

# Health Systems Research

Health care delivery is an overwhelming challenge area of Kenya's health care systems. In this Journal issue, a review article by Dr. Christine Sadia looks at factual evidence to describe the main challenges facing health care delivery in Kenya, including inefficiency and mismanagement. The review paper articulates that public health professionals and operations research practitioners are not prominently or effectively playing their role and concludes that evidence based analysis and data can help in the health reforms. Furthermore, another article, in this journal issue, on dispensing practices by Mugjiira et al endeavors to provide a baseline from which intervention programs could be designed to improve dispensing practices in the hospital studied. Although dispensing is just one aspect of healthcare delivery system, it is the last point of visit in a health facility and also most critical for the patient to get the correct information that impact on rational use of medicines. The manuscript has thus provided useful information to inform policy formulation on appropriate healthcare delivery. Effectiveness



**Editorial by J.A. Orwa** PhD, OGW, FPSK

of medicines also depends on availability of quality medicines. The pharmaceutical industry needs to play its part. To achieve this, it could not have been better described by the article on Pharmaceutical Operational Excellence by Friedli et al which has given a definition of the concept of Operational excellence (OPEX) as constituting the continuous pursuit of improvement of a production plant in all dimensions.

I shall briefly deliberate on what and how research can help address some major issues to improve healthcare delivery.

## What is a health system?

A health system is the set of resources and activities that work together to improve the health of populations. Elements of a health system include:

- » **health facilities**, beginning with local clinics all the way up to specialty-care referral hospitals
- » a **health workforce** made up of the right mix of well-trained clinical providers
- » **laboratory and pharmacy** products and services, and the related procurement and transport systems
- » a **health information system** that enables health officials to analyze how the system is functioning and whether health outcomes are being achieved
- » **health financing** that raises funds for health and protects people from the financial risk of catastrophic health costs
- » **leadership and governance** structures and policies that ensure all parts of the system work together and are accountable to the populations they serve
- » linkages to the **community**

When one or more of these elements are weak, the health system suffers, and so do the people it serves. Crucial and expensive vaccines can sit useless in a warehouse if there are not enough trained health workers to deliver them. Understanding what works and improving health services requires a reliable central database, accurate data and the ability to analyze the information and make decisions.

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## Health Systems Research

Health systems research (sometimes called “implementation science”, “operations research” or “translational research”) is a growing area of work that looks at how interventions or services are delivered in real life, and how they can be improved. It attempts to understand and evaluate how health systems function and how they can be strengthened, including how to develop and implement policies in ways that strengthen, rather than undermine, health systems. The main purpose of health systems research is to conduct research to develop and improve the organization, efficiency, effectiveness and impact of health systems on population health. Through this kind of research, governments can see what is working and where gaps exist so they can make more informed management decisions. The goal is to make sure that innovations in healthcare can be brought from theory into practice, and reach the people who need them. Health Systems research in the context of the developing countries works towards finding best ways to improve access, affordability and quality of health services for the poor while building robust health systems for the future.

A number of development partners are currently working together in support of research to improve health systems in developing countries. They are committed to strengthening the evidence base for improving health in low- and middle-income countries by investing millions of dollars to fund research aimed at providing evidence to strengthen health systems and improve health outcomes. Health systems in developing countries face the challenges of substantial socioeconomic and health inequalities, rapid globalization and evolving disease burdens. There is need to fund rigorous, high-quality research that will inform the delivery of evidence-based interventions or structural changes, and provide evidence that is of direct relevance to decision makers and users in the field, in overcoming these challenges.

Health systems are broad and comprise the many elements described above (i.e. governance, workforce, financing, information systems, products and technologies, and service delivery) and are affected by factors such as health education, community and individual action, the legislative and regulatory context and current and emerging social, economic and cultural circumstances. Multidisciplinary research teams should be encouraged to address questions within this broader context, health improvement being the main focus. Research should generate practical solutions to implementing health system improvements, including technical, economic, and cultural or governance/managerial components of implementation and sustainability. It is critical to identify and address key barriers to implementation of evidence-based interventions at local and national levels, to pave the way for their successful adoption into routine practice with improved access and use by the populations in need.

## Translating Evidence into Practice

How can public health agencies and their partners most effectively and efficiently keep people healthy and safe, particularly in this era of fewer dollars and people to support public health services? Health services research (HSR) a multidisciplinary scientific field that examines how people get access to health care practitioners and health care services, how much care costs, and what happens to patients as a result of this care, is able to find these answers. Studies in HSR investigate how social factors, financing systems, organizational structures and processes, medical technology, and personal behaviors affect access to health care, the quality and cost of health care, and quantity and quality of life. Primary goals of HSR are to identify the most effective ways to organize, manage, finance, and deliver high quality care; reduce medical errors; and improve patient safety. HSR is more concerned with delivery and access to care, in contrast to medical research, which focuses on the development and evaluation of clinical treatments. It is grounded in theory, its underlying aim being to perform research that can be applied by physicians, nurses, health managers and administrators, and other people who make decisions or deliver care in the health care system.

### Further reading

1. [http://en.wikipedia.org/wiki/Health\\_services\\_research](http://en.wikipedia.org/wiki/Health_services_research) Accessed on 17th March 2014.
2. WHO. Health Policy and Systems Research. A Methodology Reader. Geneva: World Health Organization. 2012.