Assessment of health systems’ performance: report of the peer review

Report by the Secretariat

1. WHO’s approaches to the assessment of health systems’ performance were introduced in *The world health report 2000*. At the 107th session of the Executive Board, in January 2001, the Director-General was requested to establish a technical consultation process on methods for assessing health systems’ performance, bringing together personnel and perspectives from Member States in different WHO regions, and to establish a small advisory group, including some members from the Executive Board and the Advisory Committee on Health Research, to help to monitor WHO’s support for the assessment of health system performance. In its resolution EB107.R8 on health systems’ performance assessment, the Board recognized the importance both of health systems in improving health conditions and the quality of life, and of evaluating their performance.

2. The Board took note of proposals to establish a technical consultation process. Six regional consultations, seven technical consultations and one related expert meeting have now been completed. Various issues were debated and several options were examined.

3. 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, after most of the consultations had been completed, comprising 13 members under the chairmanship of Professor 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 is annexed.

4. The specific task of the small advisory group to help monitor WHO’s support for the assessment of health systems’ performance (see paragraph 1 above) was to examine the way in which work has been taken forward by the Organization, and to recommend next steps, including ways in which this work can be of greatest benefit to Member States. At its meeting on 6 October 2001, members of the

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1 Reports and summaries of the consultations will shortly be accessible at www.who.int/health-systems-performance

2 See document A54/DIV/7.
group\(^1\) examined the process and gave it unequivocal support. They also identified the complex task being addressed by the Scientific Peer Review Group.

5. The members of the advisory group also debated the current timetable for completion of the next draft report on assessment of health systems’ performance by May 2002 for publication, after consultation, in October 2002. The group presented two options for consideration: either to follow the timetable and produce the second report on assessment of health systems’ performance in 2002, or to produce a different type of report in October 2002 that would summarize the work undertaken in relation to resolution EB107.R8 and indicate that the next reporting on country health systems’ performance would follow in 2003.

6. The Director-General wishes to express her appreciation to members of both the advisory group and the Scientific Peer Review Group for their reports.

**ACTION BY THE EXECUTIVE BOARD**

7. The Board is invited to note the above report and that of the first meeting of the Scientific Peer Review Group.

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\(^1\) The Advisory Group on Health Systems’ Performance Assessment comprised Executive Board members – Dr M. Mbaiong (Chad), Dr M. Di Gennaro (Italy), Professor V.J. Grabauskas (Lithuania) and Mrs M. Abel (Vanuatu, Chairman of the Board), and members of the Advisory Committee on Health Research – Dr C. Victora (Brazil) and Dr G. Sen (India), with Dr M. Fathalla (Chair of the Advisory Committee on Health Research).
INTERIM REPORT OF THE SCIENTIFIC PEER REVIEW GROUP
ON HEALTH SYSTEMS’ PERFORMANCE ASSESSMENT

1. The Scientific Peer Review Group on Health Systems’ Performance Assessment was constituted by the Director-General at the end of October 2001, and held its first meeting on 7 and 8 December 2001 at WHO headquarters in Geneva. The list of 13 members of the Group is attached as Appendix 1. Four members were unable to attend the first meeting in person, but three of them participated in the meeting via a video-conference or tele-conference link.

2. WHO’s Secretariat prepared an extremely full set of background documents, which were received by members of the Group about one week in advance of the meeting (an annotated bibliography is available on request). Given the very large volume of material and the short time-scale, members were able to review only parts of the summary document (itself almost 100 pages long). In addition, members benefited from presentations by WHO staff members on selected topics related to assessment of health systems’ performance at the December meeting (the agenda of the meeting is attached as Appendix 2).

3. The Group was impressed by the quality of the presentations by WHO staff members, and by the comprehensive nature of the documents submitted. In addition to The world health report 2000: Health systems: improving performance, the numerous consultations, official reports, and related literature (published and unpublished) provided an abundance of important material for members of the Group.

4. The Chair opened the meeting by stating his view that the Group was open to consideration of comments and criticisms of health systems’ performance assessment from all quarters – researchers, academics, policy-makers and governments. However, the Group should adopt a constructive approach in offering suggestions to the Director-General to take forward assessment of health systems’ performance. He reminded members of the Group’s terms of reference:

   - to review the scientific merit of methods proposed by the WHO’s 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 to work with WHO’s 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.

5. The Chair also reminded members that they had been selected in their personal capacity, and not as representatives of their institutions or governments. The Group’s task was different from that of the Advisory Group on Health Systems’ Performance Assessment, which was reviewing the process of consultation in regard to assessment rather than its technical content.

6. Since publication of The world health report 2000 the database has been improved considerably, both in terms of coverage and quality. The Group welcomed the introduction of the
World Health Survey, acknowledging its potential to inform diverse constituencies concerned with the performance of health systems. Initial comments from members of the Group included the issue of surveying populations that were not resident in households, such as refugees and those living in institutions. Where appropriate, modifications of the sampling methodology may be required in order to accommodate such populations in the surveys. On health status and responsiveness, the Group noted that the survey methodology might need to be modified in order to obtain adequate information on – and from – children (especially girls). The Group also noted that WHO’s efforts to collect data should build to the extent possible on existing survey platforms in Member States.

7. The Group noted the general value of seeking to disaggregate data, where possible, to geographical units of analysis that are smaller than the country, for example, administrative districts. As well as greatly improving the value of the data to individual countries, this development would lead to improved potential for more secure statistical modelling by WHO and others.

8. The Group considered the hierarchical-ordered probit model to adjusting survey responses for systematic variations in peoples’ attitudes. This model represented a major advance in achieving cross-country comparability of self-reported data from surveys, and Group members agreed that the methods were both innovative and necessary. However, a thorough review of the approach would have to await the Group’s final report. The model depended critically on the cross-cultural reliability and consistency of the vignettes, and the Group noted that work was under way to test the vignettes in different settings. In response to a question on the assumption of unboundedness of the latent variable (e.g. mobility) in the model, WHO staff agreed to check the robustness of their results to restricting the latent variable to a finite interval, which seemed to be a more realistic assumption for the domains considered.

9. Although substantial work was being done to achieve cross-country comparability of survey data, the Group noted that subnational comparisons at a point in time, and comparisons within a country over time, were important to monitor progress – especially for countries engaged in health-sector reform. The Group felt it was important to focus on that issue as well, and to make necessary efforts to ensure that comparison within a country over time was not compromised while new indicators were being considered and new methodologies developed.

10. After hearing presentations on health system functions and on strengthening the policy relevance of assessment, the Group welcomed the proposal that WHO should develop a parsimonious set of indicators related to the financing and service provision functions (a “dashboard” approach), and recommended that it should continue to develop a set of reliable, valid and comparable indicators.

11. Work had been undertaken on health system functions in response to suggestions that policy-makers interested in improving performance needed indicators of the basic system functions. That was an important area in helping countries understand their performance. The Group noted that under the resource generation function, drugs and consumables were missing from the current list of indicators. It also requested to see some measurement of health research in a country, especially the efficiency of investment in research.

12. The new function of stewardship raised important questions about the types of resources, especially human resources, which were necessary to ensure that the system performed well. That needed to be developed further, since different types of resources may be necessary for the stewardship function in comparison with other functions. It was also noted that development of quantitative indicators of stewardship might be difficult, and that qualitative assessments might prove useful in that area.
13. There was a need to look at resource generation in a systemic way. The distribution of resources within countries and subsystem issues were important. The Group asked whether the framework used to evaluate the whole health system could be applied to the “subsystem” of resource generation. That might not be possible because of the fundamentally different nature of the indicators of functions. Although effective coverage of critical interventions was a clear instrumental goal, with well-established links to the attainment of intrinsic goals, most of the other indicators for the functions did not fall in the same category. There were hypothesized relationships between those indicators and the attainment of intrinsic goals, which could only be validated through systematic collection and analysis of the evidence. If possible, assessment of the goodness of the resource generation function should take into account the quality and the quantity of resources relative to needs. Links with other functions also needed to be explored, for example, relating resource generation with use in providing services.

14. After a presentation of proposed indicators that had been developed to describe the financing function, clarification was sought about the aspects that were covered by the proposed indicators, and whether they are consistent with the broad definition of the system used in the framework. For example, indicators of the extent of financial risk pooling largely covered curative services, but the way the system financed nonpersonal services and intersectoral action was also important. Methods of assessing how performance in one function might influence other functions should be considered.

15. The policy relevance of the financing indicators was discussed, including how those indicators could be made more relevant to managers at lower levels of the system. There was also discussion about the type of indicators that might be most useful to policy-makers. For example, it was suggested that concentration indices were difficult for policy-makers to understand, and that indicators such as the percentage of people who make catastrophic payments might be both simpler and more relevant.

16. Effective coverage of critical interventions was discussed under the service provision function. That was a key instrumental variable that was closely linked to the attainment of intrinsic goals, as well as to the efficiency of attainment. Some Group members felt that the list of currently proposed indicators was longer than necessary; with too many indicators there was a risk that countries might not measure them routinely or seriously. The measurement strategies and indicators should be comprehensible to policy-makers, even if background research required them to be rigorously defined and elaborated as scientific constructs.

17. The proposal to develop a framework for the measurement of “effective coverage” was welcomed by the Group. The presentations included an ambitious methodology that was felt to contain promising implications for operational measurement. None the less the methodology was still experimental and needed further development, refinement and clarification. The Group would assess the new concept of effective coverage in its ongoing review, particularly the mathematical expressions and technical details used in defining it. It was suggested that the term “individual probability of receiving an intervention” might be confusing to those who were used to thinking of coverage as an ex-post concept applied at the level of a group (rather than to an individual). Instead, it might be more intuitive to think of coverage as referring to the proportion of people from a group with the same set of characteristics who receive an intervention.

18. The face validity and applicability of the indicators to policy-making and public communication should be important criteria for selecting the indicators. It was also felt that the methods for collecting information, and the analytical work needed to produce estimates and report on the indicators, should not be too burdensome to countries. For the measurement of coverage, consensus had yet to be reached on the criteria for choice of interventions. Furthermore, it was likely that the nature of the
interventions considered relevant might vary between different types of health system, depending on considerations such as levels of expenditure, geography and climate.

19. The elaboration of a framework for functions analysis would allow a better understanding of the indices of goal attainment and performance, and would enable policy-makers to improve health-sector performance. Member States were expecting policy guidance from the next round of assessment, and WHO should respond to the expectations of policy-makers in terms that were familiar, straightforward, and easy to interpret. The correlations of instrumental goals and functions with intrinsic goals and performance indices needed further investigation. That would allow selection of a set of indicators that were relevant to the considered function, and at the same time were correlated with the ultimate performance indices.

20. The Group noted that numerous technical judgements had to be made at every stage of the assessment methodology. There was a need for WHO to prepare a careful audit trail of the judgements that had been made, and to make it available for public scrutiny. It was important that the refinement of the assessment methodology and the background research that guided it should be made as transparent as possible to Member States.

21. On strengthening the policy relevance of the assessment, the Group felt that it was important to support the building and strengthening of capacity of Member States in order to improve their ability to monitor the performance of their health systems. There was need for WHO to collaborate with countries in developing efficient mechanisms to collect vital statistics data and other relevant health information. The Group pointed out the importance of ensuring that the assessment served to strengthen national health information systems where necessary. However, Group members recognized that WHO did not have the capacity – at least at headquarters – to meet all the demands for direct country support for assessment of health systems’ performance.

22. Apart from the focus on quantitative indicators, it was also important that decision-makers should understand how health systems worked. One difficult area to handle would be the interface between indicators and the organization of health systems’ functions. When moving from diagnosis to policy decisions, policy-makers could be faced with an overwhelming amount of information. It would be useful to develop techniques of showing the overall potential effects of different policy options.

23. Members emphasized that WHO needed to ensure that the Group’s findings were communicated to the appropriate audiences through suitable channels. It was important that the public should understand the key messages from assessment of health systems’ performance. WHO would need to consider the best way to handle public relations at both global and national levels for future rounds of assessment.

AGENDA AND TIMETABLE OF WORK OF THE SCIENTIFIC PEER REVIEW GROUP

24. The work of the Group will evolve over time in an effort to give assessment of health systems’ performance the full appraisal that this important initiative demands. Because of time constraints, many of the fundamental approaches in the assessment could not be addressed at the first meeting of the Group, but will be the subject matter of future meetings.

25. The Group agreed to structure its substantive review of the assessment according to the chapter headings and sections of WHO’s summary document. The Group will assign primary responsibility to
each member for a different area, including review of all relevant materials generated inside and outside WHO. Each member will produce a draft review and evaluation of the area(s) for which he or she is responsible, including detailed justification of any proposals or recommendations being put forward. These documents will be considered at the next meeting of the Group.

26. Two further meetings of the Group are planned between January and April 2002 in order to discuss the draft review(s) of each member, and to consider the proposals and recommendations that the Group wishes to include in its final report. After the first of those meetings, members will be responsible for incorporating the comments of the Group and preparing a final report on their area(s).

27. At its last meeting, the Group will finalize its report and executive summary, and present it to the Director-General.
APPENDIX 1

MEETING OF THE SCIENTIFIC PEER REVIEW GROUP
ON HEALTH SYSTEMS’ PERFORMANCE ASSESSMENT

WHO, Geneva, 7 and 8 December 2001

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APPENDIX 2

MEETING OF THE SCIENTIFIC PEER REVIEW GROUP ON HEALTH SYSTEMS’ PERFORMANCE ASSESSMENT

7 and 8 December 2001

AGENDA

Day 1: 7 December 2001

09:30-10:00 Opening of the meeting, Dr Brundtland, Director-General and Professor Anand, Chair of the Peer Review Group
   Introductions, purpose of meeting, organization of work

10:00-10:15 Review of documentation
   Dr C. Murray, EXD/EIP

10:15-10:45 The framework for health system performance assessment
   (a) Briefing on the proposed framework
   (b) Peer Review Group discussion

11:15-12:00 Framework for health performance assessment (continued)
   Discussion

12:00-12:30 Data quality and data collection strategies
   (a) Description of data problems inherent in health system performance assessment and ways of improving data quality, including the World Health Survey
   (b) Peer Review Group discussion

14:00-15:00 Data quality and data collection strategies (continued)
   Discussion

15:00-15:30 Cross-population comparability of survey data
   (a) Description of approaches developed and tested in response to consultative process (e.g. vignettes, measures tests and the hierarchical ordered probit model)
   (b) Peer Review Group discussion

16:00-17:00 Cross-population comparability of survey data (continued)
   Discussion

17:00-18:00 Peer Review Group discussions
Day 2: 8 December 2001

09:00-10:30 Health system functions: effective coverage and financing
   (a) Briefing on possible indicators of the performance of the service delivery
       and financing functions
   (b) Peer Review Group discussion

11:00-12:30 Strengthening the policy relevance of health system performance assessment
   (a) Briefing on possible methods and initiatives to increase policy relevance
   (b) Peer Review Group discussion

14:00-15:30 Peer Review Group discussion

16:00-17:30 Peer Review Group discussion (continued)