GLOBAL TASK FORCE ON
CHOLERA CONTROL

INVESTMENT CASE UPDATE

SO FAR, WE HAVE…

- Aligned on **modelling inputs**, including implementation timeline, hotspot populations, implementation strategies, and cost assumptions
- Aligned on **modelling methods** and shared feedback on early results
- Contributed to the **Hotspot Case Study** presented at WHA
- Gathered input on the **storyline**, including key points and data sources
- Discussed in depth: **sustainability**, **risks & mitigation**, and **alignment** with other strategies
- Considered **measurement of key indicators** (approaches are being finalized now)
- Shared preliminary results at Stockholm and UNC events as part of GTFCC panel presentations
- **Routed the DRAFT Investment Case for review (comments due this Friday 7/12)**

TODAY, WE WILL…

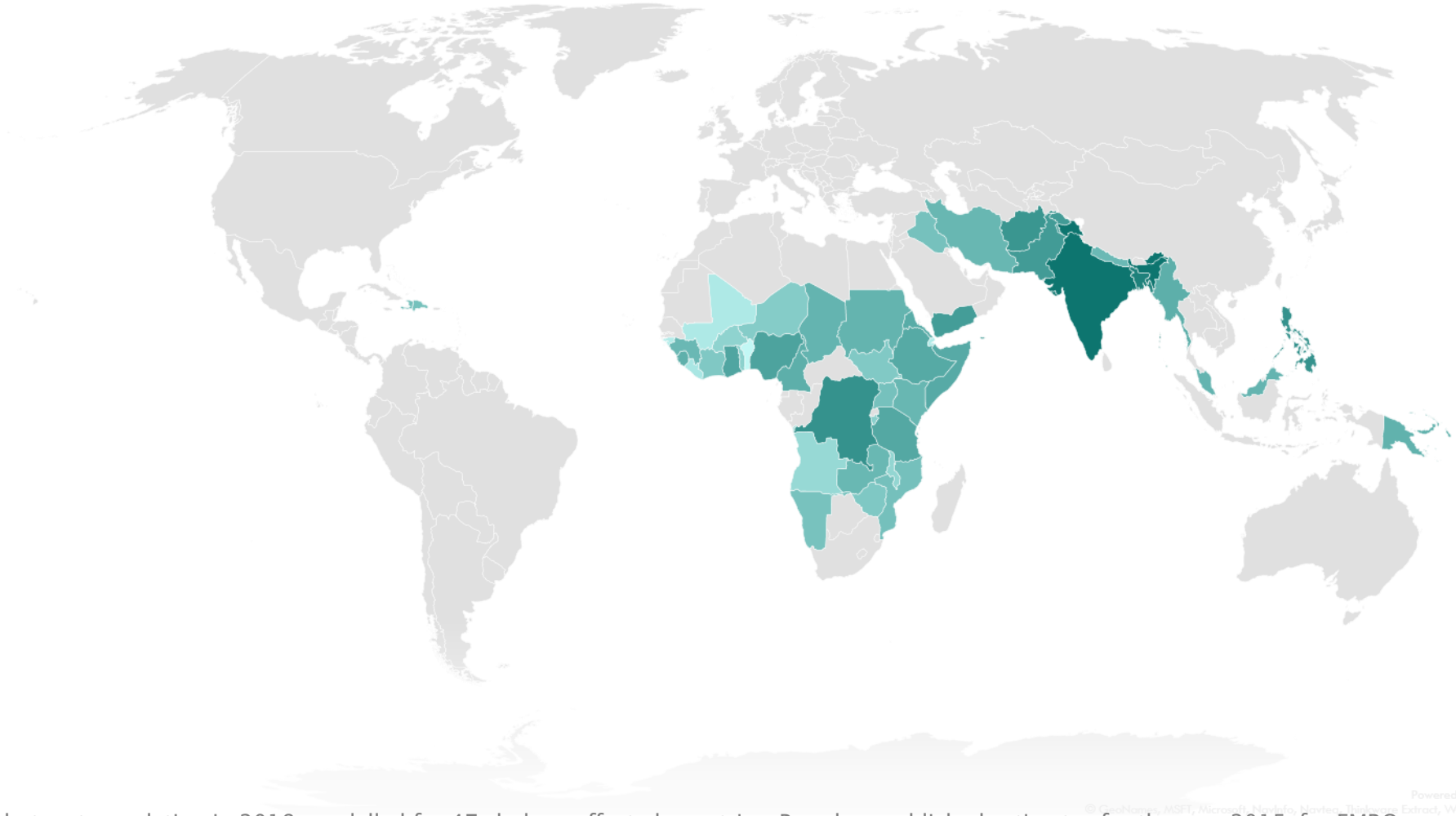
- Review Key Results from the Investment Case
- Share next steps for Finalization of the Investment Case

“NO ROADMAP” SCENARIO

	Per Person Losses ($)		Global Losses ($billions)	
	Annual Avg.	Total	Annual Avg.	Total
Total Cholera Burden	57	740	26.0	340
Emergency Response Needed	3.5	45	1.6	21
Emergency WASH	3.4	44	1.6	20
OCV Stockpile	0.05	0.60	0.02	.2
Case Management	0.03	0.41	0.01	.2
Lost Productivity	0.22	2.8	100	1.300
Loss of Life	54	700	25	320

Losses estimated based on the status qua and do not take into consideration WASH improvements that are likely to occur in the absence of the Roadmap. Per person calculations refer to the 2018 hotspot population, adjusted for population growth.

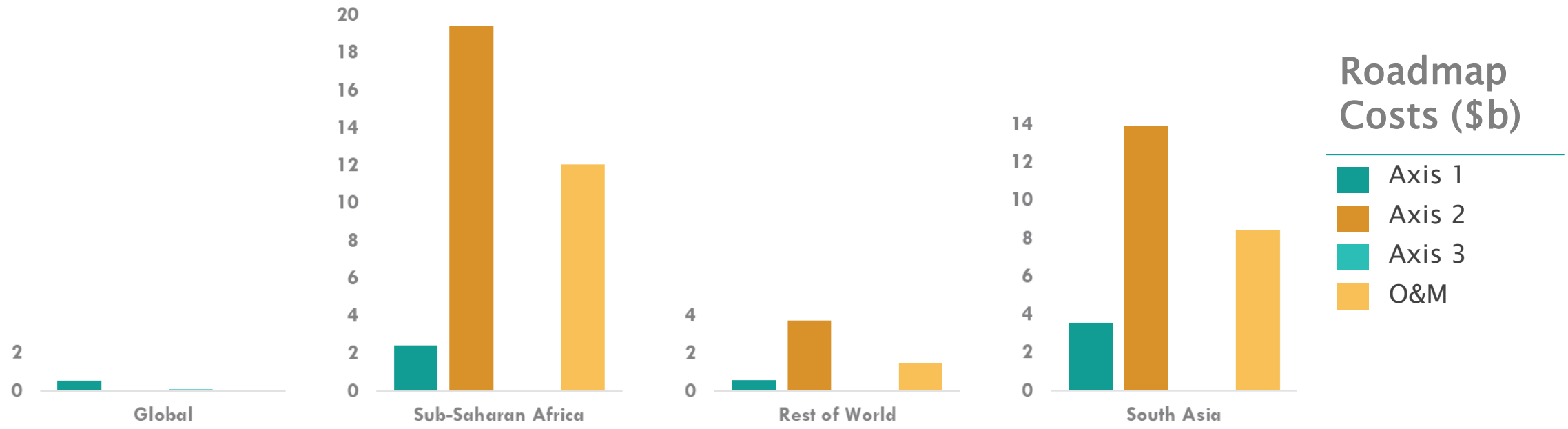
CURRENTLY OVER 420 M PEOPLE LIVE IN CHOLERA HOTSPOTS



Global hotspot population in 2018, modelled for 47 cholera-affected countries. Based on published estimates for the year 2015, for EMRO countries unpublished estimates using the same methodology, and where available country provided information. Populations forecasted using country-specific urban and rural population growth rates.

IMPLEMENTATION COSTS GREATEST IN SOUTH ASIA AND SUB-SAHARAN AFRICA

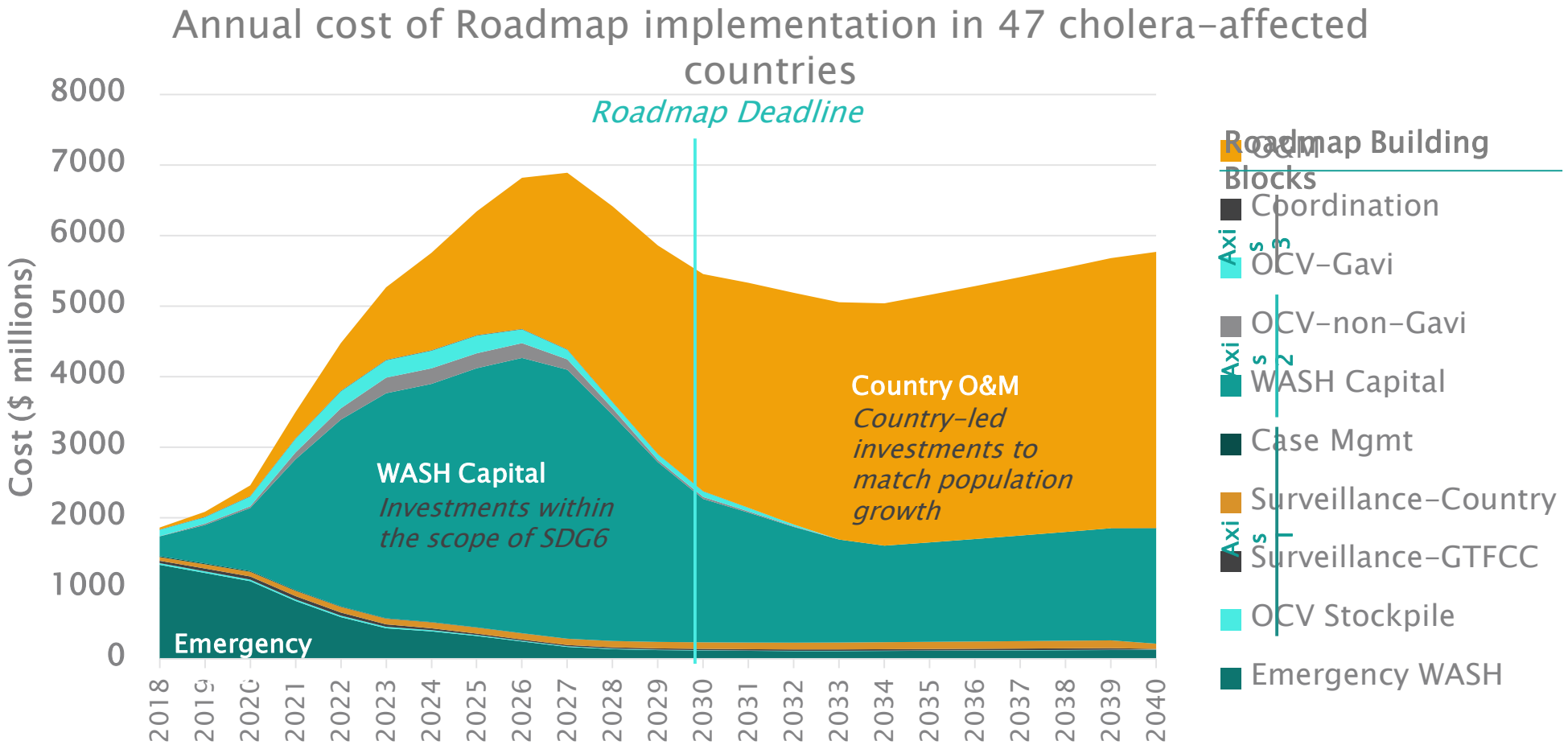
Cost of Roadmap implementation in 47 cholera-affected countries, 2018–2030



Undiscounted values.

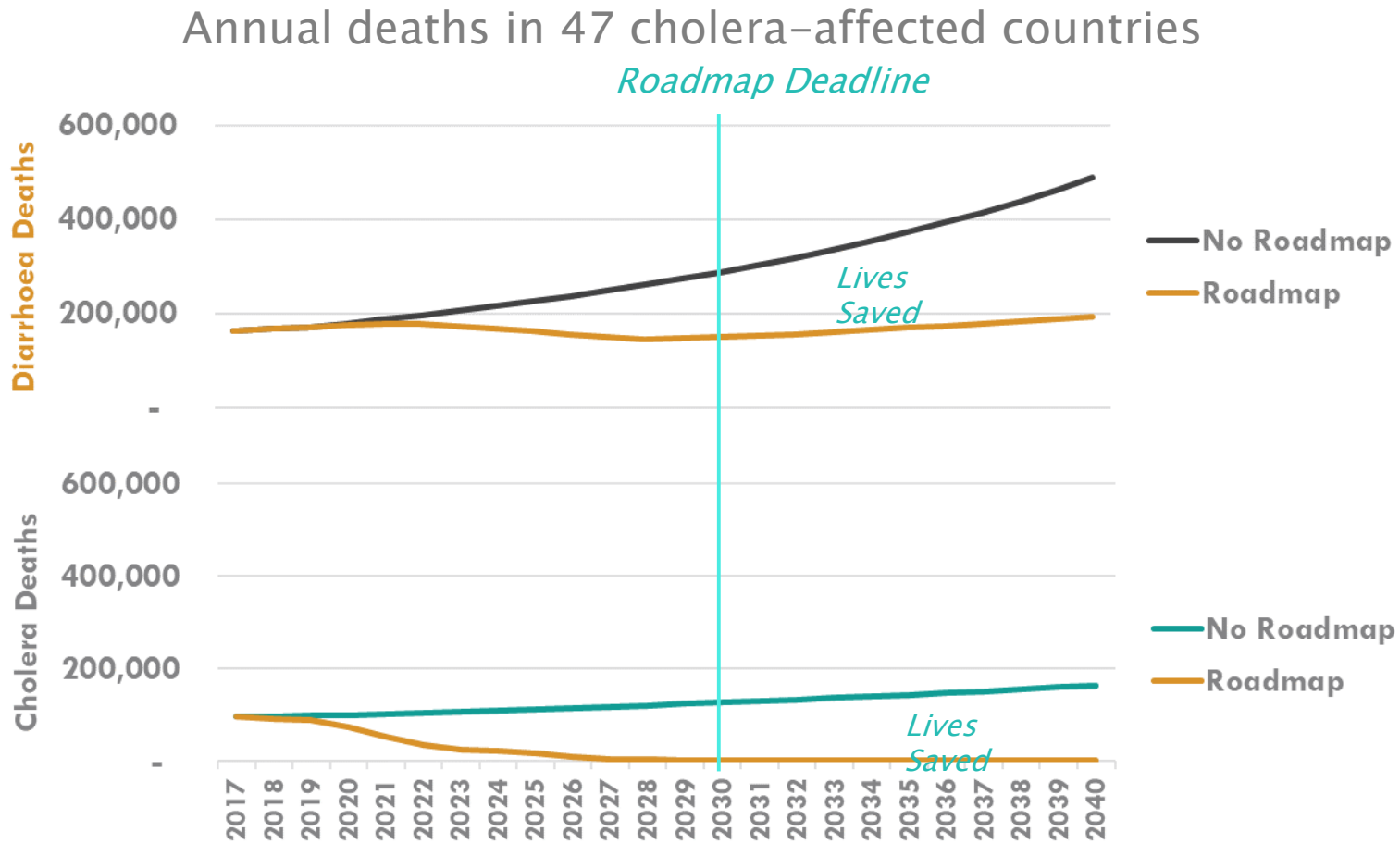
MAJORITY OF IMPLEMENTATION COSTS ARE WASH CAPITAL

AFTER IMPLEMENTATION, RESOURCE NEEDS SHIFT TO O&M



Values are not discounted. Replacement of WASH capital investments will be required but are outside of the modelled time period for the

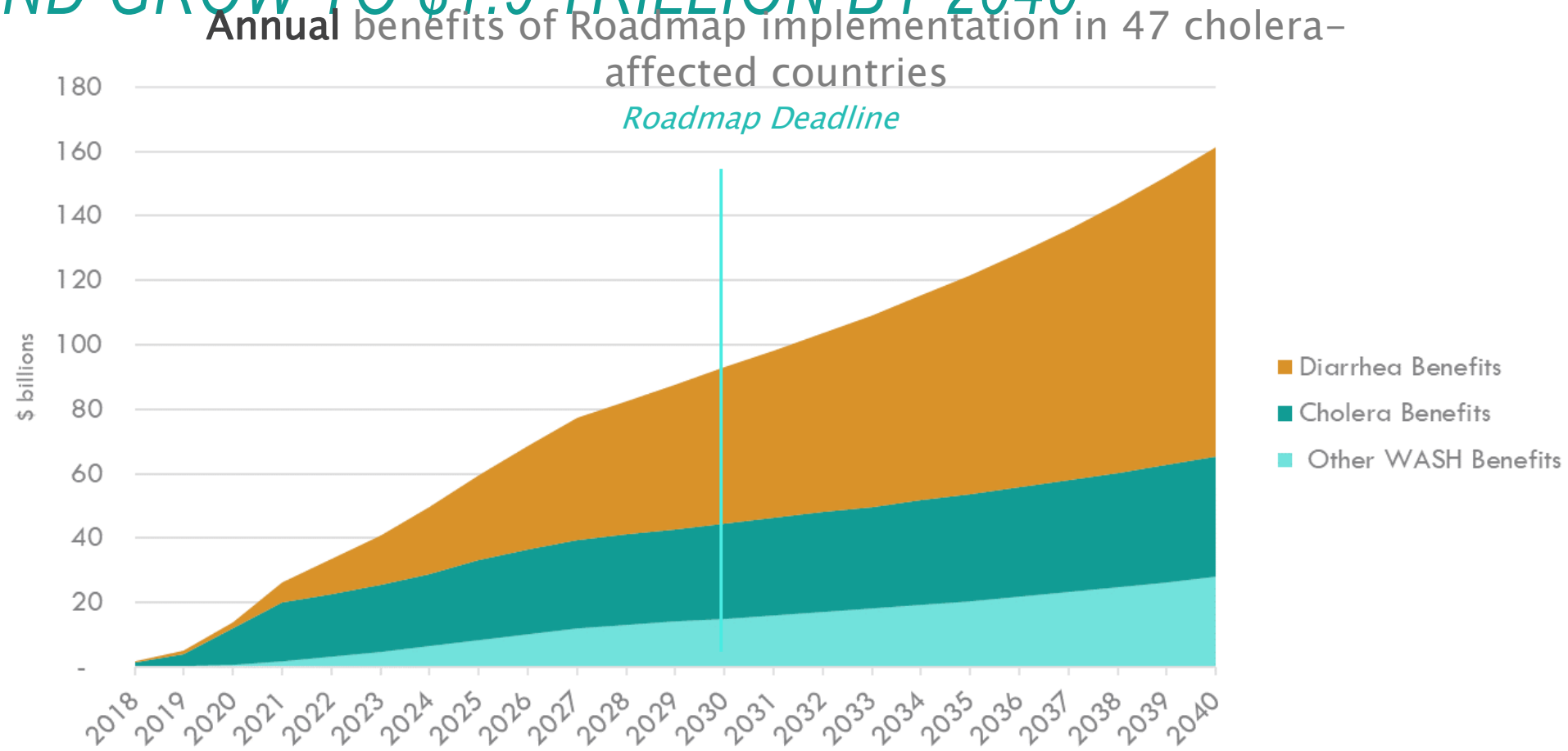
SAVING **2 MILLION** LIVES BY 2030



Lives saved as a result of Roadmap implementation in 47 cholera-affected countries. “No Roadmap” reflects the status quo and does not take into consideration WASH improvements that are likely to occur in the absence of the Roadmap.

ECONOMIC BENEFITS REACH $640 BILLION BY 2030

AND GROW TO $1.9 TRILLION BY 2040



Includes emergency response cost savings, the benefits of averting cholera and diarrhoea cases and deaths (treatment costs and productivity losses averted, and value of life gained), and time savings from improved WASH access. Values are not discounted.

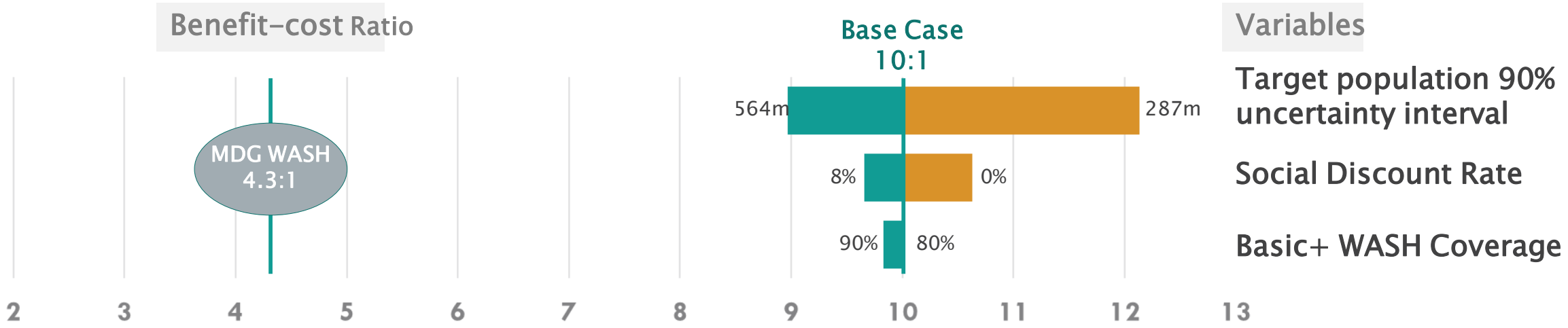
YIELDING A STRONG BENEFIT-COST RATIO

Time Period	Cumulative Benefits ($)	Marginal Costs ($)	BCR
2018–2030	430 b	43 b	10:1
2018–2040	970 b	66 b	15:1

5% Social discount rate applied to all future costs and benefits

SENSITIVITY ANALYSIS FOR KEY VARIABLES

BCR REMAINS HIGHLY FAVORABLE
ADDITIONAL ANALYSES WILL BE COMPLETED AFTER BASE SCENARIO IS APPROVED AND LOCKED



NEXT STEP: MAKE MODEL AVAILABLE TO COUNTRIES TO SUPPORT NATIONAL PLANNING & ADVOCACY

Based on the global model:

1. Cost-benefit model with list of variables and values used for each country in global investment case – country can adjust
2. Output screen (tables, graphs)
3. Reporting template automatically filled
4. Written guideline on how to adjust and adapt model and use results
5. In-country technical assistance

NEXT STEP FOR FULL TEAM MEMBERS: INSTITUTIONAL BUY-IN

As a member of the Full Team, it is your responsibility to ensure organization buy-in for the Investment Case. Timelines are as follows:

- Dec 7: Feedback from Full Team received
- Dec 14: Updated version of the Investment Case with locked base scenario sent to Full Team to begin institutional buy-in
- Jan 15: Initial feedback from key stakeholders within each organization received (potential to have another Full Team call)
- Jan 30: Investment Case is finalized and formally

BACK UP

KEY ASSUMPTIONS AND SOURCES OF DATA

Key Assumptions	Data Sources / Comments
Timelines: 2018–30	Ending Cholera Roadmap
Targeted Countries: 47 cholera endemic countries	Ending Cholera Roadmap
Targeted Population: country specific	Lesser et al. Mapping the burden of cholera in sub-Saharan Africa…; Ali et al. Updated Global Burden of Cholera in Endemic Countries; country specific epi reports
Cholera Burden: country specific	Ali et al. Updated Global Burden of Cholera in Endemic Countries, country specific epi reports
OCV: 2 doses, 2 campaigns per country (exception is crisis countries) , 76% efficacy, 85% coverage, price estimates	Gavi, WHO OCV position paper, Bi et al. Protection against cholera from killed whole-cell oral cholera vaccines…
WASH Coverage in hotspots: 50% of national WASH coverage; assumes 5-7 years linear	JMP 2015 data Planning to review IHME district data as

KEY ASSUMPTIONS AND SOURCES OF DATA, CONT

Key Assumptions	Data Sources / Comments
WASH Capital Costs: country specific, includes hardware and software	Hutton G, Varughese M. Costs of meeting the 2030 Sustainable Development Agenda targets on drinking water, sanitation and hygiene; Hutton G. Editorial: Can we meet the costs of achieving safely managed drinking-water, sanitation and hygiene services under the new sustainable development goals Feedback and input from countries
WASH O&M: Annual O&M costs estimated based on lifespan of hardware	ibid
Early Detection, CM, and Surveillance: 25% reduction in cholera burden	Expert opinion
Emergency Response: includes ORS, Emergency WASH, OCV and operational costs, deployment, surveillance	Expert opinion, IFRC cost estimates