Seven principles for strengthening research capacity in low- and middle-income countries: simple ideas in a complex world

2014

ESSENCE Good practice document series

ESSENCE
on Health Research

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Contents

About ESSENCE and this good practice document

ESSENCE on Health Research is an initiative of funding agencies to improve the coordination and harmonization of research capacity investments. ESSENCE members embrace the principles of donor harmonization and country alignment expressed in the 2005 Paris Declaration on Aid Effectiveness and in the 2008 Accra Agenda for Action. According to these principles, donors align and harmonize their activities and procedures with the priorities of the countries in which they work.

To achieve this goal, ESSENCE members agreed to jointly develop and produce good practice documents that would incorporate current knowledge and best practices on health research and development issues. The first good practice document, called 'Planning, monitoring and evaluation framework for capacity strengthening in health research', was published in 2011. The second good practice document, called 'Five keys to improving research costing in low- and middle-income countries', was published in 2012.

This third document in the series stemmed from a growing appreciation among ESSENCE members that there is a need to share the lessons learnt by funding organizations, institutes and researchers who have been involved in efforts to strengthen research capacity in low- and middle-income countries (LMICs). To that end, the project team gathered information from ESSENCE members and held panel discussions at various international symposia in an effort to obtain a breadth of opinions on best practices in capacity strengthening. In July 2013, ESSENCE convened a meeting in Uganda that brought together researchers, leaders of research institutions and

ESSENCE funders to jointly contribute their experiences of research capacity strengthening. The aim of this document is to translate that accumulated knowledge into key principles to help funders, policy-makers, researchers, universities, research institutes and others engaged in research capacity strengthening in LMICs to make effective decisions.

Although the ESSENCE group is currently health focused, we hope that this document has wider reach and can be used across all research fields.

Acknowledgements

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- Wellcome Trust
- US National Institutions of Health Fogarty International Centre (NIH/FIC)
- Canada's International Development Research Centre (IDRC)
- Special Programme for Research and Training in Tropical Diseases (TDR).

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PART I: Research capacity strengthening: first principles

Introduction

Researchers in low- and middle-income countries (LMICs) are best placed to identify and address the health challenges of their own nations and to provide local and national policy-makers with a broad range of high-quality, relevant evidence to inform decision-making. However, there are still many barriers that prevent these researchers from fulfilling their potential. Chronic underinvestment in universities and research institutions, lack of access to current research findings, low wages and poor career prospects for researchers are just some of the factors that can hold back research in LMICs, with many researchers opting to work abroad or forced to devote more time to other activities such as teaching and consultancy. Consequently, there has been a growing awareness worldwide that strengthening research capacity in LMICs is one of the prerequisites if development goals are to be met, which in turn has given rise to an interest in how research capacity strengthening works.

Research capacity strengthening (or building) is a complex concept that has been defined in several ways. In this document **the definition of research capacity strengthening includes any efforts to increase the ability of individuals and institutions to undertake high-quality research and to engage with the wider community of stakeholders.**

Many funders have a long history of involvement with research capacity strengthening in LMICs, although the precise nature of their involvement has evolved over time. Throughout the 1970s and 1980s, research capacity strengthening initiatives were focussed primarily on individuals, with a strong emphasis on professional development. Many funders supported fellowships for researchers from LMICs to be trained at masters and doctoral level at universities in high-income countries. TDR, for example, has a long history of supporting individuals who have gone on to lead in research activities in tropical diseases in developing countries. Few programmes, however, provided training that was relevant to the needs of LMICs, and newly qualified PhD and Masters candidates often had to confront a lack of established career pathways for researchers once they returned to their home countries. More recently, an increasing number of initiatives are being designed to work at the organisational level (for example, universities and non-academic research institutes) and/or the national or regional level. Organisation-level initiatives seek to strengthen an institute or group of institutes as a whole, perhaps by helping to foster a more vibrant research culture (for example, the AuthorAid programme funded by Sida, UK/DFID and TDR and run by the International Network for the Availability of Scientific Publications, which helps researchers access the latest publications and publish the results of their research), improving research governance and support structures (such as the Wellcome Trust's African Institutions Initiative and the US Medical Education Partnership Initiative network), and renovating or creating infrastructure (such as the joint UK/DFID and Wellcome Trust Health Research Capacity Strengthening Initiative in Kenya and Malawi). National-level and regional-level initiatives aim to involve the wider research community, policy-makers and government to facilitate research capacity strengthening on a large scale. Most research capacity strengthening interventions are designed to strengthen the individual, organisational, or national

component of research capacity, though strong linkages between components often means that an intervention at any level can have much broader repercussions.

Because research capacity strengthening efforts have often been embedded as part of major research programmes, their impact has not always been specifically monitored and evaluated, and assessing the degree to which past and current initiatives have succeeded or failed can be difficult for a number of reasons:

- Research capacity strengthening is a long-term process, which can make it difficult to attribute causes or contributions.

- There is no commonly used framework for evaluating research capacity strengthening initiatives to date, although the ESSENCE Planning, monitoring and evaluation framework good practice document has begun to address this.

- Different approaches to and definitions of capacity strengthening can make it difficult to discern where capacity strengthening ends and research begins.

- Undue emphasis can be placed on quantitative, rather than qualitative, metrics as measures of success.

- There can be a reluctance to acknowledge that outcomes have not been met.

These difficulties notwithstanding, it is essential to try to develop an understanding of what impact past and existing initiatives have had, and what lessons can be taken forward to better inform the design and implementation of new programmes aimed at strengthening research capacity.

How this good practice document evolved

The principles set out in this document were developed from information gathered from ESSENCE member funders, international conferences and other experts with experience in research capacity strengthening. The project team sent questionnaires to ESSENCE members and the technical programmes of the World Health Organization to gather information about the research capacity strengthening activities of each organization. The project team also held various panel discussions on strengthening research capacity at a number of international meetings, including the World Health Summit in Berlin, Germany (2012), the Annual Meeting of the American Society of Tropical Medicine and Hygiene in Atlanta, USA (2012), and the Second Global Symposium on Health Systems Research in Beijing, China (2012), to gather qualitative input from various stakeholders attending these events. In July 2013 ESSENCE also hosted an engagement meeting with researchers, funders and research leaders in Uganda to gain further insights on the draft version of this document and to benefit from the expertise of the participants.

Using this document

This document is designed to provide broad guidance on how best to ensure that any initiative to strengthen research capacity, be it at the individual, organisational, or national level, yields the maximum possible benefit. This guidance has been broken down into a number of principles. These principles are intentionally wide in scope so as to be as broadly applicable as possible, but they are also accompanied by illustrative examples to show how they have been adopted in practice, as well as some of the most commonly encountered barriers to their effective implementation. Rather than being prescriptive, or staking any claim to being the gold standard of practice, it is hoped that this document will be taken on as a tool for further discussion by everyone with a stake in effective research capacity strengthening. Whether you are a project officer in a development agency, a research leader in a major international research funding organization, or a development director at an LMIC university, we hope these good practice principles will help you to shape your programme goals and implementation plans in a simple and effective way.

Seven principles for good practice in research capacity strengthening

The seven principles are:

1 | Network, collaborate, communicate and share experiences

2 | Understand the local context and accurately evaluate existing research capacity

3 | Ensure local ownership and secure active support

4 | Build in monitoring, evaluation and learning from the start

5 | Establish robust research governance and support structures, and promote effective leadership

6 | Embed strong support, supervision and mentorship structures

7 | Think long-term, be flexible and plan for continuity

PART II : From principles to practice: simple ideas in a complex world

Because every research capacity strengthening initiative takes place in a unique context, the principles outlined in this document are designed to be as widely applicable as possible. The second part of this document expands on the principles and helps to put them into context by looking at some of the challenges faced and the lessons learned when funders and their partners have engaged in research capacity strengthening.

1 | Network, collaborate, communicate and share experiences

This document is the fruit of collaboration between many different stakeholders, and collaboration and communication goes to the very core of research capacity strengthening. All research capacity strengthening efforts are part of a wider network of activity. Finding out about and becoming a part of that network should be the first order of business for anyone who wants to have a positive impact and get involved in research capacity strengthening.

The ability to communicate effectively is a thread that will run through all the subsequent principles of good practice in this document. Understanding local context and understanding funders, engaging communities and policy-makers, effective governance and leadership, mentorship and supervision, and evaluation and learning, all rely on our ability to communicate our goals, vision, reservations and experiences.

Communication is something that we all need to work at as individuals, as communities and within and between organizations. Member organizations such as the UK Collaborative on Development Sciences (UKCDS)[1] Research Capacity Strengthening Group and the ESSENCE[2] group of funders are great networks for funders to get together, update each other on current activities and share ideas. Collaborative projects such as the European & Developing Countries Clinical Trials Partnership (EDCTP)[3] and the recent Royal Society and DFID Capacity Building Initiative in Sub-Saharan Africa (2012)[4] are all exciting collaborative opportunities to make a difference.

There are of course opportunity costs and financial costs associated with networking and collaboration, and in recognition of this, some funders will provide seed funds to help give potential collaborative projects the time and space they need to get together.

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[1] UK Collaborative on Development Sciences (UKCDS) Research Capacity Strengthening Group, London, UK, 2014. **http://www.ukcds.org.uk/our-work/24?tid=36**

[2] ESSENCE on health research, Geneva, Switzerland, 2014. **http://www.who.int/tdr/ partnerships/initiatives/essence/en/**

[3] European & Developing Countries Clinical Trials Partnership, The Hague, The Netherlands, 2014. **http://www.edctp.org/Our_Work.727.0.html**

[4] The Royal Society-DFID Africa Capacity Building Initiative, London, UK, 2014. **http://royalsociety.org/grants/schemes/africa-capacity-building/**

Other resources

- The ESSENCE group of funders has also produced a list of funders, capacity building initiatives and contacts, which will be updated periodically on the ESSENCE website at:
  http://www.who.int/tdr/partnerships/initiatives/essence/en/

- The International Institute for Educational Planning has a website that houses 300 resources on research capacity strengthening at:
  http://www.iiep.unesco.org/capacity-development/capacity-development-strategies/clearinghouse.html

- Capacity.org includes the latest research findings, analytical frameworks, policy debates, practical experiences and toolkits relevant to anyone involved in capacity strengthening. See:
  http://www.capacity.org/capacity/opencms/en/index.html

- For an interesting paper about managing capacity development projects by the United Kingdom Overseas Development Institute. See:
  http://www.odi.org.uk/publications/6348-capacity-complexity-development-projects-rapid

2 | Understand the local context and evaluate existing research capacity

"Not every future is feasible: power, organizational and political structures, resources, and history shape and constrain possibility." Ager and Zarowsky (2013)

It should go without saying that before an intervention to strengthen research capacity can be undertaken, a thorough understanding of the local context in which any capacity strengthening is to take place is essential.

At this initial preparatory stage (and in fact at all stages) it is important to keep in mind the ultimate aim of research capacity strengthening: to enable and facilitate researchers in LMICs to produce research germane to the society they live in. This immediately raises the question of who sets the research agenda, and it is a question that can only be answered by engaging all key stakeholders: researchers, policy-makers and communities. In the health sector for example, researchers must speak with communities and their representatives to gauge the most pressing priorities to be addressed[1]. Funders need to encourage and foster this interaction.

Funders rarely have direct channels of communication with the communities that they hope will stand to gain from their investment in research capacity strengthening and so rely primarily on their partners in LMICs to represent the local or wider community, and to advocate on their behalf. But funders should not be reticent to work with LMIC partners to engage directly with communities to ascertain how they might be of most benefit. It is entirely possible that the capacity of funders and potential applicants to engage effectively with local and national stakeholders is the first thing that needs to be strengthened before further steps are taken.

It is also essential for funders to cultivate, and for LMIC partners to contribute to, a comprehensive understanding of the local, national and regional economic and political context within which any capacity strengthening might take place. For example, knowledge of the political economy of a country should inform decisions on what types of investment are most likely to be sustainable in the long term (this is addressed in more detail in the document[2]. A working knowledge of the infrastructure in a country or region is also essential when capital investments are being considered. There is little point, for example, in refitting a laboratory with expensive and complex new equipment if there is no capacity in-country to service the equipment, unless the creation of the ancillary infrastructure is factored in.

Also, for example, brain drain still takes a devastating toll on Africa's medical workforce. Medical Education Partnership Initiative (MEPI) of the Fogarty International Centre of the US National Institutes of Health (FIC/NIH)[3] provides research grants for faculty as both an enticement for them to remain in-country and also to ensure health care quality continues to improve as science evolves.

For funders and LMIC researchers, a systematic needs assessment[4] can be very useful and should establish at a minimum who the key stakeholders are; what governance, management and

administration structures are already in place and how effectively they function; staffing levels; and the skills mix of staff currently involved in research, including governance and research support.
Any assessment should not only take into account the capacity currently in place, but also any capacity planned for the future and how the dynamics of continuous incremental development will interact with any putative initiative.

It should also be borne in mind that:

- Any intervention should aim to build on and work in synergy with existing capacity, rather than duplicating or bypassing it
- Only once the existing research regime and wider context is understood can gaps and opportunities be identified and understood and engagement with appropriate stakeholders can begin
- A proper assessment of existing capacity at the start of an initiative provides an accurate baseline for monitoring and evaluation efforts.

[1] Zachariah R, et al. Is operational research delivering the goods? The journey to success in low-income countries. *The Lancet Infect Dis* 2012; 12: 415–21.

[2] Ager A, Zarowsky C (2013). Addressing complexity and political economy in health research capacity strengthening: independent researchers working to institutional and national development agendas in an era of globalization of knowledge. University of Western Cape Learning About Research Capacity Strengthening Series Working Paper. **http://www.hivaids-uwc.org.za/images/ Ager_and_Zarowsky_AddressingPolitical_ Economy_and_Complexity_Working_Paper_9_ July_2013.pdf**

[3] Medical Education Partnership Initiative, FIC-NIH, **http://www.fic.nih.gov/Programs/Pages/ medical-education-africa.aspx**

[4] Malaria Capacity Development Consortium institutional capacity baseline needs assessment, London, UK, 2014. **http://www.mcdconsortium. org/what-we-do/institutional-support**.

Other resources

- For a discussion about the difficulties that LMIC institutions can encounter when attempting to develop a coherent strategy to identify and remedy deficiencies in their research capacity, and in doctoral training programmes in particular, see: Bates I, et al. Assessing and Strengthening African Universities' Capacity for Doctoral Programmes. *PLoS Med* (2011): e1001068. doi:10.1371/journal.pmed.1001068 **http://www.plosmedicine.org/article/ info%3Adoi%2F10.1371%2Fjournal.pmed.1001068**

- For a study on how different consortia addressed challenges during the initial stages of the African Institutions Initiative see: Marjanovic S, Hanlin R, Diepeveen S, Chataway J. Research capacity-building in Africa: networks, institutions and local ownership. *J Int Dev* 2012; doi: 10.1002/jid.2870. **http://onlinelibrary.wiley.com/doi/10.1002/jid.2870/abstract**

3 | Ensure local ownership and active support

"How do you own something that's not yours?" John Gyapong, University of Ghana

The principle of ensuring local ownership of the research capacity strengthening agenda is certainly nothing new. Both the 2005 Paris Declaration on Aid Effectiveness and the 2008 Accra Agenda for Action[1] state that countries that receive aid should participate fully in development policy formulation and the improvement of their own institutions. And yet, of all the principles contained within this document, the gap between rhetoric and practice is probably greatest when it comes to the concept of ownership.

For recipients of funding, it can often feel like a one-way street. Funders, who are overwhelmingly from the global north, are often seen by recipients in LMICs as driving the capacity strengthening agenda and trying to "sell" pre-packaged proposals in an effort to secure what can be perceived as tokenistic "buy-in", rather than formulating a programme by consensus. For their part, the often genuine will of funders to engage with and to be led by local stakeholders can be hamstrung by uncertainty over who to engage with.

The question of who to consult looms large. Funders can, often understandably, become preoccupied with the notion that local support and leadership for capacity strengthening should come from the highest level possible within institutes and governments. But fixation with seniority could have adverse consequences. Engaging a high-ranking government official to lead a capacity strengthening

initiative might seem like the best way of lending credibility to an endeavour, while at the same time securing an invaluable asset for cutting through bureaucratic red tape. But if that official has so many other commitments that they are unable to devote enough time to capacity strengthening, an initiative can become paralysed. On the other hand, consulting a high ranking personality for support and political buy-in can be extremely important, as embarking on a capacity strengthening programme within an academic institution without the support of senior figures such as vice chancellors can also lead to problems. There is often a delicate balance that needs to be struck between seeking high-level support for capacity strengthening, ensuring appropriate leadership of the programme and seeking active support.

The Nigeria Evidence-Based Health Systems Initiative (NEHSI)[2] struck that balance perfectly. A partnership between the Government of Nigeria, the Department of Foreign Affairs, Trade and Development Canada and the International Development Research Center, NEHSI was set up to support primary health care reforms in Nigeria, and benefitted from a detailed, 2-year planning stage before being launched. During that period, the project's planners engaged in intensive consultations with different levels of government and stakeholders in the health system, yielding an indepth understanding of capacities and priorities that helped shape the project. State and local government authorities set the research priorities and were deeply involved throughout the project, ensuring local ownership by creating a true partnership. Additionally, a large component of the project was a social audit, to ensure that communities' voices were heard.

A recent (2013) report[3] reflecting on the success of the "Research management in African universities: from awareness raising to developing structures" project, funded by the Carnegie Corporation of New York, tells a similar story. This 3-year project, which finished in 2009, aimed to help five universities develop their organizational structures for research management. The authors concluded that campus visits were central to the project's success, not only because of the "huge amounts of knowledge" gained, but also because "talking to a range of staff and academics from different areas can help to build and strengthen relationships". The authors also point out the importance of making sure you "understand your university's leadership, so that you understand key institutional structures".

Sida has taken an even more radical approach to ensuring ownership by asking potential partner universities to set out a 10-year concept note indicating where they would like to be in terms of research training and human resources in the next ten years. This concept note, which can be shared with other funders, includes a 5-year plan that Sida could consider funding.

One idea that has been gaining support from both LMIC research leaders and funders is the concept of a national research capacity forum, comprised of research leaders from academic and private sector institutes, together with governmental representation. Such a forum would be well placed to identify gaps in research capacity from a strategic perspective that takes full account of national priorities, and would be a good point of contact for funders, as well as having the expertise to lobby funders itself. National academies of science could play a role in convening these

forums and with formalising strategic capacity strengthening goals. For example, the Chinese Academy of Medical Sciences has recently taken charge of a massive programme of investment in new biomedical research infrastructure designed to address gaps that it identified in existing capacity in line with national health priorities.

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[1] The Organisation for Economic Co-operation and Development, France, 2013. http://www.oecd.org/dac/effectiveness/parisdeclarationandaccraagendaforaction.htm#Paris

[2] International Development Research Centre, Canada, 2014. http://www.idrc.ca/en/programs/global_health_policy/governance_for_equity_in_health_systems/pages/nehsi.aspx

[3] Kirkland, John and Patrice Ajai-Ajagbe. Research Management in African Universities: From Awareness Raising to Developing Structures. Association of Commonwealth Universities, London, 2014. http://carnegie.org/publications/search-publications/pub/496/

[4] Swedish International cooperation development agency: http://www.sidaresearch.se/apply-and-report/research-training-partnership-programme-.aspx

Other resources

For an overview of health research capacity strengthening, see:

- Whitworth J et al. Strengthening capacity for health research in Africa. *Lancet* 2008; 372: 1590–93.

- Breman JG, Bridbord K, Kupfer LE, Glass RI. Global health: the Fogarty International Center, National Institutes of Health: vision and mission, programs, and accomplishments. *Infect Dis Clin North Am* 2011; 511-36

4 | Build in monitoring, evaluation and learning from the start

"Mistakes are the portals of discovery" James Joyce

Although each capacity strengthening context will be unique and complex, monitoring and evaluation frameworks have recently been developed with some general indicators of success that can be used for comparative analyses of multiple initiatives. The first ESSENCE good practice document, 'Planning, monitoring and evaluation: framework for capacity strengthening in health research '[1], contains a monitoring and evaluation framework that can be adapted to almost any capacity strengthening context, and can be applied to interventions that work at the individual, organizational and systemic levels.

Evaluating the effectiveness of research capacity strengthening projects is crucial for improving ongoing initiatives, demonstrating their impact and justifying continued investment (or otherwise discontinuing it) and enabling experiences to be shared in what is still a rapidly developing area. But when we talk about evaluation, what exactly do we mean? It is important to think carefully about what indicators are most useful for measuring success, and these will depend to a large extent on the type of intervention in question. However, if we accept that one aim of capacity strengthening is to facilitate research that changes policy, then some way of measuring the impact of capacity strengthening on society and policy would be useful. For example, quantitative indicators such as the number

of people trained could be important output and outcome measures, but it may not give an indication of the quality of training or whether that training has been applied in practice. Similarly, the number of publications in peer-reviewed journals could be a useful measure of the success of a training programme, but tells us nothing about whether the publications have influenced policy. Capturing such qualitative data is notoriously difficult, especially in an area such as health research in which objective, quantifiable data is held as the gold standard. There is an increasing need for partners to engage the social sciences in an effort to capture more of the unquantifiable outcomes of capacity strengthening.

It is also important to consider when to evaluate and for how long (bearing in mind capacity strengthening can take a long time to yield results). The process of evaluation itself (whether it is done internally by researchers and funders or by external organizations) can be time-consuming, and not everything can or should be evaluated[2].

The relative complexity of research capacity strengthening and the unique contexts in which it usually takes place mean that a trial and error approach to implementation has often been taken in the past, so it is vital that enough time and effort is devoted to analysis and reflection and that initiatives, funders and their partners are flexible enough to act rapidly to build on strengths and mitigate weaknesses. For this to work, and for weaknesses and errors to be brought to the fore as early as possible, it is important to cultivate a no-blame culture.

Experience has shown that monitoring and evaluation serves the needs of funders and recipients best when the means

and metrics of evaluation are agreed and incorporated into the design of an initiative from the start. Researchers often complain about funders "moving the goal posts" during or after an initiative, so communication and transparency is crucial from the outset.

The science of monitoring and evaluating research capacity strengthening initiatives, particularly in the health sector, is still in its infancy. In a review of evaluations of research capacity strengthening, Bates and colleagues[3] found that of 593 publications that described evaluations of health research capacity strengthening projects, only four (0.7%) were primary studies from LMICs. Researchers and institutes in LMICs are ideally placed to lead and shape the development of monitoring and evaluating methods and standards.

Other resources

- Research Capacity Strengthening: Learning from Experience brings together the discussions from a workshop held by the UK Collaborative on Development Sciences on research capacity strengthening, in September 2011. See: **http://www.ukcds.org.uk/_assets/file/features/UKCDS_ Capacity_Building_Report_July_2012.pdf**

- The Netherlands-African partnership for capacity development and clinical interventions against poverty-related diseases (NACCAP) published an introduction to its projects, most of which were funded in partnership with EDCTP, with a summary of the lessons learned from these projects and reflections on the themes of capacity strengthening, fair partnership and sustainability. See: **http://www.edctp.org/Announcement.403+M5b842fc8fa6.0. html**

[1] Planning, Monitoring and Evaluation: Framework for Capacity Strengthening in Health Research, ESSENCE, Geneva, Switzerland, 2011. **http://whqlibdoc.who.int/hq/2011/tdr_ essence_11.1_eng.pdf**

[2] Boyd A, et al (2013). Frameworks for evaluating health research capacity strengthening: a qualitative study. *Health Res Pol Sys*; 11: 46. **http://www.health-policy-systems.com/ content/11/1/46**

[3] Bates I, et al. Evaluations of health research capacity strengthening: a review of the evidence. Liverpool School of Tropical Medicine, Liverpool, UK, 2014. **http://archive.lstmliverpool. ac.uk/3332/1/poster%20hrcse%20600%20 papers%2028oct12%20final%20ib.pdf**

5 | Establish robust research governance and support structures and promote effective leadership

"As we look ahead into the next century, leaders will be those who empower others" Bill Gates

Research governance and support are two sides of the same coin of effective institutional functioning. Governance refers to the structures and systems that exist to enable high-level decision-making; for example, the work of research ethics review boards. Support structures facilitate the day-to-day business of research while grants management, research costing and procurement are all essential enablers of research.

In many LMIC research institutes, governance and research support structures are still not adequate to create an environment that is conducive to research. Many LMIC universities are calibrated for teaching and research support structures simply do not exist. Consequently, researchers must devote huge amounts of time and effort to administration.

Clearly, any efforts to strengthen institutional research capacity must include a careful assessment of whether existing research governance and support structures are in place, and whether they are effective. Where these structures or staff are not already in place or are not functioning effectively, efforts to strengthen these areas should be given high priority. Alternatively, where these

structures are in place and working well, it is essential that any research capacity strengthening initiative is undertaken in harmony with them, and that a strong emphasis is placed on transparent communication between governance and support staff and funders.

Strengthening research governance and support structures can be done in a multitude of ways. EDCTP, for example, amongst its many research capacity strengthening efforts, promotes the conduct of clinical trials in many parts of Africa, but is often hampered by the lack of available information about the capacity of African research institutes to ethically review trial proposals. As a result, the Mapping of Ethics Review and Trial Regulatory Capacity in sub-Sahara Africa (MARC)[1] project was initiated in collaboration with the Council on Health Research for Development, based in Geneva, Switzerland, and the University of Kwazulu-Natal in South Africa. The project ended in 2011, delivering a "self-updating" systematic map of African research ethics review committees and clinical trial related regulatory activities.

Research costing and reporting can also present difficulties for funders and recipients alike, with some researchers reporting that they spend up to 50% of their time on administrative reports rather than on research. The second document in this series, Five keys to improving research costing in low- and middle-income countries [2], provides helpful guidance and pointers on how to make research costing easier to manage, and is a good example of the kind of indirect way that funders can seek to address specific gaps in capacity that they themselves have identified. Alternatively, more direct support can come in the form of targeted training in

skills such as accounting. It is expected that capacity will be strengthened and retained to a much greater extent if funders are able to allocate the time, financing and expertise to train local staff, rather than setting up contracts with external administrators or support agencies. This can reap long-term benefits where newly trained staff are also enabled to pass on their knowledge to others. For example, in 2012 the US President's Emergency Plan for AIDS Relief allocated US$ 2.3 million in grant supplements to institutions participating in the Medical Education Partnership Initiative (MEPI)[3] network. The grants were made through the Initiative on Research and Innovation Management to foster, stimulate or expand research administration capacity and training, with separate detailed aims and processes for each institute. For example, the Kwame Nkrumah University of Science and Technology in Ghana was awarded a grant to fulfil four core aims:

- Develop an institutional research policy and management plan
- Establish an Office of Grants and Research, including the development of a 5-year strategic plan and a 1-year implementation plan for the office
- Develop and implement customizable training modules that can be deployed across the institution and beyond
- Develop a "research proposal roadmap" to guide researchers through a programme from design to completion and allocate appropriate resources for each anticipated step

It is hoped that once these aims have been met, existing institutional ethical review, administrative and fiscal accountability processes will be integrated, while overall institutional coordination and oversight will be enhanced. Crucially, the institution is committed to sustainability measures for the Office of Grants and Research beyond the period of supplemental funding.

Leadership is a separate but related issue to governance and support, and no less crucial. Skilled leadership is a crucial factor in the success of any capacity strengthening programme. Effective leaders who are committed to research and capacity building, and who have earned the trust of staff and researchers, can be crucial catalysts for change at an organizational level within institutes. And importantly, the right leaders can make or break the relationship between institutes, as well as between institutes and funders.

Good leaders can also improve the research culture in an institute, or even at a national level, by acting as role models for junior researchers. The UK Medical Research Council (MRC) and the Department for International Development (DFID) have embraced this concept through the African Researcher Leader Scheme[4], which supports up-and-coming researchers training in essential people management skills to prepare them for future leadership roles. This type of succession planning can create strength in an organisation and increase the likelihood that capacity strengthening is sustained.

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[1] Ijsselmuiden C (2012). Mapping of Ethics Review and Trial Regulatory Capacity in subSahara Africa: Supporting the Ethics Review Capacity of Health Research in Africa. European and Developing Countries Clinical Trials Partnership, The Hague, The Netherlands. http://www.edctp.org/uploads/ tx_viprojects/Project_Profile_-_CB_Ethics-COHRED_41303_Carel_IJsselmuiden.pdf

[2] Five keys to improving research costing in low- and middle-income countries. ESSENCE, Geneva, Switzerland, 2012. http://www.who.int/tdr/publications/five_keys/en/

[3] MEPI sites awarded $2.3 M to strengthen research management. Medical Education Partnership Initiative, National Institutes of Health, Bethesda, Maryland, USA. http://www.fic.nih.gov/Programs/MedicalEducation/Pages/mepi-irim-supplements.aspx

[4] MRC/DFID African Research Leader scheme 2013. Medical Research Council, London, UK, 2014. http://www.mrc.ac.uk/Fundingopportunities/Calls/ARL2013/MRC008917

Other resources

- For more on some of the ways to approach career support for researchers in LMICs, see: Harle J (2011). Foundations for the Future: Supporting the early careers of African researchers. The Association of Commonwealth Universities and British Academy. **https://www.acu.ac.uk/focus-areas/early-careers/foundations-for-the-future**

6 | Embed strong support, supervision and mentorship structures

"You need more than a PhD and a good computer to be a world-class researcher" Alex Ezeh, African Population and Health Research Center, Kenya

Researchers need tailored, flexible, regular support from knowledgeable and passionate supervisors and mentors to produce high-quality, timely and relevant research and to successfully compete for funding. Often, however, the difference between the two roles is not well understood. In this document, a supervisor's primary role is described as being to support and oversee a researcher's work. A mentor, on the other hand, is there to support a researcher's personal and career development. Mentorship can also take the form of peer-to-peer mentorship, to build the capacity of established researchers and is as important in private sector research contexts as it is in academic research.

In many LMIC institutions there has been a chronic dearth of experienced and able supervisors and mentors, and those that are often find themselves spread too thinly to be able to devote as much time as they would like to their charges. A lack of mentors can also often be compounded by a marked variation in the skills of the mentors that are available. Seniority is often seen as a proxy for suitability as a mentor, giving rise to scenarios in which promotions lead to mentorship responsibilities without any additional training in how to mentor inexperienced

researchers. This can lead to a paternalistic approach to mentorship, with a stiff, inflexible relationship between the experienced and inexperienced partners.

Although to some extent there is a limit to the type of interpersonal skills that can be taught, training can address many of the shortcomings of existing mentors, as well as making the mentors of the future better equipped for the role. Institutional training to clearly define roles and responsibilities can produce immediate results, but thought also needs to be given to broader issues such as what incentives are available for mentors and supervisors, and whether mentors from other areas of research can have a role. Much of the advice and guidance provided by mentors is not subject-specific, so there may be room for more flexibility in terms of who junior researchers are mentored by. Funders should also be prepared to cover travel costs to ensure that face-to-face interaction is possible between geographically separated students and mentors to enable stronger relationships to be fostered. Creating a mentor ladder at an institutional level to ensure that young researchers are trained to become mentors can help drive sustainability.

Co-supervision, where a student has an experienced supervisor from a high-income institute and a less experienced supervisor from a local institute, can allow for mutual learning; the supervisor from the high-income country learns local needs and processes, while the supervisor from the LMIC can gain a breadth of skills from an experienced supervisor. Group-based co-supervision is another possibility, whereby students have access to a pool of senior experts. In both cases, there should be a clear demarcation of responsibilities between multiple supervisors.

Other resources

- For a guide to scientific management see Making the Right Moves, by the Burroughs Wellcome Fund and the Howard Hughes Medical Institute: **http://www.hhmi.org/educational-materials/lab-management/for-early-career-scientists**

- There are hundreds more free resources online that help define the role of both supervisors and mentors, and give advice on how to be effective in either role. For example, Columbia University's Responsible Conduct of Research e-seminar series includes a module on mentorship (**http://ccnmtl.columbia.edu/projects/rcr/rcr_mentoring/foundation/**), while the London School of Economics provides a code of practice for supervisors and their students (**http://www.lse.ac.uk/resources/calendar/academicRegulations/codeOfPracticeForResearchStudents.htm**).

7 | Think long-term, be flexible and plan for continuity

"If aid does not stop, it will have failed" Donald Kaberuka, President of the African Development Bank

The above quote from Donald Kaberuka will no doubt strike a chord with many involved in research capacity strengthening, but it is perhaps missing something. Aid that does not stop has failed, but so has aid that stops but does not leave a lasting beneficial legacy. Research capacity strengthening must have sustainability and continuity at its core, but there are unfortunately many examples of initiatives that, though laudable in their intentions, have resulted in no real lasting benefit.

There is now increasing recognition that long-term, systemic approaches are needed, preferably ones that act on multiple levels (individual and institutional), to reach a critical self-sustaining mass of research capacity. But this raises difficult questions for some funders, as well as researchers and institutes, in LMICs. Funding is a major issue. Although the potential pay-offs are bigger, longer time frames (and by long we are probably talking about decades) usually go hand-in-hand with greater costs and higher risks. Some organizations, however, have persisted in their efforts. In today's climate of increasing financial insecurity, these costs and risks are things that fewer funders are prepared or able to bear alone. Partnerships between funders can be a way to share risk and pool funding and experience. Researchers can play a pivotal role in bringing funders together. Joint funding schemes can help pool expertise and better enable funders to listen to recipients and strengthen multiple components of research capacity simultaneously, to multiply the beneficial impact of interventions.

The ability of recipients to attract alternative competitive funding should be a key indicator of success, and research capacity strengthening initiatives should place strong emphasis on developing the fundraising and policy engagement skills of recipients to encourage long-term, sustainable support for high-quality research. Applicants for funding must bear in mind that funders can't fund forever, and every application for funding should fit into a long-term strategic plan that will result in sustainability.

The Centro Rosarino de Estudios Perinatales (CREP) [1], in Rosario, Argentina, is a good example of how a long-term, flexible plan can lead to sustainable increases in research capacity. Between 1986 and 2006, CREP received a long-term institutional development grant from UNDP/UNFPA/UNICED/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction, as well as small capital grants and individual staff scholarships. The support allowed the centre to expand its research capacity to the point where it is now an internationally recognized leader in reproductive health research, coordinating multi-centre randomized controlled trials and publishing 334 articles in leading journals. And crucially, CREP has reached the point of being able to attract funding from a wide range of sources, from the European Commission to the US National Institutes of Health.

Ultimately, sustainability will emerge where all of the principles of good practice for research capacity strengthening have been followed: a deep understanding of the local context and a capacity strengthening strategy that addresses priorities set locally; strong and self-perpetuating governance and research support systems; courageous and communicative leadership; empathetic mentorship and viable career development pathways; and a system of monitoring and evaluation that promotes pragmatism and learning, will all play their part in creating a positive and lasting legacy.

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[1] The Centro Rosarino de Estudios Perinatales (CREP), Rosario, Argentina, 2014. **http://www. who.int/pmnch/about/members/database/ Centro_Rosarino_Estudios_Perinatales/en/ index.html**

Other resources

- For an analysis of the likely indicators of sustainability in research capacity strengthening, see: Bates I, et al. Indicators of sustainable capacity building for health research: analysis of four African case studies. *Health Res Pol Sys* 2011; 9: 14. **http://www.health-policy-systems.com/content/9/1/14**

- For an excellent overview of the different ways to approach research capacity strengthening, see: A Guide for Transboundary Research Partnerships: 11 Principles. Swiss Commission for Research Partnerships with Developing Countries (KFPE), 2012. **http://www.kfpe.ch/11-Principles/**

PART III : Learning lessons from the past

The following is a selection of case studies that help to illustrate how many of the principles for research capacity strengthening have been used in practice in the past and some of the challenges that capacity building programmes often come up against. Several of the case studies were presented by LMIC researchers at a meeting hosted by ESSENCE in Entebbe, Uganda, in July 2013.

CASE STUDY | Canada's Global Health Research Initiative (GHRI) HIV/AIDS prevention trials capacity building grants

Africa shoulders the greatest burden of HIV/AIDS worldwide and yet, prior to 2004, only 80 randomized HIV/AIDS prevention or treatment trials were done in Africa compared with 785 done in North America, and only 29% of the African trials were led by an African researcher. The GHRI's HIV/AIDS prevention trials capacity building grants support nine multinational teams working to strengthen research capacity for African-led HIV/AIDS prevention trials in sub-Saharan Africa. The teams are all based in sub-Saharan Africa, with project activities involving a total of 23 countries in the region. The aim of the programme is to develop sustainable African capacity and leadership to do future prevention trials, with a focus on innovations in HIV/AIDS prevention technologies, particularly HIV vaccines trials. The grants programme also aims to advance collaboration and networking between African, Canadian and international researchers and institutions in global HIV/AIDS prevention trials efforts.

The GHRI-funded teams develop the ability of African researchers and research institutions to do randomized controlled trials. Beyond the necessary technical and scientific knowledge and skills, researchers and their institutions must be able to coordinate all aspects of successful prevention trial research, including trial administration and management, ethics review processes, securing funding, engaging communities and policy-makers and publishing research results. The teams are active in all these areas.

For example, the West African Platform for HIV Intervention Research is a CA$ 1.8 million grant to establish a West African-driven partnership with Canadian and European collaborators to enhance HIV research and carry out clinical trials in Senegal (Université Cheikh Anta Diop), the Gambia (Medical Research Council) and Guinea Bissau (Bandim Health Project). The partners jointly manage and share cohort and bio-resource data, thereby providing each partner access to a larger HIV study population. The project involves constructing a unified database, reinforcing existing laboratory infrastructure, providing training in clinical trial support and applying social science research in support of intervention preparedness and evaluation. The project also offers specialized postgraduate training with a view to building African research leadership in the management of clinical trials.

For more on GHRI's HIV/AIDS capacity building programme see: **http://www.idrc.ca/en/programs/global_health_policy/global_health_research_initiative/pages/chvi.aspx**

CASE STUDY | The Structured Operational Research and Training Initiative (SORT IT)

Operational research helps to address the gap between knowing what to do in public health programmes and knowing how to do it for maximum public health benefit in a particular setting. It is essential to ensure that scarce resources invested in public health programmes result in improved public health. However, very limited operational research emerges from programme settings in LMIC countries where the burden of disease is highest. SORT IT is a global partnership led by TDR with the International Union Against Tuberculosis and Lung Disease (the Union) and Médecins Sans Frontières (MSF) as major implementing partners.

SORT IT aims to support countries to do operational research in accordance with their own priorities; develop adequate and sustainable operational research capacity in public health programmes; and create an organizational culture of policy and practice that is informed by operational research, which leads to improved programme performance. Since 2009, The Union and MSF have run training courses for participants from LMICs to design, do and write up operational research for peer-reviewed publication. This is the training component at the heart of SORT IT. The training model is an output and outcome-oriented mentored course with three 5-day workshops spread over a period of 9 to 12 months: workshop 1
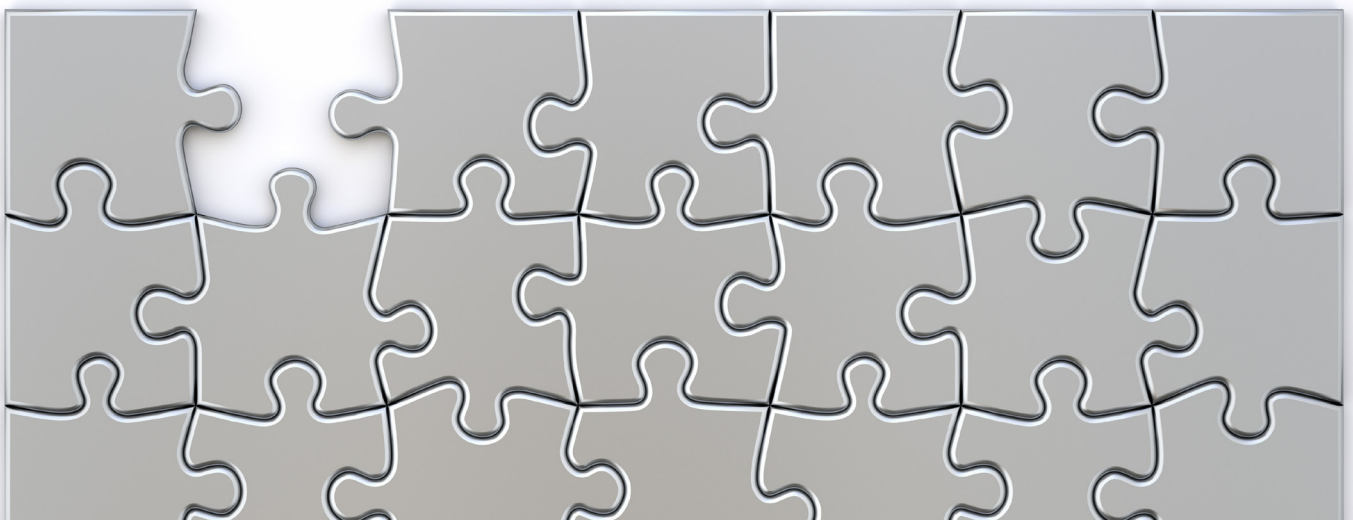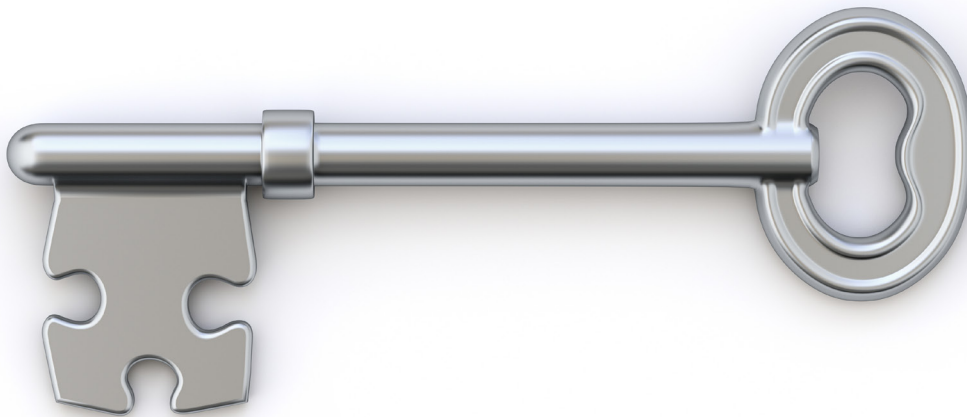
covers research protocol development and ethics; workshop 2 covers data capture and analysis; and workshop 3 deals with the writing of a scientific paper. Participants who submit a scientific manuscript to a peer-reviewed journal within 4 weeks of completion of workshop 3 are considered to have successfully completed the course.

In 2012, a SORT IT programme was run for the first time in South Asia by the Union. Twelve participants, mostly health professionals (physicians, programme managers, paramedical workers and data analysts) working in health programmes from Bangladesh, Bhutan, Cambodia, India, Indonesia, Nepal, Pakistan, Sri Lanka and Timor-Leste were selected through a competitive process and were required to attend the three modules and complete interim milestones linked to each module to remain in the course. Eleven of the 12 participants successfully completed all of the milestones and submitted 12 scientific manuscripts (one participant completed two projects), on topics ranging from tuberculosis, HIV and tobacco control to health system financing, for publication in international peer-reviewed journals. Of these, six papers were accepted for publication within three months of submission; how many more will be published and what their impact on policy and practice will be is being tracked. In addition, three junior facilitators from a previous course acted as independent facilitators and two participants from this course participated as junior facilitators in the next course in February 2013, to build mentorship capacity.

> For more on SORT IT see:
> **http://www.who.int/tdr/capacity/strengthening/sort/en/**

CASE STUDY | The Netherlands–African Partnership for Capacity Development and Clinical Interventions of Poverty-related Diseases (NACCAP) African Poverty-related Infection Oriented Research Initiative (APRIORI)

NACCAP supports African research institutes in their efforts to carry out medical research that meets international regulatory standards and encourages them to shape local research agendas. Between 2004 and 2011, NACCAP funded 11 projects, of which APRIORI was one. The project had two main objectives: to set up a state-of-the-art clinical research institute in Tanzania and to strengthen South–South cooperation. These two objectives were split into a number of goals:

- Develop a Tanzanian research centre of excellence for the prevention, control and treatment of malaria, tuberculosis and HIV/AIDS
- Meet the international standards needed to attract investment in the development of MSc and PhD curricula
- Sustain long term partnerships
- Develop new tools, vaccines and treatments
- Improve the quality of, and implement improved protocols for, the treatment of the local population
- Promote South–South collaboration and the harmonization of protocols.

The project ran for four years with a total budget of €2.25 million, and came to an end in 2010. In 2012 NACCAP published a booklet titled NACCAP 2004-2011: Lessons Learned, looking back at the projects it helped fund during that period, with reflections on the successes of APRIORI, including some candid accounts of

the challenges encountered during implementation of the project.

One of the most important successes was that APRIORI funding acted as a stimulus to attract other sources of funding to establish the purpose-built Kilimanjaro Clinical Research Institute (KCRI). The NACCAP subsidy persuaded three other major funders to contribute to the construction of the KCRI building. In the end, KCRI was created with funds and help from APRIORI, the Good Samaritan Foundation, which founded the Kilimanjaro Christian Medical Centre (KCMC) hospital in 1971, and later with the support of two project subsidies from EDCTP.

KCRI now coordinates all of the research done at the KCMC and enables Tanzanians to determine their own research priorities and function as an equal partner with their Western counterparts. Importantly, the improved research environment has led to better research and outcomes that benefit the local population. But not everything went according to plan. The authors point out that even though there are enough projects to keep the institute "more or less operational", four years was too short a time to set up the institute and to hand over financial management to the local partner. As a result, core funding is still a problem. Although KCRI is part of the Good Samaritan Foundation, financial arrangements have not yet been made. A request for core funding for KCRI was submitted to the Tanzanian Government, but the funding situation is still precarious.

NACCAP 2004-2011: Lessons Learned discusses lessons learned and best practices regarding capacity strengthening and highlights the four partnership programmes funded through NACCAP, as well as several EDCTP projects that were co-funded by NACCAP. See **http://www.nwo.nl/en/about-nwo/media-and-communication/publications/wotro/naccap-2004-2011-lessons-learned.html**

For more on the KCRI see: **http://www.kcri.ac.tz/**

CASE STUDY | The Wellcome Trust African Institutions Initiative (AII)

The African Institutions Initiative was set up in 2009 with the aim of strengthening the capacity of institutions and universities to carry out research by encouraging networks and collaborations. Seven consortia involving 51 sub-Saharan African institutions and 20 high-income country institutions were funded in following competitive process. Consortia are driven by a lead African Institution, headed by an African national, with over 90% of the funding going directly to African Institutions.

Each consortium exists in a unique context. They have had varying levels of success, have faced and in some cases are still facing different challenges and can each contribute in a unique way to our knowledge of what works in capacity building.

AFRIQUE ONE, for example, provides a dramatic illustration of how research capacity strengthening efforts can be disrupted by external political forces and also shows how such disruptive effects can be minimized. The consortium is led by Bassirou Bonfoh, the Director of the Centre Suisse de Recherches Scientifiques (CSRS) in Côte d'Ivoire. Following a contested presidential election in Côte d'Ivoire in 2010, the political crisis escalated into a full-scale civil war during 2011, which led many funders to pull out of the country. The impact this had on the scientific research community in the country as a whole was devastating. However, funding from the Swiss Government and the Wellcome Trust remained in place, with the result that research and research capacity strengthening through CSRS and AFRIQUE ONE continued throughout the crisis.

Different consortia have focussed their efforts on different areas. The Consortium for Advanced Research Training in Africa (CARTA) has worked very closely with northern partners to develop accredited curricula for training courses and has helped create a pool of trained research talent. Training Health Researchers into Vocational Excellence in East Africa (THRiVE) has had success in addressing the problem of brain drain from LMIC institutes by encouraging a huge shift in institutional policy at Makerere University in Uganda. A strong teaching universities, Makerere used this opportunity to build on their previous work to develop 2-year postdoctoral awards that include stipends, university fees, research costs, plus travel and conference expenses, to a number of successful applicants. The policy has been taken on by the entire University and will hopefully provide a template for other universities and help to foster a culture of research at the university. Along with THRiVE, the Southern African Consortium of Research Excellence (SACORE) has set up research support offices within university to act as hubs for everything from grant writing to research costing.

The Wellcome Trust has commissioned an extensive real-time evaluation to capture the lessons learnt every year for each consortia and the initiative as a whole. Emerging lessons reflect the principles in this document. The importance of communication, flexibility and good research support structures was readily apparent when dialogue between funders and applicants led to the conclusion that there was a gap in many applicants' capacity for financial reporting, which led to delays in payments and reduced productivity in some consortia. Subsequently, KPMG Kenya was contracted to design financial training courses to close this capacity gap.

Similarly, a large part of the differing successes of consortia can be ascribed to the degree of active support they receive from university deans and vice-chancellors, with high turnover of staff at some institutes sometimes causing difficulties. Maintaining high-quality research is essential but challenging, and requires strong supervisory and mentorship structures. Students have thrived where they have had adequate face-to-face contact with supervisors and mentors, but have struggled when this has not been the case.

For more on the AII see:
**http://www.wellcome.ac.uk/Funding/
International/African-Institutions-
Initiative/**

CASE STUDY | International Vaccine Institute Pilot Vaccination Programme against Japanese encephalitis and Haemophilus influenzae type B in the Democratic People's Republic of Korea

Vaccines are powerful tools for the prevention of infectious diseases. However, establishing a sustainable immunization programme in resource-limited settings remains a challenge that requires political will, well-trained local public health staff and adequate laboratory facilities. In a programme supported by the governments of the Republic of Korea, Sweden (Sida) and Kuwait, the International Vaccine Institute (IVI) set up a pilot project in the Democratic People's Republic of Korea (DPRK; North Korea) to vaccinate children against Haemophilus influenzae type B (Hib) and Japanese encephalitis (JE) virus infection, and to train public health workers using a "learning-by-doing" model to ensure long-term sustainability.

The project took place in two provinces of the DPRK. In order to ensure long-term engagement, IVI trained local DPRK public health workers during every step of the programme on subjects ranging from epidemiology to laboratory diagnostics and surveillance. The success of the demonstration project contributed to the implementation of two large-scale JE immunization campaigns targeting over 1.5 million children aged 12 to 23 months in six provinces during 2009-2010, targeting over 3 million children in 2012-2013. In future, efforts will focus on introducing vaccines for JE and diarrhoeal diseases into routine vaccination programmes.

One of the main challenges for the programme was the constant possibility of disruption due to political tension.

Other factors, such as logistical issues, could largely be overcome by having established close partnerships with DPRK government officials, WHO, UNICEF and other nongovernmental organizations working in the DPRK. And in spite of political tensions, the project has shown that "learning-by-doing" vaccination training programmes can ensure long-term engagement with a planned responsible exit strategy that achieves sustainability.

For more about IVI's vaccination programmes see:
http://www.ivi.int/web/www/01_01

The way ahead

One of the overarching themes to emerge from consultations with funders, researchers and institutes is that strengthening research capacity is an incredibly important end in itself and needs to be an explicit objective rather than an assumed spin-off benefit of funding research. To address the health challenges of their own nations, policy-makers in low- and middle-income countries need to be able to base their decisions on high-quality evidence. Strengthening research capacity in LMICs is crucial to achieving that goal.

However, initiatives to strengthen capacity require long-term commitments, and at a time when funders are increasingly having to do more with less, there is a pressing need for more tools to help inform investment decisions. Knowledge sharing is the best way for funders and recipients of funding to learn from experience and to maximise the benefits of research capacity strengthening and we hope the principles set out in this document will be a useful resource for anyone hoping to engage in research capacity strengthening in LMICs.

Research capacity strengthening is a rapidly developing field, both in terms of the number of initiatives taking place and the consensus on best practices. Comparisons between initiatives could be a powerful tool to inform best practice, but evaluating the impact of research capacity strengthening initiatives remains a challenge. Because most capacity strengthening initiatives take place in LMICs, institutes are uniquely well placed to lead the effort to develop robust and transferrable measures of success for capacity strengthening programmes, build on the recommendations in the first ESSENCE good practice document Planning, Monitoring and Evaluation: *Framework for Capacity Strengthening in*

Health Research and establish themselves as world leaders in monitoring and evaluation.

Far from being the final word on how best to plan and implement research capacity building, we hope the principles set out here will continue to evolve as ever greater cooperation and collaboration between different funding organizations and recipients that will ensure that research in LMICs can answer the questions asked by life in the 21st century.

We hope this document has the potential to:

- Raise awareness that strengthening research capacity needs to be an explicit objective rather than an assumed spin-off benefit of funding research
- Help funders take an overview of factors that could affect research capacity strengthening initiatives at different levels
- Stimulate discussion on how best to evaluate the impact of research capacity strengthening initiatives
- Promote good research governance and emphasize the importance of effective operational and strategic leadership
- Encourage funders and recipients to share their experiences of research capacity building and help to shape best practice
- Foster greater cooperation and collaboration between different funding organizations and recipients.

The ESSENCE members encourage funders and recipients of funding to share knowledge and work in partnership to maximise the benefits of research capacity strengthening.

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