

Costing to support economic evaluations in global health

Carol Levin, Ph.D

Disease Control Priorities Project

*Clinical Associate Professor, Department of Global Health,
University of Washington*

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Interest is high

Childhood Pneumonia and Diarrhoea 2
Interventions to address deaths from childhood pneumonia and diarrhoea equitably: what works and at what cost?



Maternal and Child Nutrition 2

Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost?

Cost-effectiveness of HIV prevention for high-risk groups at scale: an economic evaluation of the Avahan programme in south India

Is there scope for cost savings and efficiency gains in HIV services?
A systematic review of the evidence from low- and middle-income countries

Integrated HIV Testing, Malaria, and Diarrhea Prevention Campaign in Kenya: Modeled Health Impact and Cost-Effectiveness

Avahan and the cost-effectiveness of "prevention as prevention"

Patient costs of accessing collaborative tuberculosis and human immunodeficiency virus interventions in Ethiopia

Advancing social and economic development by investing in women's and children's health: a new Global Investment Framework

Multiple uses for cost data

Priority setting for new interventions or introducing new technologies, drugs, vaccines

Resource requirements and advocacy

Financial planning and budgeting

Improving technical efficiency

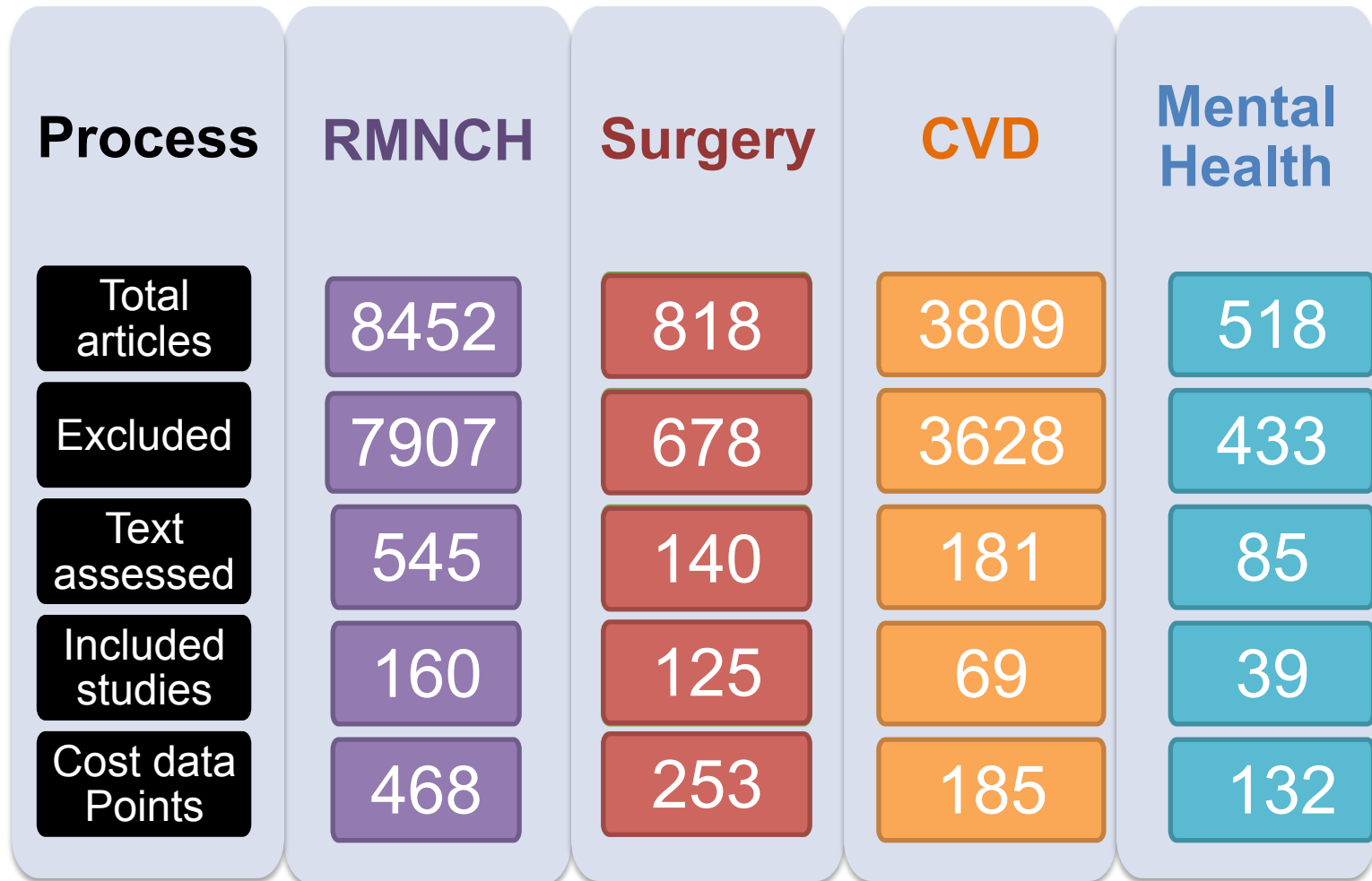
DCP Literature reviews

- **Searches completed for economic evaluations (costs, CEA)**
- **RMNCH**
 - Reproductive health and family planning
 - Maternal, Child and Neonatal health and nutrition
 - PMTCT
- **Non-communicable disease**
 - CVD, diabetes, respiratory
 - Cancers (Breast, cervical, pediatric, liver, colon)
 - Mental Health
- **Essential Surgery**

Inclusion criteria

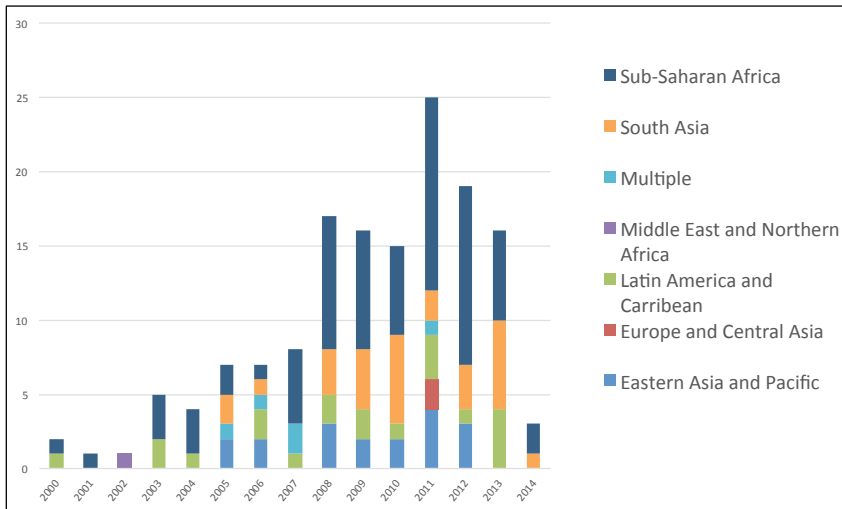
- **Type of evaluation**
 - Partial economic evaluation
 - Includes only costing data
 - Full economic evaluation:
 - Includes both costs and effectiveness
 - Only keep if it has good cost data
- **Measurement/Study Type**
 - Must have either or both:
 - Unit costs
 - Cost of intervention
- **Includes direct costs, or both direct and direct non-medical**
 - Focus on costs of implementing the interventions
 - Treatment costs
- **Only English articles**

By the numbers: Article retrieval and unit cost extraction

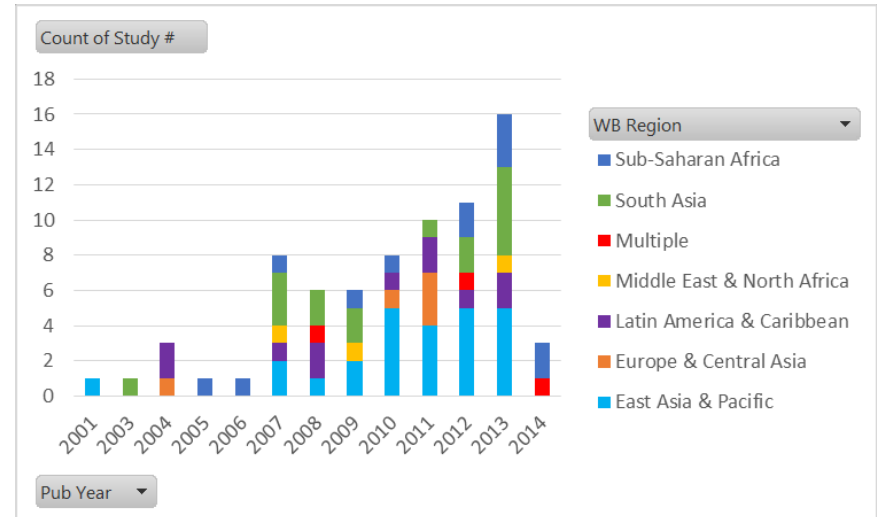


Increase in number of studies over time

Reproductive, maternal, neonatal and child health



Cardiovascular and respiratory cost studies



Growing body of literature in low and middle income countries

So what's the problem?

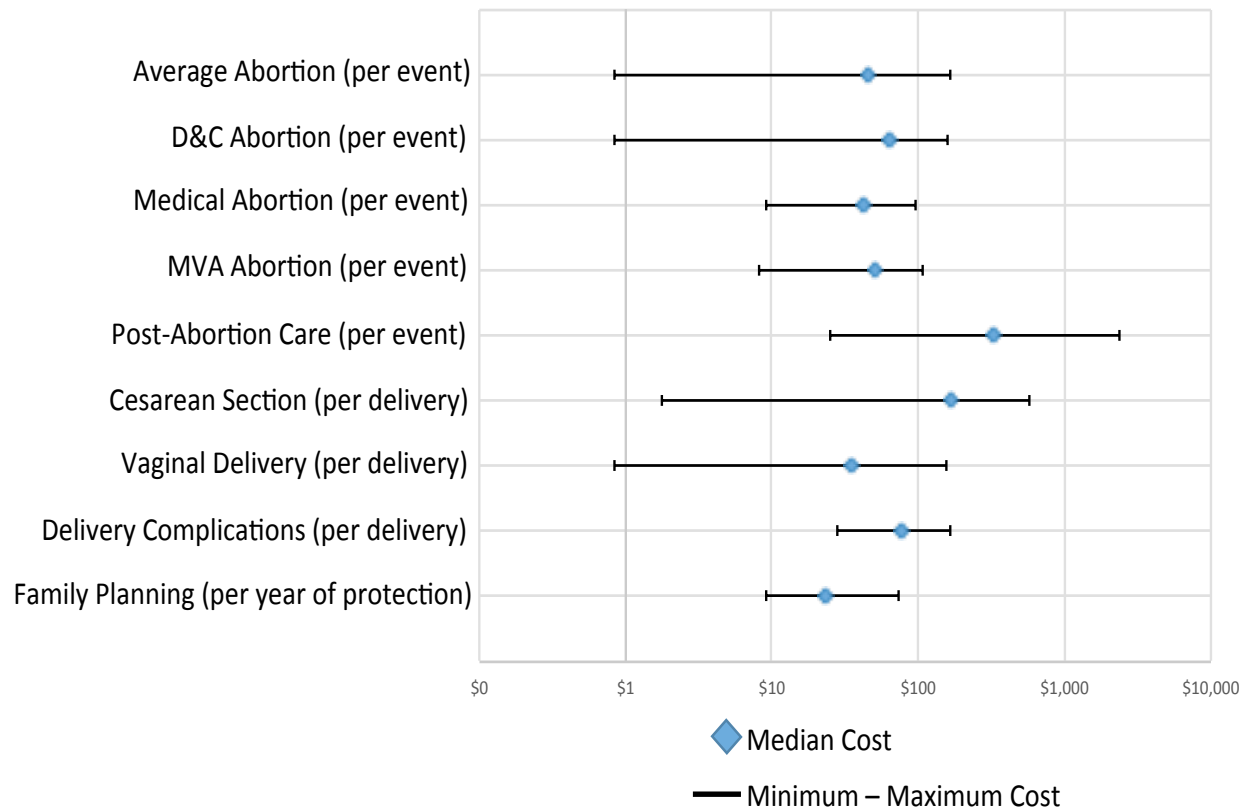
- **Depends on your perspective.**
- **Donor “Do we need more cost studies?”**
 - Can't we use the data we have?
- **Researchers “We need better data”**
 - Moving toward more expensive studies
 - Larger samples sizes to improve precision, accuracy and robustness.
- **Decision makers “We need information today”**
- **WHO “Let's build a sustainable system for routine cost collection.”**

Challenges

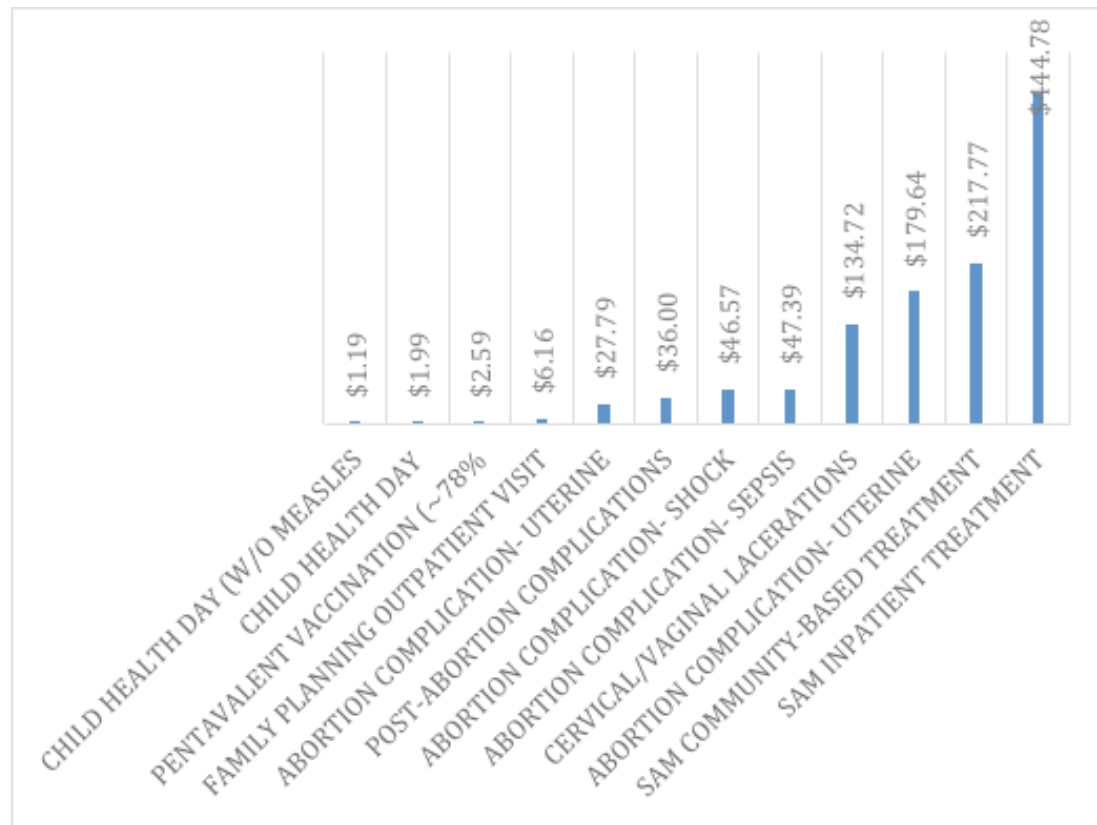
- **Many estimates of program costs are inadequate and of mixed quality.**
- **Relevant data are sometimes absent, are not locally relevant, are not quality adjusted, or are available from a limited perspective (e.g. the payers), do not capture full system costs, and fail to capture variations in cost by delivery strategy/platform.**
- **There are no validated methods for projecting costs from one setting to others.**
- **Very little standard methods or reporting for costing studies**
 - Multiplicity of ways to estimate costs
 - Little attention by authors to quality check lists for costs, although they do exist.
 - Little reporting on discount rate, whether tradable or non-tradable
- **Scarce or absent published literature for interventions to address adolescents, maternal depression, care and care practices, gender based violence.**
- **Limited packages of interventions estimated using costing tools**

Variability in costs: example: Reproductive and maternal health costs

Reproductive and Maternal Health Costs in Low- and Middle-Income Countries (USD 2012)



Lack of cost data for low capacity settings: RMNCH cost data for Ethiopia



Why does it matter? Consequences

- **Countries and donors often do not know the correct cost estimates to use in financial planning, resource allocation and budgeting.**
 - resources are misallocated and health benefits are foregone.
- **Over time, efficiency improvements cannot be measured.**
- **Donors, funders and National Finance Ministries cannot assess whether they are getting value for their money, and cannot provide effective incentives for greater efficiency.**

Actions to improve costing

- **Development of a reference case for economic evaluation in low-resource settings**
- **Development of a global health costing consortium**

Disease Control Priorities Network

DCP – DGH Team

Dean Jamison – Principal Investigator

Rachel Nugent – Project Director

Carol Levin - Senior Research Scientist

Stephane Verguet – Acting Assistant Professor

Brie Adderley – Project Coordinator

Zach Olson– Health Economics Analyst, now at UC Berkeley

Partners: PHFI, CGHR, UQ, IOM, World Bank, WHO

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Contact : clevin@uw.edu

THANK YOU!