

# IMPLEMENTATION RESEARCH TOOLKIT

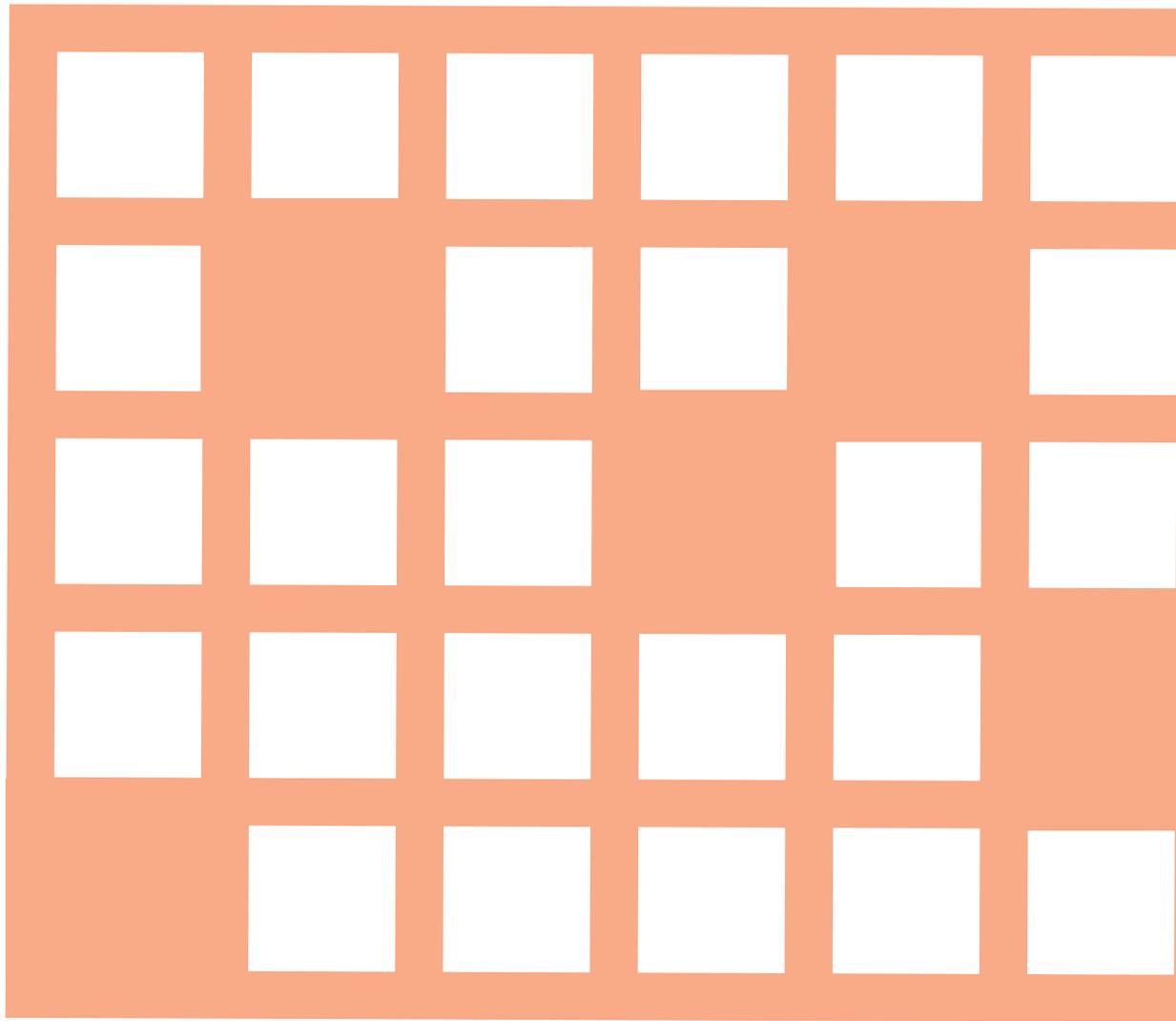


## Integrating Implementation Research into the Health System

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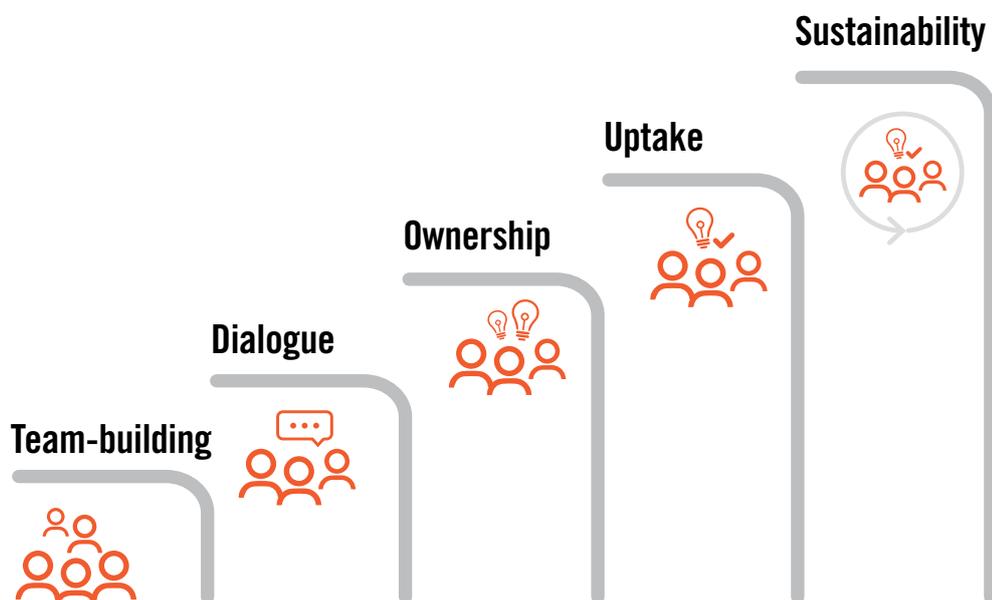
# Integrating Implementation Research into the Health System



Within health systems, implementation research (IR) is embedded in real-life settings and its goal is to improve health interventions by helping to highlight specific implementation bottlenecks and barriers, and by suggesting solutions identified through close collaboration with those who deliver health programmes. Ideally, these solutions will become part of the intervention, lending sustainability to the research and improved delivery.

With uptake and sustainability of solutions as the ultimate goals of IR, there are a series of steps that must be completed to attain them. This module outlines each of these steps in a progressive fashion, where each step builds upon the success of the preceding one.

**Figure 1. Progressive steps towards IR ultimate goals**



### **Building an IR Team**

Despite the potential value of new IR knowledge, technologies and approaches, a general lack of authentic coordination, cooperation and dialogue among various health-/science-related disciplines and community stakeholders limit their application. This continually hampers accessibility of innovations in many contexts, holding back the progress necessary to reach health-related goals and commitments. To be truly successful, IR requires effective multi-stakeholder coordination, cooperation and dialogue to take place from the outset – when the research question and goals are defined – through planning of the research, and continuing throughout the local implementation, sharing and actions based on research results. In this sense, IR teams require more integrated approaches and are quite distinct from – and more broad-based – than those set up to conduct most other forms of biomedical or social research.

More than most other types of research, the collaborative and deliberative nature of IR requires people with a broad range of skills, experiences and backgrounds to think together in order to address an implementation challenge that is experienced – in a given context – by health care providers, programme managers, implementers or other service providers. In other words, conducting IR implies close and consistent teamwork.



Outside of IR, however, intersectoral and multidisciplinary collaborations are typically limited to critical moments when pivotal decisions are being made. But with their longer-term approach, IR teams bring together stakeholders from various disciplines so they can engage in ongoing, authentic dialogue around existing local challenges and appropriate potential solutions. Depending on the specific research question it addresses, an IR team must be appropriately multidisciplinary and diverse in order to meet the project objectives.

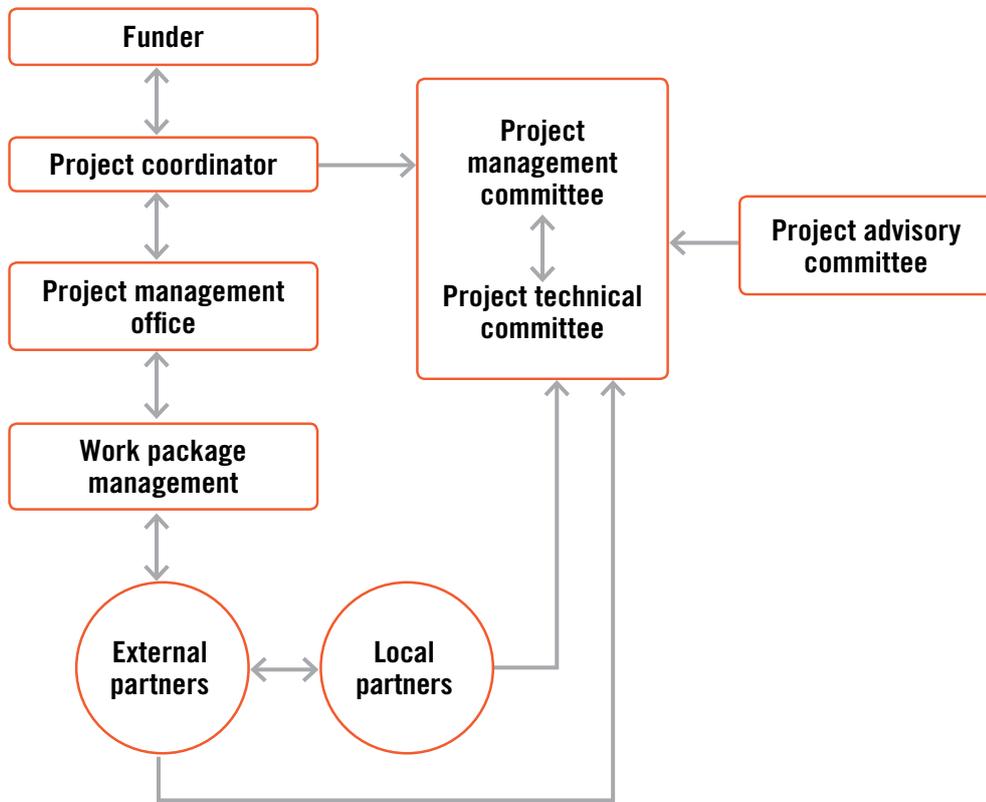
Team building includes both enhancing the ability of team members to contribute as individuals as well as enhancing the ability of the group to function as a team. Individual competencies are the essential foundation to building the core of an IR team. Team building is often complicated when individual team members are accountable to both a functional/line manager as well as the IR team leader. Effective management of this dual reporting is essential for the success of an IR project. However, each IR team should integrate appropriate expertise with local understanding to design, conduct and communicate the proposed research effectively. A typical IR core team includes the following functions (note that one person could perform multiple roles):

- Team leader.
- Investigator(s)/implementer(s)/health care provider(s).
- Project manager(s).
- Scientific/technical leader
- Other researchers (multidisciplinary, depending on the IR question).
- Media/communications specialist(s)
- Programme M & E/data specialist

In some circumstances, additional IR team members might include community members/health care recipients and advisory committee/policy-makers, and other research collaborators.

In addition to including the appropriate expertise, an IR team must adopt a suitable team management approach (Figure 2).

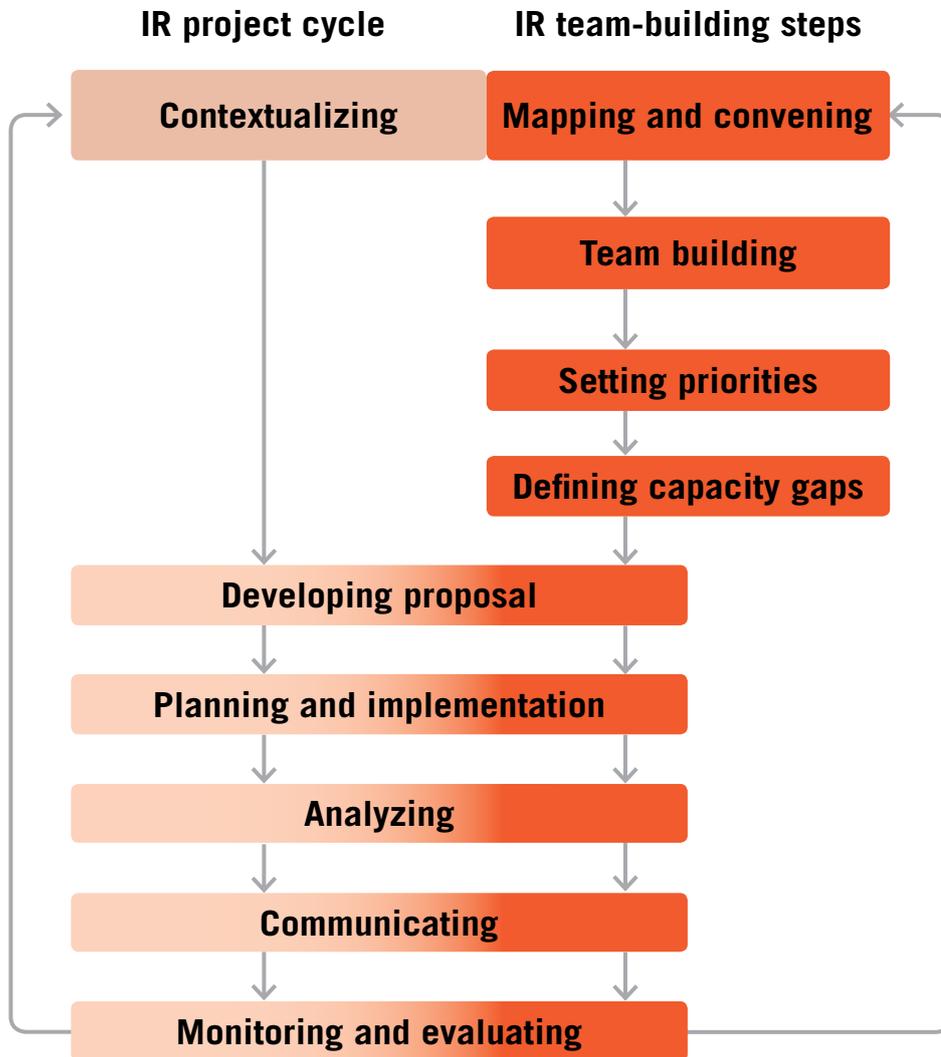
Figure 2. Research team management structure (example)



Based on various current models for team and partnership development, four specific steps are outlined for the establishment of IR teams (Figure 3). In accordance with local and team considerations, not all teams will need to go through each individual step. For some existing teams, a renewed focus on specific or incomplete steps may also be helpful.



**Figure 3: Parallel processes of the IR project cycle and IR team-building steps**



**Start up, mapping and convening**

As you will have read in several other modules, the physical, socioeconomic and cultural environments, health systems, stakeholders and institutional culture are key aspects of the IR context. As the first of the pre-implementation steps of an IR project, the IR team must be brought together from this preliminary contextualizing stage to jointly analyze and agree on relevant contextual factors.



In addition to building a common understanding of the research context, this initial step also represents an ideal opportunity for the core IR team to achieve several team-related objectives:

- Understanding the opportunities and challenges of existing research Partnerships/collaborations.
- Identifying potential team members and additional project stakeholders.
- Gathering issue status information and data mapping (e.g. desk research).
- Consulting with relevant stakeholders and with external resource providers (including donors).

Convening team members often requires time and patience, and cannot be hurried. A good understanding of existing power relationships between stakeholders may also be essential. Clear and equal communication among team members is an important principle from the outset, and one potential challenge at this stage is the lack of human resources to dedicate to the team-building process.

The mapping and convening step might include exploring potential interest and partner ‘readiness’ through initial one-to-one meetings, as well as initial IR core team brainstorming meetings, as the collaboration takes shape. This first stage frequently involves consultation leading to development of a preliminary conceptual framework for a research question and/or early consensus surrounding a common challenge or priority.

### Productive dialogue

In the setting of an IR team, productive dialogue is essential for joint prioritization and evidence-based decision-making, the cornerstones of integrated knowledge translation. Genuine collaboration and dialogue can only take place when IR team members share common goals, yet acknowledge underlying differences and fragmentation in their respective approaches. Trust builds when team members recognize these challenges and are willing to jointly address them to achieve their common goals.

Many commentators have defined the key characteristics of authentic dialogue:<sup>1</sup>

- *Inclusiveness*: Individual team members have key pieces of the expertise and knowledge required to address a shared problem, as well as the processes or structures for addressing it.
- *Joint ownership*: There must be something real and common at stake in identifying optimal solutions.
- *Learning*: Rather than being about talking, productive dialogue is about learning together, and listening to those we might not hear otherwise. It is also about individual team members realizing what they don’t know.
- *Humanity*: Showing empathy for others’ positions.
- *Long term perspective*: Recognizing that there are no quick fixes, dialogue is intentionally open-ended.



By its nature, IR takes place in the real, complex adaptive systems of non-experimental settings, and understanding of specific contextual factors and the perspectives of all team members directly influences the planning, design and conduct of the research.



For this reason, productive dialogue is often the best way – indeed the only way – for the IR team to jointly: identify research questions; determine methodologies; conduct the research; interpret findings; disseminate and apply the findings. In practice, dialogue is founded on four key skills that IR team members must cultivate, as summarized in Table 1.

**Table 1. Four practices of productive dialogue<sup>2</sup>**

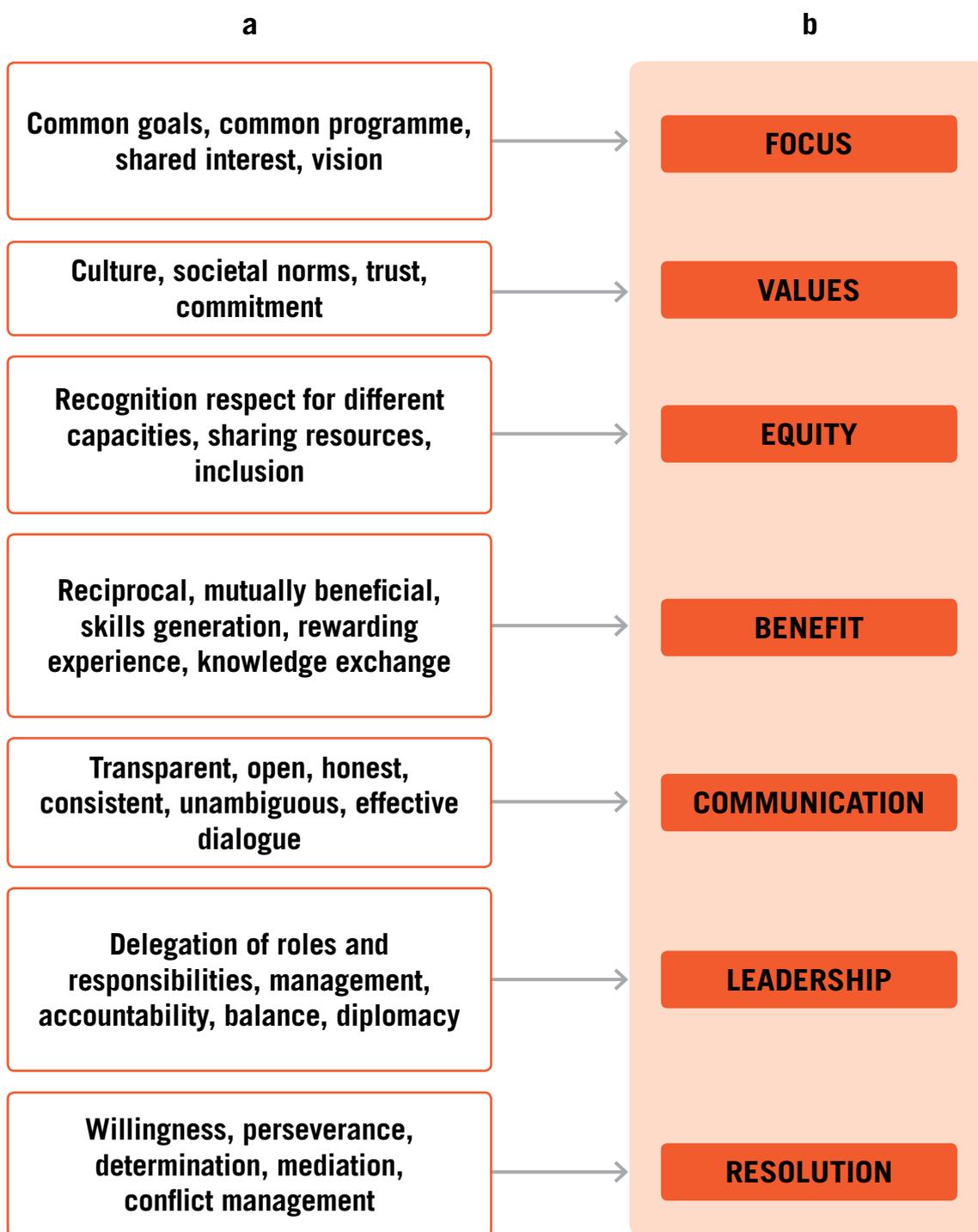
Practice	Summary
Active listening	Requires stakeholders/participants to not only hear the words, but also different points of view.
Respecting	Begins with accepting and acknowledging that others have things to teach us, and may involve highlighting what seems different or impossible to understand.
Suspending	When we listen to someone speak, we begin to form an opinion, and face a choice: to defend our view and resist theirs; or, we can suspend our opinion and the certainty that lies behind it. Suspension means neither suppressing what we think nor advocating it with unilateral conviction. The opposite of suspension is dogmatism.
Voicing	Revealing what is true for you regardless of other influences that might be brought to bear

With time and a safe environment, IR team members can learn to let go of personal or organisational biases, and turn to IR methods to jointly design pragmatic, contextual approaches, rather than falling back on generic or familiar ones. In this way, a new paradigm – one of thinking and working together – can be established within IR teams, where contextual learning, dialogue and collective implementation become the norm. Genuine collaboration and accountability can only be generated when IR team members are able to reach this new level of openness with one another. Accountability can also be generated as a by-product of team dialogue – an understanding of what team members can expect from one another – as opposed to being an outcome of ‘enforced’ monitoring or evaluation.

**Ownership, trust, responsibilities and roles**

Recent work on health system strengthening has identified some useful common requirements and characteristics of research teams and partnerships. Among other criteria, Larkan et al<sup>3</sup> have suggested that complex partnerships require all parties to agree to a common minimum programme, should involve all major stakeholders from the design stage, and have resources clearly allocated. Summary attributes (a) and core concepts (b) for successful research teams are proposed in Figure 4.

**Figure 4. Summary attributes (a) and core concepts (b) for successful research teams in global health**



Adapted from Larkan et al.



Figure 4. Summary attributes (a) and core concepts (b) for successful research teams in global health (adapted from Larkan et al). At an early stage in the IR team establishment process, an initial team/partnership meeting is essential. The first meeting should involve as many potential stakeholders as possible, and is an opportunity to bring partners together – possibly for the first time – to begin defining a common research question and approach, and to commit to continue working together to develop an IR proposal. As far as possible, it should create a neutral, inclusive space where all potential IR stakeholders have the opportunity to understand and question the IR approach, as well as gauge and agree to their own involvement and roles.

This is also an occasion for team members to explore the division of labour and any critical capacity needs or gaps across the team. The topics that might be covered during the initial meeting might include:

- Decision-making mechanisms clarified and agreed.
- Agreement on core objectives.
- Team member commitments and responsibilities defined and agreed, e.g.:
  - networking with other potential stakeholders;
  - initial publicity/advocacy for the IR study;
  - strengthening/complementing existing team members' capacities;
  - IR team coordination and conflict resolution;
  - monitoring, evaluation and review;
  - learning and sharing;
  - resource mobilization.

Following the meeting, a concept note should be created that captures the discussion and decisions, and begins to lay out the vision, goals and design/methodology for the IR project, and should refer to the shared values, strategic objectives, IR core team members, collaboration and ways forward. One or two individuals need to be assigned this task during the initial team meeting, preferably the scientific leader.

### Setting priorities, defining problems and research questions

By now, the research team should be able to develop a 'Statement of the problem' and – through a systematic analysis of existing resources and literature – provide a rationale for why conducting the proposed research would provide answers, solutions or alternative strategies to the problem identified.

In developing the 'Statement of the problem' that the IR project addresses, the team should reach a shared understanding of the purpose of the study and the research question(s) it will focus on.

Once again, reaching this point should not be rushed and should take into account the varying positions and capacities of different team members and broader stakeholders. Building team ownership at an early phase of the project will yield invaluable engagement in subsequent stages of the study.





## Capacity strengthening

If the team is aware of specific capacities that the IR project requires, but that cannot be identified within the team, steps should be taken to identify additional team members, either locally or remotely, who can contribute those capacities. In specific cases, where local capacity is essential but cannot be identified, it may be necessary to devise an option for developing specific skills or capacities within the team, time and resources permitting.

### Case study 1

#### Capacity building for sustainable health research: analysis of four African case studies

**Background:** Despite substantial investment in health capacity building in developing countries, evaluations of capacity building effectiveness are scarce. By analysing projects in Africa that had successfully built sustainable capacity, we aimed to identify evidence which could indicate that capacity building was likely to be sustainable. Four projects were selected as case studies using pre-determined criteria, including the apparent achievement of sustainable capacity. By mapping the capacity-building activities in each case study onto a framework previously used for evaluating health research capacity in Ghana, we were able to identify activities that were common to all projects. We used these activities to derive indicators that could then be used in other projects, including to monitor progress towards building sustainable research capacity.

**Results:** Indicators of sustainable capacity building increased in complexity as projects matured and included: (i) early engagement of stakeholders; explicit plans for scale up; strategies for influencing policies; quality assessments (awareness and experiential stages); (ii) improved resources; institutionalization of activities; innovation (expansion stage); and (iii) funding for core activities secured; management and decision-making led by southern partners (consolidation stage). Projects became sustainable after a median of 66 months. The main challenges to achieving sustainability were high turnover of staff and stakeholders, and difficulties in embedding new activities into existing systems, securing funding and influencing policy development.

**Conclusions:** It takes many years for capacity building projects to become sustainable therefore indicators : i) should be both generic and context specific; ii) should evolve and increase in sophistication as projects mature; iii) need buy-in from stakeholders and should be revised regularly.

Source: Bates I. et al. Indicators of sustainable capacity building for health research: analysis of four African case studies. *Health Research Policy and Systems*. (2011); 9(1):1.



## Uptake of Findings

The findings and solutions identified in an IR project need to be accepted by the health personnel delivering the health intervention. If these key stakeholders are willing to take up the recommendations suggested by the IR project, then the research will add value and improvement to the health intervention. Without uptake, the IR project has not achieved its intent and its findings will not be used. As discussed earlier in this module, identifying the right people for the IR team is an essential step in this process. This team will work directly with the health personnel throughout the project. The quality and frequency of their interaction will determine how likely the health personnel will utilize the IR project findings and recommendations.

## Explanation of Continuous Monitoring

As highlighted throughout the toolkit, the aim of IR is to identify bottlenecks and barriers to implementing health interventions. Data collection in IR investigates why these barriers exist and in its analysis, proposes solutions to address them. Throughout this process, engagement of health personnel who deliver the interventions is key. IR is not ‘monitoring and evaluation’ of a health intervention, and health personnel should not feel that they are being evaluated while participating in an IR project. This will not encourage the ownership and uptake of the project results by the very people who need to use them.

IR uses an ongoing process of feedback and dialogue between the IR team and health personnel involved in the delivery of the intervention. At the outset of any IR project, this process should be designed so that health personnel understand that they are a critical part of the research and the IR team. Effective feedback should be constructive, tangible, transparent, actionable, user-friendly, specific, timely and ongoing. Feedback can be delivered in various formats: reflection meetings, supportive supervision visits, frequent data review meetings and sharing of research results and updates.

During the process of continuous monitoring, it is possible that adjustments may be made to the health intervention before the IR project has been completed. For example, if education about malaria prevention offered to a cohort of mothers of children <5 years is shown to reduce malaria cases, then the health personnel may decide to offer education to all mothers coming to the health centre at a midpoint in the IR project cycle. Involving the health personnel in the analysis of those early data findings may help them to improve the interventions under study before waiting until the final conclusion of the IR project. Continuous monitoring differentiates IR from other scientific studies, where a researcher traditionally waits until all of the results are compiled and analyzed before providing recommendations. Because IR occurs in real-life settings, the ability to adapt to ongoing findings can have the potential to save lives and improve population health.

Throughout the project cycle, continuous monitoring should be built into the team's activities. These interactions between the research team and the health personnel on the IR team provide opportunities to engage key health personnel in the data collection process, the data analysis and its interpretation. Each of these steps is outlined below.

Health personnel's input into data collection is essential. They often provide most of the local knowledge that the IR team needs prior to starting data collection. For example, what times of the day are best to interview community members? Who are key informants in this locality? What cultural parameters exist in this area that may affect data collection (e.g. women must be interviewed by women, religious holidays, etc.)?

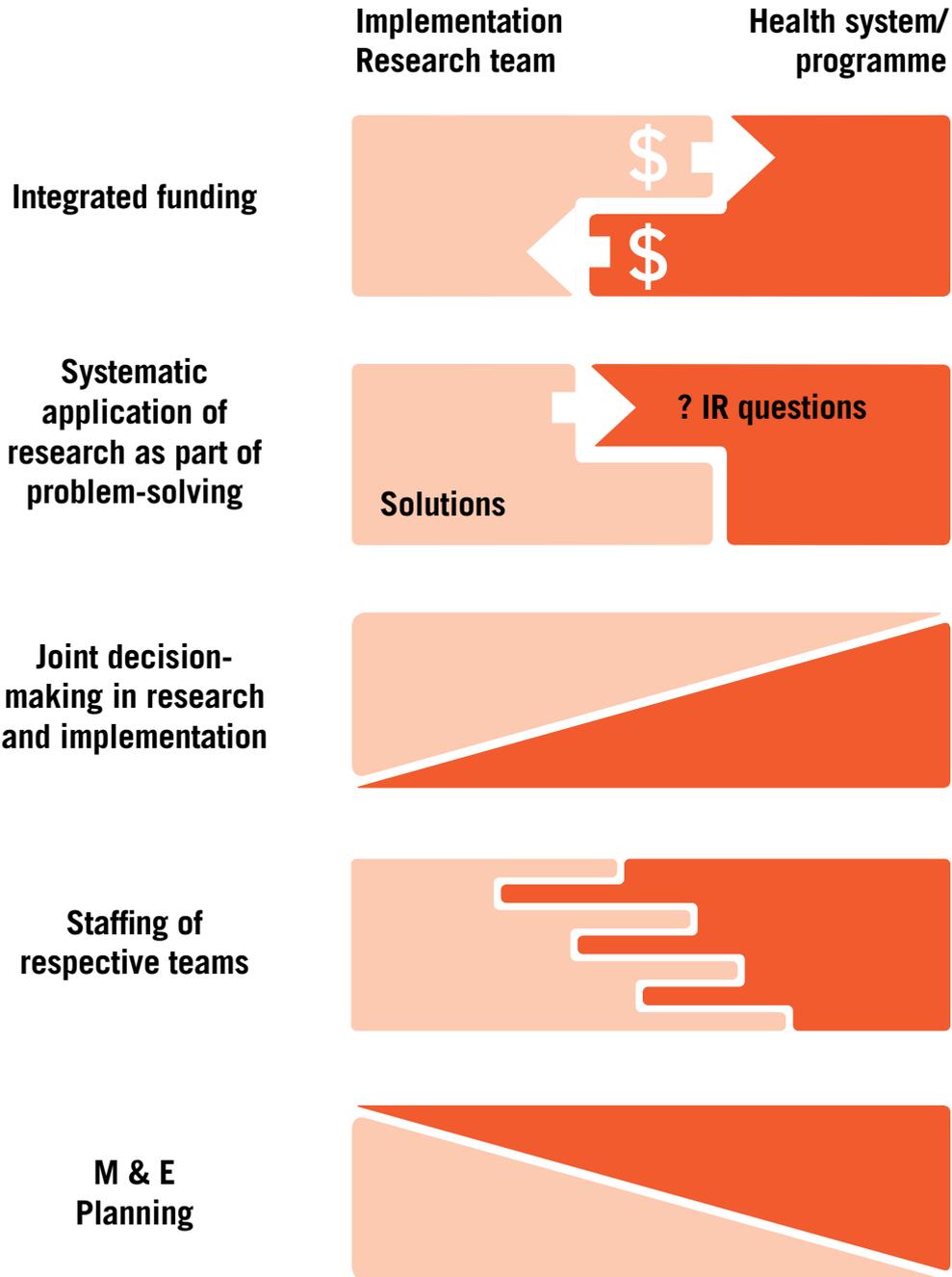
By involving health personnel in the design of the data collection, the IR team creates an expectation of responsibility that continues throughout the project. With this, health personnel will take more ownership of the IR project, even ensuring that their reports are accurate, complete and prompt, thereby improving the quality of the data collected during the project. Their willingness to engage with the information improves if they feel involved in the process. Throughout data collection, the IR team should guarantee the quality of data so that health personnel staff can be confident about its value, thereby increasing their likelihood of them using the information for learning and decision-making. Regular communication during this stage of the IR project will provide an opportunity to address any challenges in the fieldwork and allows the health personnel to participate in the interpretation of some of the early findings, thereby offering the chance to revise the data collection as needed.

During the data analysis and interpretation phase of the IR project, the involvement of the health personnel is critical. By providing opportunities that encourage health personnel to interpret the IR project findings, they are able to identify their own successes, challenges, and solutions to bottlenecks. This dialogue reinforces health personnel ownership rather than forcing "top-down" interpretations and solutions. Furthermore, health personnel provide that important contextual explanation for research findings that the IR team may not be familiar with. As discussed above, at different times throughout the project cycle, the IR findings may be adapted into the existing health intervention.

At the end of the project, when the results are being disseminated to relevant stakeholders, it is important that the IR team work together with the health personnel to identify the best people to deliver messages as well as those people that need to be targeted for knowledge translation. Feedback of this process to the team will be important so that reactions and interpretations of the findings can be understood and where necessary, the message can be adapted. Furthermore, involving key health personnel in the dissemination of the results can be an empowering process.



**Figure 5. Infographic to demonstrate the interaction between health personnel and the IR team, showing the embedded nature of IR within the health system**



## Documentation

Implementation research is a dynamic process that often requires adaptation, flexibility and innovation during the execution of the project. As we have seen, the process of continuous monitoring may bring changes to the IR project and the IR team should be prepared to make these adjustments as they arise. For example, health personnel may decide to implement a solution identified through the IR project in the middle of the research process, once it has been shown to be effective. Or they may decide that the modification proposed to the health intervention in the IR project needs to be amended. It is crucial that such changes or adaptations to the research process are well documented, coordinated and monitored to ensure credibility and fidelity.

The following questions should underpin the documentation the team carries out:

- What is happening?
- Why is it happening this way?
- Is this expected?

The IR team must be objective when documenting processes and report both the negative and positive experiences. This will facilitate learning and evidence to support previously anecdotal reports. Documentation of the various processes, adaptations, revisions and experiences that occurred and impacted the research will ensure that programme planners and policy-makers do not only receive the results of the study but understand the process by which the results were obtained.

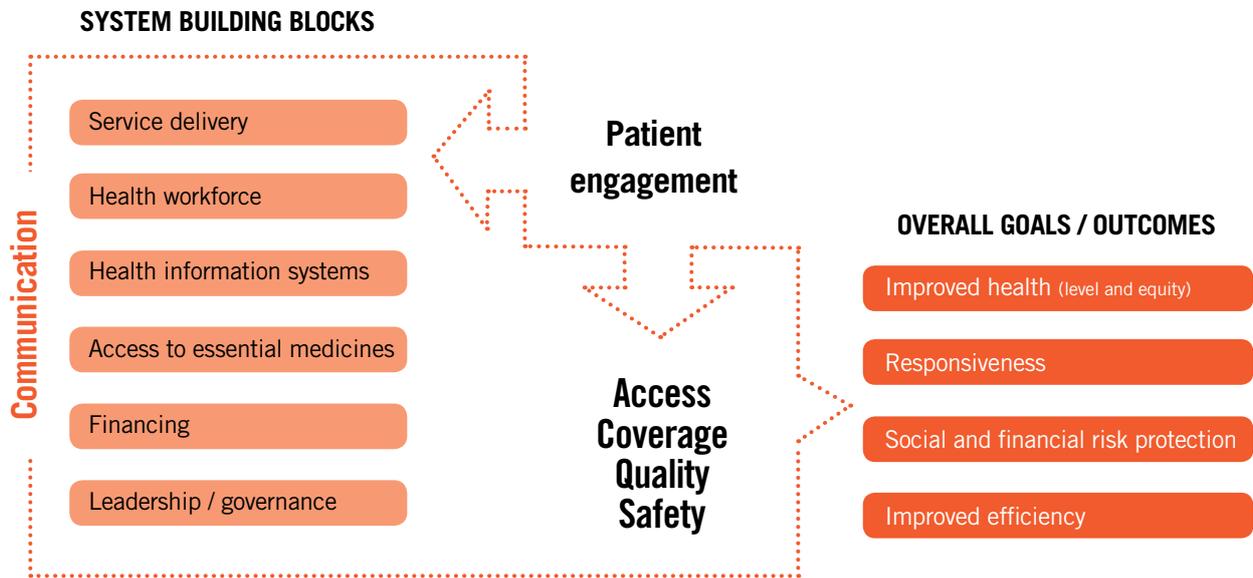
## Using the WHO Health Systems Framework in IR

As stated, during the IR process health personnel are involved in the development of the research questions, the data collection as well as the interpretation of results and identification of recommendations. At the same time, they are responsible for the delivery of the intervention, whether it be mass drug administration for onchocerciasis, promoting better sanitation to reduce transmission of intestinal helminths or other health interventions. For reasons of operational feasibility, human resources and funding, IR is often conducted in only a selection of districts or health centres. However, the implications of the IR might apply to the wider health system. How then, do we ensure that these results are integrated and sustained within the health system?

The WHO Health Systems Framework (Figure 6) provides a guide to IR practitioners on how the wider health system can be involved in implementation research. Before the IR project begins, the IR team can review the framework to assess how each of the building blocks might be implicated in the health intervention under study as well as in the solutions to identified barriers.



**Figure 6. The WHO health systems framework<sup>4</sup>**



Let’s consider an example to understand how the six building blocks in the WHO framework can serve as a guide for integration of IR into the health system:

Your IR project aims to understand and reduce barriers to uptake with insecticide-treated bed nets (ITN) in families with children under the age of 5 in two districts using a mixed methods study. Barriers to ITN use included: fathers were not supportive of bed net use for children; and mothers needed more understanding and skills to ensure their children slept under a net every night. The IR project tested two solutions to these barriers: 1) text messaging to fathers; and 2) the use of counselling to mothers in MNCH clinics. IR results demonstrated the utility of both actions to improve compliance with ITN use in two districts, confirmed with a reduction in cases of malaria in children < 5 years as treated by local health staff. These results and actions are applicable to several other districts in the health system, so how will you ensure that these new practices are integrated into existing health service delivery so that they can be sustained over time?

With this example, each health system building block contributes to integration of results and increased sustainability:

- *Service delivery:* These IR recommendations provide a solution to reduce the cases of malaria in children under the age of 5 by improved use of ITNs. These actions have been shown to be effective, safe and with a minimum of additional resources. As a result, these IR actions can be recommended for improved service delivery in more than the two districts under study.

- *Health workforce:* In order to ensure that mothers are counselled in each district, appropriate health personnel working in MNCH clinics need to be identified for training so that they can provide counselling to mothers. These activities can be added to the regular staff training programmes as well as supervision checklists to ensure that staff have the resources and skills they need to carry out the activities. Consider if further upstream training is required to sustain the activities, e.g. at nursing or midwifery schools.
- *Health information systems:* How can the recording of these activities be integrated into the routine data collection at the health centre and/or the district health office?
- *Medical products, vaccines and technologies:* If the IR project demonstrated the use of a job aid (e.g. brochure, poster, Frequently Asked Question sheet) to guide the health staff as they counselled mothers, how can this be reproduced and distributed on a wider scale?
- *Health financing:* Can the training of health personnel be integrated into existing training activities to reduce financial pressure on the health system? How can routine text messages to fathers be financially maintained?
- *Leadership and governance:* In order to ensure effective oversight of these activities, regular monitoring and evaluation of the counselling, text messaging and reported malaria cases can demonstrate the impact of these activities over time.

Without considering the health system, IR risks producing results that have limited and time-bound implications. Sustainability in IR is efficient. Without sustainability, the same IR question may be researched again in several years, as the barrier or bottleneck may have only been temporarily removed. Working within the health system improves the equity of the reach of IR so that those areas not originally in the research project may also benefit from its results. Health interventions need to benefit all those in need. Considering sustainability, equity and the rational use of resources should be a part of all IR projects.

**Case study 2****Use of WHO health systems 'building block' framework to analyse how IR can be integrated and sustained within the health system?**

**Background:** Although IR may be conducted in only a limited geographical area or health facility for reasons of operational feasibility, human resources and funding, the implications of the IR might apply to a wider section of a given health system. The WHO has recommended use of a health systems 'building block' framework for comprehensively examining how interventions can operate more successfully and effectively in complex, real-world settings. This approach analyses the six WHO health systems building blocks, which define the essential components of a health system. This approach was used in the analysis of the barriers and motivators of voluntary medical male circumcision (VMMC) in 14 priority countries that were tasked with scaling-up VMMC services to 80% of HIV-negative men aged 15–49 years by 2016. Although the programme started in 2008, by July 2014 only two countries had achieved over 50% of the target, while the rest had <30%. This review used the WHO health systems building block framework to examine the factors influencing the scale-up of the VMMC programmes from 2008–2013 in 14 priority countries. The influence of each respective health system building block is summarized below.

- (i) *Leadership and governance:* The success of the intervention was facilitated by sustained country ownership and political will. However continued commitment and engagement of the stakeholders is also key.
- (ii) *Health workforce:* The activities of the proposed intervention should not compromise the already overstretched work force and the overall quality of health services provided. Thus, any innovations should ensure efficiencies to minimize human resource constraints. In VMMC, task shifting and task sharing appeared to facilitate scale up. Appropriate training of non-physician health workers was essential.
- (iii) *Health service delivery:* Expanding access and improving demand for VMMC are essential to service utilization. Mobile or outreach services to expand access to VMMC were successful in countries such as Kenya. However, experience from Zimbabwe revealed understanding the barriers and motivating factors related to the uptake of VMMC was necessary to determine service demand.
- (iv) *Medical products, vaccines, and technologies:* Availability of commodities and supplies in good quantities, on time and of acceptable quality is critical for the success of an intervention. Successful VMMC implementation requires coordinated partnerships that are effective and efficient in meeting commodity requirements. However, 10 of the 14 countries reported challenges related to inadequate supplies and delayed procurement. In addition, in most cases, VMMC waste management activities were not costed.
- (v) *Health system financing:* In the scale-up of VMMC, availability of external funding was a major facilitator. However, reliance on donor funding for scale up proved to be a barrier in countries where achievements of VMMC targets had been low. To close such funding gaps, several countries are currently generating and directing national funds specifically to HIV programmes, including VMMC activities.



## Case study 2

### Use of WHO health systems 'building block' framework to analyse how IR can be integrated and sustained within the health system?

(vi) Health information: Quality information is needed to guide evidenced-based decisions on how to allocate limited resources for HIV prevention, including the VMMC programmes. Standardized sets of indicators agreed upon by technical and funding agencies was one factor that strengthened the monitoring and the evaluation of VMMC services. However, since ensuring that the data collected through the national health information systems are of sufficient quality for meaningful interpretation is a challenge, the VMMC monitoring systems in most of the countries are parallel to national health information systems.

**Conclusion:** Use of WHO health system building blocks to analyze implementation bottlenecks can explicitly identify barriers and facilitators to integrating IR into the health system.

**Lessons:** Understanding of contextual barriers and facilitators of demand for a given intervention are essential in enhancing integration and sustainability of IR into the health system.

Source: Ledikwe J.H. et al. Scaling-up voluntary medical male circumcision – what have we learned? HIV/AIDS (Auckl). 2014; 6:139–46.

## Principles of Sustainability

The approach advocated in this module closely mirrors that articulated by the Sustainable Development Goals (SDGs). In particular, SDG goal #3 that aims to ensure healthy lives and promote well-being for people at all ages. The need to address sustainability challenges in a more comprehensive, multi- and interdisciplinary manner is key. A better understanding of the factors and determinants that delay progress or, in some instances, set countries off-track highlights the need to better address health system bottlenecks with applicable and tailored approaches.

Lessons learnt from the Millennium Development Goals (MDGs) and challenges anticipated in the SDG era emphasize the importance of a more hands-on approach in addressing and designing interventions that are better suited to a modified and adapted context, where one-size-fits-all approaches are widely recognized as being obsolete.

The integrated framework for implementing SDGs recognizes the role of local action, community buy-in, local leadership and coordination at all levels of governance. The health-related SDG targets, along with other global platforms, highlight the importance of acting now; the need to enhance research; increase the quality implementation of services; promote partnership and stakeholder roles, while tailoring sustainable solutions to local realities and challenges. IR fits into these as a way to reach the anticipated aims and targets.



Making sure that health interventions benefit all those in need is a key challenge for LMICs.

**Case study 3****Building sustainable implementation research in the Ghana Health Service.**

**Background:** Ghana has steadily embedded implementation research (IR) in its health system through sustained country-led capacity building and sustained efforts by the Ministry of Health (MoH) and the Ghana Health Service (GHS). Over a period of almost 20 years, successive leadership has engaged stakeholders at the national and international levels to identify bottlenecks in the health system and address them with varying degrees of success. Most recently, the GHS led the development of a national health research agenda and an IR capacity plan for some key disease control programmes, with support from a multilateral partnership on access and delivery of health interventions.

In order to strengthen capacity within the GHS for implementation and operational research to identify and address country-specific health system needs for effective access to and delivery of new health technologies, a series of national workshops and stakeholder activities were conducted serially over a period of 18 months by the Research and Development Division (RDD) of the GHS. These included the development of a National Health Research Agenda so that the priority research areas identified by the GHS, its stakeholders and other collaborators could develop and provide evidence to support decision-making. Over one hundred and fifty development partners, GHS Directors and Deputy Directors, MoH Directors, Scientists from GHS research institutions, the Noguchi Memorial Institute for Medical Research, staff of the School of Public Health, Staff of non-GHS research institutions, policy-makers, disease control programme managers, Regional Directors, District Directors, Regional and District level Health Staff, Academics, and Health Administrators all contributed to the development of the research agenda, and participated in various workshops and stakeholders' meetings to review and refine the emerging research priorities. The resulting *National Health Research Agenda* included a list of barriers and problems impeding the effective delivery of health programmes and implementation of policies. The list provided a practical point at which IR can begin and focus.

A second series of workshops were conducted after the initial stakeholder consultation on the research agenda. These workshops were designed to:

- sensitize policy-makers at the GHS on the importance of IR to address priority programme needs;
- sensitize key players of the African Regional Training Centre (RTC) at the University of Ghana on the value of IR to address priority programme needs;
- build capacity in cohorts of research teams for the conduct of IR and dissemination of research findings in public health; and
- promote teamwork and functional partnerships among researchers, disease programme implementers and policy-makers.



### Case study 3

## Building sustainable implementation research in the Ghana Health Service.

### Development of a national health research agenda for Ghana

Ghana has a rich history of health services research, with strong institutional arrangements for the coordination of research efforts in the country. The Health Research Unit, established in 1990 serves as the main coordination mechanism for health research and has evolved over time to the Research and Development Division (RDD) of the GHS. Research has always been accorded a high priority to support the successive *Health Sector Five-Year Programmes of Work*, starting with the first programme of work in 1996. In 1998, the Government published *Policy guidelines for strengthening research* in support of the *First Medium-Term Health Strategy* in Ghana. The second five-year Programme of Work (2002–2006) had its own five-year research programme, aligned with the Medium-Term Health Strategy for Ghana (2002–2006). Successive health sector programmes had strong research components, and in 2008, a health research agenda was published to accompany the programme of work.

In 2004, the GHS/RDD developed a health research agenda for 2015–2018 with the support of partners (WHO/TDR and the United Nations Development Programme) to underpin the 2014–2017 Health Sector Medium Term Development Plan. The process involved high-level stakeholders' meetings organized by the GHS in collaboration with other partners, in order to obtain input on a draft national health research agenda covering 2015 to 2018. A draft document was produced and reviewed at a subsequent stakeholders meeting. The revised document was finalized and published by the GHS as the *Ghana National Health Research Agenda 2015 – 2019*.

### Sensitization workshops for policy-makers and Regional Training Centre staff

A one-day workshop was convened for Directors and Deputy Directors of the various divisions in the GHS. The workshop sensitized and familiarized top management of the GHS to the key concepts of and approaches to IR and its potential value in addressing the key health system challenges in the country. Being slightly removed from the implementation level, it was imperative that policy-makers appreciated the value of IR in addressing implementation challenges encountered by programme managers at the district level. The second component of the sensitization process was to engage academia at the School of Public Health, University of Ghana and to sensitize key players on the content and processes of IR.

### Training workshop for national control programmes

Following the sensitization of policy-makers, attention shifted to front-line practitioners of three priority programmes of the GHS: the National Malaria Control Programme (NMCP), National Neglected Tropical Diseases Control Programme (NTDCP), and the National Tuberculosis and Leprosy Control Programme (NTLP). Workshops were designed to equip programme teams to undertake IR on obstacles to the effective and efficient delivery of programme interventions. These obstacles were previously identified during the stakeholder consultations for the development of the national health research agenda.

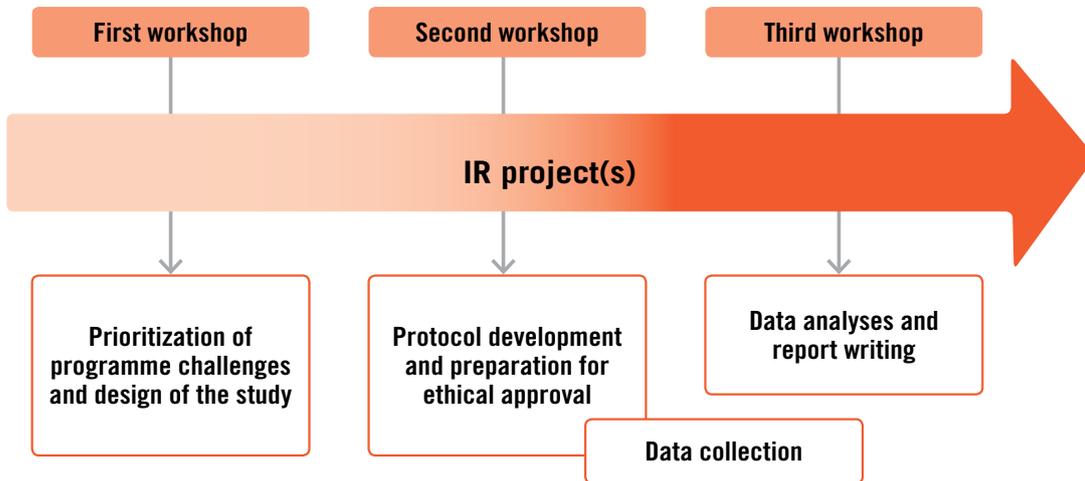
A comprehensive plan was put in place to equip the research teams constituted by the priority control programmes through a series of national workshops – from the identification of research problems through to the development of robust study protocols, conduct of the research, data analyses, and preparation and dissemination of results (Figure).



**Case study 3**

**Building sustainable implementation research in the Ghana Health Service.**

**Figure. Planning for building IR capacity among priority programme managers**



The programme managers constituted teams for the workshops on training and proposal development. Teams comprised a key member of the control programme, respective information officers, and researchers with quantitative and quantitative skills and an interest in the programme.

The workshop helped research teams to start the process of executing IR to address priority problems identified by national control programmes in Ghana. A number of programmes were able to provide funding within their programme budgets to support the resulting research projects.

**Lessons:** Engagement of key stakeholders in the health sector and research community in the identification of barriers, and development of the national health research agenda, facilitated wider appreciation of the value of IR in achieving national health outcomes. Funds were allocated within the national programme budget(s) to support IR without dependence on external sources.

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