
**Health informatics — Workforce roles
and capabilities for terminology and
terminology services in healthcare
(term workforce)**

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Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Abbreviations	3
5 Terminology and terminology services in healthcare	4
6 Healthcare terminology professionals	5
6.1 Workforce shortage and impact.....	5
6.2 Terminology specialists: Roles, job and skills requirements, and qualifications	5
6.2.1 Terminology technical specialist.....	6
6.2.2 Terminology specialist.....	9
6.2.3 Terminology advanced specialist	12
7 Competencies, educational objectives and content	16
7.1 Competencies.....	16
7.2 Learning outcomes per competency.....	17
Annex A (informative) HIT, HIM and informatics workforce needs: Examples from Canada, UK, and US	31
Annex B (informative) Roles within healthcare organizations that work with or support terminology services	32
Annex C (Informative) Bloom’s Taxonomic Level	33
Bibliography	34

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 215, *Health informatics*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Introduction

Countries that began the adoption of Health Information and Communication Technology (HICT) products have reported shortfalls in the quantity and skills of the workforce in Health Information Technology (HIT), Health Information Management (HIM), and Health Informatics (HI).

This document addresses workforce needs when implementing terminology resources (products) in healthcare organizations and related supporting organizations, including regional, national, and international HICT programs.

The purpose of this document is to enable healthcare organizations and related supporting organizations that deploy HICT products to safely and effectively support semantic interoperability within systems and between systems locally, nationally, or globally. Semantic interoperability, the ability of computer systems to exchange data with unambiguous and shared meaning, is impacted by the generation, management and sharing of health-related data and information.

Implementation and operation of complex terminologies in healthcare organizations and related supporting organizations without proper knowledge and skills of personnel in those terminological resources is a contributing factor in the resulting failure to deliver expected care outcomes, in delays in Electronic Health Record (EHR) and Health Information Systems (HIS) implementations, and in some cases, in injury caused to patients. Employers need to be able to hire workers with confidence that they have the right skill set for the job.

This document specifies tasks associated with electronic capture, management, sharing, and use of health record content in EHR and HIS in the context of clinical care, business processes, and information governance activities in healthcare.

This document is targeted to stakeholders involved in HICT products development, deployment, and use. Specific value includes:

- **Healthcare organizations and HICT vendors:** Requirements and guidance for tasks and the skills for human resource staff to guide hiring of terminology standards personnel.
- **Professional associations:** Guidance for terminology skill requirements, training and certification of HIT, HIM, and Informatics professionals, as well as accreditation of terminology services programs.
- **Academia:** Guidance for (a) the overall curricula development to support semantic interoperability education under HIT, HIM, and informatics programs, and (b) terminology competencies to support course development.
- **eHealth, HIM, HIT, Informatics professionals and others:** Provide a mechanism to consistently and accurately indicate career pathways and skill expectations.
- **Consumers** (patients, clinicians, governments, society): Safe, quality information is available.

This document supports the deployment of semantic content standards developed by TC 215 in healthcare organizations and governmental entities involved in electronic information sharing using interoperable standards-based HICT products. It provides direction on workforce needs for deployment and operation of terminological resources as well as the roles, competencies and skills to support these needs. Consideration of a business case development and potential numbers needed (i.e. terminology workers) would also be helpful in determining workforce requirements.

It also supports the development of the TC 215 reference standards portfolio (an assembly of individual standards) for interoperable HICT solutions in specific health domains, by identifying specific content area(s) for which a qualified terminology services workforce is needed.

ISO 21298 also describes a number of roles in healthcare. It is possible that some staff with roles as described in ISO 22287 roles might also undertake roles as described in ISO 21298 roles, or there might be naming collisions.

