

I. THE FRAMEWORK FOR HSPA

1. WHR 2000

WHR 2000 defined the health system to include personal medical care, public health interventions and inter-sectoral actions designed primarily to improve health. It was recognized that the health system contributes towards many outcomes that are socially desirable, including improving health, educational attainment, and individual incomes. WHR 2000 specified a parsimonious set of these goals where the contribution of health actions is sufficiently large to warrant measuring the goals regularly.

A goal was defined as intrinsically valued if raising the level of attainment on that goal is desirable in and of itself. To ensure that each goal measures a different outcome, it was further specified that each intrinsic goal must be at least partially independent of all others, i.e. it is possible to raise the level of attainment of the goal while holding the level of all other intrinsic goals constant. Instrumental goals were defined as outcomes that are desirable because they contribute to attainment of an intrinsic goal.

To warrant measuring attainment of an intrinsic goal regularly, two additional criteria were proposed. The health system must be able to make a large enough contribution to the goal to warrant the expense of measuring it regularly, and it must be feasible to measure the health-system impact on a regular basis.

Using these criteria, three intrinsic goals were identified. The defining goal was to improve health, both the average level of population health and its distribution (i.e., to reduce health inequality). The second intrinsic goal was to enhance the responsiveness of the health system to the legitimate expectations of the population for the non-health improving dimensions of their interaction with the health system. Responsiveness also had two components – the average level of and inequality in responsiveness.

The third intrinsic goal was the fairness in household financial contributions to the health system. Although it was recognized that other goals, such as educational attainment and income-earning potential, might meet the criteria of an intrinsic goal, it was judged that it was impractical to measure the impact of the health system on them on a regular basis.

A number of instrumental goals, such as the coverage of health services, were discussed in the text of WHR 2000. But the level of attainment on these goals was not measured in the annex tables. WHR 2000 also defined four basic functions which contribute to intrinsic goal attainment – financing, service provision, resource generation, and stewardship. The text of the

report summarized the available evidence relating these functions to goal attainment and efficiency, but did not define or measure indicators of performance for the functions.

The final concept proposed in the framework was called performance – equivalent to the economic concept of efficiency. It was defined as the system’s contributions to the intrinsic goals taking into account the inputs used to achieve them. The efficiency of systems in producing health and the composite attainment index (made up of the three intrinsic goals) was estimated.

2. Main commentaries and criticisms

There are eight commentaries and four responses that relate to the issue of framework (Almeida et al. 2000; World Health Organization 2001a; DfID 2000; McKee 2001; Murray and Frenk 2001; Navarro 2000; Navarro 2001; Oswaldo Cruz Foundation 2000; Travassos and Buss 2000; World Health Organization 2001b; Williams 2000, 2001; Murray et al. 2001). Only general issues relating to the framework are discussed here. Debates and suggestions on specific indicators, overall attainment, and efficiency are discussed later in this report.

Definition of the health system

Two opposing definitions were expressed. One was that the boundaries of the health system should be drawn tightly around the activities under the direct control of the Ministry of Health – largely personal medical services (WHO Regional Office for the Americas, 2001a). The other extreme was that the boundaries used in WHR 2000 were too narrow, focusing largely on medical interventions and ignoring the broader social and perhaps spiritual components (Navarro 2000; WHO Regional Office for the Americas, 2001b; Ugá et al. 2001; Oswaldo Cruz Foundation 2000).

Goals

Some debate focused on the appropriate intrinsic goals to include for routine monitoring. Again, two opposing views were expressed. The first was that health systems should be concerned with, and judged on, their contributions to population health alone so that population health should be the only intrinsic goal. The opposing view was that not only should health, responsiveness and fairness of financial contributions be included as intrinsic goals, but others should be added as well (WHO Regional Office for the Americas 2001b). The OECD (Hurst 2002), for example, has adopted the concept of responsiveness in its proposed health-system performance framework, but called it “responsiveness and access”. (Access was defined by WHO as an intermediate goal rather than an intrinsic goal – more access

is only valued if it contributes to furthering one of the intrinsic goals). In addition, the OECD has included the level of health financing as an intrinsic goal, although it has not attempted to identify the optimal level for each country.

Other approaches to identifying indicators that could be potentially useful for HSPA include the Essential Public Health Functions (EHPF) of the WHO Regional Office for the Americas. That approach defines 11 key functions involving a mix of inputs, functions and outcomes without a composite index or an explicit statement of which ones contribute more or less to health-system performance. The “benchmarks of fairness” approach of Daniels et al. (2000) is similar. In it, nine benchmarks are used to evaluate the impact of health-system reforms on “fairness” – including assessing the impact on: coverage of key interventions both within and outside the health sector (e.g. literacy, education); barriers and inequalities in access; equitable financing; efficacy, efficiency and quality of care; democratic accountability and empowerment; and autonomy. Each benchmark contains many components and sub-indicators which raters must evaluate subjectively and incorporate into a composite rating for each benchmark on a scale from –5 to +5. No weighting is suggested for possible aggregation across indicators. The benchmarks and their components include indicators that would be labelled intermediate goals in the WHO framework as well as components of WHO’s intrinsic goals (e.g. autonomy is a component of responsiveness in the WHO framework). These approaches focus on very important questions related to the functioning of the health system and, in the case of the benchmarks project, the impact of reforms on fairness. They do not purport to be a comprehensive framework for assessing health-system performance.

Attribution and measurement

All regional consultations pointed out that goal attainment is influenced not only by health actions but by non-health system actions as well. WHO used multivariate statistical analysis to separate the influence of the health system from other possible determinants. Some commentators suggested that it would be useful for decision-making to define and measure indicators of that part of overall goal attainment believed to be determined largely by the activities of the Ministry of Health, either instead of, or in addition to, the outcome indicators defined by WHO. One possible example is the number of deaths due to medical errors which is more directly under the control of the Ministry of Health than all-cause mortality.

Inputs

There was little published criticism of the use of health expenditure per capita as an aggregate indicator of the inputs available to the system, although questions of timing between inputs and outcomes have been raised (Williams 2000; Ministry of Health, Vietnam 2001), which are considered in Section XIV

on Efficiency. Regional consultations also suggested the need to measure inputs to the production of health such as human resources (WHO Regional Office for the Americas 2001b).

Health system functions

Many commentators argued that while information on intrinsic goal attainment was important, it was only a starting point. It was necessary to develop indicators that allowed policy makers to “drill down” so as to discover possible causes of poor performance and ways in which that might be improved (WHO Regional Office for the Americas 2001b; WHO Regional Office for the Eastern Mediterranean 2001). These indicators should be linked to the key function of the health system, which would make the measurement exercise more policy-relevant (Ollila and Koivusalo 2000).

Performance and efficiency – Terminology

In WHR 2000 the term “performance” was used as a synonym for “efficiency” (Williams 2000). At a number of the regional consultations it was suggested that “health system performance assessment” should be defined to include the measurement of goal attainment, as well as the efficiency of input use and the way the system is functioning (WHO Regional Office for the Americas 2001b; WHO Regional Office for Europe 2001), whereas the term “efficiency” should be used in the narrower sense of how well resources are used to produce the desired outcomes.

Focus

Participants in the South-East Asian Regional Consultation suggested that it would be useful to extend the performance assessment exercise to the sub-national level (WHO Regional Office for South-East Asia 2001), while Wibulpolprasert and Tangcharoensathien (2001) argued it could also be used to assess the performance of particular programmes or interventions.

3. WHO responses and proposals

WHO proposes to retain the definition of the health system used in WHR 2000 and to retain the three intrinsic goals. Although WHO recognizes the desire for policy makers to define an appropriate level of health spending, appropriate ways of operationalizing the concept need to be developed. Since publication of WHR 2000, WHO has attempted to make the framework more policy-relevant by defining a set of intermediate indicators that can be of immediate use to policy makers, allowing them to drill down to possible causes of poor performance. They are linked to the four key functions of health systems and are discussed later in this report. It has also begun to

develop ways of assessing the inputs of human resources to the system (see Section III).

4. SPRG comments and recommendations

Definitions

The definition of health systems as proposed by the Secretariat in WHR 2000 is clear and acceptable. The three levels of health attributes, i.e. personal medical, non-personal health services, and inter-sectoral actions, are acceptable and should be used as the 'operational framework'. Given the definition of 'health' in the WHO constitution, which encompasses physical, mental and social well-being, it is suggested that WHO could work with other international agencies to ensure that the impact of health on education and income could be assessed at regular intervals. Some members of SPRG felt that WHO might consider interacting with UNDP to explore if it were possible to modify the Human Development Index (HDI) into something like a Health-Adjusted Human Development Index (HAHDI) by substituting HALE for Life Expectancy in the HDI.

In interacting with other international agencies, it was also suggested that they might do a 'health impact assessment' of their activities on a routine basis.

Goals

The three intrinsic goals – i.e. health, responsiveness and fairness of financial contributions – are operational and acceptable. Countries do care about the level of financing as well, but there is no easy way to operationalize the ideal level of health financing for every country, and inclusion of this might have to be postponed.

SPRG members nonetheless agreed on the importance of retaining measures of the level of financing in future reports (as WHO proposes), and on the benefits of WHO collaborating with any future OECD work on optimal levels of health spending.

Attribution and measurement

SPRG agrees with the Secretariat's proposal to measure the system's contribution to the desired final outcomes. Although this may be a difficult task in developing countries with limited capacity, efforts should be commenced. SPRG also commends the attempt at regular measurement of intermediate goals as proposed by the Secretariat. Data availability and accuracy, scientific soundness of method, including transparency of the

processes, are major concerns. Responses by the WHO Secretariat to these questions have been encouraging in that weaknesses in WHR 2000 have been acknowledged and steps have been taken for improvement.

Inputs

It is reasonable to use health expenditures as the main input. However, data availability in this area is critical and in many countries either there are no reasonable estimates or there are competing estimates. WHO should work with international agencies to standardize methods and estimates on variables such as GDP, expenditures and purchasing-power-parity exchange rates. It should also build capacity in countries in this area. SPRG also commends the Secretariat's attempts to explore the possibility of estimating the quantities of labour and capital stock for all Member States.

Functions

The four main functions are acceptable. SPRG commends the Secretariat's proposal to measure routinely a set of instrumental goals linked to each of the four functions as well as to selected attributes of these functions. It suggests that the work of the benchmarks-for-fairness exercise (Daniels et al. 2000) could provide useful insights. Some members of SPRG suggested that WHO might consider adding one more function, the **organization of health resources** as suggested by Kleczkowski, Roemer, and Van der Werff (1984). This function may be inserted between resource generation and service provision. It is quite logical to think that after we generate resources, we organize them, and then they provide services. However, other members felt that this is really part of each of the other functions.

Performance

SPRG recommends that the term 'performance' should be redefined to include the measurement of goal attainment, as well as the efficiency of input use and the way the system is functioning. 'Efficiency' should then be used more narrowly to represent the concept of value for money.

A strategic plan

SPRG recognizes that the HSPA exercise of WHR 2000 stimulated fresh thinking about health-system performance, and awareness and concerns for better health information (particularly vital registration, health-care financing, morbidity and mortality data, and responsiveness.) It recommends that WHO develop a strategic plan to improve data availability and accuracy of all variables at the global, regional and country levels. Specific plans, including the World Health Survey, should be developed and implemented with clear targets of achievement. Additional resources from funding agencies could also be mobilized for this purpose.

Other suggestions

Issues	Improvements
Measurements	<ul style="list-style-type: none"> ▪ Request for further disaggregation should be handled with great care. Only very important variables should be measured routinely. ▪ Improvement of indicators through more interactive peer review and user feedback.
Data non-availability and accuracy	<ul style="list-style-type: none"> ▪ Provide more support to sustain national information systems in increasing coverage and accuracy of available data. ▪ Improve estimation through more peer review process on scientifically sound techniques. ▪ Transparency through detailed explanation of data sources and estimation techniques.
Methodologies	<ul style="list-style-type: none"> ▪ Demystification through capacity-strengthening, creation of global, regional, sub-regional and country networks/institutes for HSPA. More training, publications, surveys and research are needed. ▪ Involve more researchers in future rounds. ▪ Use more extensive peer review on methodologies. ▪ Description of methods used and commentaries, as well as current improvement strategies, should be presented and open to the public.
League tables	<ul style="list-style-type: none"> ▪ The decision to continue with the league table is a strategic one, which it is up to WHO to make. If WHO decides to continue publishing league tables, it should include more explanations and precautions. More detail on this issue is discussed in Section XI on 'Composite Indicators'. ▪ Incentives may be offered to those at the bottom of the list, e.g., more WHO support, more financial support from donors, reward for improvement in the next round of assessment.

5. References

Almeida, C. M., P. Braveman, M. R. Gold, C. L. Szwarcwald, J. M. Ribeiro, A. Miglionico, J. S. Millar, S. Porto, N. R. Costa, V. O. Rubio, M. Segall, B. Starfield, C. Travassos, A. Ugá, J. Valente, and F. Viacava (2001): Methodological concerns and recommendations on policy consequences of the World Health Report 2000. *Lancet*, 357(9269): 1692-1697.

Daniels, N., J. Bryant, R. A. Castano, O. G. Dantes, J. S. Khas, and S. Pannarunthai (2000): Benchmarks of fairness for health care reform: A policy tool for developing countries. *Bulletin of the World Health Organization*, 78(6): 740-750.

DfID (Department for International Development, UK Health Systems Resource Center) (2000): World Health Report 2000: Summary and comments. Draft 10 July 2000.

Hurst, J. (2002): Performance measurement and improvement in OECD health systems: Overview of issues and challenges. *Measuring Up: Improving Health System Performance in OECD Countries*. Organization for Economic Co-operation and Development.

Kleczkowski, B. M., M. I. Roemer, and A. Van der Werff (1984): National Health Systems and their reorientation towards health for all guidelines for policy-making. *Public Health Papers*, No. 77. Geneva, Switzerland: World Health Organization. [http://whqlibdoc.who.int/php/WHO_PHP_77.pdf]

McKee, M. (2001): Measuring the efficiency of health systems. *British Medical Journal*, 323(7308): 295-296.

Ministry of Health, Vietnam (2001): Comments and suggestions of Vietnam Ministry of Health/Health Policy Unit as regards the World Health Report 2000.

Murray, C. J. L. and J. Frenk (2001): World Health Report 2000: A step towards evidence-based health policy. *Lancet*, 357(9269): 1698-1700.

Murray, C. J. L., J. Frenk, D. Evans, K. Kawabata, A. Lopez, and O. Adams (2001): Science or marketing at WHO? A response to Williams. *Health Economics*, 10(4): 277-282.

Navarro, V. (2000): Assessment of the World Health Report 2000. *Lancet*, 356(9241): 1598-1601.

Navarro, V. (2001): World Health Report 2000: Responses to Murray and Frenk. *Lancet*, 357(9269): 1701-1702.

Ollila, E. and M. Koivusalo (2000): Values, ideologies and evidence-based recommendations -- The World Health Report 2000: WHO's health policy drifting off course. In eds. U. Häkkinen and E. Ollila. *The World Health Report 2000: What does it tell us about health systems? Analyses by Finnish Experts*. Helsinki: National Research and Development Center for Welfare and Health (STAKES).
[<http://www.stakes.fi/english/publicati/Publications.htm>]

Oswaldo Cruz Foundation, Brazilian Ministry of Health (2000): Report of the workshop "Health Systems Performance: The World Health Report 2000". 14-12-2000, Rio de Janeiro.

Travassos, C. and M. Buss (2000): The controversial World Health Organization report. Editorial. *Cadernos de Saude Publica*, 16(4): 890-891.

Ugá, A. D., C. M. Almeida, C. L. Szwarcwald, C. Travassos, F. Viacava, J. M. Ribeiro, N. R. Costa, P. M. Buss, and S. Porto (2001): Considerations on methodology used in the World Health Organization 2000 Report. *Cadernos de Saude Publica*, 17(3): 705-712.

Wibulpolprasert, S. and V. Tangcharoensathien (2001): Health systems performance: what's next? *Bulletin of the World Health Organization*, 79(6): 489.

Williams, A. (2000): Science or marketing at WHO? A Commentary on 'World Health 2000'. *Health Economics*, 10(2): 93-100.

Williams, A. (2001): Science or marketing at WHO? Rejoinder from Alan Williams. *Health Economics*, 10(4): 283-285.

World Health Organization (2001a): The methods and data used in the World Health Report 2000: A response to Almeida et al. Geneva, Switzerland: World Health Organization.

World Health Organization (2001b): The methods and data used in the World Health Report 2000: A response to the commentary made by the Brazilian delegation to the Executive Board, 17 and 19 January 2001.

WHO Regional Office for the Americas (2001a): Regional consultation of the Americas on Health Systems Performance Assessment, Background Document: Critical issues in health systems performance assessment. Washington, D.C.

WHO Regional Office for the Americas (2001b): Regional consultation of the Americas on Health Systems Performance Assessment: Final Report. 8-5-2001, Washington, D.C.

REPORT OF SPRG ON HSPA

WHO Regional Office for the Eastern Mediterranean (2001): Report on the Regional Consultation on the Conceptual Framework for Health System Performance Assessment. 9-7-2001, Ain Saadeh, Lebanon.

WHO Regional Office for Europe (2001): Report of the Regional Consultation on Health Systems Performance Assessment. 3-9-2001, Copenhagen.

WHO Regional Office for South-East Asia (2001): Report of the regional consultation and technical workshop on health systems performance assessment. 18-6-2001, New Delhi, India.