

Australian Standard™

**Implementation of Health Level Seven
(HL7) Version 2.3.1**

Part 2: Pathology orders and results



This Australian Standard was prepared by Committee IT-014, Health Informatics. It was approved on behalf of the Council of Standards Australia on 6 February 2004. This Standard was published on 19 March 2004.

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Australian Health Insurance Association
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PREFACE

This Standard was prepared under the auspices of the Joint Standards Australia/Standards New Zealand Committee IT-014, Health Informatics, in response to requests from the health informatics community. It covers implementation of the Health Level Seven (HL7) Version 2.3.1 protocol, for communication between health service providers and pathology providers within and between Australian health care settings. It also covers referrals between pathology providers and communication between pathology providers and knowledge bases.

This Standard incorporates Amendment No. 1 (April 2006). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

This Standard was prepared by the IT-014-06-05 Pathology Messages Working Group of IT-014-06 Messaging Sub-Committee under direction from the Australian members of the Joint Standards Australia/Standards New Zealand Committee IT-014. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this Standard is to specify message formats and codesets for communicating pathology orders and results within and between Australian health care settings.

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Standards Australia wishes to thank the Department of Health and Ageing for their continued financial support in helping us to achieve our aims.

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FOREWORD

The mission of the working group is to advise on the appropriateness of international Standards and to recommend specific standards and/or implementation guidelines for report messages and order entry messages, and to consider the need for Standards for other messages related to pathology.

The HL7 Version 2.3.1 protocol covers a wide range of data interchange functions. However, this Australian implementation Standard focuses on the pathology orders and results for HL7 messages. An order entry message is analogous to a pathology request. An observational report message is analogous to the printed pathology report.

All efforts have been made to minimize divergence from the HL7 protocol to ensure maximum compatibility with future versions.

HL7 is a healthcare application protocol accredited as a Standard by the American National Standards Institute (ANSI). ‘Level Seven’ refers to the highest level of the International Organization for Standardization (ISO) communications model for Open Systems Interconnection (OSI)—the application level. Issues within the application level include definition of the data to be exchanged, the timing of the exchange and communication of certain errors to the application. This level supports such functions as security checks, identification of the participants, availability checks, negotiating exchange mechanisms and, importantly, structuring the data exchanges themselves.

Australia and New Zealand already have an existing base of health care institutions that use the HL7 protocol to exchange key sets of data between different computer application systems. While HL7 is concerned with addressing immediate needs, there is a very strong focus on convergence with other Standards development activities in the United States of America and international HL7 initiatives in countries including Canada, Finland, Germany, India, Japan, the Netherlands, South Africa and the United Kingdom.

The HL7 family of standards is a collection of standards that specify the implementation of interfaces between computer applications. It is not rigid. Flexibility is built into the protocol to allow compatibility for specialized data sets that have facility-specific needs. One of HL7’s strengths is its inbuilt flexibility. However, it is also one of its weaknesses. It is open to differences in interpretation in its structure and format. Implementation of the HL7 Version 2.3.1 Standard in the Australian health environment requires a common and consistent approach.

STANDARDS AUSTRALIA

Australian Standard

Implementation of Health Level Seven (HL7) Version 2.3.1

Part 2: Pathology orders and results

1 SCOPE

HL7 is a healthcare application protocol accredited as a Standard by the American National Standards Institute (ANSI). This Standard covers implementation of pathology orders and results using HL7 Version 2.3.1 protocol, for communication between health service providers and pathology providers, within and between Australian health care settings. The Standard includes the data segments and data elements that are mandatory (required), optional or conditional (required, based on a condition), and relevant usage notes in the Australian health environment. The Standard provides consistent use of data definitions as well as commentary and references to the International Organization for Standardization (ISO), the National Health Data Dictionary (NHDD), the National Association of Testing Authorities Australia (NATA) and The Royal College of Pathologists of Australasia (RCPA).

2 APPLICATION

This Standard is for use by Australian health authorities, health service providers, pathology providers, health institutions, health information technology vendors, health information technology consultants and the health informatics community.

For the purposes of this Standard, only human patients are considered.

3 REFERENCED AND RELATED DOCUMENTS

3.1 Referenced documents

The following documents are referred to in this Standard:

AS	
4590	Interchange of client information
4700	Implementation of Health Level Seven (HL7) Version 2.3.1
4700.1	Part 1: Patient administration
4700.2	Part 2: Pathology orders and results
5017	Health Care Client Identification
HB 262	Pathology electronic messaging—Guidelines for pathology messaging between pathology providers and health service providers—Implementation guide
ISO	
2955	Information processing—Representation of SI and other units in systems with limited character sets
HL7 V2.3.1	Health Level Seven Standard Version 2.3.1: Health Level Seven Inc., Ann Arbor 1999
Broadsheet No. 29	SI Units Revisited: The Royal College of Pathologists of Australasia, Sydney: 1986