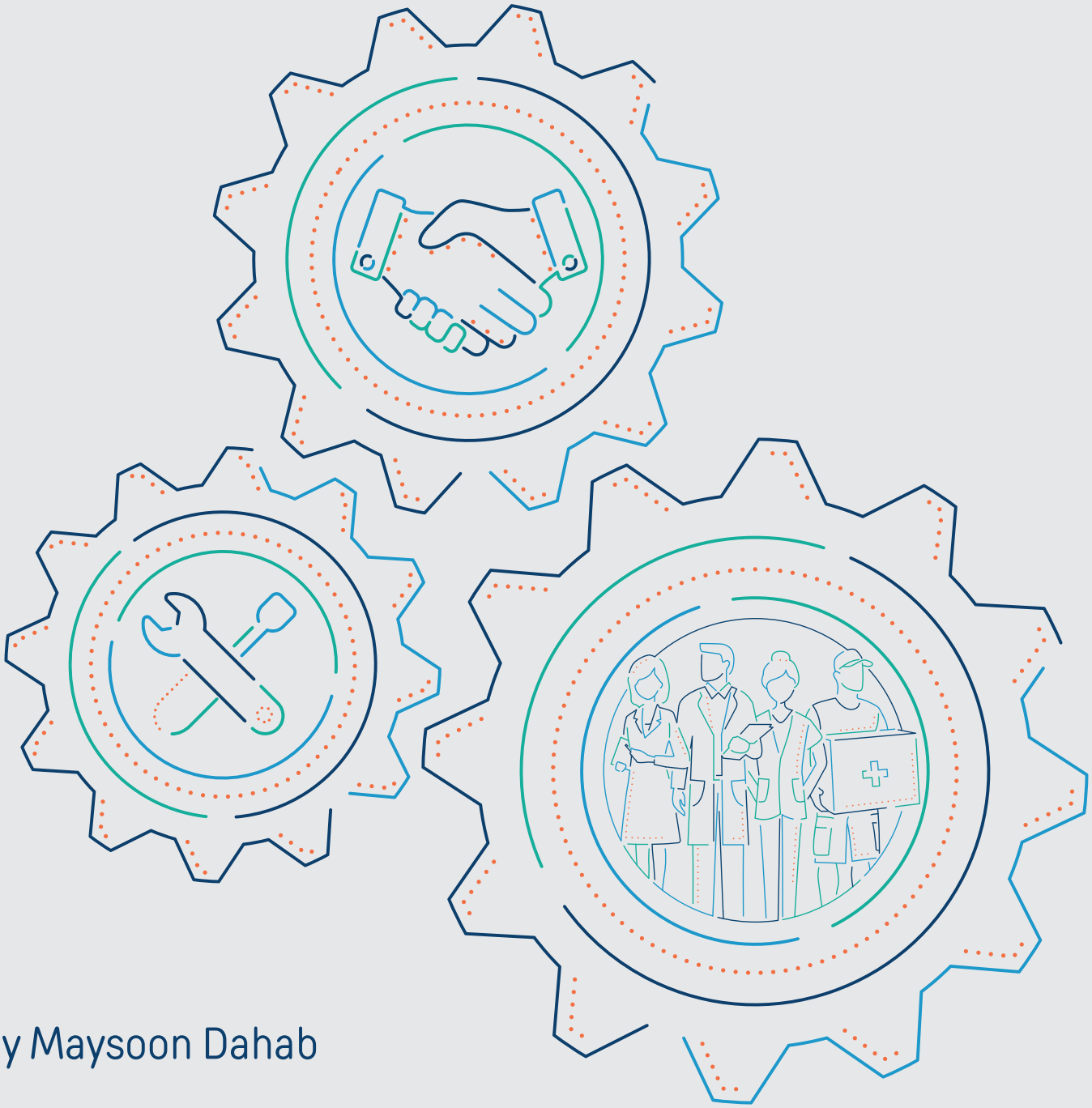
r2hc Research for health in humanitarian crises | elrha

MITIGATING OPERATIONAL CHALLENGES IN **HUMANITARIAN HEALTH RESEARCH**

The R2HC Experience 2014-2018



By Maysoon Dahab

ABOUT ELRHA

We are a global charity that finds solutions to complex humanitarian problems through research and innovation. We are an established actor in the humanitarian community, working in partnership with humanitarian organisations, researchers, innovators, and the private sector.

We have supported more than 200 world-class research studies and innovation projects, championing new ideas and different approaches to evidence what works in humanitarian response.

But it's not just about pinpointing what works. We transform that evidence-based knowledge into practical tools and guidance for humanitarian responders to apply in some of the most difficult situations affecting people and communities, so that those affected by crises get the right help when they need it most.

We carry out our work through two funding programmes: our research-focused R2HC programme and our innovation-focused HIF.

RESEARCH FOR HEALTH IN HUMANITARIAN CRISES (R2HC)

R2HC aims to improve health outcomes for people affected by humanitarian crises by strengthening the evidence base for public health interventions. Our globally recognised research programme focuses on maximising the potential for public health research to bring about positive change and transform the effectiveness of humanitarian response. The work we do through the R2HC helps inform decision making.

Since 2013, we have funded more than 60 research studies across a range of public health fields.

HUMANITARIAN INNOVATION FUND (THE HIF)

The HIF aims to improve outcomes for people affected by humanitarian crises by identifying, nurturing and sharing more effective and scalable solutions. The HIF is our globally-recognised programme leading on the development and testing of innovation in the humanitarian system. Established in 2011, it was the first of its kind: an independent, grant-making programme open to the entire humanitarian community.

Through HIF, we fund, support and manage innovation at every stage of the innovation process. Our portfolio of funded projects informs a more detailed understanding of what successful innovation looks like, and what it can achieve for the humanitarian community. This work is leading the global conversation on innovation in humanitarian response.

OUR DONORS

Our Research for Health in Humanitarian Crises programme is funded by the UK Department for International Development (DFID), Wellcome, and the UK National Institute for Health Research (NIHR).

ACKNOWLEDGEMENTS

We would like to thank Maysoon Dahab for conducting the research and authoring this review.

Designed by Just So Graphic Design

SUGGESTED CITATION:

Dahab, M. (2019). 'Mitigating operational challenges in humanitarian health research: The R2HC experience 2014–2018'. Elrha: London

TABLE OF CONTENTS

FOREWORD

Our Research for Health in Humanitarian Crises (R2HC) programme was established in 2013 with the aim of increasing the evidence base for public health interventions in humanitarian crises. As well as funding research and working with key stakeholders to ensure research findings are used to inform policy and practice, we seek to capture broader lessons learned from conducting research in humanitarian settings. This includes documenting experiences on a range of cross-cutting issues so that good practice can be shared across the humanitarian research community.

Although many challenges associated with undertaking research during humanitarian crises are well understood, little has been documented about these and how they can be mitigated by research teams. Most peer reviewed articles and sector specific guidance has focused on the ethical dimensions of humanitarian research challenges. To our knowledge there has been no peer reviewed research published on the field operational challenges of conducting humanitarian research and how these are most frequently mitigated or addressed.

A review we conducted in 2017 identified common operational challenges faced by research teams funded through the R2HC. We realised that although many of the challenges are similar to those faced by researchers conducting studies in other settings, the intensity or degree of challenge was exacerbated in humanitarian settings where fewer options exist for mitigation.

Building on the earlier review, we decided to examine our existing data with a view to quantifying and categorising the range of challenges faced, and identifying solutions that have been adopted by R2HC-funded researchers to address these.

We, as well as most other funders of research, expect grant recipients to undertake risk assessments before they begin their studies. We believe that this review's findings will provide practical guidance and suggestions that will help researchers plan and mitigate some of the most frequently experienced challenges they are likely to face when conducting their studies. We are pleased to share this report with the humanitarian research community.

Anne Harmer
Head of R2HC, Elrha

EXECUTIVE SUMMARY

Aim

Humanitarian health research funding opportunities have increased in recent years, partly through initiatives such as Elrha's Research for Health in Humanitarian Crises (R2HC) programme. Along with this increased focus there has also been a general consensus that implementing health research studies in humanitarian contexts can be operationally complex. Learning from the growing operational experiences of teams carrying out humanitarian health research can help to maximize the potential and impact of future studies in similar contexts.

Our previous report, published in 2017, aimed to qualitatively illustrate the breadth of operational challenges faced by R2HC-funded humanitarian health research teams.[1] However, to our knowledge, there are currently no published reports that describe these challenges, nor their impacts or solutions, quantitatively. Certainly, none that do so for a large and diverse group of research studies covering a wide range of humanitarian health topics.

This report aims to contribute towards filling this gap in three ways:

1. To quantify common operational challenges described by R2HC-funded humanitarian health research teams. This includes quantifying both the impact of these challenges and how they were addressed.
2. To describe which factors positively impact the ability of study teams to address risks and challenges as they arise.
3. To synthesize knowledge of both positive and negative operational factors into recommendations for teams designing future studies in similar contexts.

To this end, we reviewed study progress reports submitted to R2HC between 2014 and 2018. We perused each report on a line-by-line basis. We then conducted a thematic analysis where we identified, then quantified, key themes relating to challenges of conducting humanitarian health research, their impacts and solutions. We also extracted themes about enabling factors that positively influenced study implementation.

Ethical clearance for this study was provided by the King's College London Research Ethics Board.

[1] Dahab, M. (2017), Operational Challenges of implementing health research in humanitarian settings. Cardiff, UK: Elrha

Findings

We reviewed 111 progress reports submitted between 2014 and 2018. We identified 136 unique challenges, which were organized into four main themes. About 40% of overall challenges were related to components of the study inputs and/or design. In this group the main challenge (46%) related to staff being unavailable/underqualified for work, or teams having difficulties hiring staff altogether. Other challenges within this thematic were budgeting shortfalls (16%), contracting complexities (11%) and delayed ethics approvals (9%).

Second highest, were issues related to the setting or context the study was conducted in (24%). Among this group the main challenge (59%) was insecurity due to conflict or political violence. Otherwise, teams were challenged by the failure of physical and communication infrastructure, such as roads or internet (19%), and the variable quality of programmatic data available to the study teams (16%).

Fourteen percent of overall challenges related to partnership coordination. Among this group, more than half of challenges were due to the inability to communicate effectively with partners, especially in new and/or complex partnership arrangements. Additionally, 20% of challenges in this group were due to partnership negotiations failing completely before the start of project activities.

Finally, 12% of overall challenges were related to the community or study populations. The most common among these (38% each) were the study population having negative perceptions of research activities in relation to competing humanitarian needs, and study teams finding that the pool of potential participants was in fact smaller than originally anticipated.

For each challenge the mitigation strategies identified were relatively limited, though none had only one solution for all contexts. For example, where staff were unavailable or underqualified for work, study teams most often tried to hire or train new/alternative staff members. Where hiring new staff was difficult, teams regularly had to delay or cancel some study activities. Otherwise, critical tasks were shifted to available staff members, in some cases non-research programme staff.

When study sites became inaccessible, study teams often had no choice but to move data collection and/or training activities to secure areas, in some cases permanently. Otherwise, there were three reports of adapting study methodology to use real time data collection software to improve remote monitoring of data collection. There were also two reports where study sites could still be accessed despite insecurity, although recruitment and retention dropped. This was because potential participants were less likely to attend clinic and/or tracing activities could not be carried out.

In terms of partnership difficulties, where new partnership negotiations broke down and/or a partnership or study site had to be terminated after the study started, study teams often had little alternative but to identify new or alternative partners or sites.

Where communication broke down due to complexity of partnership arrangements, teams mostly responded by increasing the regularity of communications by whatever means possible (e.g. phone calls and skype). However, many commented that more frequent face-to-face meetings were preferred, even if not always possible.

The above example underscores two points. Firstly, that some solutions are more commonly used to address key challenges. But secondly, that none of these was found to be a one size fits all solution for any of the challenges identified.

Apart from understanding what type of challenges could arise and which solutions could be implemented, how this process is carried out can be as important. Factors that may positively influence a team's ability to predict threats and/or address them successfully include:

- Fostering an equitable engagement between partners, especially where complex partnership arrangements are involved. This includes having a clear understanding of roles and responsibilities of each partner and fostering of a sense ownership of the study activities, however peripherally involved the partner is. This is particularly important as humanitarian health research studies are implemented in contexts where partners more often than not have competing priorities beyond the research activities, not least of which is the humanitarian crisis response demands on the community and study staff themselves. To this end, communities of study and staff must be viewed as the backbone of these partnership arrangements and engaged fully and appropriately throughout the study cycle.
- A clear communication plan coupled with clear roles and responsibilities enables team members to appropriately monitor study programmes and identify problems early on. It should also provide a forum for discussing these issues as they arise to identify the most appropriate mitigation strategy.

Recommendations

Study planning stages

- Develop a risk preparedness plan that takes into account common challenges
- Develop a clear communication plan that defines how partners working in different countries and sites will stay informed about study progress, identify problems and discuss solutions, all in real-time. This must include:
    - Plans to bring new partners and/or staff up to speed
    - Back up plans when internet services are weak.
- Dedicate appropriate time to engage partners meaningfully, and to foster a strong sense of ownership of study activities and a clear understanding of roles and responsibilities.
- Dedicate time for piloting and pre-testing study tools and procedures, as well as management and logistical processes.
- Map stakeholder and communities affected by the study and plan engagement sessions throughout the study cycle.

Study implementation stages

- Update risk and communication plans appropriately
- Continue to engage stakeholders and update the communities' involved
- In challenging times, the study design and/or procedures may need to be simplified to prioritize the most essential study activities. Where this is the case, it is essential that teams be transparent about the effect of these changes on the study findings, including the introduction of any additional biases.

INTRODUCTION

Funding for humanitarian health research efforts has increased in recent years. Elrha's Research for Health in Humanitarian Crises (R2HC) programme, established in 2013, exemplified such efforts. The R2HC dispersed £17.9 million to 52 research studies between 2014–2018.[2] With the increase in funding there is also a general agreement that the implementation of humanitarian health research studies is challenged by the settings in which they are conducted. There are however very few publications that synthesize these perceived challenges.

Some publications, including our previous work[3], have documented key challenges.[4,5] These included restricted access to study population, working within fragmented health care systems, competing humanitarian crises, and difficulty recruiting staff with the necessary research skills and experience. What remains missing is a synthesis not only of challenges but also of impacts and mitigation strategies to address them.

The R2HC portfolio of studies provides a unique opportunity to understand the breadth of these challenges and how they are addressed in diverse humanitarian contexts. R2HC monitors both operational and technical progress of each funded study throughout the funding cycle. This process generates a wealth of knowledge on key operational research challenges across various humanitarian settings.

In this study we aimed to update findings from our 2017 study[2] that synthesized key operational challenges in humanitarian health research. This updated study also includes a description of the impacts and mitigation strategies common to R2HC studies. The aim is to provide future study teams working in humanitarian settings with an understanding of common potential risks when planning research proposals. We also aim to inform how teams and study activities should be structured to address challenges as they arise.

METHODS

We reviewed all study progress reports submitted to R2HC between 2014 and 2018. For each report we conducted a thematic analysis where the data was perused for key themes relating to challenges of conducting humanitarian health research, their impacts and solutions. The process was inductive in that we coded the data without trying to fit it into a pre-existing coding frame or according to a pre-existing analytical preconception, and in this way the analysis was data driven.

The analysis was conducted in four broad steps. Firstly, we familiarised ourselves with the data in the progress reports.

Secondly, we generated the initial codes by working systematically through the entire data set, giving full and equal attention to each data item, and identifying interesting aspects in the data items that may form the basis of repeated patterns (themes).

Thirdly we searched for themes by sorting the different codes into potential themes and collating all the relevant data extracts within the identified themes.

[2]Elrha (2018), R2HC research portfolio 2018. Cardiff, UK: Elrha
[3]Dahab, M. (2017), Operational Challenges of implementing health research in humanitarian settings. Cardiff, UK: Elrha
[4]Khatib, R., Giacaman, R., Khammash, U., & Yusuf, S. (2017). Challenges to conducting epidemiology research in chronic conflict areas: examples from PURE- Palestine. Conflict and Health, 10(33). doi:10.1186/s13031-016-0101-x
[5]Stern, S., & De Roquemaurel, M. (n.d.). Methodological challenges for operational research in the humanitarian context. Retrieved May 17, 2017, from http://www.ennonline.net/fex/54/opchallengeshumresearch

Finally, we reviewed, defined and named the themes. We then used this list of themes to narratively describe and illustrate the key challenges and solutions employed.

Ultimately, we generated an excel data base with a row for each challenge reported, its associated impact and solutions, as well as the themes into which these items were grouped. We also included, for each row, key study identifier characteristics (e.g. study location, humanitarian context, funding year). The latter enabled us to cross-tabulate key themes with potentially relevant study characteristics such as the humanitarian context in which the study was conducted.

ETHICS

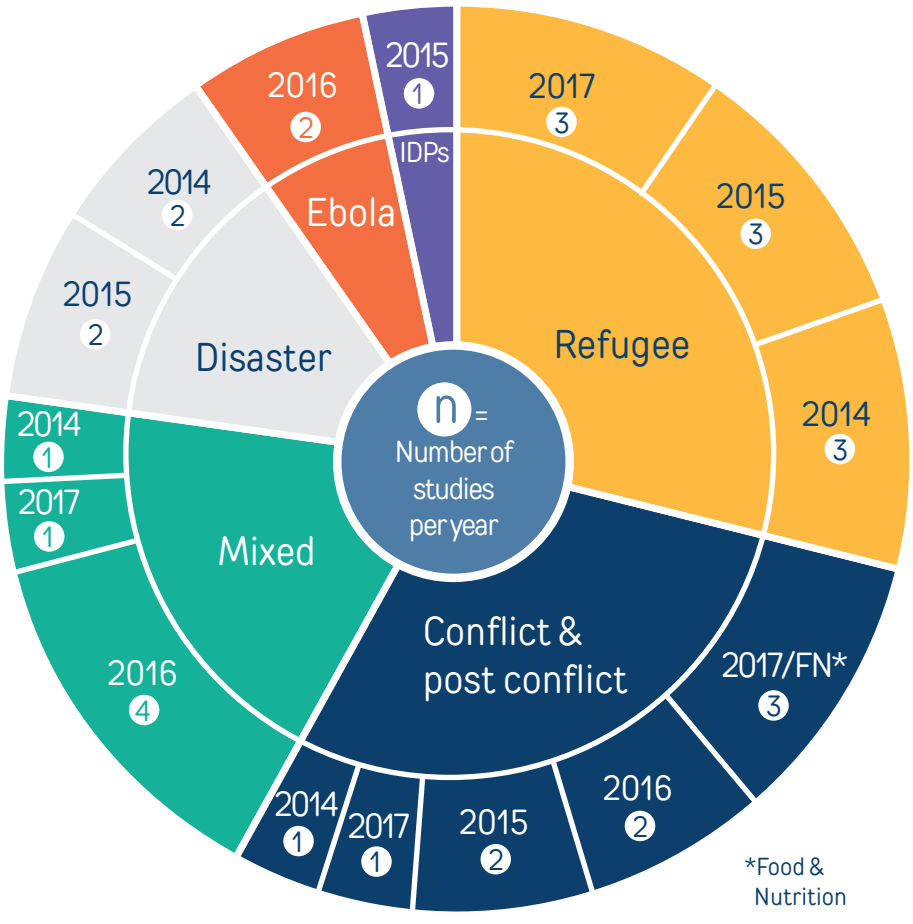
Ethics approval for this study was provided by the King's College London Research Ethics Board.

FINDINGS

Characteristics of studies reviewed

We reviewed 111 progress reports submitted between 2014 and 2018 by 31 R2HC funded study teams. Approximately 50% of the studies had been completed at the time of this review.

Figure 1: Number of R2HC studies by year and humanitarian context



Overall challenges, their impacts and mitigation strategies

Among the reports reviewed, a total of 136 individual challenges were identified (Figure 2). For ease of presentation we loosely grouped these challenges into five main themes:

1. Study components
2. Setting or context
3. Partnership coordination
4. Community and/or study population
5. Other characteristics

The following section describes the challenges by thematic group (Figure 2), along with their impacts (Figure 3), and the mitigation strategies deployed by study teams (Figure 4).

Study components

About 40% of the challenges identified were related to components of the study inputs and/or design (Figure 2). This primarily included staffing difficulties, budget shortfalls, and complex study methods and/or procedures. These study-related challenges most often resulted in the delay or cancellation of study activities.

Among the 48 solutions reported for study-related challenges, the most common (21%) was to simplify study methodology. This included changing the study design from RCT to cross-sectional or qualitative, reducing follow-up evaluation activities, simplifying study tool/intervention, reducing sample size, and/or reducing outcomes based on available data only. Otherwise, teams had to delay and/or hire and train alternative/additional staff.

Setting or context

Almost a quarter (24%) of challenges related to the setting or context in which the study was conducted. The most common were insecurity due to violence or political instability. This most often led to lack of access to the study site. 31 solutions were reported for setting related challenges.

Unsurprisingly, the most common (31%) was to move data collection activities to a more secure location. 16% of solutions required simplification of the study design, while another 16% related to improving and regularizing communication between partners in the study team.

Partnership coordination

14% of challenges related to the partnership setup and coordination. These included loss of partners or study sites before the study began, and complexity of communicating and engaging multiple partners. The main impact of these types of challenges was the need to identify new and/or alternative partners.

Among challenges related to partnership set-up and coordination, 13 solutions were reported. In almost half (46%) of these cases the solution offered involved identifying new and/or alternative partnerships or different sites where participants can be recruited. 36% of this group involved partnerships that were manageable, but where there was a need for teams to improve and/or regularize, communication was strengthened between partners, using the best available means. This communication often involved the creation or improvement of a communications plan that included a clarification of roles and responsibilities of each partner.

Community and study population

Issues related to the community and/or study population characteristics accounted for 12% of overall challenges identified. These largely included mobility of potential study participants in and out of the study site, a smaller than anticipated pool of potential participants, and the study population having a negative or low priority perception of the research due to competing humanitarian needs. Challenges of this type mostly affected the study teams' ability to recruit and retain participants.

For challenges related to the community or study population characteristics, 18 solutions were put forward. The most common was, again, simplification of the study methodology (33%), followed by improving tracing activities (22%), and identifying new/alternative sites for recruitment.

Other challenges

There were 13 challenges that could not easily be grouped into one of the above categories (Table 1).

Table 1: Other challenges reported by R2HC funded research teams between 2014–2018

Challenge	Number of times reported
Difficulty translating intervention material into several language dialects	1
Difficulties in manufacturing intervention material to be tested	1
Difficulty ensuring all staff adhering to intervention protocol	1
Ethics breach during data collection	1
Visa barriers to international travel limiting face to face meetings	1
Fluctuation in the value of cash transfers being tested and evaluated	1
National survey results needed were withheld from full release	1
Difficulty ensuring interview privacy in highly populated research sites	1
Lack of data management plan in the programme with limited technical oversight and regular checks	1
Original methodology had too short a period between intervention and evaluation	1
Participant distress associated with data collection post traumatic natural disaster experience	1
Technical challenges in producing summary results from technological intervention for use by clinical team	1
Inability to identify sites where the intervention to be tested was being implemented	1
Total	13

Figure 2: Operational challenges reported by R2HC study teams between 2014–2018, organized by thematic groups

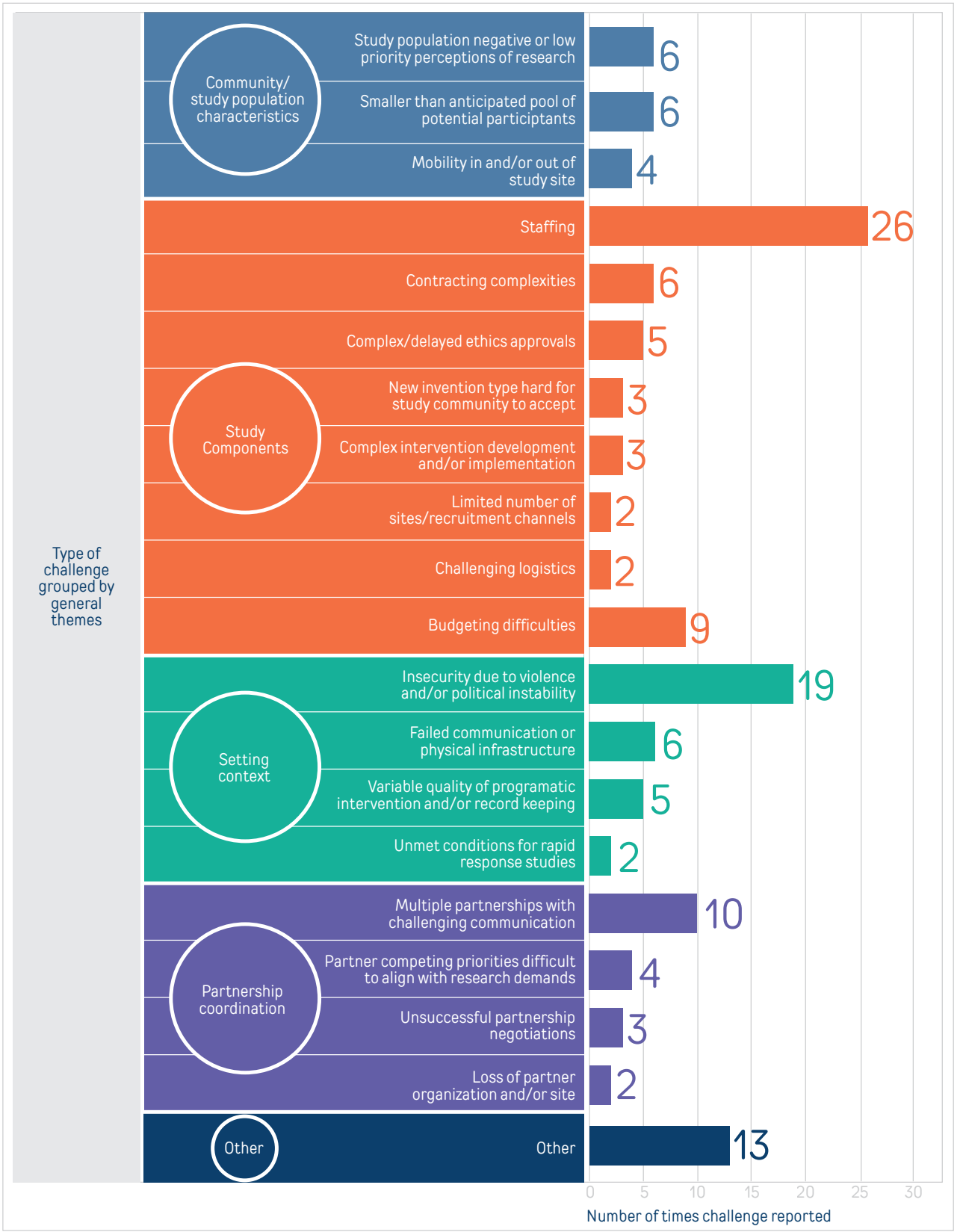


Figure 3: Main impacts by challenge theme reported by R2HC study teams between 2014–2018

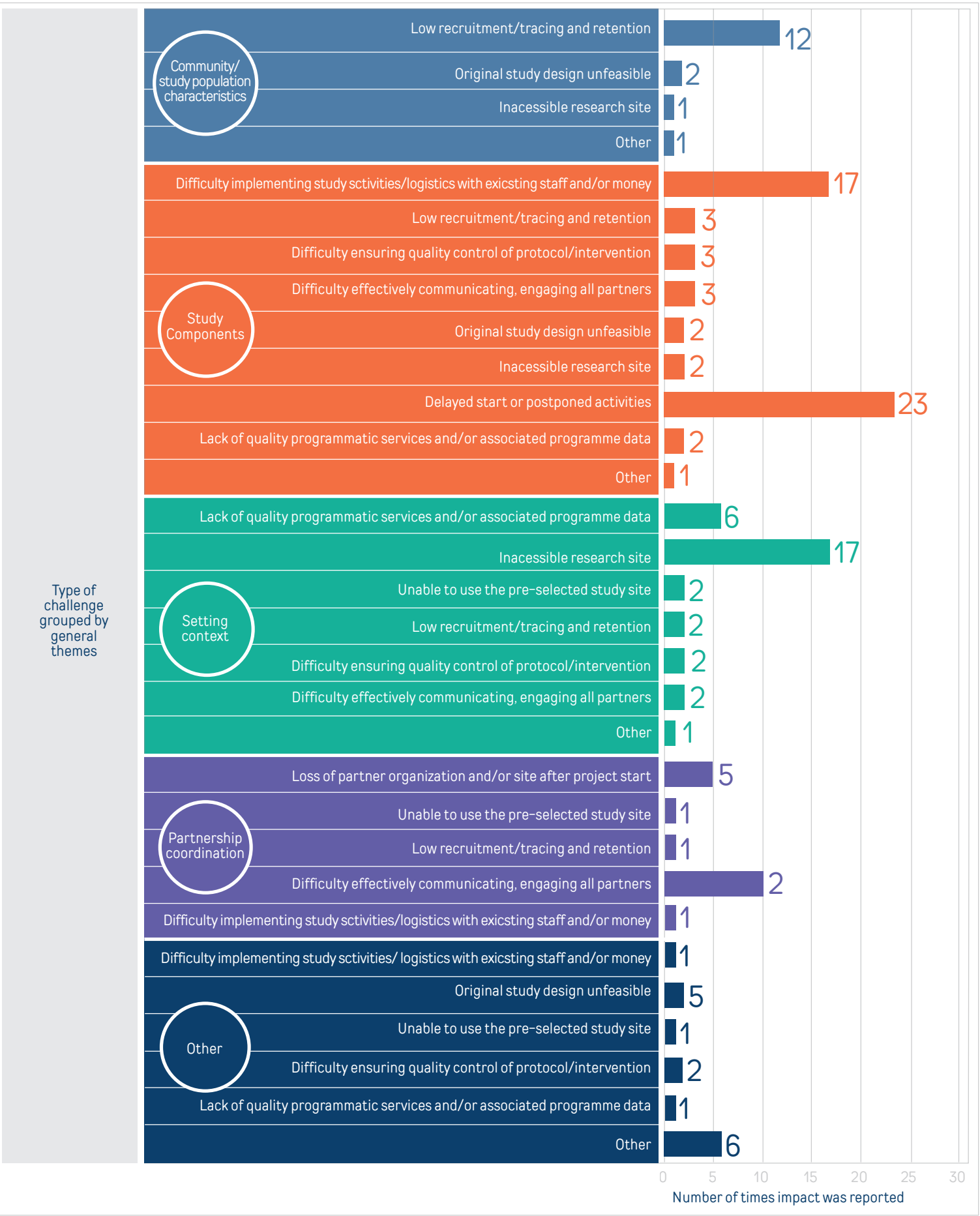
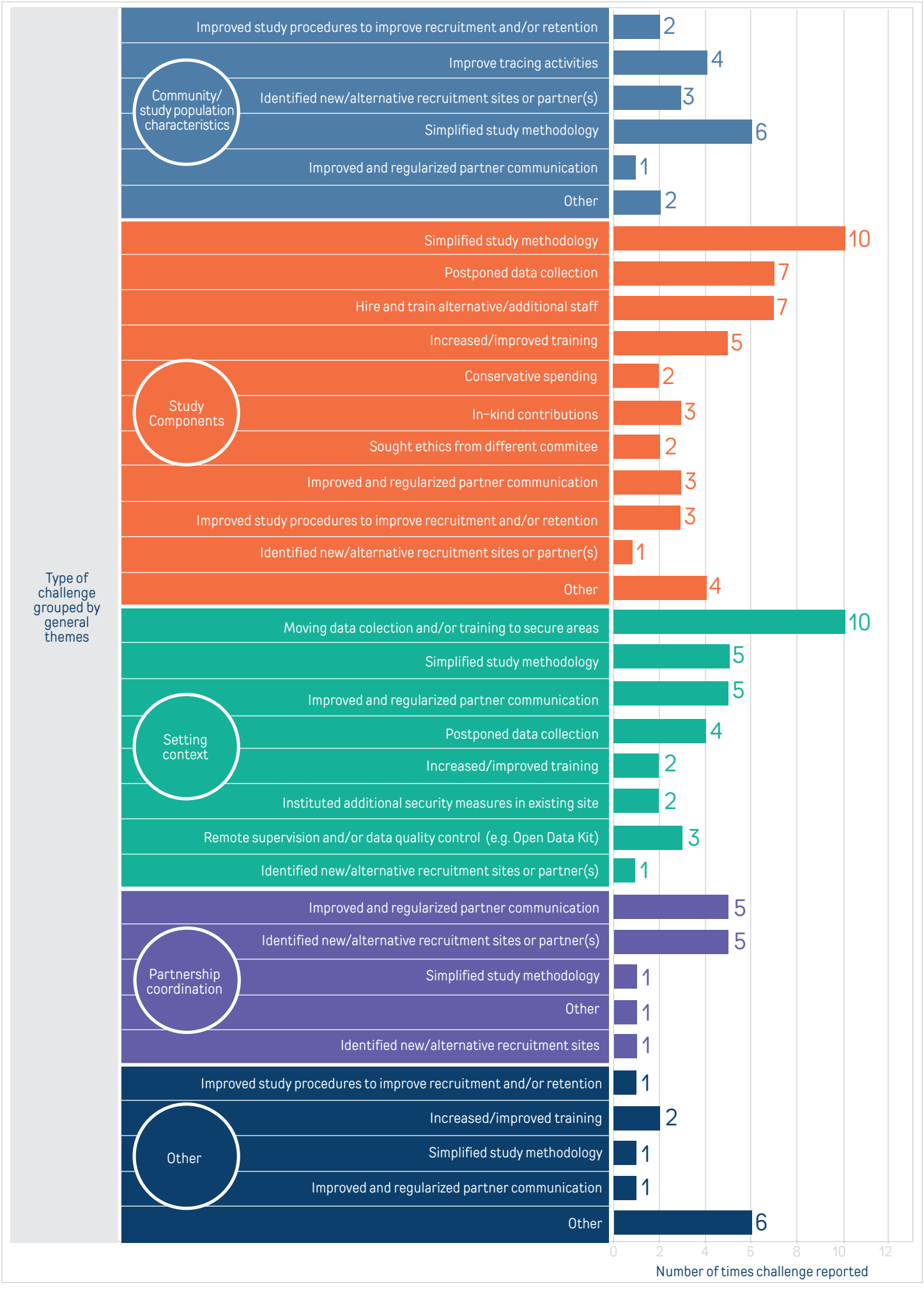


Figure 4: Key mitigation strategies reported by R2HC study teams between 2014–2018, organized by challenge theme

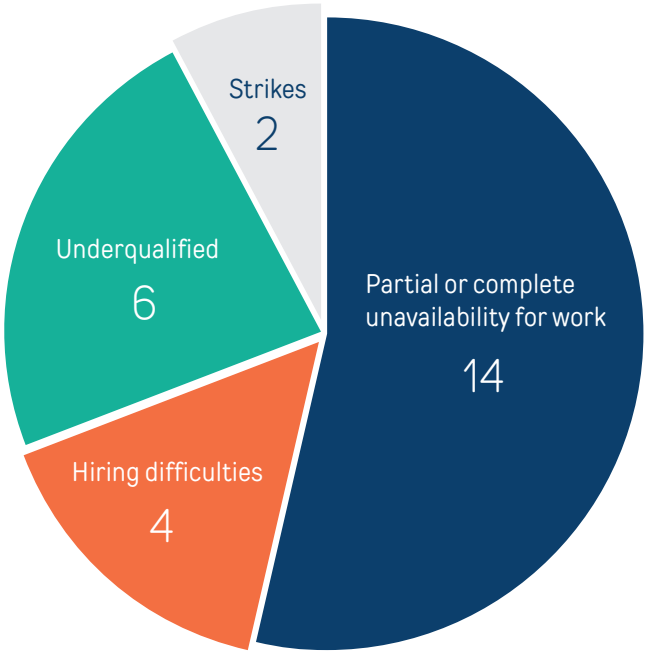


Impact and mitigation of the most common challenges reported

Human resources challenges

Overall, the most commonly reported challenge related to difficulties in staffing (Figure 2). This ranged from staff unavailability, to underqualification and hiring difficulties (see Figure 5).

Figure 5: Breakdown of types of staffing difficulties reported



Where staffing difficulties occurred, this was most often addressed by hiring or training additional or alternative staff, or delaying or task shifting activities (see Figure 6).

Specifically, among the 26 reports of staffing difficulties, more than half were due to staff being partially or completely unavailable for work. This was due to staff turnover, illness, competing work priorities, or exposure to the stress of humanitarian disaster. Staff unavailability most often led to delays or suspension of study activities, difficulties in coordinating study activities and logistics, and/or difficulties in ensuring strong fidelity or quality control of study protocols and related activities. In almost all of these cases the study teams responded to this challenge by hiring and training alternative and/or additional staff.

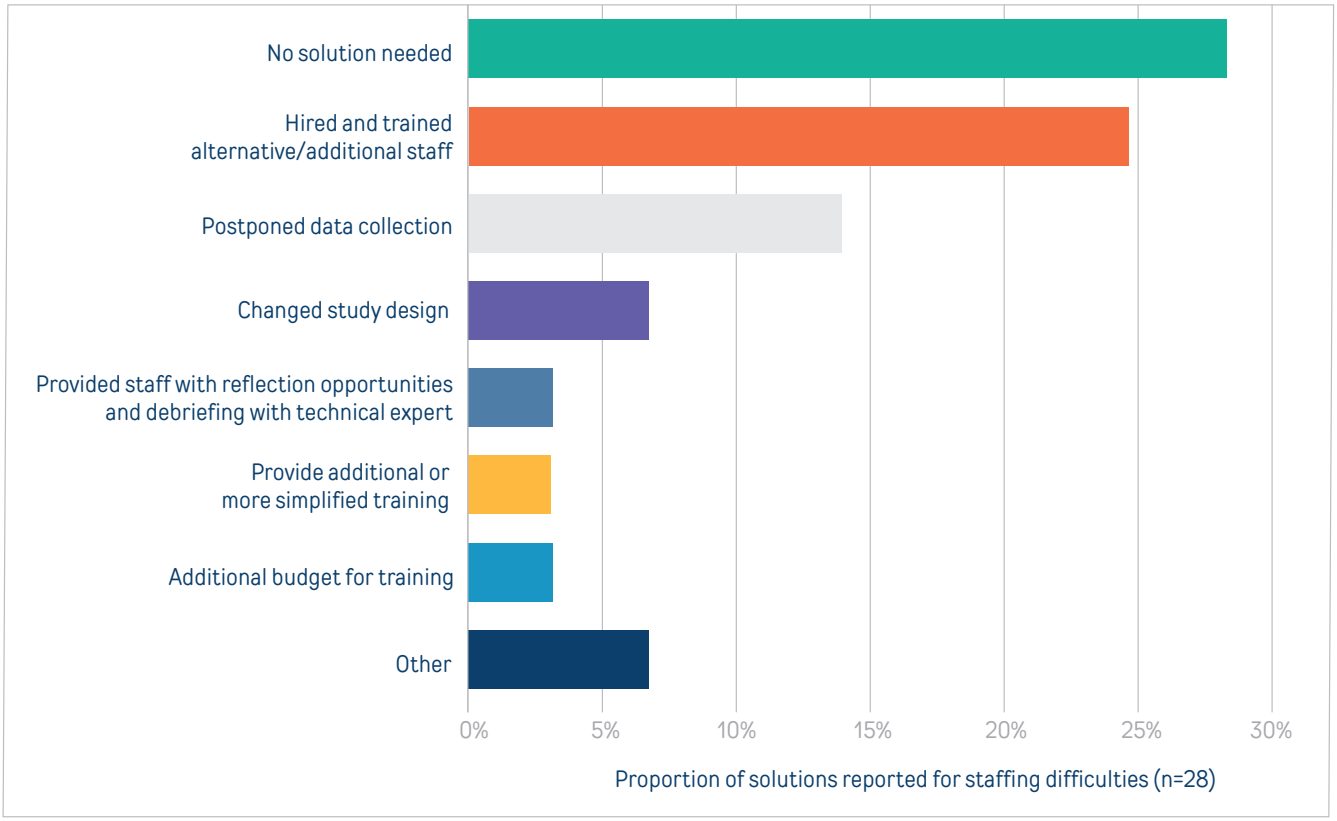
In one case the study team responded to timeline constraints by replacing a second post-intervention follow-up proposed in the original proposal with a qualitative process evaluation. The team thus could not conduct a definitive test of the effectiveness of the intervention but rather a test of the feasibility of the intervention and research protocols.

23% of staffing difficulties were due to difficulties in identifying or hiring appropriate staff. This was due to either a small pool of qualified applicants, difficulty attracting staff due to competing projects, or complex salary negotiations. This again led to delayed or suspended activities but also to difficulty carrying out more complex trainings and interventions, as well as staff being less able to operate independently, if at all. Study team most often postponed study activities and, in one case, used programme delivery staff for research activities.

15% of the reported staffing challenges were due to hiring underqualified individuals. This included staff with limited or no previous experience in the intervention, or with low levels of formal education. This often led to delays in study activities because study teams needed to hire more qualified staff, provide more training, and in one case develop specific material for training illiterate study staff.

Finally, there were limited but seriously crippling instances of health worker strikes which led to shutdown of programmatic services and associated research activities. Study teams often postponed study activities, or shifted to tasks such as analysis and training that could be performed while clinic staff were on strike. In one case, strike disruptions meant that clinical research variables could not be maintained constant for a true stepped-wedge design. The study team had to change the study design from stepped-wedge to using historical data for control.

Figure 6: Solutions employed by study staff to address staffing challenges among R2HC funded studies (2014–2017)



Insecurity

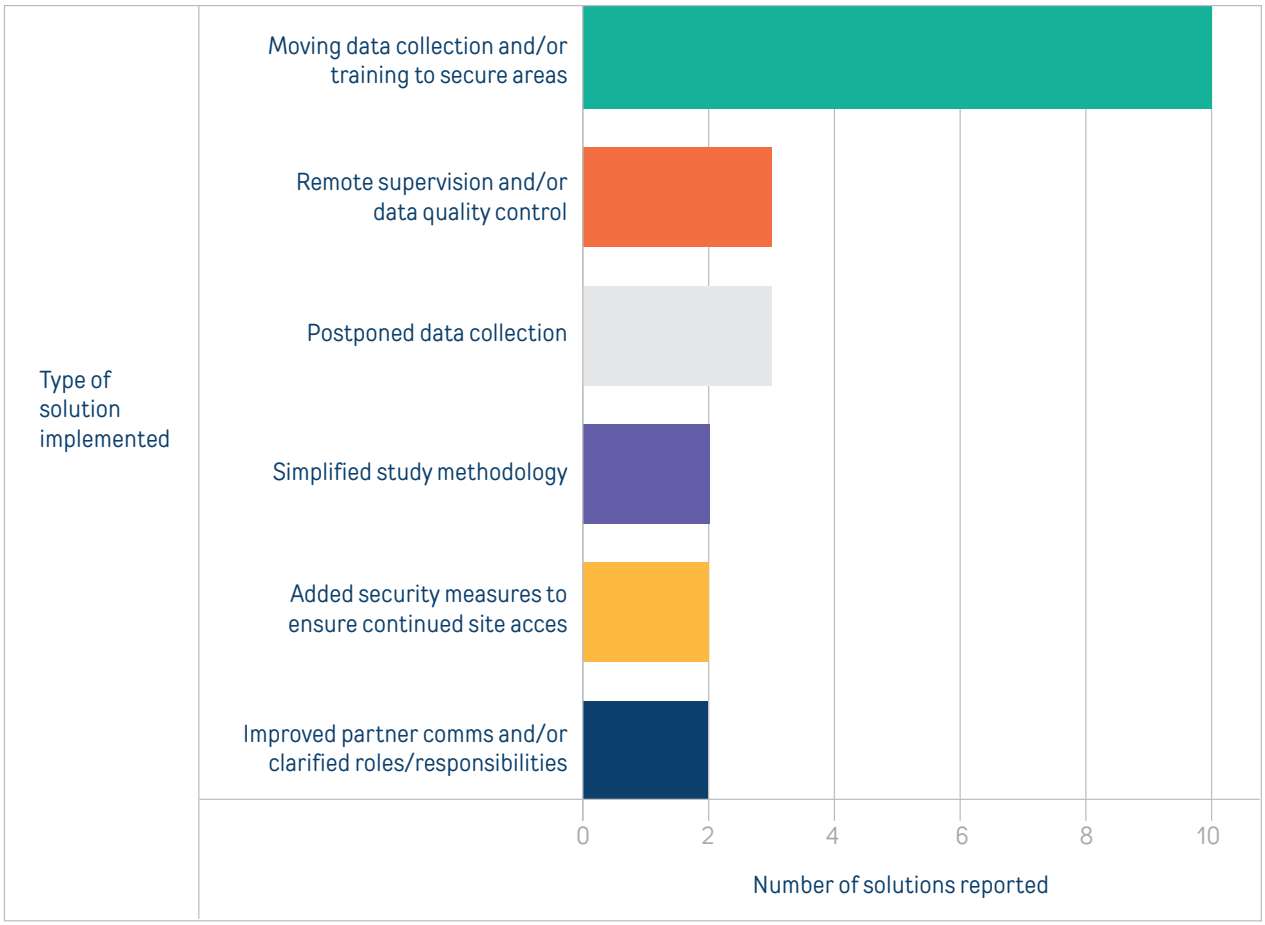
The overall second most commonly reported challenge was insecurity due to conflict and/or political instability (Figure 2). In the majority of these cases this led to the study site(s) becoming temporarily or permanently inaccessible to study staff.

When study sites became inaccessible, study teams almost always had no choice but to move data collection and/or training activities to secure areas, in some cases permanently. In one case a study team tried to use community escorts to enter less secure areas, but this was soon abandoned in favour of moving study activities.

There were three reports of adapting study methodology to use real time data collection software (e.g. Open Data Kit) to improve remote monitoring of data collection. There were also two reports where study sites could still be accessed despite insecurity, but recruitment and retention dropped. This was because potential participants were less likely to attend clinic and/or tracing activities could not be carried out.

Of note was one study where the political leadership was constantly changing due to political instability and the study team had to continuously re-engage/re-sensitize new political stakeholders.

Figure 7: Mitigation strategies against insecurity

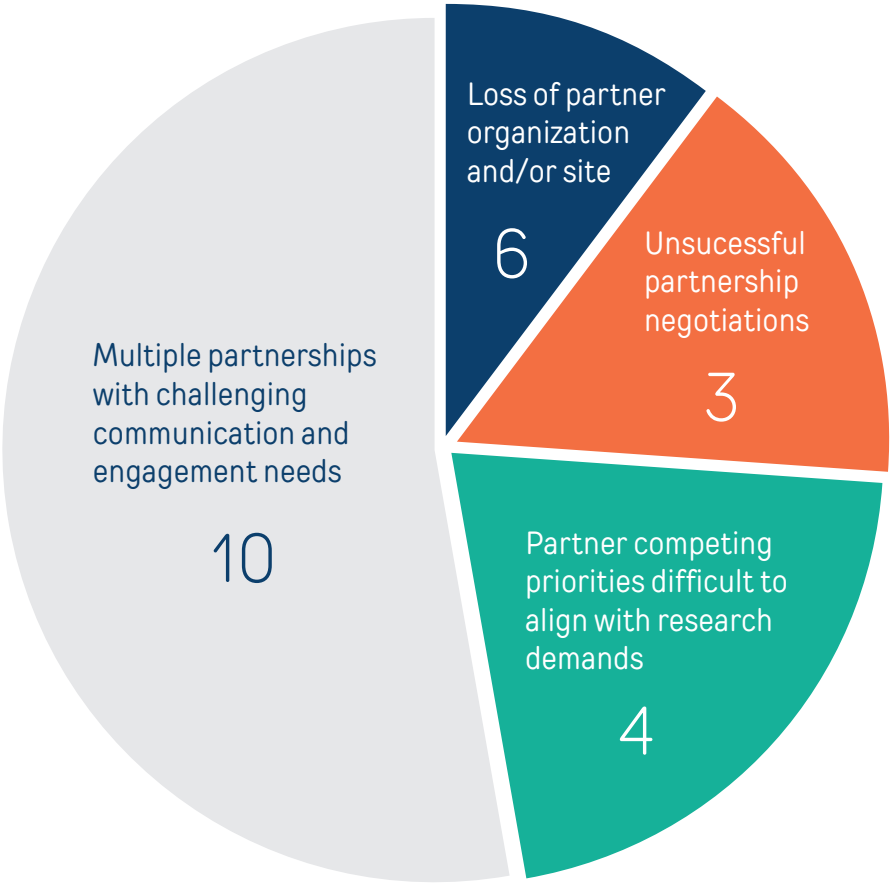


Partnerships

Studies with multiple and complex partnership arrangements reported two main challenges (Figure 8). Firstly, that negotiations for a new partnership broke down and/or a partnership or study site had to be terminated after the study started. In these cases, study teams often had little alternative but to identify new or alternative partners or sites.

The second challenge in relation to partnerships is challenges in communicating with multiple partners across different time zones, and where different sectors (e.g. health, education, CASH) were expected to engage together. Teams mostly responded by increasing the regularity of communications by whatever means possible (e.g. phone calls and skype). However, many commented that more frequent face-to-face meetings were preferred even if not always possible.

Figure 8: Partnership related challenges reported by R2HC-funded studies between 2014-2018



Budget shortfalls

A further 7% of reported challenges related to budgeting difficulties, with almost all reflecting a reduction in available budget as a result of currency fluctuation. This sometimes meant that teams could not hire dedicated technical (analytical or lab) staff or had to cancel activities. In a minority of cases study activities could be maintained unaffected due to "conservative spending", reliance on in-kind contribution from partners and capitalizing on existing meetings to reduce travel budgets.

Intervention characteristics

Teams reported two types of challenges related to the characteristics of study intervention. These were either the intervention being too complex, or time intensive, or so novel that the community had a difficult time accepting it. In the three studies that reported the intervention being too complex, researchers simplified the study design, opting instead to reduce the follow-up activities or the sample size. Three studies reported that the intervention was too novel for the community to accept fully. Two of these teams focused on improving the study procedures (e.g. additional counselling, increased recruitment sites), while another cited that they increased communication among partners to generate the best solution.

Administrative or logistics challenges

Administratively, studies mostly faced difficulties when dealing with complex contracting arrangements between different institutions working in different countries, sometimes for the first time together. Mostly this led to delays in the start of the study activities. One case ultimately resulted in the termination of a study partnership even before the study began.

Enabling factors

Partnerships

- Challenges can lead to opportunities for current and future studies, for example:
  - No access to study site often created more opportunities for hiring and capacity building of local staff and facilities
  - Low participant recruitment necessitated increased community engagement efforts and building of stronger trust relationships with research teams.
- It is critical to define the roles and responsibilities of each partner at the outset. This is in order to build ownership around each stakeholder's respective roles and responsibilities. Teams noted that these efforts are challenged by high rates of turnover among personnel in the field. Efforts to address this should focus on defining a mechanism to regularly brief local field staff on the project's progress and inform new staff about the project to minimize setbacks and reduce interruptions in research activities.
- Studies evaluating the impact of interventions should consider how to maintain independence between the implementing partner and those evaluating the impact of those activities.

Communication

- Communication across time zones and with conflicting schedules of stakeholders was often challenging. Face-to-face meetings between core staff were not always possible after the first initial meeting. Suggestions to address this included:
  - Budgeting for more regular (e.g. bi-annual) face-to-face meetings of the core team
  - Developing a communication plan to address safe and ethical transfer of data

Methodology and scope

- Some questions that arose were whether combining development of an intervention and rigorous evaluation may be too ambitious for a relatively short-term project in a humanitarian context
- Adoption of new technologies by practitioners in humanitarian settings may be more challenging than expected. Additional time, incentives, stronger supportive supervision and integration of new technologies into existing reporting systems may improve uptake of the new technologies.
  - For example, in a study of a m-Health technology, despite doctors and clinic managers seeing potential for quality of care improvement and user friendliness, there was still resistance to using the application, and use often fell to the nurse, which negated the value of the decision support feature. Despite numerous updates to the application based on provider feedback, and conceptual agreement on the value of the m-Health application, adoption was more challenging than anticipated.

- It is critically important to invest time in pilot testing tools and procedures, including building in time for reflection and community response to the introduction of new activities. This can be done through ensuring an adequate pilot study period using qualitative research and/or community advisory board meetings.
    - Integrating research activities within existing community structures improved uptake and acceptance by the local community. For example, one study team reported recruiting female participants through existing community women's groups. They felt that working within these existing social networks helped keep participants motivated, and improved retention as well as group dynamics. Moreover, intervention facilitators experienced in working in other community programmes, were also able to provide valuable insight into identifying the most appropriate follow-up and retention strategies.
    - Additionally, flexibility in intervention timelines around religious events (e.g. Ramadan) was necessary to ensure the feasibility of participant attendance at sessions during this time.

Capacity building

- While training in research methods and clinical skills generally, and study procedures more specifically, inevitably play a role in research partnerships, future projects may benefit from making this component more explicit and comprehensive. In some cases, partner organizations might benefit from significant capacity building in multiple areas of organizational development and functioning (rather than in study procedures alone) in order to provide a strong foundation for programme activities. If plans for assessing and building such capacity can be built into the project proposal and budget, it is more likely that this can be implemented in a comprehensive, systematic (rather than in an as-needed, sometimes haphazard) fashion. Donors could facilitate this process by more formally requesting such components in their requests for proposals.
- Likewise, academic actors have much to learn from local implementing partners, with much of this learning occurring naturally in the process of co-planning and implementation. However, a more formal system for learning from partners' existing experience (e.g. through conducting a partner SWOT analysis, shadowing concurrent project implementation and/or service delivery) could be productively built into start-up procedures.
- A local research co-ordinator within the operational partner organisation (ideally a research/M&E officer) should be identified in each agency to partner with the study research coordinator. For some teams, this role proved to be critical to the success of the project.

LIMITATIONS

While this study attempts to tease apart unique challenges, it does not however account for if and how different combinations of challenges interact and/or affect the solutions study teams adopted.

RECOMMENDATIONS

Common challenges and solutions

We have identified several challenges commonly reported by R2HC-funded study teams. These included insecurity, staffing, and partnership coordination difficulties. There were also common mitigation strategies across studies. These included simplifying the study design, relocating data collection activities to secure areas, and improving communication between partners. These factors provide a guide to future study teams about potential issues that may arise in their settings.

Problem solving approach

However, even as some strategies were common, their successful use was still context specific. This was observed even within the same study. For example, a research team was advised that providing remuneration for study participants was essential in one study country, with same practice deemed inappropriate and potentially offensive in a second country where the same study was being implemented. This highlights the need to be aware of potential useful strategies, but also to warn again a one-size-fits-all approach.

Similarly, in cases where a team experienced insecurity and restricted access to the study teams', solutions varied. Most moved data collection to more secure locations, whilst some implemented remote supervision and/or data quality control measures, and others postponed data collection or simplified study methodology.

Importantly, how study teams identify problems, engage partners, and set up communication plans is crucial. This is to ensure that beyond understanding common challenges and solutions, teams are able to be resilient and cohesive in identifying and resolving problems in the most context-appropriate way. To this end, study teams implementing health research in humanitarian settings should consider key activities throughout the study cycle, as described below.

Study planning stages

- Develop a risk preparedness plan that takes into account common challenges identified in this report (e.g. staffing, insecurity, and partnership coordination challenges).
- Develop a clear communication plan that defines how partners working in different countries and sites would stay informed about study progress, identify problems and discuss solutions, all in real-time.
    - This must include identifying back up communication strategies, especially when internet services are weak or non-existent.
    - Teams must also consider how they will ensure that new partners or staff are brought up to speed on study developments should they come on board after the study starts.

[6] Bingley. K. (2019). 'Partnerships Review: Research for Health in Humanitarian Crises'. Elrha: London

- Dedicate appropriate time to engage partners meaningfully. This should ensure that roles and responsibilities are determined and communicated clearly. Also, that partners, even those peripherally involved, are able to develop a strong sense of ownership of study activities. The latter is especially important to ensure engagement of multiple humanitarian partners in settings with competing priorities due to multiple projects occurring at the same time.
    - Teams should pay close attention to factors described above to facilitate fair, equitable and effective partnerships. These include:
        - Establishing a way of working that encourages trust, empathy, honesty, openness and flexibility among partners, with each partner being clear on its own non-negotiables.
        - Fostering of open discussion of roles and responsibilities in all stages of the research cycle
        - Creation of mutual learning opportunities to break down assumptions and ensure knowledge and experience are effectively harnessed.
    - A formal system for learning from partners' existing experience (e.g. through conducting a partner SWOT analysis, shadowing concurrent project implementation and/or service delivery) could also be considered.
- Whenever possible, time should also be set aside for piloting of study procedures. This is in order to refine the study tools and intervention, as well as management and logistical processes.
- Carefully map the different stakeholder and communities affected by the study and plan engagement sessions throughout the study cycle. This is to ensure that study activities can be discussed appropriately and all involved have an opportunity to voice concerns and/or help resolve issues as they arise.

Study implementation stages

- Update risk and communication plans appropriately
- Continue to engage stakeholders and update the communities' involved
- In situations where challenges cannot be sufficiently mitigated, the team may find it necessary to change the study design and/or prioritize most essential study activities. This was also noted in a parallel review of R2HC study methodologies[7]. Where this is the case, it is essential that teams be transparent about the effect of these changes on the study findings, including the introduction of any additional biases.

Recommendations for R2HC

- Workshops and forums to describe main challenge themes and mitigation challenges.
- Design and require risk planning form to be completed at the start of studies and periodically thereafter.
- Continue process of quantifying challenges/solutions from progress reports
    - Could allow flexibility in providing information on potential challenges. For example, you could look at specific countries or types of studies.
    - To be useful this would need to be done in real time so that the data is up to date.

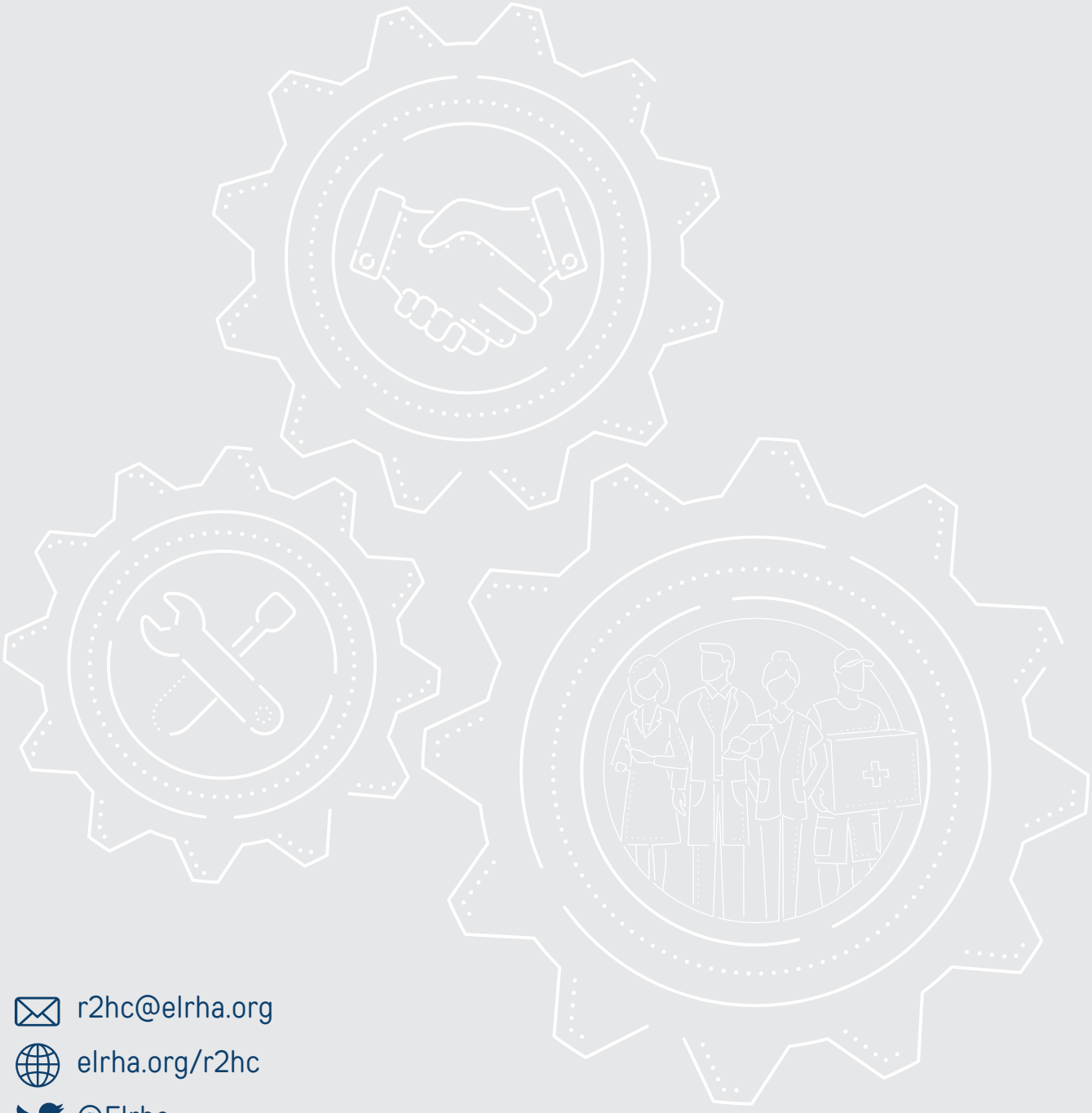
[7]Smith, J. Blanchet, K. (2019) Research Methodologies in Humanitarian Crises. Cardiff, UK: Elrha

Annex 1: Solutions employed by study teams by type of challenge

Type of challenge	Impacts	Mitigation strategies
Human resource challenges	Delayed start or postponed activities	Hire and train alternative/additional staff
	Difficulty implementing study activities/logistics with existing staff and/or money	Postponed data collection
	Lack of quality programmatic services and/or associated programme data	Increased/improved training
	Difficulty effectively communicating, engaging and coordinating with all partners	Simplified study methodology (changed study design, reduced follow-up, simplified study tool/intervention, cancelled data collection activities, reduced sample size, refined outcomes based on available data)
	Original study design unfeasible (e.g. study design, sample size, inadequate time between intervention and follow-up)	Improved and regularized partner communication by best available means and/or clarified roles/responsibilities
Insecurity	Inaccessible research site	Moving data collection and /or trainings to secure areas
	Low recruitment/tracing and retention (e.g. low clinic attendance among potential participants or those recurring follow up, or participants giving false locator information to research team)	Postponed data collection
	Difficulty effectively communicating, engaging and coordinating with all partners	Remote supervision and/or data quality control (e.g. ODK)
	Lack of quality programmatic services and/or associated programme data	Improved and regularized partner communication by best available means and/or clarified roles/responsibilities
		Instituted additional security measures to ensure continued site access
Study population characteristics (mobility, small eligible participant pool, competing humanitarian priorities)	Low recruitment/tracing and retention (e.g. low clinic attendance among potential participants or those recurring follow up, or participants giving false locator information to research team)	Simplified study methodology (changed study design, reduced follow-up, simplified study tool/intervention, cancelled data collection activities, reduced sample size, refined outcomes based on available data)
	Original study design unfeasible (e.g. study design, sample size, inadequate time between intervention and follow-up)	Improve tracing activities (e.g. quality control of locator information)
	Inaccessible research site	Identified new/alternative recruitment sites or partner(s)
		Improved study procedures (e.g. additional counselling, increased recruitment sites) to improve recruitment and/or retention
		Improved and regularized partner communication by best available means and/or clarified roles/responsibilities
		Improved study procedures (e.g. additional counselling, increased recruitment sites) to improve recruitment and/or retention
		Increased/improved training
Partnership challenges (loss of partner before or during study, challenging comms/engagement, competing priorities)	Difficulty effectively communicating, engaging and coordinating with all partners	Identified new/alternative recruitment sites or partner(s)
	Loss of partner organization and/or site (e.g. lab or implementation NGO or even country not suitable) after project start	Improved and regularized partner communication by best available means and/or clarified roles/responsibilities
	Difficulty implementing study activities/logistics with existing staff and/or money	Identified new/alternative recruitment sites
	Low recruitment/tracing and retention (e.g. low clinic attendance among potential participants or those recurring follow up, or participants giving false locator information to research team)	Simplified study methodology (changed study design, reduced follow-up, simplified study tool/intervention, cancelled data collection activities, reduced sample size, refined outcomes based on available data)
	Unable to use the pre-selected study site	

Type of challenge	Impacts	Mitigation strategies
Intervention characteristics (Novel, complex, low acceptability)	Delayed start or postponed activities	Simplified study methodology (changed study design, reduced follow-up, simplified study tool/intervention, cancelled data collection activities, reduced sample size, refined outcomes based on available data)
	Difficulty effectively communicating, engaging and coordinating with all partners	Improved study procedures (e.g. additional counselling, increased recruitment sites) to improve recruitment and/or retention
	Low recruitment/tracing and retention (e.g. low clinic attendance among potential participants or those recurring follow up, or participants giving false locator information to research team)	Improved and regularized partner communication by best available means and/or clarified roles/responsibilities
		Increased/improved training
Budget shortfall	Difficulty implementing study activities/logistics with existing staff and/or money	In-kind contributions
		Simplified study methodology (changed study design, reduced follow-up, simplified study tool/intervention, cancelled data collection activities, reduced sample size, refined outcomes based on available data)
		Conservative spending (e.g. Combined/reduced study meetings)
Administrative and logistics challenges (contracting complexities, failed infrastructure, fuel, vehicle maintenance)	Delayed start or postponed activities	Identified new/alternative recruitment sites or partner(s)
	Inaccessible research site	Improved and regularized partner communication by best available means and/or clarified roles/responsibilities
Complex/delayed ethics approvals	Delayed start or postponed activities	Postponed data collection
	Original study design unfeasible (e.g. study design, sample size, inadequate time between intervention and follow-up)	Simplified study methodology (changed study design, reduced follow-up, simplified study tool/intervention, cancelled data collection activities, reduced sample size, refined outcomes based on available data)
		Sought ethics from different committee
Variable quality of programmatic intervention and/or record keeping quality in independently managed health facilities	Lack of quality programmatic services and/or associated programme data	Simplified study methodology (changed study design, reduced follow-up, simplified study tool/intervention, cancelled data collection activities, reduced sample size, refined outcomes based on available data)
		Improved and regularized partner communication by best available means and/or clarified roles/responsibilities
		Increased/improved training
Failed communication or physical infrastructure (e.g. internet, electricity, roads, bridges)	Inaccessible research site	Improved and regularized partner communication by best available means and/or clarified roles/responsibilities
	Difficulty ensuring quality control of protocol/intervention	Increased/improved training
	Difficulty effectively communicating, engaging and coordinating with all partners	Postponed data collection
Conditions for rapid response trigger not met in pre-selected site (e.g. natural disaster not occurring)	Unable to use the pre-selected study site	Identified new/alternative recruitment sites or partner(s)
	Low recruitment/tracing and retention (e.g. low clinic attendance among potential participants or those recurring follow up, or participants giving false locator information to research team)	Simplified study methodology (changed study design, reduced follow-up, simplified study tool/intervention, cancelled data collection activities, reduced sample size, refined outcomes based on available data)
		Improved study procedures (e.g. additional counselling, increased recruitment sites) to improve recruitment and/or retention

r2hc Research for health in humanitarian crises | elrha



r2hc@elrha.org
elrha.org/r2hc
@Elrha

Elrha | R2HC
8 Cathedral Road
Cardiff, UK
CF11 9LJ