

Health informatics — Health indicators conceptual framework

ICS 35.240.80

National foreword

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A list of organizations represented on this committee can be obtained on request to its secretary.

Cross-references

The British Standards which implement international publications referred to in this document may be found in the BSI Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Search” facility of the *BSI Electronic Catalogue* or of British Standards Online.

Summary of pages

This document comprises a front cover, an inside front cover, the ISO/TS title page, pages ii to v, a blank page, pages 1 to 20, an inside back cover and a back cover.

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This Draft for Development was published under the authority of the Standards Policy and Strategy Committee on 28 May 2004

Amendments issued since publication

Amd. No.	Date	Comments

© BSI 28 May 2004

ISBN 0 580 43833 3

TECHNICAL SPECIFICATION

ISO/TS 21667

First edition
2004-04-01

Health informatics — Health indicators conceptual framework

Informatique de santé — Cadre conceptuel d'indicateurs de santé



Reference number
ISO/TS 21667:2004(E)

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Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Terms and definitions	1
3 Health indicators conceptual framework	2
3.1 Framework	2
3.2 Equity framework dimensions	2
3.2.1 Health status	2
3.2.2 Non-medical determinants of health	3
3.2.3 Health system performance	4
3.2.4 Community and health system characteristics (contextual information)	5
3.2.5 Equity	6
Annex A (informative) Correspondence with OECD health indicator initiatives	7
Annex B (informative) Rationale for a common health indicators conceptual framework	9
Annex C (informative) Background to the health indicators conceptual framework	10
Annex D (informative) Health status	12
Annex E (informative) Non-medical determinants of health	13
Annex F (informative) Health system performance	15
Annex G (informative) Community and health system characteristics (contextual indicators)	16
Annex H (informative) Equity	17
Bibliography	18

Foreword

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

In other circumstances, particularly when there is an urgent market requirement for such documents, a technical committee may decide to publish other types of normative document:

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ISO/TS 21667 was prepared by Technical Committee ISO/TC 215, *Health informatics*.

Introduction

Heightened interest in the measurement and monitoring of the performance of health care systems, as well as accountability and responsiveness to payors and stakeholders is now evident on an international scale. Consequently, many countries have begun the systematic definition and collection of health information for monitoring health system performance. This trend has also concomitantly driven, and is driven by, an enhanced data infrastructure that allows for more explicit and rigorous examination of the health of populations and their health care systems. More often than not, this has taken the form of the collection of specific health indicators with which to describe a variety of health and health system-related trends and factors.

The term *health indicator* refers to a single summary measure, most often expressed in quantitative terms, that represents a key dimension of health status, the health care system or related factors. A health indicator must be informative, and also be sensitive to variations over time and across jurisdictions.

In order for them to be useful for monitoring health or health system performance, however, explicit criteria must be applied for choosing and defining health indicators. The selection must be based on some agreement about what is to be measured, and for what purpose, and informed by a clear conceptual framework. This implies a common framework, to be used internationally, for structuring the way we measure health and health system performance. Here, a comprehensive, high-level taxonomy of the key types of indicators that are useful for assessing population health and health services is described.

Working toward a standard health indicators framework will undoubtedly foster a common language for communication between countries, and ultimately, lead to greater commonalities for indicator development. This could, and in fact should, lead to greater potential for generating internationally comparable health data in the long term, in order to permit consistent reporting, dissemination and analysis.

This initiative can also be seen as complementary to work currently underway by other organizations — the OECD, for example. The adoption of a common health indicators conceptual framework will further stimulate efforts to develop and collect common health indicators internationally. Furthermore, a harmonized effort to develop an internationally accepted health indicators conceptual framework will not only foster increasingly robust cross-national comparisons and analyses, but may also facilitate the development of comparable data that can be used as a basis for the setting of international benchmarks. The results of such endeavours may be invaluable for informing national health policy related to health expenditures, health human resources requirements or the organization of health and social systems. Ultimately, these developments may facilitate an improved global understanding about variations in health, variations in health care and the effect of other, non-medical determinants of health in the context of other essential factors.

See Annex A for more information regarding the OECD initiative and its relationship to this Technical Specification's health indicators conceptual framework.

Health informatics — Health indicators conceptual framework

1 Scope

This Technical Specification establishes a common health indicators conceptual framework for the field of health informatics. It is intended to foster a common vocabulary and conceptual definitions for a framework which

- defines the appropriate dimensions and subdimensions required to describe the health of the population and performance of a health care system,
- is sufficiently broad (high-level) to accommodate a variety of health care systems, and
- is comprehensive, encapsulating all of the factors that are related to health outcomes and health system performance and utilization, and regional and national variations.

This Technical Specification does not identify or describe individual indicators or specific data elements for the health indicators conceptual framework. As a next step, it has been proposed that a subsequent work item address the metadata, or the characteristics and common attributes, of actual indicators that might be contained in the health indicators conceptual framework.

The definition of benchmarks and/or approaches used in the definition of benchmarks is outside the scope of this Technical Specification.

NOTE 1 See Annex B for a more complete discussion of the underlying rationale for this framework.

NOTE 2 Many countries have already developed their own models for directing the collection and analysis of health indicators. For the purposes of national reporting, these existing frameworks are not expected to change. Rather, this framework can be viewed as a compliment to currently existing frameworks. For example, if a particular health indicators framework currently focuses only on health system performance, the comprehensive approach suggested here may serve to augment and/or supplement the currently used model(s).

NOTE 3 Individual jurisdictions may elect to operationalize the conceptual framework differently. Because the conceptual dimensions represent a high-level taxonomy, this provides considerable discretion and leeway in the selection of specific indicators by individual countries. This focus on a high-level taxonomy also allows for sufficient flexibility for the inclusion of new indicators in the future, as new issues emerge and additional data become available. Because specific data elements are not defined, jurisdictions have the freedom to populate this framework with the most relevant, and available, indicators, for their specific situations.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

health indicator

single summary measure, most often expressed in quantitative terms, that represents a key dimension of health status, the health care system, or related factors

NOTE A health indicator is to be informative and also sensitive to variations over time and across jurisdictions.