

International Workshop Agreement

IWA 1

Quality management systems — Guidelines for process improvements in health service organizations

*Based on ISO 9004:2000,
Second edition, 2005-04-01*
*Quality management systems —
Guidelines for performance improvements*

IWA 1:2005

<https://standards.iteh.ai/catalog/standards/sist/10b7896b-0661-41b7-a586-be50fd98df03/iwa-1-2005>



PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

iTeh STANDARD PREVIEW

The text of this document which is included in blue italics was prepared by AIAG and ASQ (Healthcare Division), copyrighted by AIAG and then submitted for consideration by the ISO workshop. AIAG grants permission to ISO to quote the text within the dashed boxes directly in this publication, as well as in derivative publications of ISO's members, including in national adoptions. Other use of the text is subject to the usual copyright exploitations laws.

© ISO 2005

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Printed in Switzerland

Contents

Page

Foreword	vi
Foreword - Supplemental	viii
Introduction	x
0.1 General	x
0.2 Process approach	x
0.2.1 Primary health service process	xii
0.3 Relationship with ISO 9001	xiii
0.4 Introduction	xiii
1 Scope	1
1.1 Scope – Health services additions	1
2 Normative reference	2
3 Terms and definitions	2
3.1 Terms and definitions - Supplemental	2
4 Quality management system	7
4.1 Managing systems and processes	8
4.2 Documentation	9
4.2.1 Control of documents - Supplemental	10
4.2.4 Control of records - Supplemental	12
4.3 Use of quality management principles	13
5 Management responsibility	14
5.1 General guidance	14
5.1.1 Introduction	14
5.1.2 Issues to be considered	15
5.2 Needs and expectations of interested parties	16
5.2.1 General	16
5.2.2 Needs and expectations	17
5.2.2.1 Product safety	18
5.2.2.2 Product efficacy	18
5.2.2.3 Security	18
5.2.2.4 Community service	19
5.2.2.5 Social responsibility	19
5.2.3 Statutory and regulatory requirements	19
5.2.4 Patient/client care practices	19
5.3 Quality policy	20
5.4 Planning	21
5.4.1 Quality objectives	21
5.4.2 Quality planning	22
5.4.3 Business planning	23
5.4.4 Error proofing	23
5.5 Responsibility, authority and communication	25
5.5.1 Responsibility and authority	25
5.5.1.1 Responsibility and authority - Supplemental	25
5.5.2 Management representative	26
5.5.3 Internal communication	26
5.6 Management review	27
5.6.1 General	27
5.6.2 Review input	28
5.6.3 Review output	29
6 Resource management	30

6.1	General guidance	30
6.1.1	Introduction	30
6.1.2	Issues to be considered	30
6.1.2.1	Shift resources	30
6.2	People	31
6.2.1	Involvement of people	31
6.2.2	Competence, awareness and training	32
6.2.2.1	Competence	32
6.2.2.1.1	Credentials and health status	32
6.2.2.1.2	Quality management and requalification	32
6.2.2.1.3	Communication skills	33
6.2.2.2	Awareness and training	33
6.2.2.2.1	Ongoing training	34
6.2.2.2.2	Identification of patient/client's family education/training programs	34
6.3	Infrastructure	35
6.3.1	Hazardous waste handling	35
6.4	Work environment	36
6.5	Information	36
6.6	Suppliers and partnerships	37
6.6.1	Supply-purchased product	37
6.7	Natural resources	37
6.8	Financial resources	37
7	Product realization	39
7.1	General guidance	39
7.1.1	Introduction	39
7.1.2	Issues to be considered	40
7.1.3	Managing processes	40
7.1.3.1	General	40
7.1.3.2	Process inputs, outputs and review	41
7.1.3.2.1	Planning of realization processes	41
7.1.3.3	Product and process validation and changes	42
7.2	Processes related to interested parties	44
7.2.1	Contract review	45
7.3	Design and development	46
7.3.1	General guidance	46
7.3.1.1	Design process	46
7.3.2	Design and development input and output	47
7.3.2.1	Facility and equipment planning	48
7.3.3	Design and development review	49
7.3.3.1	Selecting care approaches	50
7.4	Purchasing	52
7.4.1	Purchasing process	52
7.4.1.1	Purchasing control	53
7.4.1.2	Urgently needed purchased product	53
7.4.2	Supplier control process	53
7.4.2.1	Predetermined suppliers	53
7.4.2.2	Subcontracted services	54
7.5	Production and service operations	56
7.5.1	Operation and realization	56
7.5.1.1	Manage patient/client care processes	56
7.5.1.2	Servicing	56
7.5.2	Identification and traceability	58
7.5.4	Customer property	58
7.5.5	Preservation of product	59
7.5.5.1	Preservation of product - Supplemental	60
7.6	Control of measuring and monitoring devices	61
7.6.1	Control of measuring and monitoring devices - Supplemental	61
8	Measurement, analysis and improvement	62

iTech STANDARD PREVIEW
(standards.itih.ai)

IWA 1:2005

<https://standards.itih.ai/catalog/standards/sis/1067896b-0661-41b7-b286-bc501d98d103/iwa-1-2005>

8.1	General guidance	62
8.1.1	Introduction	62
8.1.1.1	Planning measurement	63
8.1.2	Issues to be considered	63
8.2	Measurement and monitoring	64
8.2.1	Measuring and monitoring of system performance	64
8.2.1.1	General	64
8.2.1.2	Measurement and monitoring of customer satisfaction	64
8.2.1.2.1	Measurement and monitoring of customer satisfaction - Supplemental	65
8.2.1.3	Internal audit	66
8.2.1.3.1	Strategic auditing	67
8.2.1.4	Financial measures	67
8.2.1.5	Self-assessment	67
8.2.2	Measuring and monitoring of processes	68
8.2.2.1	Measuring and monitoring of processes - Supplemental	68
8.2.3	Measuring and monitoring of product	69
8.2.3.1	Measuring and monitoring of product - Supplemental	70
8.2.4	Measurement and monitoring the satisfaction of interested parties	70
8.3	Control of nonconformity	72
8.3.1	General	72
8.3.1.1	Handling of nonconforming product	72
8.3.2	Nonconformity review and disposition	72
8.4	Analysis of data	73
8.5	Improvement	75
8.5.1	General	75
8.5.1.1	General - Supplemental	75
8.5.2	Corrective action	76
8.5.2.1	Corrective action process	77
8.5.3	Loss prevention	77
8.5.4	Continual improvement of the organization	78
Annex A (informative)	Guidelines for self-assessment	80
Annex B (informative)	Process for continual improvement	82
Bibliography	84

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). ISO's technical work is normally carried out through ISO technical committees in which each ISO member body has the right to be represented. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

In order to respond to urgent market requirements, ISO has also introduced the possibility of preparing documents through a workshop mechanism, external to its normal committee processes. These documents are published by ISO as International Workshop Agreements. Proposals to hold such workshops may come from any source and are subject to approval by the ISO Technical Management Board which also designates an ISO member body to assist the proposer in the organization of the workshop. International Workshop Agreements are approved by consensus amongst the individual participants in such workshops. Although it is permissible that competing International Workshop Agreements exist on the same subject, an International Workshop Agreement shall not conflict with an existing ISO or IEC standard.

An International Workshop Agreement is reviewed after three years, under the responsibility of the member body designated by the Technical Management Board, in order to decide whether it will be confirmed for a further three years, transferred to an ISO technical body for revision, or withdrawn. If the International Workshop Agreement is confirmed, it is reviewed again after a further three years, at which time it must be either revised by the relevant ISO technical body or withdrawn.

Attention is drawn to the possibility that some of the elements of this International Workshop Agreement may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Workshop Agreement IWA 1 was approved at a workshop organized jointly by the Automotive Industry Action Group (AIAG), the American Society for Quality (ASQ) (Healthcare Division), the Standards Council of Canada (SCC) and CSA International, and held in January 2001. Appreciation is extended to the Automotive Industry Action Group (AIAG), the American Society for Quality (ASQ) (Healthcare Division), the Standards Council of Canada (SCC) and CSA International for both the organization of the workshop and the preparation of this International Workshop Agreement.

This second edition of IWA 1 cancels and replaces the first edition (IWA 1:2001). It provides the content of the first edition but with improved appearance.

Foreword to IWA 1, 2nd Edition – Supplemental

The IWA 1 2nd Edition is intended to provide the IWA 1, 1st Edition content with the same intent, but with improved appearance and usefulness. This is not the only way to interpret the ISO 9000 series of standards for health service organizations. The examples, definitions, and text given are only representative of how the wording is used within the context of this document. Organization-specific terminology can be used as applicable. These changes were the compilation of developments or comments received since the original workshop from IWA 1, from reviewers who were primarily providers, and some of the comments from the original workshop not previously incorporated.

Layout of this Edition:

Text in the solid box is from ISO 9001:2000. Black text outside the box is from ISO 9004:2000, which is both generic guidance and applicable to all organizations. *Italicized text in Times New Roman font is material added by AIAG, ASQ or the IWA-1 Workshop aimed at assisting health service organizations specifically.*

Also new in this Edition is guidance on “What to look for” as well as examples when implementing IWA 1 guidance.

Implementing this guidance and maintaining the system with discipline and rigor throughout the organization should produce effectiveness and efficiencies with a cost benefit up to 17:1 based on experience of other sectors. This document can be used to implement a quality system that is compliant with and can be third party certified to ISO 9001 if the organization desires.

(standards.iteh.ai)

Acknowledgements are due to the following for their contribution to this Edition:

- Marvin “Mickey” Christensen, TQM Systems (ASQ-Healthcare Division Standards committee)
- R. Dan Reid, General Motors Powertrain
- Reginald Shaughnessy, Q-Norm
- Ulises Ruiz Ferandiz MD, Universidad Complutensa, Madrid
- Peggy Congin, RN, Cleveland Clinic
- Jane DeHart, OTR, Midwest Health System, Work-Safe Occupational Health
- Ema Demink, AIAG
- Ron Tillinger, AIAG
- Joe McMahon, Standards Council of Canada
- David Zimmerman, Canadian Standards Association
- Jim Collins, Plexus Training
- Rita Radcliff, MD, Medical Excellence

February 2005

Foreword-Supplemental

This guideline is the product of a committee under the American Society for Quality (ASQ) Health Care Division and the Automotive Industry Action Group (AIAG), consisting of the following members:

Robert Abbott, President, Unicorn Grove Enterprises, Inc., Registered QMS Lead Auditor, Audits for RAB

M.M. "Mickey" Christensen, P.E., President, TQM Systems, Registered Professional Engineer, Registered QMS Lead Auditor, Chair, ASQ Health Care Division Standards Committee

Margaret Class, RN, Commander, U.S. Navy, Loaned Executive to Joint Commission on Accreditation of Health Care Organizations, Bethesda Naval Hospital

Jane DeHart, MA, OTR, Administrative Director of Occupational Health, Henry Ford Health System

Thomas L. Gavan, M.D., Resident Emeritus staff, Division of Pathology and Laboratory Medicine, The Cleveland Clinic Foundation. Initial drafter of ISO 15189 "Quality management in the Medical Laboratory". Member US TAG ISO/TC212 and Member ISO/TC212 WG1

Jim Hindelang, ASQ CQA, Consultant, Results Systems, Inc., Registered QMS Auditor

Herbert Monnich, Jr., P.E., ASQ CQA, CQE, CRE, Consultant, Member of US TAG to TC 176, Assembled US TAG comments together for TC 179 Product Introduction & Transition package and ISO/TC 176 N488 Communique on the Results of the IAF-ISO/TC 176 - ISO/CASCO joint session on Transition Planning for Year 2000 ISO 9000 Standards

Laura DeVincentis Prioli, MPA, Health Care Services Manager, SGS International Certification Services, Inc., Registered QMS Lead Auditor

R. Dan Reid, M.B.S., M.A., ASQ CQE, Manager, General Motors Worldwide Purchasing, AIAG Health Care Project Team, International Automotive Task Force (IATF) Delegation Leader (Past) & ISO 9000:2000 Drafting Committee (T.G 1.7.7)

Thomas Reiley, MD, MHS, President, Synapse Consultation, PC, Chair (Past), ASQ Health Care Division

David Simmons, P.E., PhD, President, Health service Engineering, Registered Professional Engineer, Past Chair, ASQ Health Care Division

Prof. Ulises Ruiz, MD, PhD, FACS, University Institute for Health Care Assessment, Universidad Complutense de Madrid, 28040 MADRID, Spain

Acknowledgements are due to the following that participated in preparation of this document:

Bruce Bradley, General Motors;

Adam Miller, UAW;

Carol Sauwen, General Motors;

Don Longnecker, DaimlerChrysler;

Renee Turner-Bailey, Ford Motor Company;
Beth Ginzinger, Ford Motor Company;
Matti Liukko, M.D. M.Q., Medical Administrator, Finnish Association of Local and Regional Authorities;
Viljo Rissanen, MD, Deputy Medical Director, Kuopio University Hospital, Kuopio, Finland;
Melvin Alexander, CQE, MS, ASQ Fellow, GloboMax LLC;
Ronald G. Berglund, MPH, CHE, CQmgr., Management Resources International of MSX, International;
Jim Collins, MS, Master Trainer, Plexus Corporation;
Paul Schyve, MD, Joint Commission for Accreditation of Healthcare Organizations;
Maureen Carr, Joint Commission for Accreditation of Healthcare Organizations;
Gary Carneal, American Accreditation Health Care Commission (URAC);
Guy D'Andrea, American Accreditation Health Care Commission (URAC);
Suzanne Atkinson, representative of the National Committee for Quality Assurance (NCQA).

iTeh STANDARD PREVIEW **(standards.iteh.ai)**

IWA 1:2005

<https://standards.iteh.ai/catalog/standards/sist/10b7896b-0661-41b7-a586-be50fd98df03/iwa-1-2005>

INTRODUCTION

The goal of this document is to aid in the development or improvement of a fundamental quality management system for health service organizations (see 3.1.8) that provides for continuous improvement, emphasizing error or adverse outcomes prevention, the reduction of variation and organizational waste, for example non-value added activities (3.1.25).

This guide incorporates much of the text of ISO 9004:2000 – “Quality management systems -- Guidelines for performance improvements” and provides guidance on quality management systems, including the processes for continual improvement that contribute to the satisfaction of a health service organization’s customers (see 3.1.3) and other interested parties. The quality management system should provide for all customers of a health service organization regardless of the product, profession or service provided.

0.1 General

See ISO 9004:2000.

0.2 Process approach

This International Standard promotes the adoption of a process approach when developing, implementing and improving the effectiveness and efficiency of a quality management system to enhance interested party satisfaction by meeting interested party requirements.

For an organization to function effectively and efficiently, it has to identify and manage numerous linked activities. An activity using resources, and managed in order to enable the transformation of inputs into outputs, is considered as a process. Often the output from one process directly forms the input to the next.

The application of a system of processes within an organization, together with the identification and interactions and managing of these processes can be referred to as the “process approach”.

An advantage of the process approach is the ongoing control that it provides over the linkage between the individual processes within the system of processes, as well as their combination and interaction.

Health service organizations should define all their processes. These processes, which are typically multi-disciplinary, include administrative and other support services as well as those involving treatment, include such examples as the:

- a) development and delivery of training as required by competencies or credentialing*
- b) surgery processes and the necessary ancillary support services*
- c) preventive and predictive maintenance program*
- d) design and/or development of diagnostic protocols/ pathways.*
- e) Billing and coding for services correctly*
- f) Continuum of care for patient, regardless of setting or location*

When used within a quality management system, such an approach emphasizes the importance of

- a) understanding and fulfilling the requirements,
- b) the need to consider processes in terms of added value,
- c) obtaining results of process performance and effectiveness, and
- d) continual improvement of processes based on objective measurement.

The model of a process-based quality management system shown in Figure 1 illustrates the process linkages presented in clauses 4 to 8. This illustration shows that interested parties play a significant role in defining requirements as inputs. Monitoring the satisfaction of interested parties requires the evaluation of information

relating to the perception of interested parties as to whether the organization has met their requirements. The model shown in Figure 1 does not show processes at a detailed level.

All work should be viewed as a process, and part of a system (see ISO 9000:2000, clause 2.2.1). To make improvements in the system, it is essential to understand how the parts of the system interact. Process management involves stability, capability, and targeting, which require management of variation. (see ISO 9004:2000, clause 7.5.1.1).

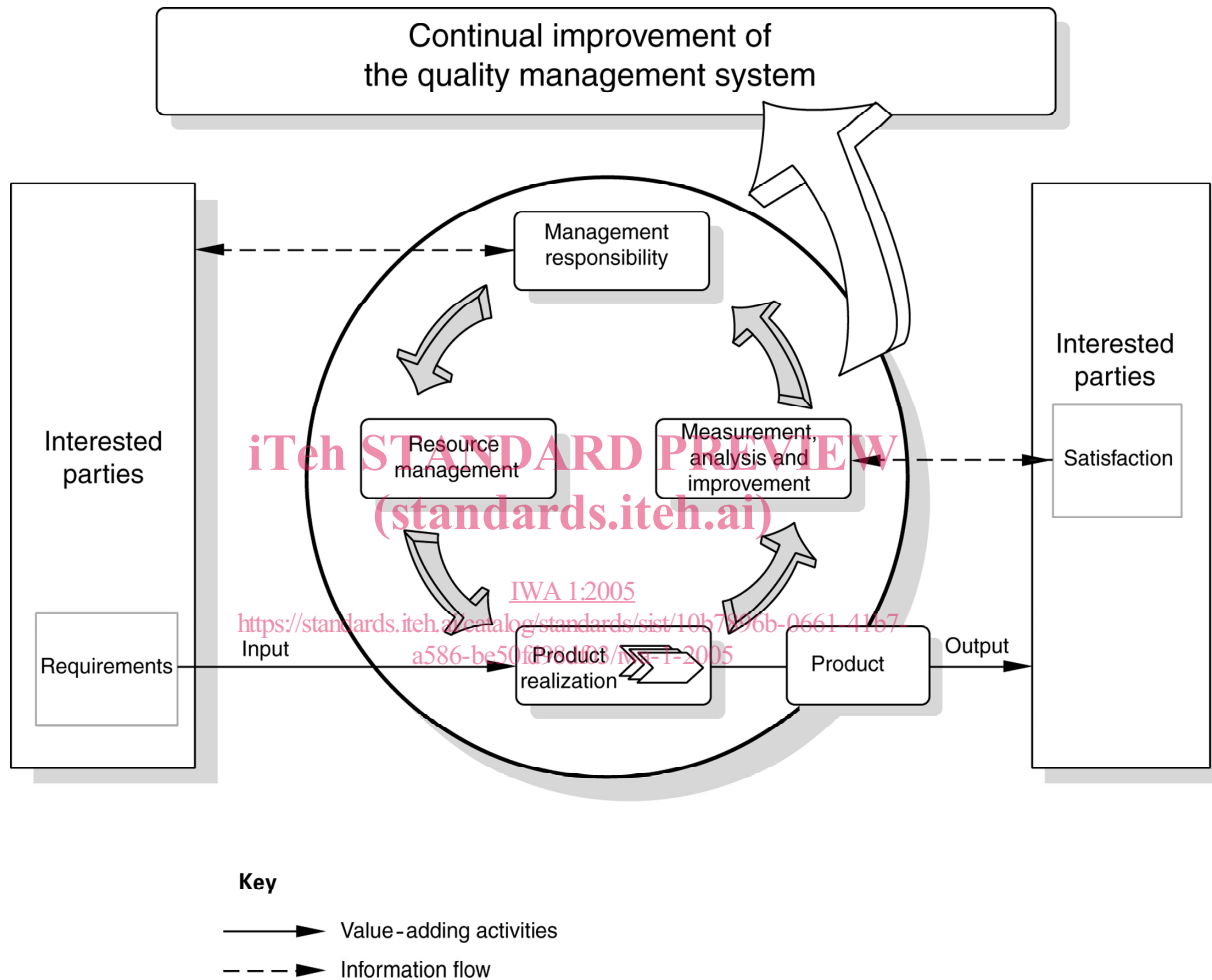


Figure 1 — Model of a process-based quality management system

0.2.1 Primary health service process

The primary beneficiary of the health service system is the patient/client (see 3.1.11). Health service design, delivery, management and/or administration should focus ultimately on the patient/client. For some health service organizations, the beneficiaries are individuals, communities and/or populations, thus their focus would be on these client groups.

NOTE For health service management organizations, this applies to their members.

ISO 9004:2000 does not specifically define “what” needs to be done by a health professional (see 3.1.13). That is to be done by consensus of appropriate professionals based upon medical findings. Rather, ISO 9004:2000 can be used to ensure that the right activities are carried out consistently and in a controlled manner.

The primary health service process, with the patient/client (see 3.1.11) depicted as the customer (see 3.1.3), is shown in the diagram below. The basic product (see 3.1.14) of the health service delivery organization in this diagram is the planning, design, and delivery of patient/client care. This model would also apply to other health service processes, for example education and training for preventive/wellness medicine. Design-responsibility (see 7.3), asterisked below, is either with the customer or the supplier. If the customer does not provide the design, then the supplier is design responsible, even if they choose to subcontract the design to an outside organization or health professional (see 3.1.13). The care plan (see 3.1.2) and clinical guidelines are examples of quality system documentation, while the patient/client health record (see 3.1.12) is an example of a quality record.

(standards.iteh.ai)

For organizations that elect to be third-party certified against the requirements of ISO 9001:2000, particular attention should be given to define an accurate scope of the certification to ensure that all appropriate elements, for example design (see 7.3) are included. Also, due consideration should be given to Clauses 1.1 Scope and 1.2 Application of ISO 9001:2000, which are not included in this document.

NOTE It is emphasized that ISO 9000:2000 clause 3.4.4 defines ‘design and development’ as the ‘set of processes that transforms requirements into specified characteristics or into the specification of a product, process or system.’

The care plan (see 3.1.1) and clinical guidelines are examples of quality system documentation, while the patient/client health record (see 3.1.11) is an example of a quality record.

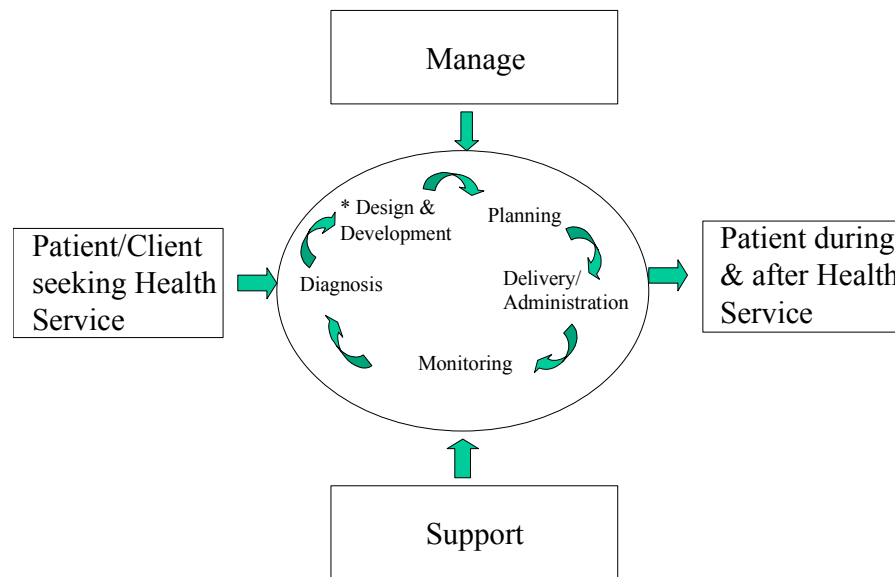


Figure 2: Model for Health Service Organizations with Patient/Client as “Customer”

** See 7.3 Design and development*

0.3 Relationship with ISO 9001

See ISO 9004:2000.

This International Standard does not include guidance specific to other management systems, such as those particular to environmental management, occupational health and safety management, financial management, or risk management. However, this International Standard enables an organization to align or integrate its own quality management system with related management systems. It is possible for an organization to adapt its existing management system(s) in order to establish a quality management system that follows the guidelines of this International Standard.

Each section of this document is tied to its counterpart in ISO 9004:2000 containing all the requirements of ISO 9001:2000. This provides additional guidance for full compatibility between the ISO 9000 standards and the resulting quality system.

0.4 Introduction

This document was developed with the following objectives:

- *Improve delivered health service quality and safety to complement existing accreditation or to aid in achieving accreditation*
- *Provide process improvements to increase the value added to the organization and customer (see 3.1.2)*
- *Improve the image of the organization, increase customer confidence and have a tool to reward quality*
- *Maintain consistency in the global approach with TS-16949 and other ISO 9000 sector-specific documents, for example aerospace (AS-9100), medical devices (ISO 13485), telecommunications (TL-9000), and medical laboratories (ISO 15189).*
- *Develop/incorporate a process that is actionable*
- *Minimize/reduce burden on health service organizations.*

Any relevant health service accreditation criteria external to the organization should be used in conjunction with this document. The organization can include additional requirements to further define and/or document the quality management system as appropriate (for example use of quality award criteria).

iTeh STANDARD PREVIEW
(standards.iteh.ai)

IWA 1:2005

<https://standards.iteh.ai/catalog/standards/sist/10b7896b-0661-41b7-a586-be50fd98df03/iwa-1-2005>

Quality Management Systems — Guidelines for process improvements in health service organizations

Quality management systems — Guidelines for performance improvements

1 Scope

This International Standard provides guidelines beyond the requirements given in ISO 9001 in order to consider both the effectiveness and efficiency of a quality management system, and consequently the potential for improvement of the performance of an organization. When compared to ISO 9001, the objectives of customer satisfaction and product quality are extended to include the satisfaction of interested parties and the performance of the organization.

This International Standard is applicable to the processes of the organization and consequently the quality management principles on which it is based can be deployed throughout the organization. The focus of this International Standard is the achievement of ongoing improvement, measured through the satisfaction of customers and other interested parties.

This International Standard consists of guidance and recommendations and is not intended for certification, regulatory or contractual use, nor as a guide to the implementation of ISO 9001.

1.1 Scope - Health service additions

This document provides additional guidance for any health service organization (see 3.1.8) involved in the management, delivery, or administration of health service products or services, including training and/or research, in the life continuum process for human beings, regardless of type, size and the product or service provided.

NOTE ISO 13485 and ISO/IEC 17025 provide specific information for medical device organizations and commercial laboratory facilities. ISO 15189 provides specific information for medical (clinical) laboratories. Other organizations, such as manufacturers/distributors of pharmaceuticals, medical supplies are regulated and have to comply with other specified criteria. This document could be viewed as a voluntary supplement to those organizations should they choose to implement the guidance of this document.

The definitions of terms such as patient/client, client, primary, ancillary, and specialty care vary by region within the health service community. The organization's processes for addressing these activities should be included in the quality management system. The recommendations and guidance in this document apply to anyone in the organization who could affect the quality of the organization's product(s) or service(s), including necessary support services (see 3.1.23).