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English version

Medical informatics - Registration of information objects used for EDI in healthcare - Part 1: The Register

Informatique de santé - Enregistrement d'objets d'information utilisés pour l'échange de données informatisé dans le domaine de la santé - Partie 1: Registre

Medizinische Informatik - Registrierung von Informationsobjekten für den elektronischen Datenaustausch (EDI) im Gesundheitswesen - Teil 1: Register

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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CONTENTS

Foreword

This European Prestandard has been prepared by Technical Committee CEN/TC 251 "Medical informatics", the secretariat of which is held by IBN.

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to announce this European Prestandard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

The standard is published in two parts. This part specifies the information to be registered for information objects used in electronic data interchange (EDI) in healthcare.

Part 2 specifies the procedures for the operation of registration authorities. It incorporates a description of the software required to support the practical application of this European Prestandard.

Annex A of this Part is normative. Annexes B, C, D, E, F, G are informative.

Introduction

The following Introduction wording is also used in Part 2.

The increased use of data processing and telecommunications capabilities has made possible the interchange of information in machine readable and machine processable formats. As automated interchange of information in healthcare increases it is essential to provide appropriate data interchange standards.

All the methods of electronic data interchange (EDI) currently in use require the division of the information to be interchanged into suitable components, which are then identified in some way so that the receiving system can recognize them and process them appropriately. The components are assembled into messages, each message representing a transaction or being equivalent to a form in paper based working methods.

In the context of this European Prestandard a component may range from a data element, which is a unit of data normally considered to be indivisible, through logically associated groups of data elements, to complete messages. All are information objects.

The rapid growth in EDI is resulting in the almost simultaneous development of systems each designed to satisfy the requirements of a particular application area. Unfortunately these uncoordinated developments also result in unnecessary variations in the manner in which information is represented, identified, named and described. The use of identical identifiers and names for different data concepts introduces a serious risk of misunderstanding and confusion when data is exchanged between application areas which have developed independently. In the English

language the term "date of delivery", for example, may represent entirely different concepts for gynaecologists and couriers.

This European Prestandard describes a procedure by which the components and messages required to facilitate the use of EDI in support of healthcare may be registered and allocated an internationally unique identifier. This European Prestandard also specifies how components when registered may be included in a widely available International Register which is so indexed and constructed that those designing EDI messages can ascertain easily whether a component or message which is suitable for their purposes already exists.

If it is established that new components or messages are essential the procedures for registration specified in this European Prestandard are designed to encourage their derivation from existing entries with appropriate modifications thus avoiding unnecessary variations in the way similar data concepts are represented. Registration will also enable synonyms, i.e. two or more information objects serving an identical function, to be identified. Perhaps most importantly, it will highlight the situations where similar or identical names are in use for EDI information objects which are significantly different in one or more respects.

The procedures specified in this European Prestandard recognize that the development of EDI messages is a dynamic and fast moving process and may involve the use of more than one syntax. They are therefore designed to be syntax independent and also to minimize administrative delay.

This European Prestandard is based on work within CEN TC 251 which uses a domain information model (DIM) as a basis for the design of EDI messages. It also draws on work within ISO.

1 Scope

This part of the European Prestandard specifies the information to be registered for information objects used in EDI for the purpose of information interchange related to healthcare.

The information objects and the information relating to them are recorded in a way which is designed to be independent of interchange format and to facilitate the use of the information objects to construct implementable message specifications.

This European Prestandard does not cover the registration of information objects which fall within layers 1-7 of the Basic Reference Model of Open Systems Interconnection ISO 7498, nor does it specify the data base software, programming languages, file organization, storage media, etc., to be used for the establishment and maintenance of the Register.

> NOTE: Although the scope of this European Prestandard is confined to EDI in support of healthcare the provisions are intended to be capable of application to EDI universally.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this European Prestandard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the