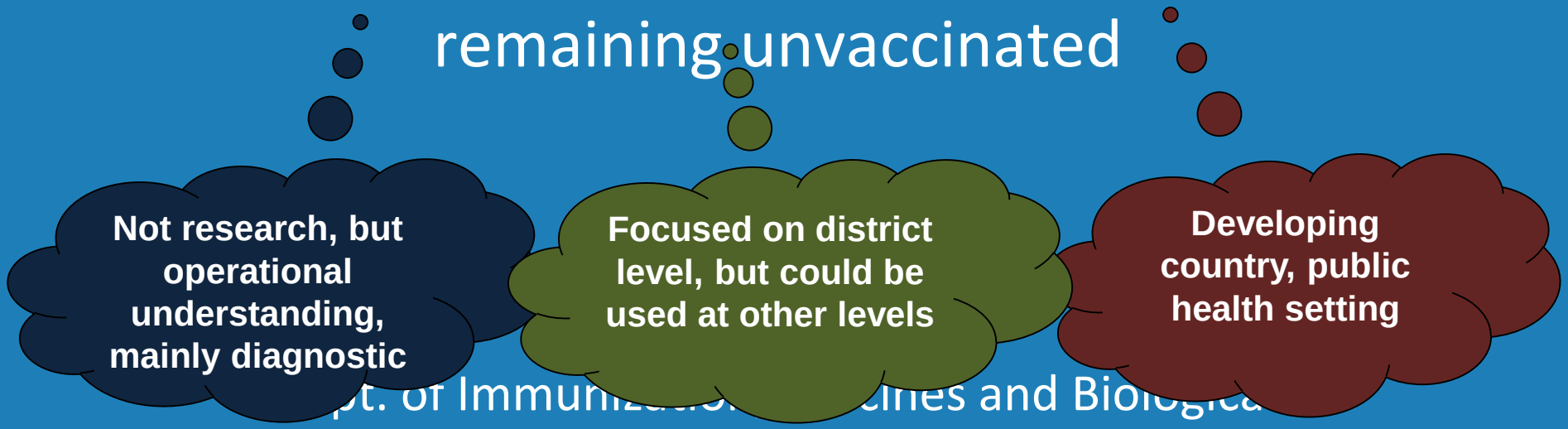
World Health Organization

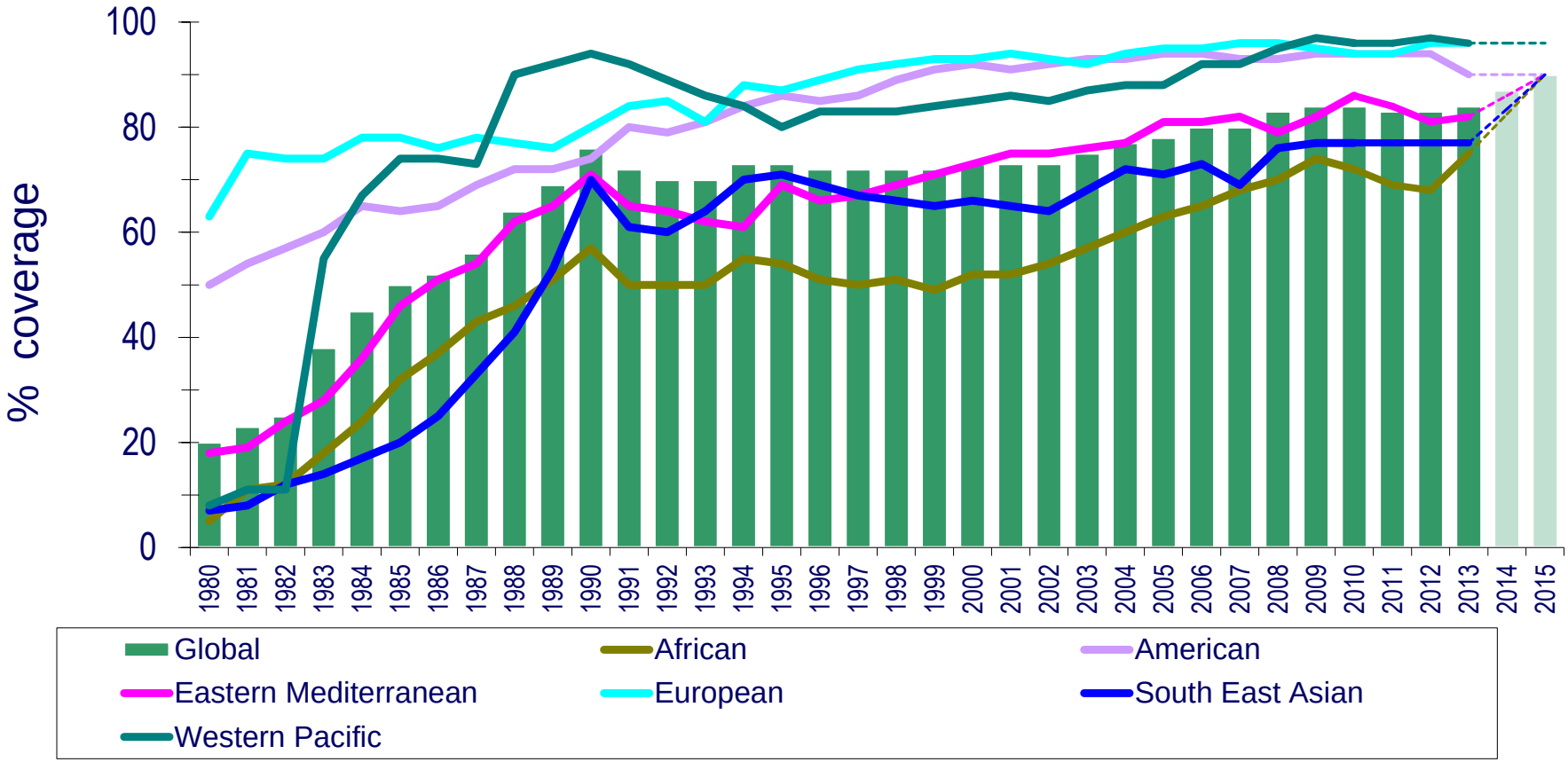
Tools for identifying root causes of children remaining unvaccinated



pt. of Immunizat… …cines and Biologica…
World Health Organization, Geneva

Are we on track to reach our coverage goals?

Global Immunization 1980-2013 and projections to reach 90% global coverage goals in 2015 - DTP3 coverage



Source: WHO/UNICEF coverage estimates 2013 revision. July 2014
Immunization Vaccines and Biologicals, (IVB), World Health Organization.
194 WHO Member States.

Reaching Every District (RED) strategies based on district microplanning

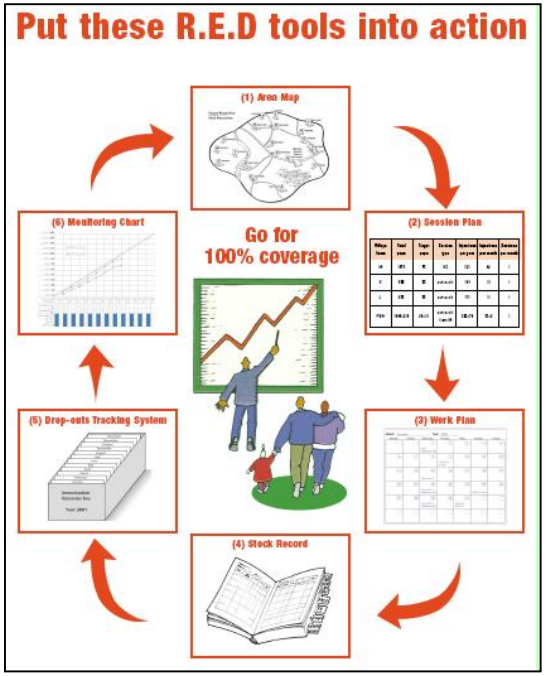
1. **Re-establishment of outreach services**
   regular outreach for communities with poor access

2. **Supportive supervision**
   on site training by supervisors

3. **Community links with service delivery**
   regular meetings between community and health staff

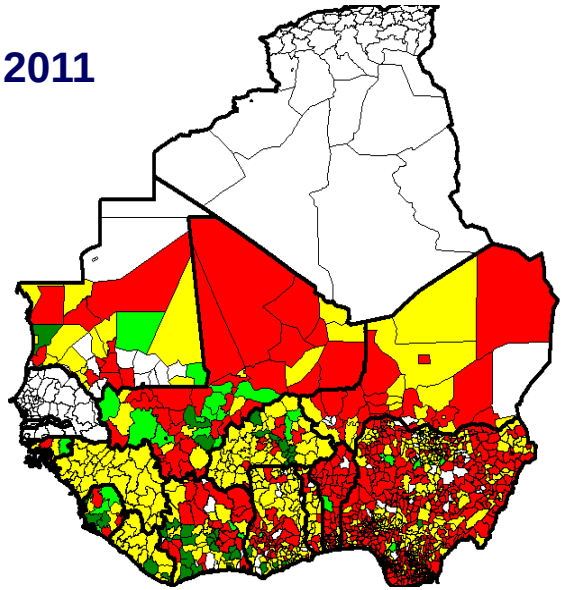
4. **Monitoring and use of data for action**
   chart doses, map population in each health facility

5. **Planning and management of resources**
   better management of human and financial resources

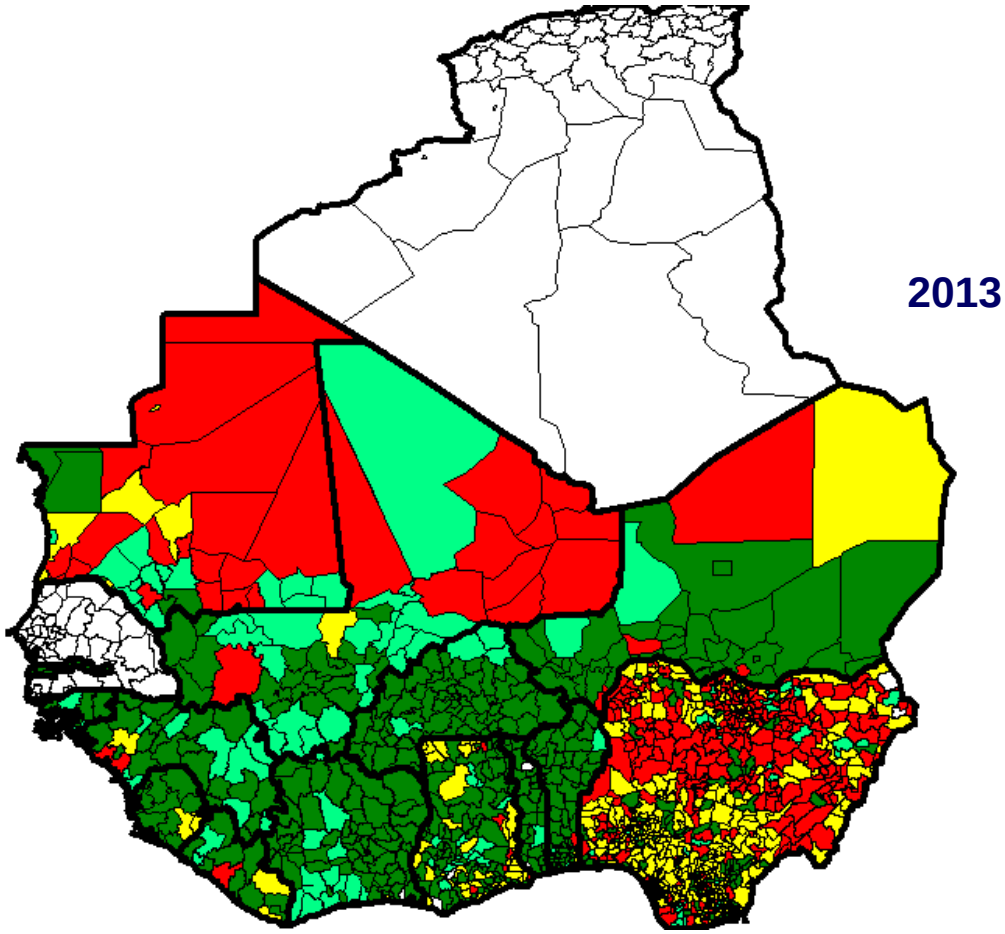


West Africa – use of RED strategies

2011



2013



- Cat 1 (Cov. ≥ 80% and Drop out ≤ 10%)
- Cat 2 (Cov. ≥ 80% et Drop out > 10%)
- Cat 3 (Cov.< 80% et Drop out ≤ 10%)
- Cat 4 (Cov.< 80% et Drop out > 10%)

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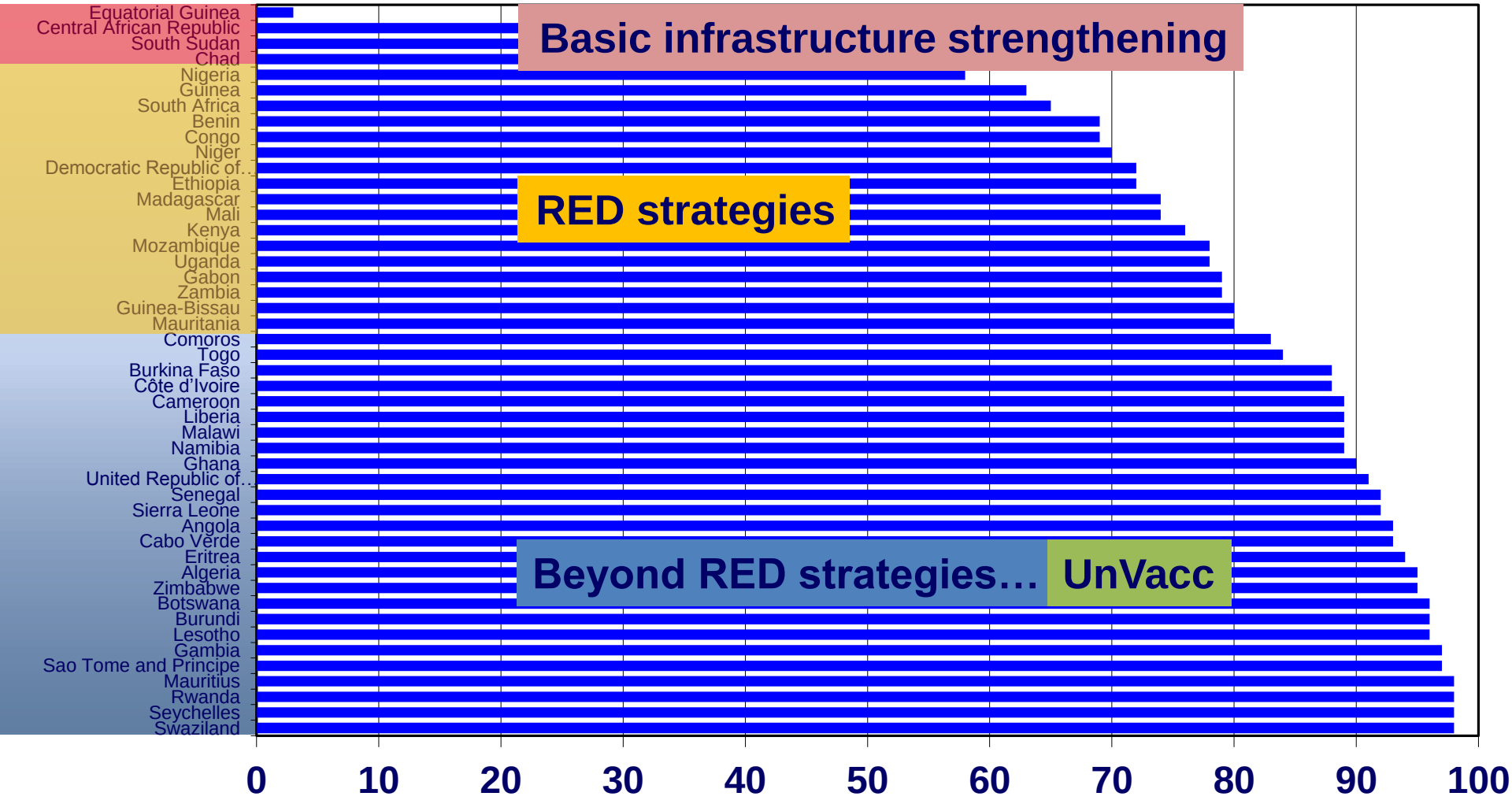
DTP3 coverage 2013, African Region, regional coverage 75%



UnVacc Toolkit, conceptually
Reaching last pockets of unvaccinated…

- Focused at districts that have already overcome major impediments in immunization systems, including weak programme management and systematic barriers and are reasonably well performing

- Development of a district level methodology and tool to analyze in depth specific problem areas preventing all children being vaccinated

UnVacc Toolkit, conceptually

"…having reached most of the targeted population in my district, what do I need to do to reach the last unvaccinated persons…?"

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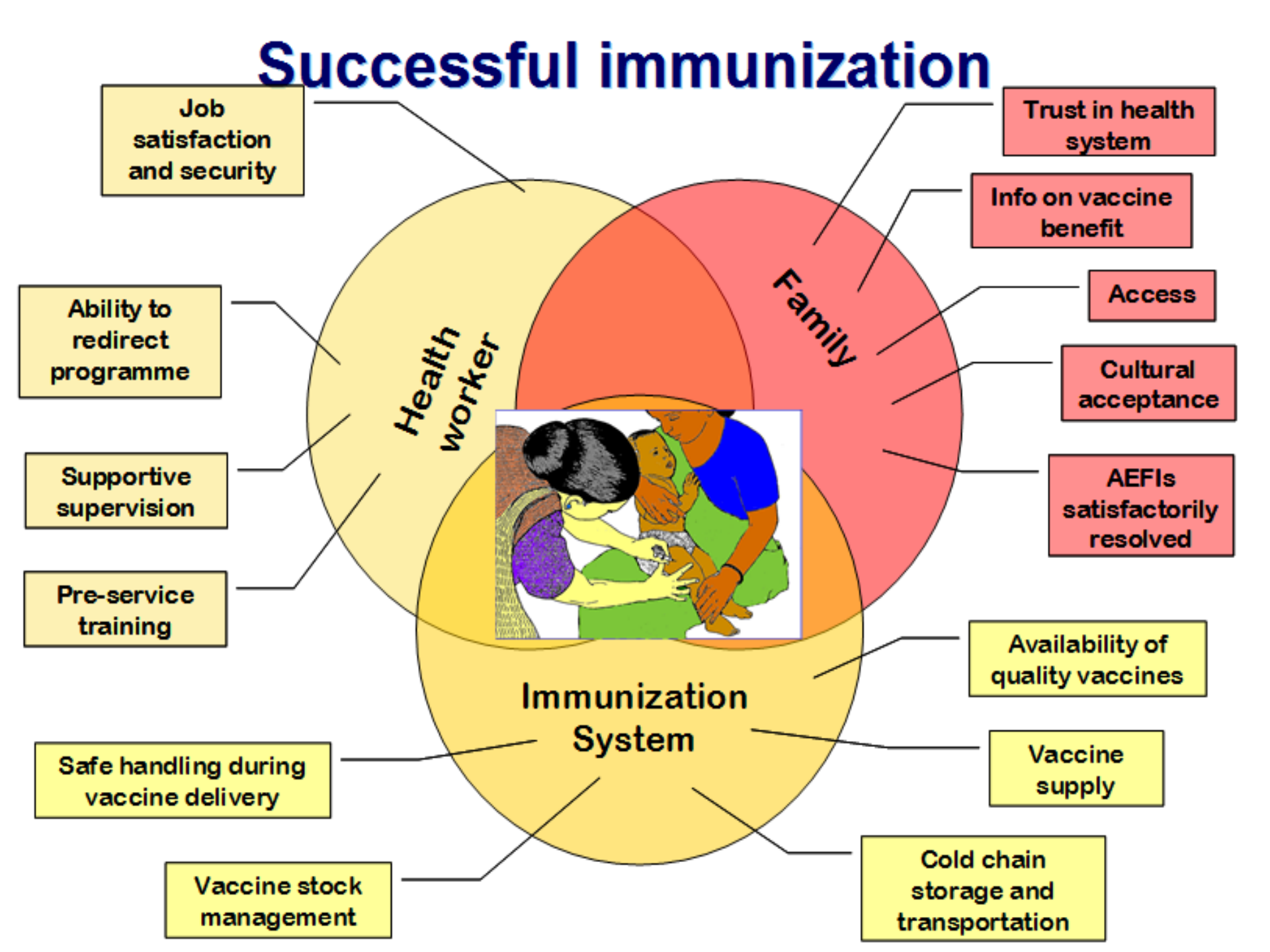
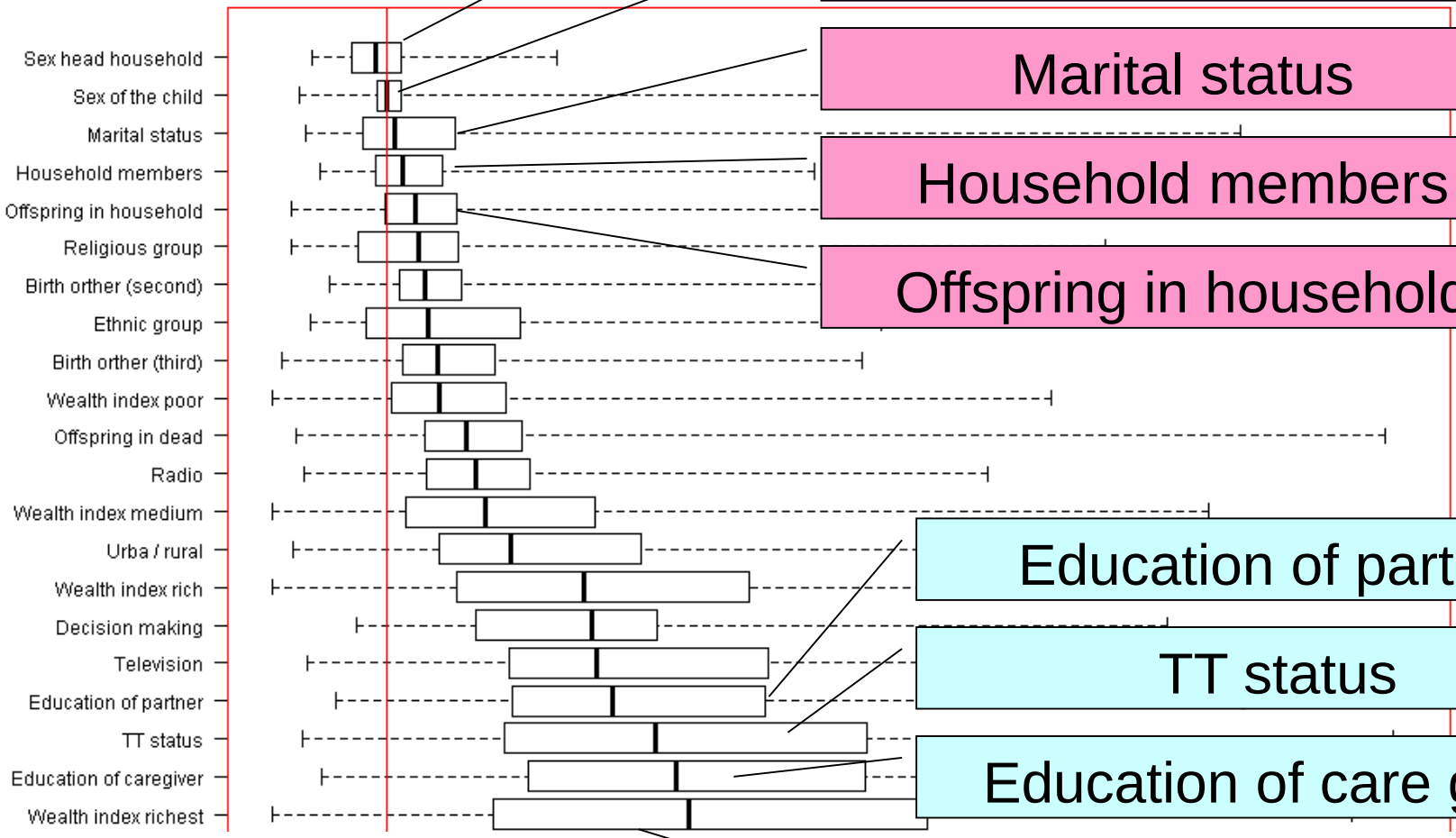
What do we know about the UNVACCINATED child?

Successful immunization



Univariate Review of 241 DHS/MICS surveys*
Distribution of odds r



Sex of head of household

Sex of the child

Marital status

Household members

Offspring in household

Education of partner

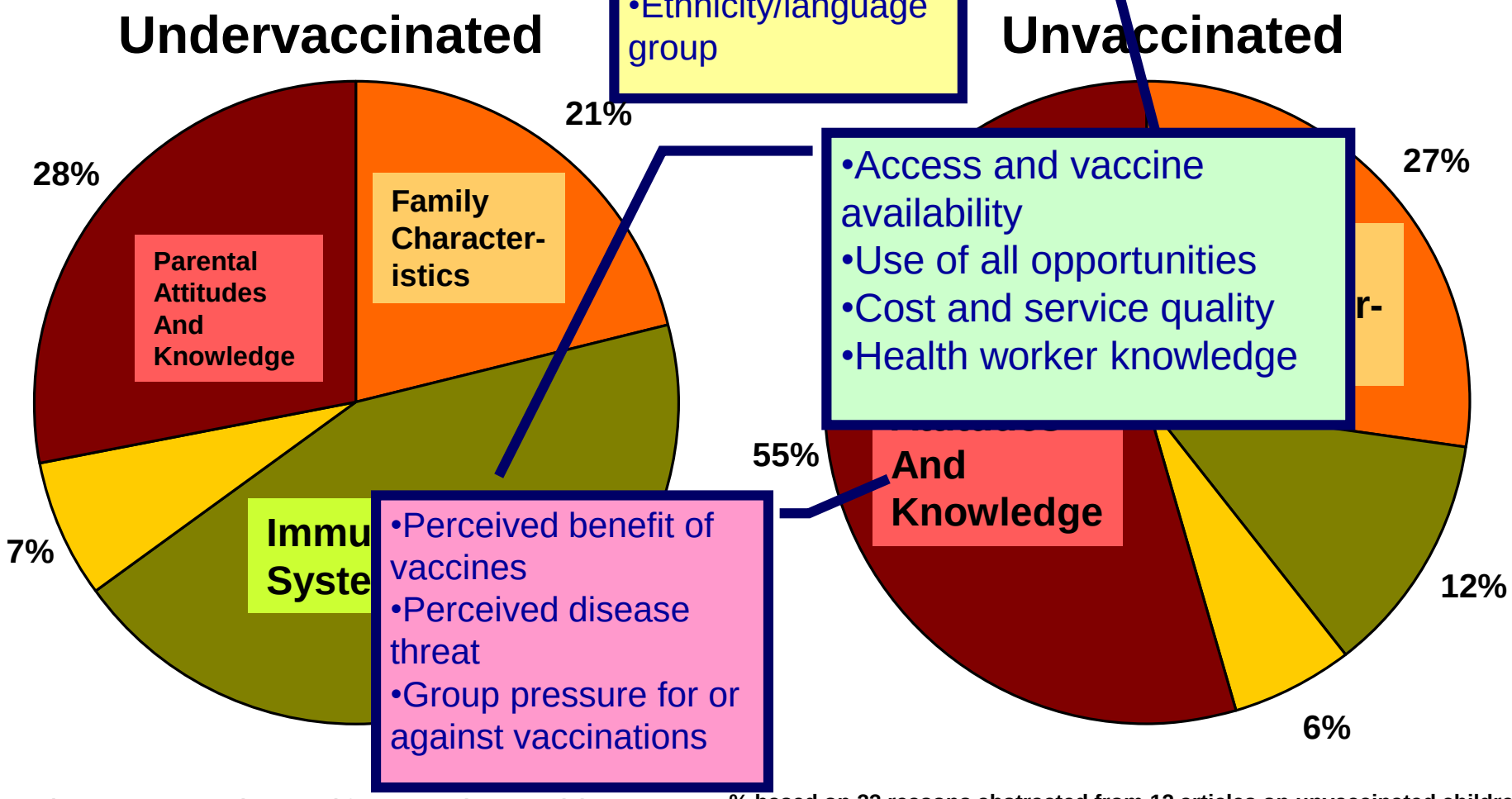
TT status

Education of care giver

Richest wealth index

Based on Bosch-Capblanch X, Epidemiology of the unvaccinated children, SCIH (WHO 2010)

Review of [illegible] literature: Reasons for be[illegible]ervaccinated



% based on 887 reasons abstracted from 209 relevant articles

% based on 33 reasons abstracted from 12 articles on unvaccinated children

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Six Core Problems…

Core problem areas: Unvaccinated child

World Health Organization

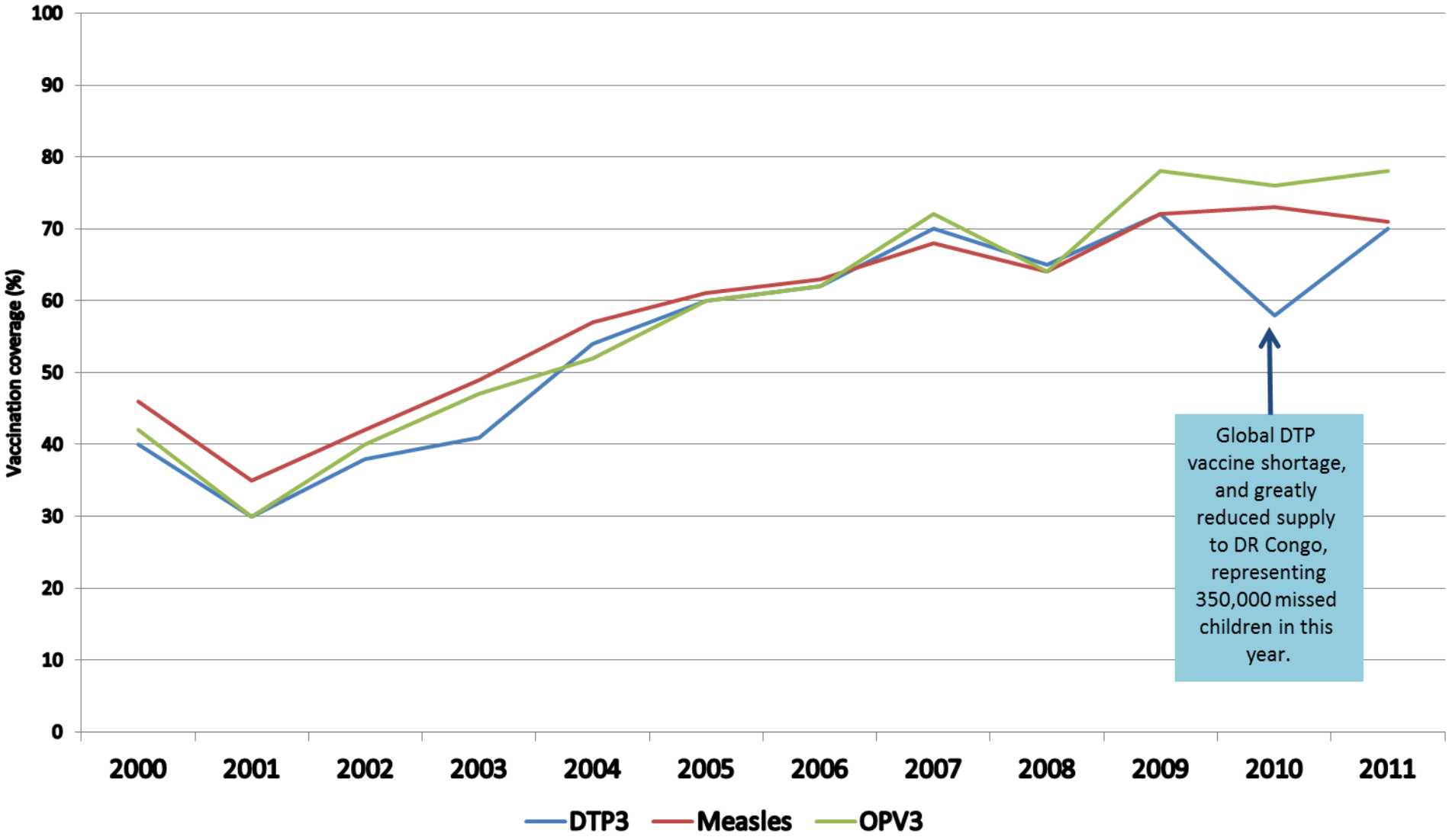
Core problem areas: Unvaccinated child

World Health Organization

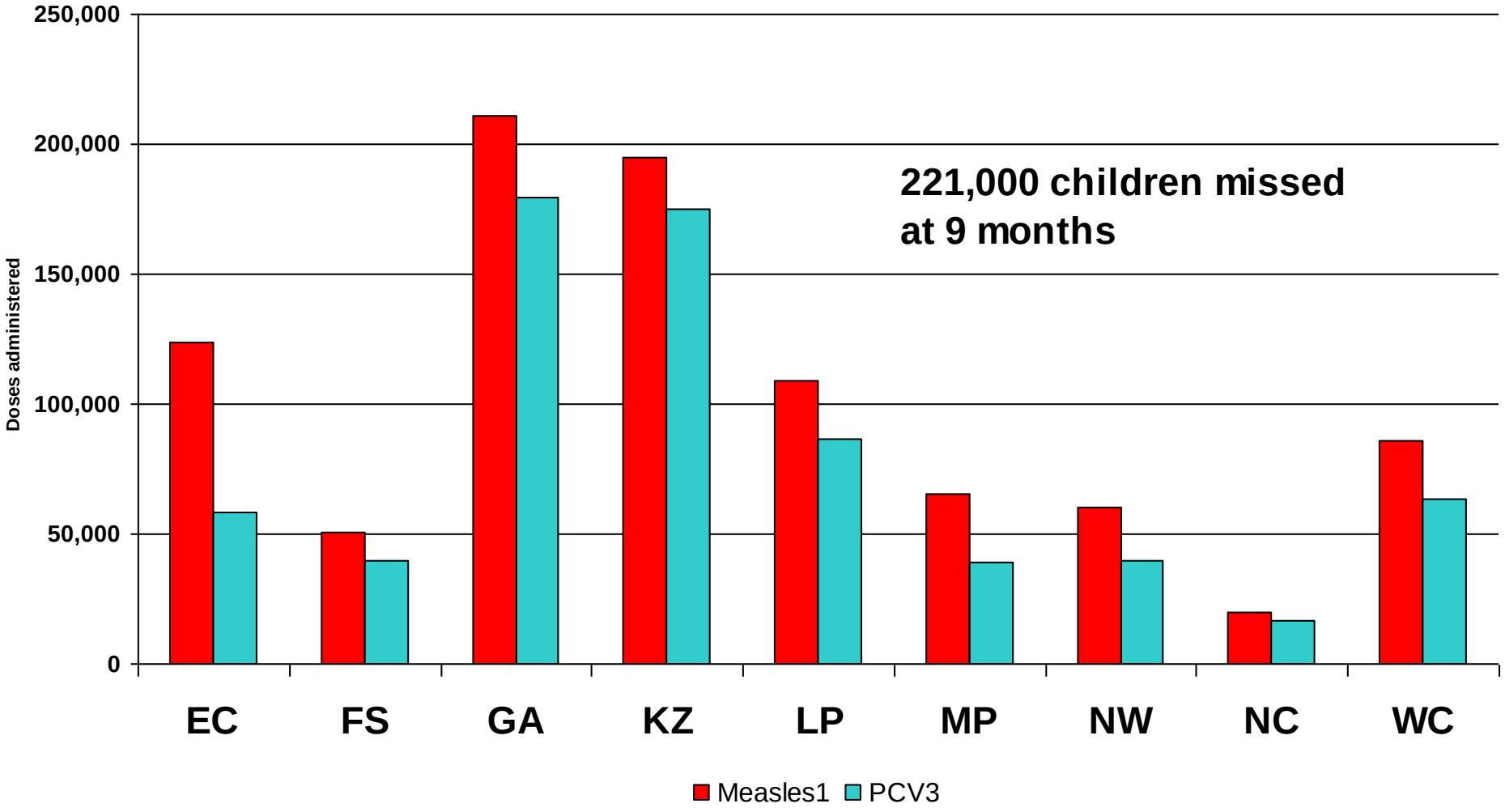
Core problem area: Vaccine availability

- Problem statement
  - Interruptions of regular vaccine supply;
  - Inadequate vaccine management or a deficient cold chain;
  - Vaccine or injection equipment required for the vaccination is unavailable or damaged
  - Mismanagement of vaccines received
  - Forecasting problems
  - Transport issues

Dr Congo vaccination coverage, 2000 - 2011 (based on WHO/UNICEF estimates)



South African PIE
Comparison: Doses given at 9 months
Apr 2010-Mar 2011



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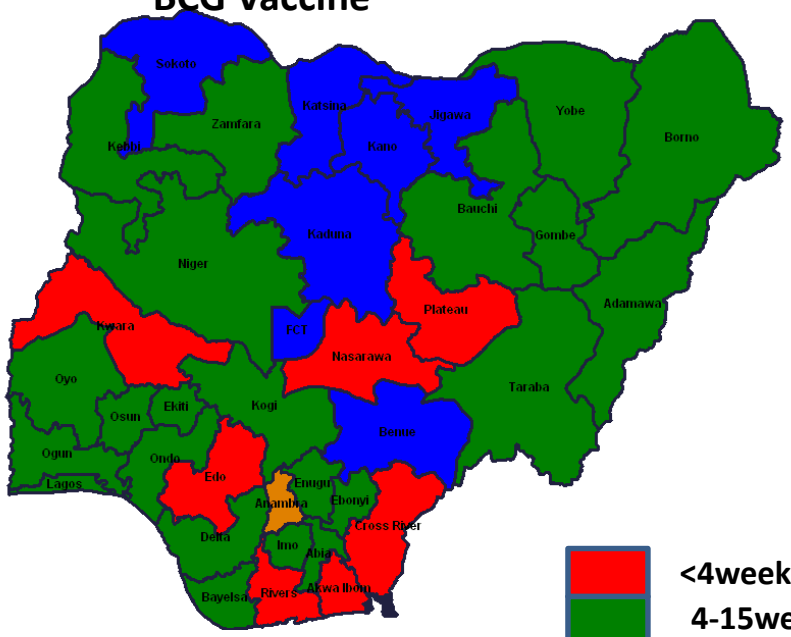
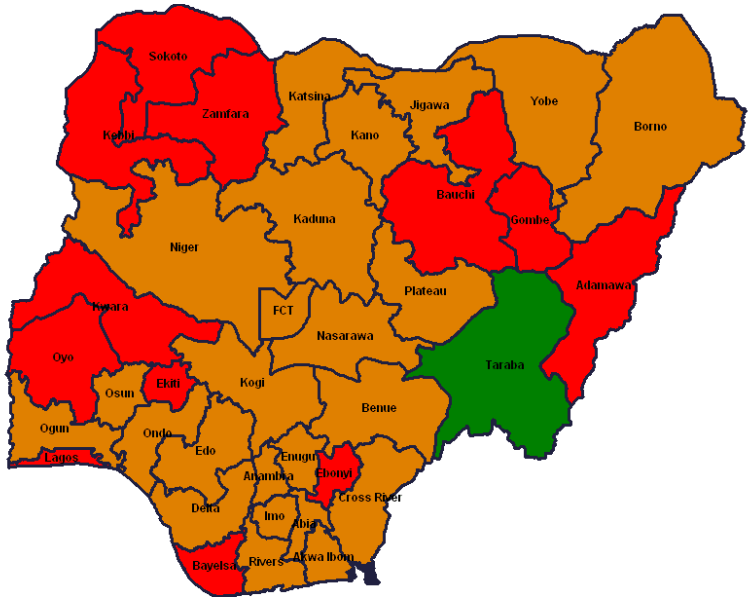
Nigeria Vaccine Stock Levels at State Level April 2013 (Monthly state stocks reports)

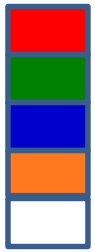
Enough vaccine…

BCG Vaccine



BCG Syringes



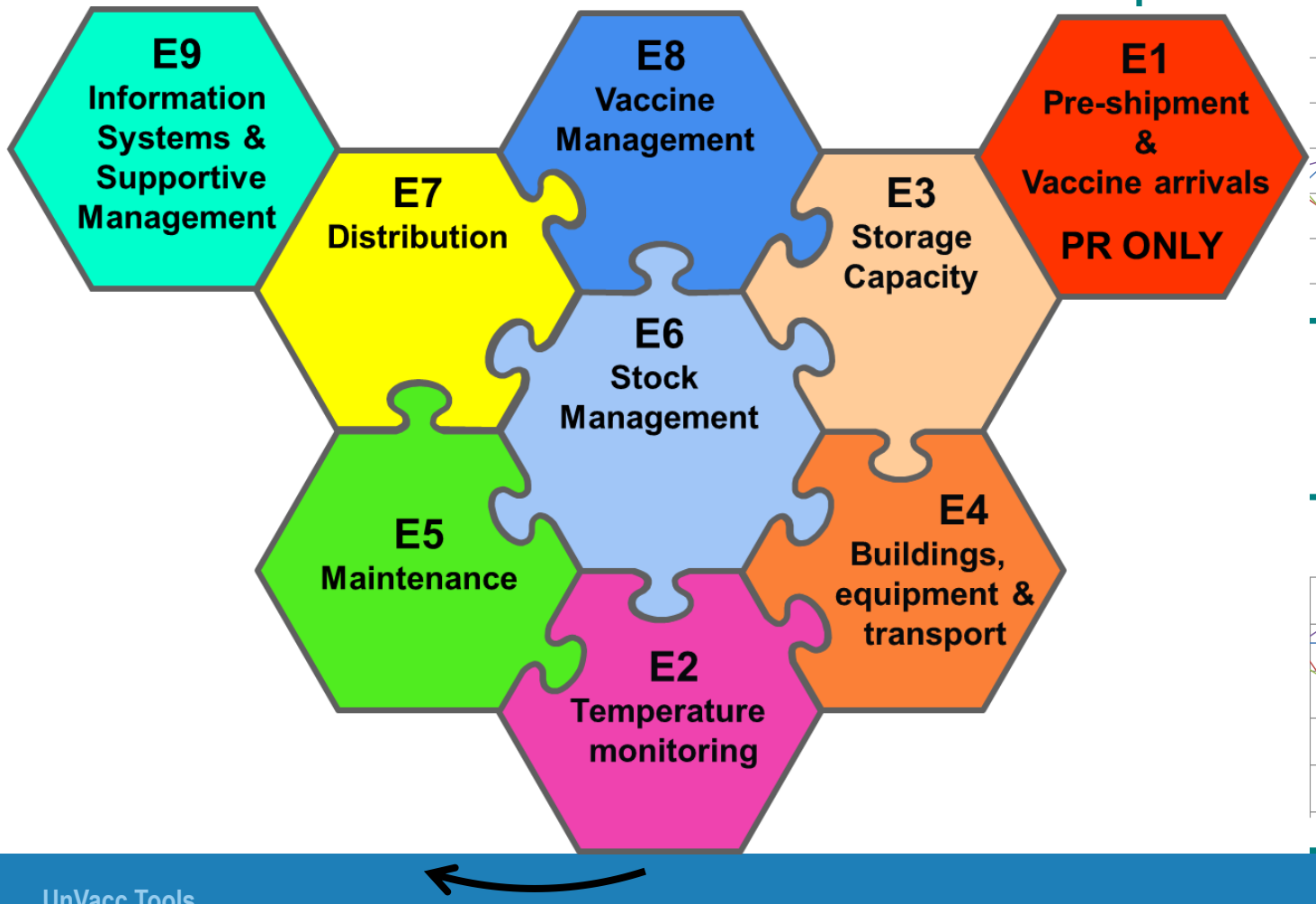


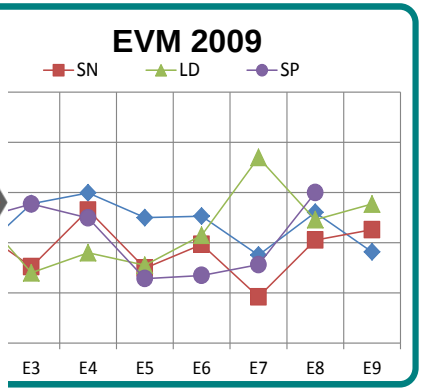
- <4weeks
- 4-15weeks
- >15weeks
- Stock Out
- No Vaccine Data

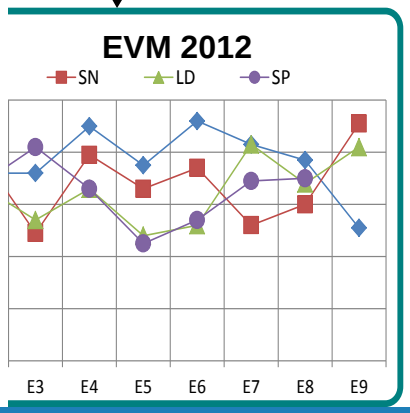
…but no syringes!

What is the EVM (Effective Vaccine Management)?

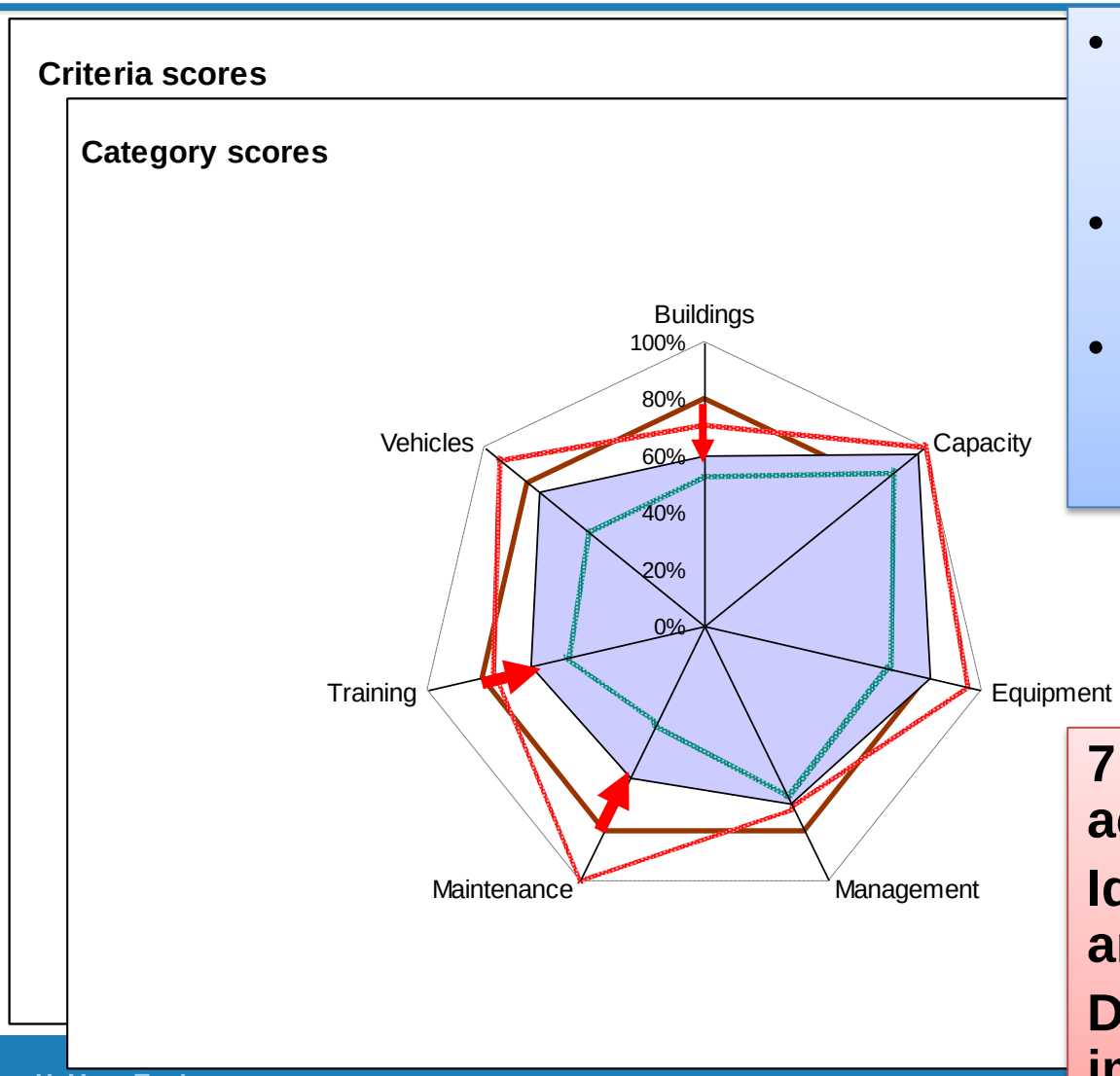
EVM is a continuous quality improvement process







EVM: Assessment results & Improvement categories



- 9 global criteria with requirement and set of indicators
- Identify strength and areas for improvement
- Guide development and implementation of improvement plan

7 general categories for action improvement

- **Identify strength and areas for improvement**
- **Direct actions for improvement**

Core problem areas: Unvaccinated child

World Health Organization

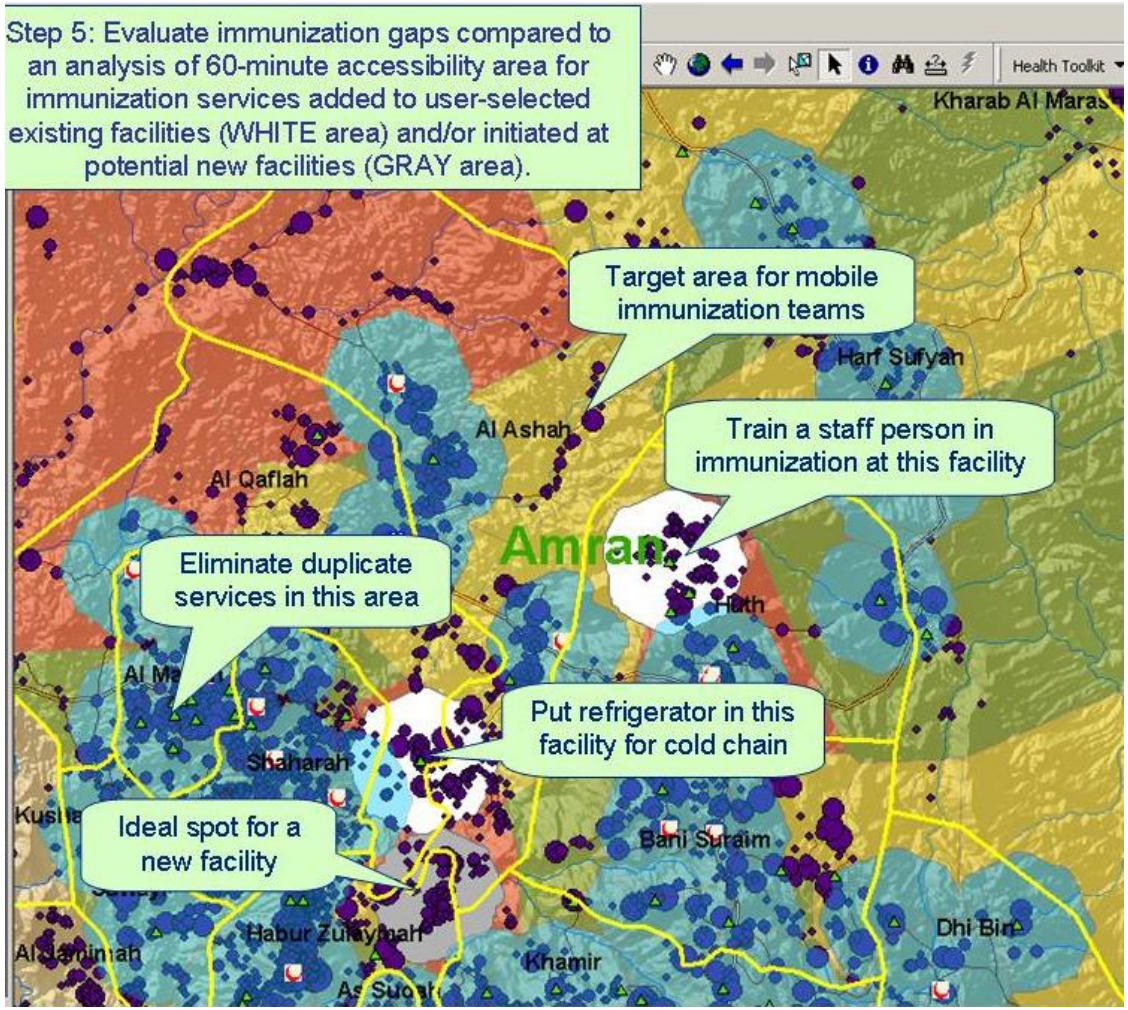
Core problem area: Physical access

- Problem statement
  - Lack of vaccination services due to the physical inaccessibility of some communities;
  - Lack of health and road infrastructure;
  - Geographical barriers to mobility;
  - Nomadic or seasonal lifestyles of communities;
  - Opening hours of the health facility or vaccination post, which render a physically accessible facility inaccessible due to their working hours.

Core problem area: Physical access

- Use of GIS

  Yemen



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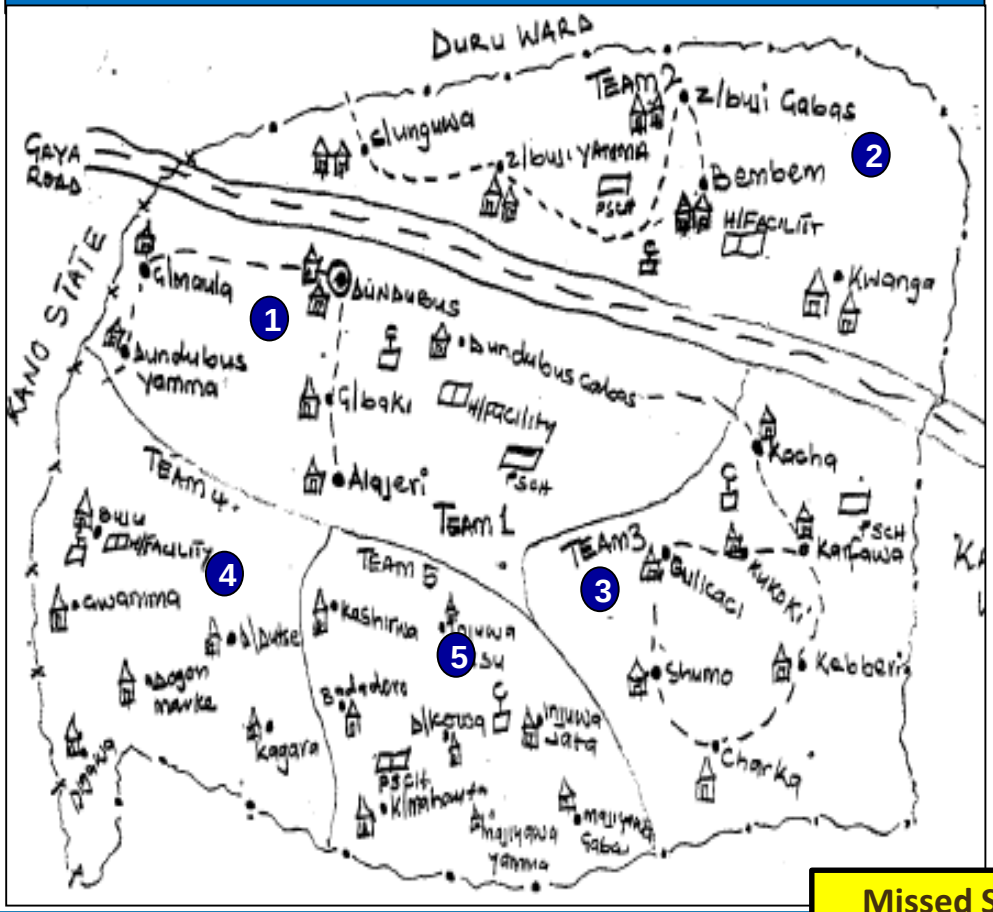
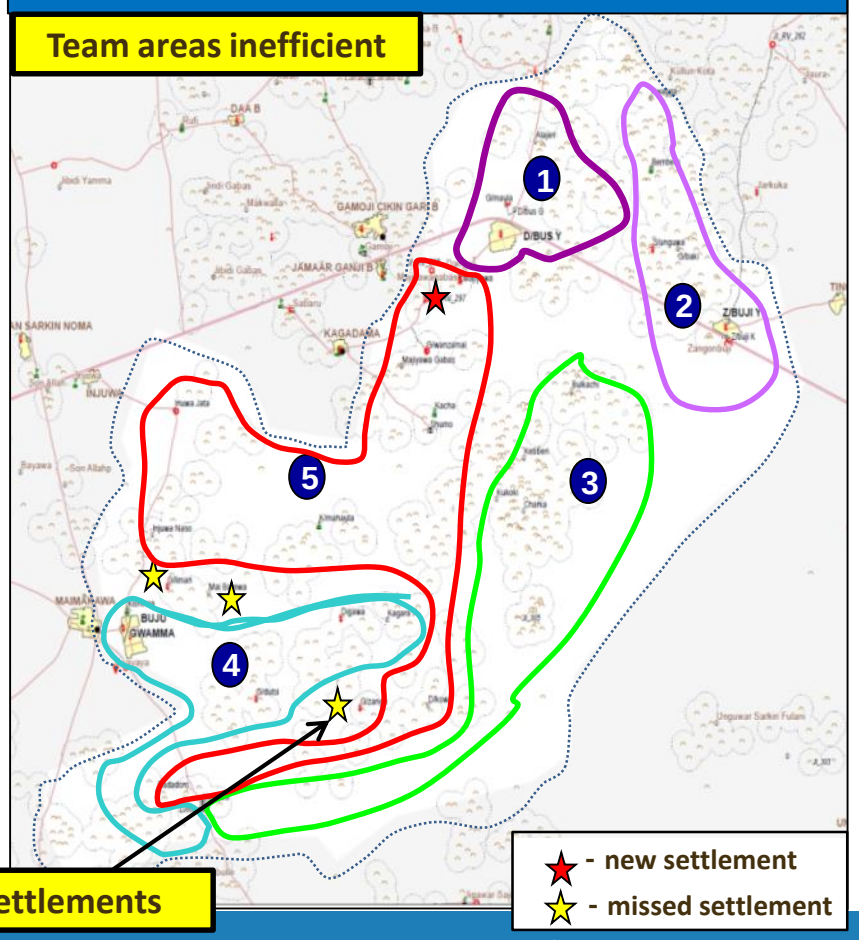
Accurate maps can improve microplanning…

1. Hand-drawn ward map from micro-plan with team-day areas (5 teams)



2. Original team-day areas shown on GIS Map (5 teams)



Core problem areas: Unvaccinated child

World Health Organization

Core problem area
Health worker Knowledge, Attitude and Practices (KAP)

- Problem statement
  - How a health worker interacts with the care-giver during a vaccination session is a major component in determining return visits
  - Knowledge of the subject and the capability to administer the vaccine in a competent and safe manner dictate how the clients of the service will perceive their needs to be met.

Viewpoints…

- The vaccinator may ***not be present*** and ready to begin vaccinating when they should.
- Some caregivers and children, because they are friends with the vaccinator or more educated and wealthy, able to ***jump the line*** while I wait.
- Sometimes my child cannot be vaccinated because the needed ***vaccine or syringe is not available***.
- We are ***yelled at*** for not having "retained" a ***vaccination card*** that they never received in the first place, or that was damaged in the rain, or that they may have lost.
- Some mothers are ***ridiculed*** for their child's threadbare or unclean clothing.
- We are ***made to feel ignorant*** for asking for the HW to explain the purpose of the vaccination or why their child needs to return for another dose.
- Some HWs ask for ***unofficial payments*** from poor mothers.

CAREGIVER

- Have to attend ***too many mothers and children***, and they all come early in the day.
- Have to deal with too many caregivers ***who don't act responsibly***… don't show up for appointments, lose their children's health cards, and ***don't follow instructions.***
- ***Need more training***.
- ***Need more supervision*** that helps them do their job better rather than criticizes them.
- Need ***more resources***…cold chain equipment, vehicles and fuel for outreach, etc.
- Need ***more vaccine*** so they can open a vial for one or a few children like they're supposed to do.
- Want to ***feel supported***, that the Ministry of Health "has their back" so, for example, if a child gets sick after a HW vaccinates him correctly, their supervisors will support them.

HEALTH WORKER

Four components in KAP method

- **Observations** of vaccinator/care-giver interactions
- **In-depth interviews** with vaccinators, supervisors and facility directors (separately)
- **Exit interviews** with caregivers (outside of the health facility)
- **Group discussions** with mothers (and with fathers or others if they commonly bring children for vaccination)

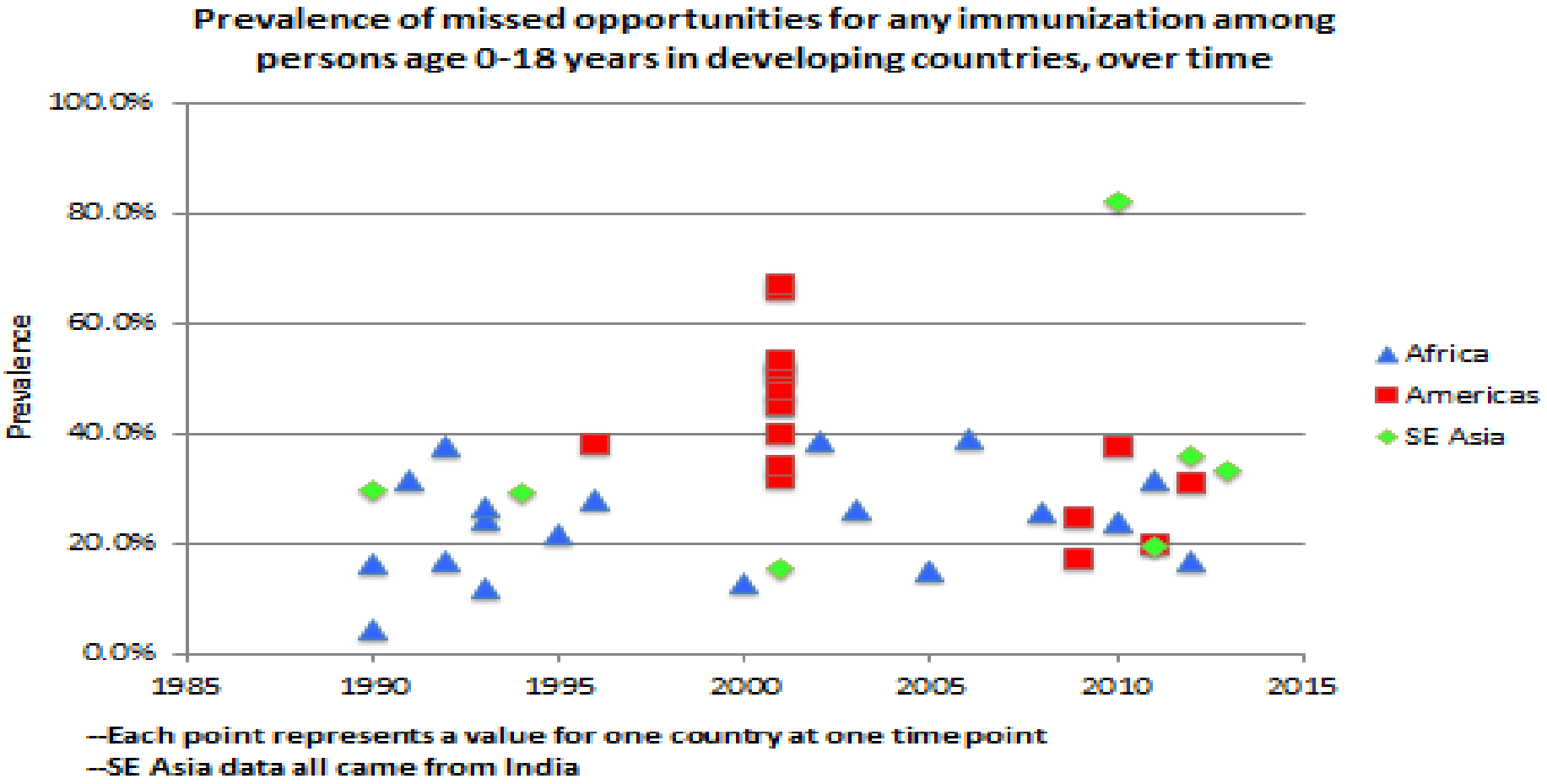
Core problem areas: Unvaccinated child

World Health Organization

Core problem area
Missed opportunities

- Problem statement
  - Undervaccinated children will occasionally access health services for curative or other preventative service;
  - May accompany an adult seeking services;
  - Such visit is considered a "missed opportunity" if the opportunity to vaccinate was not used
  - Several publications, but barrier persists
- Definition (AMP)
  - "an occasion when a person **eligible** for immunization and with **no valid contraindication** visits a health service facility and **does not receive all recommended vaccines**"
- Two basic types (LSTMH)
  - Giving overdue doses at other vaccine dose visits
  - Giving overdue doses with treatment for episodes of illness / other person
- An old problem…

Missed opportunity: Literature review - AMP



Ref: Shruti Sridhar, Nadira Maleq, Elise Guillerment and Bradford D. Gessner. Missed opportunities for immunization in low and middle income countries: A systematic literature review. Presentation to IVIRAC, 18 Sept 2014

Methods…


epicentre
MEDECINS SANS FRONTIERES
Module pour l'évaluation des Occasions Manquées de vaccination
Florence FERMON
Chloé TARNAUD
Jessica NEERKORN
Mars 2013
Methodology for the Evaluation of Missed Opportunities for Vaccination
EXPANDED PROGRAMME ON IMMUNIZATION
WHO/EPI/GEN/92.9
Original: English
Distr: General
Opportunities for immunization
w of studies from developing and industrialized countries
onja S. Hutchins, Temporary Adviser
a A. F. M. Jansen, Short-term Consultant
usan E. Robertson, Medical Officer
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ORGANIZATION

Core problem areas: Unvaccinated child

World Health Organization

Core problem area:

Care-giver information, beliefs and attitudes

- Problem statement
  - Key component of reasons for remaining unvaccinated include parent or care-giver information; may lack…
    - Knowledge of the disease, or
    - Knowledge of the protective effect of vaccination
    - Understanding for the need for multiple doses to attain immunity, or
    - Confusion about antigens.
  - Beliefs and attitudes present in the family of the unvaccinated; beliefs surrounding
    - The nature or constituents of the vaccine
    - The act of injection or
    - The “necessity” of disease

Core problem area
Community/societal factors

- Problem statement
  - The community and society within which the unvaccinated child lives may constitute the final core problem area
    - Religious reasons (eg. northern Nigeria) or
    - Secular considerations (eg. Germany, Sweden)
    - “Scientific” reasons (eg. MMR in Britain)
  - Alienation or marginalization of a whole community may cause inequality in coverage in spite of available services.

POPULATION MOSTLY AFFECTED DURING THE MEASLES EPIDEMIC IN BULGARIA

An informal … bout the ethnic orig… wing that in av… g from 38.9% i…

Measle…		.3
Death…		91.7

Measles attack rates (Bulgaria 2009/2010):

Roma = 579 cases / 10,000 pop.

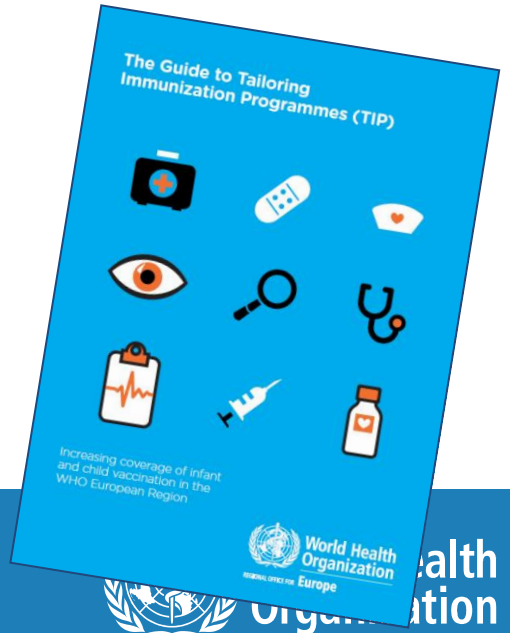
Non-Roma = 3 cases / 10,000 pop.

From: MEASLES OUTBREAK IN BULGARIA, 2009-2010, Prof. Mira Kojouharova , NCIPD, Bulgaria
http://ecdc.europa.eu/en/activities/diseaseprogrammes/vpd/Documents/Kojouharova_Budapest_2011.pdf

EURO – Targeting Immunization Programmes (TIP) tool

Understanding and influencing behaviour

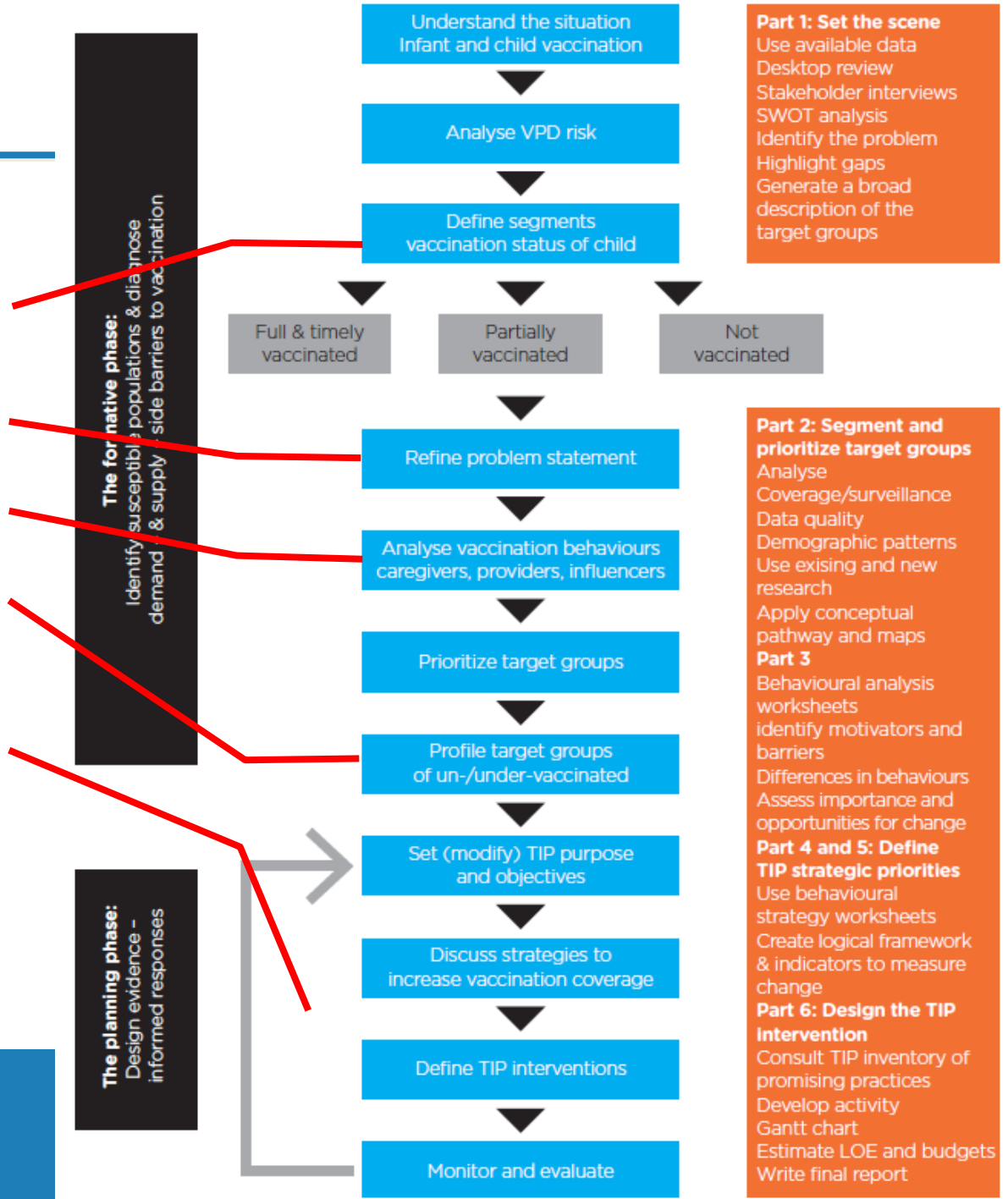
- "…a comprehensive approach to understand and influence parental and societal vaccination factors"
- **Overall objective of increasing uptake of vaccination of susceptible infants and children.**
- **Design behavioural interventions**
  - Explore and describe the determinants that influence parental decision-making in respect of vaccinations
  - An approach to address target groups based on epidemiological and behavioural determinants.
  - An inventory of lessons learned and best practices in immunisation, to design of immunisation programming



TIP

Step-by-step

- **Segmentation**
- **Refine problem**
- **Analyze behaviour**
- **Profile target groups**
- **Define targeted strategies and interventions**



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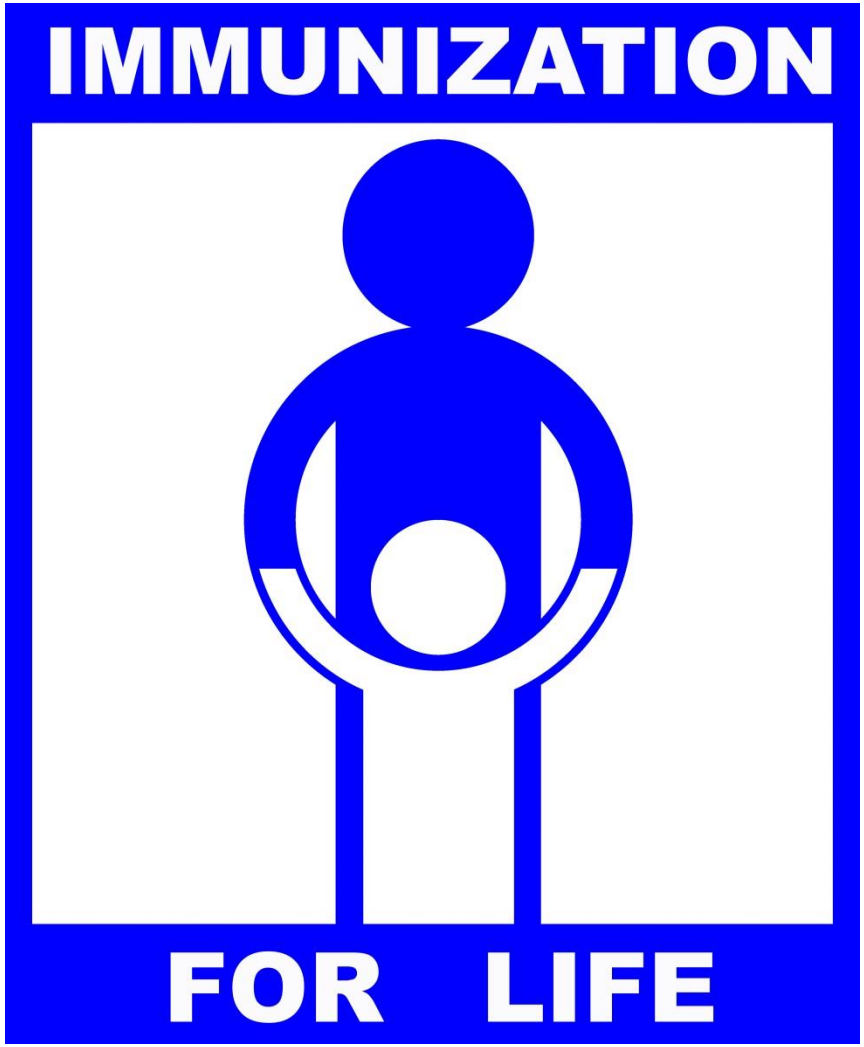
IMMUNIZATION
FOR LIFE