Funding Cholera Research
& the
Global Research Agenda for Cholera

## GTFCC Case Management Working Group Meeting Nov 2019

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Background to Wellcome

- Financially and politically independent global charitable foundation dedicated to:

"understanding and improving health through research"

- Established in 1936 under the will of **Sir Henry Wellcome.**
  - Current endowment of ~£26 bn.

- Second biggest funder of health research, after BMGF

- Fund and support: basic science; translation science and clinical trials; innovative solutions, humanities and social sciences; public engagement; policy and advocacy

- Wellcome Collection: free museum that challenges how we think and feel about health
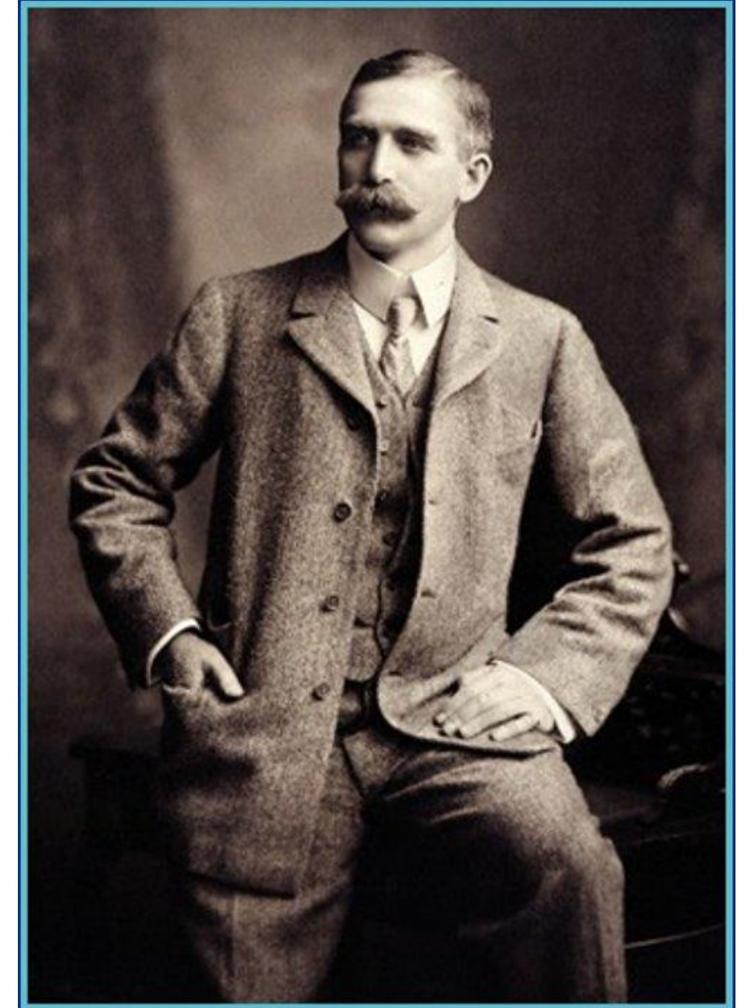
Research Funding across Wellcome

Science

Creating knowledge

- Response-mode funding
- Investigator-led schemes
- Core-funded Institutes

Innovations

Translational research

- Innovator awards
- Flagship portfolios
- Hilleman Laboratories

Priority Areas

Addressing a challenge

- Cross-cutting activities
- Strategic awards
- Policy and advocacy

Cholera Research Funding across Wellcome

Science

Creating knowledge

- Response-mode funding
- Investigator-led schemes
- Core-funded Institutes

- Cholera genomics work at the Sanger Institute
- Many other cholera research projects over the years

Innovations

Translational research

- Innovator awards
- Flagship portfolios
- Hilleman Laboratories

- Development of Hillchol vaccine
- Prevention of enteric disease flagship
- Point of care diagnostics

Priority Areas

Addressing a challenge

- Cross-cutting activities
- Strategic awards
- Policy and advocacy

Vaccines Priority Area
- Linking evidence with implementation
- Policy and advocacy

Global Taskforce for Cholera Control
Ending Cholera: A Global Roadmap to 2030

Ambitions

Evidence Needs to be filled by Research

| Axis 1: Early detection and quick response to contain outbreaks | → | - Better tools and policies for rapid detection
- New approaches to rapid responses with OCV and WASH. |

| Axis 2: Prevent recurrence by targeting OCV and WaSH to cholera "hotspots" | → | - Will targeting hotspots actually prevent recurrence?
- How to combine interventions for maximum impact? |

| Axis 3: Effective coordination and partnership at local and global levels | → | A mechanism for research coordination to improve efficiency, inform resource allocation and measure and drive impact. |
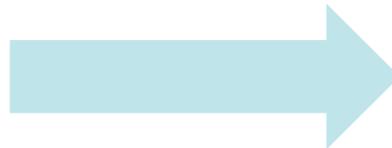
Linking evidence with implementation - focus on cholera

Support development of strategies to prevent, control, treat and eliminate cholera that are informed by evidence and to ensure research in cholera is driven by implementation and policy needs.

For Wellcome Vaccines Priority Area: This will lead to **better use of vaccines** informed by evidence

For the GTFCC and cholera community: This will help support implementation of the *Ending Cholera Roadmap*

evidence is available and being used to inform implementation

Evidence

Cholera research

Implementation

Cholera control interventions and strategies

Implementation needs are known about and filled by evidence
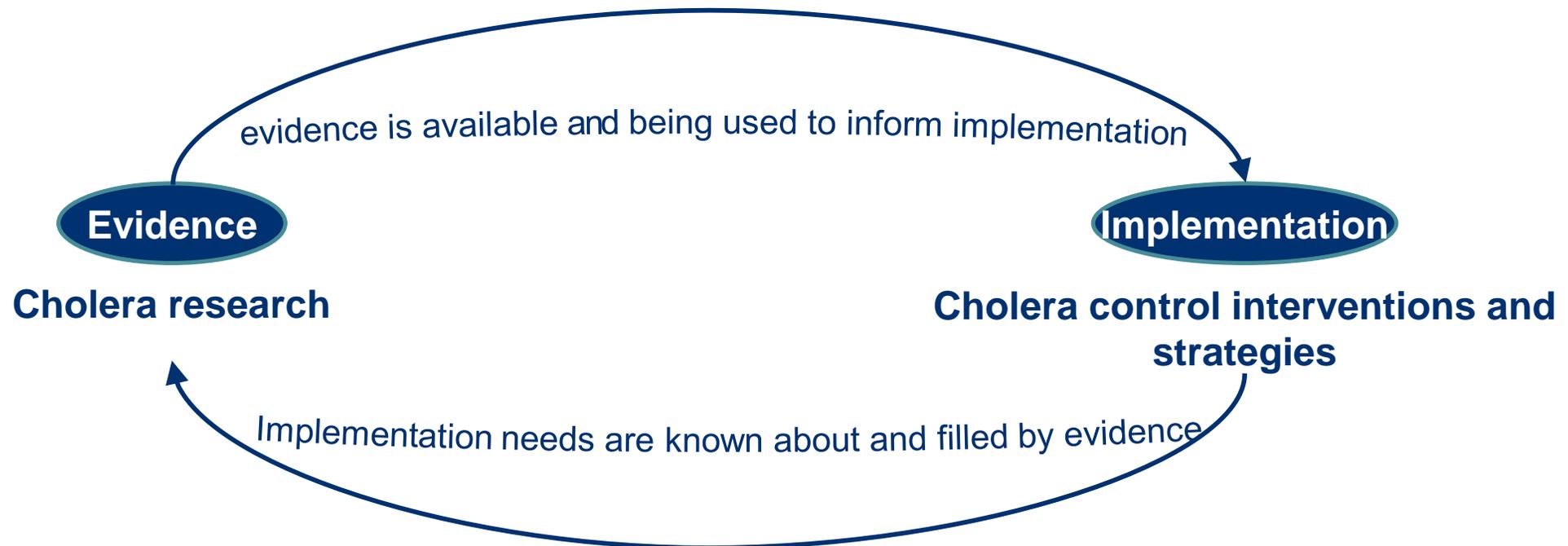
Linking evidence with implementation - focus on cholera

1. **Strengthen links within and between research and implementation communities**

evidence is available and being used to inform implementation

Evidence

Cholera research

Facilitate dialogue: researchers and policy-makers

Implementation

Cholera control interventions and strategies

Implementation needs are known about and filled by evidence

Embed effective policy & practice considerations

Conduct analysis of barriers between research, policy, and practice
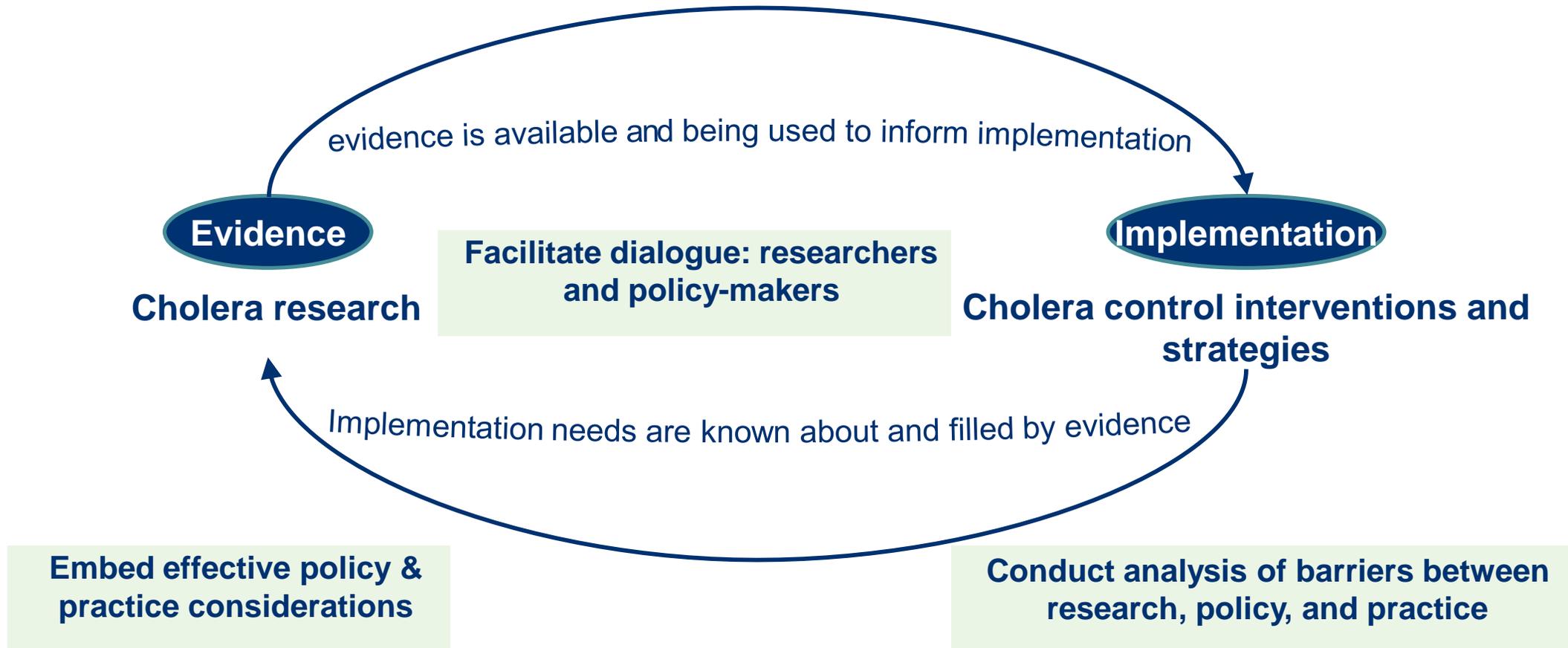
Linking evidence with implementation - focus on cholera

2. **Coordinate research and fill evidence gaps to guide implementation**
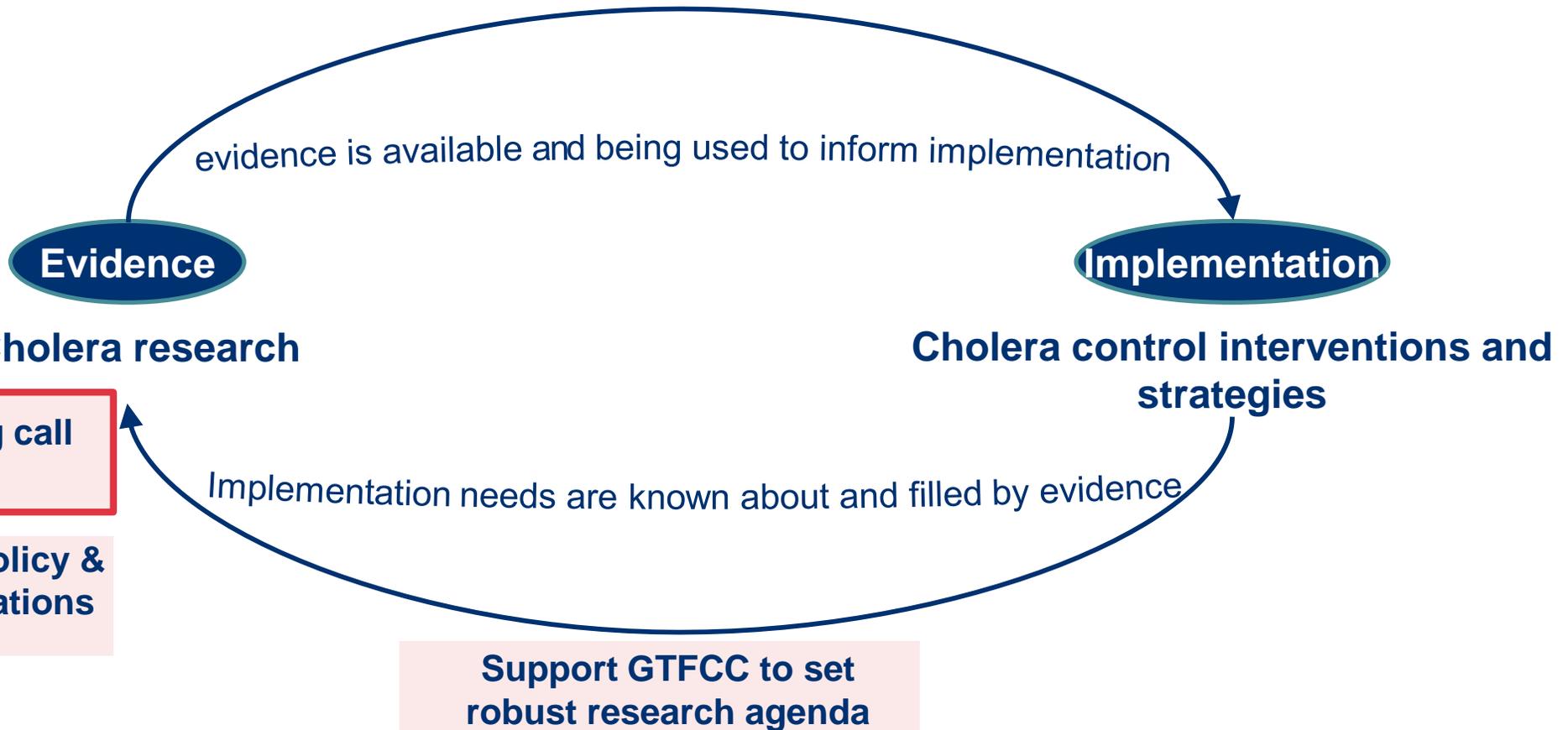
Supporting Cholera Research

- June 2018: Wellcome and DfID hosted "Research Scoping Meeting"

- **Aim:** Research a consensus on a research agenda aligned with the GTFCC *Ending Cholera Roadmap*

High-level "interim" research agenda

PRE-IMPLEMENTATION	IMPLEMENTATION	POST IMPLEMENTATION / M&E

Burden of disease and identification of hotspots:
• Hotspots:
  - Quantification
  - Characterization
• Accessible laboratory confirmation methods in hotspots
• Assessment tool – hotspot vs at risk
• Improve estimates of mortality and where it occurs
 	
Transmission dynamics:
• Laboratory data, WGS, epidemiological data
• Community/household level
• Disease modelling for outbreak short term prediction
	Optimization of interventions at the community level:
	• Rapid Diagnostic Tests
	• Use of antibiotic (targeted prophylaxis)
	• WASH package (short medium and long term)
	• Delivery strategies for OCV
	• Behavior change
	
	Operational research on cholera vaccine:
	
	Synergies of interventions: OCV and WASH
	
	Cholera And Severe Acute Malnutrition (SAM)
		Effectiveness:
		• Outcomes and process for continuous improvement
		• Improve targeting and use of interventions in country
		
		Change in attitude:
		• Political will
		• Lessons learnt to be documented

CROSS-CUTTING		
Social sciences • Country engagement: policy drivers, determinants and barriers • Documenting success stories through case studies – to be linked to advocacy efforts **Impact**: • Level of WASH coverage needed to stop transmission, • Role of disease estimate modelling to support countries in defining control plans • Impact of outbreak response (including OCV reactive campaigns) and endemic cholera control activities **Cost effectiveness/value for money**		

Funding Cholera Research

Joint Initiative

Funding call:
Preventing and Controlling Cholera

Guidance: Evaluate applications on alignment with GTFCC interim research agenda

32 applications

Peer review by experts

11 projects

2 rapid diagnostic tests

2 cholera transmission/hotspots

3 OCV-related studies

1 WASH strategy

2 behavioural determinants

1 study on treating cholera

Results: Q3 2021 – Q1 2022

Funding and research coordination

Need to ensure that future cholera research funding, by us or other funders, is informed by evidence-needs of the whole cholera community

- researchers, clinicians, implementors and policy-makers across all areas of cholera control

Example: Only received one application on case management of cholera, which ended up being funded

The research needed to reduce deaths due to cholera by 90 % needs to be:

1. **Identified**
2. **Prioritised**
3. **Communicated to researchers and funders**

via overarching **Cholera Research Agenda**

Question to the **GTFCC Case Management Working Group:**

What are the research questions which need to be answered to develop strategies for treating and preventing mortality due to cholera?

Global Cholera Research Agenda

Background

Why are we doing this?

Successful implementation E*nding Cholera Roadmap* relies on areas where they are **evidence gaps**

Prioritising and communicating what research is needed to fill these gaps will:
- help **guide researchers and funders**
- may help **policy-makers incorporate research** into their National Cholera Control Plans

Improve on interim research agenda

- Greater involvement with all the GTFCC working groups
- Incorporate evidence needs of implementation specialists and policy makers
- Designed in a **systemic, non-biased way to identify research priorities**
- Stronger link to regional and country-level evidence needs

Research questions identified ➜ Research prioritised ➜ Development of Research Agenda ➜ Evidence generated and available ➜ Evidence used to inform _most appropriate_ strategies for cholera prevention, control, treatment and elimination

Process

How are we going to achieve this?

2019   **2020**   **2021**

Release RFP and interview for suppliers   Develop prioritised research agenda for cholera   Publish

1 Steering Committee of cholera experts ✔

- GTFCC Representative
- Oral cholera vaccine expert
- WASH expert
- Asian-country representative (MoH)
- African-country representative (NRI)

2 Issue Request for Proposals (RFP) ✔

- Steering Committee give guidance on RFP

- Steering Committee read proposals, interview and recommend third-party group

3 Third-party group design research agenda and prioritise research questions

- Systematic, robust and unbiased methodology

- Steering Committee provide suggestions and guidance through regular meetings

4 Publish and Communicate GTFCC Research Agenda for Cholera Control and Elimination

Overview: Global Cholera Research Agenda
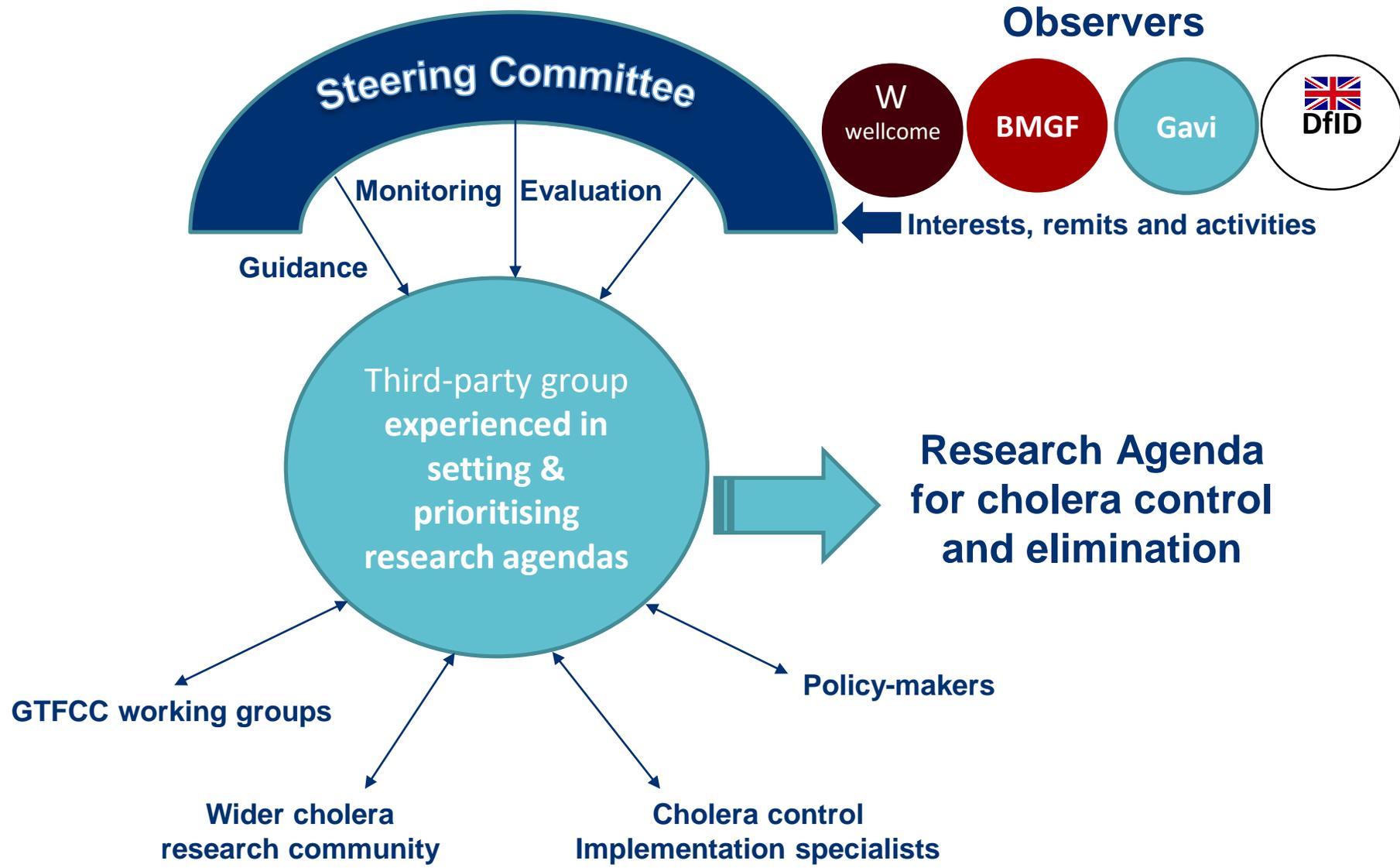
Request for Proposals

Target: academic groups and private consultancies

- Experience in research prioritisation, research agenda and strategy design
- Experience in cholera field **not** a necessity

Prioritising Research – key for the agenda to act as a guide for funders and researchers

The research agenda needs to:

- Prioritise **between** different areas of cholera research
- Show dependencies between research priorities
- Identify short, medium and long-term research priorities
- Consider differences between global, regional and country-level research priorities

Prioritising Research

What is Research Priority Setting?

- A collective activity for deciding which uncertainties and questions are most worth trying to resolve through research

Defining objectives	Partnering with Stakeholders	Selecting **method** to a). Engage with stakeholders b). Rank questions	Identifying questions	Defining criteria to weight questions	Ranking questions	Reaching consensus on priorities questions

GTFCC WGs   **GTFCC WGs**   **GTFCC WGs**

Examples of methods:

- Child Health and Nutrition Research Initiative ➜ mental health, dementia, childhood diarrhoea
- Combined Approach Matrix ➜ HIV prevention, tropical diseases, diarrhoeal diseases in India
- Delphi Method ➜ Old age, nursing, cerebral palsy

= Often involve a combination of qualitative surveying and quantitative ranking

Impact of research prioritisation:

- MoH Malaysia set health research priorities = 96 % of subsequently funded research contributed to policy-making

Where we are now:
Global Cholera Research Agenda

Next steps

Wellcome

- Visit GTFCC Working Groups to spread awareness and engage with development of research agenda
- Identify individuals outside GTFCC communities to engage with

What we need from the GTFCC WGs:

- Identification of research questions for each area
- Suggestions for country-level implementors and policy-makers to engage with during research agenda development
- Engagement with third-party group via their chosen approach e.g. email surveys, teleconferences, workshops

Thank you!

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