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COVID-19 vaccine delivery: Implementation and evaluation

Use of cost evidence

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Overview of this session

- Results from MOMENTUM Routine Immunization Transformation and Equity Project – Grace Chee, JSI
- Methodology challenges in conducting COVID-19 costing studies during a pandemic – Flavia Moi, ThinkWell
- Practical challenges in conducting COVID-19 costing studies during a pandemic – Ishani Mathur, MSH
- Use of COVID-19 cost evidence for policy – Kelsey Vaughan, UNICEF
- Q&A and discussion

Overview of ongoing UNICEF costing studies

Botswana

- Data collection from national level and a sample (6/18) regions
- No facility-level data collection
- Mix of ingredients approach and top-down estimation
- Inclusion of staff costs:
  - Fiscal costs of all new staff that have been specifically recruited to work on COVID-19 vaccination
  - Opportunity costs of existing human resources' time, if directly involved in vaccination

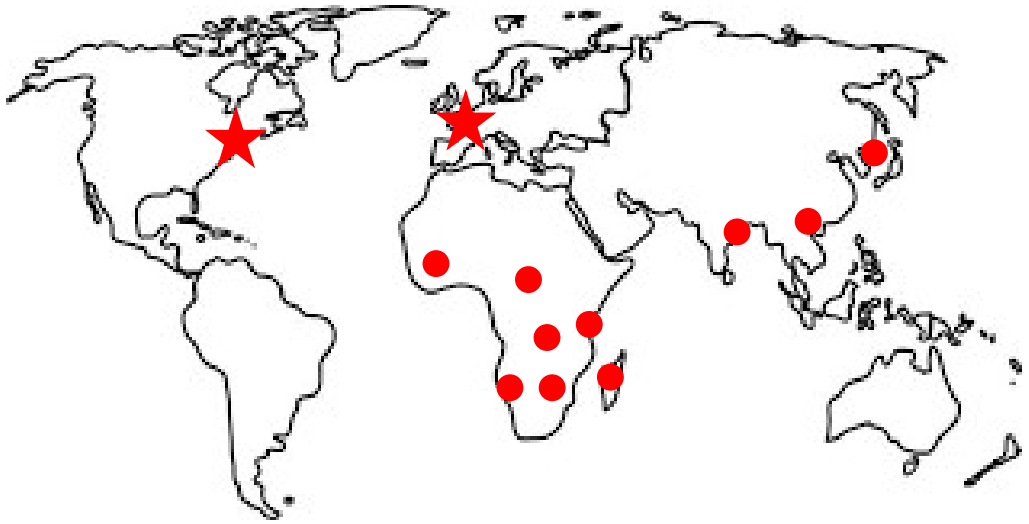
Lesotho

- Protocol currently undergoing clearance by MOH

Botswana: use of different costing methods according to resource type

	Resource type	Ingredient approach	Top-down estimation
1	Planning and coordination	X	X
2	COVID-19 vaccine procurement	X	
3	Syringes & safety boxes	X	
4	Training of vaccinators		X
5	New purchase of regular cold chain equipment	X	
6	New purchase of ultra-cold chain equipment	X	
7	Vaccine transport		X
8	Hand hygiene supplies	X	
9	Personal protective equipment	X	
10	Printed vaccination certificates	X	
11	Electronic vaccination certificates		X
12	Vaccine coverage data management	X	X
13	Human resources for vaccine delivery	X	
14	Supervision	X	
15	Subsistence allowance	X	X
16	Transportation for outreach services	X	X
17	Social mobilization		X
18	Waste management of used syringes	X	X
19	Adverse event monitoring for immunization (AEFI)		X

Use of COVID-19 cost evidence: two levels



● Country-level

★ Global-level

Use of COVID-19 cost evidence at country level?

- Possible uses of costing evidence at country level
  - As inputs into annual planning and budgeting
  - As inputs into comprehensive multi-year planning or strategic plans
  - For advocacy for higher budgetary allocations to health and/or immunization
  - As inputs into funding applications
  - To support or inform a political decision, such as new vaccine introduction
- There are many ongoing COVID-19 vaccination costing studies
  - MSH, ThinkWell and UNICEF alone involved in studies in at least 10 countries: Bangladesh, Botswana, Cote D'Ivoire, Democratic Republic of Congo (DRC), Lesotho, Madagascar, Malawi, Mozambique, Philippines, Vietnam
  - Other studies: CARE, KEMRI, LSHTM, VillageReach
- Despite efforts to conduct studies more quickly, to make evidence quickly available for future COVID-19 budgeting, time from study conception to results is still too long
  - Many countries have already produced revised and updated NDVPs
  - Some countries starting to think about embedding COVID-19 vaccination in PHC, with different cost implications

"Simply making immunization cost evidence available will not lead to uptake at country level."

Tips for improving use of COVID-19 cost evidence at country level

1. **Provide a clear use case**

2. **Make evidence available within windows of opportunity** – have we missed it?

3. **Consult non-health and sub-national stakeholders** (for example, through microplanning at district level)

3. **Tailor evidence and messages for different audiences** – something researchers have done poorly in the past

Key Factors Influencing Use of Immunization Cost Evidence in Country Planning and Budgeting Processes: Experiences From Indonesia, Tanzania, and Vietnam

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Key Messages

- Simply making immunization cost evidence available will not likely lead to uptake at country level, with several potential causes identified.
- Facilitating the 6-step evidence to policy and practice process led to increased recognition by national- and subnational-level stakeholders of the importance of generating and using cost evidence in all 3 countries. However, this did not necessarily translate to actual use.
- Six lessons learned can help future researchers improve the use of immunization cost evidence in country planning and budgeting processes.

Key Implications

- Researchers need to provide a clear use case for cost evidence. Engaging a small multidisciplinary stakeholder group to develop, implement, and later champion the research can help.
- Researchers should make cost evidence available within windows of opportunity required by policy makers and practitioners, even if it occasionally requires a sacrifice between rigor and speed. Researchers need help from local stakeholders to properly tailor, package, and deliver the key messages.
- Researchers need to be prepared to support potential users of cost evidence in translating cost data for use and should build this time into project and funding cycles.

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ABSTRACT

In many low- and middle-income countries, planning cycles and policy decisions are not always informed by cost evidence, even where relevant and recent cost evidence is available. The Immunization Costing Action Network (ICAN) project was a research and learning community designed to strengthen country capacity to generate immunization cost evidence and to understand and improve the evidence-to-policy linkages for the evidence. We identified key factors that increase the likelihood that health policy makers will use evidence for policy making or planning, which shaped the development of a 6-step evidence to policy and practice (EPP) facilitated process. ICAN used the EPP process in Indonesia, Tanzania, and Vietnam from 2016–2019. The experience resulted in several insights regarding country priorities related to cost evidence and factors that determine uptake. Cost evidence is more likely to be used if it answers a specific policy question prioritized by the immunization program, while the use case is less clear and urgent for routine planning and program management. Nonhealth ministries and subnational stakeholders can provide important perspectives to inform the research and its usability. The use case for evidence should be revisited periodically as divergences from formal planning cycles are common and new policy windows open. Ensuring evidence is available at the right time is critical, even if this requires a sacrifice between rigor and speed. Engaging a small group of stakeholders, rather than an individual, to champion the research may be more effective, and the research has greater legitimacy if it is produced by multidisciplinary country teams. Evidence and messages should be tailored for and packaged targeting different audiences. Going forward, continued support is necessary to bridge the divide between those who generate cost evidence and those who translate evidence for policy and planning decisions.

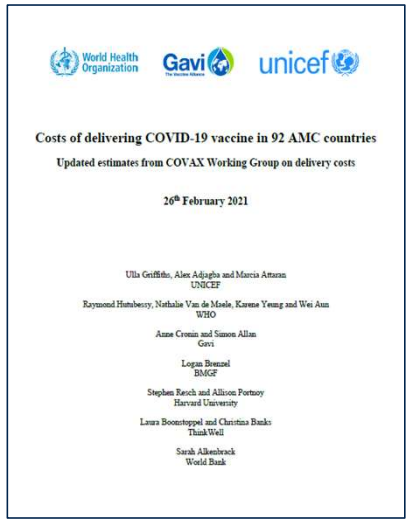
BACKGROUND

Governments need to understand what it costs to deliver vaccines to reach coverage goals, address health equity, manage the introduction of new vaccines, and ensure efficient use of resources. Even in low- and middle-income countries where relevant and recent cost evidence is available, planning cycles and policy decisions are not always informed by evidence. Globally, there is limited understanding of how economic or other types of evidence are used in health policy

https://www.ghspjournal.org/content/10/1/e2100264.abstract

Use of COVID-19 cost evidence at global level

- Input into UNICEF/Harvard global model that is used for determining global fundraising targets
  - Anticipated challenges: 1) comparability between studies – methods, but also definitions of strategies, etc.; 2) cost per dose at low coverage levels may differ from higher coverage; 3) change in strategies and approach: from fixed site and outreach to high volume to integration into PHC


World Health Organization Gavi unicef

Costs of delivering COVID-19 vaccine in 92 AMC countries

Updated estimates from COVAX Working Group on delivery costs

26th February 2021

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Use of COVID-19 cost evidence: country- and global-levels

- Results must be carefully communicated – some studies showing financial costs not very high (and lower than routine immunization)
  - Not finding huge expenditures for cold chain, social mobilization, transport, as originally expected
  - No large-scale HRH mobilization
  - Possibly related to delayed disbursement of funds? Absorption capacity?

- Message isn't that COVID-19 vaccination is "cheap"
  - Our work indicates countries were forced to work with what they had, used virtual trainings, didn't pay per diems or transport allowances where money was short, made use of personal vehicles, etc. – in some cases these adjustments worked well
  - In some cases resources diverted away from routine immunization or other health services to make COVID-19 vaccination possible

Questions and discussion