

Strengthening health sciences research in Africa: lessons and insights from across the continent



Executive Summary

Since the publication of the Commission on Health Research and Development (1990), national, regional, and international efforts have been made to improve health research capacity in Africa. However, these investments have been uncoordinated, intermittent, and in many instances have not led to sustainable national health research systems. While there is considerable progress in the production of health sciences research by Africa-based authors over the past ten years, African states are grappling with challenges of ensuring enabling environments, investment mechanisms, knowledge translation processes, and regulatory systems for health science research.

Improving health sciences research in Africa requires a broad and diverse knowledge base, that is informed by experiences across the continent. Initiatives and interventions that focus on strengthening individual researchers' or cohorts' training and skills development, or research capacity at an organisational level, comprise the bulk of current efforts to build, develop, and strengthen research capacity in health sciences. Changes in policy and practice that comprehensively consider the entirety of a national health research system are needed to tackle these challenges.

A first step in measuring the performance of health sciences research in African countries across the continent is to assess standard indicators for research outputs, innovation, and financing. Metrics used include the number of clinical trials conducted, number of publications produced, number of researchers, or financial investment as a percent of gross domestic product. These indicators can be limited by data availability, and such quantified evaluations of health sciences research at an aggregate level do not necessarily capture the nuances of the institutional dynamics and the role of local contexts (e.g. political, economic, social, cultural, epistemic) that are critical for developing a national health research system. Indeed, a country with a small, but locally financed and organised, system of research serving local needs might perform 'worse' on many metrics compared to a country which has several high-cost projects run by international organisations with limited local integration or ownership.

In this report, we apply a whole-systems perspective to building capacity for health sciences research. The lessons drawn from our in-depth case studies show that elements such as research leadership, political will, and research culture must be considered as part of a holistic and home-grown investment strategy in health sciences research capacity. A whole systems approach recognises the need for integration of health with other sectors such as education, as well as the dynamic processes, such as advocacy, collaboration, and innovation, that can make research systems more robust. Ultimately, this work produces insights on how countries can build a foundation of long-term support for research systems that are rooted in local expertise, committed to local ownership, and responsive to the knowledge and data needs of their communities, practitioners, and decision-makers.

Countries share common challenges related to human resources and research personnel, institutional capacity, lack of prioritisation of health research, absence of clear coordination mechanisms, and inadequate domestic public funding for health research. However, the policy and regulatory frameworks and institutional arrangements for governing health research systems vary greatly across African contexts. While operating differently within each national setting, several elements and processes influence the development of national health research systems. For example, long-term advocacy efforts by local champions, and the use of data from in-country research to identify priorities appears critical to the process of institutionalising health research governance. Additionally, external partnership and international collaboration are essential inputs for African research institutions, but their ability to contribute to capacity development depends on whether these investments are aligned with local health needs, provide training and opportunity for local researcher leadership development, and equitably involve local leadership in decision-making.

Events, such as health crises, have served as windows of opportunity to modify the health sciences research landscape through rapid investments used to strengthen local infrastructure and capacity in some settings in the past. Yet, the ability to seize on these opportunities is contingent on a range of supporting elements in place such as well-connected and politically astute local research leaders who are dedicated to building independent research capacity, and professionally respected in national and international networks.

A key insight identified is that the multi-sectoral nature of national health research systems should not be neglected when planning and investing in health research capacity. National health research systems in Africa intersect with multiple government policy sectors – including higher education; health; development; and science, technology, and innovation. Yet this project’s findings point to a siloisation of many decision-makers in health sciences research. In some cases, there is a lack of clarity about lines of authority, which can create either overlapping areas, duplication, or vacuums of responsibility within health sciences research decision-making in government and in the governance of the national health research system. Decision-makers acknowledge the value of opportunities to meet, collaborate, and create channels of communication to improve coordination within countries and to exchange and learn from their counterparts with regional networks between countries. Furthermore, while funding is obviously important, findings show that a narrow focus on investing in health research staff, infrastructure, or projects is not sufficient to build national capacity, due to the ways that health research is integrated with, and relies on, these other sectors and processes.

A key challenge for the governance of national health research systems is to ensure research undertaken and capacities developed are aligned to those priorities defined by African leaders. International collaborators from outside and from within the continent are vital, but leadership by African experts and decision-makers to negotiate and design partnerships are necessary to guarantee such alignment. Processes of aligning national priorities can be hampered by the influence of foreign partners seeking to impose their own preferences on the national agenda. Donor-recipient dynamics that espouse donor privilege can significantly reduce the space and opportunity for African decision-makers to challenge the priorities that are not in line with their needs and goals.

While alignment of research priorities works to ensure that health research serves local needs, it also may be an important step to convincing local leaders of the utility of domestic investment into health research systems. However, findings point to a further need for ongoing advocacy by research leaders and networks with strong ties to government and political elites to achieve this goal. Building relationships and improving communication between researchers and policy-makers can assist in establishing supportive foundations for successful, long-term advocacy and help create trust, which is vital for these ongoing conversations between national stakeholders.

This report concludes with recommendations on how to strengthen national health research systems in Africa, aimed at African stakeholders in government, those working in research or academia, and international donors and research funders. The recommendations fall under three broad areas:

- Support national ownership and governance of health sciences research through equitable partnership agreements that promote leadership of African experts and benefit the national health research system.
- Invest in research infrastructure (institutions, ethics committees, technical platforms, laboratories, data management systems) to create a conducive regulatory environment to coordinate research activities.
- Cultivate a national culture of research, which promotes research leaders as advocates and advisors of national policies, and create pathways to attract, train, and retain skilled researchers.



This research was funded by Wellcome. For information and the full report:
<https://www.lse.ac.uk/lse-health/research/projects/research-capacity-in-africa-2>