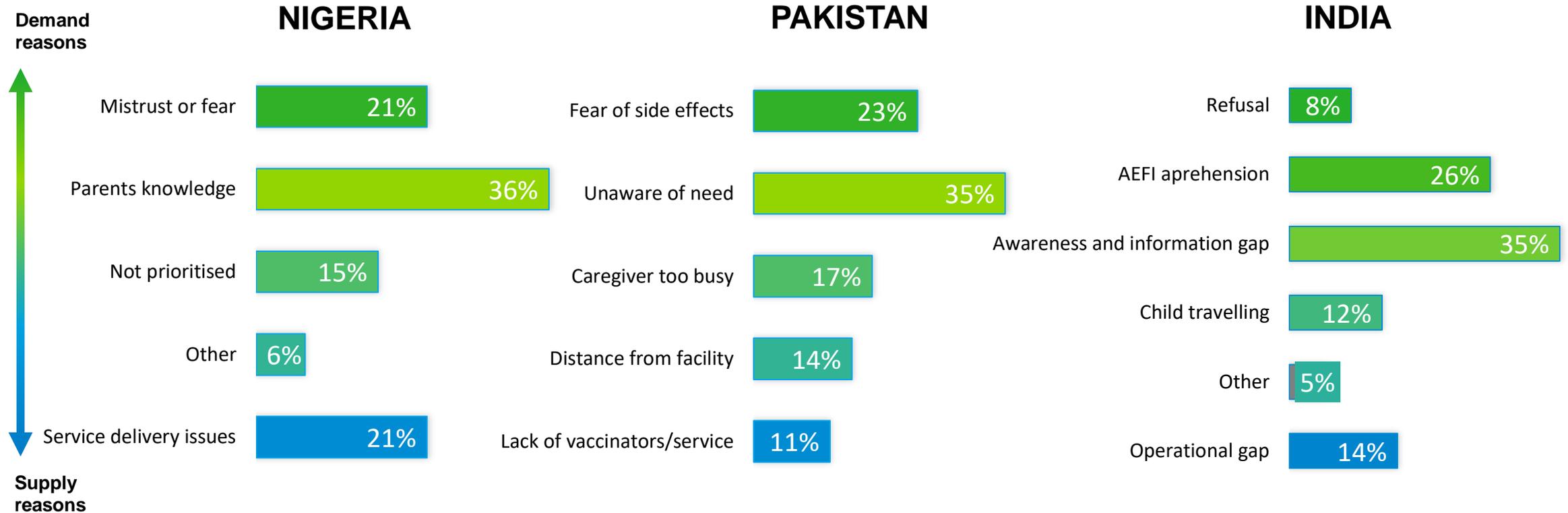
Solutions in IA2030

- 1 Observations 2020 
- 2 IA2030 
- 3 Targeted Action 
- 4 **Gaps and Research** 

Coverage and Equity



Interventions for Vx Hesitancy: A closer look at reasons for missed children...

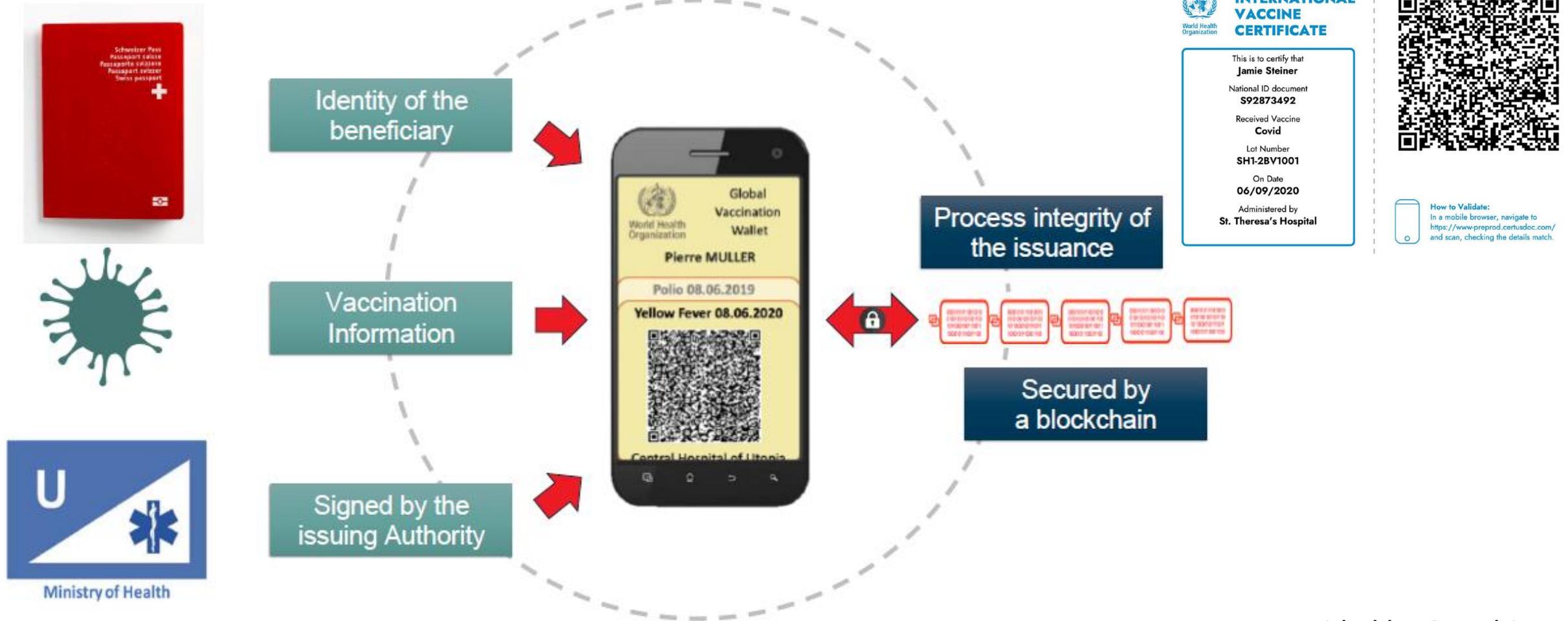


Nigeria: McKinsey analysis of data from the 2016/2017 MICS/NICS

India: Concurrent Routine Immunisation Monitoring Data – Jan to Dec 2017

Pakistan: Reasons for non-vaccination and under vaccination among children in Pakistan, Riaz et al., Vaccine 2018

Innovations for coverage monitoring: e-Vax card captures the interaction between provider and patient (vaccination), certified by central authority



Establish value and impact of barcodes for improvements in.....

To improve **immunization coverage**

To increase the **patients' trust**

To reduce **vaccine stock**

To improve **safety**



2D barcode on primary container



Barcode on secondary packaging

Novel Delivery Devices : Micro array patches



Image: Geargia Tech



Image: Vaxxas



- **No licensed** vaccine-MAP products.
- **Preclinical development** is underway
- **Clinical studies** of MR-MAP ongoing

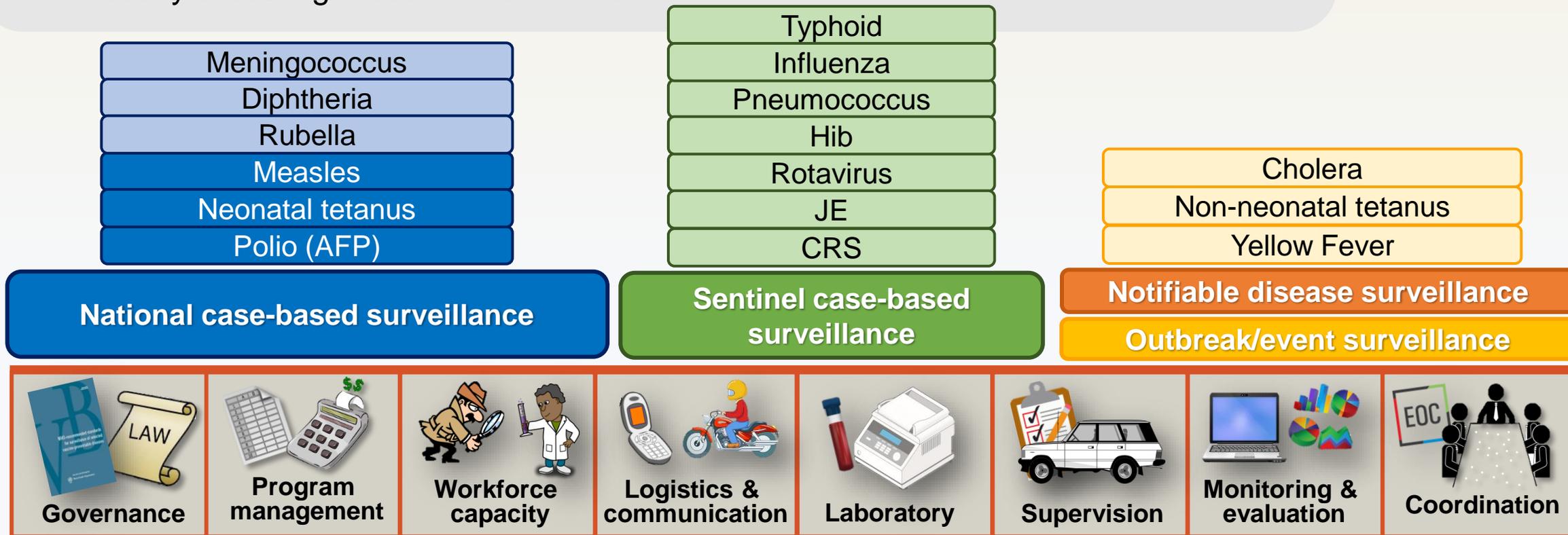
Delivering using non-injectable methods could be a game-changing for coverage and equity

Full public health value proposition needs to be assessed

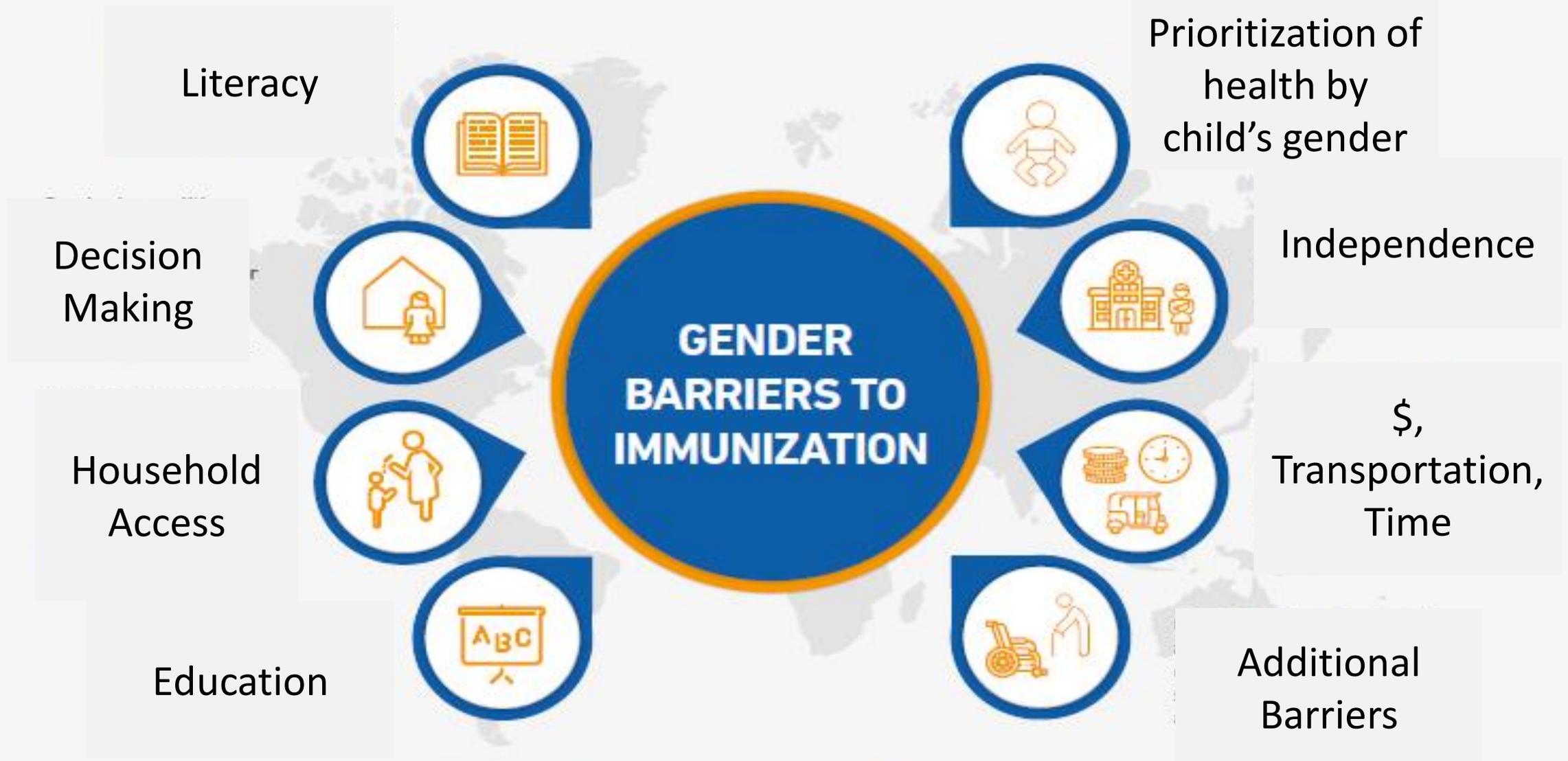
Build and enhance comprehensive VPD surveillance

- Strategy & partner coordination
- Standards — surveillance & information systems
- Laboratory networks — including bacterial
- Technical support for implementation
- Advocacy & costing/resource mobilization

Global / Regional level



Surveillance support functions



UNDERSTANDING THE VALUE OF IMPLEMENTATION RESEARCH

Equity is local

We need to understand what works in specific communities and contexts.

Implementation research is a critical tool that allows us to learn by testing solutions in real programs in real time.



THE EQUITY REFERENCE GROUP (ERG)

The ERG consists of senior experts working to generate innovative ideas to accelerate progress on equity in immunization. The group is working to provide actionable recommendations for decision makers at the national and global levels and aims to test innovative approaches through implementation research.

Learn more about the ERG and explore publicly available reports and resources at sites.google.com/view/erg4immunisation

ADDITIONAL EQUITY RESOURCES

[Immunization Agenda 2030 \(link\)](#)

The WHO global strategy that sets out an ambitious overarching global vision and long-term strategic framework for 2021 to 2030.

[Gavi 5.0: The Alliance's 2021 – 2025 Strategy \(link\)](#)

The Gavi Alliance's five-year strategy with the vision to "leave no-one behind with immunization."

[State of Inequality \(link\)](#)

A WHO report using global health observatory data on equality in childhood immunization, including interactive visualizations of health data.

[Sustainable Development Goals \(link\)](#)

The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015.

[Universal Health Coverage \(UHC\) \(link\)](#)

Fact sheet on UHC and the World Health Organization response.



The Opportunity is Now

