How to do better health reform: a snapshot of change and improvement initiatives in the health systems of 30 countries

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Abstract

Health systems are continually being reformed. Why, and how? To answer these questions, we draw on a book we recently contributed, Healthcare Reform, Quality and Safety: Perspectives, Participants, Partnerships and Prospects in 30 Countries. We analyse the impact that these health-reform initiatives have had on the quality and safety of care in an international context—that is, in low-, middle- and high-income countries—Argentina, Australia, Brazil, Chile, China, Denmark, England, Ghana, Germany, the Gulf states, Hong Kong, India, Indonesia, Israel, Italy, Japan, Mexico, Myanmar, New Zealand, Norway, Oman, Papua New Guinea (PNG), South Africa, the USA, Scotland and Sweden. Popular reforms in less well-off countries include boosting equity, providing infrastructure, and reducing mortality and morbidity in maternal and child health. In countries with higher GDP per capita, the focus is on new IT systems or trialling innovative funding models. Wealthy or less wealthy, countries are embracing ways to enhance quality of care and keep patients safe, via mechanisms such as accreditation, clinical guidelines and hand hygiene campaigns. Two timely reminders are that, first, a population’s health is not determined solely by the acute system, but is a product of inter-sectoral effort—that is, measures to alleviate poverty and provide good housing, education, nutrition, running water and sanitation across the population. Second, all reformers and advocates of better-quality of care should include well-designed evaluation in their initiatives. Too often, improvement is assumed, not measured. That is perhaps the key message.
Prospects in 30 Countries, edited by the first four authors, and set in context by the last two authors, through their foreword and the support of the International Society for Quality in Health Care (ISQua). Previous books on the subject [1, 2], and initiatives such as the Commonwealth Fund, have tended to focus on the developed world. Healthcare Reform, Quality and Safety draws together scholarship from lower- and middle-income nations as well as OECD (Organisation for Economic Cooperation and Development) countries.

It is not trivial to determine whether reforms have led to sustained and positive outcomes. Linear cause-and-effect logic (let us do reform X, which will realize benefit Y) rarely holds. That is because of the complex, layered, high-tech, high-touch nature of healthcare systems and the labyrinthine political and socio-economic convolutions any reform negotiates as it moves from policy idea to implemented improvement. Nevertheless, it is necessary, since system-wide reforms should not be undertaken unless they both secure demonstrable, attainable benefits and avoid dysfunctional effects. ‘First, do no harm’ should apply not only to doctor–patient encounters but to healthcare system interventions, too.

The seeds of the book, which is aimed at policymakers, bureaucrats, regulators, managers, clinicians and patients, were sown at the 2013 ISQua International Conference in Edinburgh, Scotland. Selected delegates were asked to give a talk on their country, and then invited to contribute a chapter.

The result is a “compendium of the current state … of global healthcare reform” [3], in nations as diverse as India (population 1.3 billion), Israel (8.4 million), Ghana (27.4 million), PNG (7.8 million) and Italy (60.6 million). The 30 countries in the book range from compact Oman (309,500 km²) to Argentina (2.8 million km²) and sprawling Indonesia, with its 6,000 inhabited islands. Together, they deliver healthcare to >60% of the world’s population.

What people do to improve health systems

Notwithstanding such breadth and variety, common reform themes emerge—along with similar policies, objectives and obstacles. There is a “universal aim … towards enhancing the ability to deliver quality healthcare and thereby improve the health of society” [3].

That goal translates into different priorities. Low-income nations, where fundamentals—infrastructure, a skilled workforce—may be lacking, and basic problems such as high maternal and infant mortality rates persist, will emphasize equity, access to care and improved finances. For them, reform may mean increasing the pay and absolute numbers of health professionals, and distributing them more fairly, across the country. In wealthier countries, where basic problems will have largely been addressed, reform means enhancing efficiency, quality and safety; acquiring advanced technologies; and enabling patients and clinicians to participate in setting the direction (and pace) of reform.

Each of the 30 countries has adopted a different mix of measures, and each thinks its reforms are unique. However, we found the measures they adopt share many features. They include trialling or embracing new funding models; updating legislation and policies; restructuring government health departments and agencies; strengthening regulatory regimes; creating new institutions; freeing up market forces; developing performance indicators; rationalizing clinical and organizational structures; importing or designing next-generation IT solutions; using financial incentives and payment for performance; and recruiting and training clinicians.

Ideas about quality and safety run similarly in parallel. Israel, Hong Kong and Japan, for example, all emphasize to varying extents evidence-based practice, accreditation initiatives, unified standards, adverse incident reporting, clinical guidelines, root cause analysis, handover and hand hygiene programmes. Also conspicuously alike are the obstacles to change: shortages of finance and staff, medical profession politics and intransigence, poor infrastructure, organizational cultures riven with resistance to change, ineffective leadership and management or governance arrangements that are not fit for purpose.

Perhaps the most striking similarity between the countries studied, though—and our book’s most sobering finding—is the absence of evidence to link specific reforms with positive outcomes. What links existed were weak and situation dependent. Clearly, with the publication of this book, no policymaker can assume a reform, however well intended, will inevitably improve care.

Should healthcare reformers then, give up trying? Not at all. Our book offers a way forward. Missing from these accounts of well-intentioned, sometimes well-designed reforms, we believe, is rigorous and credible evaluation which starts with baseline measures and assesses progress at intervals against indicators. Future reforms, we emphasize, must be accompanied by robust, objective assessment [4, 5, 6]. Evaluation should be at arm’s length from those who sponsor and implement the measures [7]. Independent (and independently minded) groups from, for example, the academic world, who are well grounded in systems enhancement, relevant theories and rigorous measurement, are ideal for these assignments.

Reforms in low- and middle-income health systems

Among the countries studied, the most impoverished can make the greatest gains—because every extra dollar, wisely invested, goes further than in well-resourced systems. When one starts from a low base, the results of particular reforms can also be easier to measure. Guinea worm disease is believed to have been wiped out in Ghana, thanks to an eradication programme instituted in 1989, for example. In South Africa, the belated availability of anti-retroviral drugs has transformed the prospects of HIV/AIDS patients. In that country’s Free State Province, a decline in maternal mortality is attributed to a new adverse incident monitoring system.

Yet, although progress is possible, the scale and perspective of problems are considerable. As Rodzi Tidzi-Tetey reports in his chapter, a 2006 study found that Ghana needs 69% more pharmacists and 883% more X-ray technologists. And South Africa not only carries a quadruple burden of disease—HIV/AIDS and tuberculosis, maternal and infant mortality, non-communicable diseases (NCDs), and violence and trauma—but faces hurdles that include “unacceptably high levels of fraud and theft, top-heavy management and administration structures, and an excessively hospital-centric and specialist focus”, according to Stuart Whittaker, Carol Marshall and Grace Labadarios [3].

Even worse off is PNG, where low spending on health is exacerbated by crumbling infrastructure and the logistics of servicing a poor, tribally divided and linguistically diverse population living mostly in remote villages. Most health facilities lack running water and electricity, and, according to William Adu-Crow and Paulinus Lingani, the system is officially described as “in crisis”. Recent reclassification of PNG as a lower middle-income nation has made little difference, prompting the authors to conclude that “economic growth in itself is clearly not sufficient to lead an improvement in the health of a country’s population”. By contrast, in similarly re-categorized Ghana, the government has used pay rises
to attract or retain health workers in specialties where skills are scarce, or in locations which are under-resourced.

In China and India, middle-income countries struggling to address disparities in the care delivered to their huge populations, the challenges are “unmatched in human history”, so notes regional editor Matsuyama in the book’s Eastern and Southern Asia section. Although China’s new quality-assurance mechanisms and comprehensive reforms have turned a disease-focused health system into one dispensing universal care, spending, at USD367 per head in 2013 is far below the world average (USD1,042). However, life expectancy (75.2 years in 2012) is better than in other developing nations, and the mortality rate for under-5s has dropped from 16.4% in 2010 to 13.2% in 2012.

Of all nations, only Myanmar spends less on health per capita than fast-growing India, where provision lags so far behind demand that quality “takes a back seat”, according to Girdhar J. Gyani. Only 200 of India’s 50,000-plus hospitals have been accredited under a safety system set up in 2006. But rural and urban Indian reform programmes have achieved significant results: deaths from kala-azar disease have fallen 21.2%, from malaria 45.2%, microfilaria 26.7% and dengue fever 52%. Infant and maternal mortality rates, a major problem given the shortage of gynaecologists, paediatricians and anaesthetists, have also decreased.

Until recently, patients’ out-of-pocket payments constituted nearly half Indonesia’s health funding. The middle-income country is now introducing a National Social Insurance Scheme (NSIS) which will improve equity and accessibility and make it the largest nation with universal health coverage. Other initiatives will distribute resources more fairly, devolving services to provinces and districts. While Indonesia still faces many challenges, including a mounting NCD burden, say Sophia Hermawan and Brette Blakely, the insurance scheme and a supportive regulatory environment set a “promising tone”.

In Argentina, Brazil and Chile, large-scale healthcare reforms have followed the end of military dictatorship in recent decades. But the impact on quality and safety in Latin America, where wide disparities of wealth reinforce health inequalities, has been varied. In Argentina, quality and safety of care have been “marginal strategies in health policy”, report Hugo Arce and Ezequiel Garcia Elorrio, while in Chile, according to Giorgio Solimano and Leontel Valdivia, “medical care coverage expansion has been relatively successful” but initiatives for “quality, safety and equity … [have] not met expectations”.

Quality and safety improvements are on the agenda in Brazil, which has established performance indicators, a hospital accreditation system and clinical guidelines. The quality of care still varies enormously, and some services are “likely to be exposing patients to significant hazards and damages”, write José Carvalho de Noronha, Victor Grabois and Adelia Quadros Farias Gomes. There is encouraging news from Mexico, where a new universal healthcare scheme guarantees access to 275 essential and 57 specialized costly interventions, the latter including neonatal intensive care, cervical and breast cancer and HIV/AIDS. Over half the population has enrolled in recent years.

Across the Americas, quality has been expressed about national and institutional cultures as obstacles to reform. Argentina, while not alone, exhibits a “general unwillingness to obey rules”. In hospitals this produces a “generalised tendency to conceal mistakes” and a resistance to procedural standards such as surgical checklists. Meanwhile, in Brazil, a “strong punitive approach … often impedes the development of a blameless culture”, say the chapter authors.

Contrast this with Chile, where a major challenge is “overcoming the notion of healthcare as a market commodity and adopting the notion of healthcare as a human right”.

The foci of reform measures in high-income countries

The Europe section of Healthcare Reform, Quality and Safety surveys seven countries with well-established, advanced health systems. As section editor Russell Mannion reports, England, Sweden and Norway have employed financial incentives to boost the performance of healthcare providers, while England and Sweden have introduced pro-market reforms premised on competition and choice. Across Europe, quality is viewed as a managerial and organizational issue as well as a medical concern. Patients and the public are increasingly involved in evaluating quality improvement efforts.

Over the past two decades, England’s National Health Service has undergone almost incessant reform and unprecedented scrutiny, partly thanks to hospital scandals and partly because, as a national treasure, it attracts all-encompassing political interest. Most studies suggest that reforms—including the largest restructure in the history of the NHS, new hospital star ratings and networks of “collaboratives”—have helped improve productivity, quality and safety, with fewer deaths from cancer and cardiovascular disease now recorded. However, they also point to longer wait times in emergency departments, persistent geographical and socio-economic inequities, and an avoidable mortality rate in England higher than that of comparable countries. In the faint praise of Mannion and his fellow chapter author, Martin Powell, the NHS is “capable of delivering high-quality care to some patients, in some areas, some of the time”.

In 2011, Norway, as Ellen Catharina Tveter Deilkås, Tor Ingebrigtsen and Ånen Ringard report, launched a 3-year patient safety campaign, adopting a non-punitive approach to the reporting of adverse events. In 2012, events causing patient harm or contributing to death, or requiring intervention or a longer hospital stay, fell to 13.9%, from 16.1% in 2011.

Elsewhere in Scandinavia, the impacts of reform are less clear. John Övervist, Magna Andreen Sachs and Marion Lindh in the Sweden chapter doubt whether measures to address overcrowded emergency rooms and longer than OECD-average waiting times have improved the safety and quality of care. Janne Lehmann Knudsen, Carsten Engel and Jesper Eriksen in Denmark report that patients often complain of a lack of continuity of care, which experts blame on three separate tiers of management.

The Italy chapter by Americo Cicchetti, Sylvia Crotti and Valentina Iacopino describes a sophisticated health system separated into regions, based on a Beveridge model of universal access and principles of equity (like Australia, New Zealand and other OECD systems). Italy has introduced reform through new laws, new clinical standards and quality and patient safety improvements. Reforms have been delayed, however, by the 2008 economic crisis, the impact of which has yet to subside.

Germany’s system, also decentralized, separates care sectors—e.g. inpatient and rehabilitation care. This fragmentation inhibits transparency; aggregated data sets to analyse the system are lacking, as is overarching systems thinking, say chapter writers Holger Pfaff, Tristan Gloede and Antje Hammer. These pose obstacles to reform. Nonetheless, German reforms have focused on cost-containment, measures to increase efficiency and strategies to improve quality of care and patient safety. Some of these measures
conflict: using Diagnosis-Related Groups to encourage hospitals to be efficient can have adverse effects on patients’ quality of care, for example. Germany has no national quality improvement institute which could collect data and provide a stimulus for enhancing systems.

In the USA, the costliest of all health systems still exhibits levels of inequity that countries such as Australia, New Zealand and Norway eliminated decades ago. The USA finally addressed this challenge after much political wrangling in the 2000s. The Patient Protection and Affordable Care Act (2010)—commonly called the Affordable Care Act (ACA) or just Obamacare—extended health insurance to many uninsured, introduced measures to improve quality of care and systems performance, and also included public health initiatives and improvement mechanisms. The USA is not close to universal coverage, but the ACA has extended insurance to ~20 million previously uninsured people—including historic increases in coverage for low-wage workers and others long left out of the system [8]. While some continue to oppose it, Obamacare may become increasingly embedded as a cornerstone of American healthcare. Future efforts to reform and improve US healthcare can use the ACA as a platform for further systems gains.

Our take-home lessons

One conclusion of Healthcare Reform, Quality and Safety is that we cannot escape the possibility that in less wealthy countries (and wealthier countries dogged by inequities, for that matter), we may be looking for solutions in the wrong place. Perhaps counter-intuitively, to improve a population’s health it may be wiser to spend money outside the health system. As we point out in the book, it is increasingly clear that the health of any population depends on many factors outside healthcare—including alleviating poverty, adequate housing, good nutrition, access to information and education, law and order, universal sanitation and running water. Improvements require better integration and coordination between all those departments and agencies which affect population health.

Some researchers see in health systems profound forces which resist change, such as rigid cultures characterized by inertia, partisan interests, professionally sponsored politics and unfair resource distributions [9, 10]. Together, these can obstruct change. By contrast, chapter authors in our compendium of 30 countries found the reformers they report on optimistic that their reforms would make a difference.

Our central point, however, remains: in all countries, rich and poor alike, effective, independent evaluation of reform initiatives is currently lacking. Policymakers around the world tend to conduct retrospective, often politically motivated reviews, cherry-picking programmes which seem to work, so they can report success to their superiors. This must change if reform is to succeed. Robust, comprehensive evaluation is essential. The positive hindsight bias these present “evaluations” rest on must not continue to prevent us from learning from success and failure.

The experiences this book describes offer lessons for reformers. First, before embarking on any reform or improvement journey, take some baseline measures. Then, treat the change as an intervention, and measure its impact over time, using an arm’s-length group that is independent of those who funded, sponsored or managed the intervention. If feasible, have a control group that does not receive the reform or improvement, to enable comparisons.

Sophisticated thinkers may go further and consider a stepped-wedge intervention, whereby the change enrols the entire population, but its introduction is staged, so the population becomes its own control [11]. (We acknowledge that some worry about the ethics of staging introductions when benefits are obvious and in populations or groups which receive the intervention late, some may miss out.)

While scientific evaluation of this kind, conducted over time, may not depoliticize health reforms, it at least gives them a sounder footing. At the same time, evaluations should consider less tangible aspects of care such as compassion, dignity and respect.

The optimal evaluation would capture long-term benefits and costs that do not show up immediately. It should be based on a theory of change, sensitive to its context and should seek the views of stakeholders. Evaluations of this type, we argue, would benefit policymakers, managers, clinicians, researchers and patients. Are not the last group, after all, the ones whom reforms and quality and safety improvements are meant to serve?

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