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Vaccine Procurement Practitioners Network – Webinar

How to build an investment case for immunisation – Discussion with Egypt, Morocco and Tunisia

30 January 2024, 2pm – 2:45pm GMT+1



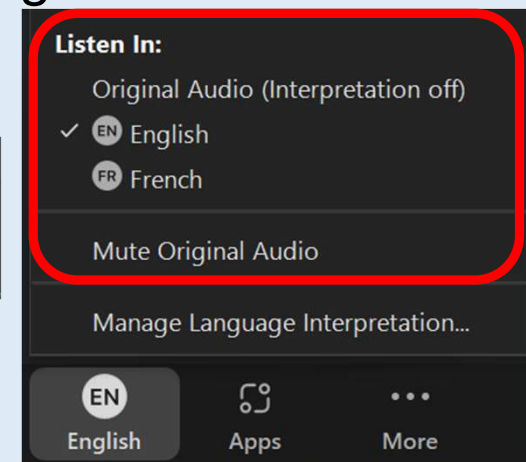
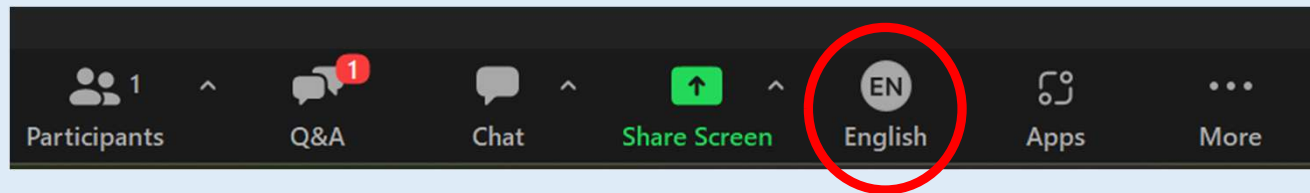
AGENDA

Time	Topic
2:00pm GMT+1 (2 mins)	Welcome and introduction
2:02pm GMT+1 (5 mins)	How to create and use an investment case for new vaccine introduction
2:07pm GMT+1 (20 mins)	Panel discussion
2:27pm GMT+1 (15 mins)	Questions & Answers
2:42pm GMT+1 (3 mins)	Closing remarks
2:45pm GMT+1	End & Further E-discussion on the VPPN

ZOOM FUNCTIONS

Interpretation

- Click on the Language button and choose the language you wish to hear. For this webinar, *English* or *French* are available.
- To hear the interpreted language only, click 'Mute Original Audio'.

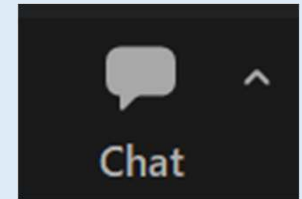


ZOOM FUNCTIONS

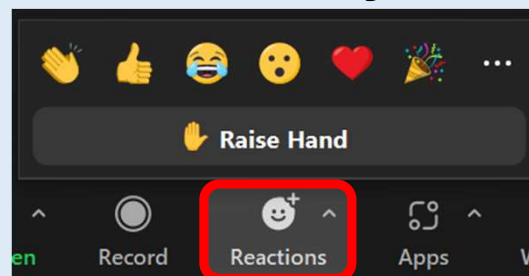
Chat

Use the Chat feature:

- For **all your questions** (regarding the topic or the logistics)
- To **introduce yourself** (name, organisation, country)



During the Q&A, you can also **raise your hand** to ask a question.



RECORDING AND SHARING ON THE VPPN

Recording

These sessions are recorded and your attendance is consent to be recorded.

Knowledge Sharing

The presentations and recording will be **shared on the [Vaccine Procurement Practitioners Network \(VPPN\)](#)**.

INTRODUCTION

Key Learning Objectives

- Share key steps, challenges and best practices regarding the vaccine introduction process
- Provide peer-to-peer and expert knowledge on to strengthen capacity on how to build an investment case for immunisation
 - Answer questions on sustainable financing

INTRODUCTION

Our panellists today

Egypt:

- Dr. Mohammad Abdelfattah
*Undersecretary for Preventive Affairs,
Ministry of Health and Population*
- Dr. Hesham Magdy
*Medical Epidemiologist, Ministry of Health
and Population*

Morocco:

- Dr. Mohammed Benazzouz
*Head of the National Immunisation
Programme, Ministry of Health*

Tunisia:

- Dr. Mahrez Yahyaoui
*Head of the National Immunisation
Programme, Ministry of Health*

UNICEF:

- Ulla Kou Griffiths
*Senior Adviser, UNICEF Programme
Group*

Moderator:

- Diana Kizza
*Health Specialist, UNICEF Middle East
and North Africa Regional Office*

HOW TO CREATE AND USE AN INVESTMENT CASE FOR NEW VACCINE INTRODUCTION



Decision-making for a new vaccine introduction

Key factors to consider

1. Enabling environment

- Social factors
- Economic factors
- Political factors
- Regulatory/ Institutional factors
- Stakeholders/ Interest groups

2. Studies

- Burden of disease
- Costs
- Vaccine characteristics
- Programmatic characteristics

3. Financing:

- Funding sources
- Forecasting
- Sustainability

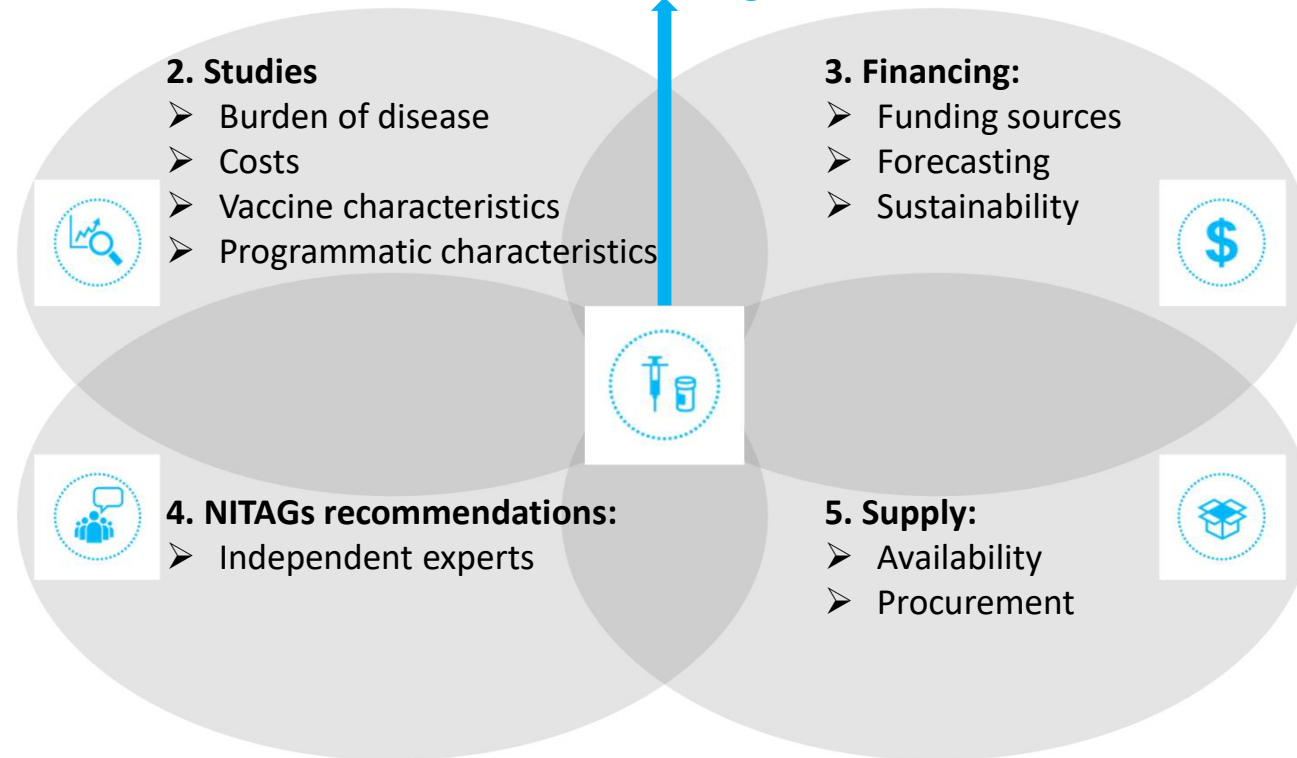
4. NITAGs recommendations:

- Independent experts

5. Supply:

- Availability
- Procurement

New vaccine
introduction agreed



Definitions

INVESTMENT CASE

- Useful for advocacy
- Contains an economic evaluation and broader topics:
 - Programmatic issues
 - Fiscal space
 - Rights-based and equity arguments
- Investment cases often include a cost-benefit analysis or return on investment
 - This involves attaching a monetary value on morbidity and mortality, which is methodologically challenging

Ref: The UNICEF public finance toolkit

<https://www.unicef.org/documents/public-finance-toolkit>

ECONOMIC EVALUATION

- Comparative analysis of alternative courses of action in terms of both their costs and their consequence
 - For instance, with and without a new vaccine

Three types of economic evaluation

Type	Cost measurement	Effect measurement
Cost-effectiveness analysis	\$	Natural units (cases, life years)
Cost-utility analysis	\$	Healthy years (QALYs/DALYs)
Cost-benefit analysis	\$	\$

Examples of investment cases



Systematic Literature Review

A Scoping Review of Investment Cases for Vaccines and Immunization Programs

So Yoon Sim, MA, MSPH,¹ Mark Jit, PhD,^{2,3} Dagna Constenla, PhD,¹ David H. Peters, MD, DrPH,¹ Raymond C.W. Hutubessy, PhD^{4*}

¹Department of International Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA; ²London School of Hygiene & Tropical Medicine, London, UK; ³Modelling and Economics Unit, Public Health England, London, UK; ⁴Initiative for Vaccine Research, Department of Immunization, Vaccines and Biologicals, World Health Organization, Geneva, Switzerland

- 24 vaccine investment cases identified between 1980-2017
- 21 global analyses and only 3 country specific (2 from Bangladesh, 1 from China)
- Audience: mainly donors and 'all stakeholders'
- 14 for licensed vaccines and 5 for pipeline vaccines (TB, malaria, ETEC)

Country specific

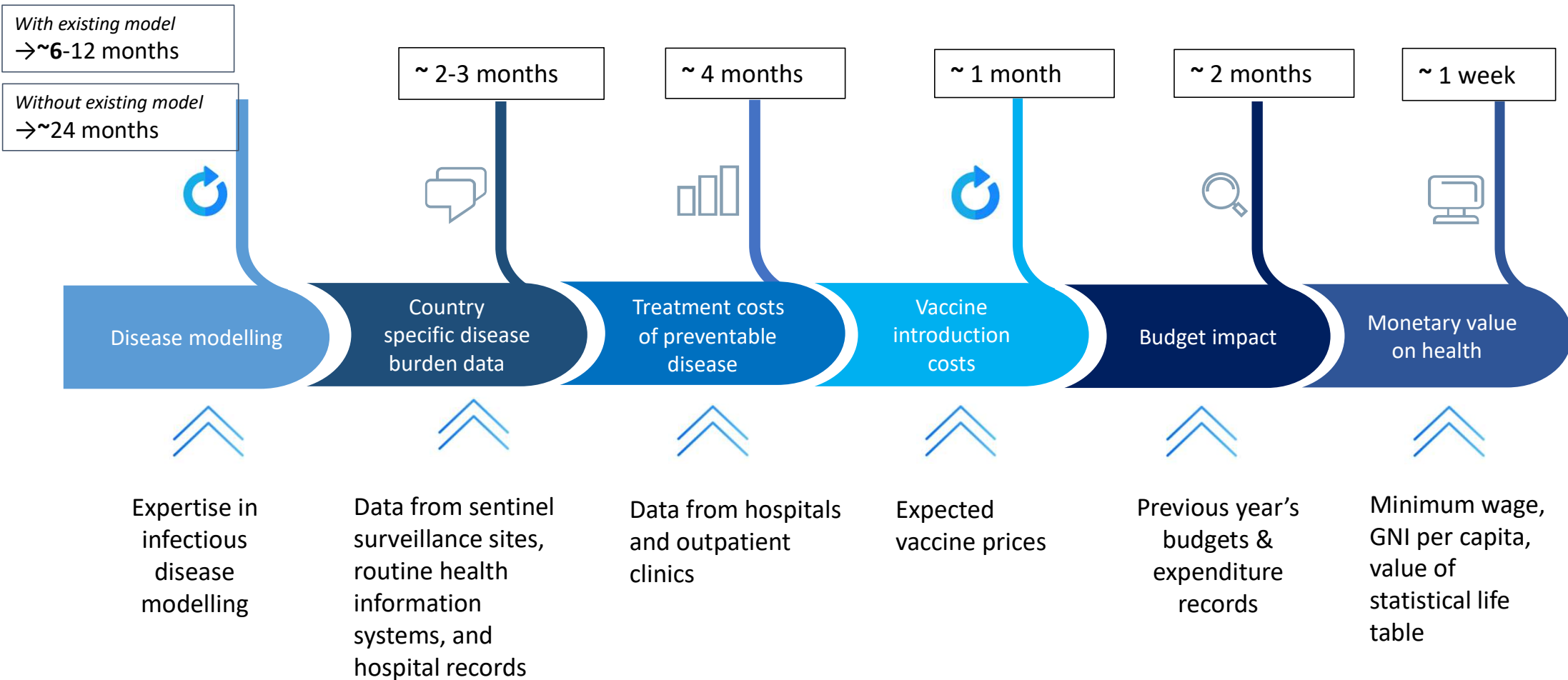
Cost-effectiveness and budget-impact of sustaining *Haemophilus influenzae* type b, rotavirus and pneumococcal vaccination in the Sudan during and after transition from Gavi support

18th December 2020

Sudan investment case: Key findings

- Impact of Hib, rotavirus and PCV:
 - Prevent ~80,000 deaths and ~US\$ 48 million disease treatment costs during 2022-2031
- Cost to the Government of sustaining the vaccines:
 - ~ US\$ 415 million in procurement costs during 2022-2031, assuming Sudan transitions from Gavi support in 2027
- After subtracting savings from averted healthcare:
 - ~US\$22 million costs in 2022, increasing to around \$45 million annually during period of self-financing (2027-2031)
- When converting benefits to monetary values:
 - Total value estimated as \$12 billion over the ten-year period
 - Increases to \$46 billion when using a higher estimate of the "Value of Statistical Life"

Time & resources needed to develop an investment case



How to best use an investment case for decision-making

- Engage relevant decision makers during the process of developing the investment case
- Gather disease burden and cost data from local sources that decision makers recognize
- Engage local experts/academics in the process
- Ensure advocacy is linked to the budgetary process
- Link to any Health Technology Assessment organization in the country

The decision-making process is complex and political

- Evidence influences decision makers at different points, which cannot be predicted
- It is often important to look for the right moments to advocate

PANEL DISCUSSION



PANEL DISCUSSION

Question 1

Could you briefly describe the status of your immunisation programme?

What vaccines have you introduced over the last 12 months?

What vaccines are you planning to introduce in the near future?

PANEL DISCUSSION

Status of Immunisation Programme

	EGYPT	MOROCCO	TUNISIA
National Immunization Schedule	<p>10 vaccines</p> <ul style="list-style-type: none"> • Bivalent oral polio vaccine and Salk vaccine • Pentavalent vaccine against diphtheria, tetanus, pertussis (whooping cough), hepatitis B and Haemophilus influenzae type b • Measles, mumps and rubella (MMR) 	<p>13 vaccines</p> <ul style="list-style-type: none"> • BCG • Hepatitis B • OPV • DTwP-HepB-Hib • IPV • MR • DTP • Td 	<p>11 vaccines</p> <ul style="list-style-type: none"> • BCG • Hepatitis B • Pentavalent • Polio (injectable and oral) • PCV • Measles and rubella (MR) • Hepatitis A
Status of NVI (HPV, PCV, RV)	<ul style="list-style-type: none"> • HPV and RV – no timeline for introduction, priority is RV and then HPV • PCV – 2024 	<ul style="list-style-type: none"> • PCV – 2010 • RV – 2010 • HPV – 2022 • PCV 10 to PCV 13 – 2023 	<ul style="list-style-type: none"> • PCV – 2019 • HPV – academic year 2024/2025 • RV – no timeline for introduction
Planned vaccine introductions		<ul style="list-style-type: none"> • Hexavalent • MMR • Hepatitis A 	<ul style="list-style-type: none"> • Tetraxim for 6-year-olds • DTPa for school-age children and pregnant women • HPV – 2024/2025 • DTCa-VPI for 6-year-olds – 2024/2025 • dTCa for pregnant women – 2024

PANEL DISCUSSION

Question 2

What process do you go through to introduce a new vaccine? Using your latest vaccine introduction as a concrete example, could you highlight:

- The process' main recurring steps?
- The challenges you usually face?
- The best practices you have found usually work well?

PANEL DISCUSSION

Question 3

Do you complete an investment case for a new vaccine introduction?

- If yes, what is it useful for and what are the key requirements for a good investment case?
- If no, would an investment case or other types of evidence be useful to introduce a new vaccine?

PANEL DISCUSSION

Question 4

How can UNICEF support you when talking about new vaccines introduction?

Would a process framework or more sharing of other countries' experience be helpful?

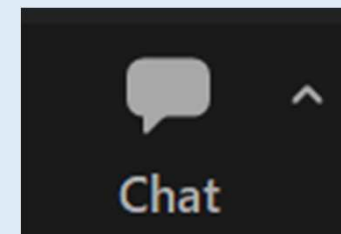
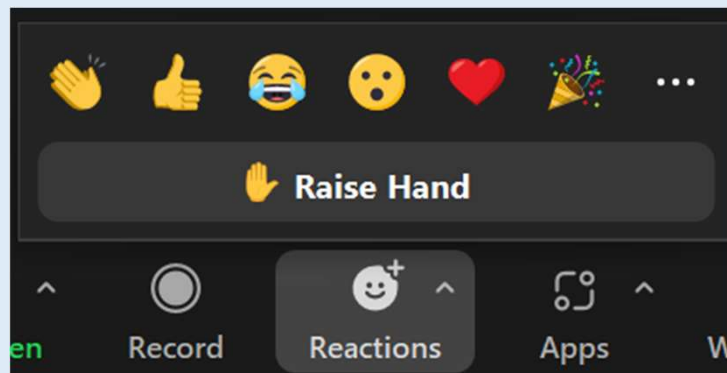
QUESTIONS & ANSWERS



QUESTIONS & ANSWERS

The floor is open for your questions...

...Raise your hand to ask a question or write it in the chat.



CLOSING REMARKS

- Through regional TA, UNICEF is committed to supporting MICS across the region to reverse backsliding in vaccine coverage and to accelerate the introduction of new vaccines. For more information please contact: dkizza@unicef.org or smalm@unicef.org
- Join us on the [Vaccine Procurement Practitioners Network](#)'s platform to continue the discussion and share any other question you might have:

→ [Link to E-discussion](#)

THANK YOU!



ANNEXES



MNTE investment case: Key findings

COUNTRY

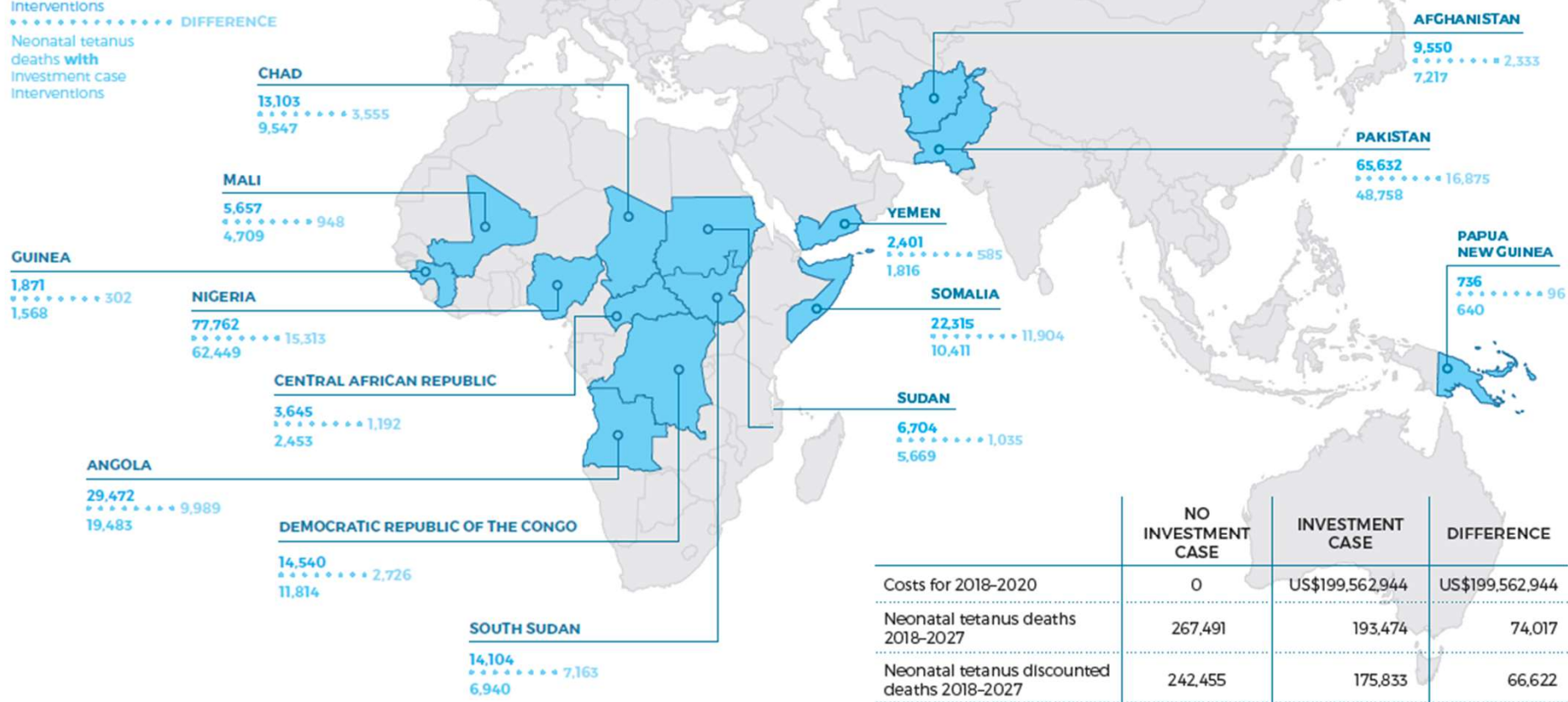
Neonatal tetanus deaths **without** investment case interventions
 DIFFERENCE
 Neonatal tetanus deaths **with** investment case interventions

TOTAL NEONATAL TETANUS DEATHS

267,491 WITHOUT INVESTMENT CASE

..... 74,017 DIFFERENCE

193,474 WITH INVESTMENT CASE



	NO INVESTMENT CASE	INVESTMENT CASE	DIFFERENCE
Costs for 2018-2020	0	US\$199,562,944	US\$199,562,944
Neonatal tetanus deaths 2018-2027	267,491	193,474	74,017
Neonatal tetanus discounted deaths 2018-2027	242,455	175,833	66,622
Cost per death averted			US\$2,696
Cost per discounted death averted			US\$2,995

Examples of investment cases with UNICEF TA

Country specific

Cost-effectiveness and budget-impact of sustaining Haemophilus influenzae type b, rotavirus and pneumococcal vaccination in the Sudan during and after transition from Gavi support

18th December 2020

Contracted institution

London School of Hygiene and Tropical Medicine (LSHTM)

Funding

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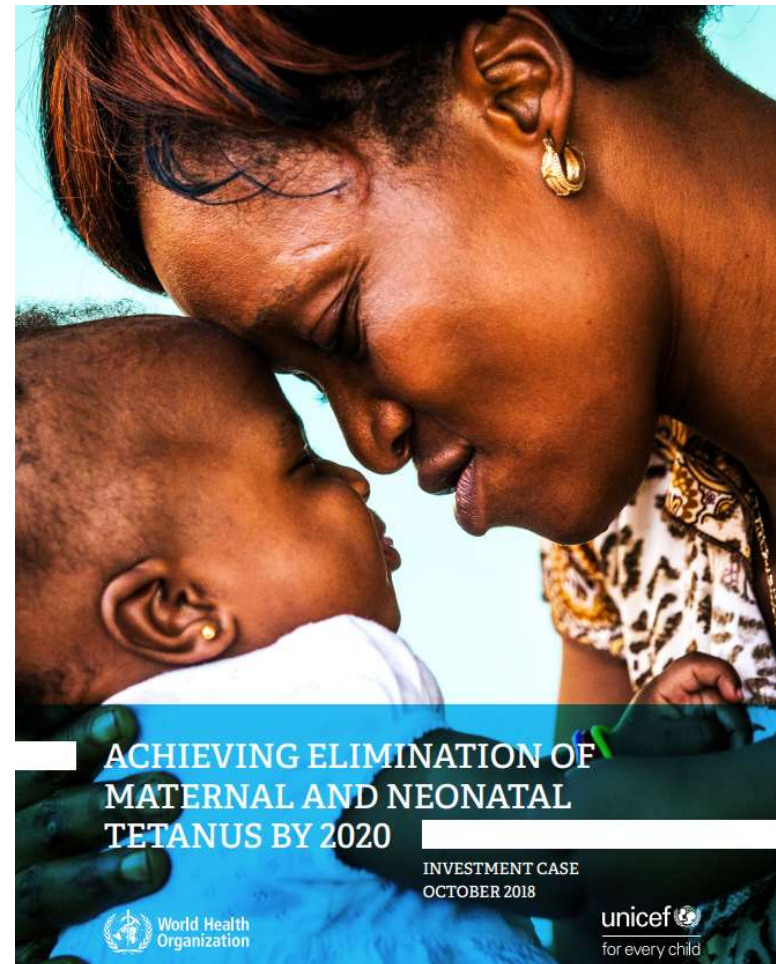
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Global



Yoon Sim et al, 2019

➤ Objectives of investment cases

- Provide information for decision-making
- Advocate for specific goal (e.g. global eradication, establishment of Gavi financing, increase private sector investment).
- Outline strategic plan for introduction of new vaccines

➤ Outcomes reported

- **Burden of disease: defines the magnitude of the problem**
 - Deaths
 - Cases
 - Economic burden (direct and indirect costs)
- **Cost of investment (from payer perspective)**
 - Vaccine price
 - Quantity demanded
 - Delivery costs (sometimes included): cold chain; training and supervision; vehicles and transport; social mobilization and awareness raising; surveillance; monitoring and evaluation; waste management; overhead costs.
- **Impact of investment**
 - Health impact: Deaths averted
 - Economic impact:
 - Incremental cost-effectiveness ratios (ICER)
 - Benefit-cost analyses (BCA)
 - Broader economic benefits – mostly qualitative. E.g reduction of socioeconomic inequalities
- **Other considerations for implementation of investment**
 - Health system capacity: immunization programme capacity; human resources; cold chain; transport; need for integration
 - Vaccine financing landscape

The decision-making process is complex and political

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Health Policy and Planning 2012;27:ii5–ii16
doi:10.1093/heapol/czs035

New vaccine adoption: qualitative study of national decision-making processes in seven low- and middle-income countries

H E D Burchett,^{1*} S Mounier-Jack,¹ U K Griffiths,¹ R Biellik,² P Ongolo-Zogo,³ E Chavez,⁴ H Sarma,⁵ J Uddin,⁵ M Konate,⁴ Y Kitaw,⁴ M Molla,⁶ S Wakasiaka,⁷ L Gilson^{1,8} and A Mills¹

¹Department of Global Health and Development, Faculty of Public Health Policy, London School of Hygiene & Tropical Medicine, UK, ²Consultant epidemiologist, ³Centre for Development of Best Practices in Health, Yaounde Central Hospital, Cameroon, ⁴Independent consultant, ⁵ICDDR,B, Health System and Economics Units, Health System and Infectious Diseases Division, Bangladesh, ⁶Department of Health Management, Environmental Health and Behavioural Sciences, School of Public Health, Addis Ababa University, Ethiopia, ⁷College of Health Sciences, School of Nursing, University of Nairobi, Kenya and ⁸School of Public Health and Family Medicine, University of Cape Town, South Africa

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Accepted 16 February 2012

As more new and improved vaccines become available, decisions on which to adopt into routine programmes become more frequent and complex. This qualitative study aimed to explore processes of national decision-making around new vaccine adoption and to understand the factors affecting these decisions.

Ninety-five key informant interviews were conducted in seven low- and middle-income countries: Bangladesh, Cameroon, Ethiopia, Guatemala, Kenya, Mali and South Africa. Framework analysis was used to explore issues both within and between countries.

- Evidence influences decision makers at different points, which cannot be predicted
- Who is involved in the process is critical