



# WORLD HEALTH ORGANIZATION

**EXECUTIVE BOARD**  
**110th Session**  
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## **Assessment of health systems' performance: report of the Scientific Peer Review Group**

### **Report by the Secretariat**

1. *The world health report 2000* introduced WHO's approach to the assessment of health systems' performance. At its 107th session in January 2001, the Executive Board adopted resolution EB107.R8, in which it took note with satisfaction of the measures proposed by the Director-General for strengthening that process, including the establishment of a technical consultation process, bringing together personnel and perspectives from Member States in different WHO regions. Since the adoption of the resolution, six regional consultations, seven technical consultations and one related expert meeting have been held.<sup>1</sup> Another measure taken note of by the Board was the establishment of a small advisory group, including some members from the Executive Board and the Advisory Committee on Health Research, that can help monitor WHO's support for the assessment of health systems' performance.

2. In resolution EB107.R8, the Board also requested the Director-General to initiate a scientific peer review of the methodology for health systems' performance as part of the technical consultation process, including updating on methodology and new data sources relevant to the performance of health systems. To this end, a scientific peer review group was constituted in October 2001, comprising 13 members under the chairmanship of Dr Sudhir Anand (University of Oxford, United Kingdom of Great Britain and Northern Ireland). The Group's report to the Director-General of its first meeting in December 2001 was presented to the Board at its 109th session in January 2002.<sup>2</sup> The Scientific Peer Review Group has now completed its work and the executive summary of its report is annexed.

### **ACTION BY THE EXECUTIVE BOARD**

3. The Executive Board is invited to note the report and its annex.

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<sup>1</sup> Reports and summaries of the consultations are accessible at [www.who.int/health-systems-performance](http://www.who.int/health-systems-performance)

<sup>2</sup> See document EB109/6.

## ANNEX

### **REPORT OF THE SCIENTIFIC PEER REVIEW GROUP ON HEALTH SYSTEMS' PERFORMANCE ASSESSMENT**

#### **INTRODUCTION AND EXECUTIVE SUMMARY**

1. The Scientific Peer Review Group on Health Systems' Performance Assessment was set up by the Director-General at the end of October 2001. The list of members of the Group is attached as an Appendix. Its terms of reference were:

- to review the scientific merit of methods proposed by the WHO Secretariat for the next round of health systems' performance assessment, building on the suggestions made in the technical, regional and country consultations, in ongoing research and the general academic debate;
- to propose revisions, as necessary, to the methods in order to improve their scientific merit, and work with the WHO Secretariat to assess the feasibility and impact of any revision;
- to advise the Director-General of the scientific merit of the final methods emerging from this process.

2. The Group met for the first time in December 2001, and prepared an interim report that was presented to the Executive Board in January 2002.<sup>1</sup> The Group had two subsequent meetings in February and April 2002. Each of the three meetings was attended in person by at least nine members, with most of the others participating by videoconference or teleconference link.

3. This final report of the Group, presented to the Director-General in April 2002, has been prepared with input from every member, and its conclusions and recommendations are unanimous.

4. The Group considers that the objectives of the health systems' performance assessment initiative are valid, and that the provision of comparative data on health system characteristics is a vital component of securing health system improvements. In its deliberations the Group has therefore sought to apply the following overarching criterion to inform its recommendations: that all future such assessment activity should be judged by the extent to which it effects an improvement in health systems' performance worldwide, particularly in countries with low levels of attainment.

5. The Group welcomes the opportunity it has been given to contribute to the assessment process. *The world health report 2000* made an important breakthrough in seeking to provide an integrated quantitative assessment of health systems' performance, and bringing the topic of health systems' performance to the attention of policy-makers worldwide.

6. The Group considers that many of the important issues that have been raised in the public debate about health systems' performance assessment concern strategic policy rather than science. The strategic concerns may be matters on which WHO will need to determine a policy, but are in general

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<sup>1</sup> See document EB109/6.

beyond the remit of the Group, which has, therefore, sought wherever possible to focus only on the scientific aspects of health systems' performance assessment.

7. Within the limited time and resources at its disposal, the Group has sought to review the scientific evidence from five main sources:

- published and unpublished documents and presentations by WHO staff;
- the reports of WHO regional consultations and technical workshops;
- the reports of WHO meetings of experts;
- commentaries by national governments and agencies; and
- published literature in peer-reviewed journals and unpublished working papers by external commentators.

8. In addition, during the review process, the Group has been open to considering comments and criticisms received in the form of personal communications from various quarters – researchers, academics and professionals in the public policy area.

9. The Group wishes to congratulate and thank the Evidence and Information for Policy cluster for the breadth and quality of the materials presented. An enormous volume of material has been made available to the Group, and members of all departments in the cluster were unfailingly helpful in making themselves available and responding to requests for clarification and additional material. Without this responsiveness, our job would have been impossible.

10. The responsiveness of the staff was an immensely encouraging aspect of the process. Paradoxically, however, it did generate problems in the sense that the Group frequently found itself commenting on what one member referred to as a “moving target”. WHO proposals were refined over the course of the review process, leading to the production of numerous new working papers as the review process progressed.

11. The general approach adopted by the Group has been to follow the template set out by the WHO Secretariat in its summary document “Proposed strategies for health systems' performance assessment” (in background documentation for Scientific Peer Review Group Meeting, Geneva, 7 and 8 December 2001). This included 15 topic areas, which correspond to the sections set out in the main body of this report. For each topic we have sought to describe the approach taken in *The world health report 2000*, summarize the criticisms that the report attracted, outline the subsequent response by WHO, and put forward our comments and recommendations.

12. In reviewing the material made available, the Group also developed some overarching recommendations that apply across a wide range of health systems' performance assessment activity. They can be summarized as follows:

- (a) the development of local capacity to provide and interpret comparative data is essential to the effectiveness and sustainability of health systems' performance assessment. It is also likely to be a highly cost-effective use of resources for assessment. Attention should be given to mechanisms of developing capacity at regional and country level, through processes such as the

Enhancing Health Systems Performance Initiative, promoting regional networks, nurturing academic networks, implementing training courses, and encouraging active user engagement.

(b) Health systems' performance assessment should be a dynamic, interactive process in which users and other stakeholders are actively involved at both conceptual and implementation stage. It may induce beneficial responses within nations, but unless carefully designed it has the risk of being ineffective or of inducing undesirable outcomes, such as lack of attention to long-term health system goals. Therefore, in order to achieve its goals, it is imperative that health systems' performance assessment has a positive influence on ministries of health and other key stakeholders. WHO should consider whether it is possible systematically to evaluate the impact of health systems' performance assessment on Member States.

(c) WHO should use rigorous scientific methods in developing and implementing new measurement tools. *The world health report 2000* was criticized for inadequate engagement with, and recognition of, the contributions of experts in the field. The Group recognizes that, like all scientific endeavours, the methods will evolve over time. The Group considers it is imperative that future methodology is developed in collaboration with relevant outside experts, and welcomes the recent consultative processes initiated by WHO. Mechanisms to secure expert engagement include expert panels, independent peer review, and secondments to and from relevant institutions. The Group also encourages WHO to work closely with other international bodies with expertise in this area, such as OECD.

(d) Numerous technical judgements have to be made at every stage of the methodology of health systems' performance assessment. There is a need for WHO to prepare a careful audit trail of such judgements, and to make this available for public scrutiny.

(e) Notwithstanding the need for scientific rigour, the methods used should be as simple as possible, subject to being fit-for-purpose. Health systems' performance assessment introduces many new concepts and methodologies that are challenging for governments and other stakeholders, and any unnecessary complexity is a serious impediment to communication. The final product should be a set of scientifically sound, practical, user-friendly tools that achieve the objectives of the assessment in enhancing health systems' performance.

(f) The research function implicit in health systems' performance assessment should be distinguished carefully from operational implementation. Methods and data sources should be robust, credible, sustainable and cost-effective before full implementation. In the meantime, they should be presented as work-in-progress, and should be developed using the collaborative and open research process advocated above. It may be helpful for WHO to develop explicit criteria against which it can evaluate initiatives being considered for implementation within health systems' performance assessment.

(g) Great care should be taken with the dynamic aspects of health systems' performance. Many actions, particularly in the domain of public health, may have effects on outcomes only after a considerable time lag, and the methodologies used should reflect this complication. Furthermore, policy-makers are naturally concerned with national trends over time. Therefore, as methodologies and data sets change, there will arise an important need to ensure that consistent time-series of data are made available to countries.

(h) There is an urgent need to improve the quality and continuity of the data on which health systems' performance assessment is based. Detailed recommendations are given in relevant

sections of this report. Particularly important means to this end will include nurturing the development of sustainable health-information systems within countries, development of user skills and capacity, implementation of new data collection tools, and use of cost-effective quality assurance instruments.

(i) The world health survey is a particularly important new development within health systems' performance assessment. The Group welcomes the introduction of the survey, acknowledging its potential to inform diverse constituencies concerned with the performance of health systems. The Group recommends that developmental work to ensure its effectiveness and reliability must continue over time, and its detailed recommendations are given in section XII (see below). The Group noted that the survey should, wherever possible, build on existing survey platforms, be useful for local purposes, and not put an unsustainable burden on local capacity for data collection. The Group also notes that the survey is likely to be of greatest benefit in countries with poor information systems and low levels of health system attainment. It therefore recommends that WHO gives priority in the world health survey and its implementation to the needs of such countries.

(j) The Group welcomes the WHO proposal to develop a parsimonious set of indicators related to the financing, service provision and resource generation functions (in the form of a "dashboard" approach). The Group offers detailed recommendations in the relevant sections of this report, but considers that the development of a set of reliable, valid, cost-effective and comparable indicators of health system functions is an urgent requirement to enhance the usefulness of health systems' performance assessment.

(k) WHO should consider publishing a report card for health systems' performance assessment for every country, which offers a diagnostic tool in the form of a commentary on issues such as measured performance and prospects for improvement. The exact content of these should be determined in consultation with Member States, and should reflect the criterion of cost-effective use of WHO resources. The Group suggests that the report cards could include a commentary on data quality and assumptions, progress made since the last assessment, and aspects of performance that appear to merit further investigation.

(l) The Group has examined carefully the role of "league tables" of health systems' performance within the assessment process. It considers that the decision as to whether or not to publish such league tables is ultimately a policy and strategic decision for WHO rather than a technical issue. However, there were serious technical questions raised about *The world health report 2000* methodology relating to the weights used in the composite index, the scaling of the component indicators and the treatment of missing data. These criticisms have been documented in the subsequent sections of this report, which also give our detailed response to WHO's proposals for addressing these criticisms.

13. The following sections report the results of our detailed scrutiny of each of the 15 topic areas. They bear testimony to the extraordinary breadth and richness of the agenda unleashed by *The world health report 2000*. Within the limited time and resources available, the Group has found it extremely challenging to cover all the issues raised. We nevertheless hope that the treatment of the topics can serve as an adequate basis for informing progress on health systems' performance assessment in the near future. We have sought to reflect the major issues raised in *The world health report 2000*, and have made numerous detailed recommendations. The main messages from our review are now briefly noted under the 15 headings.

- I. The Group broadly endorsed the **framework for health systems' performance assessment**, but in section I makes some detailed comments designed to clarify and refine the concept.
- II. The Group noted the extensive work that has already gone into the development of measures of **health systems' inputs**, in the form of the national health accounts. Section II offers a large number of detailed observations and suggestions for improvement.
- III. The Group welcomes the attention now placed on the **resource generation function**, but considers current WHO thinking to be at an early stage of development. Section III offers some preliminary observations, but we recommend that this topic should be developed in full consultation with relevant users and experts.
- IV. The Group considers that the **service provision and coverage function** is particularly important for nations seeking to understand the reasons for their measured level of health systems' performance. In particular, WHO has started to develop an ambitious methodology that contains promising implications for operational measurement. However, the methodology will need continued elaboration, refinement, and clarification.
- V. The Group agrees that WHO should continue to develop operational measures relating to the **financing function**. There is a need for research that provides evidence on how the financing function affects health systems' performance.
- VI. The Group welcomes the emphasis on the **stewardship function** in *The world health report 2000*. Although it considers that the measurement of stewardship poses serious challenges and could be a sensitive area, the Group suggests that WHO should develop and test the proposed new tools.
- VII. Methodology for the measurement of **average level of population health** is relatively advanced. Technical issues have been raised concerning the estimation of health-adjusted life expectancy (HALE), and these are treated in detail in sections VII and XIII.
- VIII. The concept and measurement of **health inequality** have generated some of the most contentious debates arising from *The world health report 2000*. This goal of health systems' performance assessment poses epistemological as well as policy challenges, and introduces serious practical measurement difficulties. The Group is not aware of any current data sources that allow international measurement of inequality in the chosen measure for "average level of population health", namely health-adjusted life expectancy (rather than inequality in child survival to age two as used in *The world health report 2000*). Hence, the Group recommends that the "pure health inequality" approach to examining "health inequalities" should be developed further at both a methodological and statistical level, and acknowledges that measuring "socioeconomic inequalities in health" is a valuable additional approach.
- IX. The treatment of **level and distribution of responsiveness** in *The world health report 2000* was weak, relying on key informant surveys administered in only a fraction of Member States. The introduction of the world health survey will for the first time provide population-based information on responsiveness. However, further work is required to define the concept of responsiveness and identify its importance in different cultural settings and at different stages of development.

- X. The concept and measurement of the **fairness of financial contributions** have attracted a great deal of debate since *The world health report 2000* was published. Although there are some as yet unsettled technical questions, many of the concerns expressed in the debate relate to policy choices that WHO will have to make and defend.
- XI. The Group considers that the decision on whether or not to continue to publish a **composite index** of health systems' performance is ultimately a policy decision for WHO rather than a technical issue. However, there were serious technical questions raised about *The world health report 2000* methodology, which are addressed in section XI.
- XII. Data inadequacies were a chief source of concern in commentaries on *The world health report 2000*. In response, WHO has launched a major initiative on **data quality and data collection strategies**, including the world health survey. As noted above, the Group welcomes this development, but has raised serious concerns that are detailed in section XII. It recommends that WHO makes intensive efforts to obtain household survey data in as many countries as possible, and reduces the need to estimate missing data to a minimum.
- XIII. The Group considers that the methods proposed to achieve **cross-population comparability** are necessary and innovative. The methodology represents a major advance in comparing self-reported survey responses of different population groups (countries). The methods are still at a developmental stage, and require extensive further testing for robustness.
- XIV. The Group acknowledges the usefulness of seeking to measure health system **efficiency**. However, the measurement of efficiency gives rise to a large number of technical problems that have yet to be resolved, as explained in section XIV. This work requires further development and consultation, and WHO should recognize that it is work-in-progress in any tables it produces.
- XV. The Group considers that **enhancing policy relevance** is an essential aspect of the exercise of health systems' performance assessment, without which the finest technical endeavours will be irrelevant. WHO has made a number of recommendations for country support and capacity building, all of which appear to offer promise. Their implementation will require careful design and evaluation.
14. The Group concludes that the independent peer review process has been illuminating and valuable to both WHO and members of the Group, and that the WHO consultation process has already enhanced the effectiveness of the health systems' performance assessment initiative. It believes that adoption of these recommendations will further enhance the longer-term effectiveness of assessment, and is pleased to note that many of its comments and suggestions during the review process have already been incorporated into the WHO methodology. More generally, it hopes that the usefulness of the peer review process will encourage WHO to embrace the principle of engaging with independent outside expertise on specific health systems' performance assessment topics, whenever appropriate.

## APPENDIX

**MEMBERSHIP OF THE SCIENTIFIC PEER REVIEW GROUP ON  
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<sup>1</sup> Replaces Dr John Eisenberg, deceased.

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