Electronic Health Record-System Functional Model, Release 1.1

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 10781:2010 sisaldab Euroopa standardi EN ISO 10781:2009 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 10781:2010 consists of the English text of the European standard EN ISO 10781:2009.
Standard on kinnitatud Eesti Standardikeskuse 28.02.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 28.02.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 15.11.2009.	Date of Availability of the European standard text 15.11.2009.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

ICS 35.240.80

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 10781

November 2009

ICS 35.240.80

English Version

Electronic Health Record-System Functional Model, Release 1.1 (ISO 10781:2009)

Modèle fonctionnel d'un système d'enregistrement électronique de la santé HL7, version 1.1 (ISO 10781:2009)

Medizinische Informatik - HL7 funktionales Modell für ein elektronisches Gesundheitsaktensystem (ISO 10781:2009)

This European Standard was approved by CEN on 7 November 2009.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN ISO 10781:2009: E

Foreword

This document (EN ISO 10781:2009) has been prepared by Technical Committee ISO/TC 215 "Health informatics" in collaboration with Technical Committee CEN/TC 251 “Health informatics”, the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2010, and conflicting national standards shall be withdrawn at the latest by May 2010.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of ISO 10781:2009 has been approved by CEN as a EN ISO 10781:2009 without any modification.

HL7 EHR Work Group

Electronic Health Record-System Functional Model, Release 1.1 June 2009

Chapter One: Overview

EHR Work Group Co-chairs:

Don Mon
American Health Information Management Association (AHIMA)

John Ritter

Corey Spears
Practice Partners – McKesson

Pat Van Dyke
The ODS Companies, Delta Dental Plans Association

Preface

i. Notes to Readers

The HL7 EHR-S Functional Model, which was approved in July, 2004 as a Draft Standard for Trial Use (DSTU), has undergone a series of enhancements in the last year as it made its way to a fully approved American National Standards Institute (ANSI) standard. A broad constituency - including intensive outreach to industry, care providers, and healthcare organizations - has worked to refine the initial EHR-S Functional Model. This version reflects the changes made as part of the reconciliation process in the successful membership level balloting that took place at the January 2007 HL7 Workgroup Meeting.

ii. Acknowledgements

The committee is indebted to the following past co-chairs and facilitators for their contributions towards the Public Health domain and the material presented here. Direct and indirect participants in the development of the model, including workgroup contributors and other participants, can be found in the "Contributor Listing" found at www.HL7.org/EHR in the "documents" section.

Name	Role	Organization
Peter DeVault	Past TC Co-Chair	Epic Systems Corporation
Gary Dickinson	Past TC Co-Chair	CentrifyHealth, Inc.
Linda Fischetti	Past TC Co-Chair	U.S. Department of Veterans Affairs
Sam Heard	Past TC Co-Chair	Ocean Informatics
David Rowlands	Past TC Co-Chair	Standards Australia
Corey Spears	Past TC Co-Chair	Practice Partner
Jason Carley	Special Administrative Recognition	U.S. Department of Veterans Affairs
Pam Morgan	Special Administrative Recognition	EDS
Sean O'Connor	Special Administrative Recognition	SAIC
Fred Stark	Special Administrative Recognition	EDS
Lenel James	Co-facilitators: Chapter 1 - Overview	Blue Cross Blue Shield Association
Sue Mitchell	Co-facilitators: Chapter 1 - Overview	Omnicare Information Solutions
John Ritter	Co-facilitators: Chapter 1 - Overview	Intel Corporation
Lenel James	Co-facilitators: Chapter 2 – Conformance Clause	Blue Cross Blue Shield Association
Lynne Rosenthal	Co-facilitators: Chapter 2 – Conformance Clause	National Institute of Standards and Technology
Mary Jo Deering	Co-facilitators: Chapter 3 – Direct Care	U.S. National Institute of Health, National Cancer Institute
Sue Mitchell	Co-facilitators: Chapter 3 – Direct Care	Omnicare Information Solutions
Don Mon	Co-facilitators: Chapter 3 –	American Health Information

Name	Role	Organization
	Direct Care	Management Association
Pat Van Dyke	Co-facilitators: Chapter 3 – Direct Care	The ODS Companies
Dave Allard	Co-facilitators: Chapter 4 – Supportive	IBM Corporation
Lenel James	Co-facilitators: Chapter 4 – Supportive	Blue Cross Blue Shield Association
Vassil Peytchev	Co-facilitators: Chapter 4 – Supportive	Epic Systems Corporation
Vassil Peytchev	Co-facilitators: Chapter 5 – Information Infrastructure	Epic Systems Corporation
Harry Rhodes	Co-facilitators: Chapter 5 – Information Infrastructure	American Health Information Management Association
John Ritter	Co-facilitators: Chapter 5 – Information Infrastructure	Intel Corporation
Ioana Singureanu	Co-facilitators: Chapter 5 – Information Infrastructure	U.S. Department of Veterans Affairs
Harry Rhodes	Facilitator: Glossary Project	American Health Information Management Association
Lynne Rosenthal	Facilitator: How-to Guide for Creating Functional Profiles	National Institute of Standards and Technology
Lenel James	Co-Facilitators: Publications Working Group	Blue Cross Blue Shield Association
Sue Mitchell	Co-Facilitators: Publications Working Group	Omnicare Information Solutions
John Ritter	Co-Facilitators: Publications Working Group	Intel Corporation

iii. Changes from Previous Release

The HL7 EHR-S Functional Model was promoted to an ISO International Standard after passing HL7 consensus ballot as a normative standard and achieving ANSI approval. This promotion follows the process outlined in the ISO/HL7 Pilot Agreement. The June, 2009 release of this document includes updates from the joint ISO/HL7 ballot. The dates of the comment for the 60 day Draft International Standard (DIS) ballot were February through April, 2009. The HL7 comment period was a 30 day window that coordinted with the last 30 days of the ISO-DIS ballot period. Reconciliation was accomplished in May and early June of 2009.

Chapter 1 Introduction and Overview

The HL7 Electronic Health Records Special Interest Group (EHR SIG) was established in the spring of 2002. In the spring of 2003 the HL7 group began efforts to develop a standardized functional specification for Electronic Health Records Systems (EHR-S). In May 2004 the SIG was promoted to a full HL7 Technical Committee, becoming the EHR TC. The EHR TC is intended primarily to serve as a body which promotes the uptake of Electronic Health Record (EHR) implementation by standardizing the functions that may be present, based on user selection, in an EHR-S.

The Department of Health and Human Services, the Veterans Health Administration, the Health Information Management Systems Society and the Robert Wood Johnson Foundation, in a public-private partnership, approached HL7 to accelerate their existing work to develop a consensus standard to define the functions of an EHR-S. HL7, through its EHR SIG, responded by developing an EHR-S Functional Model that passed ballot as a Draft Standard for Trial Use (DSTU) in April 2004. The Functional Model DSTU was published and formally registered with the American National Standards Institute (ANSI) in July 2004. The Functional Model was then balloted and passed as a normative standard as part of the January 2007 HL7 Workgroup Meeting and is now registered as a normative standard with ANSI

Learning important lessons from the ballot process, a Functional Model with a clearer, more simplified list of functions, has been created. The HL7 EHR System Functional Model provides a reference list of functions that may be present in an Electronic Health Record System (EHR-S). The function list is described from a user perspective with the intent to enable consistent expression of system functionality. This EHR-S Model, through the creation of Functional Profiles, enables a standardized description and common understanding of functions sought or available in a given setting (e.g. intensive care, cardiology, office practice in one country or primary care in another country).

1 Background

1.1 What is HL7?

Established in 1987, Health Level Seven (HL7) is an American National Standards Institute (ANSI) accredited, not-for-profit standards-development organization, whose mission is to provide standards for the exchange, integration, sharing, and retrieval of electronic health information; support clinical practice; and support the management, delivery and evaluation of health services. ANSI accreditation, coupled with HL7's own procedures, dictates that any standard published by HL7 and submitted to ANSI for approval, be developed and ratified by a process that adheres to ANSI's procedures for open consensus and meets a balance of interest requirement by attaining near equal participation in the voting process by the various constituencies that are materially affected by the standard (e.g., vendors, providers, government agencies, consultants, non-profit organizations). This balance of interest goal ensures that a particular constituency is neither refused participation nor is it allowed to dominate the development and ratification of a proposed standard. More information and background on ANSI is available on their website at: http://www.ANSI.org