Executive Summary

The Open University (OU)

In responding to this enquiry, the Open University draws on its longstanding research expertise and policy involvement in innovation and health systems in development contexts, by the Innogen Institute, the Innovation, Knowledge and Development (IKD) research centre, and the Development Policy and Practice (DPP) research group.

Aspects addressed by the OU response.

DFID’s support for health systems strengthening (HSS) in low income countries (LICs) is welcomed. Our response addresses the following aspects of Committee’s questions concerning the effectiveness of DFID’s current approach to HSS: DFID’s support for the six building blocks of health system strengthening; DFID’s role in ensuring better balance between rural and urban healthcare; and the UK’s work with other development agencies, partner governments, communities and civil society on health system strengthening.

Key OU research findings

- Low income health systems are frequently highly commercialised, their pervasive reliance on private out-of-pocket payment reflecting the behaviour of the wider economy, shaping health facility behaviour and restricting health care access by the poor; these aspects of commercialisation interact within health systems, and require system-wide policy approaches to tackle the most damaging effects.

- South-based innovation systems, and pharmaceutical and medical supplies producers in Southern countries, promise considerable scope for open and inclusive innovation to benefit poor users of health care systems; however UK and country policymakers still tend to tackle industrial innovation and health systems as separate concerns; policies for HSS rarely interact with the needs of local manufacturers supplying health systems.

- OU involvement in DFID’s Research into Use (RIU) programme demonstrates positive benefits from innovation system-based policy work with private sector players in agricultural biotechnology, lessons for more ‘joined up’ HSS and industrial aid support.

Recommendations for DFID-supported policy and research funding

DFID’s welcome support for HSS could be further enhanced by:

- Greater attention to diagnosing market structure and functioning in health systems, and devising support for system-wide policies to tackle damaging “race to the bottom” price-based competition in impoverished contexts; ensuring that funding support based on the WHO’s six “building blocks” does not impede policies to tackle system-wide market processes that operate to the detriment of quality and access to health care;

- More effective integration of DFID support for industrial innovation with health sector supply chain support, through closer working with locally based private sector suppliers and manufacturers’ associations; greater attention to promoting innovation, competition and market access for local industrial suppliers; and integrated innovation and supply chain support that ensures beneficial institutional development to sustain appropriate research-into-use, benefitting industrial and health sector performance and inclusive access to health care.
The Open University

1. The Open University’s sustained commitment to teaching, research and programmes in international development, over more than twenty years, is part of its core mission of openness to people and places.

2. Research in International Development at the OU is undertaken by members of the Innogen Institute (http://www.innogen.ac.uk/), the Innovation, Knowledge and Development (IKD) Research Centre (www.open.ac.uk.ikd) and the Development Policy and Practice (DPP) research group (http://dpp.open.ac.uk/). Programmes, including the HEAT health sector programme, are led by the International Development Office (http://www.open.ac.uk/about/international-development/ido-africa/HEAT).

3. A core OU research field is innovation and health equity: pioneering collaborations between specialists in technology and innovation, industrial economists and health researchers have put the OU at the forefront of work on innovation systems and equity in health care. This research is done in close and sustained collaboration with African and other developing country peer researchers in countries including Tanzania, Kenya, Ghana, Sierra Leone, Zimbabwe and India.

Health sector commercialisation and implications for aid policy

4. Health sectors are deeply influenced by the economies in which they are embedded. Where small scale entrepreneurialism and informal contracting are dominant forms of economic activity, underfunded health systems easily slide into reliance on (often under-documented) out-of-pocket spending by struggling low income consumers [1,2]. Health facilities’ behaviour is strongly shaped by reliance for non-salary expenditure on formal and informal small scale payment systems, and recommendations to abolish “user fees” – that is, government formal charges – may fail to address the underlying system structure, which can then revert to charging [3,4]. This situation can generate staff demoralisation and abuse of patients [5,6].

5. The typical competition pattern in these contexts is very price-focused, given the low levels of income of patients. Two deleterious outcomes can follow. First, privately owned facilities (including non-profits if they have little subsidy, a situation facing many providers) which try to operate with competent staff are persistently undercut by those staffed by people with low or no qualifications, a situation we have called the “emptying middle”: low quality drives out moderate competence and some of the resultant “health facilities” are appallingly dangerous [7,8]. Second, low priced medicines are purchased on the private market, in contexts where competent (or cautious) retailers are undercut by those less scrupulous in sourcing medicines; furthermore under-dosing (sale and use of half doses) becomes the norm, driving resistance to antibiotics and other medication [3, 6].

6. The policy implications are the following. The focus in current aid design on evidence-based interventions can produce desired results only where there is a clear recognition of the actual (not ideal) health system context. Understanding of the market characteristics of the system into which the intervention is made should frame the design, and careful account taken of likely feedbacks within the health care market. Careful attention to business sustainability is essential, yet this is rarely addressed in our experience of current proposals for health system intervention, and requires analytical understanding of the market in health services and commodities [9]. Sustainability of interventions and moves towards universal access depend on finding methods to undercut the worst features of low income, low priced commercialisation while sustaining investment by competent providers and undercutting reversion to informal payment.
System-wide reforms to sustain free-at-point-of-use access to integrated primary care in low income contexts do not always fit into the increasingly experiment-focused evaluation framework for projects in HSS, but should not be side-lined for this reason.

**Integrating support for industrial innovation with health system strengthening**

7. Recent OU research with African colleagues has demonstrated that, in Tanzania, local manufacturers of essential medicines have been more effective than importers in distributing medicines in rural areas [10,11]. This finding, widely discussed with Africa-based manufacturers, was initially an unexpected outcome of research on medicines access through non-governmental outlets. The results have influenced current international debate on the role of local manufacturers in health system strengthening, and have contributed to new research on potential synergies between industrial development and health promotion policies [12,13].

8. However, support for industrial innovation, and for health systems strengthening, tend to operate within non-interacting silos [14], despite some current efforts to overcome the divide [15,16]. These silos result from disciplinary divisions between health and industrial researchers, interacting with national and international institutional policy communication gaps between Industry Ministries and Health Ministries and their respective experts. Substantial opportunities for synergies between employment and skills development, industrial innovation capability development, and health system strengthening, continue to be lost through lack of communication and entrenched policy positions. The policy differences between health and industrial ‘camps’ concerning tax and trade policies and procurement policies for industrial inputs to health are somewhat entrenched, but can respond to more open, evidence-based dialogue: an example is the need for better research on the incidence of low income country tariffs on health sector inputs.

**Innovation systems as a working heuristic to tackle system change**

9. Extensive OU research on international product development partnerships (PDPs) for HIV/AIDS and malaria, and other neglected tropical diseases, has shown the scope for integrating appropriate product innovation and HSS [17]. The research confirms that a focus on developing new technologies or products is essential for HSS but insufficient in isolation from other changes: there are human capacity, regulatory, manufacturing, distributional and access issues embedded in the local context that determine the success of interventions by PDPs. OU researchers have advanced the concept of “social technologies” to characterise the new mix of organisations and ways of working that emerge as PDPs seek to combine product development with targeted and efficient approaches to working locally with health, community and development organisations in developing countries. A social technology is thus an institutional arrangement bringing people together around particular aims, projects and initiatives [18].

10. In Uganda for example, the International AIDS Vaccine Initiative has worked with the Uganda Virus Research Institute to develop technological interventions effective for the HIV sub-types dominant in the country. Delays in scientific progress in coming up with an effective vaccine, alongside human resource capacity and regulatory challenges, required the partnership to extend beyond narrow scientific objectives to include providing support to other weaker areas of the health research system, doing this in conjunction with local partners. Institutional support mechanisms also had to be deployed to manage the expectations of patients involved in clinical trials, as well as keeping harnessed and deployed the skills of scientists developed by the partnership. The lasting impact of these social technologies in the health systems, lessons that they
generate for the wider health system and other sectors, as well as measures for assessing their impact remain critical areas for further inquiry which the DFID may be interested in pursuing.

11. An example of how this type of institutional development can be promoted is offered by Open University research in the agricultural sector. OU researchers have worked with the major DFID-supported exercise on Research into Use (RIU) in the agricultural sector in Africa. A core finding of that research was that effective translation and use of research findings involved the development of supportive interactions among a range of stakeholders and institutions [19, 20]. A “Best Bets” exercise selected innovations with potential to benefit the poor for RIU support. Results were patchy but there were real successes and these were characterised by continuing involvement of scientists, associated with the mobilisation of other knowledge sources including NGOs and government, and substantial pre-competitive business support. In all cases, the private sector played a key role in association with other institutions. The concept of an “innovation system” acted as a useful heuristic, focusing attention on the challenge of integrating technology aid interventions into agricultural systems.

12. There are lessons from this experience for the health sector. The key lesson of systems thinking is the recognition of, and working with, interactions among elements of the system, to build synergies and overcome blockages [21, 22, 23]. Fragmented health sectors in low income contexts require patient rebuilding of mutually supportive institutions. Key building blocks include capabilities to generate innovative products and processes that are appropriate for low income populations and whose production is sustainable in the medium term. So far, very little of this type of systems thinking has been translated to health sectors and their local and international suppliers. DFID could usefully support the translation of the lessons from its agricultural RIU for adaptation for health system strengthening.

13. The core message of this submission is thus the need for increased DFID support for integrated systems thinking and related aid support, including attention to market feedbacks within the health sector and integration of support for product and process innovation with HSS.

References


[18] Kale, D. Hanlin R. Chataway, J. (2013) ‘New drugs and health technologies for low income populations: will the private sector meet the needs of low income populations in developing countries?’ *Innovation and Development* 3(1) 121-137


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