

## AIMS

- To establish vaccination acceptance as a legitimate discipline for theoretical and applied research
- To ensure the adoption of standardized tools for understanding, diagnosing, monitoring and evaluation of vaccination acceptance
- To foster a dynamic and better connected community of practice
- To map what is working now, in practice, to increase vaccination uptake.
  
- Users Guide to Vaccination Uptake v1.0
  - Practice guide
  - Data based
  - Interventions
  - Tools to develop & monitor & evaluate interventions
- Twitter #motivgate



# 5AS VACCINATION COVERAGE ROOT CAUSE FRAMEWORK

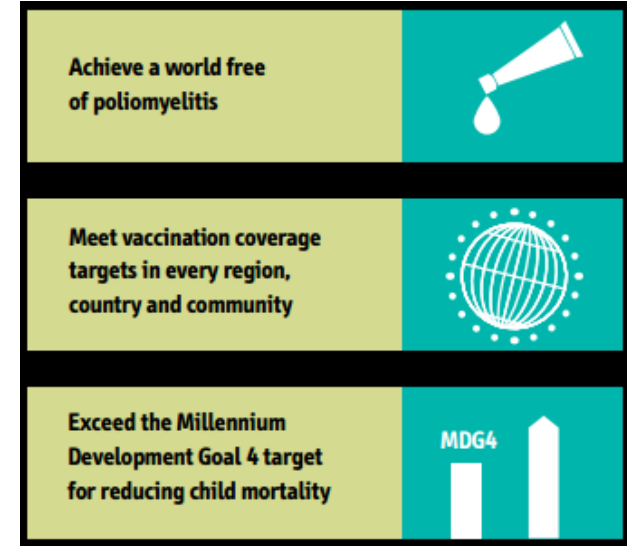
*Reaching target coverage through evidence-based advocacy*

Angus Thomson  
Vaccination Policy & Advocacy, Sanofi Pasteur

# The Global Vaccine Action Plan

*Roadmap for the decade of vaccines, ratified by 194 Ministers of Health.*

- **MISSION:** To extend, by 2020 and beyond, the full benefit of immunization to all people, regardless of where they are born, who they are or where they live
- **GOAL 2: Meet vaccination coverage targets in every region, country & community**
- **STRATEGIC OBJECTIVES:**
  - **All countries commit to immunisation as a priority**
  - **Individuals and communities understand the value of vaccines and demand immunization as both their right and responsibility.**
- **GUIDING PRINCIPLE 2:** Shared responsibility and partnership. Immunization against vaccine-preventable diseases is an individual, community and governmental responsibility that **transcends borders and settings. The benefits of immunization are equitably extended to all people.** Metric: attitudinal surveys  
  - *“Achieving the vision and goals of the Decade of Vaccines (2011–2020) will only be possible if **all stakeholders** involved in immunization commit themselves to, and take action to achieve, the six strategic objectives”*
- Echoed for flu vaccination in recent European Commission report

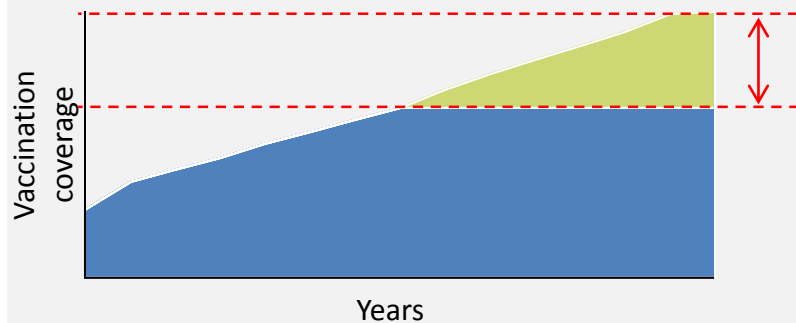


# Vaccination programs face two major challenges: coverage gaps & coverage erosion

## Coverage gap & coverage erosion mechanisms (illustration, in % of vaccinated population)

ILLUSTRATIVE

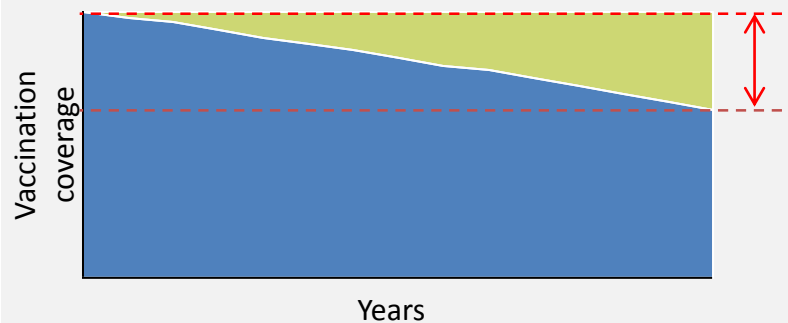
### 1 Coverage gap



■ Coverage gap    ■ Actual coverage

- Great progress since introduction of EPI program - but 1 in 5 children still not receiving the basic vaccines
- Many influenza vaccination programs have never even approached the target coverage

### 2 Erosion gap

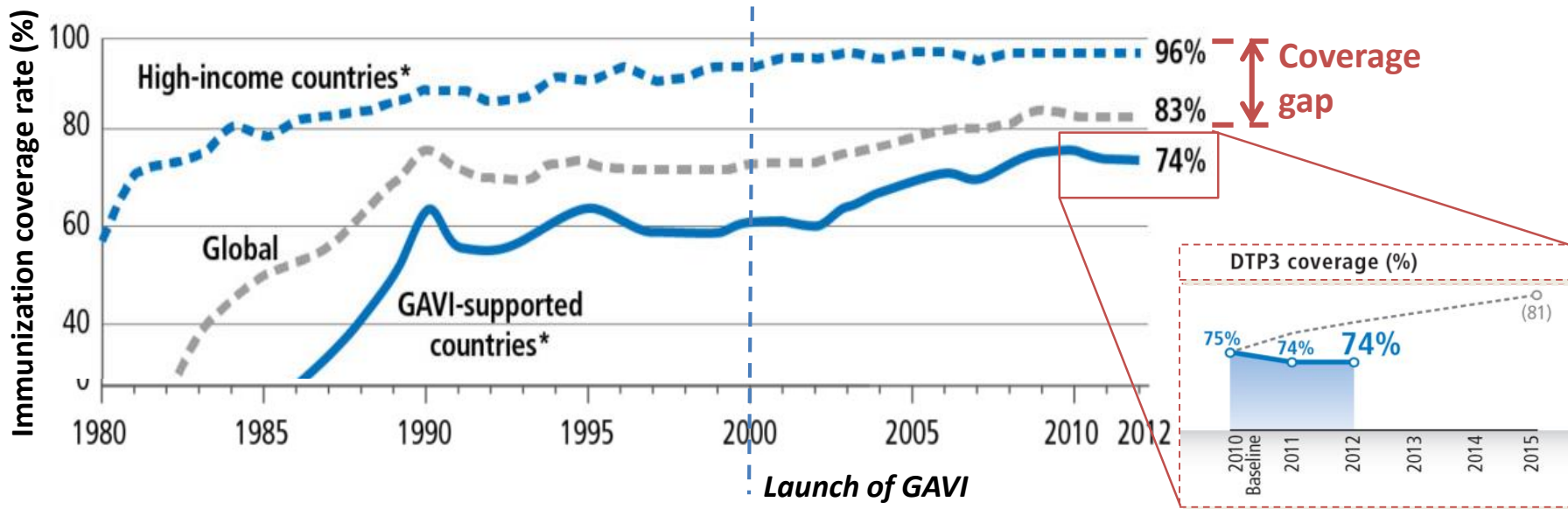


■ Coverage erosion    ■ Actual coverage

- Many countries have achieved sustained success
- However, all vaccination programs are intrinsically fragile
- Coverage rates have been eroded by loss of public confidence (MMR, HepB, Polio) or

# Coverage gap: Despite remarkable progress, 1 in 5 children still do not receive the basic vaccines

**DTP3 average vaccination coverage trend by country type**  
(in % of population, 1980-2012 estimates)

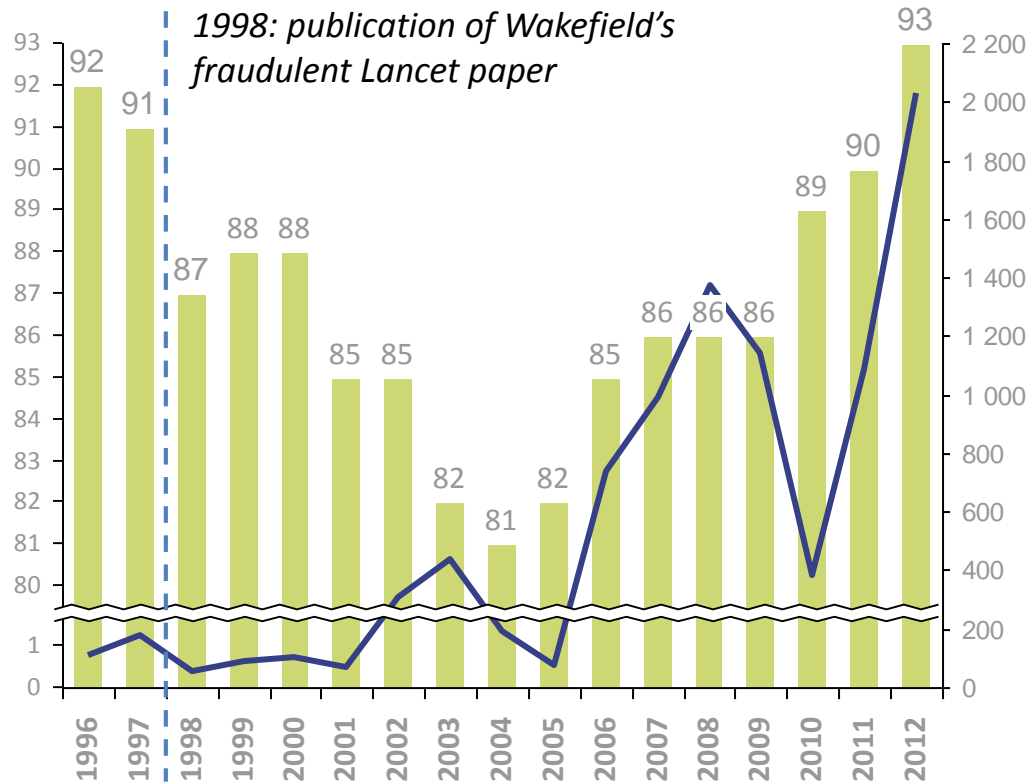


**The launch of GAVI in 2000, despite some progress (~14% in 10 years), has not succeeded in closing the childhood vaccination gap, coverage has plateaued & recently decreased.**

Source: WHO, UNICEF, GAVI

# Erosion gap: Loss of public confidence in vaccination can lead to disease outbreaks in high income countries

## Measles vaccine coverage & measles cases (England and Wales, in % of total population and # cases)

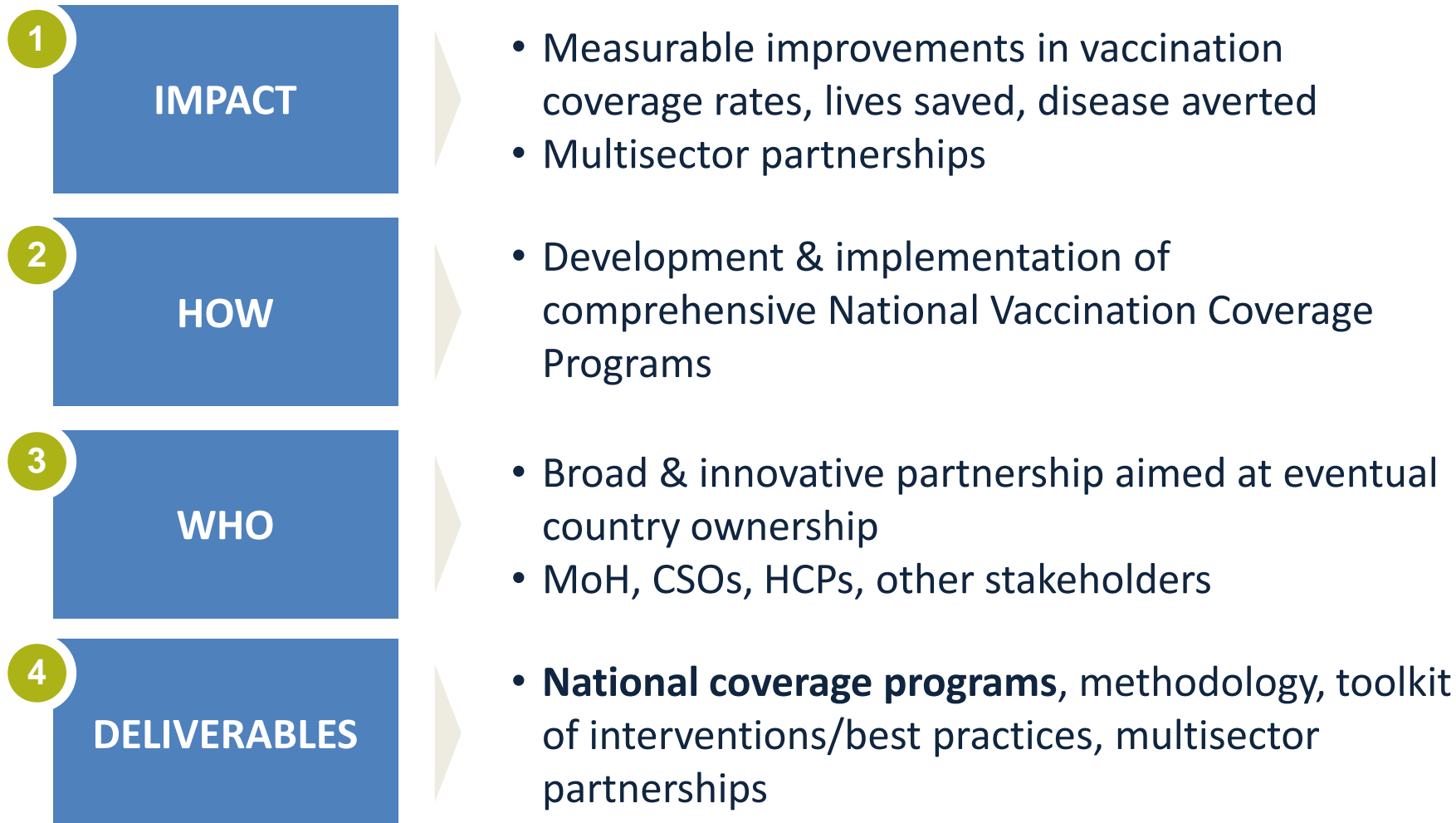


### Key facts

- In Feb. 1998, a paper published in the UK by researcher Andrew Wakefield questioned the safety of the MMR Vaccine (article that later proved fraudulent)
- Wide media coverage made the MMR vaccination a hot topic in year 2000s
- The impact has been strong on vaccination coverage with significant drops in 2003/ 2004/ 2005

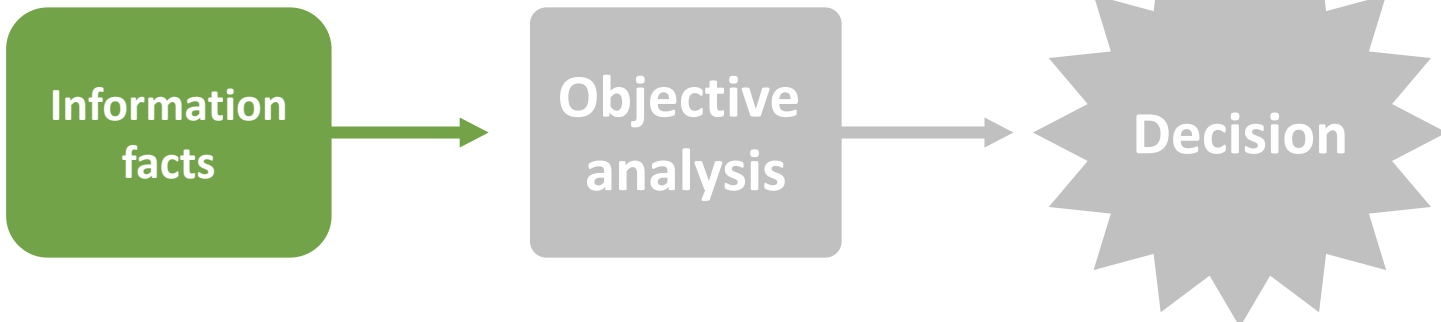
Source: WHO, UNICEF, Public Health England — Measles cases — Vaccination coverage

# 5As framework: Optimising the impact of vaccination



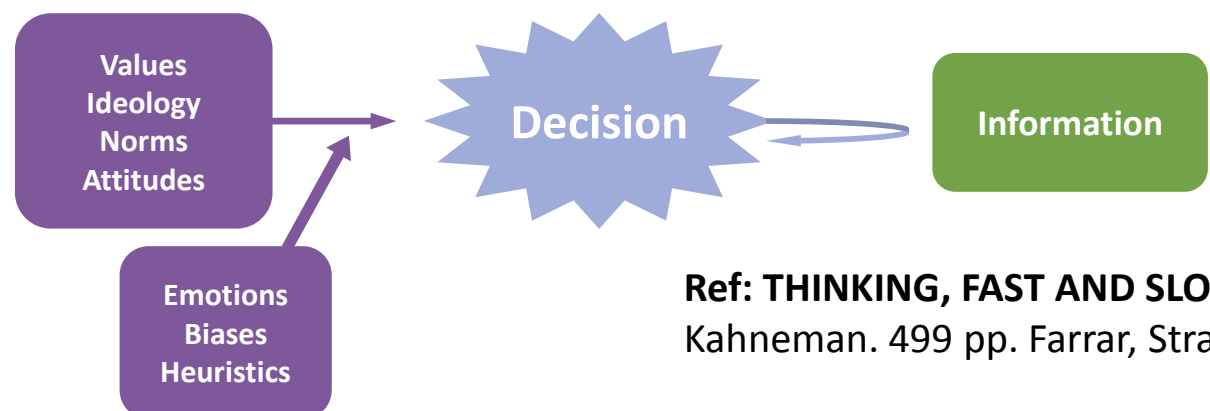
# Behavioral Analysis: How we think we decide

Information  
**Facts**  
Education  
Critical analysis  
Knowledge



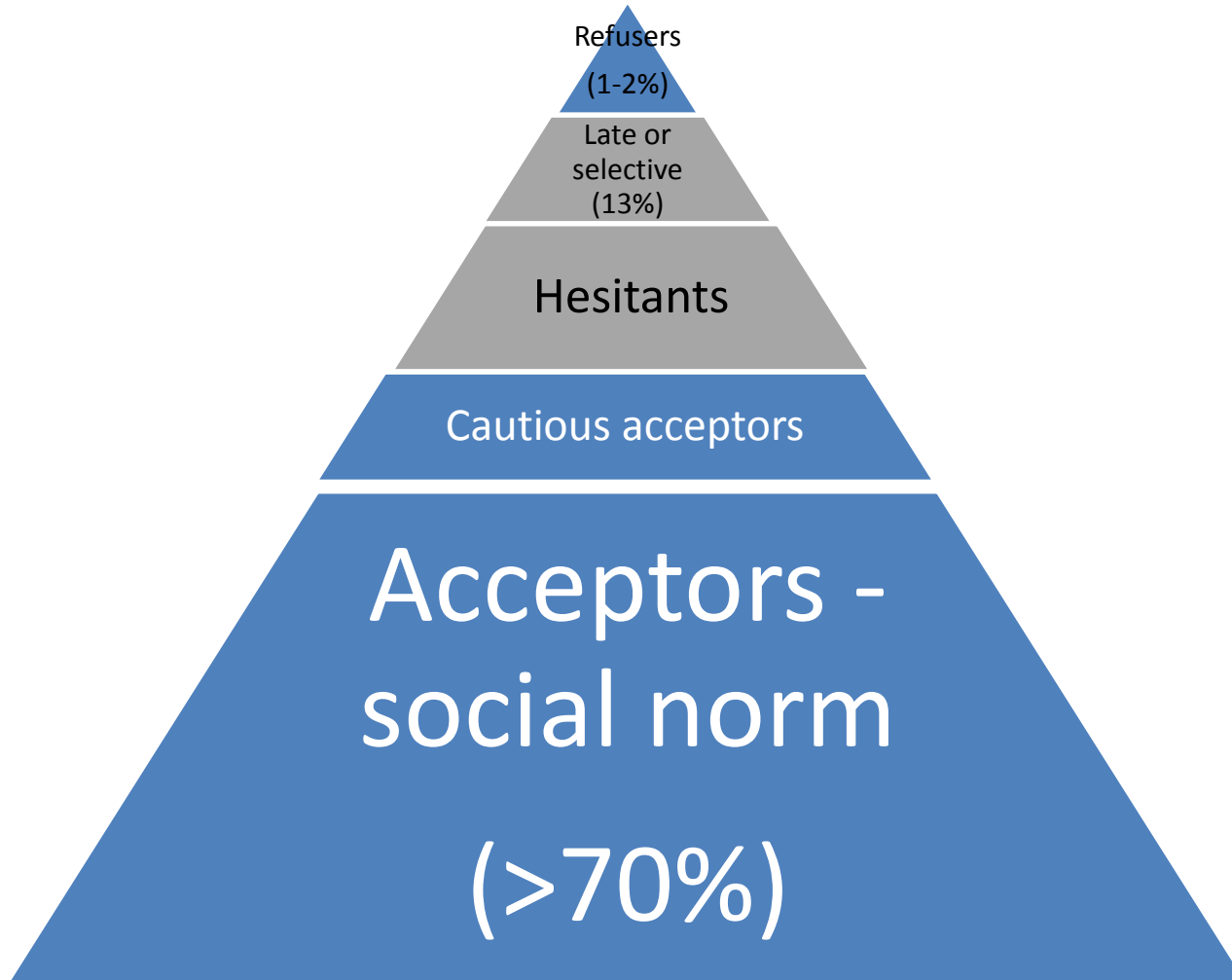


# Behavioral Analysis: How we really decide



Ref: **THINKING, FAST AND SLOW** By Daniel Kahneman. 499 pp. Farrar, Straus & Giroux

# Acceptance & hesitancy, not 'anti-vaccination lobby'



Credit: Julie Leask

Childhood Immunisation Tracking UK DoH 2010. <http://bit.ly/p2dPMf>

Thomson Reuters-NPR Health Poll 2011. <http://bit.ly/nwfKLo>

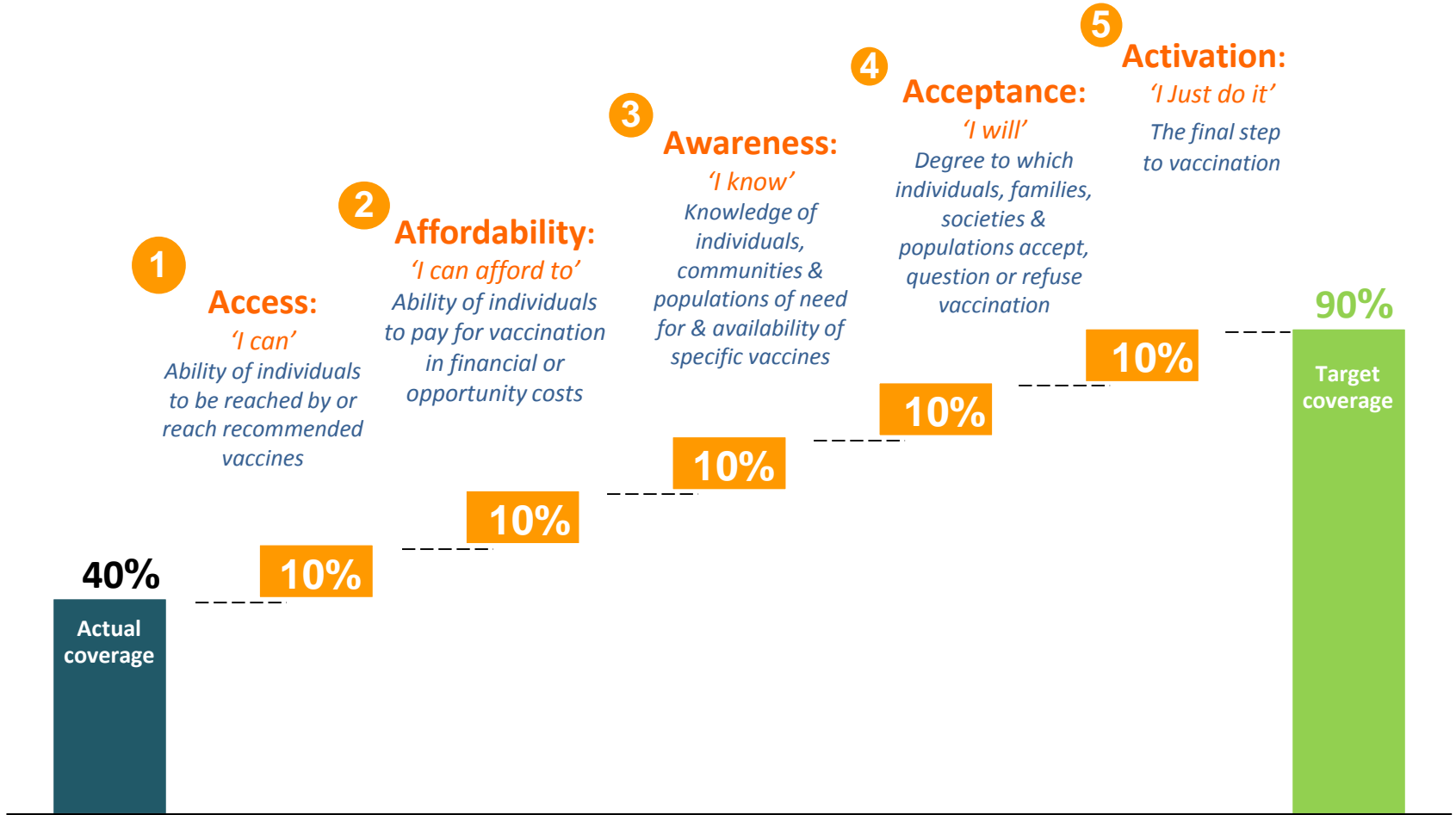
Dempsey et al. (2011) Pediatrics 128. doi:10.1542/peds.2011-0400.

# Conceptual framework for vaccination advocacy: Listen, Understand, Engage



1. A. Thomson, M. Watson. Listen, understand, engage. *Sci. Transl. Med.* 4, 138ed6 (2012).

# The 5 determinants of vaccination uptake



Figures for illustration only

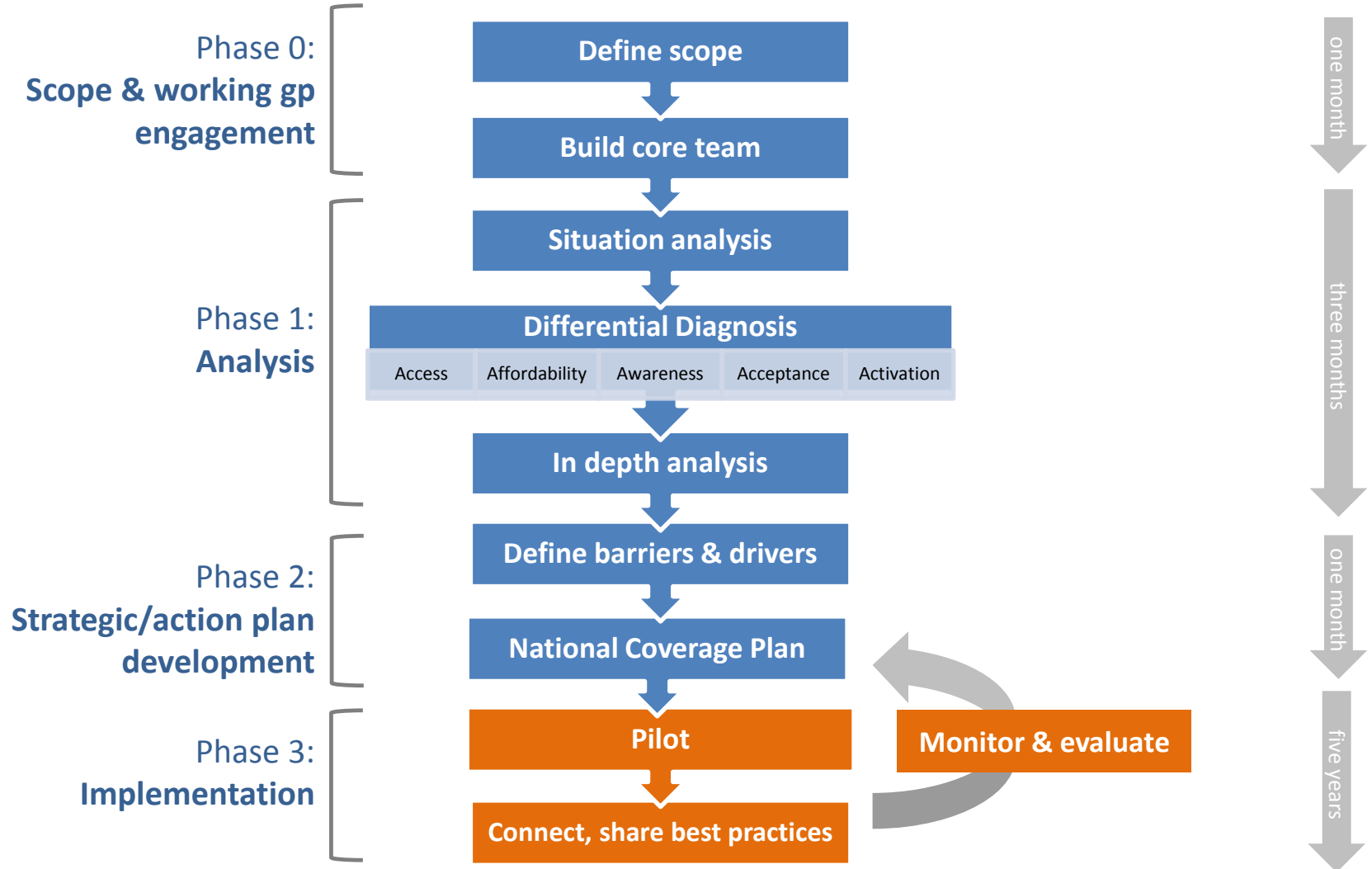
 Key barrier/driver to vaccination

# The 5As Vaccination Coverage Root Cause Framework – Key principles

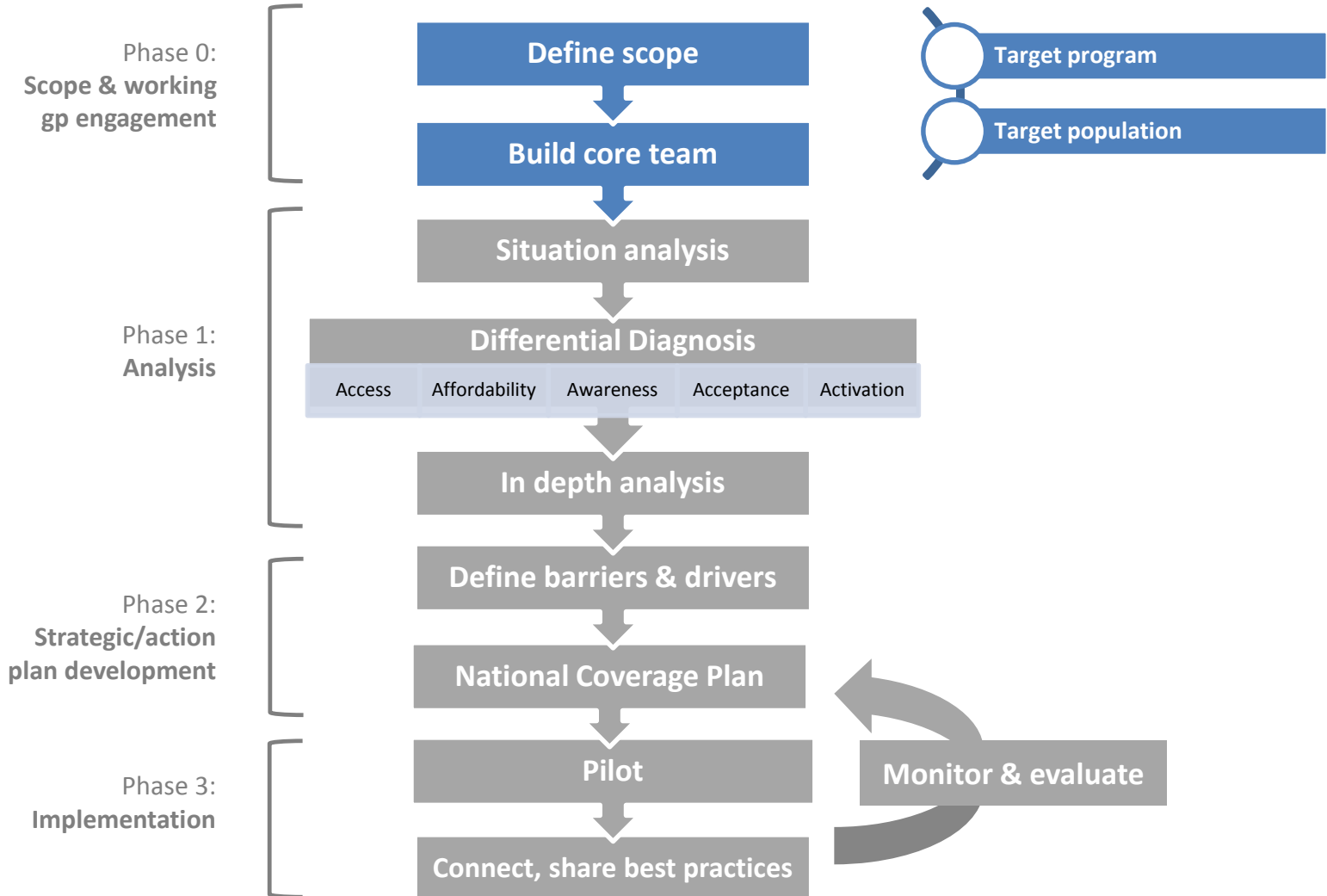
- **Vaccination coverage: the intersection of shared value**
  - Common objective for all stakeholders: the success of vaccination programs
  - Business & public health impact
  - Building multisector partnership
- **Giving structure to complexity**
  - Systematic analysis of the root causes of a coverage gap
  - Access | Affordability | Awareness | Acceptance | Activation
- **Evidence-based, not assumption-based**
  - Data-based & data-generating
- **Understanding the human part of the solution**
  - Working with social & cognitive sciences
  - To develop behaviour change interventions
- **Measure & Evaluate**
  - You cannot change what you don't measure
- **Toolkit of solutions**
  - Behaviour & social change interventions
- **Focus on Impact**
  - Lives protected, disease averted
  - Optimise market size, competitive advantage



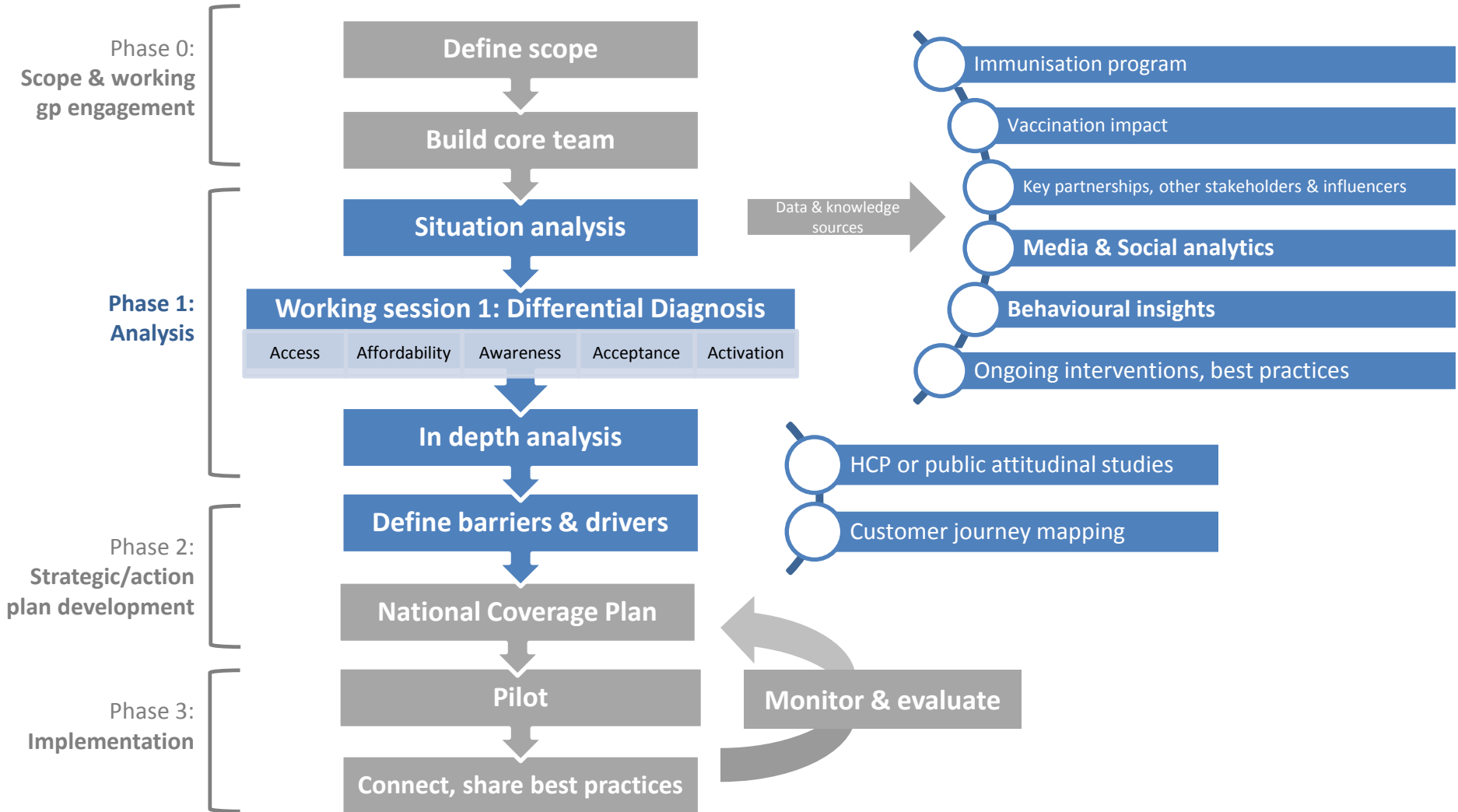
# 5As Process: Development & implementation of a National Coverage Plan



# 5As Process: Phase 0 – Scope & Working group engagement

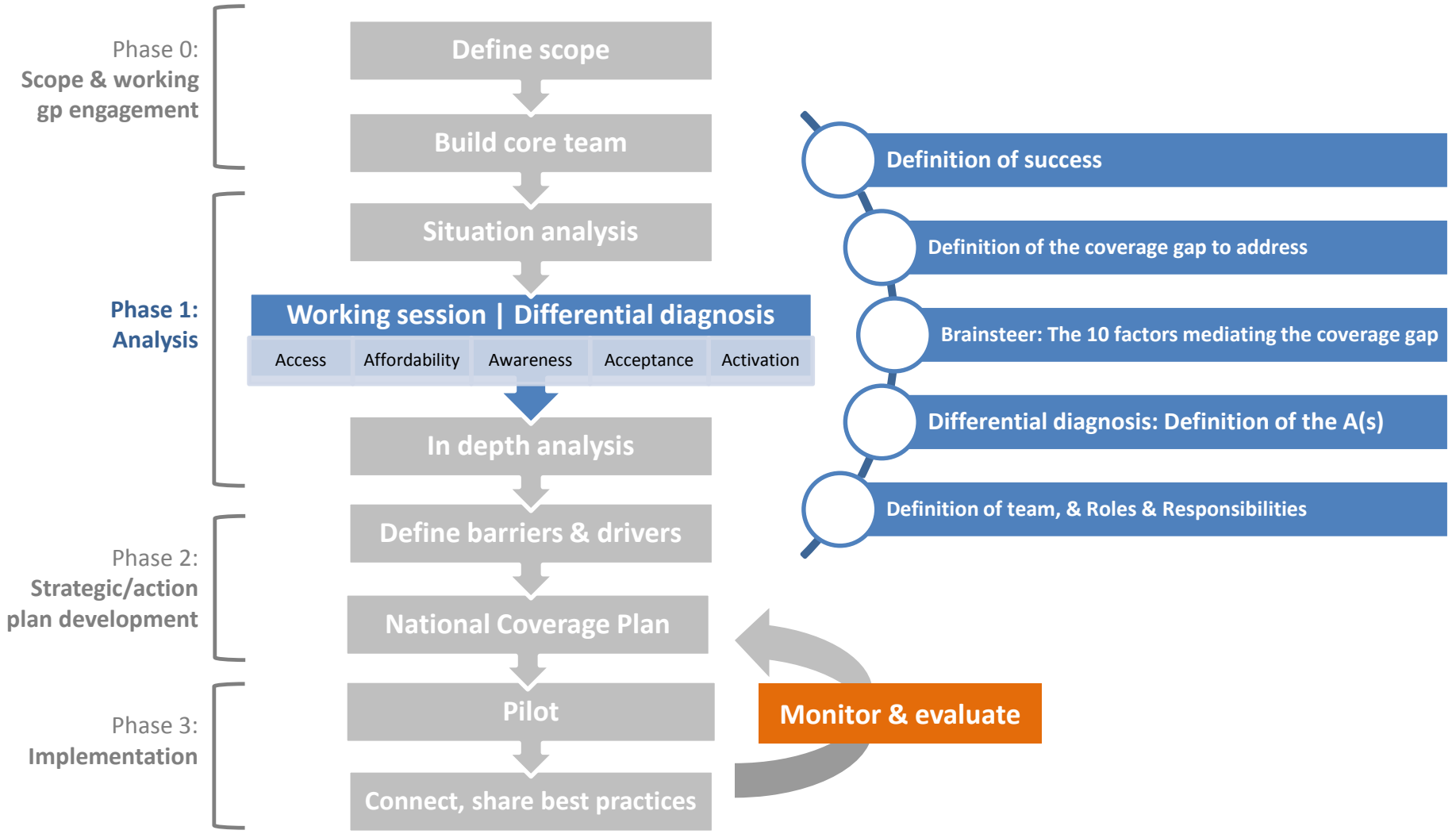


# 5As Process: Phase 1 - Analysis

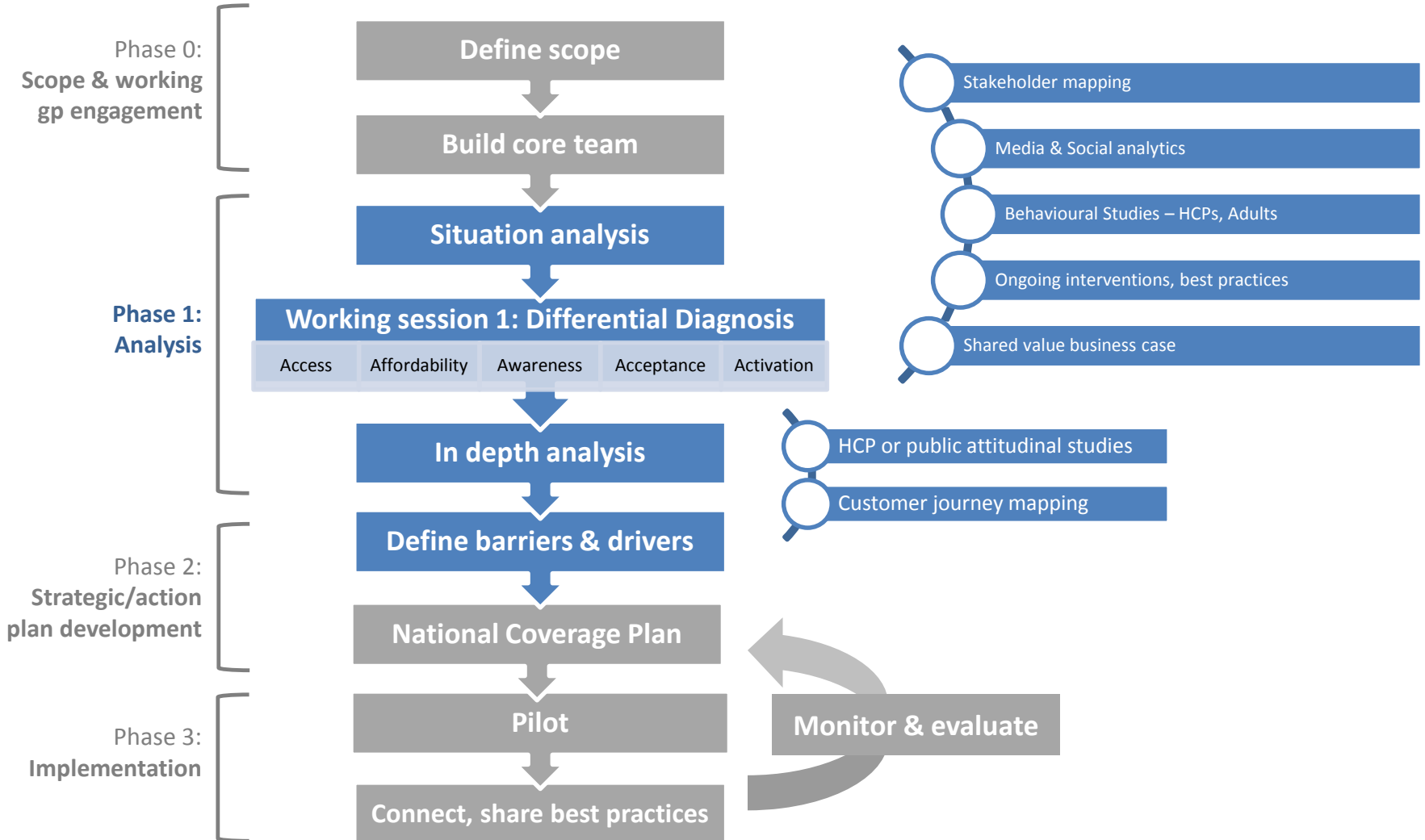




# 5As Process: Working session/differential diagnosis

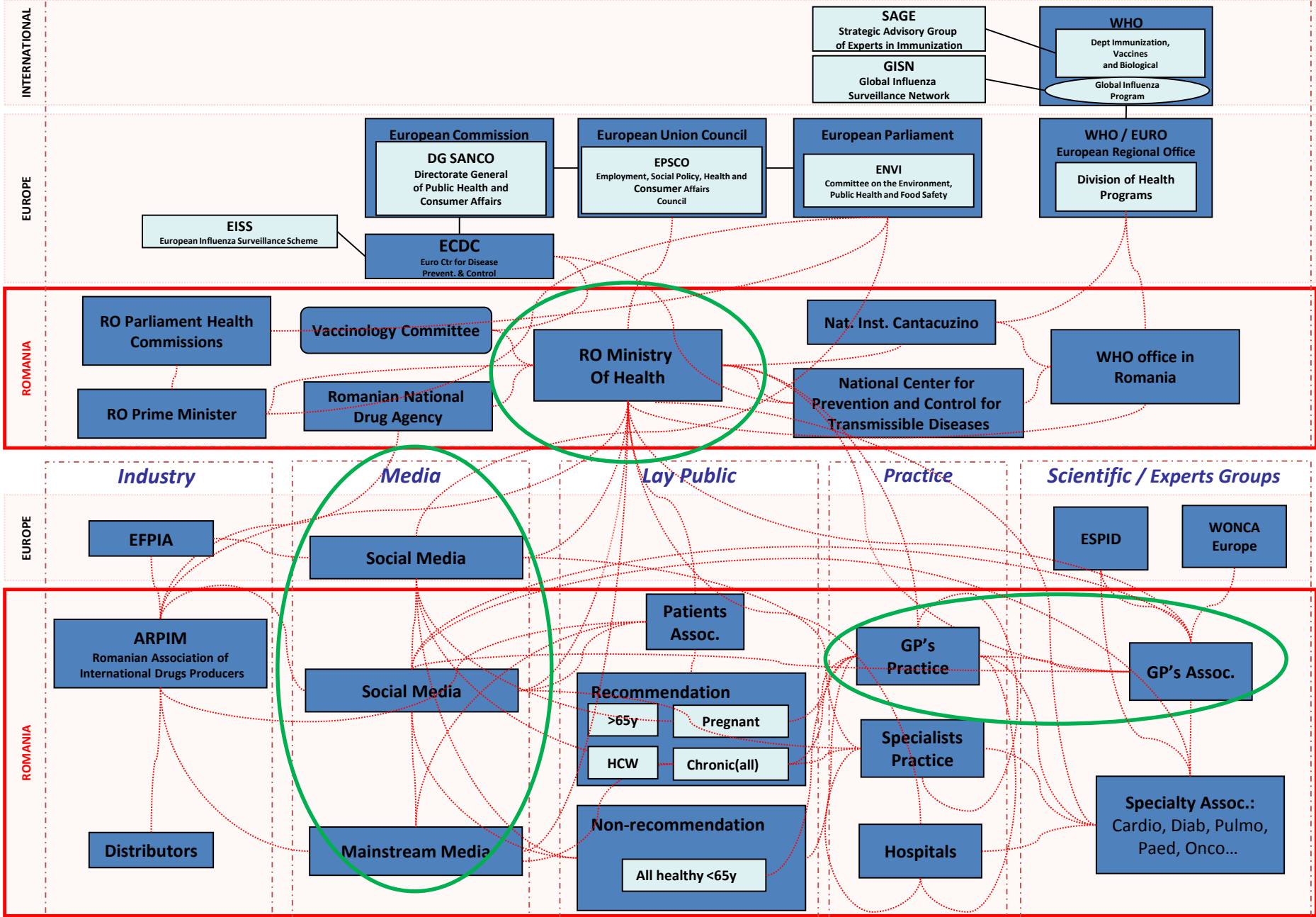


# 5As Process: Analytical tools



# Stakeholder mapping for Influenza vaccination in ROMANIA

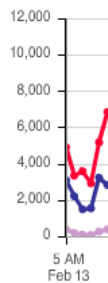
## Authorities



# Phase 1 Analysis: Media & Social Analytics

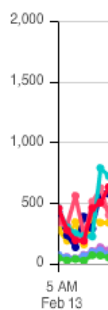
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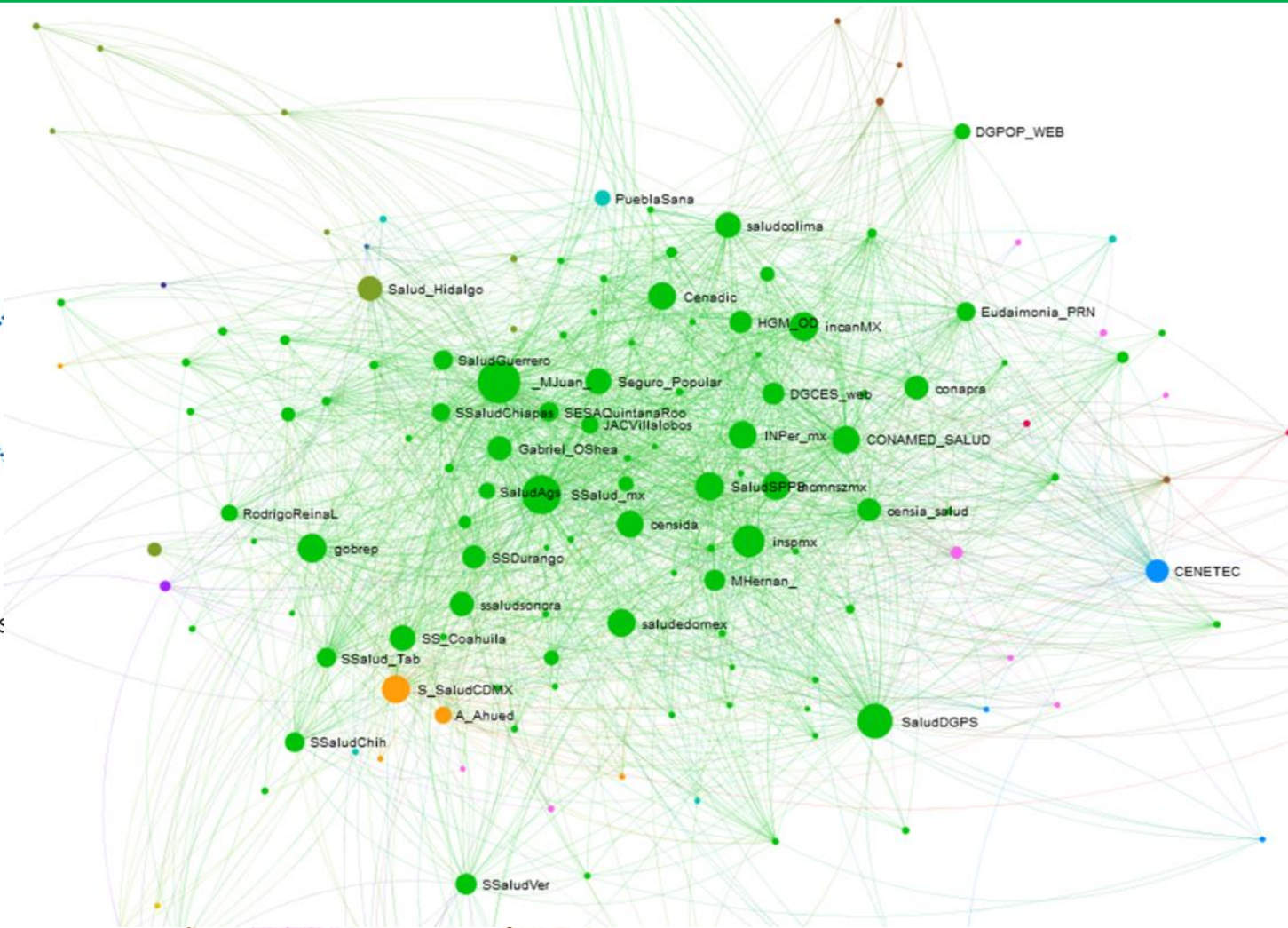
VAX IN SPANISH

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NHS

- Mexico
- Netherlands



NHS Clusters by topics or locations

Logout

hospital  
pueden  
medad  
fermedades  
onas  
marzo  
ud  
vacunas  
influenza  
gripe  
campana  
personal  
mundial

its



# Phase 1 Analysis: Behavioural insights & analytics tools

- Attitudes to adult vaccination instrument
- HCP attitudes to vaccination & vaccination advocacy instrument

### Uncertain

Vaccination is important but they are unsure of its efficiency, of their own knowledge, and of their autonomy in vaccination decisions

46%

### Proficient

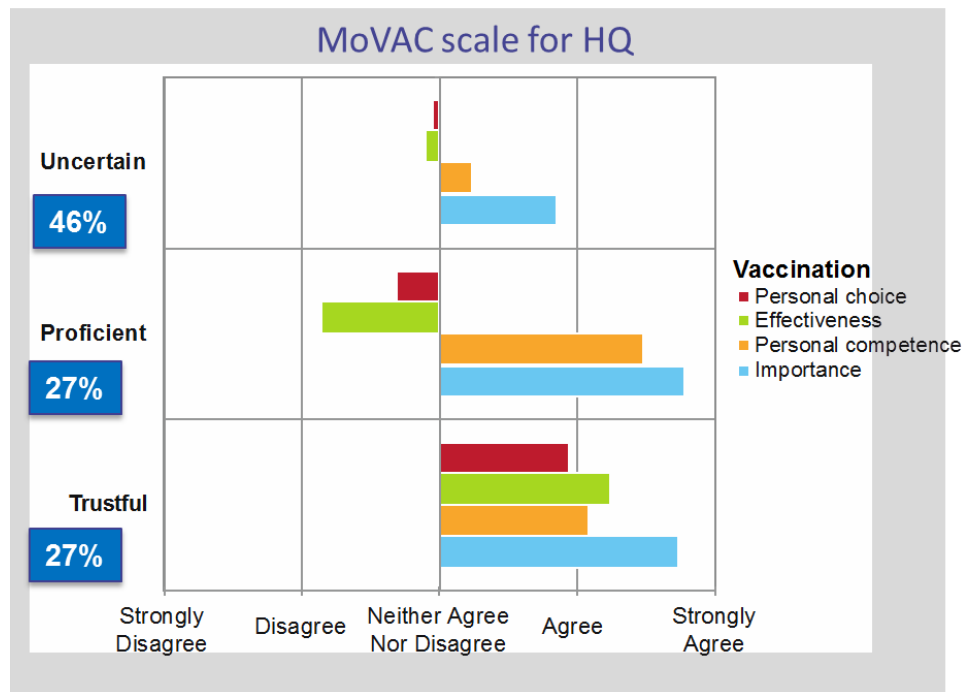
Vaccination is important. They feel highly knowledgeable, but they know vaccination is not always effective and do not believe it is an individual choice

27%

### Trustful

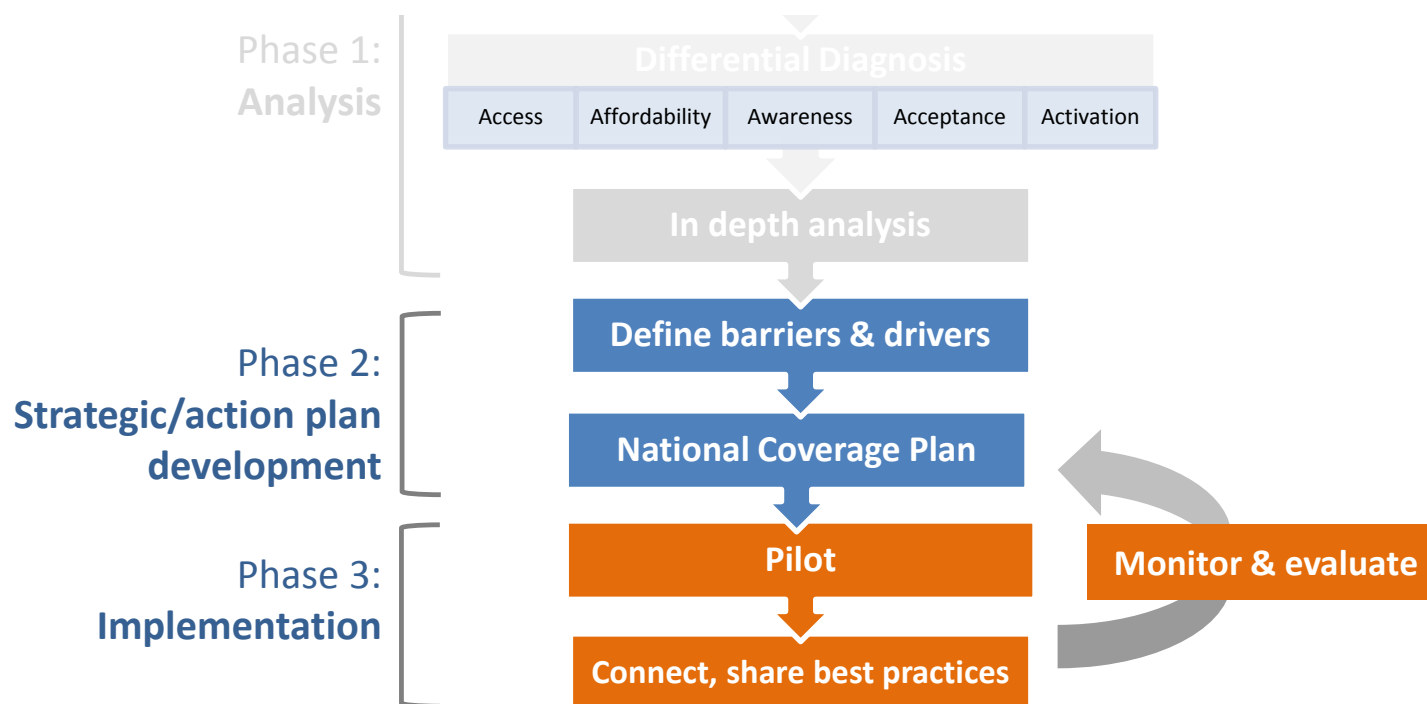
Vaccination is important, effective and a personal choice; they feel relatively knowledgeable about the topic.

27%



# 5As Process: National Coverage Plan development & implementation

- Not a comms campaign
- Comprehensive program that addresses the rights As
- Succession planning → Ownership assumed by MoH
- Monitor & evaluate



# Monitor & evaluate: Surrogate markers for impact

- We cannot change what we cannot measure
- Success = increased VCR
  - But this impact is mid-term
  - Need surrogate markers of progress

## Impact: sentiment

Monitoring & listening  
(detectable changes in  
volume, sentiment &  
influencers)

## Impact: Attitudes & beliefs

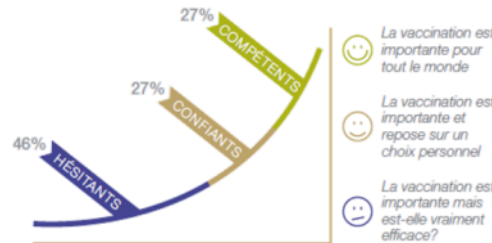
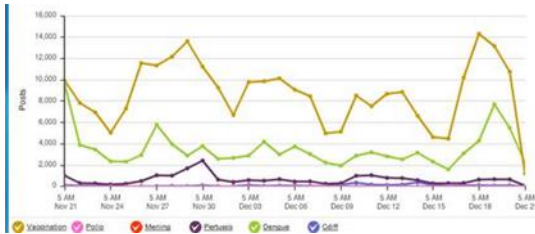
Changes in knowledge,  
beliefs & attitudes – in  
general public & HCPs

## Impact: Intentions

Changes in intentions  
to be vaccinated & to  
vaccinate

## Impact: Vaccination

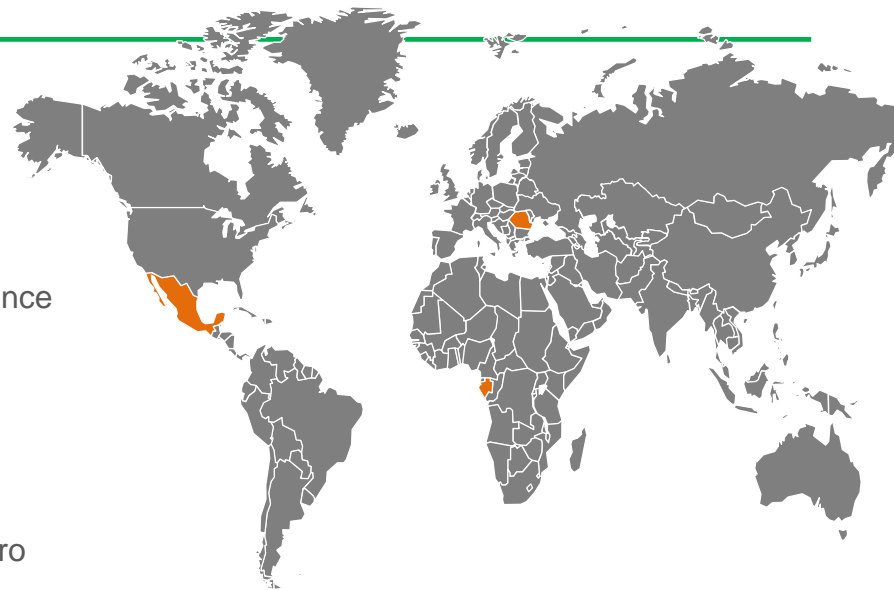
Changes in vaccination  
behavior



**Increased VCR**

“We need to think quantitatively. We can only reach our objectives if we have the right metrics in place”  
– O. Charmeil (GLN Feb 2014)

# Current status 2014: 3 pre-pilots underway



- **Romania, flu**
  - Success: 20% increase coverage PA for 5 y
  - Study of HCP attitudes to vaccination and advocacy
  - Action plan has two workstreams: Access & Acceptance
  - Flu forum, Oct 2014
  - Social & mainstream media campaign
- **Mexico, flu**
  - Multisectorial working group established (MoH, Seguro Popular, IMSS, ISSSTE, Ntl Inst Geriatrics)
  - First working session July 2, Mexico City
  - Developing social media-integrated communications strategy for Mexico with MoH
  - Large robust study on attitudes to vaccination in adults
    - Clarify the A – awareness, acceptance, activation
- **Gabon, pentavalent**
  - Phase 1 – Situation analysis, building working group



## 5As – Structuring complexity to optimise impact

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For every complex problem there is an answer  
that is clear, simple, and wrong  
- HL Mencken