Measuring and reporting on the health of populations

Report by the Secretariat

BACKGROUND

1. The need for reliable and timely information on the health of populations as a critical input into the public policy process was recognized from the very inception of WHO. Indeed, the Constitution specifically states (Article 64) that “Each Member shall provide statistical and epidemiological reports in a manner to be determined by the Health Assembly” and, in Article 65, that “Each Member shall transmit upon the request of the Board such additional information pertaining to health as may be practicable”.

2. Before the early 1980s, health reports by Member States focused on three broad areas, namely causes of death, new cases of infectious diseases, and the number and distribution of health personnel and health institutions providing care. Following the adoption by the Thirty-fourth World Health Assembly in 1981 (resolution WHA34.36) of the Global Strategy for Health for All by the Year 2000, a common format and framework for monitoring progress of its implementation were developed. The 12 global indicators chosen for monitoring health status were largely mortality based (e.g. life expectancy at birth, and infant, child and maternal mortality rates) and included only one measure of non-fatal health status (nutritional status). Subsequently, the list was extended to more than 70 specific indicators, including the prevalence of 12 communicable diseases or nutritional disorders.

3. With the epidemiological transition from communicable to noncommunicable diseases, the measurement of the non-fatal consequences of diseases, particularly chronic diseases and injuries, has become increasingly relevant to all Member States. At the same time, relatively little attention has been given to the concepts, methods and data requirements necessary for the assessment of non-fatal health outcomes to be incorporated into strategies for measuring health status.

4. The common framework for monitoring and evaluating the implementation of health-for-all strategies made possible the reporting of a large number of indicators, many of which are not the direct responsibility of the health sector in countries. This has created substantial demands on the limited resources typically allocated for health reporting. In order to meet the needs for data and information set out in the framework, countries often had to carry out additional surveys, which in many cases were poorly coordinated, inefficient and resource intensive.

5. Even though the need for greater emphasis on non-fatal health outcomes in the monitoring and evaluation framework was belatedly recognized, the concepts, terminology and methods needed to ensure the comparability of assessments of health status in different populations were not expounded.
As a result, data from Member States on these outcomes could not be compared, either over time within populations or between populations. This lack of comparability undermined monitoring and evaluation of health status both nationally and at the global level as requested of WHO in resolution WHA35.23.

6. Finally, the health-for-all framework, while touching on several specific aspects of the health situation, was not sufficiently coherent or integrated to allow monitoring of improvements in population health. The list of indicators undoubtedly covered many important elements of the health policy process, but was not based on an integrated approach to defining health system performance. This disunity often made it difficult to understand the interrelationship of indicators, their relative importance, and how to judge progress in the implementation of the health-for-all strategy.

COMMON FRAMEWORK FOR REPORTING INFORMATION ON THE HEALTH OF POPULATIONS

7. This report describes a common framework to support countries in reporting their health status in ways that are relevant to modern health information needs. It has been drafted after broad consultation with Member States, expert working groups, and networks of WHO collaborating centres, and at several WHO meetings. The framework was also tested through pilot applications of surveys (11 household, 60 postal) in the general population in 71 Member States.

8. The constituent elements of the common health-reporting framework are:

- the WHO family of international classifications;
- operational systems of data collection on health states of populations; and
- summary measures of population health.

These elements would form the basis for gathering and presenting useful and comparable health information. It is envisaged that they will be periodically revised in the light of scientific advances and evidence so as to reflect the state-of-the-art knowledge on health information.

9. It is recognized that, to be comprehensive, a framework for monitoring health progress needs information on all aspects of the health of populations, including reliable, timely data on the distribution and level of risk-factor exposure. Guidelines and standards for measuring population exposure to major risk factors have been prepared by WHO and are periodically revised. The scope of this framework is therefore limited to measuring and reporting population health status.

WHO family of international classifications

10. Previously, countries mainly reported mortality statistics on the basis of the international classification of diseases (ICD) system.¹ This approach was useful to identify life expectancy and causes of death, but the data collected gave no further indication of health status (among the living population). Additional information on population health was needed. Resolution WHA29.35 approved the publication for trial purposes of a supplementary classification of impairments and

handicaps. As a result, WHO issued in 1980 a tool for the classification of the consequences of disease, namely the *International Classification of Impairments, Disabilities and Handicaps* (ICIDH). It was field-tested in several countries and a revision process was begun in 1995 to address, *inter alia*, the need to use the classification as a framework for the reporting of the health status of populations. Over the subsequent five years, several WHO collaborating centres and both governmental and nongovernmental organizations have taken part in the revision and field-testing of successive versions. With the revisions, the title has evolved, and it is now proposed to call it the *International Classification of Functioning, Disability and Health*.\(^1\) As it currently stands, ICIDH is a complementary member of the WHO family of international classifications. Whereas ICD provides the codes for mortality and morbidity, ICIDH provides the codes for health states of individuals.

**Operational systems of data collection on health states of populations**

11. Health policy development in countries will be greatly facilitated by the availability and use of comparable data on health status. To guide that process, it is essential for countries to monitor overall health progress over time and across different populations in a comparable fashion. Standardized approaches to health measurement at the national level will lead to better international comparability and more reliable assessments of priority health needs. To support Member States in improving the comparability of data, WHO has developed a detailed framework and survey module for measuring health. These instruments have been created to fit into the WHO family of international classifications and designed to yield practical information for summary measures of population health with a common format for international comparisons. The survey modules and mechanisms to ensure comparability of data between populations could be integrated into routine processes for data collection in Member States.

**Summary measures of population health**

12. To facilitate reporting, Member States need standardized summary measures of population health that are sensitive to both mortality and non-fatal health outcomes. To compare levels and distribution of health in their populations Member States need a positive summary measure, namely healthy life expectancy. Reporting of causes of loss of population health in order to provide an informed basis for the formation and evaluation of policies needs measures of health gaps. Recommendations for data requirements and common standards for the calculation and reporting of summary measures have been prepared and can be made available to Member States.

13. The definitions and standards proposed in this framework have been selected to facilitate the comparative assessment of the health of populations. As such, they do not and cannot cover all aspects of a more comprehensive definition of health, which would include the prevalence and distribution of risk factors for major disorders and injuries.

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\(^1\) The Beta-1 version issued in 1997 was entitled *ICIDH-2: International Classification of Impairments, Activities and Participation*. For the 1999 Beta-2 version the title was changed to *ICIDH-2: International Classification of Functioning and Disability*. The proposed new title is *ICIDH-2: International Classification of Functioning, Disability and Health*. The acronym ICIDH, used as a generic term to refer to the classification, is retained for historical reasons.
RECOMMENDATIONS OF A GROUP OF INTERNATIONAL EXPERTS

14. A group of international experts on measurement and classification for health, which was convened by WHO and comprised members from all WHO regions, made the following recommendations.

**International standards to report mortality and non-fatal health outcomes:**

(1) ICIDH-2\(^1\) should be endorsed and published.

(2) The WHO family of international classifications should be endorsed as a valuable tool to describe and compare the health of the populations of Member States in terms of mortality and morbidity (ICD-10) and health states and related outcomes (ICIDH-2).

(3) Operational subsets of selected ICIDH domains should be identified for various purposes, including as the basis of a survey instrument or other data collection methods.

(4) WHO should maintain and periodically revise ICIDH, in consultation with Member States and appropriate networks of experts, including collaborating centres, at such intervals as to ensure stability of the classification system and incorporation of new knowledge.

(5) WHO Secretariat should have adequate resources to maintain and promote the classifications and to support and implement regular updates and periodic revisions.

**Basic standards to measure health states in population surveys:**

(1) WHO should coordinate the development and periodic implementation of a common survey instrument for measuring health states.

(2) Given that cross-population comparability is an essential requirement for reporting on health for Member States in addition to cross-cultural applicability, reliability and validity, Member States are encouraged to use an explicit strategy to establish such comparability as an integral part of the common instrument design for each health domain.

(3) The subset of core health domains selected from ICIDH-2 should form the basis of the development of a common survey instrument for measuring health states in periodic surveys in general populations, and there should be a continued effort to develop a short list of domains.

(4) The survey instrument should be periodically revised and maintained by WHO, in consultation with appropriate networks of experts, to reflect experience in its application and scientific advance in the field of health state measurement.

**Summary measures of population health:**

(1) Summary measures of population health, combining information on mortality and non-fatal health outcomes, provide a valuable tool to recapitulate, monitor and compare the health of populations and to compare the relative importance of different causes of variations. Two types

\(^1\) A draft text is accessible for consultation on the WHO Web site [http://www.who.int/icidh/](http://www.who.int/icidh/); printed copies are available upon request.
of summary measure, namely health expectancies and health gaps, are needed. Health expectancies provide a simple measure for comparison of the health of populations. Health gaps provide a simple basis for comparing the contribution of different causes to population health levels. It is recommended that:

(a) Member States should use such summary measures for monitoring population health levels and assessing the contributions of different causes; and

(b) the Director-General should report annually on summary measures of population health for Member States.

(2) Because distribution of health within populations, besides level of health, is important, separate summary measures should be used to report on level and distribution of health.

(3) Because health state valuations are a critical input to the reporting of both health expectancies and health gaps, they should be measured in representative population samples in each Member State.

(4) WHO should provide detailed technical advice to Member States to support them in developing and improving data sources on mortality, cause of death, morbidity and non-fatal health outcomes.

(5) WHO, in consultation with Member States and appropriate networks of experts, should develop guidelines and standards for the calculation and reporting of summary measures of population health to facilitate international comparisons.

**ACTION BY THE EXECUTIVE BOARD**

15. The Executive Board is invited to provide its views and input, in particular on the recommendations of the international group of experts.