## Metrics for tracking the health of Vaccination Ecosystem

## Which vaccine-preventable diseases should be targeted? How to set up priorities?

Possible indicators related to vaccines:

- # of antigens/vaccine candidates according to funded or unfunded status
- # of on going trials according to development stages:
  - % of total spend
  - % of on-going/planned activities

Criteria related to diseases & population:

Segmentation according to:

- Global medical needs
- Regional medical needs
- Special population such as:
  - 5<sup>th</sup> child
  - Militaries
  - Travelers
  - HCPs
  - Refugees
  - Immuno-compromised
  - Specific age groups
  - Pregnant women

Today and horizon scanning

#### Innovation

#### Topic

- R&D Activity
- Delivery technologies
- R&D Accelerators

Tech Transfer

#### Metric

- By phase, geography, vs. TPP, new, improved or "me-too"
- Prioritised & rewarded by Total Systems Cost Effectiveness.
- Adaptive Regulatory
- Adaptive Clinical
- Surrogate markers
- Translational Medicine
- Immunology
- To be defined

#### Confidence

#### **Topic**

AEFIs

- Perception/Acceptance/Ref usal surveillance
- Response system & Comms
- Effectiveness

#### Metric

Establish min. & best pactice

- GVSI Blueprint WHO
- Review SAGE/GVAP/Other proposals
- Compare to min & best practice
- See Impact Metric

### Second Level Analysis

- Root Cause Analysis Five times "Why?"
  - Coverage
  - Un/Undervaccinated
  - Supply

#### Coverage

# Acurate coverage data on ongoing basis generated within countries

- Public/ private
- By vaccine

## Epidemiology of the unvaccinated

#### Review methodology/ technologies

- Agree minimum + preacticesMeasure % vs Min & best practicesElectronic registry
- Segmentation
  - Globally, nationally, sub nationally
  - Population:
    - Age groups
    - 5th child
    - Religion
    - Ethnic
    - Migrants

#### Health / Vaccine Systems and Reach

- Vaccinators
- Vaccine campaigns / sessions
- Information systems
- Linked to coverage, policy and funding indicators

- # / 100,000
- Scheduled vs. actual completed
- % of minimum and best practice (e.g., quality of admin data vs coverage surveys, % of facilities reporting)

## Policy / Funding

- Policies / legislative commitments for immunization program
- Policies / legislative commitment to universal access to vaccines
- Policies for regulatory harmonization
- Funding for immunization program implementation, surveillance, technical advisory group
- Linked to health systems, coverage, supply, innovation indicators

Policies / legislative commitments • % of minimum and best practice

 Total budget and as a % of total MOH budget and total public spending

## Pricing of vaccines and cost of vaccination

**Metric** 

Pricing of vaccines

Cost of vaccination

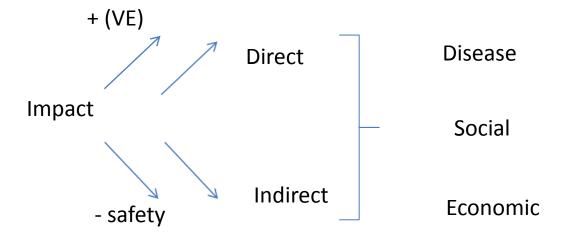
**Details** 

- Procurement practice
  - Minimum and best %
- Total including wastage
- Segment by income level
  - Weighted Average Price to fully immunize child
  - Weighted Average Cost including delivery

## Supply

Metrics	Comments
No. of PQed vaccines from producers	<ul><li><u>Segmentation (Based of Ecosystem Goals)</u></li><li>«North vs. South» producers</li><li>R&amp;D vs. Non-R&amp;D producers</li></ul>
Availability	
Security	
No supply – what?	
No. of supplier missing shipment plan	<ul> <li>+ Demand forecast</li> <li>+ Regulatory barriers</li> <li>+ Process problem</li> <li>+ Availability – quality – planning</li> </ul>
No. of country introduction delay	
No. of program introductions	
No supply – why?	
No. of suppliers	+ Regulatory harmonization, capacity and capabilities
No. of releasing NRAs	

### **Impact**



Stratified by Global, National, Subnational, Special population

Age

5th child

Religion

Minority

Ethnic

Migrant