

*Symposium on Seasonal Influenza Vaccination Policy Development and Implementation 17 - 18 June 2017 Beijing, China*

# **Seasonal influenza vaccination policy development: considerations for pandemic preparedness**

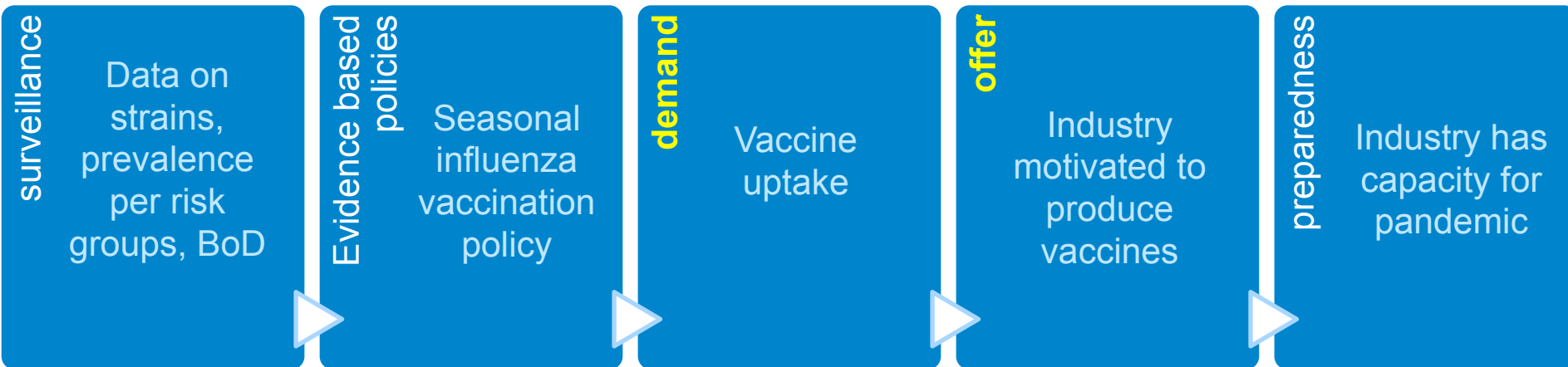
*Raymond Hutubessy WHO Initiative for Vaccine Research  
on behalf of Claudia Naneis WHO Global Action Program Influenza Vaccines*



**World Health  
Organization**

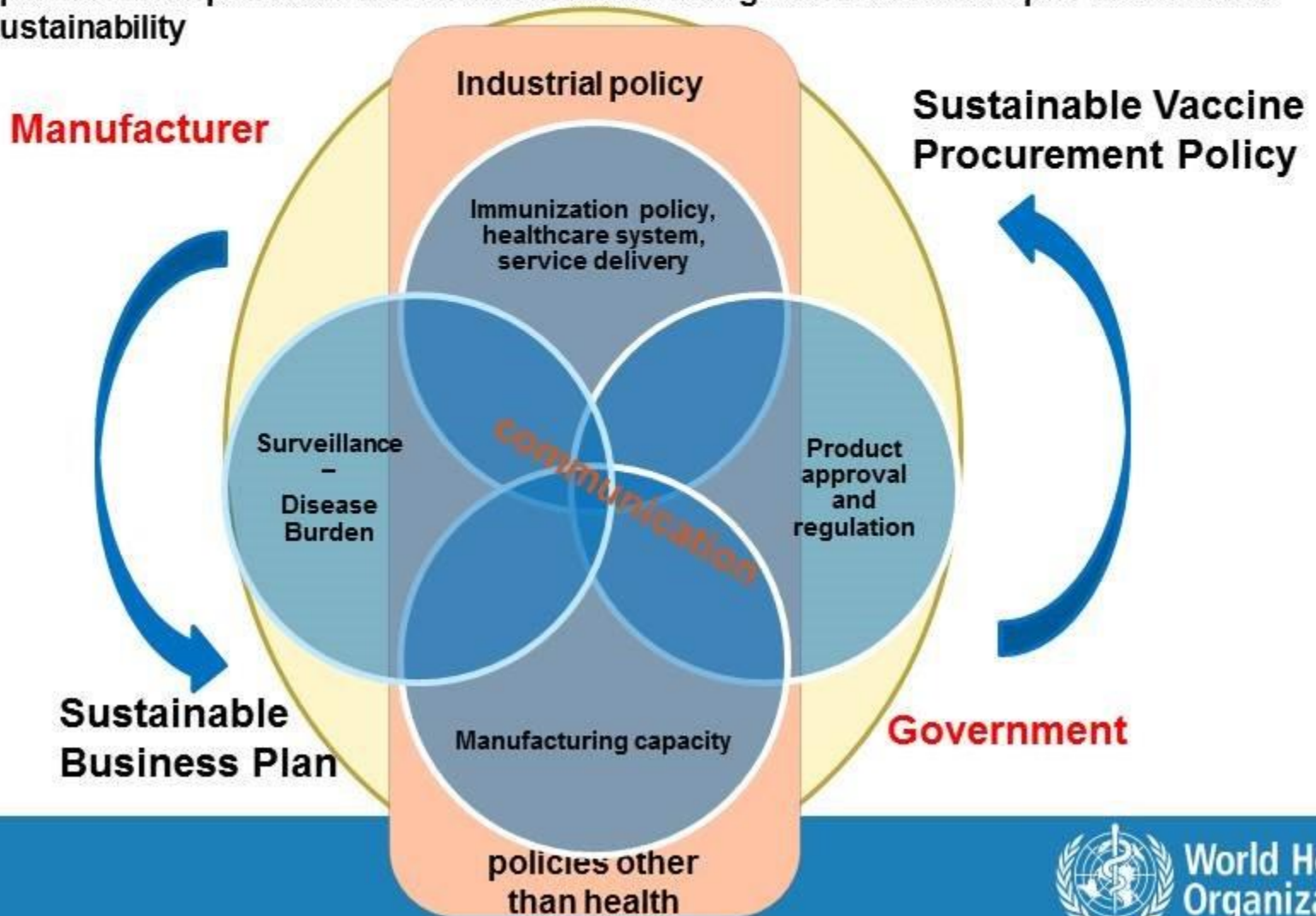
# Road toward preparedness

## Current model



# Implementing the model for preparedness at country level

context-specific mix of policies and market forces that the government sets up or facilitates to achieve sustainability



# Why should a government invest in such model?

## Return on Investment

- Better health indicators
- National security/Population protection
- When local production of vaccine => Economic development
  - Employment
  - Spill-over effects in other sectors
  - Raised workers' profile and competencies
- National budget
  - Reduction of hospital/health sector costs
  - Potential export capacity=> positive balance of payment
- .....

# Global Action Plan (GAP) for Influenza Vaccines (2006-2016)

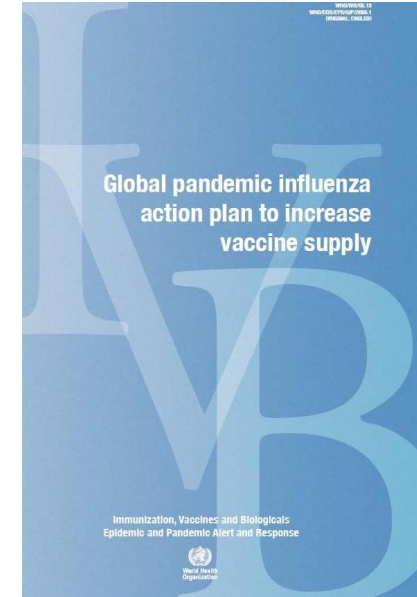
Concerning situation in 2006: Small production capacity & concentrated in a few HICs

10-year strategy to reduce anticipated global shortage & inequitable access to vaccines in the event of an influenza pandemic

**Goal:** Capacity to produce enough vaccine to immunize 70% of the global population with 2 doses of vaccine = **~10 billion doses**

## Objectives:

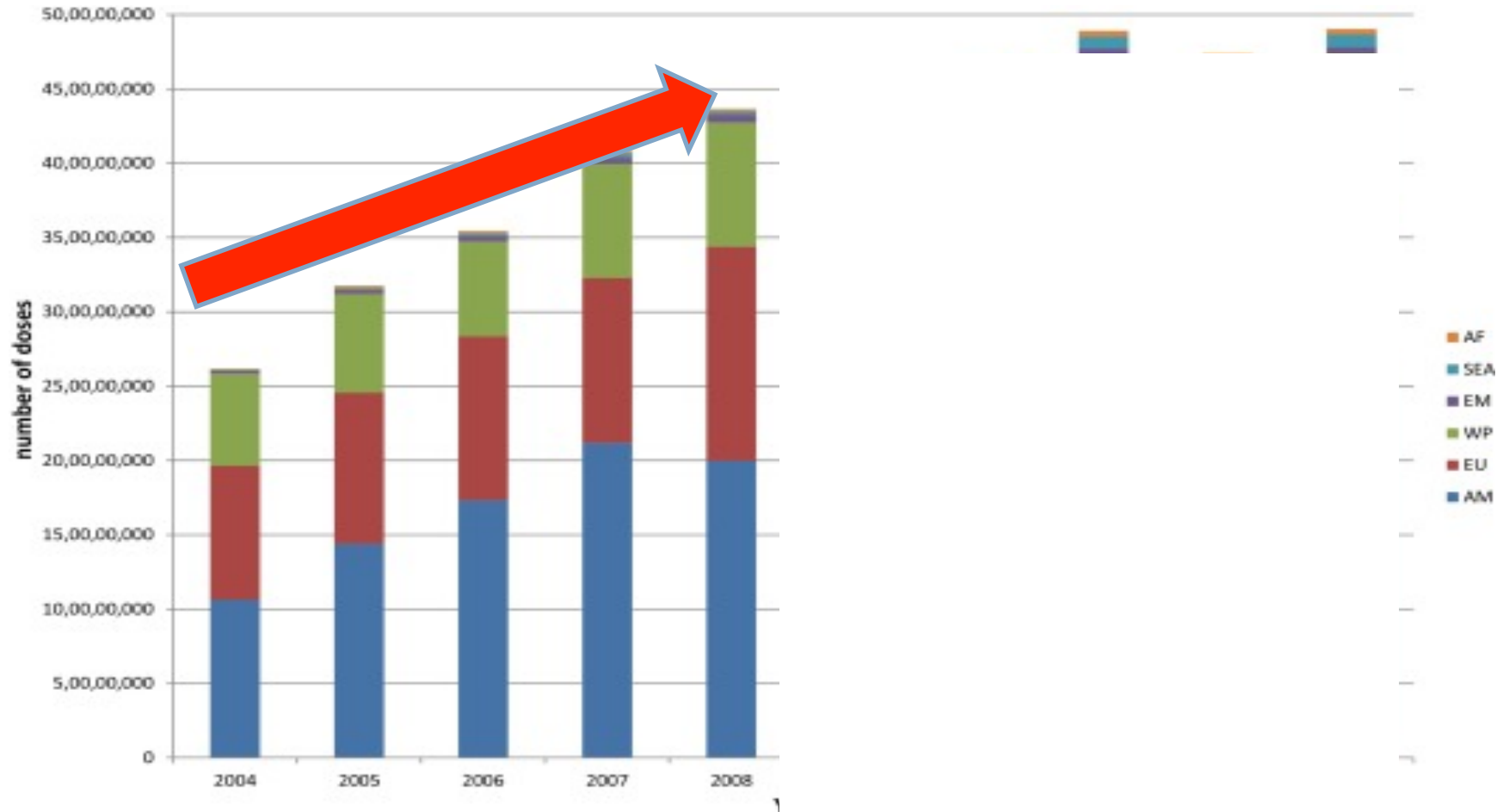
- I. Increase evidence based seasonal vaccine use
- II. Expand vaccine production & regulatory capacity
- III. Research & development for better vaccines



- Study of the WHO/UNICEF JRF (2014) :
  - **115** (59%) of WHO MS reported having a national influenza immunization policy
  - In 2006, a study with a different methodology identified **74 MS and territories** with the same policy
  - However, in 2014, **83%** were high and upper middle income countries with a median per capita annual health expenditure of 664 USD. Only 4 were Gavi-eligible countries
  
- 87% increase in doses of seasonal flu vaccine distributed
  - IFPMA for 2004-2013

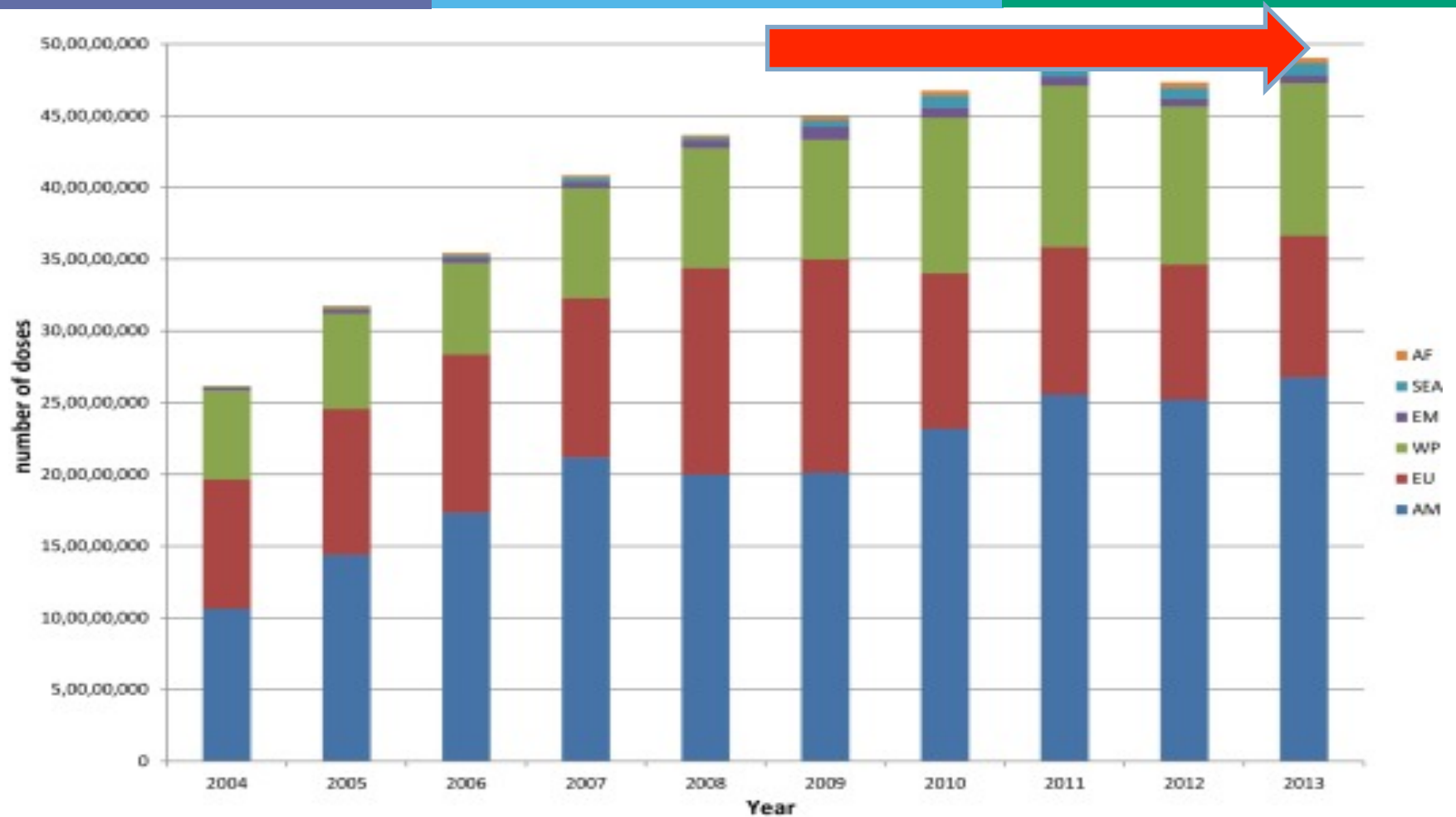
# Seasonal Influenza Vaccine Dose Distribution By Region: 2004-2008

PROXY FOR DEMAND



# Seasonal Influenza Vaccine Dose Distribution By Region: 2004-2013

PROXY FOR DEMAND





## Situation in 2006

- Enough capacity to produce **1.5 billion doses** of pandemic vaccine
- Production was based entirely in HICs

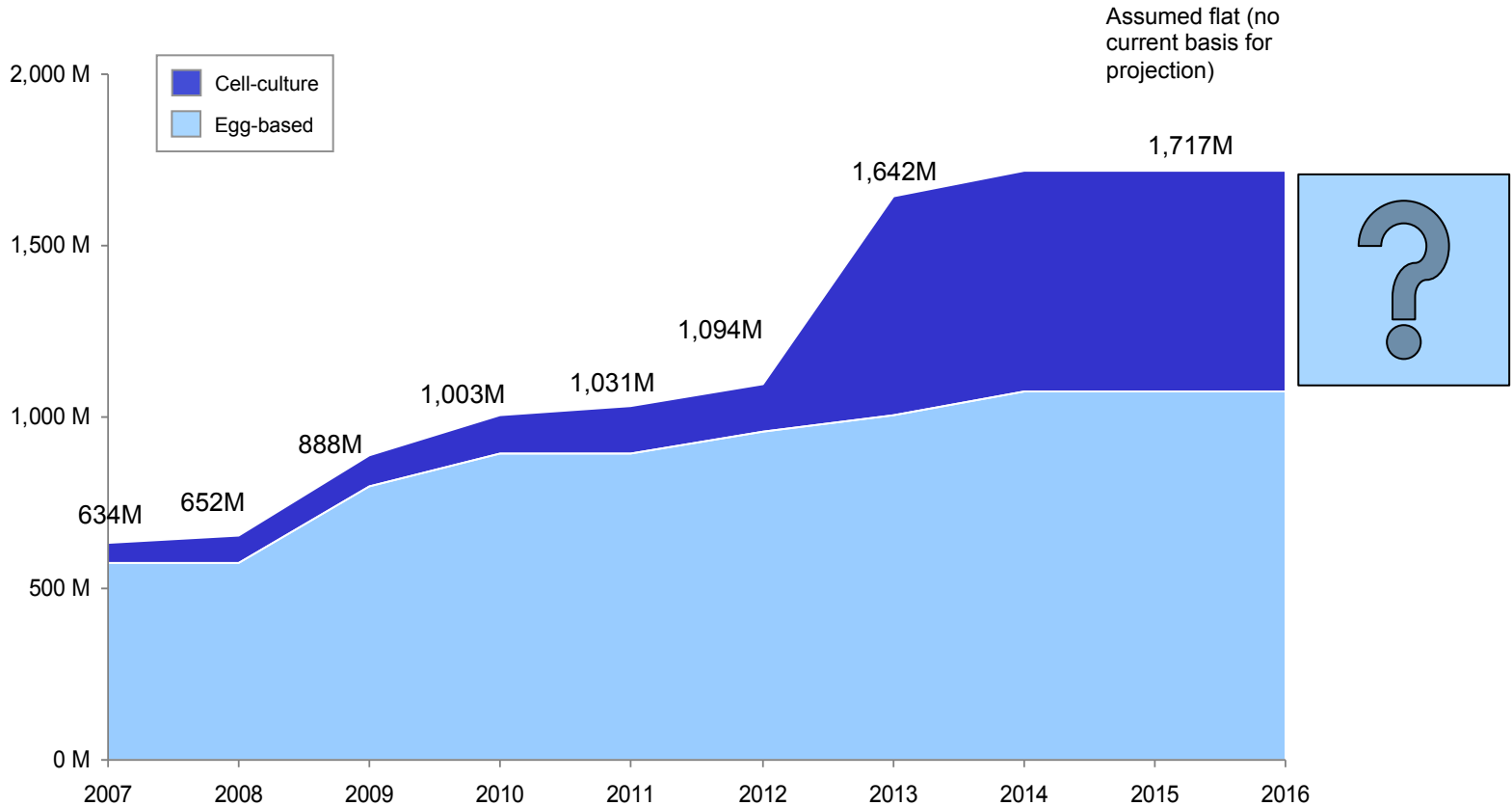
## Situation today

- Enough capacity to produce **6.4 billion doses** of pandemic vaccine
- Production has expanded to include LMICs
- But, still falls short of global needs (10 billion doses) & **challenges to maintaining this capacity**

# Predictions in 2006: Future production capacity (2008 – 2016)

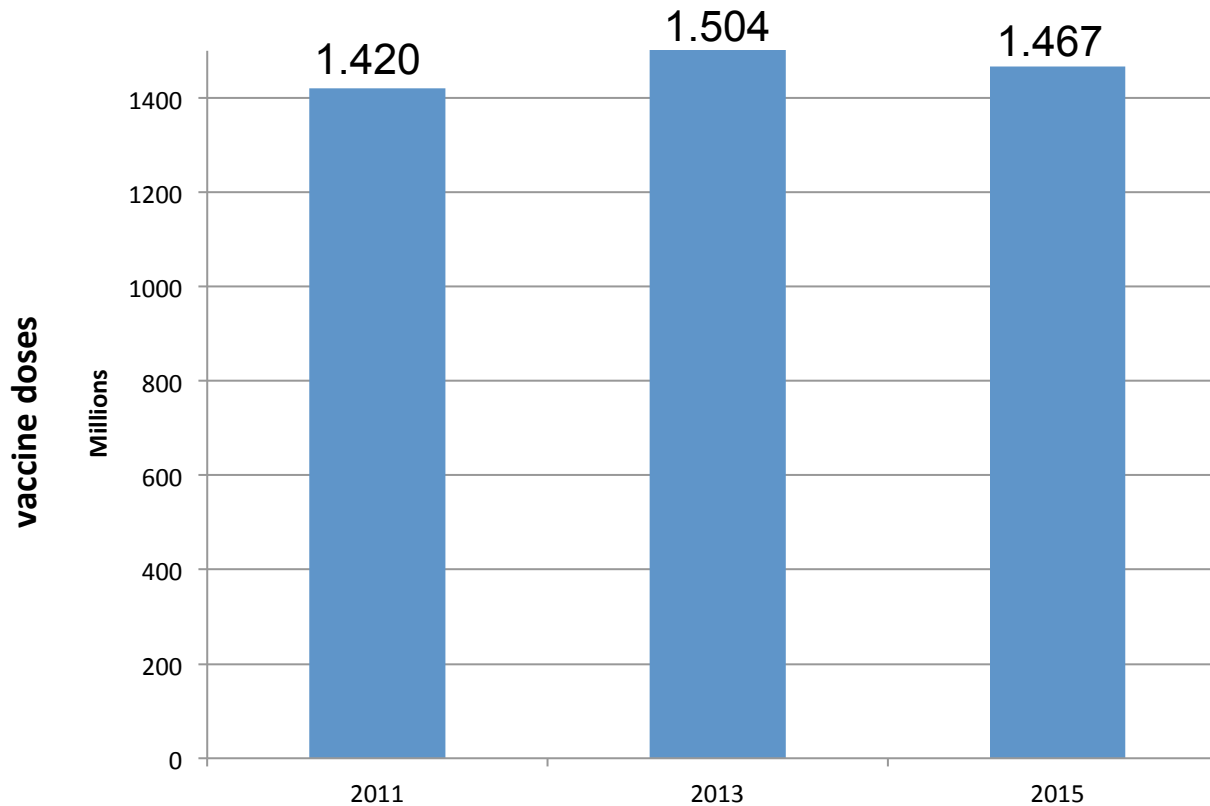
OFFER

Source: Expert interviews; company statements; news articles; UBS Report: “Flu Vaccine Capacity Outstripping Demand” – Nov. 2006; Oliver Wyman analysis.

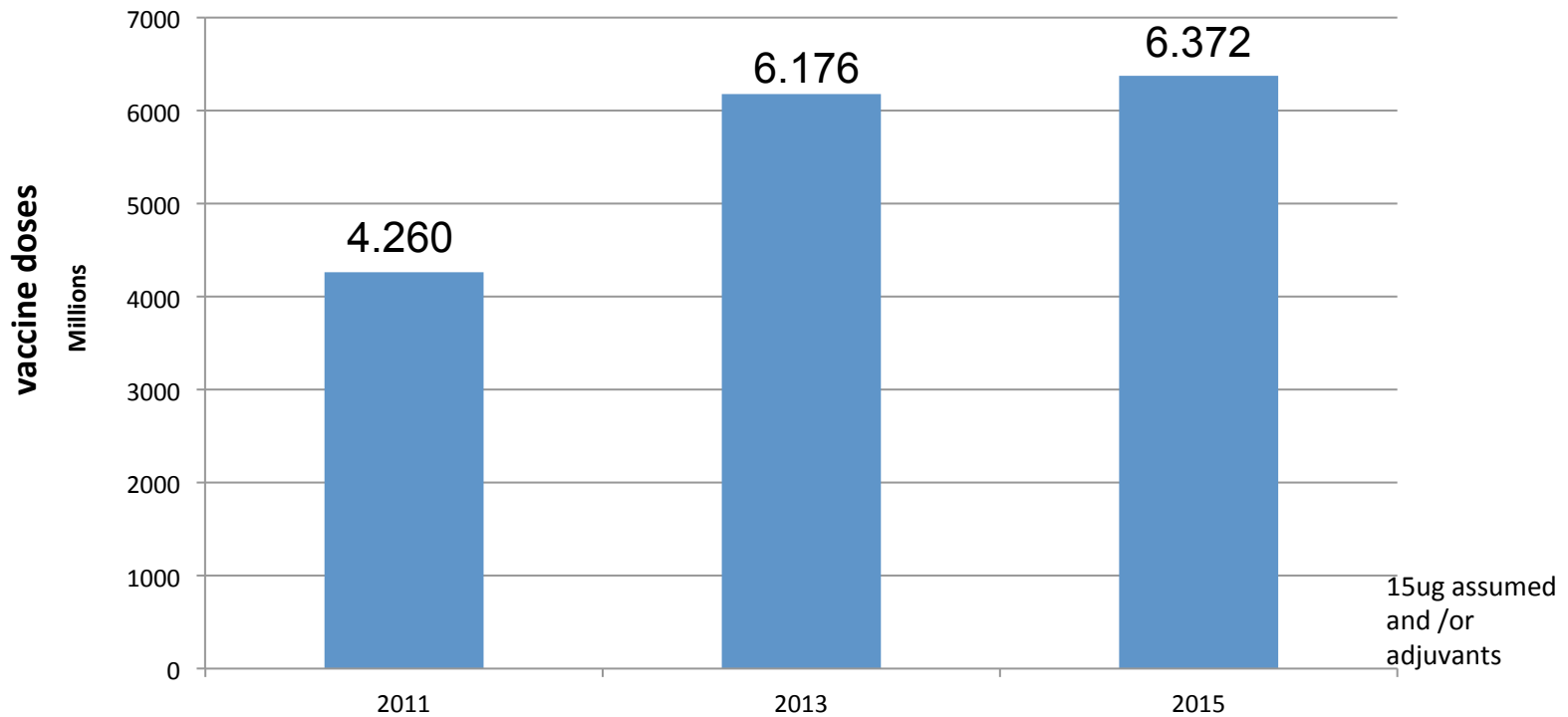


# Seasonal influenza vaccine production capacity

**OFFER**



# Predicted capacity for pandemic influenza vaccine production OFFER



# Lessons learnt – current model

- Use the seasonal vaccine to “prepare and maintain” the system for pandemic influenza response (approval from NRA, supply/cold chain, administration at various facility levels, HCW informed, trained, experienced, etc.)
- Ensure surge capacity is built on the available health system infrastructure, human resources and governance system
- Preparedness has a cost: allocation of adequate resources is key! – cost-benefit + risk analysis

# THANK YOU!

- For more information:

Claudia Nannei

[nanneic@who.int](mailto:nanneic@who.int)

[GAP flu vaccine@who.int](mailto:GAP_flu_vaccine@who.int)