

STATISTICAL COMMISSION and  
ECONOMIC COMMISSION FOR EUROPEWORLD HEALTH ORGANIZATION  
REGIONAL OFFICE FOR EUROPE

CONFERENCE OF EUROPEAN STATISTICIANS

Fourth ECE/WHO Joint Meeting on Health Statistics  
(20-23 October 1986)REPORT OF THE MEETING HELD IN GENEVA,  
20-23 OCTOBER 1986

## I. INTRODUCTION

1. The fourth ECE/WHO joint meeting on health statistics was held in Geneva from 20 to 23 October 1986. It was attended by participants from: Belgium; Canada; Finland; France; Germany, Federal Republic of; Greece; Hungary; Ireland; Italy; Netherlands; Norway; Spain; Sweden; Switzerland; and the United Kingdom. A representative of the European Economic Community also attended the meeting.
2. The provisional agenda (CES/AC.36/26; EURO/ICP/HST/116/26) was adopted.
3. Mr. J.A. Rowntree (United Kingdom) was elected Chairman and Mr. J. Korom (Hungary) was elected Vice-Chairman.
4. The meeting had before it the following documents:
  - (a) Applicability of the ICIDH to survey questions concerning disablement, submitted by the WHO Regional Office for Europe (CES/AC.36/27; EURO/ICP/HST/116/27);
  - (b) Development and use of indicators related to the WHO Regional Strategy for Health for All, submitted by the WHO Regional Office for Europe (CES/AC.36/28; EURO/ICP/HST/116/28 and Add.1);
  - (c) Calculating indicators of the performance of health services - the case of Cyprus, prepared by the Department of Statistics and Research of the Republic of Cyprus (CES/AC.36/29; EURO/ICP/HST/116/29);
  - (d) Review of methodological problems and national experiences in calculating indicators of the performance of health services in Finland, prepared by the National Public Health Institute of Finland (CES/AC.36/30; EURO/ICP/HST/116/30);
  - (e) Methodological problems and experience in calculating indicators of the performance of health services in the USSR, prepared by the Central Statistical Office of the USSR (CES/AC.36/31; EURO/ICP/HST/116/31);

8954 *pa*

- (f) . Calculating indicators of the performance of health services - the case of the United Kingdom, prepared by the Department of Health and Social Security of the United Kingdom (CES/AC.36/32; EURO/ICP/HST/116/32);
- (g) Some methodological problems and experiences in setting up and utilizing information systems for the planning, management and evaluation of health services in Finland, prepared by the National Board of Health of Finland (CES/AC.36/33; EURO/ICP/HST/116/33);
- (h) Annual statistics on public hospitals, prepared by the Department of Statistics, Studies and Information Systems of the Ministry of Social Affairs and Employment of France (CES/AC.36/34; EURO/ICP/HST/116/34);
- (i) Italian experiences in surveys of the health condition of the population and of the use of health services, 1980 and 1983, prepared by the Central Institute of Statistics of Italy (CES/AC.36/35; EURO/ICP/HST/116/35);
- (j) Health information in the Netherlands - experience and developments for health policy and evaluation, prepared by the Central Bureau of Statistics and the Ministry of Welfare, Health and Cultural Affairs of the Netherlands (CES/AC.36/36; EURO/ICP/HST/116/36);
- (k) Setting up information systems for the planning, management and evaluation of health services - the case of the United Kingdom, prepared by the Department of Health and Social Security of the United Kingdom (CES/AC.36/37; EURO/ICP/HST/116/37);
- (l) Progress by international organizations in the field of health accounts, note by the ECE secretariat (CES/AC.36/38; EURO/ICP/HST/116/38 and Add. 1-2);
- (m) Health accounts and methods of financing medical care, submitted by the WHO Regional Office for Europe (CES/AC.36/39; EURO/ICP/HST/116/39); and
- (n) Methodological problems and national experience in setting up and utilizing information systems for the planning, management and evaluation of health services in Bulgaria, prepared by the Ministry of Health of Bulgaria (CES/AC.36/40; EURO/ICP/HST/116/40).

5. The following material (in English only) was also distributed during the meeting:

- (i) material relating to statistics on health services, excerpted from "Concepts and Methods for Integrating Social and Economic Statistics on Health, Education and Housing" (United Nations publication, Sales No. E.86.XVII.23);

- (ii) a note prepared by the United Nations Statistical Office on applications of the ICIDH in the development and analysis of household surveys;
- (iii) the report of the WHO Meeting of Principal Investigators for Testing the Classification of Impairments, Disabilities and Handicaps, held in June 1985 (DES/ICIDH/85.23); and
- (iv) the publication "Development of Statistics of Disabled Persons: Case Studies" (United Nations publication, Sales No. E.86.XVII.17).

In addition, a copy of the following Statistics Canada publications was made available to the participants for reference purposes: "Demographic and Health Indicators: Presentation and Interpretation" (Catalogue No. 82-543); "Report of the Canadian Health and Disability Survey, 1983-1984" (Catalogue No. 82-555); and "Annual Return of Hospitals - Hospital Indicators, 1983-1984" (Catalogue No. 83-233).

## II. POSSIBILITY OF ADAPTING THE ICIDH FOR USE IN HOUSEHOLD SURVEYS

6. The Meeting considered this agenda item on the basis of a paper prepared by the secretariat of the WHO Regional Office for Europe (CES/AC.36/27; EURO/ICP/HST/116/27), and of supplementary material from the United Nations Statistical Office and the World Health Organization (items ii-iv in para. 5 above) which was distributed to participants as background information for their discussion on this topic.

7. The Meeting noted that the United Nations Statistical Office, in co-operation with the United Nations Centre for Social Development and Humanitarian Affairs, is developing an international data base on disability for use in monitoring the World Programme of Action Concerning Disabled Persons. The data base endeavors to bring together in a standardized format on impairments and disability collected in censuses and surveys published in over 50 different national sources. The participants welcomed this initiative, and noted that once the data base becomes available it could constitute a valuable means of assessing the extent to which the ICIDH could be used effectively in censuses and surveys.

8. Several experiences in measuring disabilities and handicaps in the population on the basis of household or health surveys and of using filtering devices (e.g. special registers and questions on census forms) to identify the disabled population were described. A number of problems were mentioned concerning the use of the ICIDH and the design of measurement instruments relating to the concepts of activity and role in disability and handicap. There was general agreement that the concepts were vague and that they needed to be clarified. A further problem concerned the formulation of questions concerning disability and the extent to which certain questions might overlap. Similar problems arose when the information obtained was classified according to the provisions of the disability axis of ICIDH.

9. There was general agreement that more information was required concerning problems encountered by persons in daily living and whether

assistance or aids were needed. Further research needed to be carried out to establish where problems arise before recommendations for amendment to the classification of handicaps could be made.

10. Several participants provided details on ICIDH-related activities in their countries. Some of the problems mentioned included the difficulty in relating the Disability classification to the OECD long-term disability indicator, the relative complexity of the classifications for use in household surveys and the lack of provision for temporary disability. One common experience was that information concerning disability was easier to obtain in surveys than information regarding impairment.

11. The discussion revealed that two major benefits that had stemmed from the publication of ICIDH in 1980 were that it focused attention on the main issues and that it served to provide a structured thought-process for the formulation of survey questions and to organize information recorded in administrative files.

12. The Meeting noted that while the three concepts of Impairments, Disabilities and Handicaps had proved to be difficult to translate into other languages because the equivalent words did not have the same specific meanings as defined in the original English-language version, there had been a beneficial effect in terms of standardization.

13. The Meeting also noted that in order to co-ordinate activities concerning the ICIDH, WHO intended to establish in the near future a collaborating centre which would carry out research into disablement and act as a focal point for the exchange of information.

### III. SOCIAL INDICATORS RELATED TO THE WHO REGIONAL STRATEGY FOR HEALTH FOR ALL BY THE YEAR 2000

14. The Meeting considered this topic on the basis of the document prepared by the WHO Regional Office for Europe (CES/AC.36/28 and Add.1; EURO/ICP/HST/116/28 and Add.1). Supplementary information was provided to the participants by the WHO secretariat on the planning of the Regional Office regarding the introduction and evaluation of health indicators in the Region. It was explained that a revised list of indicators is to be introduced, and that this revision has been based on an evaluation conducted in 1985. It was further explained that the Regional Committee will take a decision on the new list in 1987, and that comments on the new list can be considered if they are submitted to the WHO Regional Office for Europe by the Beginning of February, 1987.

15. Additional information was given to the Meeting regarding the revised list. It provides more precise definitions of indicators than the earlier list and stresses the relationships between them. The 1985 evaluation showed that several countries experienced difficulties in obtaining adequate data, and that is why the revision suggests all possible sources of available data being used to meet the need of indicators (including surrogates when the data is not available) and stresses the importance of new data collections being initiated when required.

16. A number of countries reported that they experienced particular difficulties in providing quantitative information on environmental health hazards including occupational diseases as well as information on health services based on primary health care.

17. Health surveys were cited as an area requiring substantial efforts of development. They provide most of the data related to lifestyles and perceived health and a great deal of data about the consumption of health care services by both individual and household characteristics. The Meeting noted that these types of indicators will not become available unless survey data of this kind is gathered. It also noted that the same situation applies to social variables like housing, which are definitively linked with health status. It was suggested in this connection that the population of developed countries is generally sufficiently well-informed about its medical problems that it could be directly questioned on such matters.

18. Several participants stressed the importance of health surveys for the measurement of consumers' satisfaction in the health care sector, and they noted that survey respondents seem to generally welcome questions of this kind. The Meeting recognized however that difficulties frequently arise when attempting to analyze this information, especially when considering the very high level of satisfaction observed in this type of survey.

19. The importance of standardized definitions of indicators and the related data was also addressed by the participants. The long standing role of WHO was fully recognized, but participants suggested that more should be done in order to promote and implement these standardized definitions. In this respect, a representative of the WHO stressed the fact that the indicators defined are intended to monitor trends rather than to provide a basis for international comparison and that in this sense it was more important to ensure consistency in the definitions over time rather than between countries.

20. The participants agreed that the area of social indicators deserves special attention, particularly in view of the current difficulties many countries are experiencing in developing and using the so-called qualitative indicators. Several participants reported on the national experiences they have had in developing these types of indicators.

21. The Meeting provided the following recommendations to the WHO secretariat; and noted in doing so that the WHO would require collaboration from countries in undertaking some of this work:

- (a) the efforts aimed at the diffusion of standardized definitions of indicators should be continued and developed;
- (b) the role of health surveys should be further developed;
- (c) the need of well-designed social indicators is still unmet, and hence special attention should be devoted to this area;
- (d) efforts should be made to prioritize the list of indicators to assist countries in developing required new indicators;

- (e) consideration should be given to the possibility of producing a compendium of indicators compiled by different countries in the region; and
- (f) methods used in measuring consumers' satisfaction and the quality of services should be developed.

#### IV. PROBLEMS IN CALCULATING INDICATORS OF THE PERFORMANCE OF HEALTH SERVICES

22. The Meeting considered this topic on the basis of documents prepared by Cyprus, Finland, the USSR and the United Kingdom (documents c - f in para. 4 above).

23. The discussion revealed that although many countries in the region have some experience in attempting to calculate indicators of the performance of health services, comparatively few have developed an extensive list of indicators relating input (i.e. human and financial resources) to output (health services provided). The participants agreed that indicators such as these were the most useful for managers of health services to have because they assist the managers to evaluate the delivery of services at national, regional and local levels and to manage resource allocations more effectively.

24. Several problems involved in developing and using performance indicators were referred to during the discussion. Many related to difficulties involved in making comparisons between indicators calculated for different geographical areas as a result of differences in terminology, classifications, the indicators selected, sample designs, catchment populations and population groups (e.g. patients) covered. The lack of a widely-accepted definition of performance indicators and the resources required to do the basic developmental work associated with the preparation of extensive indicator lists were other problems that were referred to.

25. Several participants stressed the importance of developing simple indicators and ones which can be standardized (e.g. for patients of the same age and sex) to aid comparisons of results for different areas.

26. The Meeting noted with interest that one country had organized its indicator package in logical hierarchical structures within each major group of indicators so that users could focus their attention on only those indicators which were likely to be of interest to them. The participants agreed that there was merit in this approach, and particularly where there is a large number of indicators in the total indicator package.

27. Several participants emphasized the importance of developing indicators from data already being collected for other purposes, so as to minimize costs and respondent burden. There was general agreement, however, that in some cases the most useful types of indicators might necessitate additional data collections.

28. One country reported that it disseminated its indicators to managers of health services and other users primarily by means of a small number of floppy disks intended to be used on the users' own user-friendly microcomputers. It also reported that it had obtained generally favourable feedback from health service managers concerning this innovation, but that other specialized users

were less satisfied with it because they found it slow to use. To accommodate the different needs of its users, two different versions of the indicator package were prepared, a basic one and a more sophisticated one for more specialized users. In addition, some hard copy tables are produced for users who prefer that method of dissemination.

29. The Meeting noted that the increasing trend towards decentralization in some countries in the region had created a concern for standardization of information at all levels.

30. In concluding its discussion on this item, the Meeting agreed that health services managers can be expected to request national statistical services to produce additional and more sophisticated types of performance indicators in the future to assist them in evaluating the delivery of services at all levels and in managing their resource allocations more effectively. The Meeting noted in this connection that the Health for All by the Year 2000 programme will also foster requests for indicators in order to monitor and evaluate the targets and the resources allocated to achieve them. The participants also agreed that as more work on the development of indicators is done by countries, further progress is likely to be made in relating input not just to the services provided but also to the outcome and quality of the services and to health statuses.

#### V. UTILIZATION OF INFORMATION SYSTEMS FOR THE PLANNING, MANAGEMENT AND EVALUATION OF HEALTH SERVICES

31. The Meeting considered this topic on the basis of reports submitted by Bulgaria, Finland, France, Italy, the Netherlands and the United Kingdom (documents g - k and n in para. 4 above).

32. The reports which were submitted and the discussion which took place under this item demonstrated that there are many different groups directly and indirectly involved in managing the health sector, ranging from bodies representing different levels of government to professional medical associations and hospital administrators. The various bodies are often interested in different facets of the health sector, and have different and sometimes competing information needs.

33. Several participants mentioned that health costs constituted a sizable proportion of governmental budgets and that there have been increased demands in their countries to account for the uses to which health resources are being put and to justify requests for additional resources. These demands as well as the demands for improved planning, monitoring and evaluation of the health sector have resulted in statistical offices being requested to provide additional and new types of information at the national, regional and local level that can be used to manage health services more effectively.

34. There was general agreement that integrated computerized information systems provided the greatest potential for providing health service managers, government bodies and other users with the vast array of information they required. There was also general agreement that although such information systems are slow, costly and difficult to establish, they are well worth the investment involved in developing them.

35. National experiences varied in terms of the types of information that can be obtained from the systems currently in place in countries. Several participants indicated that some of the core types of information available from such systems should include such diverse items as the human, financial and physical or material resources involved, various types of services rendered and information on who provided the services, who consumed the services and who financed them.
36. The discussion revealed that the data supplied as input to these systems come from many different sources, including the population at large, physicians, hospitals, employers, social insurance bodies, professional associations, financial institutions, etc, and that it ranges from quantitative and objective information to qualitative and subjective information. Several participants also referred to the negative consequences that can be expected to result from this situation in terms of data quality and of the lack of comparability in the terms, definitions and classifications employed.
37. National experiences also differed with reference to the nature and types of co-operation involved between different levels of government, for some countries reported that there was good co-operation and even sharing of some types of collected information between different levels of government whereas others reported that some local governments failed to co-operate fully with the central government and that they sometimes resisted its requests to provide it with access to de-identified data they had collected. Several participants stressed the importance of enabling legislation governing the collection and/or sharing of statistical information for resolving these types of problems and also for providing legal assurances to the population concerning the requirements for confidentiality.
38. Some participants stressed the importance of providing data suppliers with feedback on the information they provide, and noted that this practice can also result in improvements being made in the quality of the information provided.
39. There was general agreement that although important advances have been made in recent years in setting up and utilizing information systems for the improved management of health services, countries continue to encounter difficulties in providing the whole range of statistics desired (e.g. data on day-patients, data by socio-economic groups, data covering private hospitals and data on the objective components of statistics on the health status of the population), as well as in satisfactorily relating inputs to outputs and in associating data pertaining to different fields. The participants agreed that these were areas where further progress needed to be made by countries.
40. The Meeting agreed that it would be useful to include this topic on the agenda of a future ECE/WHO joint meeting on health statistics to enable countries to exchange experiences on further progress made in designing and establishing integrated statistical information systems covering all major facets of the health sector, including those systems which attempt to relate health inputs to health outputs.

## VI. PROGRESS BY INTERNATIONAL ORGANIZATIONS IN THE FIELD OF HEALTH ACCOUNTS

41. The Meeting took note of the information provided in document CES/AC.36/38; EURO/ICP/HST/116/38 and Adds. 1 and 2 on the work undertaken by the United Nations secretariat, the Statistical Office of the European Communities and the OECD on the revision of the System of National Accounts and on the development of health accounts.

42. The Meeting was also informed of the recent publication by the United Nations Statistical Office of a technical report on: Concepts and Methods for Integrating Social and Economic Statistics on Health, Education and Housing (see (i) in para. 5 above). It noted that this document contains several proposals for future work in the field of health statistics, and recommended that these proposals be considered in detail at its next meeting on the basis of national experiences as well as progress made in the next few years on the review of the systems of national accounts and balances.

43. The importance of health accounts for defining and monitoring health policies was stressed by several participants. It was noted that their compilation requires the use of data from different sources. There is therefore a need for co-ordination and harmonization between these sources and for common definitions and classifications.

44. Statistics of costs, differentiated according to users' characteristics such as age and disease categories, were mentioned as being increasingly important in many countries.

45. The Meeting noted with interest that some countries envisage a revision of their health accounts, in order to better reflect recent changes in the financing of health services, and that other countries that have not yet compiled such accounts are planning to develop satellite accounts in the near future.

## VII. MODES OF PAYMENT TO PHYSICIANS AND HOSPITALS

46. The Meeting considered this item on the basis of a report presented by the Regional Office for Europe of the WHO (CES/AC.36/39; EURO/ICP/HST/116/39).

47. The Meeting noted that the methods of paying physicians and hospitals constitute an important aspect of the general organization of the production and financing of medical care. They influence the collection of the data required for the compilation of health accounts as well as their interpretation in defining and monitoring the policies applied as regards the financing of health services.

48. Different aspects of the methods of payment were identified:

- measurement of the activity for which payment is due, and choice of the unit of measurement;
- unit remunerations; amount of remuneration and methods used to fix it; and

- identification of the payers; criteria used to distribute costs between payers and time of payment.

49. The discussion revealed that methods of payment of physicians differ widely between countries and within countries, between categories of physicians. Four methods of payment were identified: salaried remuneration; capitation fees; payment based on the number of cases treated; and payment based on the services provided.

50. As regards hospitals, it was noted that payment is generally based on the number of days and/or on the services provided. During discussion, several participants mentioned that experiments were conducted in their countries based on case-mix methods such as diagnostic-related groups (DRG). However, no systematic attempt has yet been made in Europe to use these methods in determining the level of financing of hospitals.

51. The development of health maintenance organizations (HMO), in which participants pay a fixed contribution to cover the cost of future medical care provided by the organization, was mentioned as a new form of payment of health services. Some participants reported on current attempts to develop HMO's in their countries.

52. The importance of international comparability of data was stressed by several participants. This is needed not only for international comparisons, but also to offer policy-makers at the national level a tool for evaluating the influence of different methods of payment on the cost of health services and for analyzing the role played by the different payers. In this respect, some participants emphasized the work done by the OECD in publishing homogeneous data on health expenditures and expressed the wish that this activity be continued.

53. During discussion, it was noted that the set of regional indicators for Health for All 2000 did not sufficiently cover the financial aspects of health services and it was proposed that the conclusions of the Meeting be taken into consideration in future work on the indicators.

#### VIII. FUTURE WORK

54. The Meeting noted that it had previously identified under other agenda items several possible topics of future work in the field of health statistics to be undertaken by the World Health Organization and the Conference of European Statisticians. These included (i) the recommendations for the WHO to continue work on indicators in the field of health along the lines indicated in paras. 21 and 53 above; (ii) the recommendation to exchange national experiences again at a future ECE/WHO joint meeting on health statistics on new developments in countries in utilizing information systems for the planning, management and evaluation of health services (see para. 40 above); and the recommendation to have the next joint meeting review proposals concerning the integration of social and economic statistics on health by taking into account national experiences and progress in the review of the systems of national accounts and balances (see para. 42 above).

55. During discussion, it was further suggested that it would be useful if the WHO secretariat collected questionnaires used in the major health surveys conducted in countries in this region and circulated them, in conjunction with concise summaries of the methodologies used, to national statistical offices and health ministries in the region for information.

56. The Meeting recommended the following topics for consideration at the next ECE/WHO joint meeting on health statistics:

- (i) Problems encountered by countries in implementing the ICD (Tenth Revision) and the ICIDH (by national rapporteurs)
- (ii) Development of indicators for evaluating the WHO Regional Strategy for Health for All by the Year 2000 (by the WHO secretariat)
- (iii) Integration of social and economic statistics in the field of health (including the development of health accounts) (by national rapporteurs)
- (iv) Development and use of statistical information systems for monitoring health services (including the dissemination of data from such systems) (by national rapporteurs)
- (v) Methods of measuring consumer satisfaction in health surveys (by the WHO secretariat).

57. The Meeting also agreed that item (iv) should include the study of problems in the collection of data from the part of the health sector that is not controlled by the government (e.g. private practitioners; research institutes; etc) and problems due to the multiplicity of data sources, as well as a presentation of the statistical information system implemented at the International Agency for Research on Cancer.

#### IX. ADOPTION OF THE REPORT

58. The present report was adopted by the Meeting at its closing session.