

LONDON  
SCHOOL of  
HYGIENE  
& TROPICAL  
MEDICINE



McKee, M (2001) Measuring the efficiency of health systems - The World Health Report sets the agenda, but there's still a long way to go. *BMJ (Clinical research ed)*, 323 (7308). pp. 295-6. ISSN 0959-8138

Downloaded from: <http://researchonline.lshtm.ac.uk/16711/>

DOI:

#### Usage Guidelines

Please refer to usage guidelines at <http://researchonline.lshtm.ac.uk/policies.html> or alternatively contact [researchonline@lshtm.ac.uk](mailto:researchonline@lshtm.ac.uk).

Available under license: Creative Commons Attribution Non-commercial  
<http://creativecommons.org/licenses/by-nc/3.0/>

government's white paper *Saving Lives: Our Healthier Nation* ([www.york.ac.uk/inst/crd/wph.htm](http://www.york.ac.uk/inst/crd/wph.htm)). Other projects that provide cross disciplinary evidence for policymaking will follow.

At the heart of the Campbell Collaboration is its methods groups. Their task is to ensure that reviewers use rigorous methods of research synthesis and to improve the quality of primary research and research synthesis in the social and political sciences. Currently, there are three Campbell methods groups: one on experimental methods, another on quasiexperimental methods, and the third on process and qualitative methods. Additional methods groups will follow. A Centre for Research Synthesis Methods, responsible for coordinating the methods activities of the collaboration, is soon to be established at the University of Missouri in the United States. The communications and dissemination group is the fourth core element of the collaboration, in addition to the international steering committee. This group provides guidance on, and strategic planning for, the dissemination work of the collaboration.

The Campbell Collaboration is an international organisation. Its membership is drawn from 15 countries, with growing interest being shown in developing countries. The Nordic countries are well represented and are among its most active participants. The Danish Ministry of Social Affairs has allocated resources for a Nordic Campbell Centre in Copenhagen, and is negotiating with the Nordic Council of Ministers to secure the involvement of other countries. This will give the Collaboration a European base for

training members in systematic review methods and other aspects of research synthesis, as well as a centre for undertaking and disseminating high quality systematic reviews on public policy issues. Funding for the Campbell Collaboration also comes from major research foundations, research charities, private philanthropists, and government sources.

The Campbell Collaboration is a young organisation, founded in 1999. It works closely with other organisations throughout the world that promote evidence based policymaking. The collaboration does not make policy, nor does it proselytise, advise, or work as a pressure group. Its mission is to provide high quality, sound evidence for policymakers, practitioners, and the public to make well informed decisions about public policy.

Philip Davies *director of policy evaluation*

Centre for Management and Policy Studies, Cabinet Office, London SW1A 2WH ([phil.davies@cabinet-office.x.gsi.gov.uk](mailto:phil.davies@cabinet-office.x.gsi.gov.uk))

Robert Boruch *university trustee chair professor of education*

Graduate School of Education, University of Pennsylvania, Philadelphia, PA 19104-6216, USA ([robertb@gse.upenn.edu](mailto:robertb@gse.upenn.edu))

- 1 Cabinet Office. *Modernising government*. London: Stationery Office, 1999. (Cm 4310.)
- 2 Cabinet Office. *Professional policy making for the 21st century*. London: Stationery Office, 1999.
- 3 Cabinet Office. *Adding it up: improving analysis and modelling in central government*. London: Stationery Office, 2000.
- 4 Cooper H, Hedges L. *Handbook of research synthesis*. New York: Russell Sage Foundation, 1994.

## Measuring the efficiency of health systems

*The World Health Report sets the agenda, but there's still a long way to go*

Papers p 307

In June 2000 the World Health Organization provided a long awaited answer to the question beloved of politicians and journalists: "How does the health system in country X compare with that in country Y?" The results, published in the *World Health Report 2000*,<sup>1</sup> delighted some governments, such as that of France, which came first, but infuriated others, such as Brazil, at 125. The rankings are based on measures of achievement of five health system goals. The achievement of health is seen as a core objective of a health system, so goals are a high level of health and a fair distribution. A health system should also be responsive to popular expectations. This includes respect for individuals (autonomy and confidentiality) and client orientation (prompt service and quality of facilities). As with health, the resulting goals relate to the absolute level of responsiveness and its distribution. The fifth goal is fair financing, with expenditure reflecting ability to pay rather than risk of illness.

In this week's *BMJ* some of the authors of the WHO report describe the methods they used to assess one of these goals, the attainment of health (p 307).<sup>2</sup> They relate expenditure on health, adjusted for local prices, to attainment of health. After adjusting for the level of

education in the population, itself an important determinant of health, they rank the health systems of the world according to their efficiency in turning expenditure into health.

Inevitably, a few problems exist in an undertaking of this magnitude. The first is how one defines the health system. As set out in the *World Health Report* this encompasses "all the activities whose primary purpose is to promote, restore, or maintain health." This is welcome as it emphasises the importance of intersectoral action in promoting health, but unfortunately it also provides a problem since a figure for "all the activities" is nowhere to be found in any national health accounts. Instead, the report argues, as the health care system accounts for most of what is incorporated in the broader health system, "little is lost in concentrating on a narrower definition that fits existing data."<sup>3</sup> Consequently, we must compare inputs to the health care system with outcomes of the wider health system.

A subsidiary question is whether health outcomes can even be attributed to the activities included within the broader definition of a health system. As the report notes, there is growing evidence of the health gains that can be achieved both from health care

*BMJ* 2001;323:295-6

interventions and from policies in other sectors, such as vehicle safety. But there are many other determinants of health. For example, in industrialised countries the health of populations reflects long established dietary patterns that owe more to climate, and thus the nature of agricultural produce, than to any contemporary policy. Thus, it is unsurprising that many of the countries performing best are characterised by “Mediterranean” diets. The growing evidence of how events throughout life influence health creates a further difficulty.<sup>3</sup> Health system inputs that affect infant and child health may have consequences many years later.

A second problem is the availability of data.<sup>4</sup> Many governments have only the vaguest idea of how many people live in their territory. Some have not undertaken censuses for many years,<sup>5</sup> in some cases because large areas are outside their effective control. In many parts of the world population registration systems are fragmentary, and even in some industrialised countries significant gaps exist in coverage of some groups—for example, native Americans.<sup>6</sup> Equally, there are substantial problems with comparability of data on the other measures used, health expenditure and education. The authors recognise this problem and have constructed an elaborate set of procedures to address it, so generating figures for disability adjusted life expectancy<sup>7</sup>—itself a highly controversial measure.<sup>8</sup> Fundamentally, however, one cannot create data where none exist, so each step requires a series of often heroic assumptions and extrapolations.<sup>9</sup> Unfortunately, though the *World Health Report* and its associated working papers note that many figures are estimates, it is not easy to discover just how extensive this process has been. Using complex models to generate estimates of uncertainty fails to tackle the underlying problem.

Other criticisms of this exercise have been aired elsewhere and include concern about the ideological values underpinning it and the intrinsic limitations of performance ranking.<sup>10</sup> But some of these difficulties are insuperable, and a fairer question to ask is whether the report has achieved anything.

Despite its many limitations, arguably it has. Firstly, the WHO has stated clearly that governments have a

responsibility for their health systems. It has invoked the concept of stewardship,<sup>11</sup> which implies a much more active involvement in promoting health than most governments have previously assumed.<sup>12</sup> Secondly, it has provided a useful conceptual framework that begins to tease out the goals of health systems. Thirdly, it has emphasised the need for a much better understanding of the undoubted impact that health systems have on health.<sup>13</sup> It has not, however, provided a valid answer the question of whether one system is better than another.

Martin McKee *professor of European public health*

London School of Hygiene and Tropical Medicine, London WC1E 7HT

Competing interests: MM directs a WHO Collaborating Centre and was a member of the regional reference group for the 2000 *World Health Report*.

- 1 World Health Organization. *World Health Report 2000. Health systems: improving performance*. Geneva: WHO, 2000.
- 2 Evans DB, Tandon A, Murray CJL, Lauer JA. Comparative efficiency of national health systems: cross national econometric analysis. *BMJ* 2001;323:307-10.
- 3 Kuh D, Ben-Shlomo Y. *A life course approach to chronic disease epidemiology*. Oxford: Oxford University Press, 1997.
- 4 Almeida C, Braveman P, Gold MR, Schwarzwald CL, Riberio JM, Miglionico A, et al. Methodological concerns and recommendations on policy consequences of the World Health Report 2000. *Lancet* 2001;357:1692-7.
- 5 Sibai AM, Fletcher A, Hills M, Campbell O. Non-communicable disease mortality rates using the verbal autopsy in a cohort of middle aged and older populations in Beirut during wartime, 1983-93. *J Epidemiol Community Health* 2001;55:271-6.
- 6 Heck KE, Schoendorf KC, Parker J. Are very low birthweight births among American Indians and Alaska Natives underregistered? *Int J Epidemiol* 1999;28:1096-101.
- 7 Murray CJL, Lopez AD. Mortality by cause for eight regions of the world: global burden of disease study. *Lancet* 1997;349:1269.
- 8 Anand S, Hanson K. Disability-adjusted life years: a critical review. *J Health Econ* 1997;16:685-702.
- 9 Cooper RS, Osotimehin B, Kaufman JS, Forrester T. Disease burden in sub-Saharan Africa: what should we conclude in the absence of data. *Lancet* 1998;351:208-10.
- 10 Mulligan J, Appleby J, Harrison A. Measuring the performance of health systems. *BMJ* 2000;321:191-2.
- 11 Saltman RB, Ferroussier-Davis O. The concept of stewardship in health policy. *Bull WHO* 2000;78:732-9.
- 12 McKee M, Janson S. The challenge of stewardship. *Eur J Publ Health* (in press).
- 13 McKee M. For debate—does health care save lives? *Croatian Med J* 1999;40:123-8.

## Fabricated or induced illness in children

### *Munchausen by proxy comes of age*

In 1970 the Department of Health issued a small orange booklet, *The Battered Baby*. For 25 years the association of fractures and subdural haematoma with wilful violence had been known, but Kempe had coined this emotive title only eight years before. That form of abuse is now only part of the whole range of harm to children that society has recognised. Last month the Department of Health continued the story by issuing multidisciplinary guidance on fabricated or induced illness in children.

Significant harm to children such as smothering or poisoning which simulated illness and which involved

and deceived doctors has been known for at least 40 years. It took the honesty of Roy Meadow to describe his personal experience and his journalistic flair to label it “Munchausen by proxy” in 1977.<sup>1</sup> His article drew the world’s attention to fabricated or induced illness and led to more accounts, to reviews,<sup>2</sup> and to research—though research has not been helped by arguments about what is or is not Munchausen by proxy.<sup>3</sup>

Even today one has to state clearly that some carers, including parents, do harm children, and that they sometimes involve health professionals in doing so. Doctors and others may not only fail to understand the

*BMJ* 2001;323:296-7