



EUROPE

- CHILDREN AND FAMILIES
- EDUCATION AND THE ARTS
- ENERGY AND ENVIRONMENT
- HEALTH AND HEALTH CARE
- INFRASTRUCTURE AND TRANSPORTATION
- INTERNATIONAL AFFAIRS
- LAW AND BUSINESS
- NATIONAL SECURITY
- POPULATION AND AGING
- PUBLIC SAFETY
- SCIENCE AND TECHNOLOGY
- TERRORISM AND HOMELAND SECURITY

The RAND Corporation is a nonprofit institution that helps improve policy and decisionmaking through research and analysis.

This electronic document was made available from www.rand.org as a public service of the RAND Corporation.

Skip all front matter: [Jump to Page 1](#) ▼

Support RAND

[Browse Reports & Bookstore](#)

[Make a charitable contribution](#)

For More Information

Visit RAND at www.rand.org

Explore [RAND Europe](#)

View [document details](#)

Limited Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law as indicated in a notice appearing later in this work. This electronic representation of RAND intellectual property is provided for non-commercial use only. Unauthorized posting of RAND electronic documents to a non-RAND Web site is prohibited. RAND electronic documents are protected under copyright law. Permission is required from RAND to reproduce, or reuse in another form, any of our research documents for commercial use. For information on reprint and linking permissions, please see [RAND Permissions](#).

This report is part of the RAND Corporation research report series. RAND reports present research findings and objective analysis that address the challenges facing the public and private sectors. All RAND reports undergo rigorous peer review to ensure high standards for research quality and objectivity.

The African Institutions Initiative

Insights from the First Four Years

Gavin Cochrane, Enora Robin, Sonja Marjanovic, Stephanie Diepeveen, Rebecca Hanlin, David Kryl, Lucia Muchova, Ohid Yaqub and Joanna Chataway

INTRODUCTION ■ In the past decade, global health funders, non-government organisations and policymakers have increased their efforts to support health research capacity in low and middle income countries (LMICs). LMICs, especially in sub-Saharan Africa, bear the highest burden of infectious diseases worldwide, yet health research originating from these regions remains very low. Efforts to build local research capacity are vital as African researchers and institutions are well placed to provide effective ways to address their local health problems and needs (Whitworth et al., 2008; Zofou et al. 2011; Chu et al., 2014). African higher education institutions (HEI) are increasingly recognised as key players in this process. Prominent national and international donor institutions involved include The Bill & Melinda Gates Foundation, The Wellcome Trust, the International Development Research Centre (IDRC) in Canada, the UK Department for International Development (DfID) and the National Institutes of Health (NIH) in the US.

Programmes directed toward strengthening health research capacity have taken a variety of approaches. Some programmes focus on strengthening multilateral North-South partnerships, while others promote the development of national or transnational South-South networks. The latter approach is a relatively new method for international donors—historically, capacity building initiatives in LMICs have been driven mostly by Northern institutions (Ezeh et al. 2010). Recent South-South collaborations offer the opportunity to facilitate knowledge transfers across institutions and enhance the diffusion of best practices (Marjanovic et al., 2013). While growing interest from donor institutions towards capacity building initiatives and South-South networks is encouraging, the effectiveness of these varied approaches for improving health research capacity remains unclear (Uduma et al. 2013).

Efforts to build local research capacity are vital as African researchers and institutions are well placed to provide effective ways to address their local health problems and needs

The African Institutions Initiative

The African Institutions Initiative (AII) represents an approach based on building networks. It reflects the Wellcome Trust's wider international strategy to broaden the research base for scientific endeavour in under-resourced environments; to support areas of science with the potential to contribute to health benefits for people and livestock; and to support international networks and partnerships focused on health problems of resource-poor countries. This £28 million Initiative supports seven capacity-building consortia, involving eighteen African countries and fifty-four institutions across the continent, as well as twenty institutions from Northern (predominately European) institutions. Consortia were at different stages of development at the time of the call, some new and others more established. Each consortium also has a mixture of universities or research institutes; encompassing both those that are comparatively better established and those in earlier stages of developing research capacity. The first phase of the programme, started in 2009, was planned to run for five years.

To make a significant contribution to building a critical mass of sustainable health research, the Trust's model features three central components:

- **African-led:** The Trust's approach departed from traditional models of externally-sponsored research capacity building in Africa, which are generally led by 'northern-based' actors and institutions. Within various South-South and South-North networks, African universities and research institutes took the lead in managing research capacity building consortia, and received funds directly from the Trust. This process represented an attempt to strengthen the capacity of African universities and research institutions to undertake research driven by local needs and priorities.
- **Networked:** The Trust supported a highly networked approach to capacity building. Supporting networks with multiple African participants was intended to mitigate some of the hierarchical imbalances that can exist in traditional North-South partnerships. The African partners were expected to include a mix of institutions with established research activities and those in earlier stages of developing (or renewing) their research potential.
- **Sustainable:** The Initiative was concerned with both enabling institutional environments for research and empowering individuals. Building institutional capacity entailed improvements in research governance, management and administration (RGMA) systems, including the capacity for strategic planning. Improvements in physical and Information and Communication Technology (ICT) infrastructure were also supported. This support was expected to further enabling conditions for research and research use. For individuals, the Trust hoped to build environments where African scientists could develop professionally, by pursuing and leading research through attractive career pathways within the region.

Box 1. Initiative objectives

The Trust specified six core inter-related objectives for the Initiative:

1. To create equitable and sustainable networks and partnerships between institutions in both South-South and North-South locations;
2. To build a critical mass of sustainable local research capacity and develop vibrant research environments geared to national priorities in institutions, particularly universities, across Africa—including institutions currently in the early stages of developing research potential;
3. To support the institutional human resources and infrastructure necessary for the development of administrative, governance, financial and management functions needed for research excellence;
4. To develop leadership at individual, institutional and national levels in order for countries to better initiate and lead research activities;
5. To support research leaders to act as beacons and role models to enthuse young scientists to develop research careers; and
6. To strengthen research training and build credible career pathways for the best and brightest researchers in clinical tropical medicine and in health research more generally, including public health research.

Profile of the consortia

Out of 88 proposals, seven consortia were selected through a peer review process to receive funding through the Initiative. The selection criteria were: track record of applicants and international competitiveness; alignment with objectives of Initiative; achievability and sustainability; leadership and management of consortium; rationale and appropriateness of applications; appropriateness of support requested; overall vision and stated aims.

Each of the seven consortia varied considerably in terms of strategy, available resources, and geographical scope. As a result, consortia received varying amounts of funding from the Trust. Table 1 shows some of the differences among the consortia. This table outlines the variety in mechanisms for funding students, thematic focus, and number of partners across each of the seven consortia. It also differentiates between equity and merit based approaches to allocating resources between consortia partners and countries in which partners are based. Figure 1 shows the geographical spread of the African institutions involved in each consortium.

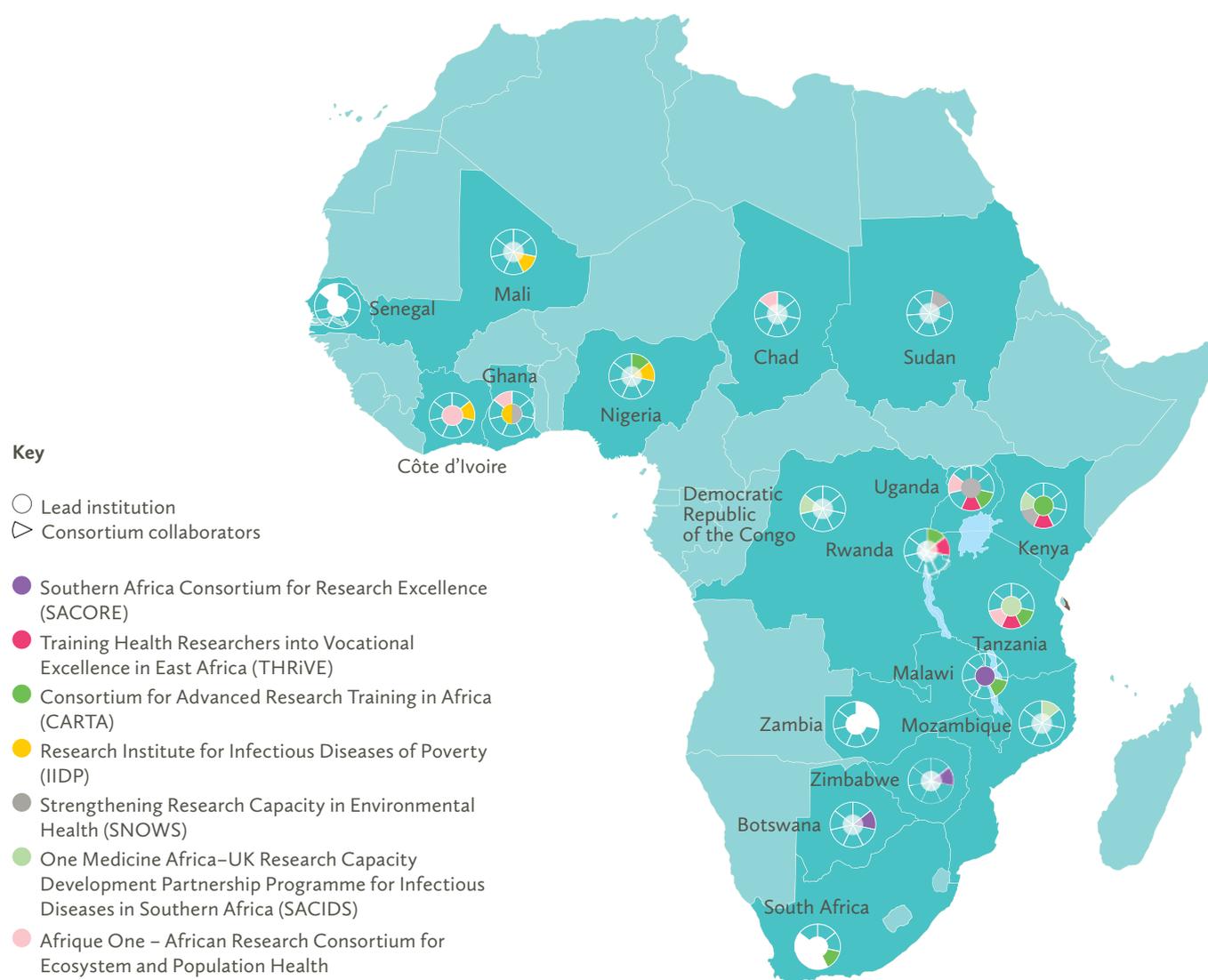
Table 1. Profile of the seven consortia funded in the African Institutions Initiative

Consortia	Total funds awarded	Funding mechanism for students	Thematic focus	Number of African partners	Number of Northern partners
One Health Initiative, the African Research Consortium for Ecosystem and Population Health (Afrique One)	£5,016,400	Merit-based funding within institutions but quotas between institutions	Specific focus	11	3
Consortium for Advanced Research Training in Africa (CARTA)	£3,423,400	Merit-based funding within institutions but quotas between institutions	Broad focus	13	7
Institute for Infectious Diseases of Poverty (IIDP)	£1,344,004	Merit-based funding within institutions but quotas between institutions	Pre-specified field, but open to diverse topics within the field	6	3
Southern Africa Centre for Infectious Disease Surveillance (SACIDS)	£5,809,079	Merit-based funding within institutions but quotas between countries	Specific focus	19	3
Southern Africa Consortium for Research Excellence (SACORE)	£4,934,167	Merit-based funding within institutions but quotas between countries and institutions	Broad focus	6	4
Scientists Networked for Outcomes in Water and Sanitation (SNOWS)	£765,354	Equity-focused investment strategies	Pre-specified field, but open to diverse topics within the field	6	3
Training Health Researchers into Vocational Excellence in East Africa (THRiVE)	£4,839,746	Merit-based competition between partners and within institutions	Broad focus	7	2

Because of cuts to original funding requests, some consortia do not directly support trainees from the Trust funds or do so to a very limited degree (i.e. through partial funding). These consortia have leveraged some external funding to support trainees in their specific area of activity. While this evaluation considered consortia performance against their own milestones – developed on the basis of funds awarded – consortia reported that the amount of funding impacted in various ways on achievements to date. Some consortia were awarded significantly less funding than they had applied for, which required strategy revisions and scaling back on original plans. Efforts to attract alternative funding to support some of the originally envisaged interventions have met with considerable success.

Figure 1. Map of the African Institutions by consortia

African Institutions Initiative



Source: <http://www.africaninstitutionsinitiative.org>

METHODOLOGY

The field of research capacity building remains conceptually pluralistic, and neither the current literature nor current practice, clearly identify proven approaches for best practice. Therefore, the evidence base in ‘the science of capacity building’ requires continual attention. This report presents findings from an independent *real-time* evaluation of the first four years of the Initiative. Evaluation in real time – during a programme’s life as opposed to at the end of it – is particularly suitable for the kinds of complex interventions and uncertain contexts reflected in this Initiative. With real-time evaluation, on-going learning is optimised to inform programme implementation.

This evaluation adopted an approach which mirrored the participatory, African-led ethos of the overall Initiative. It worked with the seven consortia to evaluate them against their own articulated and documented aims and objectives. Furthermore, the evaluation assisted self-reporting on and understanding of specific progress and obstacles. Finally, the approach gives equal weight to learning as to evaluation.

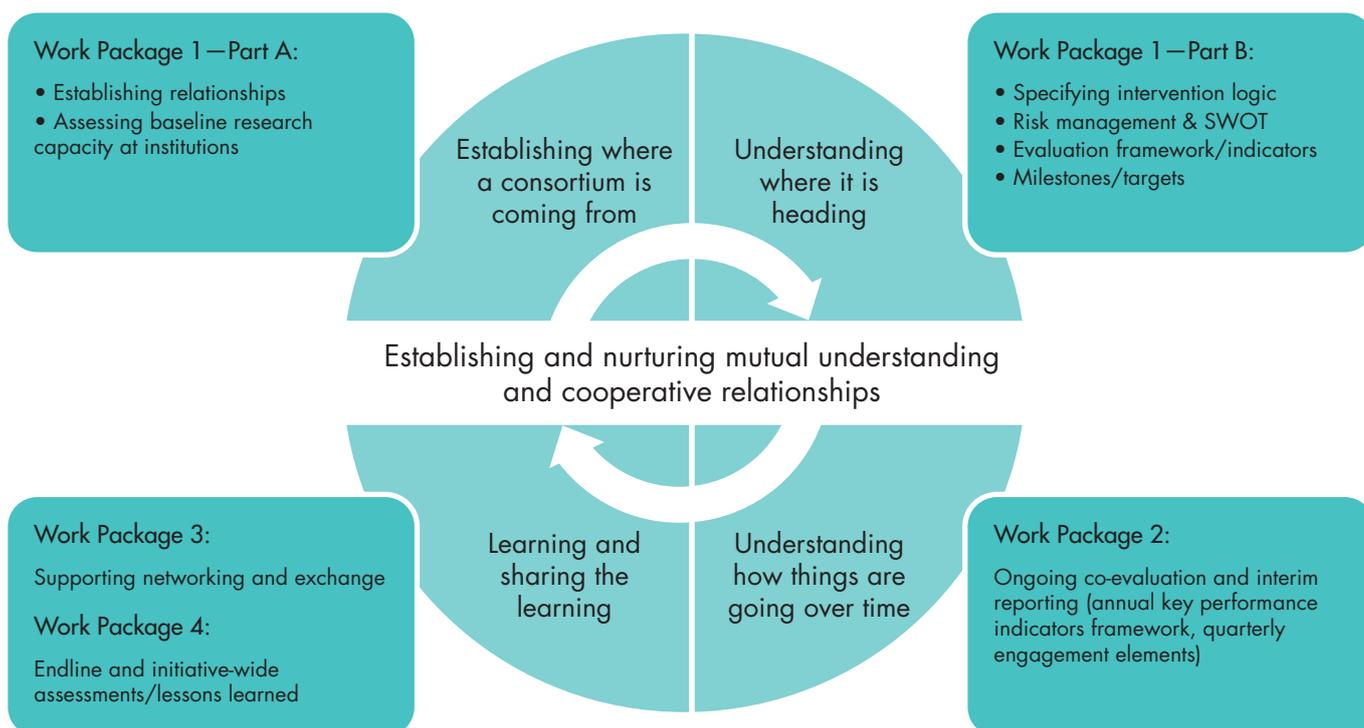
Over four years, the Evaluation and Learning (E&L) team were involved in: initial training and capacity building in evaluation and learning; the development of ‘logic models’ and associated indicators for the overall Initiative and its individual consortia; regular data compilation and analysis tracking progress against objectives and goals; the produc-

Evaluation in real time
– during a programme’s
life as opposed to at the
end of it – is particularly
suitable for the kinds of
complex interventions
and uncertain contexts
reflected in this Initiative

tion of annual reports; regular email and phone correspondence with consortia administrators and managers; and interviews with consortia Directors. Using these variables, the E&L team captured data and insights into the performance of each consortium, together with data and insights into the Trust’s engagement with them. Support from the Trust also enabled consortia to initiate their own internal evaluation programmes.

Figure 2 shows the four core elements of the evaluation approach.

Figure 2. Work packages for the evaluation



Consortia share a number of common features while remaining intrinsically diverse. Although each consortium has varying budgets, unique objectives, and distinct ways of pursuing objectives, three common categories describe the central institutional and individual capacity building goals particular to the Initiative's objectives as a whole. These categories underpin all consortia activities and the evaluation framework:

1. scientific skills and research training capacity: training and empowering individuals to conduct research; strengthening career development prospects at universities and research institutes (institutional receptiveness);
2. research governance, management and administration capacity (RGMA): training individuals in grant-writing, financial management, ethics, project management, supervision, publication writing; implementing better knowledge management systems;
3. ICT and physical infrastructure: investing in research infrastructures based on a critical assessment of institutions' specific needs; sharing of available infrastructure within institutions and between projects.

KEY ACHIEVEMENTS OF THE INITIATIVE TO DATE

The African Institutions Initiative was not designed to deliver 'quick wins.' Rather it plans to lay the foundations for increased research capacity and the emergence of locally relevant health research agendas over time, which is reflected in the Trust's direct engagement with African universities and research institutes to develop African-led research programmes.

This being said, programme-wide achievements during the first phase of funding are evident. These achievements relate to the three major categories of effort outlined above and are outlined below in Box 2.

While the programme is in its early stages, the Initiative is broadly on track towards contributing to its core objectives. The diversity of consortia has given rise to successful and promising capacity building models and has provided the Trust with several different options for the ways in which capacity building can be supported in the future.

Box 2. Key achievements of the African Institutions Initiative

Scientific skills and research training capacity

- A significant contribution to health research related PhD and MSc provision in Africa and the emergence of popular new models of provision: The Initiative has supported 160 PhD, 34 Post-doctoral and 134 Masters students
- Successful delivery of numerous short courses: Over 200 training courses have been delivered on a wide range of topics, including: grant management, proposal writing, qualitative and quantitative research methods
- Contribution to the profile and prominence of African research leaders: Over 250 high quality publications being accepted by peer-reviewed journals and success in grant applications
- Creation of new South-South and South-North collaborations around African-led research

Research Governance and Management and Administration capacity

- Emergence of new models of research support and governance and a diversity of financial models for supporting postgraduate students
- Significant uptake of diverse training in RGMA areas
- Active engagement of university leadership and relevant policy makers: Consortia have worked hard to establish good relationships with vice-chancellors, policymakers and external funders
- Over £80m has been leveraged by consortia in external grants from other international funders

Research infrastructure

- Creative solutions to ICT constraints and sharing of relevant learning with consortia: small merit-based equipment grants and comprehensive needs assessments
- Significantly enhanced opportunities for research based interaction and networking: The networked model provides opportunities for encouraging shared access to existing resources in the region

The diversity of consortia has given rise to successful and promising capacity building models and has provided the Trust with several different options for the ways in which capacity building can be supported in the future

Creating internationally competitive researchers

One expected output of the Initiative is the generation of internationally competitive researchers – by enhancing the skills of existing researchers, and by training those new to the field. In the first phase of the Initiative, all consortia report success in both accepting new students and providing training to existing researchers.

Consortia demonstrate diversity in the stages of career pathways supported through studentships and fellowships. Many consortia simultaneously cover the entire pipeline. Others focus investment on the stage(s) they consider most in need or carry optimal impact.

For partner institutions with little research and training capacity, the challenges involved in achieving research excellence are considerable. Consortia have adopted a number of strategies for addressing different levels of baseline scientific skills. To mitigate against institutional inequalities, consortia adopted a range of mechanisms which include: programme entry criteria as a way of normalising minimum standards, foundation courses, extra tutoring provisions, and peer-to-peer mentorship.

Clear and transparent decisionmaking criteria, developed jointly by all partners, enable consortia to pursue strategies for selecting fellows and students within institutions. In

most cases, partner buy-ins to the selection process successfully reduced relational tensions, common in a networked approach, between stronger and weaker institutions (Kinyanjui & Timæus, 2010). In addition, building flexibility into consortia funding mechanisms proved important. For example, within quota-based approaches, elasticity in funding has facilitated responses to emerging needs and absorptive capacity issues (such as substituting funds for postdoctoral fellows with masters or doctoral student support and vice versa). Focused efforts on improving supervision and mentorship helped consortia develop a solid scientific skill base and encourage career development. These mechanisms appear to be key enablers in consortia's ability to build a critical mass of researchers.

Box 3. Contextual factors – Gender equality

Gender equality

Women remain underrepresented in science and technology. While the consortia were not evaluated against their gender-equality measures in this phase, this important dimension of equity in African research could be usefully monitored in the next phase of the Initiative. Some consortia have started introducing mechanisms for gender equality, such as preferential admission criteria for female students and flexi-time arrangements around maternity leave. Building more flexible mechanisms to ensure gender equality will be essential for consortia looking forward to effectively respond to capacity building needs and contexts.

Clear and transparent decisionmaking criteria, developed jointly by all partners, enable consortia to pursue strategies for selecting fellows and students within institutions

Developing training courses at African institutions

Consortia invested in a range of training approaches including taught postgraduate degree programmes and research studentships. To different extents, all consortia invested in short course opportunities to aid the professional development of students and staff. Differences in baseline skills of participants in short courses proved a widespread challenge, exacerbated by a general lack of formal strategies to address this issue. In addition, these differences were not always apparent at the outset of the Initiative. Where possible, the consortia focused on harnessing their partner institution's relative strengths in course development and delivery, drawing on external consultants if needed. Designated coordination posts for training have proven effective in providing coordinated, cost-effective delivery of a range of training courses.

Engaging external stakeholders

Improving engagement with external stakeholders has been crucial to consortia. Engagement opportunities often mean access to additional expertise, increased impact of investments through communication and dissemination, and further fund-raising.

Throughout the Initiative there has been an escalation in fundraising activity, with particular successes for some consortia. In part, this success can be attributed to pre-existing external linkages by members of these consortia, but evidence from consortia reports and interviews with consortia Directors indicate that leadership strength in each of these consortia, enhanced by their individual reputations, appears to have strengthened the ability to secure additional funding. Consortia have leveraged funding from a range of stakeholders including: international development agencies, multilateral health funders, foundations, non-government organisations and national health ministries.

In addition to engaging with funders, consortia have also sought to improve relationships with local policymakers and health ministries. Consortia have emphasised institutional buy-in, thereby reducing reliance on non-African funders and aiming to secure sustainability for future capacity building activities. Deans and Vice Chancellors at consortia partner institutions also played a critical role in maximising the impact of research to a wider policy audience (e.g. through co-publication of peer reviewed articles and participation in the elaboration of key policy documents). They have actively contributed to strengthening consortia's external networks through reputation effects and personal networks. Hence, working with African regional and national agencies and

Consortia have leveraged funding from a range of stakeholders including: international development agencies, multilateral health funders, foundations, non-government organisations and national health ministries

governments should be encouraged during the next phase of the Initiative to ensure the sustainability of research capacity strengthening over time.

The Trust has also played a role in engaging with external stakeholders and has interacted with a number of influential actors in the research capacity building field, such as international funders, multilateral organisations and other capacity strengthening initiatives. In some instances engagement has resulted in the adoption of key features of the initiative by other programmes (e.g. NIH-MEPI adopting a similar funding model) or helped to leverage further funding for consortia.

Improving research governance, management and administration

Efforts to improve the ability of African institutions to govern, manage and support research in an efficient, accountable manner – which take into account the significance of human resources and research support systems – are crucial to ensuring the sustainability of research activities. This was recognised by the Trust and is reflected in the objectives of the Initiative (see Box 1). Across consortia, there are disparities in human resources (research managers and administrators); management and governance skills; research governance, management and administration infrastructure; and policies and processes at the beginning of the Initiative. Gaps indicated by these disparities across institutions highlight

the need for investments in these areas, and consortia have addressed these concerns in different ways. For example, the establishment of permanent research support structures, such as the Research Support Centres (RSCs) or grants management offices, may provide an opportunity for greater employment continuity of support staff in the long-term. An advantage of these models of research support is that they are fully owned and integrated into local universities, which greatly enhances the sustainability of research. Such investments are expected to increase funder confidence in the ability of African institutions to effectively and transparently manage direct research funding, thus helping the consortia leverage higher amounts of external funding in the future.

Overall, raising the profile of research, research management and administration issues with senior institutional authorities has been an important issue. Consortia have experimented with different formal and informal advocacy mechanisms to influence institutional leadership, including formal meetings, informal discussions and advisory roles, written updates on consortia activity, and efforts to demonstrate local benefits or examples of benefits from other contexts. Advocacy efforts are generally spearheaded by the consortium Secretariat and by Principal Investigators (PIs) at partner institutions. Heightened interest and awareness of the importance of research management and administration across the Initiative has led to new opportunities for support staff to engage with professional networks across Africa, such as the Association of Administrators of Research in Africa (AARA).

Leadership has proved an important enabler of success in each consortium. The role of leadership in enabling organisational excellence is widely recognised (Cheung-Judge & Holbeche, 2011; Morgan Jones et al., 2012). Leadership abilities represent key skills within research teams to drive organisational change — skills which become increasingly important when more than one project or team, perhaps with differing aims and objectives, are combined into a single research group. Strong leadership at the consortia, respected across partners, has enabled institutional support and leveraged additional funding. All consortia pursue a mix of centralised leadership (e.g. a Director) and distributed leadership (via PIs at partner institutions). The Initiative's focus on African-led, mostly experienced and reputable senior consortium leadership appears important in this regard.

Improved collaboration and networking

The Initiative has successfully supported active networks amongst African institutions and between African and

Strong leadership at the consortia, respected across partners, has enabled institutional support and leveraged additional funding

Northern partners. Collaborative networks, through a consortium-based model, maximise potential impacts of investments in capacity-building activities. Evidence collected by the E&L team suggests that partners involved in the Initiative have by and large established successful early working relationships through mechanisms such as annual meetings, conferences, training courses, joint proposal writing and collaborative research. Models for network-based training — through collaborative seminar programmes which provide interdisciplinary training, or network-based funding initiatives such as pump priming grants funding collaborative research proposals — present innovative opportunities for capacity building across networks. Inter-consortia activities have also strengthened collaboration with consortia's Northern partners, though the scale and nature of Northern partner involvement in course development and delivery varies.

Box 4. Contextual factors – Northern partners

Incentivising engagement from Northern Partners

Incentives to engagement vary greatly for Northern partners. Legacy regarding their tradition of collaboration with African Universities and current institutional strategies to promote or sustain research partnerships with African Universities influence the ways in which Northern partners have engaged with the consortia.

Since the launch of the Cambridge-Africa Programme in 2013, the University of Cambridge has intensively sought to develop new partnerships in Africa. This programme was launched to train African doctoral and postdoctoral researchers, focusing on research and mentoring activities, and demonstrates a willingness to participate in capacity strengthening in the longer term.

This distinction between more fundamental capacity building and strengthening of already good capacity is crucial to good planning for subsequent phases of the Initiative and for the future sustainability of networks created

In pursuing a networked model for capacity building, considering the needs of each institution, maintaining engagement in decisionmaking and embedding flexibility and diversity into day-to-day operations appears vital to ensuring the stability of a network.

For most consortia strengths in networking, both internally and externally, seem based on relationships pre-dating the Initiative. Here, the Initiative has strengthened rather than built capacity, thereby contributing to the ability of established research leaders to consolidate reputations and further network research activities. More fundamental capacity building, rather than strengthening existing activity, takes longer to reach fruition and therefore requires a different focus. This distinction between more fundamental capacity building and strengthening of already good capacity is crucial to good planning for subsequent phases of the Initiative and for the future sustainability of networks created.

Building evaluation and learning capacity

As part of the evaluation approach, consortia themselves collected and submitted data to the E&L team. This approach developed internal capacity for evaluation at the consortia level, helped support learning and experience sharing across consortia, and furthered the participatory nature of the Initiative.

While capacity in E&L activities at consortia has been mixed, the growing importance of its utility has begun to be recognised. Additional funding from the Trust has given the consortia more resources to pursue E&L activities, resulting in significant improvements in reporting over the Initiative.

The E&L team's experience suggests that strengthening the development of personal relationships between the Secretariat and partner institutions across consortia (through regular face-to-face contact and site visits) is crucial to improving the quality of reporting and data submission timeliness. In addition, it remains vital to involve as many

stakeholders as possible in E&L activities at initial workshops (especially partner institutions). Not all active researchers and faculty were involved at the beginning of the evaluation process—which made subsequent engagement challenging. Such interactions are particularly useful to developing a shared understanding of the evaluation's objectives and assessment mechanisms by the E&L team and the consortia.

Active engagement of the funder

Trust engagement with the consortia throughout the first phase of the Initiative provides a basis for reflecting on the role of funders in capacity-building initiatives. Feedback from consortia has highlighted the importance of the funder engaging on the ground. This engagement provides active support to partner institutions, especially in managing leadership changes, mitigating risks, and improving financial reporting activities. Maintaining regular communication and being flexible in responding to emerging needs from both the Trust and consortia has facilitated these processes.

Clarity in the funders' messages to recipients was identified as an important factor for developing shared understanding and appreciation of Initiative objectives

Similarly, maintaining open communication channels allowed the Trust to respond to consortia-specific issues (e.g. challenges related to political instability in Ivory Coast – see Box 6). Active engagement of the funder has been particularly appreciated by recipient institutions and contributed to strengthening the consortia's financial management capacity. More broadly, clarity in the funders' messages to recipients was identified as an important factor for developing shared understanding and appreciation of Initiative objectives. Regular face-to-face meetings (at least twice a year during the Directors' biannual conference) between funders and consortia have proved instrumental in facilitating effective communication around these issues.

COMMON CHALLENGES FOR CONSORTIA

Alongside achievements, several common and critical challenges have emerged during this early stage of funding. Consortia have often handled these challenges well; they are not reflections of weakness but signal issues arising in the course of the Initiative that constitute learning points. Box 5 highlights some of the common challenges experienced across the consortia.

Box 5. Common challenges for consortia in the Initiative

Human resources limitations

- Consortia must attract and retain high-calibre staff in an environment in which such staff are extremely limited and in high demand

Financial management capacity

- Limitations in financial management delayed funding flows which can have a knock-on effect on consortia's ability to undertake planned activities

Infrastructural limitations

- Limitations in research infrastructure vary across institutions involved in the Initiative, the scope of which often exceeds the confines of the institution itself, pertaining to wider difficulties associated with national infrastructure systems

Balancing merit and equity in funding allocations

- Challenges in distributing resources to diverse partners in ways that maintain good relations, cements buy-in, and achieves the main goals: rewarding research excellence, and building scientific and institutional capacity

Strengthening evaluation and learning capacity

- Some consortia found E&L activity to be time-consuming and cumbersome, relative to perceived benefits. Particularly during the first year, they struggled to find time and resources to meet commitments

Human resources limitations

Whilst some African universities possess powerful research strengths, many consortia partners are developing work plans and activities within university contexts which, for a number of reasons, do not carry a long track record for nurturing and growing research. This limitation presents challenges in recruiting and sustaining individuals who might support a complex, ambitious endeavour such as this Initiative. Most consortia have faced challenges in staff retention. Consortia must attract and retain high-calibre staff in an environment in which such staff are extremely limited and in high demand.

In a project of this magnitude, staff turnover is likely to remain an issue, not only for consortia but for the Trust. In this respect, establishing effective succession planning and investing in leadership training will be crucial in the next phase. Successful implementation should result in decreased staff losses to higher paying but equivalent positions.

Financial management capacity

Capacity in financial management and reporting is perhaps one of the most crucial elements of the Initiative so far, partly because the ability to meet financial requirements has a direct impact on the disbursement of Trust funds. All consortia

Box 6. Contextual factors – Socio-political instability

Socio-political instability

Some insights around approaches to managing capacity building programmes in the context of political instability have already emerged from the experiences of consortia and point to the nuances of navigating political relationships. The experience of the Ivory Coast, where there was considerable unrest in 2011, is a stark reminder that political instability is a particular risk in some African contexts. Having a contingency plan whereby leadership authority, budget management and 'hosting capacity' (e.g. for students from a conflict affected zone or for expensive equipment) can be transferred to a partner institution has proved crucial in overcoming such challenges. The networked model enables researchers to spread risks so that not all partners/countries are affected at the same time and other countries can support affected ones.

have experienced some difficulty in meeting the financial management requirements of the Trust. For some consortia in particular, managing the “domino effect” of incomplete or inaccurate financial reporting, whereby incomplete reporting leads to delays in the release of funds and subsequently a delay in planned activities, has remained a significant challenge. Financial management variability appears to be the result of a number of different issues, including: incumbent institutional practices, capacity of financial staff, high staff turnover, and wider challenges in country-level financial systems.

Both the Trust and the consortia took steps to address the set of issues. In the fourth year of the Initiative, the Trust appointed KPMG East Africa, an international professional services consultancy, to provide financial management training to the lead institutions of each consortium. Consortia have focused attention on the Trust's particular requirements and, at the time the data was collected for this report, most consortia had managed compliance in such a way that funds were released. Achieving this goal has proved vital in enabling all other activities.

Infrastructural limitations

Although the consortia developed some creative ways to communicate and work together, the fragility of ICT and physical infrastructure remains a common challenge. While limitations in research infrastructure vary across the African institutions involved in the Initiative, the scope of infrastructural challenges often exceed the confines of the institution itself, pertaining to “wider difficulties associated with countries' infrastructure, systems for information and communication, travel, foreign exchange, and safety” all of which are likely to have a significant impact on the research infrastructure (Volmink & Dare, 2005). An underlying issue is the extent to which the Initiative can engage in a more systematic way with this challenge.

Balancing merit and equity in funding allocations

A basic challenge for consortia has been to distribute resources to diverse partners in ways that maintain good relations, cements buy-in, and achieves the main goals: rewarding research excellence, and building scientific and institutional capacity. Consortia have deployed a range of strategies for allocating resources internally amongst partners. In most cases this approach has involved a mix of merit and equity strategies:

- **Merit-based:** funding allocated according to research excellence, but not necessarily in ways that further inclusivity
- **Equity-based:** supports inclusiveness by ensuring equality in funding allocation, but does not necessarily support research excellence

A mix of merit-based and equity-based funding between partners is beneficial for simultaneously promoting excellence and capacity building, especially in a model bringing together partners with differing baseline research capacities.

All partners need to recognise tangible benefits from participating in the network, including financial benefits

All partners need to recognise tangible benefits from participating in the network, including financial benefits. In some cases, feedback from consortia indicates that some parties remain unconvinced that the rewards justify the investment of significant time and energy.

This balance between merit and equity-based funding relates to a wider issue for the Initiative regarding scientific quality and research excellence. Given the relative investments into each consortia and the timeframe of the Initiative, traditional measures of scientific quality and research excellence are inappropriate to evaluate consortia against at the stage of the Initiative. Therefore, a clearer and realistic conceptualisation of scientific quality and research excellence, in the context of capacity development activity, is needed. This issue is of particular importance given the Trust's position as a funder of scientific excellence. Demonstrating quality will be vital for consortia sustainability.

Strengthening evaluation and learning capacity

Each of the consortia developed their own logic models, with the guidance of the E&L team, and assumed responsibility for self-assessing against internal targets. This development has proved challenging in a number of respects. Some consortia found E&L activity to be time-consuming and cumbersome, relative to perceived benefits. Particularly during the first year, they struggled to find time and resources to meet commitments. In response, the Trust provided additional funds to further enable consortia to undertake further E&L activities. Helpful as this was, the majority of consortia found it difficult to collect data from partners and failed to fully create datasets that would have enabled full assessment of their progress against aims and objectives. In the last two years of the evaluation, some consortia increasingly prioritised E&L activity as an important part of sustainability planning. This shift in priorities became evident in both substantial improvements in E&L reporting and the request for further E&L training from some consortia.

IMPLICATIONS AND RECOMMENDATIONS FOR THE NEXT PHASE OF THE INITIATIVE

Consideration of achievements and challenges to date provides a basis for planning and reflecting on the next phase of the Initiative. This section discusses some of the implications of these findings for the future. The approaches and activities of the different consortia reveal certain factors that notably

contribute to their progress to date. We divide this section into implications and considerations for the consortia, and for the Trust.

Considerations for consortia in the next phase of the Initiative

Focus on finance

The ability to submit accounts and financial information in a way that allows the Trust to disburse further funds is fundamental to consortia's ability to undertake planned activities. Therefore, consortia and the Trust may set the compilation and transmission of required financial data as a high priority. For some consortia and partner institutions, this objective is less of a problem; for others, issues associated with financial data compliance still persist. While cross-consortia exchange may facilitate learning in areas of good practice, it is crucial for consortia to determine the extent to which problems are a result of individual capacity or institutional policies, in order to develop suitable strategies to address these issues.

Supporting and nurturing leadership

Leadership can be a driving force for capacity strengthening efforts, and nurturing effective leadership can be a catalyst for change. For consortia, strong leadership contributed to securing wider institutional buy-in from partner institutions, in addition to success in leveraging external funding and implementation of planned activities. Consortia are already beginning to consider how to impart skills to people who may lead research, supervise and mentor students, and act as 'change agents' at institutions. In the next phase of the Initiative, consortia may want to consider how leadership training can be implemented as part of mentorship activities and ongoing professional development programmes for both researchers and administrative staff.

Engaging external stakeholders

Mechanisms for managing and strengthening relationships with external stakeholders (who have a stake in consortium activity and its outputs) will be crucial for the sustainability of capacity building activities. As the programme moves into its next phase, consortia should begin to consider how to obtain buy-in from new stakeholders, such as funders, practitioners and policymakers, while sustaining buy-in from those who have already contributed to consortia activities. More resources need to be mobilised to improve communica-

tion and share resources with external stakeholders, and to identify stakeholders relevant to each consortium's overarching strategy.

Cross consortia learning

Although cross consortia networking has shown some progress, these activities remain fairly small-scale, dependent on personal relationships and pre-existing linkages. While the perception of competition between consortia may have been a barrier for collaboration in the early stages of the Initiative, time and financial constraints are more commonly cited factors, which limit collaboration now that the Initiative is beginning to mature. Additionally, considering the areas where cross-consortia activities are beneficial will be essential for the Initiative going forward.

Possible activities include: developing streams to encourage cross-consortia seminars; launching conferences or workshops for post-doctoral students and early career researchers to share their experiences; and establishing Initiative-wide training on administrative activities and evaluation. Cross-consortia networking may also provide the opportunity for consortia to share relevant knowledge. Mentoring agreements could potentially help to harmonise quality standards. Harnessing the potential of institutions involved in several consortia, such as the Makerere University or the University of Malawi, and efforts to engage senior leaders from these institutions, may help to foster greater collaboration. Progress on this recommendation could be measured through increases in number of publications with cross-consortia authorship and increases in joint seminars/conferences.

ICT and physical infrastructure

Although strengthening physical infrastructure was not a core focus of the African Institutions Initiative, almost all consortia cited ICT and infrastructure limitations as having a significant impact on activities to date. In the next phase of the Initiative it will be important for consortia to identify ways to encourage shared access to facilities in the network – through exchange visits, for example, and shared access agreements. Identifying ways to address the costs and limitations in ICT infrastructure and remote communications, maximising the utility of pre-existing infrastructure, and considering the utility of future investments will be crucial for the effectiveness and sustainability of infrastructural development across consortia.

Evaluation and learning

Capacity building in E&L activities has been mixed across the consortia, although the importance of its utility for institutions has begun to be recognised more recently. For example, those consortia that have conducted comprehensive needs assessments in ICT and physical infrastructure — and have committed to addressing identified gaps — have witnessed a significant positive impact on their ability to carry out activities.

Consortia may consider strategies to decentralise evaluation and learning activities away from lead institutions/ Secretariat to encourage the spread of E&L capacity building across partner institutions. This realignment may relieve the administrative burden of E&L coordination on one institution. In addition, consortia should consider developing their own metrics and indicators for monitoring progress, refreshing their logic models and incorporating learning into strategies that serve their aims and ambitions. While decentralising may reduce the ability to compare across consortia in the next phase, an increased level of ownership at partner institutions may enable further improvements and learning by consortia. A better understanding of evaluation within consortia, with buy-in from all partner institutions, should help to demonstrate the value of E&L for all partners. Improvements in E&L will also help consortia develop comprehensive future scenarios to help assess their consortium's sustainability and prospects after the Initiative.

Considerations for the Wellcome Trust in the next phase of the Initiative

Reflecting on the totality of the Initiative to date, we believe there are several areas in which the Trust could further develop its ambitions and plans in relation to the Initiative.

Publications, research quality and research excellence

During the first few years of the Initiative, priorities centred on creating an operational base, establishing training programmes, and consolidating relationships. In the next phase, outputs and outcomes of the Initiative should be monitored from a variety of perspectives. Not only should the *number* of outputs be evaluated; so should their *quality*. Training programmes, publications and research require close attention. A number of implications follow:

First, the Trust and consortia should work closely to clarify expectations with regard to acknowledgement and attribution in publications. Whilst some rudimentary bibliometrics

While benchmarks for scientific excellence might be clearer in resource-rich contexts, a broader definition may be more appropriate in the context of less established institutions and regional contexts

work has been possible to date, clearer guidance to consortia about labelling Initiative-related work will enable bibliometric work that informs assessment of quality and quantity of publications. By comparing against existing data, it will also be possible to use future bibliometric data to understand changes in publication partnerships and networks.

Second, a range of mechanisms should be deployed to assess the quality and outcome of short courses and degree-based training opportunities. These mechanisms could include self-assessment from participants, students, and feedback from other key stakeholders.

Third, some form of career tracking would be helpful in assessing the outcomes of support to research capacity building.

Fourth, in implementing new evaluation and monitoring criteria the Trust will need to reflect on how it defines research excellence in the context of the Initiative. While benchmarks for scientific excellence might be clearer in resource-rich contexts, a broader definition may be more appropriate in the context of less established institutions and regional contexts. Publication in top journals is an important indicator but will not capture all outputs and outcomes from AII-related institutions reasonably considered ‘high quality’, given baseline capacities and regional concerns. For example, research that helps address local and regional problems may not be of interest to leading global journals but might constitute evidence of very high quality research (Chataway, Smith and Wield, 2006; Chataway, Smith and Wield, 2007; Leach and Waldman, 2009).

Capacity building is a long-term endeavour. Measures of ‘quality’ and ‘excellence’ need to be calibrated to recognise those researchers and institutions operating from disadvantageous beginnings. Clarity about definitions of excellence might best emerge from conversations between consortia, and conversations between consortia and the Trust. Findings should be incorporated into future evaluation.

The Initiative has given rise to new models of research provision and organisation that prepare not only for immedi-

ate scientific outputs but also for creating sustainable research capacity. Given that the aim of the Initiative is capacity building, these sustainability endeavours should form part of the Trust’s consideration of future evaluation metrics and frameworks. Definitions of excellence and quality might be raised by the Trust in the ESSENCE group (a group of funders with an interest in health research capacity in Africa) within which the Trust sits on the steering committee. A broader consensus on appropriate measurements and approaches may be facilitated, followed by increased clarity for African researchers on what funders regard as indicators of excellence.

Consider criteria for success, consortia sustainability, and branding post-Initiative

Consortia that established consistent and effective relationships between partners and other stakeholders referred to the importance of a strong consortium identity and a clearly delineated research approach. The Trust should encourage consortia to define a communications strategy for each stakeholder group, including a budget and specific milestones. Branding and communications are important at any stage but will be critically important as the Initiative reaches its ten-year mark as consortia consider their longer term strategies post-Initiative.

From the consortia’s perspective, communications strategies to publicise work to external stakeholders and potential funders should be linked to particular consortia profiles. From the Trust’s viewpoint, the issue relates to its broader strategy of ongoing support for science and capacity building in Africa. It seems likely that by year 10, some consortia will have a very powerful profile within Africa and will possibly be moving towards international recognition. Higher visibility for consortia could assist in their ability to raise money from multiple sources. It may be possible for these consortia to continue on the basis of different or reduced funding from the Trust.

For other consortia, the impact of the Initiative is likely to strengthen national universities and regional networks. Still other consortia may not achieve widespread recognition in ten years, but could have inspired new institutional capacity within local universities. These consortia may use a range of identities to leverage future funding and gain further institutional support. Thus, different types of consortia could be viewed as successful while offering different models for sustainability. This eventuality suggests a variety of approaches to the future, with varying strategies towards branding and communication. A consortium's approach to sustainability is linked to its particular definition of success. Is it the case that sustainability should be defined by a consortium's ability to support itself with a range of funding? Or would the Trust consider integration into and strengthening of local institutions sufficient success in the given timeframe?

To date, the end point of the Initiative has not been made clear by the Trust. In the next phase, we recommend that the Trust clarify what it considers the parameters of success: whether it expects one route towards sustainability, or whether various pathways could be encouraged. We strongly recommend that the Trust works with consortia and discuss with them what is expected in terms of sustainability at least two years prior to the end of Phase 2 funding. Discussing various scenarios with consortia could help both the Trust and consortia think through sustainability issues, appropriate branding, and sustainability strategies.

The need to distinguish between capacity building and strengthening

Reflecting on the differences in size, scope and trajectory of the seven consortia at the outset of the Initiative, a clearer definition of 'capacity building' has emerged. Findings documented in this report indicate the existence of a variety of tensions between relatively strong members of consortia and those who have less capacity and resource. Vasquez et al. (2013) note that:

“the terms ‘capacity strengthening’ and ‘capacity building’ are often used interchangeably, but their distinction is important. While ‘capacity building’ suggests an intention to establish a research infrastructure, the term ‘capacity strengthening’ more accurately conveys our intention to enhance pre-existing infrastructure”

In the case of this Initiative, none of the partners began with a complete absence of research capacity, though there was a clear range of capacities across partner institutions. In this respect, consortia with pre-existing, well-established leadership and networked researchers may be categorised

under 'capacity strengthening'. Lesser established members of these consortia, which have had to establish essential research infrastructure during the course of the Initiative, may be categorised under 'capacity building'.

It will be important for the Trust to consider this distinction going forward both in terms of measuring the relative successes of each of the consortia and for developing meaningful support systems that correspond to consortia's needs.

Re-conceptualise the role of Northern partners in consortia

Effectiveness of relationships between African and Northern partners varied across consortia, as did relationships amongst African partners. Complementary skill sets and high level of interest appeared to be more beneficial than geographic source. For the next phase of the Initiative, more clearly defined roles for Northern partners in facilitating 'capacity building' efforts through training activities, equipment procurement and laboratory improvements is needed. In addition, strategies for enabling North-South linkages can be improved. An increase in non-African partners providing benefits to consortium activities — such as publication co-authorships — may provide evidence of improvement going forward.

Advocacy in strengthening physical research infrastructure

This evaluation has noted the importance of ICT infrastructure to a networked model for research capacity building. Given the range of issues around poor communications infrastructure, limited options are available to consortia and the Trust within the confines of the programme. This limitation underscores the need for continued advocacy of investment in communications. The Trust could actively support partner institutions in their requests for investment and work with other funders to encourage investment from national governments, regional bodies and multilateral agencies.

CONCLUDING REMARKS

Finally, we reflect on some of the central features of the Initiative and discuss how these may impact on the next phase.

The Initiative's African-led programme has aimed to foster the empowerment of African researchers through the devolution of key responsibilities to recipient institutions. The innovative nature of this strategy should not be overlooked. Despite the proliferation of capacity-building initiatives from

Despite the proliferation of capacity-building initiatives from the donor community in the last decade, few initiatives to date have adopted a bottom-up approach which focusses efforts on local needs, as defined by African institutions, rather than global health interests

the donor community in the last decade, few initiatives to date have adopted a bottom-up approach which focusses efforts on local needs, as defined by African institutions, rather than global health interests. The Trust's position as a scientific funder, rather than a development agency, also places it in a unique position compared to other actors in the field of capacity building.

Such a strategy implies drawbacks but offers advantages with regard to capacity building objectives for donors (Lewis and Sobhan, 1999; Vasquez et al., 2013). For example, the difficulties experienced by some consortia in complying with financial reporting requirements, due to reasons discussed above, has required extensive support from the Trust through ongoing communication and training. Nevertheless, empowering lead institutions with a responsibility to manage funds has strengthened the consortia's capacity as a whole, enhancing the effectiveness of future donor/recipient relationships and the sustainability of research capacity.

Despite the genuinely bottom-up nature of the Initiative, it is also the case that the African Institutions Initiative has its own overall objectives and ambitions. It would be unrealistic to expect the Trust to be completely open-ended with respect to these objectives and ambitions. Consortia do have to plan activities within the remit of the Initiative's overall ambitions. Specifically, the consortia have to balance the demands of capacity building activities whilst striving to promote research excellence. Tensions have arisen with regard to choosing between merit or equity as the leading principles in allocating resources. For some Directors, the demands to achieve both research excellence and capacity building targets have been difficult to reconcile. Increased attention to the ways in which these tensions are managed continues to be important. Some scope remains for the Trust and consortia leadership to further discuss the overall success criteria for the Initiative.

There is also a need to conceptualise "research quality" and "research excellence" in the context of a capacity build-

ing initiative. Given the Trust's core mission to fund excellent science, a shift from measuring quantity to quality is vital. However, realistically achievable and measurable metrics of quality which retain the ambition to encourage research focused on local needs are still needed. Thus, the development of suitable metrics to measure the outputs of capacity building initiatives is a major issue for all stakeholders involved in research capacity building. The ability to demonstrate impact to funders, governments and policymakers will be crucial for securing further funding, which will ensure the sustainability of research environments in Africa. Policy and funding decisions are significantly linked to suitable metrics which can be used to show either the contribution or attribution of an intervention, and can ultimately justify further funding.

Consortia have experienced a range of issues related to ensuring the sustainability of their research endeavours. For some partners, the challenge is greater than for others. Sustainability is closely linked to the set of challenges outlined in Box 5 but is particularly related to the ability to gain support from local institutions, relevant policy makers and international donors. Consortia coming into the Initiative with strong leadership from powerful and wealthier higher education institutions are in a different position to those in less established institutions.

Capacity upgrading is a continuous process and interventions aimed at strengthening research capacity require long-term visions. However, there is no single model for building a critical mass of sustainable local research capacity. The different experiences of each consortium has highlighted the diversity of trajectories and allowed for rich lessons about capacity building strategies. Nevertheless, the challenge with supporting a diverse range of consortia reflects the extent to which comparisons can be drawn between them, especially in relation to value-for-money and the relative merits of certain activities over others. A value-for-money analysis would require certain core and uniform features to be identi-

fied. These features could be part of all consortia activities against which comparisons could be made. Thereafter, a clear understanding between the Trust and consortia could arise in which activities are evaluated on a value-for-money basis.

In the next phase of the Initiative, the Trust will have to make a strategic decision. Does it continue its current mode of supporting a diverse range of models for capacity building, while finding comparisons and evaluations among consortia increasingly difficult? On the other hand, can the Trust consolidate lessons from the Initiative to date and create a set of boundaries or success criteria for consortia? Such criteria may make assessments on value-for-money and cross-comparisons easier, while impacting the diversity of the Initiative.

Overall, the objectives of the Initiative represent an ambitious departure from traditional modes of strengthening research capacity in LMICs. While the Initiative is still at an early phase, evidence gathered in this evaluation show that consortia are contributing in multiple ways to developing sustainable research capacity. The unique features of the Initiative — an African-led, networked approach — have facilitated many of these achievements. The diversity of networking models for capacity building developed by consortia present the Trust with a range of models with different strengths and weaknesses, enabling the Trust to refine its aims and objectives of the Initiative against the models that have emerged.

References

- Chataway, J., J. Smith, & D. Wield. 2006. 'Science and technology partnerships and poverty alleviation in Africa.' *International Journal of Technology Management & Sustainable Development*, 5(2), 103–123.
- Chataway, J., J. Smith, & D. Wield. 2007. 'Shaping scientific excellence in agricultural research.' *International Journal of Biotechnology*, 9(2), 172–187.
- Cheung-Judge, M., & L. Holbeche. 2011. Organization Development. *A practitioner's guide for OD and HR*, London: KoganPage.
- Chu, K.M., S. Jayaraman, P. Kyamanywa, & G. Ntakiyiruta. 2014. 'Building Research Capacity in Africa: Equity and Global Health Collaborations.' *PLoS Med*, 11(3), e1001612.
- Ezeh, A., C.O. Izugbara, C.W. Kabiru, S. Fonn, K. Kahn, L. Manderson, A.S. Undieh, A. Omigbodun, & M. Thorogood. 2010. 'Building capacity for public and population health research in Africa: the consortium for advanced research training in Africa (CARTA) model.' *Global Health Action*, 5: 5693
- Kinyanjui, S., & I.M. Timæus. 2010. *The international network for the demographic evaluation of populations and their health (INDEPTH), the importance of core support*. SIDA, Stockholm.
- Leach, M., & L. Waldman. 2009. *Centres of Excellence? Questions of Capacity for Innovation, Sustainability, Development*. STEPS Working Paper 23, Brighton: STEPS Centre.
- Lewis, D., & B. Sobhan. 1999. 'Routes of funding, roots of trust? Northern NGOs, Southern NGOs, donors, and the rise of direct funding.' *Development in Practice*, 9(1-2), 117–129.
- Marjanovic, S., R. Hanlin, S. Diepeveen, & J. Chataway. 2013. 'Research Capacity Building in Africa: Networks, Institutions and Local Ownership.' *Journal of International Development*, 25: 936–946.
- Morgan Jones, M., W. Wamae, C.V. Fry, T. Kennie, & J. Chataway. 2012. *The National Institute of Health Research Leadership Programme, An evaluation of programme progress and delivery*. Santa Monica, Calif.: RAND Corporation. TR1162-DH
- Uduma, O., S. Glavey, S. Doyle, M. Hennessy, F. Barry, M. Jones, & M. MacLachlan. 2013. 'Research Capacity Building in Africa: Perceived Strengths, Weaknesses, Opportunities and Threats Impacting on the Doctoral Training for Development Programme in Africa.' *Enacting Globalization: Multidisciplinary Perspectives on International Integration*, 43.
- Vasquez, E.E., J.S. Hirsch, L.M. Giang, & R.G. Parker. 2013. 'Rethinking health research capacity strengthening.' *Global public health*, 8(sup1), S104–S124.
- Volmink, J., & L. Dare. 2005. 'Addressing inequalities in research capacity in Africa.' *Bmj*, 331(7519), 705–706.
- Whitworth, J. A., G. Kokwaro, S. Kinyanjui, V.A. Snewin, M. Tanner, M. Walport, & N. Sewankambo. 2008. 'Strengthening capacity for health research in Africa.' *Lancet*, 372(9649), 1590.
- Zofou, D., S. Abimbola, C.T. Norice, M. Samje, Z. Traore, O.A. Oyewale, ... & D.M. Kadigi. 2011. 'The needs of biomedical science training in Africa: Perspectives from the experience of young scientists.' *African Journal of Health Professions Education*, 3(2), 9–12.

About this report

In 2009 the Wellcome Trust launched the African Institutions Initiative, which aims to strengthen African institutions capacity to support and conduct health-related research. RAND Europe and the Open University was commissioned to undertake a four year evaluation and learning project for the Initiative. The aims of the project were to (i) evaluate the performance of each consortium and ultimately the initiative as a whole, based on high quality evidence; (ii) to support intra, inter and extra consortium networking for learning and exchange; and (iii) to extract lessons learnt from the initiative and disseminate these to the Trust, other funders and relevant stakeholders in academic, policy and practice communities.

The project team would like to thank all members of the seven consortia for their continued engagement with the evaluation and learning team. In particular, we would like to thank the directors and evaluation officers at each consortium, who have provided us with vital information and insights. In addition we would also like to thank the International Team at the Wellcome Trust and the Advisory Committee for their valuable contributions throughout the project.

Limited Print and Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law. This representation of RAND intellectual property is provided for noncommercial use only. Unauthorized posting of this publication online is prohibited. Permission is given to duplicate this document for personal use only, as long as it is unaltered and complete. Permission is required from RAND to reproduce, or reuse in another form, any of our research documents for commercial use. For information on reprint and linking permissions, please visit www.rand.org/pubs/permissions.html.

© Copyright 2014 RAND Corporation

The RAND Corporation is a research organisation that develops solutions to public policy challenges to help make communities throughout the world safer and more secure, healthier and more prosperous. RAND is not-for-profit, nonpartisan, and committed to the public interest. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. RAND® is a registered trademark.

www.randeurope.org

