Can there really be a 'science' of health systems?

Finding how to capture and learn from existing knowledge is a first step

If there is one common feature among the diverse group of professionals who work with health systems, it is this: they know a lot about a lot of different things. Thanks to convoluted career paths, multi-disciplinary interests and, more often than not, a load of international travel, they are highly qualified, highly experienced people who have seen it all – in many different places around the globe. They know how small changes can lead to big impacts. How ill-conceived reforms can cripple an entire system. And how a single supportive or antagonistic personality in a position of power can make or break any intervention. Each of these professionals is a walking library of knowledge, with a mass of transferable skills.

How, then, can health systems interventions remain so resolutely unscientific? Whether it is a health minister trying to choose between policies to improve coverage and outcomes. A middle-manager looking to increase efficiency and reduce errors. Or a service provider balancing business and compassion. No decisionmaker at any level is able to review others' experience to identify the 'best' options for achieving a desired result or avoiding failure. External technical advisors are similarly hamstrung, though may not admit it. Everyone has their opinion. But no one knows for sure.

This gap is not for want of potential data. With close to 200 health systems in the world, with histories of change, improvement and failure stretching back decades, there is no shortage of material to draw on. The problem is, while the development effectiveness movement has led individual funders to look more closely at their own returns on investments, there has been no community-wide effort to consolidate health systems experience so that everyone can benefit – not least the countries that need to reform. What is more, even in this era of greater scrutiny, there remains no satisfactory approach to capturing the essence of *why* certain interventions have achieved success while others failed.

Efforts to interrogate health systems interventions either draw too much on the biomedical approach, considering programmes as treatments with the potential to 'cure'. They may be too selective, examining the technical aspects of a programme or reform in isolation, without recognition of the pivotal role of politics and personalities. Or they rigidly apply quasi-experimental techniques to turn ethnographic observations into something more familiar to scientists, losing much valuable information in the process. None of these approaches is a really good fit for the complex real-world settings in which health systems function and change. The simple truth is we still do not have the appropriate tools to examine and compare health system interventions. Nor do most of the field's professionals – practitioners rather than academics – know where to start. That needs to change. But how?

A crucial step is to go back to basics. To really consider the most appropriate techniques for this field. And to recognise that the common urge to mimic biomedicine is not always the best approach. We need to draw on the knowledge of anthropologists, psychologists, social scientists, historians, political scientists, and economists – and many more – to define the appropriate ways to study the complex systems that govern health. To define the experimental approaches that generate the most useful, generalisable findings. And, to understand how to quantify uncertainty and address bias.

The goal is nothing short of a complete transformation. But progress could be quick if there was some way to take stock of what we already know. Turning the information goldmine that is the combined experience of the profession into documented knowledge is the first crucial step. Systematically capturing the experience of practitioners will define the research agenda for a new, more relevant, more scientific field.

In this context, journals have a crucial role to play. And it is with this rationale that Strengthening Health Systems has been conceived. Our aim is to capture the totality of knowledge about health systems: to support governments and development professionals to systematically document what they have seen; to link researchers with implementers to define research questions with practical relevance; and to provide policy makers with a solid foundation of knowledge on which to base their decisions. We understand that health systems 'evidence' does not usually match academic ideals. But it has some value - and choosing to ignore it rather than tackle the challenge of imperfect information will hold this field back more than it would help. Strengthening Health Systems is ready for the challenge.

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