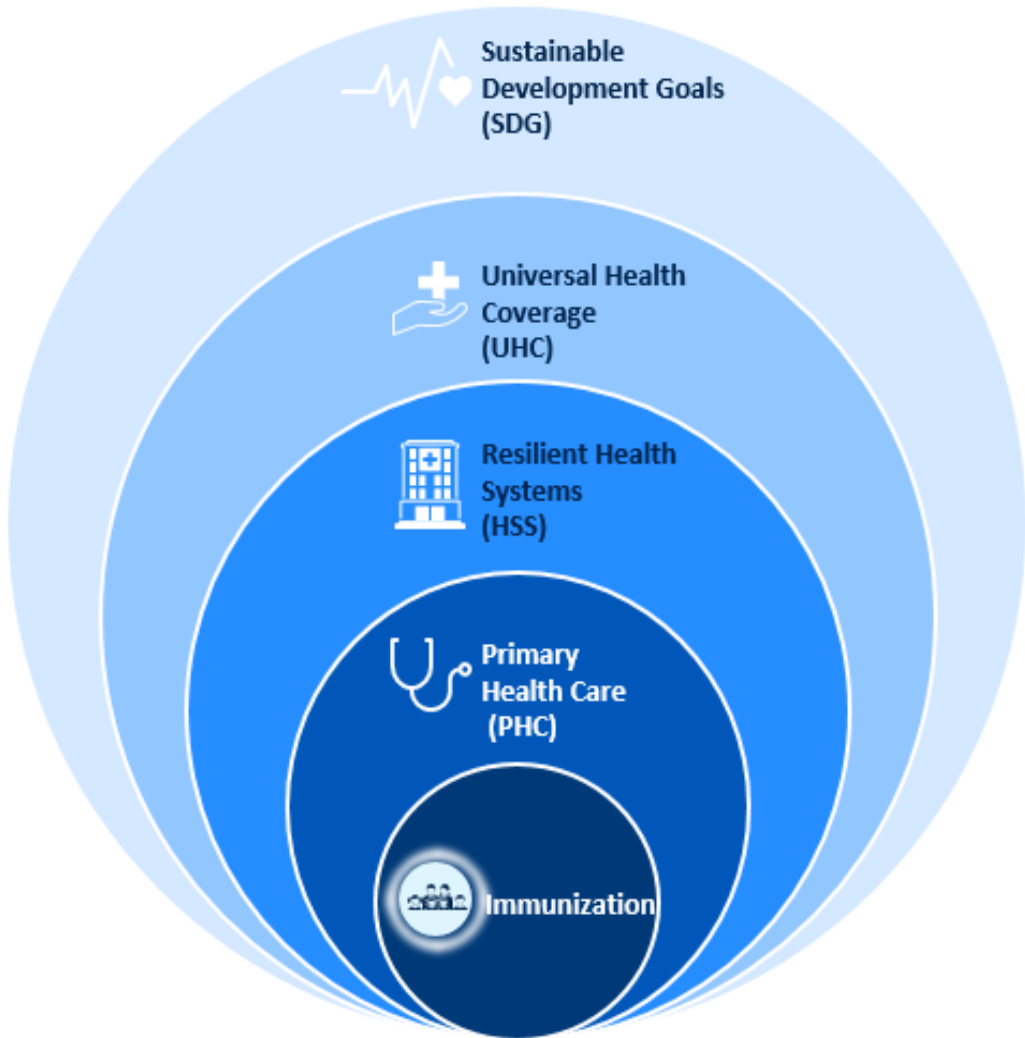


Making decisions with available data – global & donor perspective

**Raymond Hutubessy PhD
WHO Immunization, Vaccines and Biologicals (IVB) department
Geneva, Switzerland
hutubessyr@who.int**

Immunization is a core to PHC, UHC and SDG



WHAT DO YOU NEED TO GET, BE AND STAY HEALTHY?

HEALTHY?

CAN YOU GET HELP FROM A WELL-TRAINED HEALTH WORKER?

CAN YOU GET TREATMENT THAT HELPS YOU GET BETTER, AND IS SAFE?

CAN YOU GET THE MEDICINES AND OTHER HEALTH PRODUCTS YOU NEED?

WHO WILL PAY FOR IT?

ARE THERE POLICIES IN PLACE TO MAKE QUALITY SERVICES AVAILABLE TO EVERYONE, EVERY TIME?

DOES YOUR GOVERNMENT HAVE THE INFORMATION IT NEEDS TO MAKE THE RIGHT DECISIONS ABOUT THE WHOLE SYSTEM?

THE WORLD HEALTH ORGANIZATION IS WORKING AROUND THE WORLD SO THAT ALL PEOPLE AND COMMUNITIES RECEIVE THE QUALITY SERVICES THEY NEED, AND ARE PROTECTED FROM HEALTH THREATS, WITHOUT SUFFERING FINANCIAL HARDSHIP.

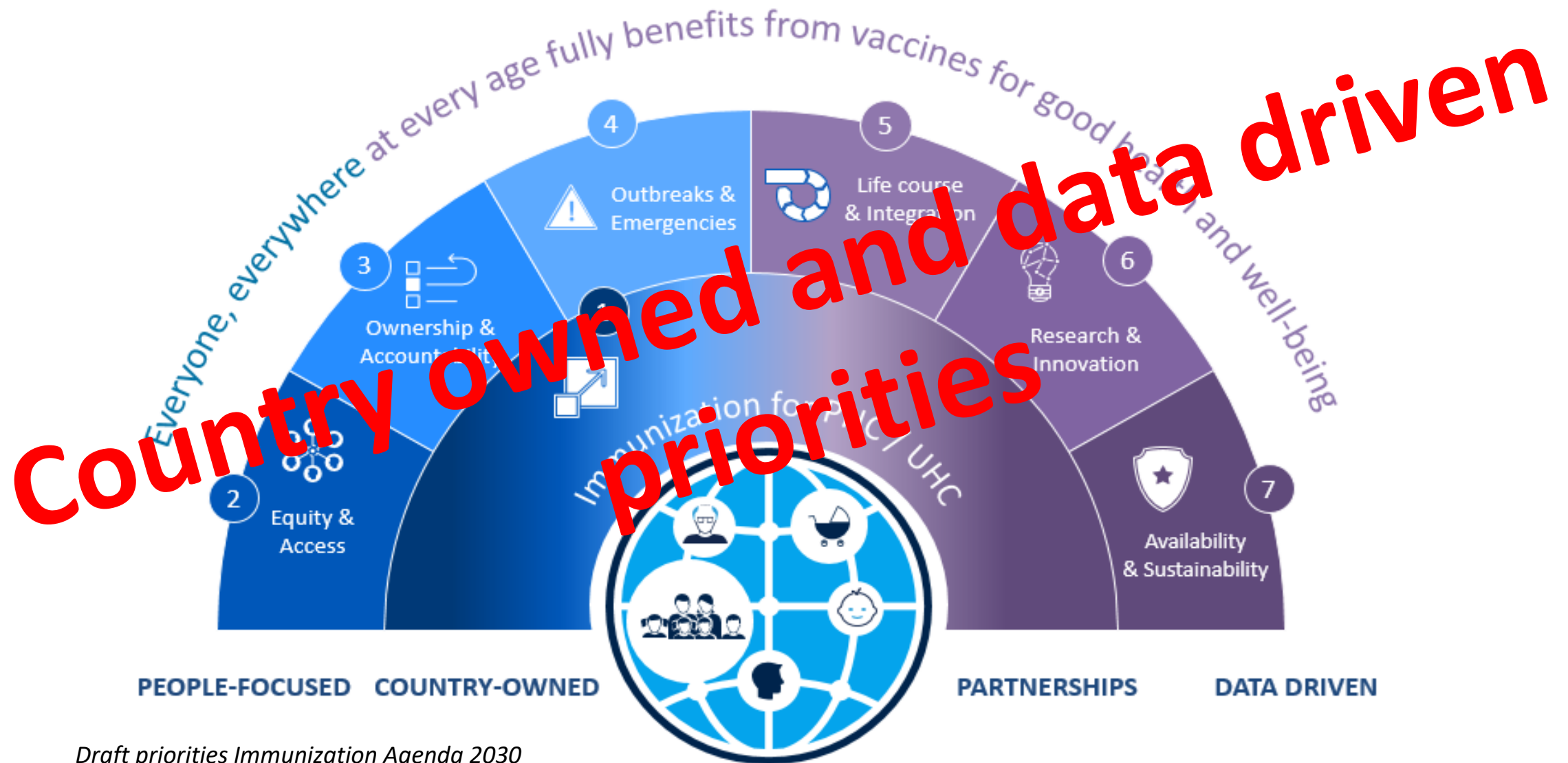
THAT'S WHAT WE CALL

UNIVERSAL HEALTH COVERAGE

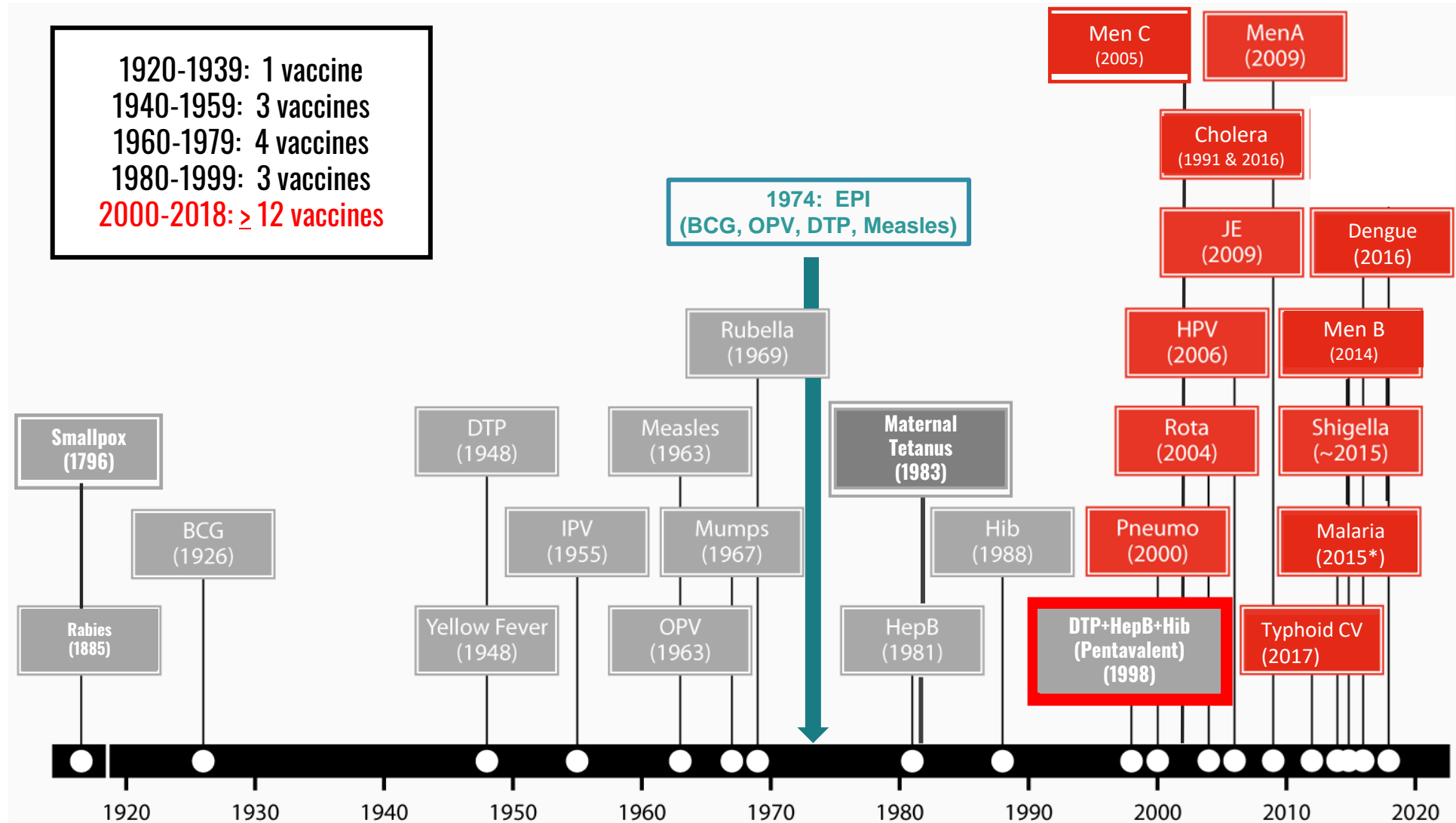
World Health Organization

WWW.WHO.INT/UHC

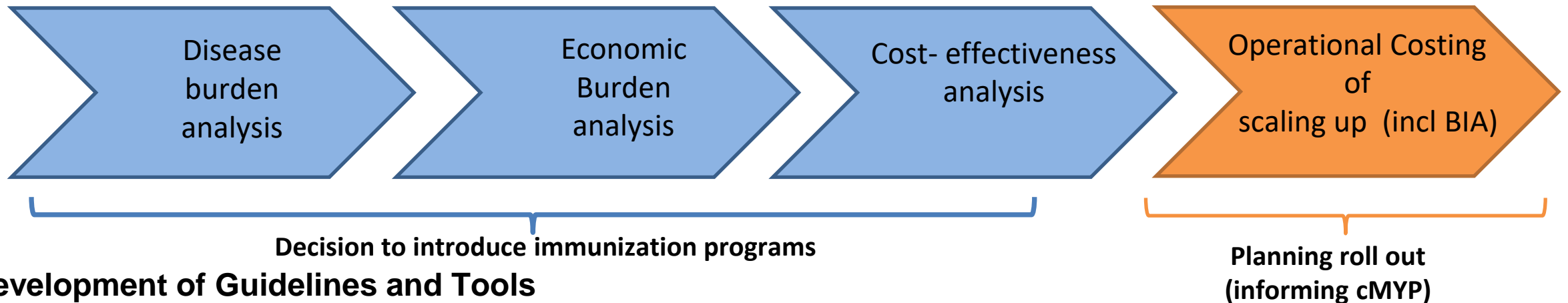
UHC is central to the Immunization Agenda 2030



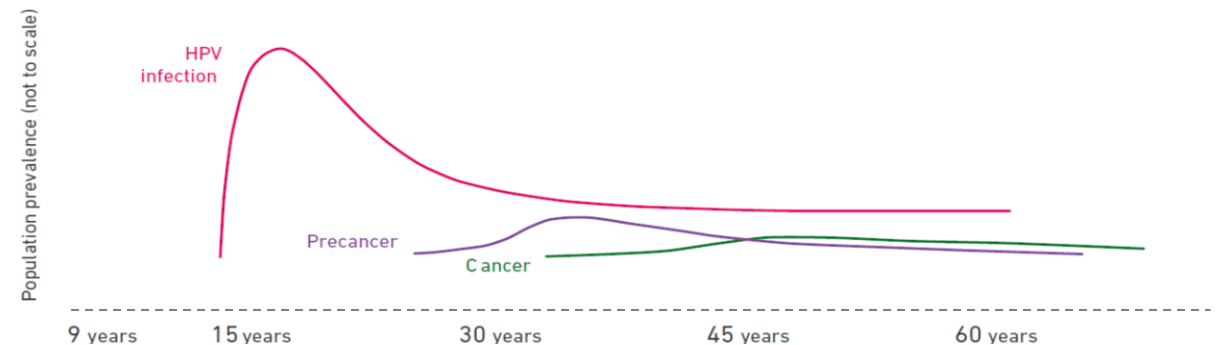
Substantial Advancement in Vaccine Innovation in last 15 years...and more to come



WHO's Vaccine Economic Analysis Value Chain for Decision Making



- **Development of Guidelines and Tools**
 - **ECONOMIC ANALYSIS VALUE CHAIN**
 - INFLUENZA VACCINES
 - HUMAN PAPILOMA VACCINES
 - CHOLERA AND TYPHOID VACCINES
 - MALARIA AND DENGUE VACCINES
- **Model comparisons for validation**
- **Life course Approach & Integration**
- **More country owned/data driven evidence by**
 - **Social characteristics**
 - **Across all levels (national and sub-national)**

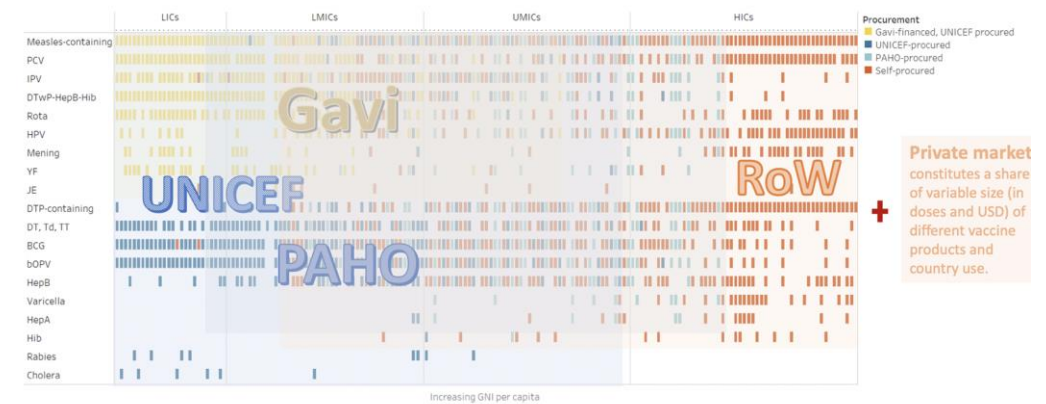


Primary Prevention	Secondary Prevention	Tertiary Prevention
Girls 9-14 years <ul style="list-style-type: none"> • HPV vaccination Girls and boys, as appropriate	Women > 30 years of age "Screen and treat" – single visit approach	All women as needed Treatment of invasive cancer at any age and palliative care

Immunization Financing Challenges in MICs

- **Relative high new vaccine prices**
 - transparency
 - pooled procurement
- **Efficiency in resource use**
- **Budget allocation for immunization programmes are often based on historical expenditures and budget ceilings rather than *needs* based**

Market Information for Access: the missing segments



Source: Developed by WHO with WHO MIAA Purchase Data, UNICEF SD, PAHO RF, Gavi, GVM.

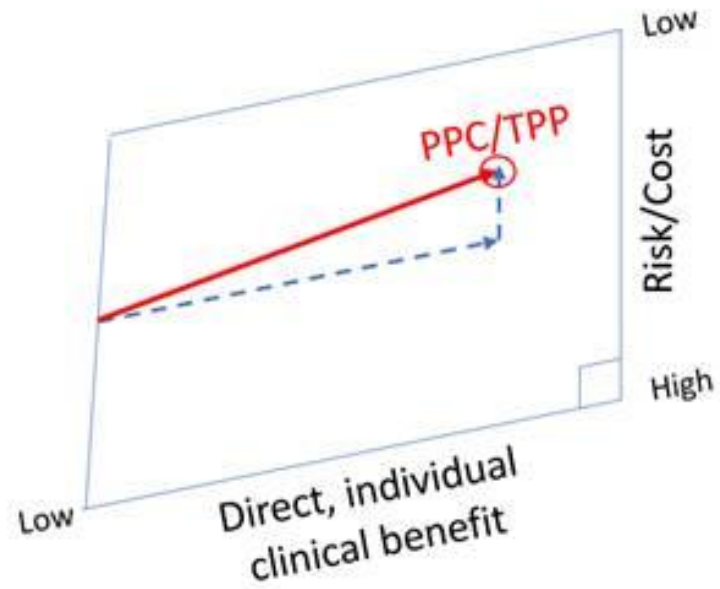
The WHO Full Public Value for vaccines is a concept *in development* that describes the global value of a vaccine

...and considers the data that will be needed to support policy recommendations & uptake in LMICs

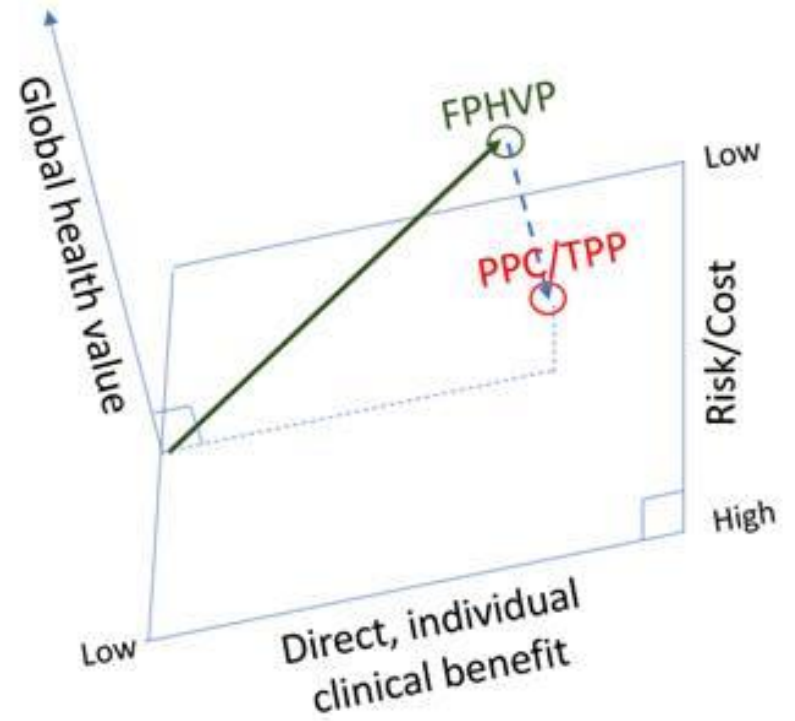


- Articulates the value of the vaccine **from the perspective of multiple stakeholders**
- Serves as an end-to-end compendium of available evidence to support advocacy and inform decision making at various stages of product development
- Identifies gaps to guide funding decisions and assessment of risk

Current approach: PPC/TPP-driven



Proposed approach: FPHVP drives PPC/TPP



VALUE PROPOSITION

COMMUNITIES AND POPULATIONS

RIGHTS of MY COMMUNITY MY FAMILY ME

- 1 Rights-based MESSAGE
- 2 V+I are safe, effective + are a gateway to services
- 3 responsibility to + FOR you, FAMILY, community

IN-COUNTRY PARTNERS

Healthy populations
esp CHILDREN

BIG ROI
children have RIGHTS to SERVICES can be a COORDINATED effort

AUGN
And we can E-X-T-E-N-D the REACH of OUR SERVICES

REGIONAL FINANCIAL INSTITUTIONS

IMMUNIZATION as a DEVELOPMENT AGENDA

USCs AMR NCDs connect to economic DATA

NEW DATA NEEDED

GREAT ROI

GLOBAL ADVOCACY ORGS

HUMAN RIGHTS and EQUITY IMPACT PLATFORM
to address Routine care and emergencies

NEW STAKEHOLDERS
An untapped resource

NEW PHILANTHROPIST

think globally - for future GENERATIONS

can be packaged with other INTERVENTIONS: reach underserved POPULATIONS

it WORKS WHEN EVERYONE does it

NATIONAL/SUBNATIONAL GOVERNMENT

SHORT + LONG TERM ROI

"save LIVES"
"immunization HELPS YOU DELIVER SERVICES"

Cost of INACTION is HIGH

ELECTED OFFICIALS

- UHC/PHC Looks good
- MEET PEOPLE'S NEEDS
- outbreaks are BAD publicity + EXPENSIVE
- outbreaks/POOR HEALTH = LOSS of WORKER PRODUCTIVITY
- RECOGNITION for good PROGRAMS = RE-ELECTABLE
- UHC: HEALTH SECURITY

85% DON'T BE COMPLACENT. DON'T FORGET WHAT GOT US HERE

ADVOCATE FOR OTHER SECTORS - it's a WIN-WIN

MEET STAKEHOLDERS in THEIR language

EXPANDING: create a NEW IMMUNIZATION AGENDA

POVERTY ALLEVIATION = BETTER ECONOMICS

PRIVATE SECTOR

WHAT'S NEW: role of TARGETED EDUCATION

NEW: VACCINE DELIVERY and PREVENTION

NEEDS: CONVENIENCE - and a REGULATED FRAMEWORK to GUIDE ENGAGEMENT

OFTEN HIGH TRUST - eg pharmacist

you WILL SUCCEED!
You're PART of a movement building HEALTH SYSTEMS

You HAVE TRUST and EXPERTISE to UNIQUELY SHIFT Society and media

guide a BROADER research agenda globally with your EXPERIENCE

Traditional + Social MEDIA

ROI + DATA

INFLUENCING ROLE **STORIES**

LINK to POLITICAL AGENDAS

HEALTHY KIDS, FAMILIES, WORKERS

COST EFFECTIVE: HEALTH TO WEALTH

GO FOR WIN-WIN

advocacy is a 2-way street

GLOBAL DONOR

- 1 SECURITY FRAMEWORK
- 2 VALUE for \$
- 3 IMPACT on SGDs

Need a strategy to engage RESEARCHERS esp anti-VAXX

WHO ELSE: ACADEMICS

Selected references

Systematic reviews

- Ng SS, Hutubessy R, Chaiyakunapruk N. Systematic review of cost-effectiveness studies of human papillomavirus (HPV) vaccination: 9-Valent vaccine, gender-neutral and multiple age cohort vaccination. *Vaccine*. 2018 May 3;36(19):2529-2544.
- Teoh SL, Kotirum S, Hutubessy RCW, Chaiyakunapruk N. Global economic evaluation of oral cholera vaccine: A systematic review. *Hum Vaccin Immunother*. 2018 Feb 1;14(2):
- Chongmelaxme B, Hammanee M, Phooaphirak W, Kotirum S, Hutubessy R, Chaiyakunapruk N. Economic evaluations of Haemophilus influenzae type b (Hib) vaccine: a systematic review. *J Med Econ*. 2017 Oct;20(10):1094-1106.
- Setiawan D, Oktora MP, Hutubessy R, Riewpaiboon A, Postma MJ. The health-economic studies of HPV vaccination in Southeast Asian countries: a systematic review. *Expert Rev Vaccines*. 2017 Sep;16(9):933-943.
- Kotirum S, Vutipongsatorn N, Kongpakwattana K, Hutubessy R, Chaiyakunapruk N. Global economic evaluations of rotavirus vaccines: A systematic review. *Vaccine*. 2017 Jun 8;35(26):3364-3386

Guidance documents

- Drolet M, Bénard É, Jit M, Hutubessy R, Brisson M. Model Comparisons of the Effectiveness and Cost-Effectiveness of Vaccination: A Systematic Review of the Literature. *Value Health*. 2018 Oct;21(10):1250-1258.
- Mauskopf J, Standaert B, Connolly MP, Culyer AJ, Garrison LP, Hutubessy R, Jit M, Pitman R, Revill P, Severens JL. Economic Analysis of Vaccination Programs: An ISPOR Good Practices for Outcomes Research Task Force Report. *Value Health*. 2018 Oct;21(10):1133-1149.
- Newall AT, Chaiyakunapruk N, Lambach P, Hutubessy RCW. WHO guide on the economic evaluation of influenza vaccination. *Influenza Other Respir Viruses*. 2018 Mar;12(2):211-219. doi: 10.1111/irv.12510. Epub 2017 Dec 27. Review.
- Carvalho N, Jit M, Cox S, Yoong J, Hutubessy RCW. Capturing Budget Impact Considerations Within Economic Evaluations: A Systematic Review of Economic Evaluations of Rotavirus Vaccine in Low- and Middle-Income Countries and a Proposed Assessment Framework. *Pharmacoeconomics*. 2018 Jan;36(1):79-90.

Tools

- Pecenka C, Munthali S, Chunga P, Levin A, Morgan W, Lambach P, Bhat N, Neuzil KM, Ortiz JR, Hutubessy R. Maternal influenza immunization in Malawi: Piloting a maternal influenza immunization program costing tool by examining a prospective program. *PLoS One*. 2017 Dec 27;12(12):
- Loganathan T, Ng CW, Lee WS, Hutubessy RCW, Verguet S, Jit M. Thresholds for decision-making: informing the cost-effectiveness and affordability of rotavirus vaccines in Malaysia. *Health Policy Plan*. 2018 Mar 1;33(2):204-214.
- Chaiyakunapruk N, Kotirum S, Newall AT, Lambach P, Hutubessy RCW. Rationale and opportunities in estimating the economic burden of seasonal influenza across countries using a standardized WHO tool and manual. *Influenza Other Respir Viruses*. 2018 Jan;12(1):13-21
- Botwright S, Holroyd T, Nanda S, Bloem P, Griffiths UK, Sidibe A, Hutubessy RCW. Experiences of operational costs of HPV vaccine delivery strategies in Gavi-supported demonstration projects. *PLoS One*. 2017 Oct 10;12(10):e0182663.
- Jit M, Brisson M, Portnoy A, Hutubessy R. Cost-effectiveness of female human papillomavirus vaccination in 179 countries: a PRIME modelling study. *Lancet Glob Health*. 2014 Jul;2(7):e406-14.