



GLOBAL TASK FORCE ON
CHOLERA CONTROL

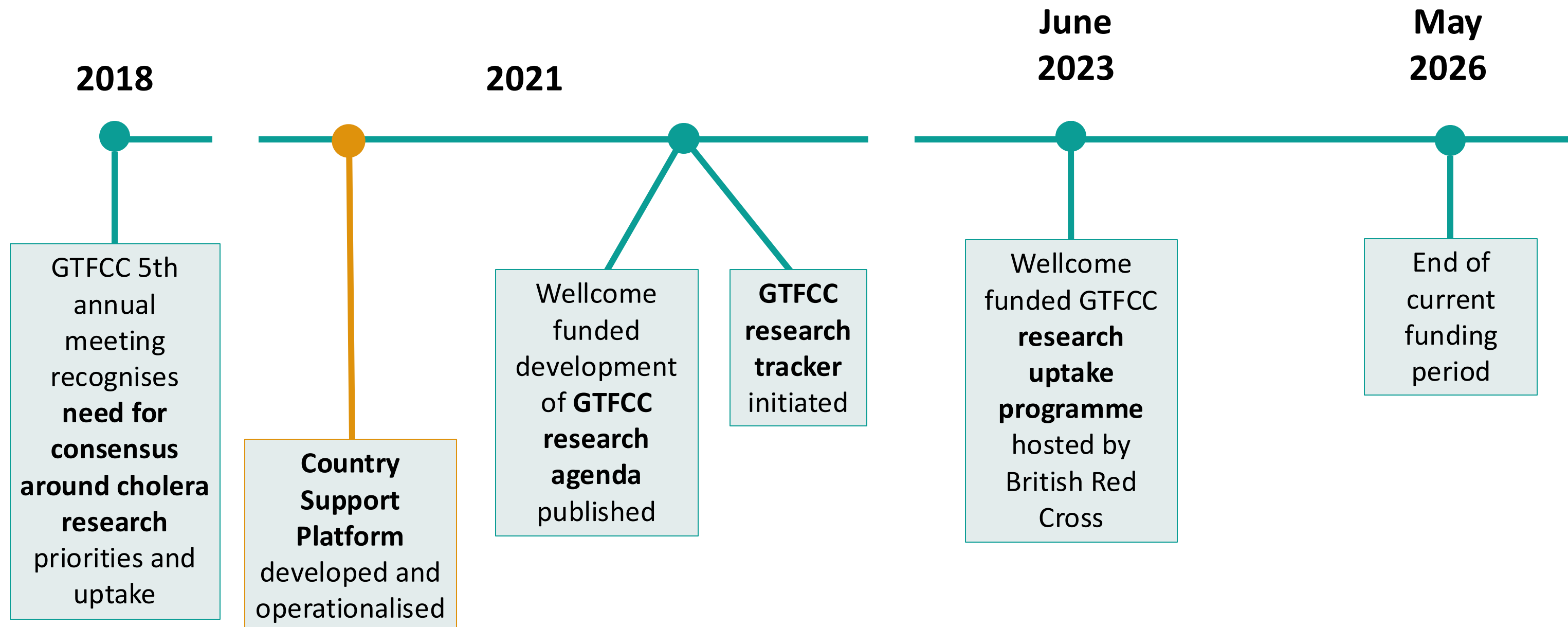
GTGCC OCV MEETING 2024 GLOBAL RESEARCH AGENDA

Tonia Thomas DPhil

IFRC CSP

GTGCC Senior Research Officer

GTFCC RESEARCH PROGRAMME TIMELINE



RESEARCH OBJECTIVES 2023 - 2026

A

Enable countries to have access to and use the best available research evidence as they put together their National Cholera Control Plans (NCPs);

B

Support countries to identify and articulate specific research needs;

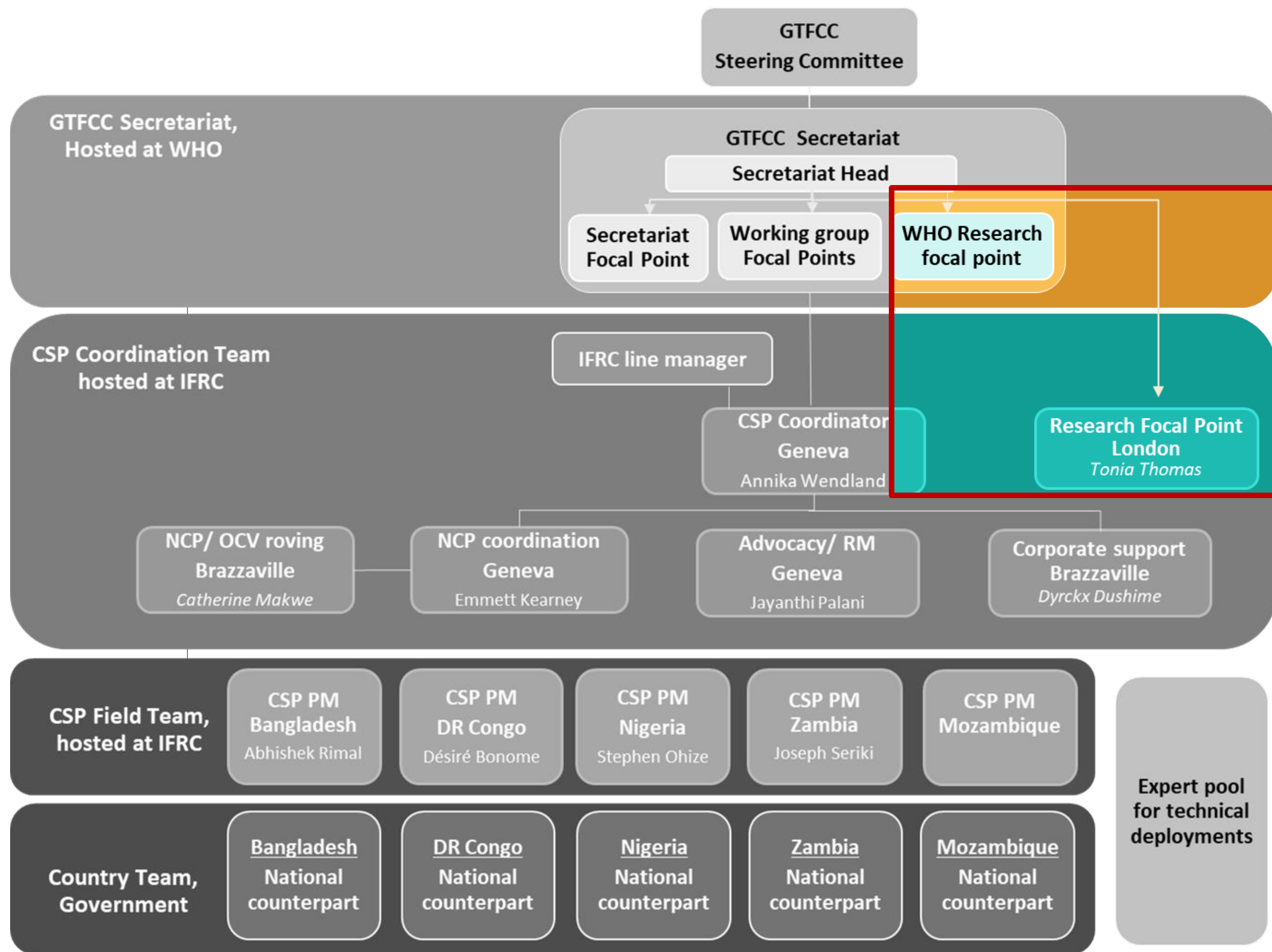
C

Create an enabling environment for countries to incorporate research studies into their operational plans

D

Strengthen the cholera research ecosystem by fostering collaboration, active sharing of research findings between countries and data sharing.

GTFCC AND CSP RESEARCH COORDINATION



GTFCC GLOBAL RESEARCH AGENDA 2021



OVERVIEW OF

CHOLERA ROADMAP RESEARCH AGENDA

















The Cholera Roadmap Research Agenda identifies knowledge gaps most important to cholera experts and stakeholders and establishes a prioritized list of research questions that, when answered, will have a significant impact on achieving the Cholera Roadmap goals. Together, the cholera control community can align our efforts and resources to answer the most pressing cholera research questions of our time and encourage discovery research and innovation.

JANUARY 2021













The Cholera Roadmap Research Agenda aims to accelerate progress towards the Cholera Roadmap goals by assisting:

- **international and national research donor agencies** to identify research projects that will have the most impact on practices and policy;
- **researchers** to prioritize the design and execution of research activities that will lead to evidence and implementable interventions with the most impact;
- **programme implementers** working on implementing the Cholera Roadmap to collaborate with researchers and to use the research results to address implementation barriers and update their operational plans;
- **policy-makers** to incorporate relevant research goals into their NCPs and to use the research results to strengthen cholera policies and strategies.


Table 1: Key priorities for the Cholera Roadmap Research Agenda

PILLARS					
	ORAL CHOLERA VACCINE	WATER, SANITATION & HYGIENE	SURVEILLANCE	COMMUNITY ENGAGEMENT	CASE MANAGEMENT
RANK OVERALL	PILLAR ^e	RESEARCH QUESTION			
1		What are the optimal oral cholera vaccine schedules (number of doses and dosing intervals) to enhance immune response and clinical effectiveness in children 1 to 5 years of age?			
2		What are potential delivery strategies to optimise oral cholera vaccine coverage in hard-to-reach populations (including during humanitarian emergencies and areas of insecurity)?			
3	 	Is there additional benefit to adding WASH packages, for example household WASH kits, to an oral cholera vaccine campaign?			
4		What is the optimal number of doses of oral cholera vaccine to be used for follow up campaigns in communities previously vaccinated with a 2-dose schedule?			
5		Can the impact of oral cholera vaccine on disease transmission, morbidity and mortality be maximized by targeting specific populations and/or targeted delivery strategies?			
6		What are the barriers and enablers for integrating cholera treatment into community case management by community health workers?			
7		What levels of coverage for relevant water, sanitation and hygiene interventions is required in cholera hotspots to control and ultimately eliminate the risk of cholera?			
8		What impact does the timing of oral cholera vaccine use have on outbreak prevention and control?			
9		What is the impact of early diagnosis of cholera using a rapid diagnostic test at the point of care in a community setting compared to testing only in health facilities?			
10		How can the use of oral cholera vaccine in the controlled temperature chain (i.e., outside the cold chain) be leveraged to maximize the coverage or impact of vaccination in a field setting?			

GTFCC GLOBAL RESEARCH AGENDA 2021

11		What is the incremental benefit of implementing a comprehensive interventions package (including water, sanitation and hygiene, antibiotics, oral cholera vaccine, oral rehydration therapy) to reduce cholera mortality during an epidemic?
12		What is the effectiveness and impact of different vaccination strategies for rapid response to cholera outbreaks (e.g., ring vaccination, case-area targeted interventions, etc)?
13	 	What is the most cost-effective package of water, sanitation and hygiene, and oral cholera vaccine in different situations, based on transmission dynamics in cholera hotspots?
14		What are the most essential (or what is the minimum set of) infection, prevention and control (IPC) interventions in cholera treatment facilities and oral rehydration points to reduce risk of transmission within these facilities?
15		Are there immunisation strategies other than repeated mass campaigns that will be effective in preventing endemic or epidemic cholera?
16		What is the role and added value of CORTs (community outbreak response teams) in enhancing case investigation and outbreak detection?
17		Can oral cholera vaccine be co-administered safely and without interference with other vaccines during mass campaigns or during routine immunization visits (measles containing vaccines, yellow fever, typhoid, meningitis, pneumococcal conjugate vaccine)?
18	 	What are effective strategies to scale up the use of household water treatment in controlling cholera outbreaks?
19		How can we improve and fine-tune hotspot definition and identification at a district and sub-district level, such as micro-hotspots?
20		Is improved access to safe water (e.g., water points and distribution networks) effective in controlling and preventing cholera outbreaks?

GTFCC GLOBAL RESEARCH AGENDA 2021 - OCV

	Oral Cholera Vaccine
1	What are the optimal oral cholera vaccine schedules (number of doses and dosing intervals) to enhance immune response and clinical effectiveness in children 1 to 5 years of age?
2	What are potential delivery strategies to optimize oral cholera vaccine coverage in hard-to-reach populations (including during humanitarian emergencies and areas of insecurity)?
3	What is the optimal number of doses of oral cholera vaccine to be used for follow-up campaigns in communities previously vaccinated with a two-dose schedule?
4	Can the impact of oral cholera vaccine on disease transmission, morbidity and mortality be maximized by targeting specific populations and/or targeted delivery strategies?
5	What impact does the timing of oral cholera vaccine use have on prevention and control of an outbreak?

Discovery research

New tools and databases

Longer time to impact

**Novel and innovative
diagnostics**

**New and improved
vaccines**

**Coordinated genomics
database**

Research agenda progress review

Review of progress against cholera research agenda

- Scoping review
- Published articles 2017 – 2024



OVERVIEW OF CHOLERA ROADMAP RESEARCH AGENDA

The Cholera Roadmap Research Agenda identifies knowledge gaps most important to cholera experts and stakeholders and establishes a prioritized list of research questions that, when answered, will have a significant impact on achieving the Cholera Roadmap goals. Together, the cholera control community can align our efforts and resources to answer the most pressing cholera research questions of our time and encourage discovery research and innovation.

JANUARY 2021

Screening

Studies screened (n = 12203)

Studies excluded (n = 11015)

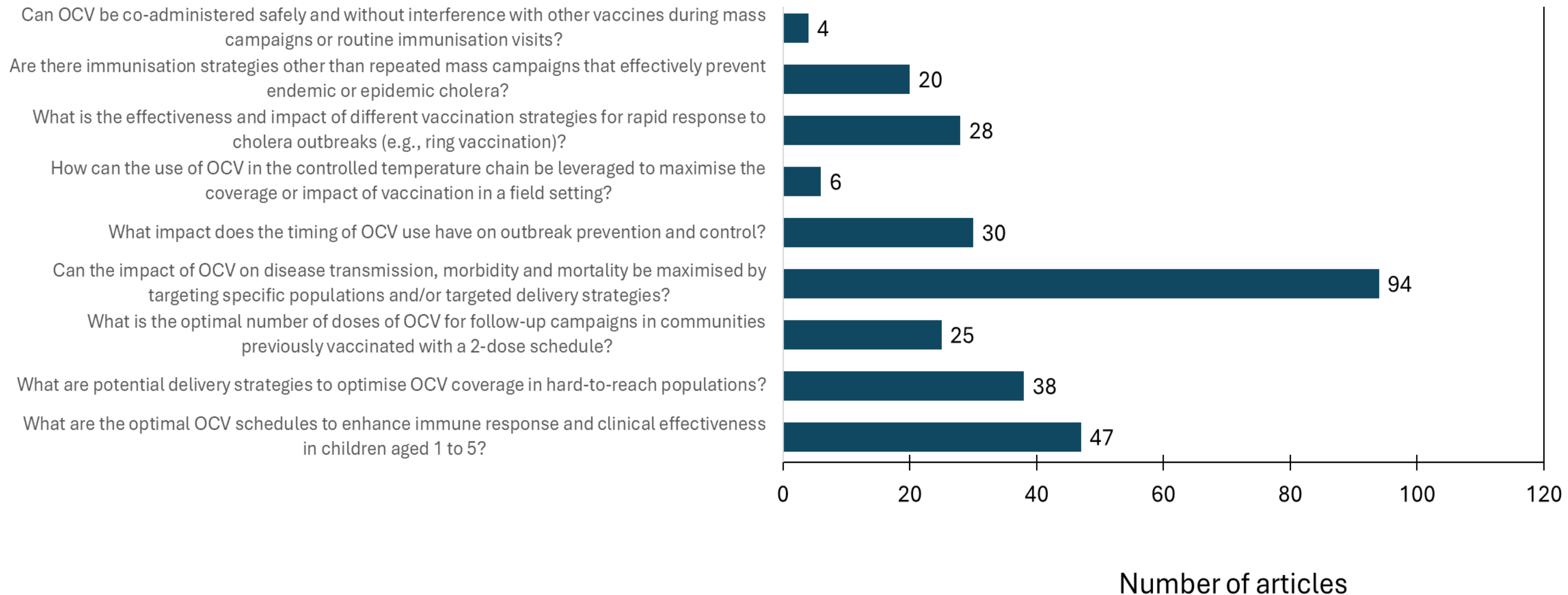
Studies assessed for eligibility
(n = 1183)

Studies excluded (n = 601)
Wrong date (n = 468)
Wrong focus (n = 37)
Can't be found (n = 5)
Wrong study design (n = 91)

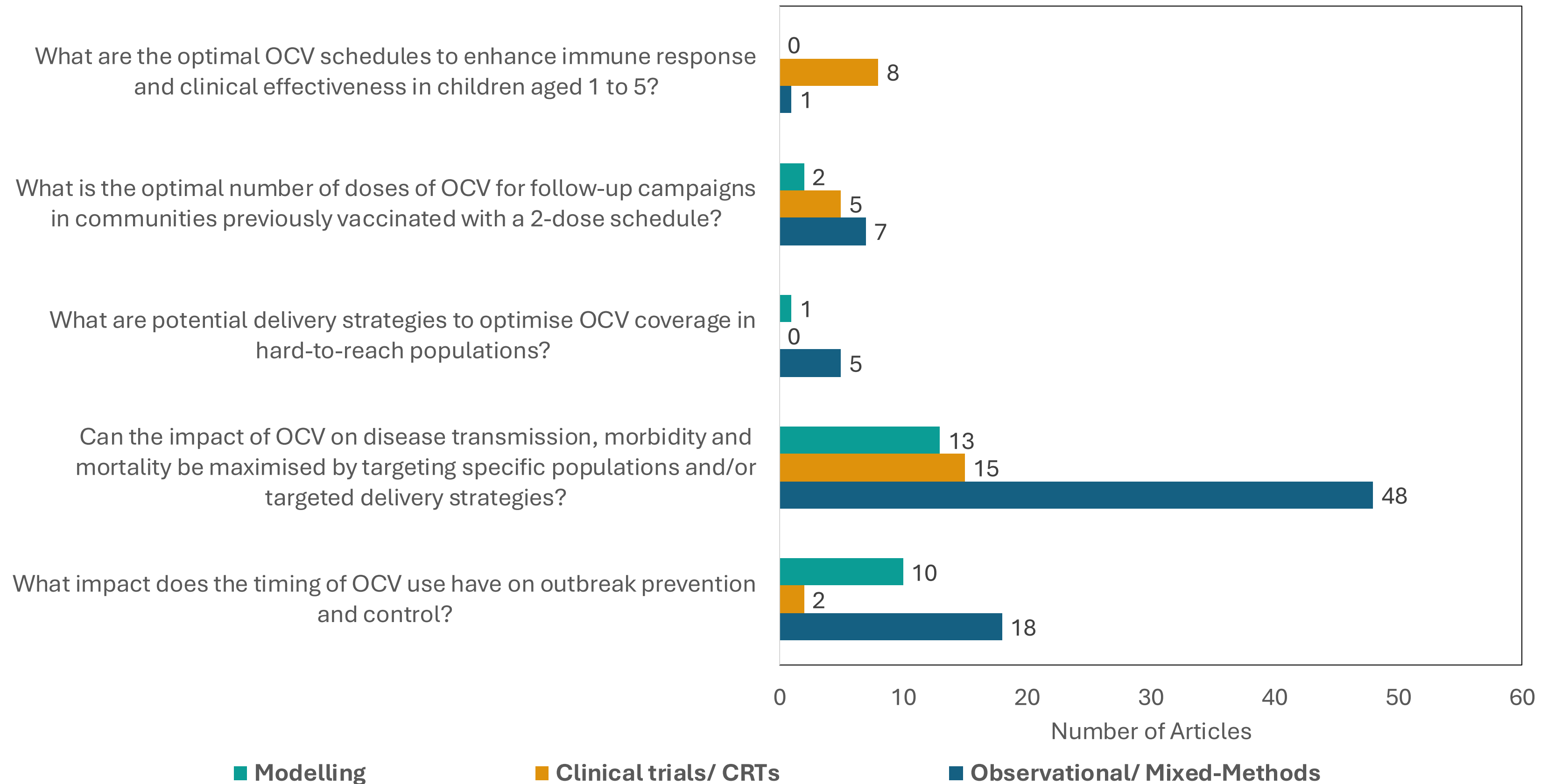
Included

Studies included for review
(n = 572)

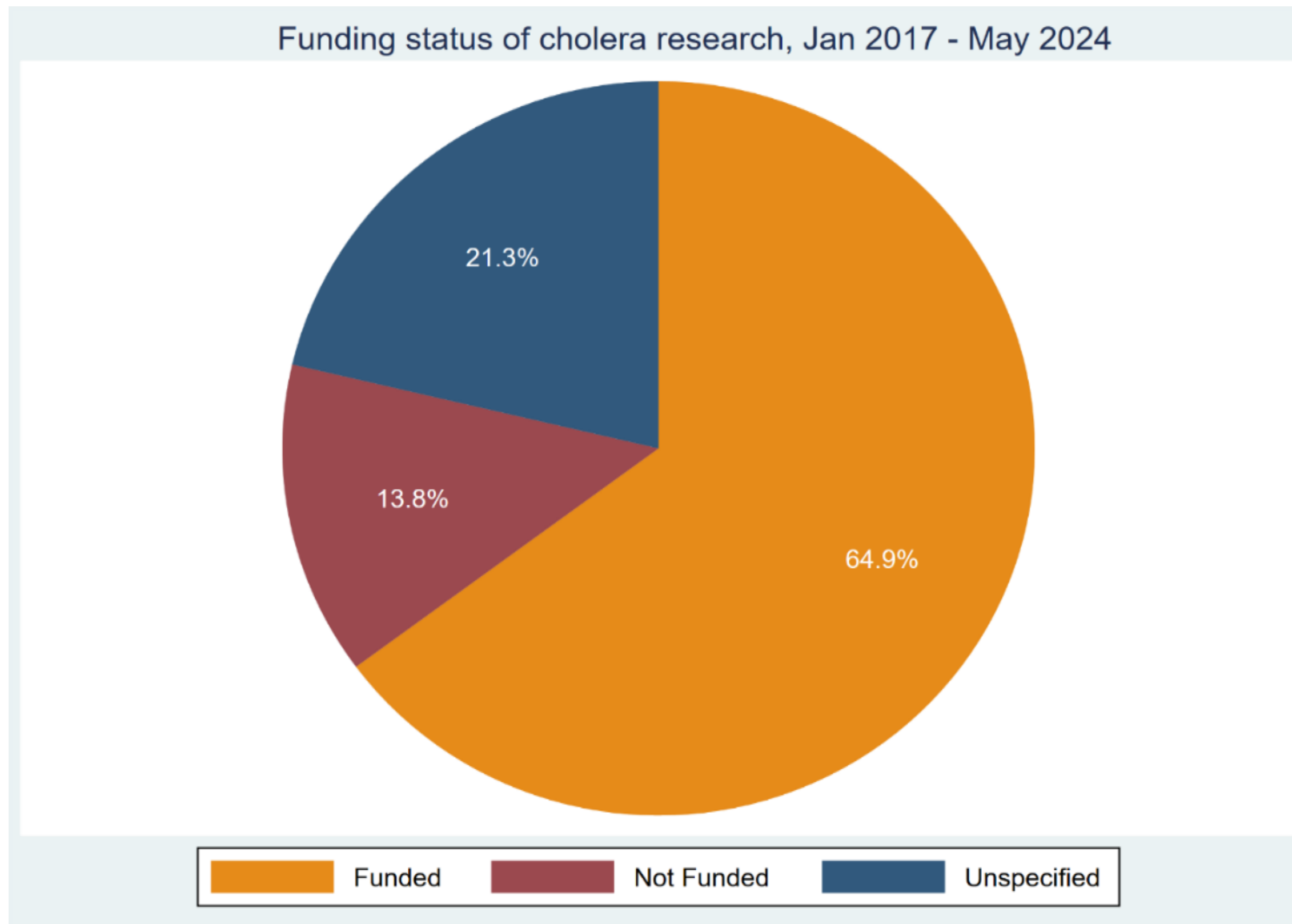
OCV questions in top 20 priorities



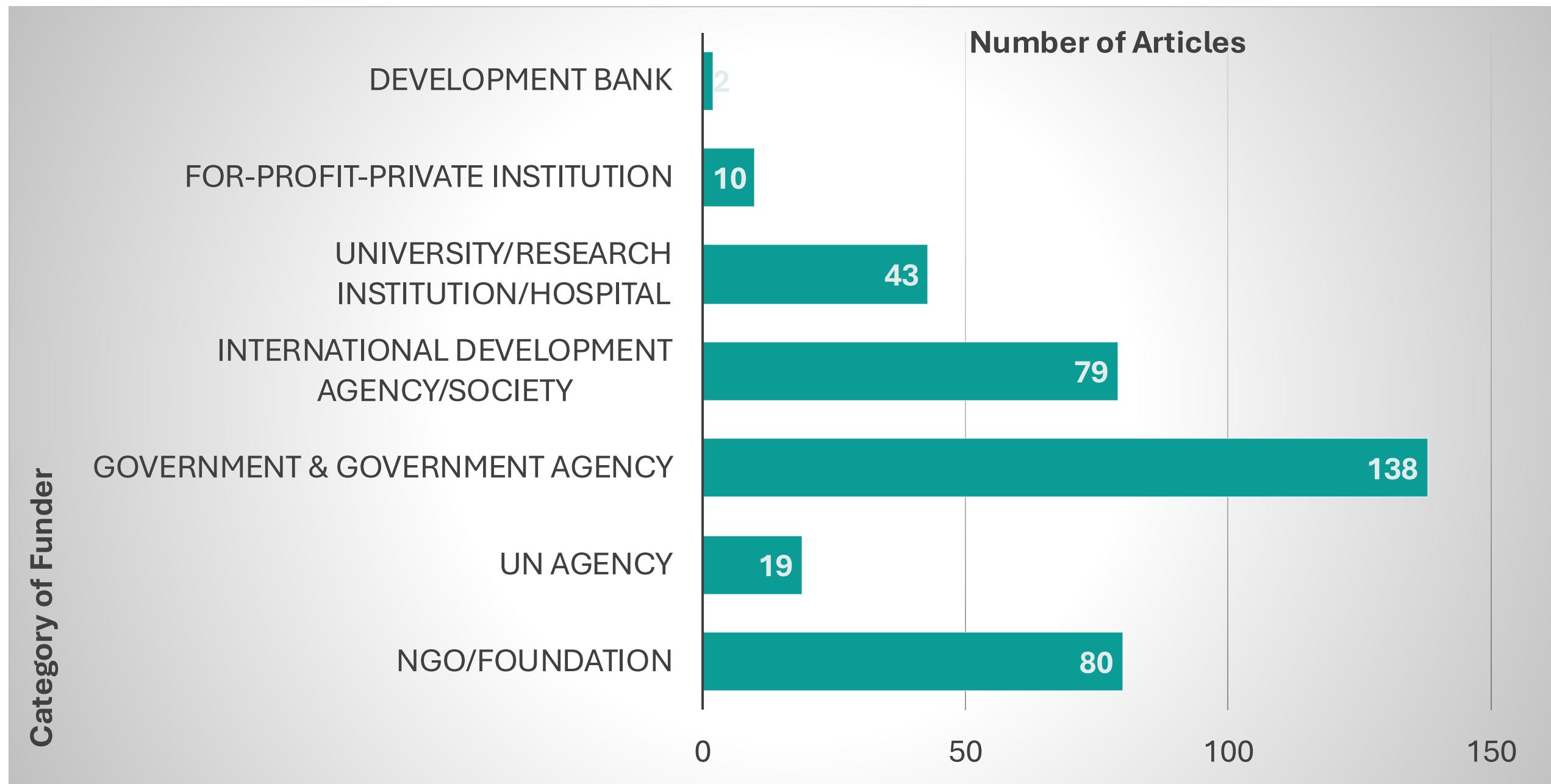
Types of research studies addressing OCV priorities



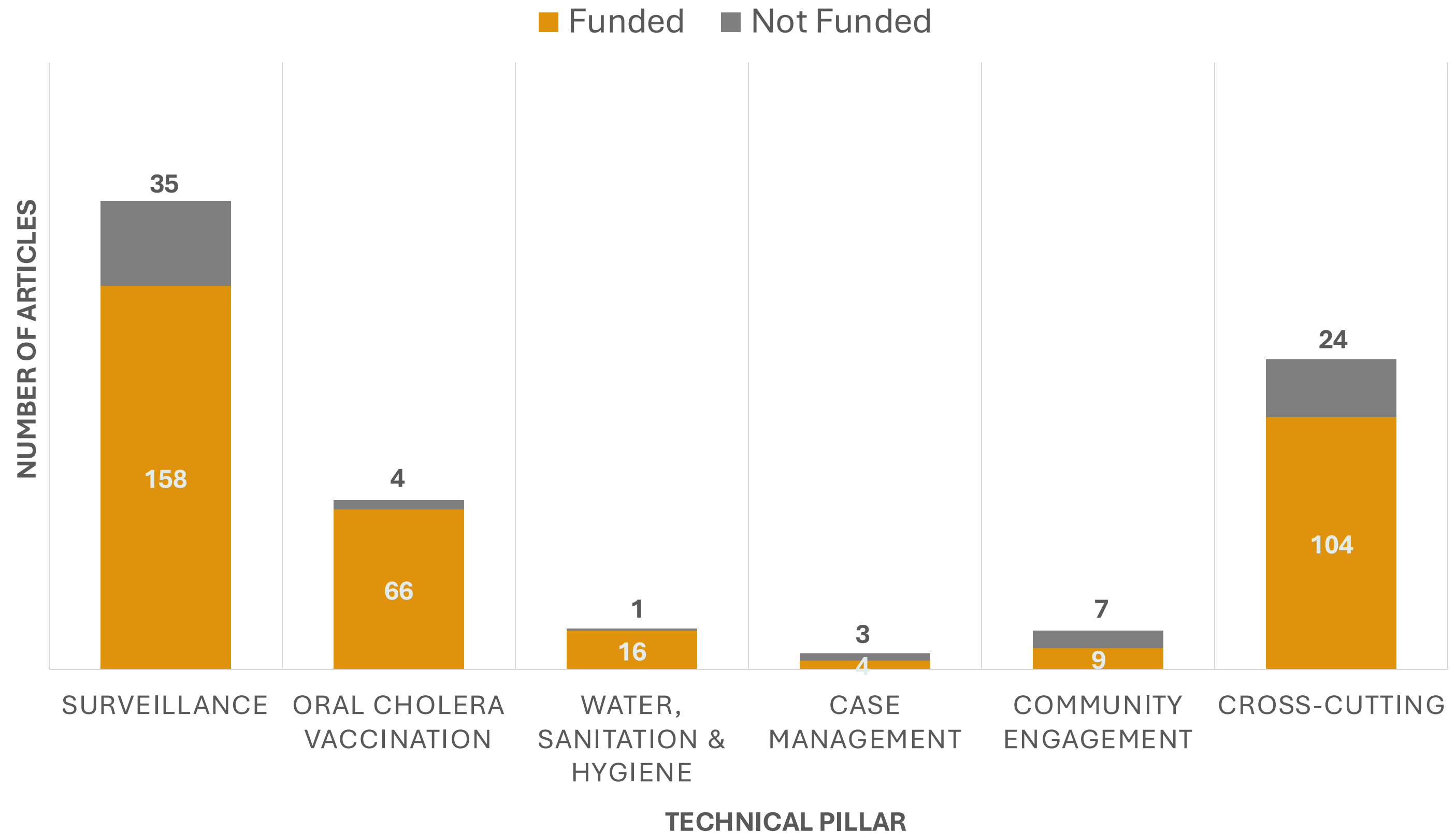
PROPORTION OF PROJECTS REPORTING FUNDING STATUS



CATEGORY OF FUNDERS FOR THOSE REPORTED




FUNDING STATUS BY TECHNICAL PILLAR



RESEARCH DISCUSSION

WHAT ARE THE REMAINING OCV RESEARCH QUESTIONS?



RESEARCH DISCUSSION

WHAT CAN THE GTFCC DO TO SUPPORT THE OCV RESEARCH SYSTEM?