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Health informatics — Functional and structural roles

Informatique de santé — Rôles fonctionnel et structurel

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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 document:

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An ISO/PAS or ISO/TS is reviewed after three years in order to decide whether it will be confirmed for a further three years, revised to become an International Standard, or withdrawn. If the ISO/PAS or ISO/TS is confirmed, it is reviewed again after a further three years, at which time it must either be transformed into an International Standard or be withdrawn.

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

ISO/TS 21298 was prepared by Technical Committee ISO/TC 215, *Health informatics*.

Introduction

This Technical Specification contains a specification for encoding information related to roles for health professionals and consumers. At least four areas have been identified where a model for encoding role information is needed.

a) **Privilege management and access control**: role-based access control is not possible without an effective means of recording role information for healthcare actors.

b) **Directory services**: structural roles are usefully recorded within directories of health care providers (see, for example, ISO/TS 21091).

c) **Audit trails**: functional roles are usefully recorded within audit trails for health information applications.

d) **Public key infrastructure (PKI)**: The three-part International Standard ISO 17090[9], [10] allows for the encoding of healthcare roles in certificate extensions, but no structured vocabulary for such roles is specified. This Technical Specification identifies such a coded vocabulary.

In addition to these security related applications there are several other possible applications of this Technical Specification, such as:

e) **Search and retrieval**: finding and identifying the right professional for a health service.

f) **Administration**: billing of health care services.

g) **Messaging**: directing healthcare related messages by means of a specific role.

This Technical Specification is complemetary to other relevant standards that also describe and define roles for the purpose of access control. Backward compatibility with ANSI INCITS and HL7 RBAC is provided through simplification by combining the policy and role into a single construct. This Technical Specification extends the model through the separation of the role and policy. This separation allows for a richer and more flexible capability to instantiate business rules across multiple domains and jurisdictions.