

# Uterotonic Medication Quality: Contributions Toward Universal Health Coverage Ghana and Nigeria Case Studies

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Concept Foundation

Quality of Reproductive Health Medicines Today Panel

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# Project Composition

## Project partners & team:

Partner	Team members
Concept Foundation	Metin Gülmezoglu, Lester Chinery, Petra Procter, Sara Rushwan
University of North Carolina	Sachiko Ozawa, Ashley Yi-Fang Lee, Colleen Higgins
University of Birmingham	Ioannis Gallos

## Country partners:

- Ghana Health Services Safe Motherhood Team, Ghana
- Bloom School of Public Health, Nigeria

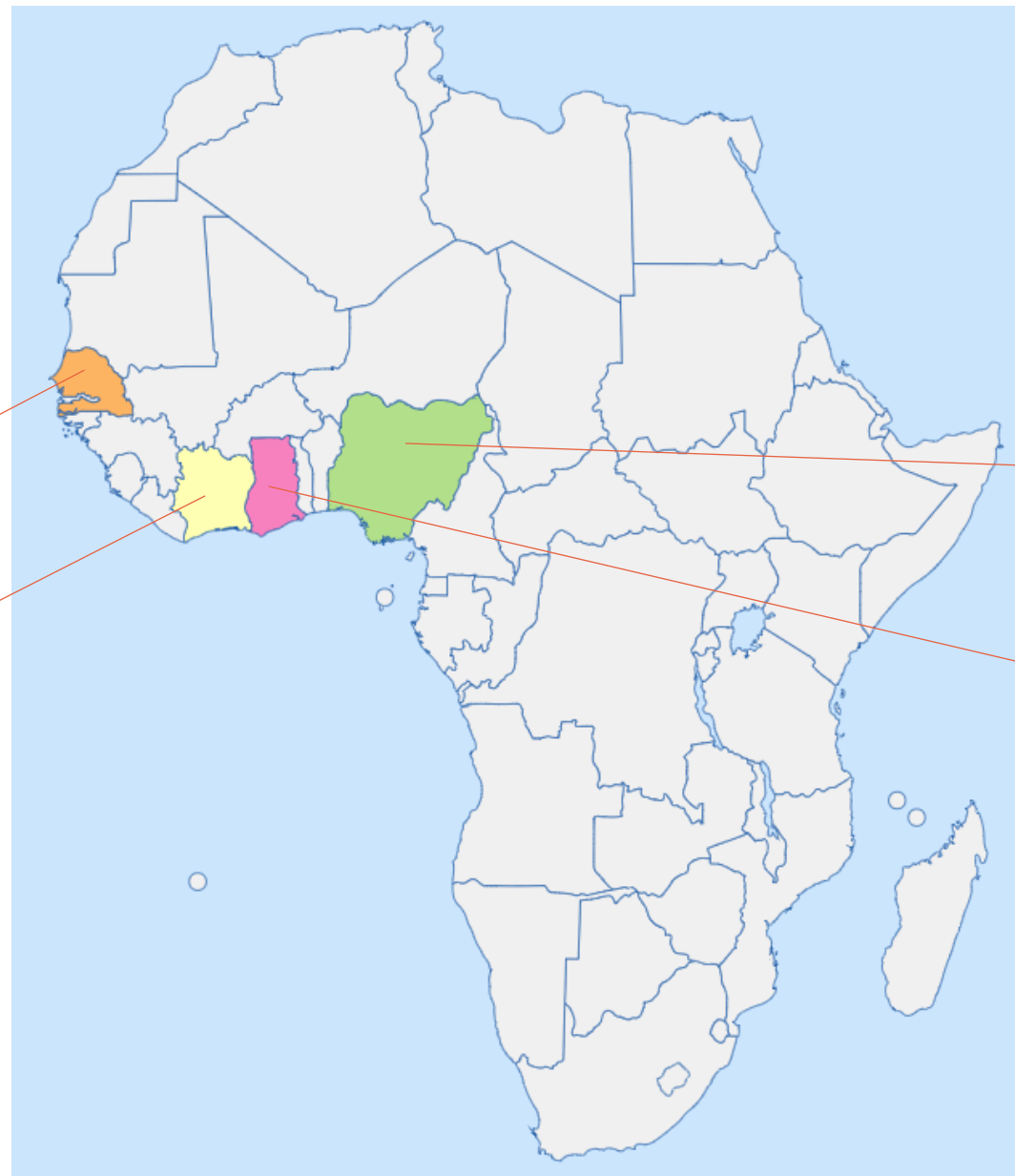
## Project donors:

- MSD for Mothers
- Global Financing Facility (GFF) - with a specific focus on Ghana
- Johnson & Johnson Foundation

# Project Overview

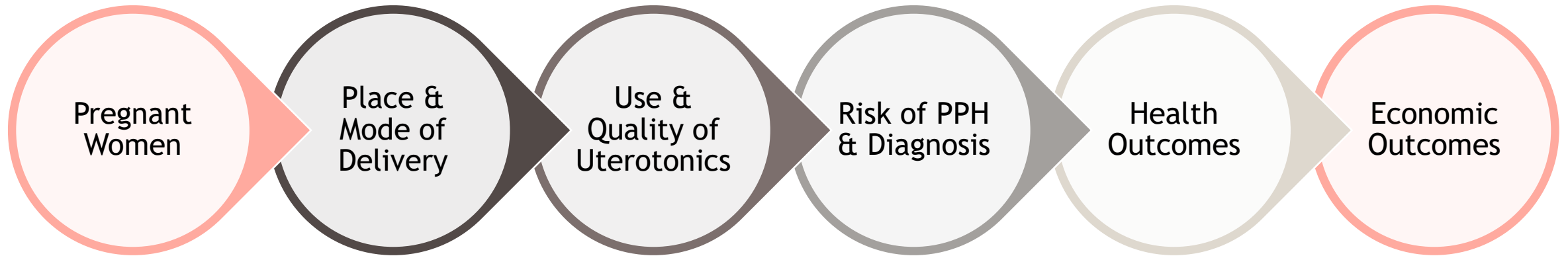
- Anchored in the principles of **Universal Health Coverage (UHC)** and the United Nations Sustainable Development Goals
- Building on previous studies undertaken by UNC linking medicine health quality with UHC
- A key aim of the study is to highlight the importance of safeguarding uterotonic medication quality in low- and middle-income countries
- Generate evidence to drive policy change through demonstrating both the **health** and **economic** impact that substandard uterotonics could have

Senegal  
Cote D'Ivoire



Nigeria  
Ghana

# Model flow diagram



Incorporate Demographic Characteristics

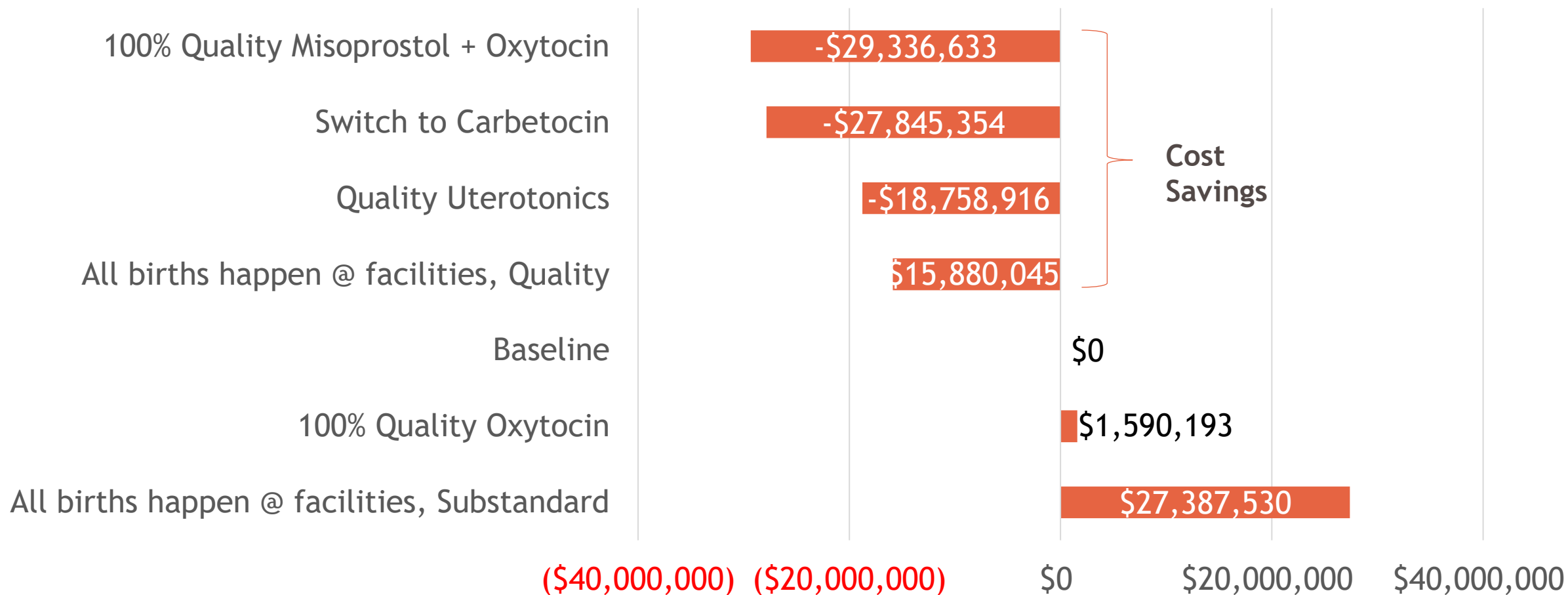
- 1) Age
- 2) Region
- 3) Urban/Rural
- 4) Wealth Quintile
- 5) Education
- 6) National Health Insurance status (if applicable)

Incorporate Health Facility Characteristics

**Public Hospital**  
**Primary Health Center**  
**Private Hospital**  
**Home**

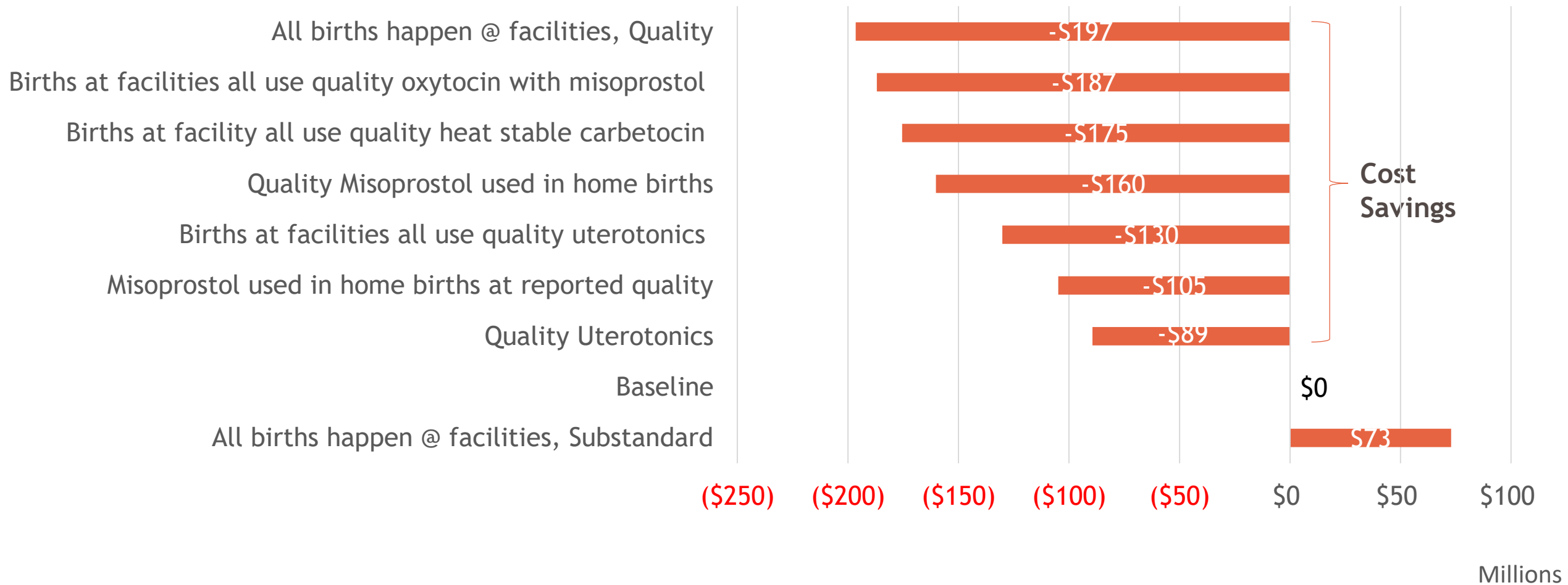
# Ghana Results

## Summary of Model Scenarios – Annual Economic Burden



# Nigeria Results

## Summary of Model Scenarios – Annual Economic Burden



## Key Findings – Ghana & Nigeria

Key results	Nigeria	Ghana
Savings in healthcare costs	\$89 M (quality uterotonics)/\$100 M + (all scenarios)	\$18. M (QA uterotonics)/ \$91 M (all scenarios)
Of which OOP costs	\$39 M (\$9 M in North, \$30 M in South)	\$6.3 M (public sector) \$4.8 M (private sector)
Of which long-term productivity losses	\$50 M	\$6 M
Ghana National Health Insurance Scheme		\$1.6 M
Reduction in PPH cases	75,000	20,000
Severe PPH cases	18,000	5,000
Maternal deaths	1,500	100

Ensuring good quality uterotonics would improve maternal health outcomes and result in millions of dollars in cost savings for the government and families in Ghana and Nigeria. Cost savings from improving uterotonic quality would aid in advancing country efforts toward achieving **Universal Health Coverage**.



## UHC Outcomes - Ghana & Nigeria

Perspective	Description	GHANA	NIGERIA
Families	No. of mothers receiving poor-quality uterotonics	354,428	1,563,008
	No. of cases of postpartum hemorrhage receiving poor-quality uterotonics	77,360	273,412
	No. of cases of severe postpartum hemorrhage receiving poor-quality uterotonics	20,155	71,290
	Out-of-pocket costs from additional treatments, blood transfusions, and longer hospitalizations due to poor-quality uterotonics (US\$)	\$11,140,917	\$39,619,345
	No. of maternal deaths averted by using quality uterotonics	107	1,453
Healthcare Providers	No. of doses of oxytocin saved by using quality uterotonics	109,893	483,459
	No. of blood transfusions averted by using quality uterotonics	12,518	59,401
Payors	Payor costs from additional treatments, blood transfusions, other related commodities due to poor-quality uterotonics (US\$)	\$1,616,603	
Governments	% of cases of postpartum hemorrhage receiving poor-quality uterotonics	42%	16%
	% of cases of severe postpartum hemorrhage receiving poor-quality uterotonics	45%	20%
	% of maternal deaths averted by using quality uterotonics	11%	5%

# Strengths

- Unique country-specific case studies demonstrate the health and economic burden of poor-quality uterotonics.
- We disaggregate burden of poor-quality uterotonics borne by payors and families.
- Results generated will contribute toward evidence to improve uterotonic quality to advance UHC.

# Limitations

- Limited data on quality of uterotonics, uterotonic use, and costs of care.
- Limited data to account for population heterogeneity across health and economic outcomes.
- Transferability of model inputs from other countries where in-country data are not available.

# Thank You!

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