Health Information and Quality Authority

An tÚdarás Um Fhaisnéis agus Cáilíocht Sláinte

General Practice Messaging Standard

Version 4.0

September 2017

Safer Better Care

Version Control

To read more about how the Standard was developed, see Appendix A, History of the General Practice Messaging Standard.

Date	Version	Change
March 2010	1.0	Approved by the Minister for Health and Children.
November 2011	2.0	Included new requirements from selected stakeholders.
May 2014	3.0	Included updates relating the electronic transfer of prescriptions.
August 2017	4.0	Included updates to messaging standards for: ▪ letters from the Outpatients Department and the Emergency Department ▪ radiology ordering ▪ cardiology results ▪ Antenatal care.

HL7 Copyright Notice

About the Health Information and Quality Authority

The Health Information and Quality Authority (HIQA) is an independent authority established to drive high-quality and safe care for people using our health and social care services in Ireland. HIQA's role is to develop Standards, inspect and review health and social care services and support informed decisions on how services are delivered. HIQA's ultimate aim is to safeguard people using services and improve the safety and quality of health and social care services across its full range of functions.

HIQA's mandate to date extends across a specified range of public, private and voluntary sector services. Reporting to the Minister for Health and the Minister for Children and Youth Affairs, HIQA has statutory responsibility for:

- **Setting Standards for Health and Social Services** — Developing person-centred Standards, based on evidence and best international practice, for health and social care services in Ireland.
- **Regulation** — Registering and inspecting designated centres.
- **Monitoring Children's Services** — Monitoring and inspecting children's social services.
- **Monitoring Healthcare Safety and Quality** — Monitoring the safety and quality of health services and investigating as necessary serious concerns about the health and welfare of people who use these services.
- **Health Technology Assessment** — Providing advice that enables the best outcome for people who use our health service and the best use of resources by evaluating the clinical effectiveness and cost-effectiveness of drugs, equipment, diagnostic techniques and health promotion and protection activities.
- **Health Information** — Advising on the efficient and secure collection and sharing of health information, setting Standards, evaluating information resources and publishing information about the delivery and performance of Ireland's health and social care services.

Overview of the health information function of HIQA

Healthcare is information-intensive, generating huge volumes of data every day. Health and social care workers spend a significant amount of their time handling information, collecting it, looking for it and storing it. It is therefore imperative that information is managed in the most effective way possible in order to ensure a high-quality, safe service.

Safe, reliable healthcare depends on access to, and the use of, information that is accurate, valid, reliable, timely, relevant, legible and complete. For example, when giving a patient a drug, a nurse needs to be sure that they are administering the appropriate dose of the correct drug to the right patient and that the patient is not allergic to it. Similarly, lack of up-to-date information can lead to the unnecessary duplication of tests — if critical diagnostic results are missing or overlooked, tests have to be repeated unnecessarily and, at best, appropriate treatment is delayed or at worst not given.

In addition, health information has a key role to play in healthcare planning decisions — where to locate a new service, whether or not to introduce a new national screening programme and decisions on best value for money in health and social care provision.

Under section (8)(1)(k) of the Health Act 2007, the Health Information and Quality Authority (HIQA) has responsibility for setting Standards for all aspects of health information and monitoring compliance with those Standards. In addition, under section 8(1)(j), HIQA is charged with evaluating the quality of the information available on health and social care and making recommendations in relation to improving the quality and filling in gaps where information is needed but is not currently available.

Information and communications technology (ICT) has a critical role to play in ensuring that information to drive quality and safety in health and social care settings is available when and where it is required. For example, it can generate alerts in the event that a patient is prescribed medication to which they are allergic. Further to this, it can support a much

faster, more reliable and safer referral system between the patient's general practitioner (GP) and hospitals.

Although there are a number of examples of good practice, the current ICT infrastructure in Ireland's health and social care sector is highly fragmented with major gaps and silos of information which prevents the safe, effective, transfer of information. This results in people using the service being asked to provide the same information on multiple occasions.

In Ireland, information can be lost, documentation is poor, and there is over-reliance on memory. Equally, those responsible for planning our services experience great difficulty in bringing together information in order to make informed decisions. Variability in practice leads to variability in outcomes and cost of care. Furthermore, we are all being encouraged to take more responsibility for our own health and wellbeing, yet it can be very difficult to find consistent, understandable and trustworthy information on which to base our decisions.

As a result of these deficiencies, there is a clear and pressing need to develop a coherent and integrated approach to health information, based on Standards and international best practice. A robust health information environment will allow all stakeholders, the general public, patients and service users, health professionals and policy makers to make choices or decisions based on the best available information. This is a fundamental requirement for a high reliability healthcare system.

Through its health information function, HIQA is addressing these issues and working to ensure that high quality health and social care information is available to support the delivery, planning and monitoring of services.

One of the areas currently being addressed through this work programme is the need to standardise the information shared between general practitioners and hospital consultant and administrative staff. This has been achieved through a General Practice Messaging Standard. The Standard is based on the international Health Level Seven (HL7) version 2.4 Messaging Standard. Published in April 2010, the first version of the General Practice Messaging Standard was approved by the then Minister for Health and Children. In 2011, General Practice Messaging Standard version 2.0 was developed to incorporate new requirements identified by stakeholders. General Practice Messaging Standard version 3.0

followed in 2014, and it incorporated messaging requirements for the electronic transfer of prescriptions between GPs and community pharmacies, including the outpatient departments of hospitals. This document describes General Practice Messaging Standard version 4.0, which includes messaging Standards for:

- Letters from the Outpatients Department and the Emergency Department
- Radiology ordering
- Cardiology results
- Antenatal care

Contents

About this document

This document is divided into the following sections:

- **Chapter 1 — Introduction**: This chapter describes the background to the development of the General Practice Messaging Standard (GPMS), including the remit under which the Health Information and Quality Authority (HIQA) defined the Standard.

- **Chapter 2 — Use cases**: This chapter describes the use cases for each scenario covered by the Standard. Each use case describes the messages sent to accomplish the overall goal of the use case. The Standard defines use cases for selected clinical scenarios, including antenatal care, and electronic prescribing (e-prescribing) in the community.

- **Chapter 3 — Message types**: This chapter describes the format required for each type of message covered by the Standard. These formats are defined by the HL7 Standard.

- **Chapter 4 — Message segments**: This chapter defines the 25 HL7 message segments covered by the Standard, together with the conventions used in the corresponding segment tables.

- **Chapter 5 — Reference tables**: This chapter lists all the HL7 reference tables used in the 25 message segment tables covered by the Standard.

- **Appendix A — History of the General Practice Messaging Standard**:This appendix provides a chronology of the events and actions involved in developing the Standard.

- **Appendix B — LOINC and SNOMED CT codes for antenatal care:** This appendix lists the LOINC and SNOMED CT clinical codes that are used for antenatal care events.

- **Appendix C — LOINC codes for referrals:** This appendix describes the LOINC codes that are used in referrals.

- **Appendix D — HL7 message type to eHealthIreland message type:** This appendix maps the structure of each HL7 message type to the corresponding eHealthIreland message type.

- **Appendix E — LOINC copyright statement:** This appendix reproduces the LOINC copyright statement, as required under the LOINC terms of use when listing LOINC codes.

- **Appendix F — Change history by version:** This appendix lists the changes that have been made to each version of this Standard document.

- **Appendix G — Feedback form:** This appendix provides a form for returning feedback on any aspect of the Standard or its development.

1   Introduction

The successful implementation of health messaging in Ireland requires a common and consistent approach. It is essential that sender and recipient agree the structure and meaning of the data being exchanged electronically before the exchange takes place. This ensures that the benefits of the electronic sharing of information (referred to as health messaging) can be realised and any potential for misinterpretation can be avoided.

The General Practice Messaging Standard is intended to standardise the electronic transmission of messages between healthcare practitioners in different healthcare settings in Ireland — for example, between general practitioners (GPs) and hospitals or between prescribers and dispensers. The Standard is based on the HL7 Messaging Standard Version 2.4.[1] This document describes General Practice Messaging Standard version 4.0, which updates the agreed Standard for messaging to and from GP services and for electronic prescribing (e-prescribing) in the community in Ireland.

1.1   Background

The General Practice Messaging Standard presented in this document was developed as per HIQA's legislative remit under the Health Act 2007 and subsequent amendments to the Act. This gives HIQA a remit to set standards for the Health Service Executive (HSE), the Child and Family Agency (Tusla) and services funded by the HSE and to monitor compliance with those standards.

Under the Health Act 2007, HIQA currently has a statutory remit to develop standards, evaluate information and make recommendations about deficiencies in health information. The responsibilities of HIQA in this regard are outlined in the following sections of the Act:

- Section 8(1)(i): to evaluate available information respecting the service and the health and welfare of the population

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[1] See http://www.hl7.org/implement/standards/product_brief.cfm?product_id=142.

- Section 8(1)(j): to provide advice and make recommendations to the Minister for Health and the HSE about deficiencies identified by HIQA in respect of the information referred to in paragraph (i)

- Section 8(1)(k): to set standards as HIQA considers appropriate for the HSE and service providers respecting data and information in their possession in relation to services and the health and welfare of the population

- Section 8(1)(l): to advise the Minister for Health and the HSE as to the level of compliance by the HSE and service providers with the standards referred to in paragraph (k).

Under Section 8(1)(k) of the Health Act 2007, HIQA is charged with setting standards for health information. This includes standards for the communication of health information between healthcare providers.

As part of this remit, and in line with best practice in standards development, HIQA seeks to adopt accepted international standards defined by recognised authorities. A US-based, not-for-profit organisation, Health Level Seven International (HL7) coordinates the development and publication of standards specifically for healthcare. Among the standards it has the developed is the HL7 Messaging Standard Version 2.4, which is known for its flexibility. This flexibility makes it suitable to be adapted for use in an Irish setting. However, the same flexibility also creates challenges, as, without appropriate guidance, its structure and format may be open to misinterpretation. The General Practice Messaging Standard defines a subset of the HL7 Messaging Standard Version 2.4 for use in Ireland, focusing in particular on the structure and content of electronic messages used. Each HL7 Version 2.4 message is comprised of several **message segments**. Each message segment consists of one or more **data fields,** and each data field can contain one or more **components**. Components can repeat within the message. Each segment's data fields and components are defined in the corresponding **segment table**.

The General Practise Messaging Standard defines messages segments and message flows supported for use. It also defines both the dynamic aspects — systems participating in the interchange and triggers which precipitate the interchange — and the static aspects —

message structure and content. The Standard is an application-level specification and does not address lower level details, specifically:

- choice of transport technologies
- encryption and authentication mechanisms
- infrastructure for addressing and routing of messages.

In particular, the Standard supports 26 HL7 segments, covering a selected range of clinical scenarios and electronic prescribing scenarios. This document lists the 26 HL7 segments supported, together with their corresponding segment tables. It outlines the clinical scenarios and electronic prescribing scenarios in which they are supported for use. It specifies the interactions that typically occur in each scenario and the message structure needed in any messages exchanged.

This document describes only those aspects of the HL7 Version 2.4 Standard that are supported by the General Practice Messaging Standard.

1.2   Benefits

Messaging standards outline the structure, content and data requirements of electronic messages to enable the effective sharing of information. In the context of messaging standards, the term "message" refers to a unit of information that is sent from one system to another, such as between a laboratory and a GP.

In the healthcare context, messaging standards such as the General Practice Messaging Standard help to ensure the effective exchange of clinical, administrative and patient information, which improves the quality and safety of patient care.

Messaging standards are critically important in promoting the effective and consistent recording and sharing of information between GPs and third parties such as laboratories, radiological services, emergency departments and hospital consultants. The ongoing development of the Standard is particularly important as a means of increasing patient safety. The Standard also helps to reduce the administrative burden on GP practices in the community by enabling patient information to be shared more effectively by electronic means. This has the potential to increase the amount of time GPs can spend on frontline

service delivery to patients and reduce reliance on less reliable, traditional, means of information sharing such as record transcribing and hard-copy posting of diagnostic results.

Benefits for patients

A standard form of GP messaging provides the following benefits to patients:

- speeds up the patient-referral process to enable the patient to start on their journey of care more quickly

- reduces the need for duplicate and repeat diagnostic testing

- speeds up the sharing of patient discharge details and facilitating continuing care for patients during transfer between secondary care (for example, hospital) and primary care (for example, GP)

- provides complete, accurate, and searchable health information, available at the point of diagnosis and care, allowing for more informed decision making to enhance the quality and reliability of healthcare delivery

- offers more efficient and convenient delivery of care, without having to wait for the exchange of records or paperwork and without requiring unnecessary or repetitive tests or procedures

- supports earlier diagnosis of disease, with the potential to thereby improve outcomes and reduce costs

- reduces adverse events through an improved understanding of each patient's particular medical history, reducing the potential for harmful drug interactions in the course of treatment

- facilitates the outcome of out-of-hours consultations on patient being available to GPs, thus facilitating continuity of care for the patient

- patient laboratory and radiology reports and diagnosis transmitted more efficiently to GPs, ensuring patients are receiving the most appropriate treatment.

Benefits for GPs

A standard form of GP messaging provides the following benefits to GPs:

- enables the faster, more efficient and accurate transfer of information between acute services and GPs

- reduces transcription errors in the recording and sharing of information, ensuring that patients and their information can be more reliably identified

- increases efficiencies related to administrative tasks, allowing for more interaction with and transfer of information to patients, caregivers, and clinical care coordinators, and monitoring of patient care

- facilitates GPs to increase the amount of time spent on the delivery of frontline patient care as a result of a reduced administrative burden

- supports the notification of patient attendance in emergency departments, thus facilitating patient follow up if required

- facilitates the electronic ordering of tests, thus reducing waiting times for investigations for patients

- allows GPs to select/use the system best suited to their needs, while at the same time ensuring that they can exchange information safely with hospital and other systems.

1.3   Methodology

In accordance with its framework for quality assurance, HIQA follows the following process when developing or reviewing a Standard:

1. Develop project planning materials.

2. Create a draft standards document for consultation, incorporating the following items:

   a. any relevant changes to the international Standard on which the Standard is based

   b. any relevant change requests from stakeholders.

3. Hold a targeted consultation on the draft standards document with the eHealth Standards Advisory Group and any other stakeholders identified in Step 1.

4. Circulate the updated draft standards document, including all changes from the consultation process, to the eHealth Standards Advisory Group and any other stakeholders who participated.

5. Circulate the resulting final draft standards document to HIQA's Executive Management Team (EMT), together with:

   a. Statement of Assurance, which confirms that the Standard has been developed in accordance with the Quality Assurance Framework

   b. briefing note, which provides background information.

6. Circulate the EMT-approved final draft standards document to the Board of HIQA, together with:

   a. Statement of Assurance, which confirms that the Standard has been developed in accordance with the Quality Assurance Framework.

   b. briefing note, which provides background information.

7. Present the approved standards document to the Minister for Health and publish on the HIQA website.

HIQA began developing a General Practice Messaging Standard in 2009. First, an extensive literature and practice review was undertaken to ensure that elements already in place in some practices in Ireland could, where appropriate, be adapted for standardised national use. The literature reviewed included the Health Executive Board Messaging Specification and the Healthlink Online Messaging Specification.

Then, reflecting its commitment to consultation and engagement, HIQA convened and chaired a multidisciplinary working group to solicit feedback. The eHealth Standards Advisory Group, as it is known, included clinical experts, policy makers, and methodological experts. The terms of references are described in Appendix A, History of the General Practice Messaging Standard.

Consultation on the proposed Standard took place in December 2009. The proposed Standard was updated with appropriate additions based on the feedback received. The updated draft Standard document was approved by HIQA's Executive Management Team and the Board of HIQA. The General Practice Messaging Standard version 1.0 was first published in April 2010 and approved by the Minister for Health and Children in May 2010.

Since its first publication in 2010, HIQA has undertaken timely reviews of the Standard. Reflecting HIQA's commitment to consultation and engagement, each review included a targeted consultation process to solicit and incorporate feedback from the eHealth Standards Advisory Group and other stakeholders. These targeted consultations ensure that the Standard takes account of relevant elements of existing practices in GP messaging and includes any appropriate requirements identified by stakeholders.

General Practice Messaging Standard version 2.0 included new scenarios for clinical settings while version 3.0 included scenarios for electronic prescribing (e-prescribing) in the community.

This document describes General Practice Messaging Standard version 4.0. Working in conjunction with Healthlink and other key stakeholders the GPMS has been significantly revised in order to reflect recent development in messaging standards used in Ireland. The Antenatal Shared Care message has been developed by Healthlink in conjunction with the General Practice Information Technology Group and the Maternal & New born Clinical Management System (MN-CMS). Additional uses case have been identified and supported in this revision including radiology ordering, emergency department and outpatient clinic letter and cardiology results messaging. The specification provides the structure and content of electronic messaging to support the sharing of these records between primary care and secondary care. Healthlink requested other minor additions to the specification which were including in the revision of the Standard. Finally, a significant restructuring of the layout of

the standard document was undertaken during this revision improving the flow of the document.

2   Use cases

This chapter describes the use cases that this General Practice Messaging Standard supports. A use case describes the steps and actions needed to complete the use case goal. Within the Standard, each use case describes all the messages sent to accomplish a goal. For example, use case 14, the laboratory order request, describes the message sent from the general practice management system to the message exchange when a general practitioner orders a laboratory test and the acknowledgement message sent from the message exchange to the general practice management system. The Standard covers use cases for selected clinical settings, including antenatal care, and for electronic prescribing in community settings.

2.1   Supported clinical uses cases

The Standard supports a range of clinical use cases, such as when a patient is attends a healthcare facility or when a patient has been added to a waiting list. Each clinical scenario is described in the following terms:

- **Use Case** briefly describes the use case associated with the scenario. Treating the business process as a black box, the use case describes the interactions that help healthcare professionals to achieve their goals — for example, to order a test or to send a referral.

- **System Interactions** describes each interaction — that is, each single one-way communication — that occurs in the scenario. It also identifies trigger events, actors and message types.

- **Message Type** identifies the abstract message type for each interaction.

- **Required Segments/Data Fields** lists the required segments and data fields for the message(s) used in each interaction.

> **Note.** The segment tables in Chapter 4, *Message segments*, list all mandatory data fields for each segment. The use cases in this chapter list only any additional mandatory data fields constrained by the Standard.

Use case 1 — Emergency department attendance notification

A person attends an Emergency Department and the attendance is recorded on the local system. An electronic notification of the attendance of the patient is sent to other systems.

Source System   Destination System

A patient's attendance at the Emergency Department is recorded.

ADT_A01
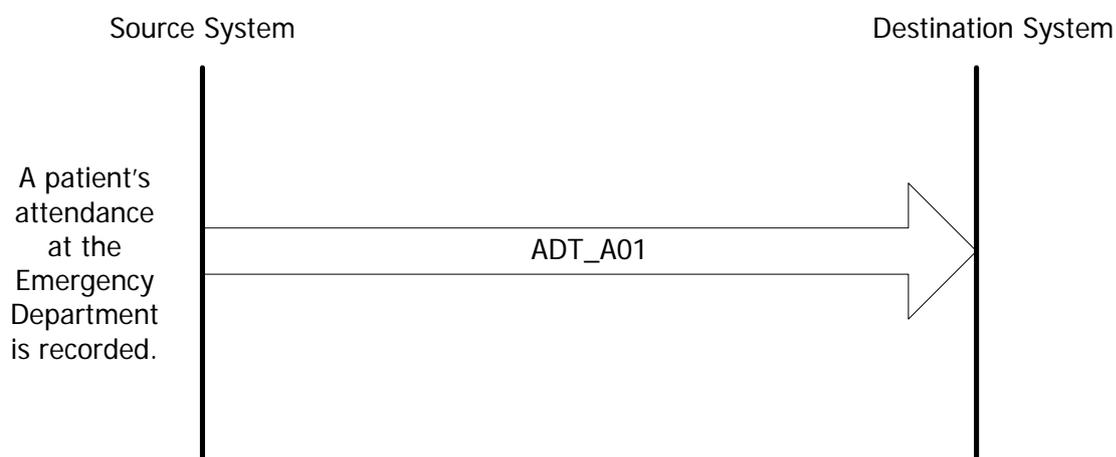
The following table lists the segments and data fields required:

Use case 1 — Emergency department attendance message	
System interactions	Single notification sent from source (Emergency Department) to the destination (GP) system
Message type	ADT_A01

Required segments/ data fields	MSH Message Header
	PID Patient Identification
	EVN Event Segment
	PV1 Event Type/Patient Visit
	    ▪ PV1.14 Admit Source
	    ▪ PV1.44 Admit Date/Time
	PV2 Event Type/Additional information

Use case 2 — Emergency department letter

A patient attends an Emergency Department. Following the visit a letter detailing their visit is sent to their GP.

Source System   Destination System

A patient attends an Emergency Department Following the visit, a letter detailing their visit is sent to their GP.

REF_I12
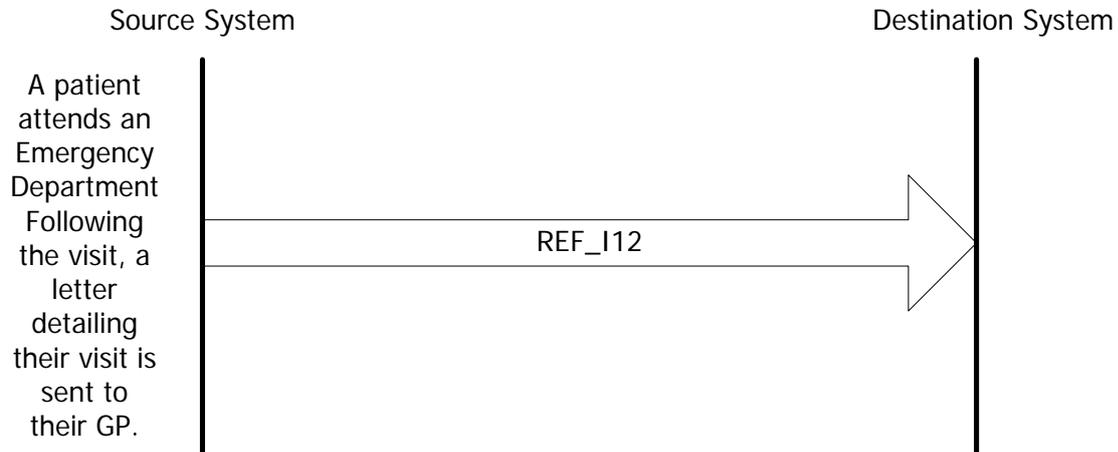
The following table lists the segments and data fields required:

Use case 2 — Emergency department attendance message	
System interactions	Single notification sent from source (Emergency Department) to the destination (GP) system
Message type	REF_I12
Required segments /data fields	MSH Message Header PID Patient Identification PRD Provider Data PV1 Event Type/Patient Visit ■ PV1.44 Admit Date/Time NTE Notes and comments

Use case 3 — Admission to healthcare facility

A patient is admitted as an inpatient to a healthcare facility and this is recorded on the local system. An electronic notification of the admission of the patient is sent to other systems.

Source System		Destination System
A patient has been admitted to a healthcare facility. A notification is sent to the GP system.	ADT_A01 →	
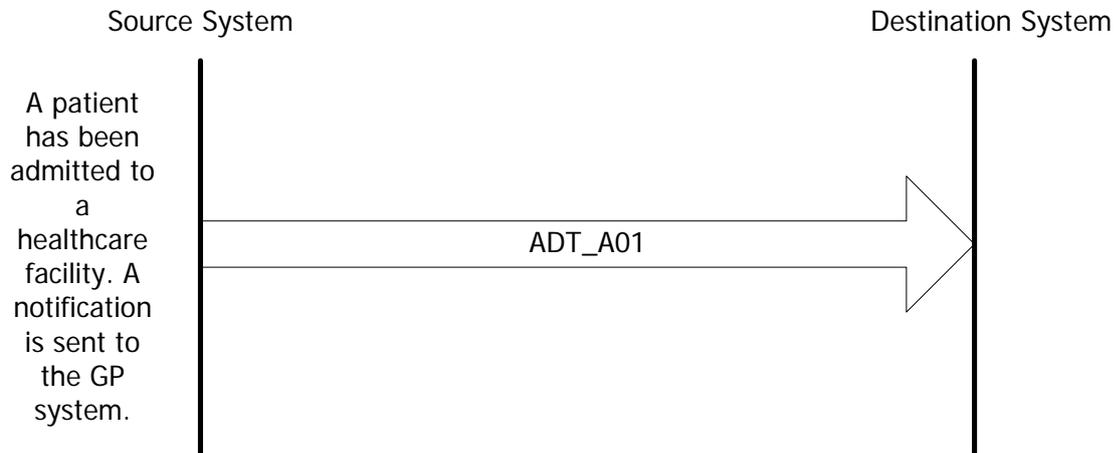
The following table lists the segments and data fields required:

Use case 3 — Admission notification message	
System interactions	Single notification sent from source (healthcare facility) to the destination (GP) system
Message type	ADT_A01
Required segments/ data fields	MSH Message Header PID Patient Identification EVN Event Segment PV1 Event Type/Patient Visit ▪ PV1.14 Admit Source ▪ PV1.44 Admit Date/Time PV2 Event Type/Additional information

Use case 4 — Administrative discharge notification

An outpatient is discharged from a healthcare facility and the administrative event is recorded on the local system. A notification message, containing administrative information related to the admission and discharge, is sent.

Source System   Destination System

A patient has been discharged from a healthcare facility. An administrative discharge is recorded on the local system.

ADT_A03
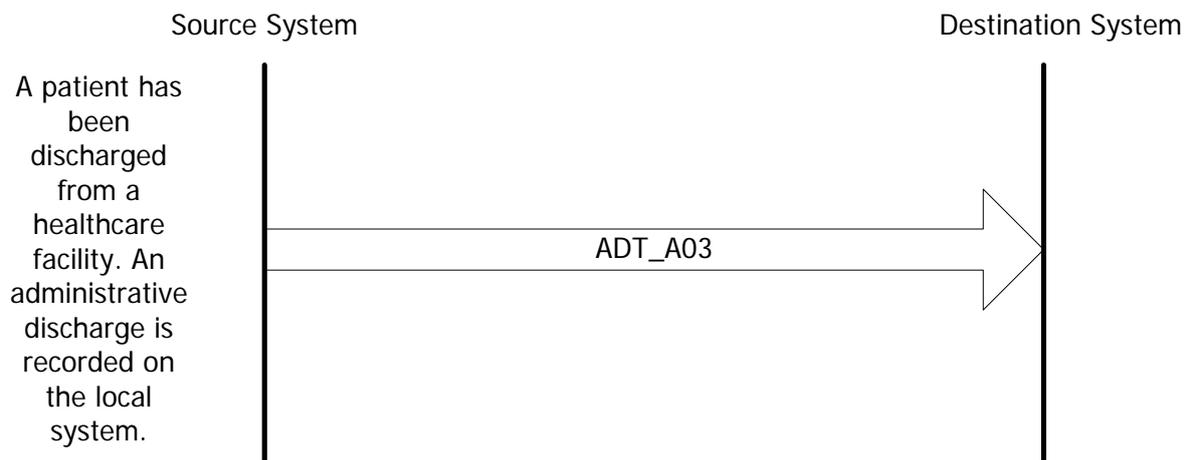
The following table lists the segments and data fields required:

Use case 4 — Administrative discharge notification	
System interactions	Single notification, containing admission and discharge information, sent from the source (healthcare facility) to the destination (GP) system.
Message type	ADT_A03
Required segments/ data fields	MSH Message Header PID Patient Identification EVN Event Segment PV1 Event Type/Patient Visit ▪ PV1.36 — Discharge Disposition ▪ PV1.37 — Discharge to Location (populate if known*) ▪ PV1.45 — Discharge Date/Time PV2 Event Type/Additional information

* It is strongly recommended that this data field be populated field if known.

Use case 5 — Patient registration request

A patient attends a general practitioner and requires a service from a service provider. A request is sent to the service provider to register the patient on the system.
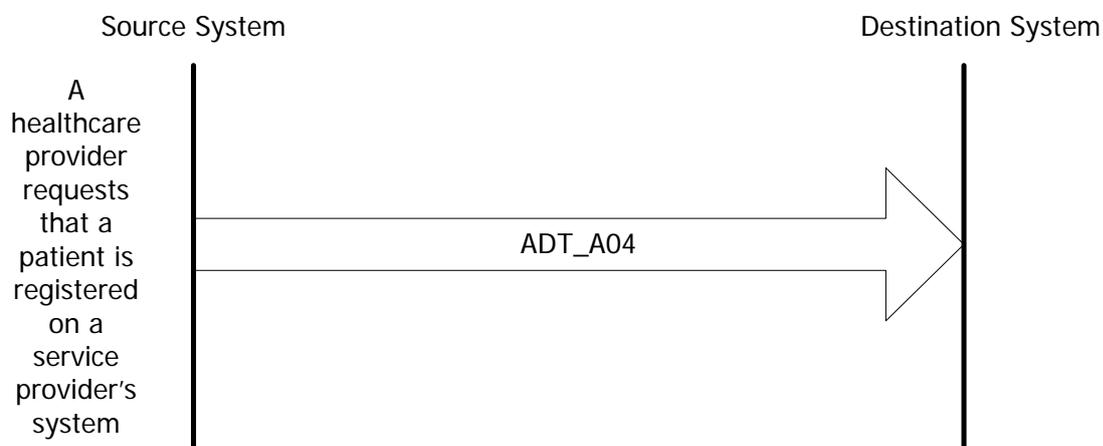
The following table lists the segments and data fields required:

Use case 5 — Patient attendance registration	
System interactions	Single notification, containing registration information, sent from the source (healthcare facility) to the destination (GP) system.
Message type	ADT_A04
Required segments/ data fields	MSH Message Header PID Patient Identification EVN Event Segment

Use case 6 — Clinical discharge summary notification

A patient is discharged after an inpatient stay from a healthcare facility, a clinical discharge is recorded on the system and this clinical discharge is sent to other systems.

Source System   Destination System

A clinical
discharge
summary is   REF_I12
recorded
for an
inpatient
episode.
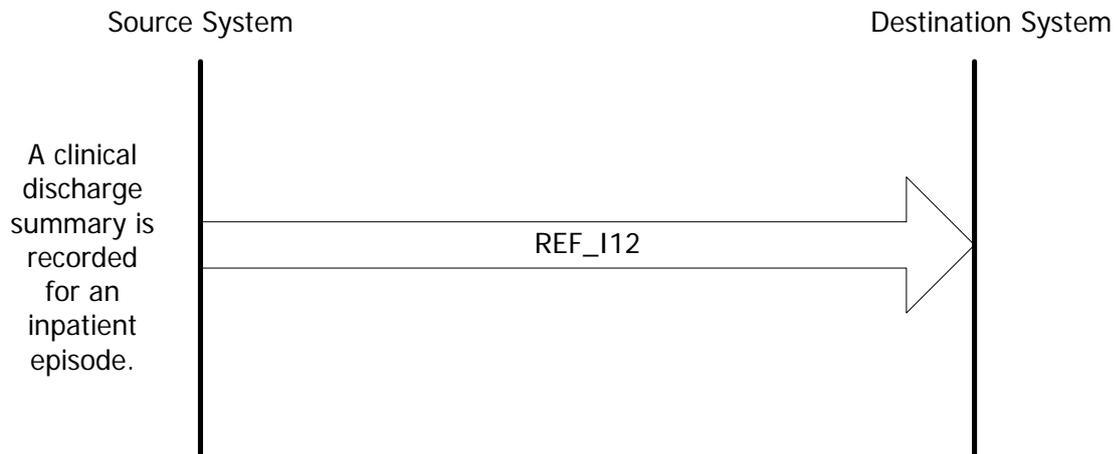
The following table lists the segments and data fields required:

Use case 6 — Clinical discharge summary notification	
System interactions	Single notification sent from source (healthcare facility) to the destination (GP) system
Message type	REF_I12

Required segments/ data fields	MSH Message Header
	PID Patient Identification
	PRD Provider Data
	DG1 Diagnosis
	PV1 Event Type/Patient Visit
	   ▪ PV1.36 Discharge disposition
	   ▪ PV1.37 Discharge to location (populate if known*)
	   ▪ PV1.45 Discharge Date/Time
	AL1 Patient Allergy Information
	PR1 Procedures
	OBR Observation Request
	OBX Observation Result
	NTE Notes and Comments
	   ▪ NTE.3 — Comment

* It is strongly recommended that this data field be populated if known.

Use case 7 — Death notification

The death of a patient is recorded on the local system. An electronic notification of the death of the patient is sent to other systems.

Source System		Destination System
A patient's death is recorded on the system.	→ ADT_A03 →	
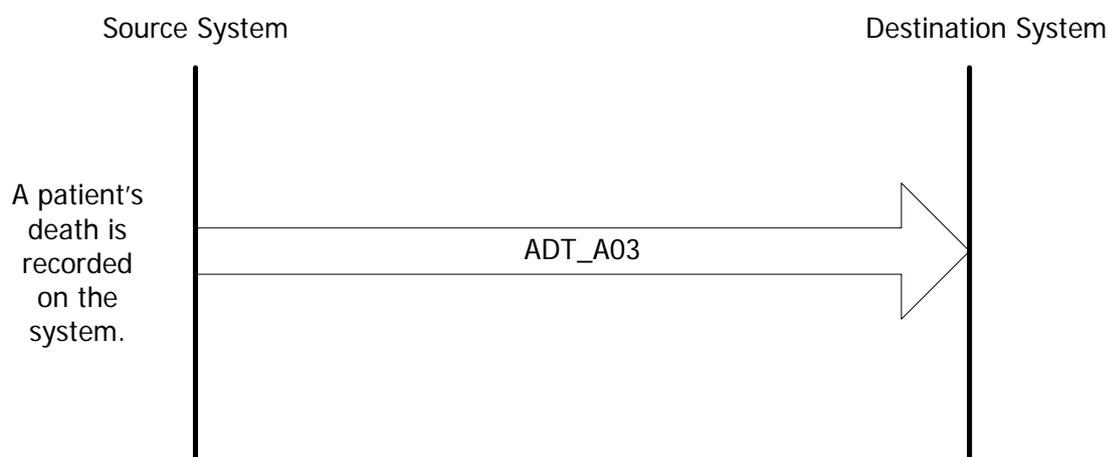
The following table lists the segments and data fields required:

Use case 7 — Death notification	
System interactions	Single notification sent from source (healthcare facility) to the destination (GP) system
Message type	ADT_A03

Required segments/ data fields	MSH Message Header
	PID Patient Identification
	    ▪ PID.29 Patient Death Date and Time
	    ▪ PID.30 Patient Death Indicator
	EVN Event Segment
	PV1 Event Type/Patient Visit
	PDA Patient Death and Autopsy
	    ▪ PDA.1 Death Cause Code (populate if known*)
	    ▪ PDA.2 Death Location (populate if known*)
	    ▪ PDA.4 Death Certificate Signed Date and Time (populate if known*)
	PV2 Event Type/Additional

* These data fields are optional. However, it is strongly recommended that they be populated if known when generating a death notification message.

Use case 8 — GP data returns

A patient attends a GP clinic and a reimbursement message is sent to the reimburser.

Source System   Destination System

A patient attends a
GP clinic and a
reimbursement   ORU_R01
message is sent to
the reimburser.
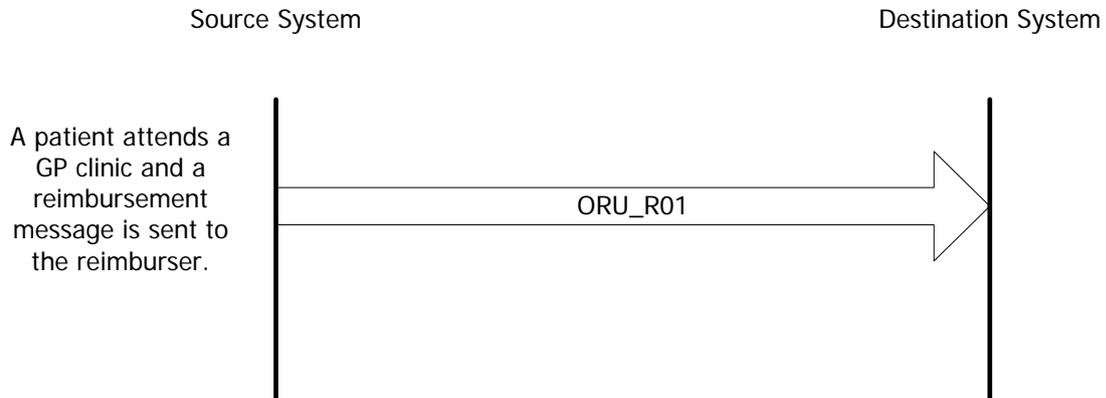
The following table lists the segments and data fields required:

Use case 8 — GP data returns	
System interactions	Single notification sent from source (healthcare facility) to the destination (GP) system
Message type	ORU_R01
Required segments/ data fields	MSH Message Header PID Patient Identification PV1 Event Type/Patient Visit OBR Observation Request OBX Observation Result NTE Notes and comments

Use case 9 — Cooperative discharge summary notification

A patient contacts a GP out-of-hours cooperative and is assessed by a nurse or general practitioner. Clinical information relating to the patient is recorded on the system and a summary of this information is sent to the patient's general practitioner.

Source System   Destination System

A patient
contacts a
GP out of
hours co-
operative   REF_I12
and is
assessed   ACK^I12
by a nurse
or GP.
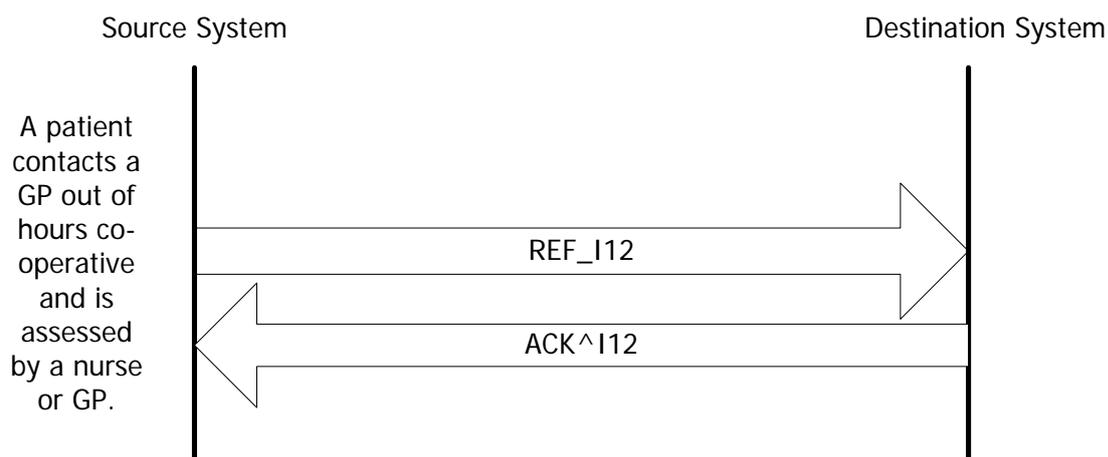
The following table lists the segments and data fields required:

Use case 9 — Cooperative discharge summary notification	
System interactions	Single notification sent from source (cooperative) to the destination (GP) system
Message type	REF_I12
Required segments/ data fields	MSH Message Header PID Patient Identification PRD Provider Data DG1 Diagnosis NTE Notes and comments OBR Observation Request OBX Observation Result

The following table lists the segments and data fields required:

Use case 9 — System acknowledgement	
System interactions	Single acknowledgement response sent from the destination (GP) to the source (cooperative) system.
Message type	ACK^I12
Required segments/ data fields	MSH Message Header MSA Message Acknowledgement ERR Error Information

Use case 10 — Outpatient clinic letter

A patient attends an Outpatient Department. A letter detailing their visit is sent to their GP.

Source System   Destination System

A patient attends an Outpatient Clinic. A letter detailing their visit is sent to their GP.

REF_I12
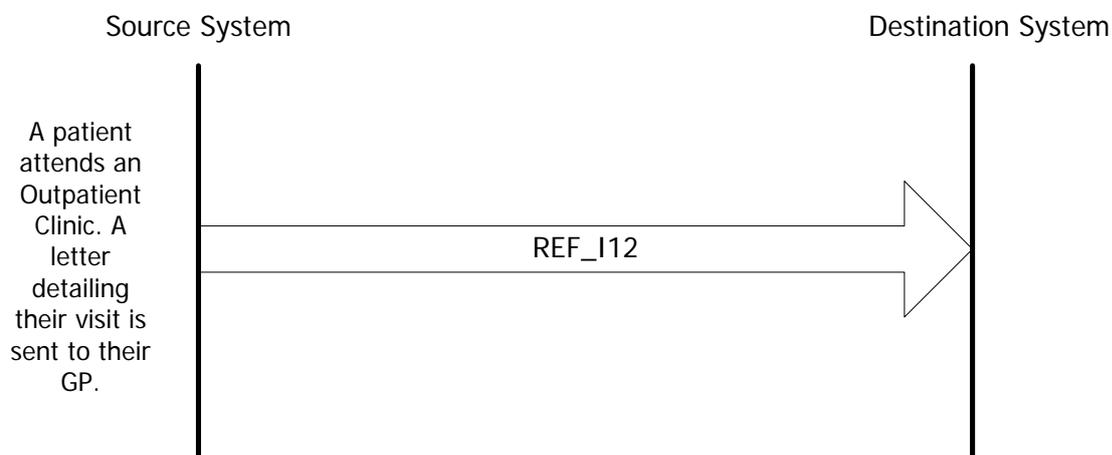
The following table lists the segments and data fields required:

Use case 10 — Outpatient department letter	
System interactions	Single notification sent from source (healthcare facility) to the destination (GP) system
Message type	REF_I12
Required segments/ data fields	MSH Message Header PID Patient Identification PRD Provider Data PV1 Event Type/Patient Visit ▪ PV1.44 Admit Date/Time NTE Notes and comments

Use case 11 — Outpatient department appointment

An appointment is scheduled for a patient on a hospitals administrative IT system. The appointment may be subsequently rescheduled, modified or cancelled or the patient may not attend the appointment. Notification of each of these events may be sent to the patient's recorded general practitioner.
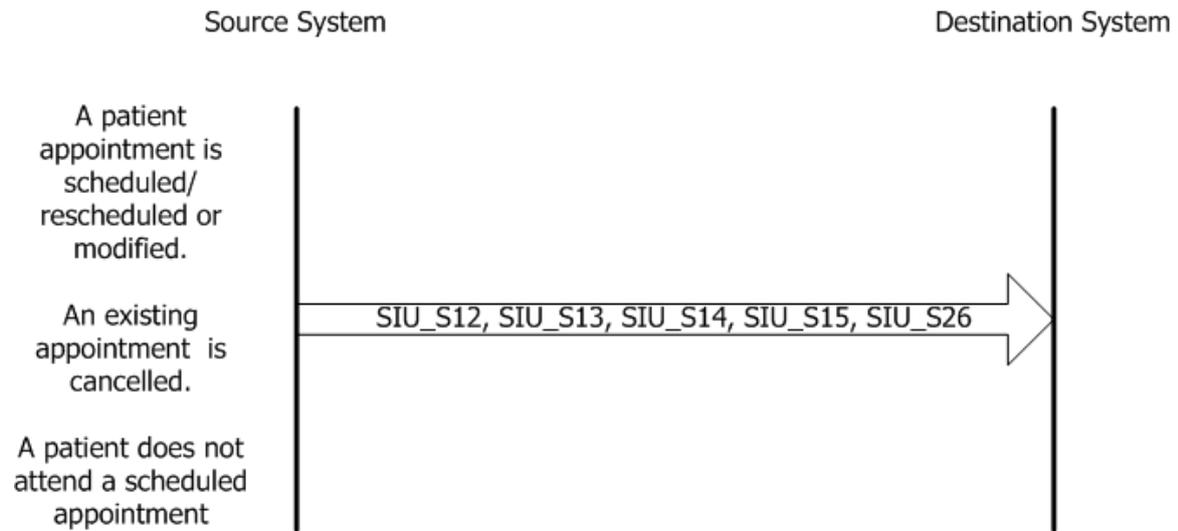
The following table lists the segments and data fields required:

Use case 11 — Outpatient department appointment notification	
System interactions	Single notification sent from source (healthcare facility) to the destination (GP) system
Message type	A patient appointment is scheduled (**SUI12**), re-scheduled (**SUI13**), modified (**SUI14**), or cancelled (**SUI15**). Or the patient does not attend an appointment (**SUI26**).
Required segments/ data fields	MSH Message Header PID Patient Identification PV1 Event Type/Patient Visit RGS Resource Group AIP Appointment Information — Personnel Information SCH Scheduling Activity Information NTE Notes and comments

Use case 12 — Waiting list notification

A patient is placed on a waiting list for an appointment. The waiting list entry may be subsequently modified or removed. Notifications of these events may be messaged to the patient's general practitioner.
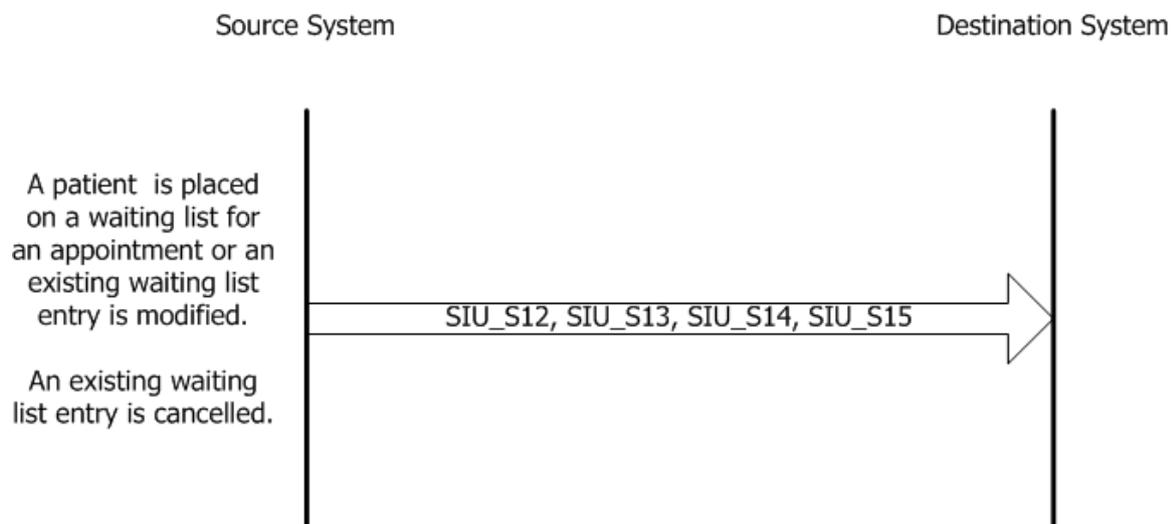
The following table lists the segments and data fields required:

Use case 12 — Waiting list notification	
System interactions	Single notification sent from source (outpatients) to the destination (GP) system
Message type	A patient is added to a waiting list (**SUI12**). The patient's existing waiting list appointment is: • rescheduled (**SUI13**). • modified (**SUI14**). • cancelled (**SUI15**).
Required segments/ data fields	MSH Message Header PID Patient Identification PV1 Event Type/Patient Visit RGS Resource Group AIL Appointment Information — Location Information AIP Appointment Information — Personnel Information SCH Scheduling Activity Information NTE Notes and comments

Use case 13 — Online referral and response notification

A GP refers a patient to a hospital consultant. The GP records the details of the referral on the source system and the referral is available to the referred to provider. The referred to provider reviews the referral and advice or information on further management is provided to the referrer within an agreed time period.

Source System   Destination System

A clinician creates a
referral to a
consultant.

REF_I12

ACK^I12

RRI_I12

ACK^I12

The referral is
reviewed by the
consultant and a
management advice
is decided.
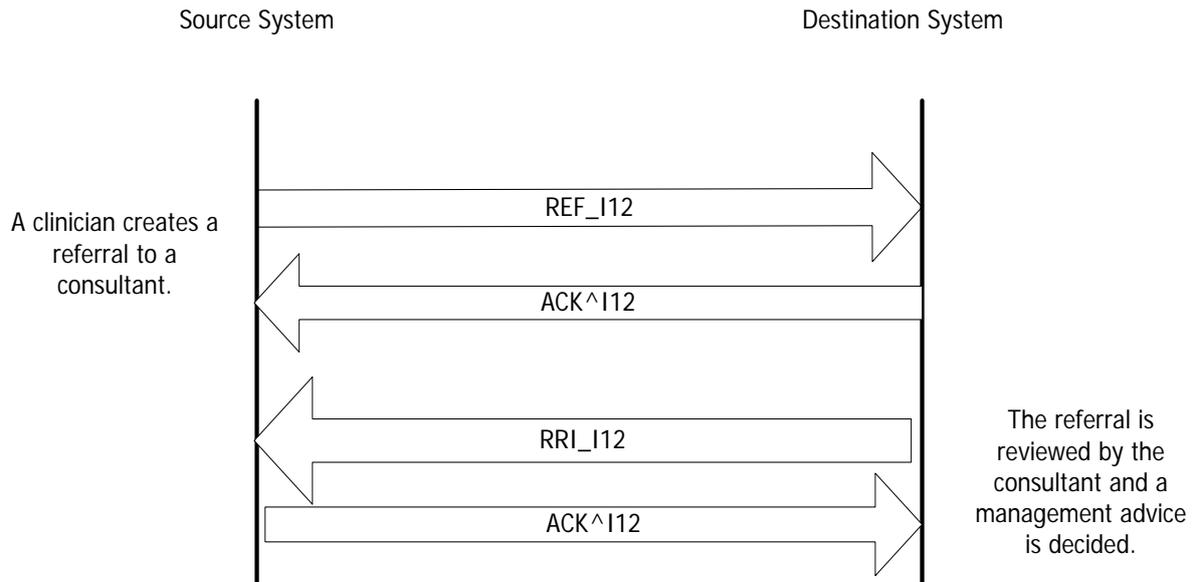
The following table lists the segments and data fields required:

Use case 13	Referral generated message	Referral response message
System interactions	Single notification sent from source (GP) to the destination (referred to provider) system	Single notification sent from source (referred to provider) to the destination (GP) system
Message type	REF_I12	RRI_I12
Required segments/ data fields	MSH Message Header	MSH Message Header
	RF1 Referral Details ▪ RF1.1 Referral Status* ▪ RF1.2 Referral Priority* ▪ RF1.3 Referral Type* ▪ RF1.7 Effective Date*	RF1 Referral Details
	PRD Provider Data ▪ PRD.2 Provider Name* ▪ PRD.3 Provider Address* ▪ PRD.4 Provider Location* ▪ PRD.5 Provider Communication Information* ▪ PRD.7 Provider Identifiers*	PRD Provider Data ▪ PRD.2 Provider Name* ▪ PRD.3 Provider Address* ▪ PRD.4 Provider Location* ▪ PRD.5 Provider Communication Information* ▪ PRD.7 Provider Identifiers*
	PID Patient Identification	PID Patient Identification
	OBR Observation Request ▪ OBR.2 Place Order Number	OBR Observation Request ▪ OBR.2 Place Order Number
	OBX Observation Result	OBX Observation Result
	PV1 Event Type/Patient Visit	
	NTE Notes and comments	NTE Notes and comments

*These data fields are optional. However, it is strongly recommended that they be populated if known.

The following table lists the segments and data fields required:

Use case 13 — System acknowledgement	
System interactions	Single acknowledgement response sent to confirm the referral generation or referral response.
Message type	ACK^I12
Required segments/ data fields	MSH Message Header MSA Message Acknowledgement ERR Error Information

Use case 14 — Laboratory order request

A GP orders a laboratory test for a patient. The GP records the detail of the order on an electronic system and the details of the order are sent to the performing laboratory department. If there is an error in the structure or content of the message the destination system sends an error message in response to the order. When a result is available an electronic message containing the result will be returned to the original GP who ordered the test or to any healthcare practitioner(s) designated to receive a copy of the results.

The following table lists the segments and data fields required:

Use case 14	Laboratory order message
System interactions	Single notification sent from source (GP) to the destination (consultant/provider) system
Message type	OML_021
Required segments/ data fields	MSH Message Header
	PID Patient Identification
	PV1 Event Type/Patient Visit
	ORC Common Order Segment
	OBR Observation Request ▪ OBR.2 Place Order Number ▪ OBR.7 Observation Date/Time*
	SAC Specimen Container Details
	OBX Observation Result
	DG1 Diagnosis
	NTE Notes and comments

* This data field is required when the specimen accompanies the laboratory order.

Note. Many report headers (OBR) may be sent after each patient segment, with many separate observation segments (OBX) after each OBR. Note segments (NTE) may be inserted after a PID, OBR, and OBX segment. The note segment applies to the segment that immediately precedes it.

The following table lists the segments and data fields required:

Use case 14	Laboratory result message	Laboratory results message
System interactions	Single notification sent from source (consultant/provider) to the destination (GP) system	Single acknowledgement response sent from the destination (laboratory) system to the source system.
Message type	ORU_R01	ORL_O22
Required segments/ data fields	MSH Message Header	MSH Message Header
	PID Patient Identification	MSA Message Acknowledgement
	PV1 Event Type/Patient Visit	ERR Error Information
	OBR Observation Request	
	OBX Observation Result ▪ OBR.2 Place Order Number ▪ OBR.7 Observation Date/Time* ▪ OBR.14 Specimen Received Date/Time ▪ OBR.24 Diagnostic Serv Sect ID	
	NTE Notes and comments	

Use case 15 — Radiology orders and response

A healthcare practitioner requests that the radiology department perform a radiological investigation on a patient.
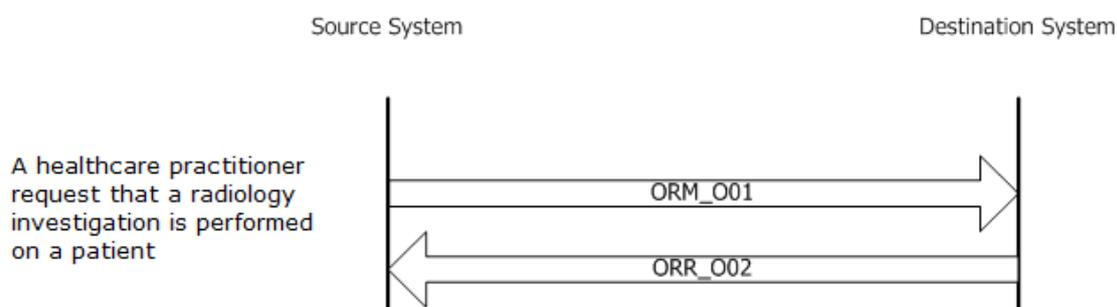
The following table lists the segments and data fields required:

Use case 15 — Radiology order message	
System interactions	Single notification sent from source (GP) to the destination (radiology department) system.
Message type	ORM_O01

Required segments/ data fields	MSH Message Header
	PID Patient Identification
	PV1 Event Type/Patient Visit
	   ▪ PV1.8 Referring Doctor
	ORC Common Order Segment
	   ▪ ORC.2 Placer Order Number
	OBR Observation Request
	   ▪ OBR.2 Place Order Number
	   ▪ OBR.7 Observation Date/Time
	   ▪ OBR.13 Diagnostic Serv Sect ID
	   ▪ OBR.15 Results Status
	OBX Observation Result

Note. Many report headers (OBR) may be sent after each patient segment, with many separate observation segments (OBX) after each OBR. Note segments (NTE) may be

inserted after a PID, OBR, and OBX segment. The note segment applies to the segment that immediately precedes it.

The radiology department confirms the healthcare practitioner's request to perform a radiological investigation on a patient. This request is sent from the radiology department system to the healthcare practitioner's system.

The following table lists the segments and data fields required:

Use case 15 — Radiology order response	
System interactions	Single notification sent from source (radiology department) to the destination (GP) system
Message type	ORR_O02
Required segments/ data fields	MSH Message Header MSA Message Acknowedgement ERR Message Error ORC Common Order Segment

Use case 16 — Unsolicited radiology results

A radiology department performs a radiological investigation on a patient. When a result is reported this is communicated to the GP responsible for ordering the investigation or to any healthcare practitioner designated to receive a copy of the results.

Source System   Destination System

A radiological investigation is performed and a result is available

ORU_R01

ACK^R01
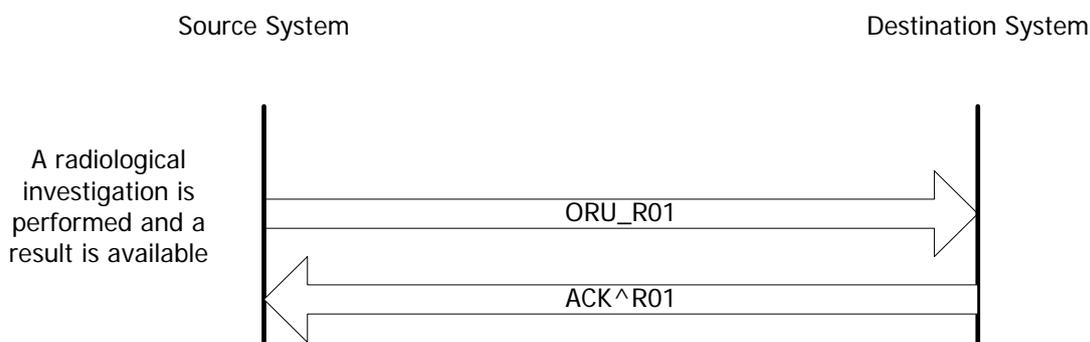
The following table lists the segments and data fields required:

Use case 16 — Unsolicited Radiology Response	
System interactions	Single notification sent from source (radiology department) to the destination (GP) system
Message type	ORU_R01

Required segments/ data fields	MSH Message Header
	PID Patient Identification
	PV1 Event Type/Patient Visit
	OBR Observation Request
	  ▪ OBR.7 Observation Date/Time
	  ▪ OBR.24 Diagnostic Serv Sect ID
	  ▪ OBR.25 Results Status
	OBX Observation Result
	NTE Notes and comments

Note. Many report headers (OBR) may be sent after each patient segment, with many separate observation segments (OBX) after each OBR. Note segments (NTE) may be inserted after a PID, OBR, and OBX segment. The note segment applies to the segment that immediately precedes it.

All OBX.11 Status values are defined in table 0123. The following values are used in Ireland:

Value	Name	Description
F	Final Result	The result is final and can be changed only by a corrected result.
P	Preliminary Result	A further result is expected, for the same type of test.
S	Partial Result	The results of other tests will follow, to complete the set of tests for this overall test.
W	Wrong Result	The result has been verified as wrong. A corrected result may follow.
C	Corrected Result	The previous result was wrong and is replaced by this result.

To copy results to clinicians other than the ordering provider, use these data fields:

Data field	Data field name	Value
OBR.16	Ordering provider	Set the *XCN.16 <Copy To> Indicator Prefix* component to COPY_TO
OBR.28	Result copies to	Identify the individuals to whom test results should be copied.

The destination system acknowledges receipt of the unsolicited radiology results messages as follows:

Use case 16 — System acknowledgement	
System interactions	Single acknowledgement response sent from the destination (laboratory) system to the source system.
Message type	ACK^R01
Required segments/ data fields	MSH Message Header MSA Message Acknowledgement ERR Error Information

Use case 17 — Unsolicited laboratory results

A laboratory receives a specimen and analyses the specimen. When a result is available this is communicated to the GP responsible for ordering the investigation or to any healthcare practitioner designated to receive a copy of the results.

Source System   Destination System

The patients specimen is processed and a result is available

ORU_R01 →

← ACK^R01
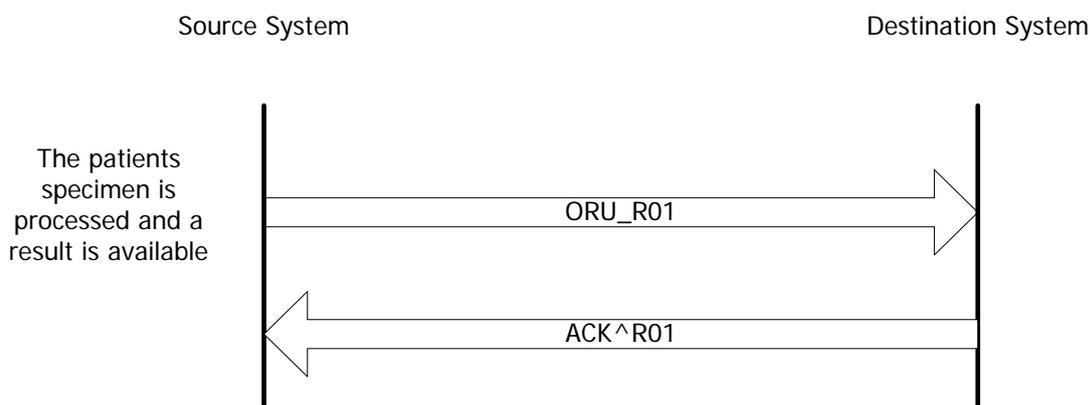
The following table lists the segments and data fields required:

Use case 17 — Unsolicited laboratory result notification	
System interactions	Single notification sent from source (radiology department) to the destination (GP) system
Message type	ORU_R01
Required segments/ data fields	MSH Message Header PID Patient Identification PV1 Event Type/Patient Visit OBR Observation Request ▪ OBR.7 Observation Date/Time ▪ OBR.14 Specimen Received Date/Time ▪ OBR.24 Diagnostic Serv Sect ID OBX Observation Result ▪ OBX.11 Status NTE Notes and comments

Note. Many report headers (OBR) may be sent after each patient segment, with many separate observation segments (OBX) after each OBR. Note segments (NTE) may be inserted after a PID, OBR, and OBX segment. The note segment applies to the segment that immediately precedes it.

All OBX.11 Status values are defined in HL7 table 0123. The following values are used in Ireland:

Value	Name	Description
F	Final Result	The result is final and can be changed only by a corrected result.
P	Preliminary Result	A further result is expected, for the same type of test.
S	Partial Result	The results of other tests will follow, to complete the set of tests for this overall test.
W	Wrong Result	The result has been verified as wrong. A corrected result may follow.
C	Corrected Result	The previous result was wrong and is replaced by this result.

To copy results to clinicians other than the ordering provider, use these data fields:

Data field	Data field name	Value
OBR.16	Ordering provider	Set the *XCN.16 <Copy To> Indicator Prefix* component to COPY_TO
OBR.28	Result copies to	Identify the individuals to whom test results should be copied.

The destination system acknowledges receipt of the unsolicited laboratory results messages as follows:

Use case 17 — System acknowledgement	
System interactions	Single acknowledgement response sent from the destination (GP) to the source (laboratory) system.
Message type	ACK^R01
Required segments/ data fields	MSH Message Header MSA Message Acknowledgement ERR Error Information

Use case 18 — Cardiology results notification

A patient's cardiology results are sent from the cardiology department to the patient's GP.

The following table lists the segments and data fields required:

Use case 18 — Cardiology results notification	
System interactions	Single notification sent from source (cardiology department) to the destination (GP) system
Message type	ORU_R01

Required segments/ data fields	MSH Message Header
	PID Patient Identification
	PV1 Event Type/Patient Visit
	OBR Observation Request
	    ■ OBR.7 Observation Date/Time
	    ■ OBR.24 Diagnostic Serv Sect ID
	    ■ OBR.25 Results Status
	OBX Observation Result
	    ■ OBX.11 Status
	NTE Notes and comments

Note. Many report headers (OBR) may be sent after each patient segment, with many separate observation segments (OBX) after each OBR. Note segments (NTE) may be inserted after a PID, OBR, and OBX segment. The note segment applies to the segment that immediately precedes it.

Use case 19 — Corrected results notification

A laboratory received a specimen, analysed the specimen and communicated the result to the healthcare practitioner responsible for ordering the specimen. Information in the message indicated the message was a final result for the tests requested. Subsequently, the result is corrected and the laboratory sends a message to the healthcare practitioner to indicate the previous result requires correction.

Source System   Destination System

The patients specimen is processed and a result is available

ORU_R01

ACK^R01
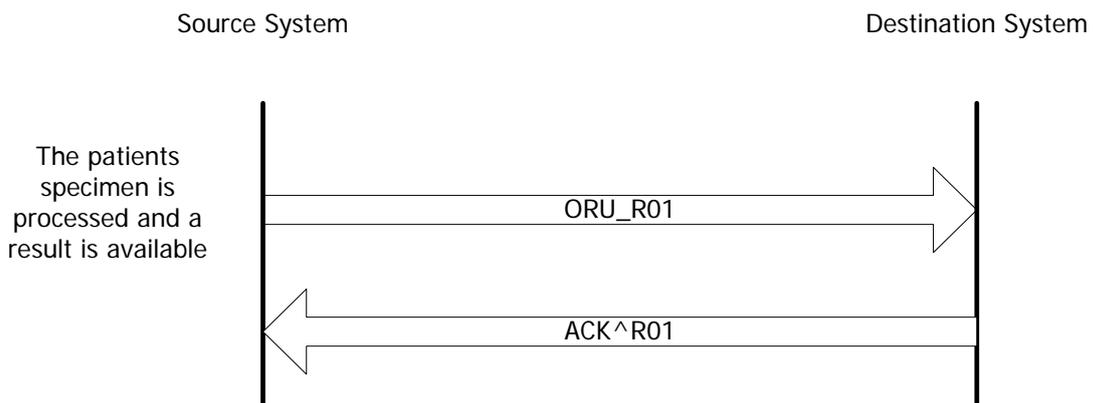
The following table lists the segments and data fields required:

Use case 19 — Corrected results notification	
System interactions	Single notification sent from source (radiology department) to the destination (GP) system
Message type	ORU_R01

Required segments/ data fields	MSH Message Header
	 PID Patient Identification
	 PV1 Event Type/Patient Visit
	 OBR Observation Request
	     ▪ OBR.7 Observation Date/Time
	     ▪ OBR.14 Specimen Received Date/Time
	     ▪ OBR.24 Diagnostic Serv Sect ID
	     ▪ OBR.25* Results Status
	 OBX Observation Result
	 NTE Notes and comments

Note. *Code F in the OBX.25 field indicates that the result has been verified to be correct and final. Code C indicates that data contained in the OBX-5-observation value field are to replace previously transmitted (verified and) final result data with the same observation ID OBX.3 (including suffix, if applicable) and observation sub-ID usually because the previous results were wrong.

To copy the corrected results to clinicians other than the ordering provider, use these data fields:

Data field	Data field name	Value
OBR.16	Ordering provider	Set the *XCN.16 <Copy To> Indicator Prefix* component to COPY_TO
OBR.28	Result copies to	Identify the individuals to whom test results should be copied.

The destination system acknowledges receipt of the unsolicited laboratory results messages as follows:

Use case 19 — System acknowledgement	
System interactions	Single acknowledgement response sent from the destination (GP) to the source (laboratory) system.
Message type	ACK^R01
Required segments/ data fields	MSH Message Header MSA Message Acknowledgement ERR Error Information

Use case 20 — Antenatal visit notification

A GP, an obstetrician or a midwife generates clinical information at an antenatal visit. This information is sent from the GP practice system to the hospital system or from the hospital system to the GP practice system.
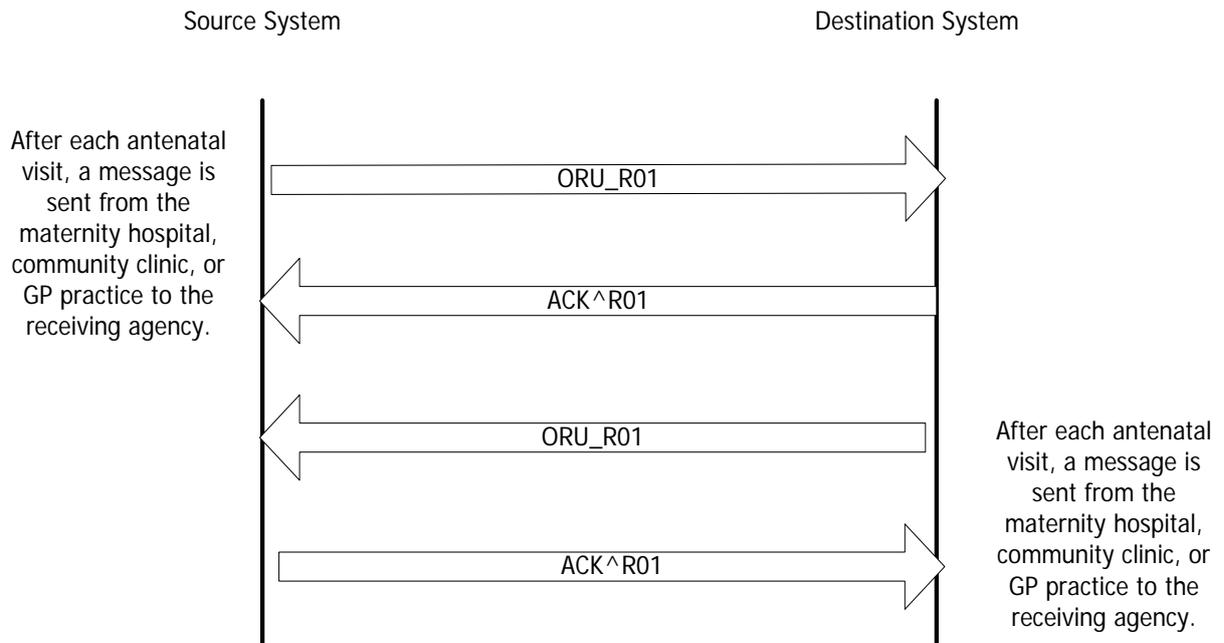
The following table lists the segments and data fields required:

Use case 20 — Ante natal message		
System Interactions	Single notification sent from source (GP) to the destination (ante-natal department) system.	Single notification sent from source (ante-natal department) to the destination (GP) system.
Message type	ORU_R01	ORU_R01

Required segments/ data fields	MSH Message Header
	    ▪ MSH.5 Receiving application
	    ▪ MSH.15 Accept ACK type
	PID Patient Identification
	    ▪ PID.7 Date of birth
	    ▪ PID.11 Address
	PV1 Event Type/Patient Visit
	    ▪ PV1.7 Attending doctor
	OBR Observation report
	    ▪ OBR.7 Observation time
	OBX Observation result
	    ▪ OBX.2 Value type
	    ▪ OBX.5 Observation value
	    ▪ OBX.14 Date/Time of the Observation
		MSH Message Header
		PID Patient Identification
		PV1 Event Type/Patient Visit
		OBR Observation report
		OBX Observation result

The following table lists the segments and data fields required:

Use case 20 — System acknowledgement	
System interactions	Single acknowledgement response sent from the message exchange to the prescriber's system
Message type	ACK^R01
Required segments/ data fields	MSH Message Header MSA Message Acknowledgement ERR Error Information

2.2   Supported e-prescribing scenarios and use cases

This section describes each scenario that the General Practice Messaging Standard supports for electronic prescribing (e-prescribing) in the community in the following terms:

- **Scenario** explains the sequence of use cases that help achieve a goal.
- **Clinical examples to inform the use case** provide sample clinical instances that support the use case
- **Use Case** briefly describes the use case associated with the scenario. Treating the business process as a black box, the use case describes how healthcare professionals to achieve their goals — for example, to order a test or to send a referral.
  - o **System Interactions** describes each interaction — that is, each single one-way communication — that occurs and identifies trigger events, actors and message types.
  - o **Message Type** identifies the abstract message type for each interaction.
  - o **Required Segments/Data Fields** lists the required segments and data fields in the message for this interaction.

Figure 1 shows all the uses cases involved. This chapter defines and describes each e-prescribing scenario and the related use cases.
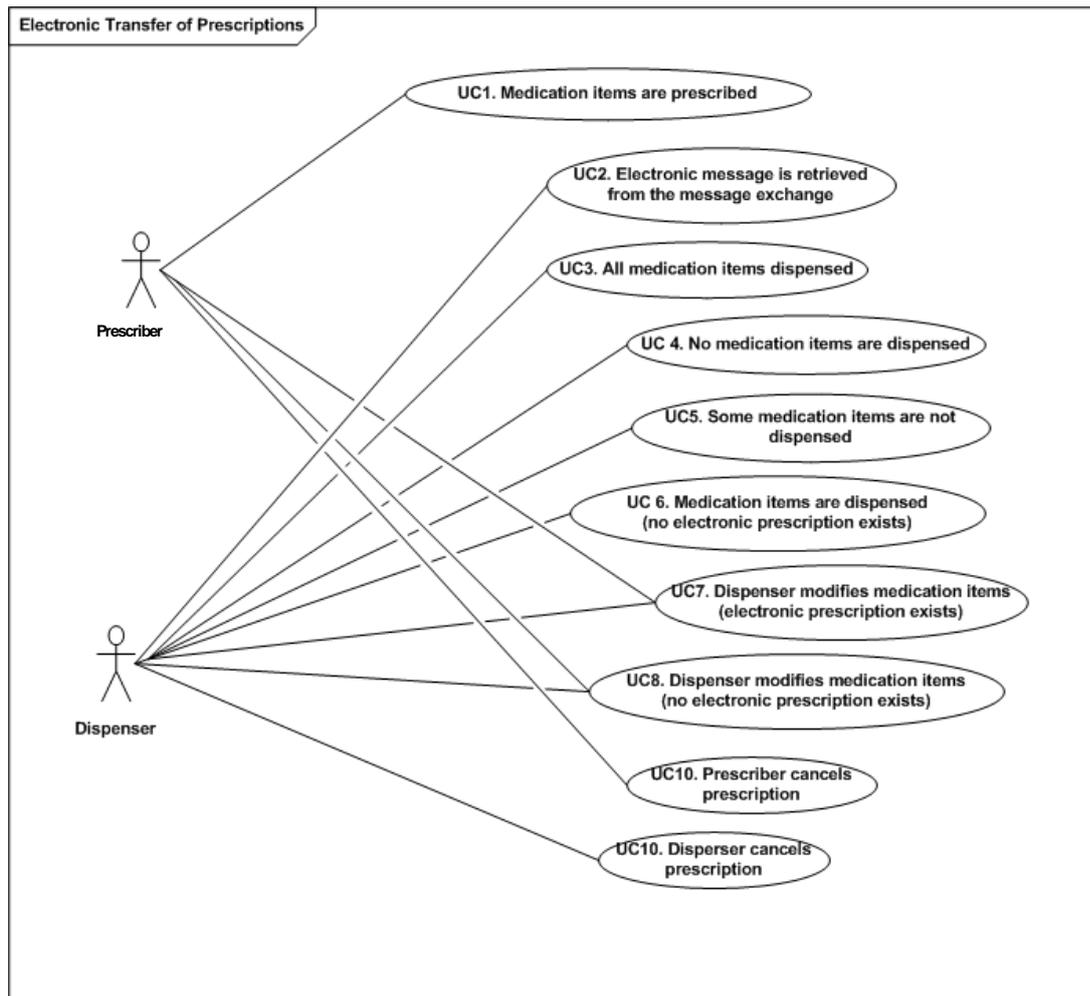
Figure 1 – ePrescribing use cases

Scenario 1 — A patient receives an e-prescription, all or no medication is dispensed

A patient attends a prescriber who generates an electronic prescription which is sent and stored at the message exchange (eHealthIreland). The patient subsequently attends a dispenser and provides the dispenser with a bar coded paper prescription which allows the dispenser to identify and retrieve the prescription from the message exchange. The dispenser then dispenses the prescribed medication in accordance with the prescription information.

Finally, if no medications are dispensed for the prescription and the dispenser indicates this by returning the unfulfilled items in a message back to the message exchange.

Clinical examples to inform use cases

- The patient attends a prescriber and is prescribed medication (UC 1)
- A patient may contact a prescriber requesting that a repeat prescription is issued. (UC 1)
- A next of kin or carer may request a prescription be issued for a patient (UC 1)
- The patient or a person on their behalf attends the pharmacy of his/her choice in order to have medication items dispensed. The dispenser retrieves the electronic prescription from the message exchange. (UC 2)
- A prescription is presented to a dispenser, the person the prescription relates to may present in person or another person may collect the prescription on their behalf. The dispenser retrieves the electronic message from the message exchange. The dispenser is able to dispense all medication items on the prescription (UC 2 and UC 3).
- The patient receives a prescription from a prescriber and decides to have the price checked at the pharmacy without any of the prescribed medication items being dispensed. (UC 2 and UC 4)
- The patient attends the pharmacy of his/her choice but the pharmacy does not have the required medication in stock and no medication items are dispensed (UC 2 and UC 4).
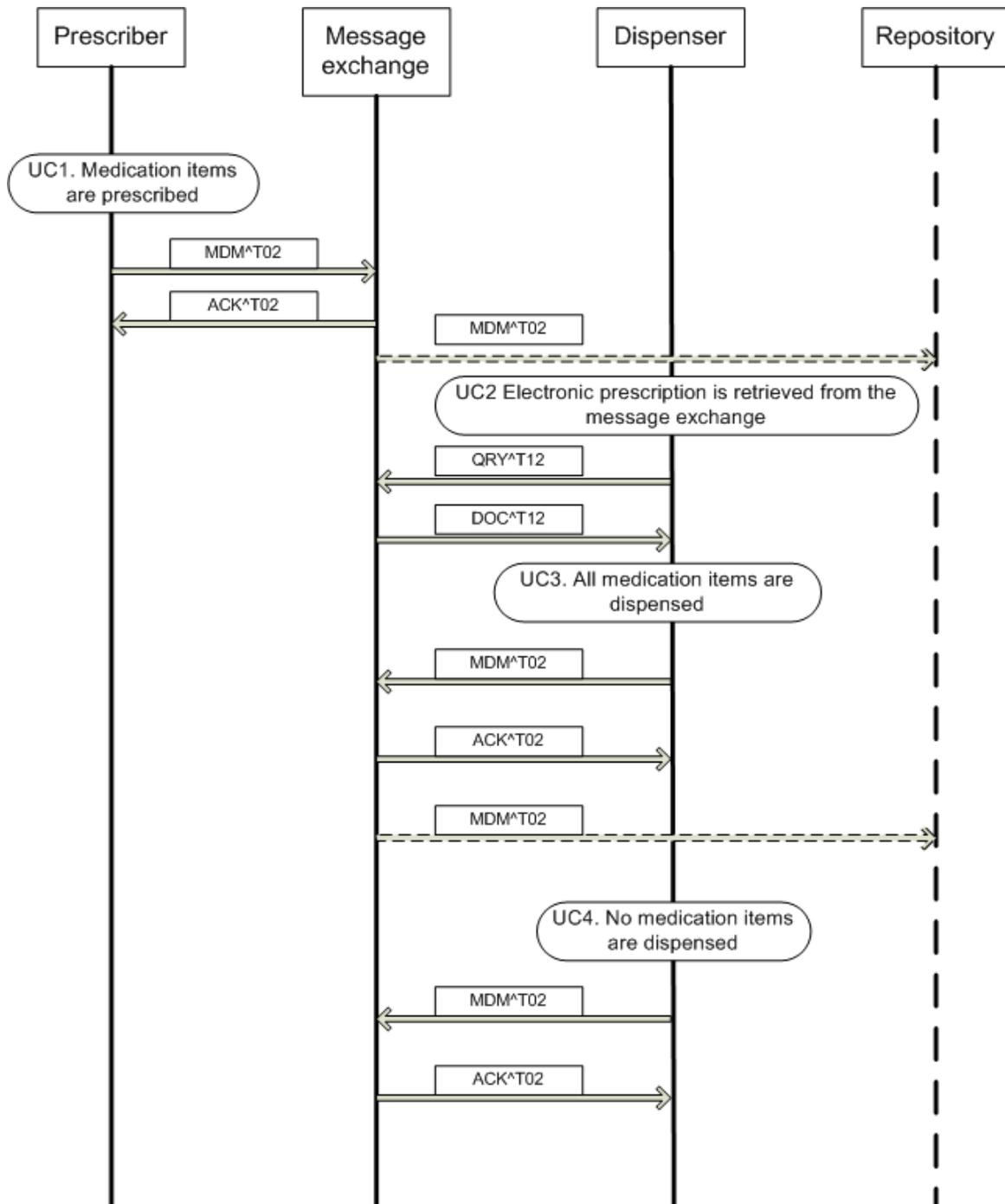
Note: The repository is included in message flow diagrams for completeness but would be considered out of scope within the electronic transfer of prescription solution. Messages forwarded to the repository and from the repository should be seen as optional and possibly a future requirement.

Use case 1 — Medication items are prescribed

The prescriber creates electronic prescription for medication items, which is sent to the message exchange.

Use case 1 - Medication items are prescribed notification	
System interactions	Single notification sent from the prescriber's system to the message exchange
Message type	MDM^T02 with a MIME-encapsulated CDA in the OBX segment
Required segments/ data fields	MSH Message Header PID Patient Identification EVN Event Segment PV1 Event Type/Patient Visit TXA Document Notification OBX Observation/Result

The message exchange sends an acknowledgement.

Use case 1 — System acknowledgement	
System interactions	Single acknowledgement response sent from the message exchange to the prescriber's system
Message type	ACK^T02
Required segments/ data fields	MSH Message Header MSA Message Acknowledgement ERR Error Information

Use case 2 — e-prescription is retrieved from the message exchange

The dispenser requests the e-prescription from the message exchange.

Use case 2 — e-prescription is retrieved from the message exchange	
System Interaction	Dispenser sends query to messaging exchange requesting a specific electronic prescription
Message type	QRT^T12
Required segments/ data fields	MSH Message Header QRD Query Definition QRF Query Filter

The message exchange returns the e-prescription.

Use case 2 — Requested e-prescription retrieved	
System Interaction	The message exchange sends the requested prescription to the dispenser in response to the request.
Message type	DOC^T12
Required segments/ data fields	MSH Message Header MSA Message Acknowledgement ERR Error Information QRD Query Definition EVN Event Segment PID Patient Identification PV1 Event Type/Patient Visit OBX Observation Response

Use case 3 — All medication items are dispensed

The dispenser dispenses all medication items on the e-prescription. The dispenser system sends a dispense note to the message exchange.

Use case 3 — All medication items are dispensed	
System interactions	Single notification sent from the dispenser's system to the message exchange
Message type	MDM^T02 with a MIME-encapsulated CDA in the OBX segment
Required segments/ data fields	MSH Message Header PID Patient Identification EVN Event Segment PV1 Event Type/Patient Visit TXA Document Notification OBX Observation/Result

The message exchange acknowledges receipt of the dispense note.

Use case 3 — System acknowledgement	
System interactions	Single acknowledgement response sent from the message exchange to the dispenser's system
Message type	ACK^T02
Required segments/ data fields	MSH Message Header MSA Message Acknowledgement ERR Error Information

Use case 4 — No medication items are dispensed

No prescribed medication items are dispensed. The dispenser system sends a dispense note to the message exchange:

Use case 4 — No medication items are dispensed	
System interactions	Single notification sent from the dispenser's system to the message exchange
Message type	MDM^T02 with a MIME-encapsulated CDA in the OBX segment
Required segments/ data fields	MSH Message Header PID Patient Identification EVN Event Segment PV1 Event Type/Patient Visit TXA Document Notification OBX Observation/Result

The message exchange acknowledges receipt of the dispense note.

Use case 4 — System acknowledgement	
System interactions	Single acknowledgement response sent from the message exchange to the dispenser's system
Message type	ACK^T02
Required segments/ data fields	MSH Message Header MSA Message Acknowledgement ERR Error Information

Scenario 2 — Some medication is dispensed

The dispenser is able to prescribe some of the items prescribed. After the patient collects the medication the dispenser updates the message exchange of medications dispensed. If

certain medications are not dispensed then the dispenser updates the medication exchange to indicate this.

Clinical examples to inform use case

The patient receives a prescription from their prescriber for one or more medication items. But not all the medications are dispensed because:

- The patient attends a prescriber and receives a prescription for one or more medication items. The pharmacist does not have all medications in stock but dispenses some of the medication items prescribed.
- The patient attends the GP and receives a prescription for more than one medication. The patient decides to collect only part of the prescription; therefore some of the medication items are dispensed.
- A GMS patient attends the GP and receives a prescription for more than one medication item. Some medications are not covered under the GMS scheme and are therefore not dispensed.
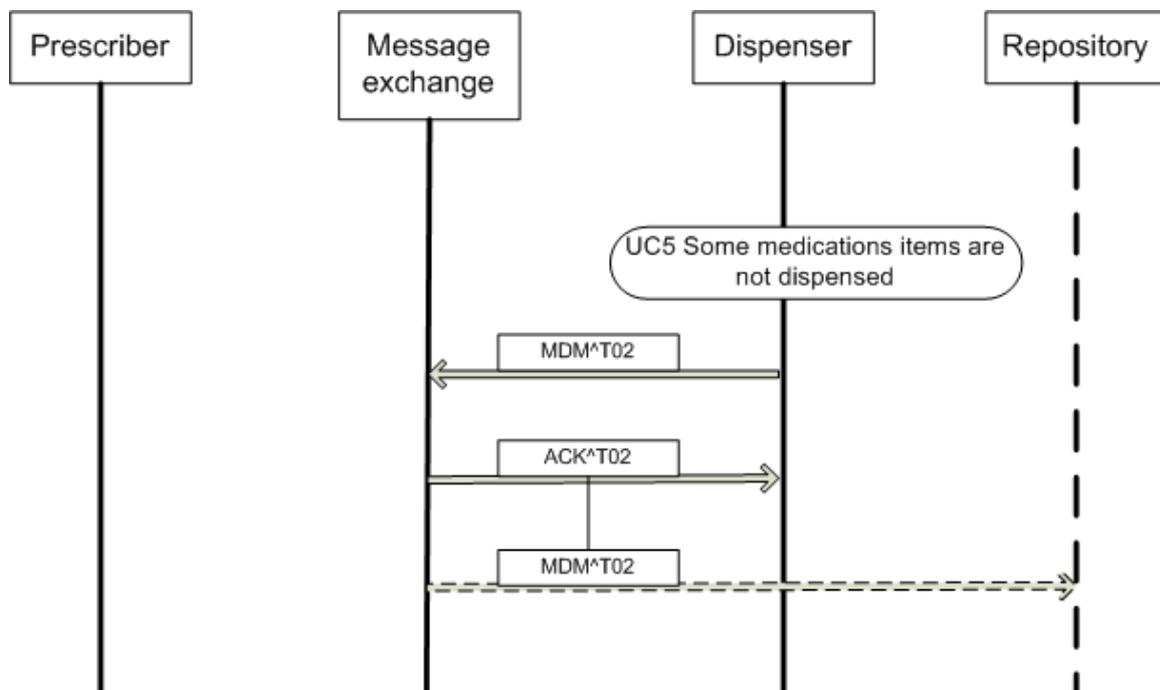
Use case 5 — Some medication items are not dispensed

Some of the prescribed medications are not dispensed. The dispenser sends a dispense note to the message exchange.

Use case 5 — Some medication items are dispensed	
System interactions	Single notification sent from the dispenser's system to the message exchange
Message type	MDM^T02 with a MIME-encapsulated CDA in the OBX segment
Required segments/ data fields	MSH Message Header PID Patient Identification EVN Event Segment PV1 Event Type/Patient Visit TXA Document Notification OBX Observation/Result

The message exchange acknowledges receipt of the dispense note.

Use case 5 — System acknowledgement	
System interactions	Single acknowledgement response sent from the message exchange to the dispenser's system
Message type	ACK^T02
Required segments/ data fields	MSH Message Header MSA Message Acknowledgement ERR Error Information

Scenario 3 — A patient receives a paper prescription, all medication is dispensed.

A patient attends a dispenser with a paper prescription. The pharmacist dispenses the medication items to the patient and records this on their computer system. No electronic prescription record exists for the prescription from the prescriber.

Clinical examples to inform use cases

The prescriber has given the patient a handwritten, typed, or printed prescription because:

- A patient attends a prescriber who has yet to computerise processes and is given a handwritten, typed or printed prescription.
- Information systems are not functioning and the prescriber must revert to manual processes and prescribe using a paper handwritten prescription.
- A patient is reviewed by a prescriber during a home visit and the prescriber writes a paper prescription.
- A patient is reviewed by a prescriber out of hours and the prescriber creates a paper prescription.
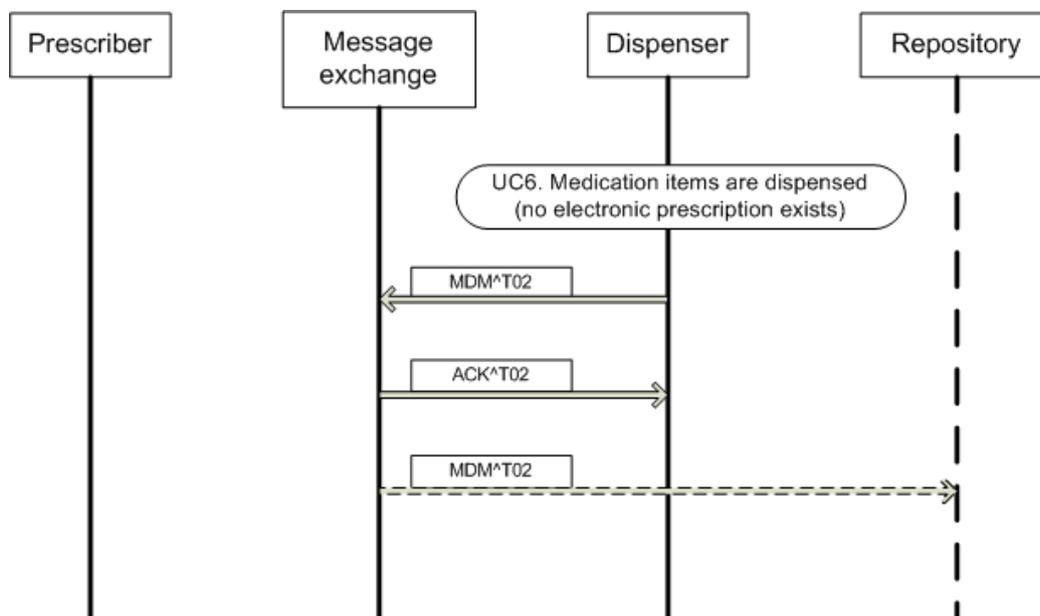
Use case 6 — Medication items are dispensed (no electronic prescription exists)

The dispenser records the medications dispensed for a paper prescription, and a dispense note is sent to the message exchange.

Use case 6 — No e-prescription created, medication items are dispensed	
System interactions	Single notification sent from the dispenser's system to the message exchange
Message type	MDM^T02 with a MIME-encapsulated CDA in the OBX segment
Required segments/ data fields	MSH Message Header PID Patient Identification EVN Event Segment PV1 Event Type/Patient Visit TXA Document Notification OBX Observation/Result

The message exchange acknowledges receipt.

Use case 6 — System acknowledgement	
System interactions	Single acknowledgement response sent from the message exchange to the dispenser's system
Message type	ACK^T02
Required segments/ data fields	MSH Message Header MSA Message Acknowledgement ERR Error Information

Scenario 4 — A patient receives an e-prescription, modified medication is dispensed.

A patient attends a prescriber and is prescribed medication items. The patient visits a dispenser to have the medication items dispensed. Prior to dispensing a medication item,

the dispenser decides a substitution is to be made for one of the medication items which requires authorisation by the prescriber. The authorisation to change the medication items is obtained and a prescriber subsequently issues an updated prescription.

Clinical examples to inform use cases

- It may occur that the dispenser feels it is necessary to change the dose of a medication due to an error on the prescription or other clinical factors.
- The duration that the medication is to be taken may require a change.
- The route of administration of the medication may need to be changed.
- The dispenser may have knowledge of an allergy that requires substitution for a different type of medication.
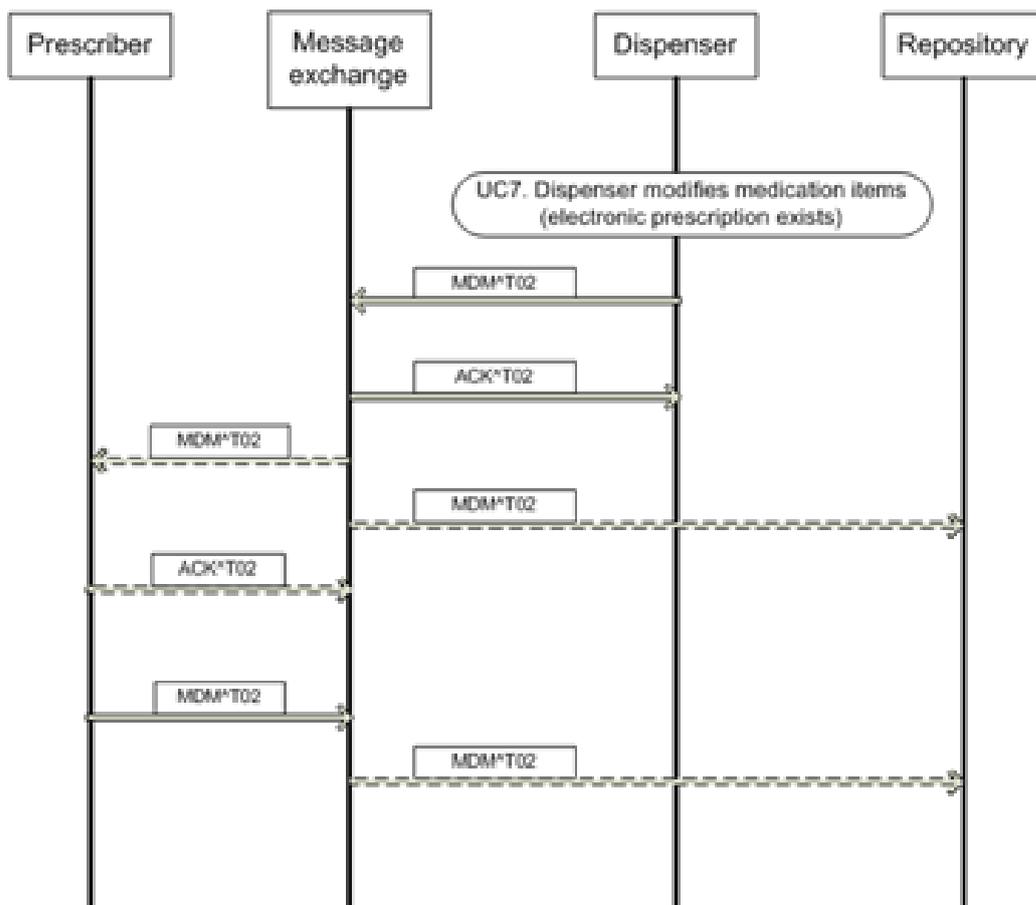
Use case 7 — Dispenser modifies some medication items (electronic prescription exists)

The dispenser records that some medication items, listed on a patient's e-prescription, were modified prior to dispensing. A dispense note detailing medications dispensed including modifications from original prescription is sent to the message exchange.

Use case 7 — Dispenser modifies some medication items (electronic prescription exists)	
System interactions	Single notification sent from the dispenser's system to the message exchange
Message type	MDM^T02 with a MIME-encapsulated CDA in the OBX segment
Required segments/ data fields	MSH Message Header PID Patient Identification EVN Event Segment PV1 Event Type/Patient Visit TXA Document Notification OBX Observation/Result

The message exchange acknowledges receipt.

Use case 7 — System acknowledgement	
System interactions	Single acknowledgement response sent from the message exchange to the dispenser's system
Message type	ACK^T02
Required segments/ data fields	MSH Message Header MSA Message Acknowledgement ERR Error Information

Scenario 5 — A patient receives a paper prescription, modified medications are dispensed.

A patient attends a doctor and is prescribed medication items on a paper prescription. The patient visits a pharmacy to have the medication items dispensed. Prior to dispensing medication a substitution is made for one of the medication items which requires authorisation by the doctor. The authorisation is obtained and a doctor sends another paper prescription to the pharmacy.

Clinical examples to inform the use case

- It may occur that the pharmacist feels it is necessary to change the dose of a medication due to an error on the prescription or other clinical factors (Use case 8).
- The duration that the medication is to be taken may require a change (Use case 8).
- The route of administration of the medication may need to be changed (Use case 8).
- The pharmacist may have knowledge of an allergy that requires substitution for a different type of medication (Use case 8).
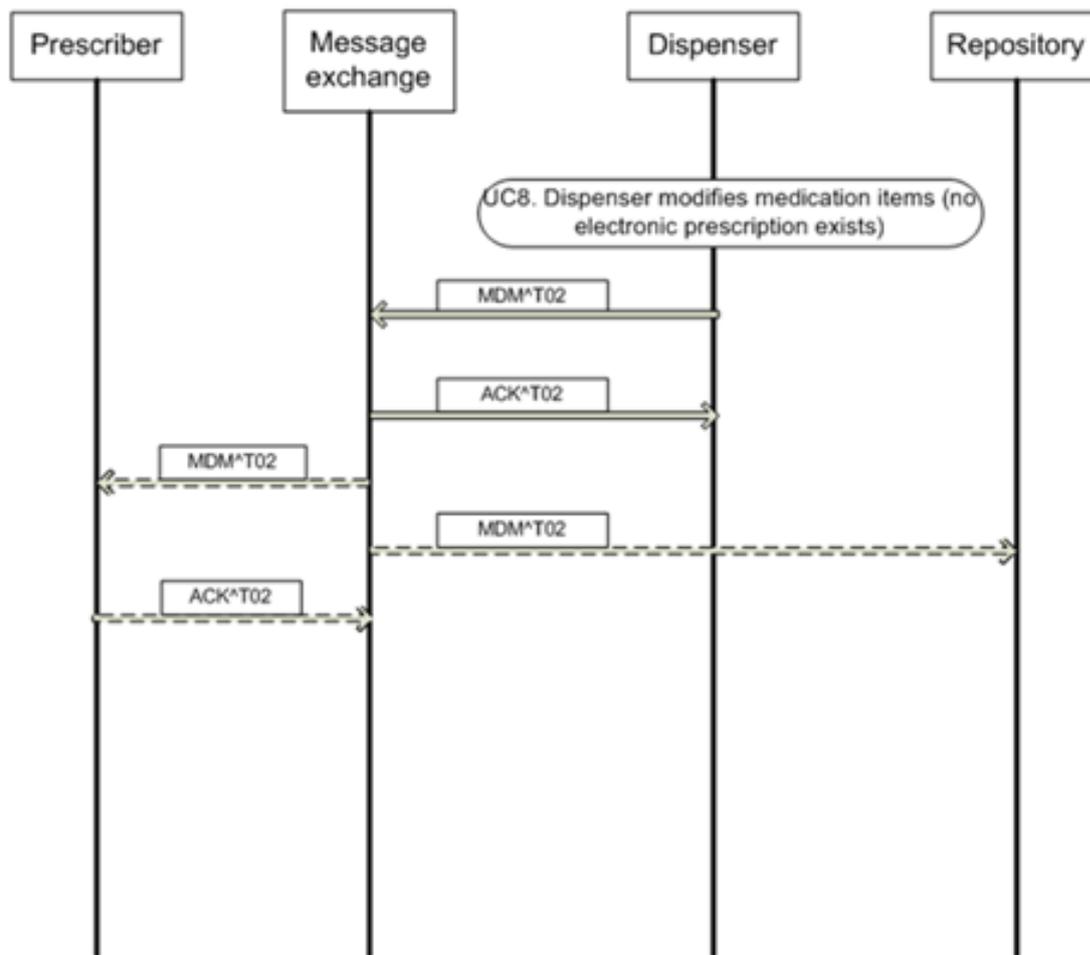
Use case 8 — Dispenser modifies medication items (no electronic prescription exists)

The dispenser records that some medication items, listed on a patient's paper prescription, more modified prior to being dispensed. A dispense note is sent to the message exchange listing all medications dispensed including modifications.

Use case 8 — Dispenser modifies some medication items (NO electronic prescription exists)	
System interactions	Single notification sent from the dispenser's system to the message exchange
Message type	MDM^T02 with a MIME-encapsulated CDA in the OBX segment
Required segments/ data fields	MSH Message Header PID Patient Identification EVN Event Segment PV1 Event Type/Patient Visit TXA Document Notification OBX Observation/Result

The message exchange acknowledges receipt.

Use case 8 — System acknowledgement	
System interactions	Single acknowledgement response sent from the message exchange to the dispenser's system
Message type	ACK^T02
Required segments/ data fields	MSH Message Header MSA Message Acknowledgement ERR Error Information

Scenario 6 — A patient receives an e-prescription, which is later cancelled.

A patient attends a prescriber who generates an electronic prescription which is sent and stored in the message exchange. After the patient has left, the prescriber decides the prescription should be cancelled.

The patient subsequently attends a dispenser and provides the dispenser with a bar coded paper prescription which allows the dispenser to identify and retrieve the prescription from the message exchange. The dispenser retrieves a cancelled prescription indicating that the prescriber has decided that the prescription is not required. The dispenser informs the patient of the cancellation.

Or, a patient attends a prescriber who generates an electronic prescription which is sent and stored in the message exchange. The patient subsequently attends a dispenser and provides the dispenser with a bar coded paper prescription which allows the dispenser to identify and retrieve the prescription from the message exchange. The dispenser decides that the prescription should be cancelled. Authorisation is received from the prescriber and the dispenser cancels the prescription and informs the patient.

Clinical examples to inform the use case

- The prescriber or dispenser suspects medication misuse or abuse (Use case 9 and 10).
- The dispenser discovers the prescriber is not authorised to prescribe a certain type of medication (Use case 10).
- The dispenser may decide it is unsafe to dispense the medication prescribed (Use case 10).
- The dispenser may discover that the prescription is for an unlicensed medication and may cancel the prescription (Use case 10).
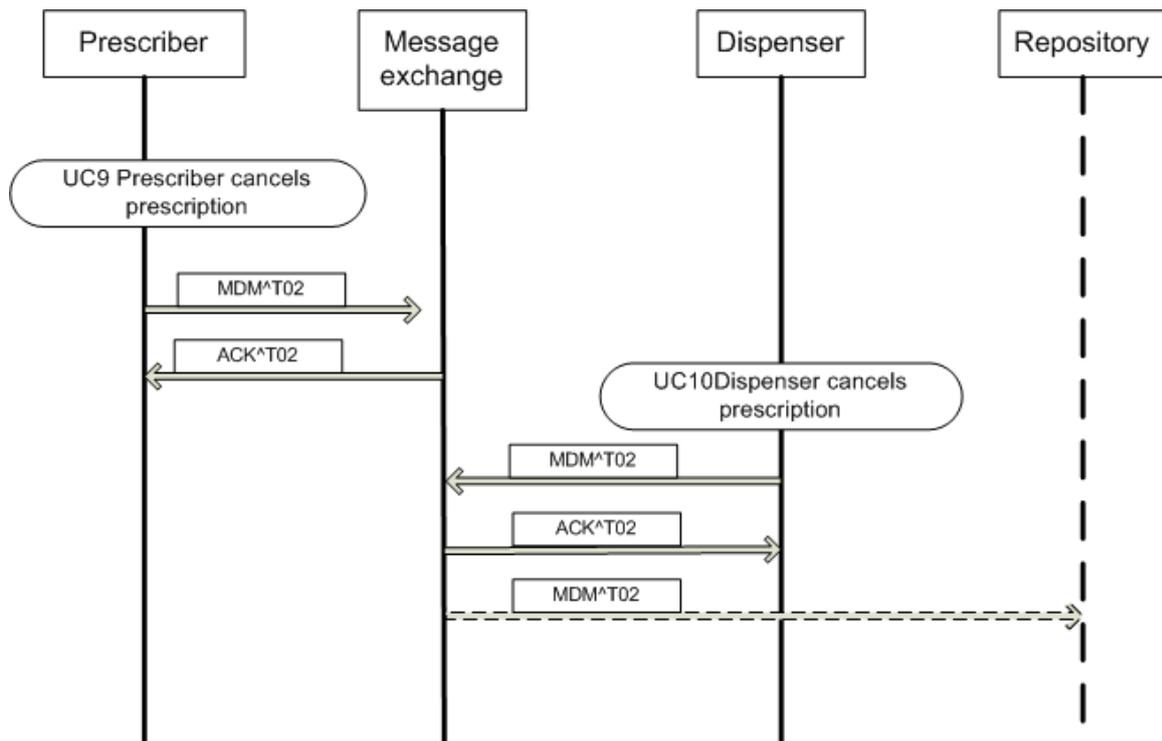
Use case 9 — Prescriber cancels prescription

The prescriber notifies the message exchange that the prescription has been cancelled.

Use case 9 — Prescriber cancels prescription	
System interactions	Single notification sent from the prescriber's system to the message exchange
Message type	MDM^T02 with a MIME-encapsulated CDA in the OBX segment
Required segments/ data fields	MSH Message Header PID Patient Identification EVN Event Segment PV1 Event Type/Patient Visit TXA Document Notification OBX Observation/Result

The message exchange acknowledges receipt.

Use case 9 — System acknowledgement	
System interactions	Single acknowledgement response sent from the message exchange to the dispenser's system
Message type	ACK^T02
Required segments/ data fields	MSH Message Header MSA Message Acknowledgement ERR Error Information

Use case 10 — Dispenser cancels prescription

The dispenser cancels the prescription on their system, which notifies the message exchange.

Use case 10 — Dispenser cancels the prescription	
System interactions	Single notification sent from the dispenser's system to the message exchange
Message type	MDM^T02 with a MIME-encapsulated CDA in the OBX segment
Required segments/ data fields	MSH Message Header PID Patient Identification EVN Event Segment PV1 Event Type/Patient Visit TXA Document Notification OBX Observation/Result

The message exchange acknowledges receipt.

Use case 10 — System acknowledgement	
System interactions	Single acknowledgement response sent from the message exchange to the dispenser's system
Message type	ACK^T02
Required segments/ data fields	MSH Message Header MSA Message Acknowledgement ERR Error Information

3   Message types

This chapter describes the format required for each type of message used in the Standard. Defined in the HL7 Standard, the format specifies which message segments to use with the recommended sequence and how to structure the message. This format ensures that both the source system and the target system interpret each message in the same way. To reflect the sequence and structure, the following column names are used in the message type tables:

- The **Segment ID** column lists each segment that can appear in the message and shows the allowed sequence of segments in a message instance:
  - **Braces {…..}** surrounding a group of segments indicate one or more repetitions of the enclosed group may occur.
  - **Brackets [….]** surrounding a group of segments indicates that the enclosed group is optional. If a group of segments is optional and may repeat, it is enclosed in brackets and braces {[…..]}.
- The **Name** column provides the name of the segment
- The **Chapter** column shows the HL7 Chapter where the segment is defined.

The remainder of this section lists the HL7 message types that are supported by the General Practice Messaging Standard.

3.1   Supported message types

This table summarises all message types supported by the General Practice Messaging Standard.

Category	Type	Description
Patient visits and admissions	ADT_A01	Admit a patient to a bed
	ADT_A03	End a patient's admission
	ADT_A04	Register a patient without admission to a bed
Orders, observations, and results	OML_021	Laboratory order
	OMP_O09	Pharmacy or treatment order
	ORL_022	Response to a laboratory order
	ORM_O01	General order message
	ORR_O02	General order message response
	ORU_R01	Observation result
Patient referral and visit scheduling	REF_I12	Patient referral
	RRI_I12	Return of referral
	SUI	Scheduling information
Message controls	MDM	Original document
	ACK	General acknowledgement
	QRY_T12	Document Question
	DOC_T12	Document response

Message type ADT_A01 (Admit a patient)

This table shows the segments for the ADT_A01 message type, which is used when admitting a patient to a healthcare facility:

Segment ID	Name	Chapter
MSH	Message Header	2
EVN	Event Type	3
PID	Patient Identification	3
[PD1]	Additional Demographics	3
[{ ROL }]	Role	12
[{ NK1 }]	Next of Kin / Associated Parties	3
PV1	Patient Visit	3
[PV2]	Patient Visit - Additional Info.	3
[{ ROL }]	Role	12
[{ DB1 }]	Disability Information	3
[{ OBX }]	Observation/Result	7
[{ AL1 }]	Allergy Information	3
[{ DG1 }]	Diagnosis Information	6
[DRG]	Diagnosis Related Group	6
[{		
PR1	Procedures	6
[{ ROL }]	Role	12
}]		
[{ GT1 }]	Guarantor	6
[{		
IN1	Insurance	6
[IN2]	Insurance Additional Info.	6
[{ IN3 }]	Insurance Additional Info - Cert.	6
[{ ROL }]	Role	12
}]		
[ACC]	Accident Information	6
[UB1]	Universal Bill Information	6
[UB2]	Universal Bill 92 Information	6
[PDA]	Patient Death and Autopsy	3

Message type ADT_A03 (End an admission)

This table shows the segments for the ADT_A03 message type, which is used when a patient who was admitted to a healthcare facility has been discharged:

Segment ID	Name	Chapter
MSH	Message Header	2
EVN	Event Type	3
PID	Patient Identification	3
[PD1]	Additional Demographics	3
[{ ROL }]	Role	12
PV1	Patient Visit	3
[PV2]	Patient Visit - Additional Info.	3
[{ ROL }]	Role	12
[{ DB1 }]	Disability Information	3
[{ DG1 }]	Diagnosis Information	6
[DRG]	Diagnosis Related Group	6
[{		
PR1	Procedures	6
[{ ROL }]	Role	12
}]		
[{ OBX }]	Observation/Result	7
[PDA]	Patient Death and Autopsy	3

Message type ADT_A04 (Register a patient)

This table shows the segments for the ADT_A04 message type, which is used when registering a patient who has arrived at an outpatient department or emergency department – that is, the patient has not been assigned to a bed:

Segment ID	Name	Chapter
MSH	Message Header	2
EVN	Event Type	3
PID	Patient Identification	3
[PD1]	Additional Demographics	3
[{ ROL }]	Role	12
[{ NK1 }]	Next of Kin / Associated Parties	3
PV1	Patient Visit	3
[PV2]	Patient Visit - Additional Info.	3
[{ ROL }]	Role	12
[{ DB1 }]	Disability Information	3
[{ OBX }]	Observation/Result	7
[{ AL1 }]	Allergy Information	3
[{ DG1 }]	Diagnosis Information	6
[DRG]	Diagnosis Related Group	6
[{		
PR1	Procedures	6
[{ ROL }]	Role	12
}]		
[{ GT1 }]	Guarantor	6
[{		
IN1	Insurance	6
[IN2]	Insurance Additional Info.	6
[{ IN3 }]	Insurance Additional Info - Cert.	6
[{ ROL }]	Role	12
}]		
[ACC]	Accident Information	6
[UB1]	Universal Bill Information	6
[UB2]	Universal Bill 92 Information	6
[PDA]	Patient Death and Autopsy	3

Message type OML_021 (Laboratory order)

This table shows the segments for the OML_021 message type, which is used for laboratory orders:

Segment ID	Name	Chapter
MSH	Message Header	2
[{NTE}]	Notes and Comments (for Header)	2
[		
PID	Patient Identification	3
[PD1]	Additional Demographics	3
[{NTE}]	Notes and Comments (for Patient ID)	2
[PV1	Patient Visit	3
[PV2]]	Patient Visit- Additional Info	3
[{IN1	Insurance	6
[IN2]	Insurance Additional Info	6
[IN3]	Insurance Add'l Info - Cert.	6
}]		
[GT1]	Guarantor	6
[{AL1}]	Allergy Information	3
]		
{		
[		
SAC	Specimen Container Details	13
[{OBX}]	Additional Specimen Characteristics	7
]		
{		
ORC	Common Order	4
[		
OBR	Observation Request	4
[{		
SAC	Specimen Container Details	13
[{OBX}]	Additional Specimen Characteristics	7
}]		
[TCD]	Test Code Details	13
[{NTE}]	Notes and Comments (for Detail)	2
[{DG1}]	Diagnosis	6
[{		
OBX	Observation/Result	7
[TCD]	Test Code Detail	13
[{NTE}]	Notes and Comments (for Results)	2
}]		

[{		
[PID	Patient Identification - previous result	3
[PD1]]	Additional Demographics - previous result	3
[PV1	Patient Visit - previous result	3
[PV2]]	Patient Visit Add. Info - previous result	3
[{AL1}]	Allergy Information - previous result	3
{		
[ORC]	Common Order - previous result	4
OBR	Order Detail - previous result	4
{[NTE]}	Notes and Comments - previous result	2
{		
OBX	Observation/Result - previous result	7
[{NTE}]	Notes and Comments - previous result	2
}		
}		
}]		
]		
[{FT1}]	Financial Transaction	6
[{CTI}]	Clinical Trial Identification	7
[BLG]	Billing Segment	4
}		
]		

Message type OMP_O09 (Pharmacy or treatment order)

This table shows the segments for the OMP_O09 message type, which is used for pharmacy or treatment orders:

Segment ID	Name	Chapter
MSH	Message Header	2
[{NTE}]	Notes and Comments (for Header)	2
[		
PID	Patient Identification	3
[PD1]	Additional Demographics	3
[{NTE}]	Notes and Comments (for Patient ID)	2
[PV1	Patient Visit	3
[PV2]	Patient Visit - Additional Info	3
[{IN1	Insurance	6
[IN2]	Insurance Additional Info	6
[IN3]	Insurance Additional Info - Certificate	6
}]		
[GT1]	Guarantor	6
[{AL1}]	Allergy Information	3
]		
{		
ORC	Order common	4
RXO	Pharmacy/Treatment Order	4
[{NTE}]	Notes and comments (for RXO)	2
{RXR}	Pharmacy/Treatment Route	4
[		
{RXC}	Pharmacy/Treatment Component	4
{[NTE]}	Notes and comments (for RXC)	2
]		
[		
{		
OBX	Observation/Result	7
[{NTE}]	Notes and comments (for OBX)	2
}		
]	Financial Transaction	2
[{FT1}]	Clinical Trial Identification	6
[BLG]	Billing Segment	6
}		

Message type ORL_022 (Response to laboratory order)

This table shows the segments for the ORU_022 message type, which is used in the response to a laboratory order:

Segment ID	Name	Chapter
MSH	Message Header	2
MSA	Message Acknowledgment	2
[ERR]	Error	2
[{NTE}]	Notes and Comments (for Header)	2
[		
[PID	Patient Identification	3
{		
[SAC	Specimen Container Details	13
[{OBX}]	Additional Specimen Characteristics	7
]		
[{		
ORC	Common Order	4
[OBR	Observation Request	4
[{SAC}]	Specimen Container Details	13
]		
}]		
}		
]		
]		

Message type ORM_O01 (General order message)

This table shows the segments for the ORM_O01 message type, which is used to send a general order message:

Segment ID	Name	Chapter
MSH	Message Header	2
[{NTE}]	Notes and comments (for Header)	2
[		
PID	Patient Identification	3
[PD1]	Additional Demographics	3
[{NTE}]	Notes and Comments (for Patient ID)	2
[		
PV1	Patient Visit	3
[PV2]]	Patient Visit - Additional Info	3
[{IN1	Insurance	6
[IN2]	Insurance Additional Info	6
[IN3]	Insurance Additional Info - Certificate	6
}]		
[GT1]	Guarantor	6
[{AL1}]	Allergy Information	3
]		
{		
ORC	Order common	4
[		
<OBR|	Observations Detail Segment OBR, etc.	4
RQD|		
RQ1|		
RXO|		
ODS|		
ODT>		
{[NTE]}	Notes and comments (for Detail)	2
[CTD]	Contact Data	11
[{DG1}]	Diagnosis	6
[{	Observation/Result	7
OBX		2
[{NTE}]	Notes and comments	
}]		
}		
[{FT1}]	Financial Transaction	6
[{CTI}]		

[BLG]	Clinical Trial Identification	7
}	Billing Segment	4
}		
[DSC]		
	Continuation Pointer	2

Message type ORR_002 (General order message response)

This table shows the segments for the ORR_002 message type, which is used to respond to a general order message, ORM type:

Segment ID	Name	Chapter
MSH	Message Header	2
MSA	Message Acknowledgement	2
[ERR]	Error	2
[{NTE}]	Notes and Comments (for Header)	2
[		
[PID	Patient Identification	3
[{NTE}]	Notes and Comments	2
{		
ORC	Common Order	3
<OBR|	[Order Detail Segment] OBR, etc.	4
RQD|		
RQ1|		
RXO|		
ODS|		
ODT>		
[{NTE}]	Notes and comments (for Details)	2
[{CTI}]	Clinical Trial Identification	7
}		
]		

Message type ORU_R01 (Observational report - unsolicited)

This table shows the segments for the ORU_021 message type, which is used to send the results of an observation:

Segment ID	Name	Chapter
MSH	Message Header	2
{		
[		
PID	Patient Identification	3
[PD1]	Additional Demographics	3
[{NK1}]	Next of Kin/Associated Parties	3
[{NTE}]	Notes and Comments	2
[		
PV1	Patient Visit	3
[PV2]	Patient Visit - Additional Info	3
]		
]		
{		
[ORC]	Order common	4
OBR	Observations Report ID	7
{[NTE]}	Notes and comments	2
[CTD]	Contact Data	11
{		
[OBX]	Observation/Result	7
{[NTE]}	Notes and comments	2
}		
[{FT1}]	Financial Transaction	6
{[CTI]}	Clinical Trial Identification	7
}		
}		
[DSC]	Continuation Pointer	2

Message type REF_I12 (Patient referral)

This table shows the segments used in the REF_I12 type, which is used to refer a patient:

Segment ID	Name	Chapter
MSH	Message Header	2
[RF1]	Referral Information	11
[		
AUT	Authorization Information	11
[CTD]	Contact Data	11
]		
{		
PRD	Provider Data	11
[{CTD}]	Contact Data	11
}		
PID	Patient Identification	3
[{NK1}]	Next of Kin/Associated Parties	6
[{GT1}]	Guarantor	6
[		
{		
IN1	Insurance	6
[IN2]	Insurance Additional Info	6
[IN3]	Insurance Add'l Info - Cert	6
}		
]		
[ACC]	Accident Information	6
[{DG1}]	Diagnosis	6
[{DRG}]	Diagnosis Related Group	6
[{AL1}]	Allergy Information	3
[		
{		
PR1	Procedure	6
[		
AUT	Authorization Information	11
[CTD]	Contact Data	11
]		
}		
]		
[		
{		
OBR	Observation Request	4

[{NTE}]	Notes and Comments	2
[		
{		
OBX	Observation/Result	7
[{NTE}]	Notes and Comments	2
}		
]		
}		
]		
[		
PV1	Patient Visit	3
[PV2]	Patient Visit Additional Info	3
]		
[		
PV1	Patient Visit	3
[PV2]	Patient Visit Additional Info	3
]		
[{NTE}]	Notes and Comments	2

Message type RRI_I12 (Return of referral information)

This table shows the segments used in the RRI_I12 message type, which is used to return a patient's referral information:

Segment ID	Name	Chapter
MSH	Message Header	2
[MSA]	Message Acknowledgement	3
[RF1]	Referral Information	11
[		
AUT	Authorization Information	11
[CTD]	Contact Data	11
]		
{		
PRD	Provider Data	11
[{CTD}]	Contact Data	11
}		
PID	Patient Identification	3
[{NK1}]	Next of Kin/Associated Parties	6
[{GT1}]	Guarantor	6
[		
{		
IN1	Insurance	6
[IN2]	Insurance Additional Info	6
[IN3]	Insurance Add'l Info - Cert	6
}		
]		
[ACC]	Accident Information	6
[{DG1}]	Diagnosis	6
[{DRG}]	Diagnosis Related Group	6
[{AL1}]	Allergy Information	3
[		
{		
PR1	Procedure	6
[		
AUT	Authorization Information	11
[CTD]	Contact Data	11
]		
}		
]		

[		
{		
OBR	Observation Request	4
[{NTE}]	Notes and Comments	2
[		
{		
OBX	Observation/Result	7
[{NTE}]	Notes and Comments	2
}		
]		
}		
]		
[		
PV1	Patient Visit	3
[PV2]	Patient Visit Additional Info	3
]		
[		
PV1	Patient Visit	3
[PV2]	Patient Visit Additional Info	3
]		
[{NTE}]	Notes and Comments	2

Message type SUI (Scheduling information unsolicited)

This table shows the segments used in the SUI message type, which is used for a patient's appointment from the hospital scheduling system to a practice management system:

Segment ID	Name	Chapter
MSH	Message Header	2
SCH	Schedule Activity Information	10
[{ NTE }]	Notes and Comments	2
[{ PID	Patient Identification	3
[PD1]	Additional Demographics	3
[PV1]	Patient Visit	3
[PV2]	Patient Visit - Additional Info	3
[{ OBX }]	Observation/Result	4
[{ DG1 }]	Diagnosis	6
}		
]		
{ RGS	Resource Group Segment	10
[{ AIS	Appointment Information - Service	10
[{ NTE }]	Notes and Comments	2
}		
]		
[{ AIG	Appointment Information - General Resource	10
[{ NTE }]	Notes and Comments	2
}		
]		
[{ AIL	Appointment Information - Location Resource	10
[{ NTE }]	Notes and Comments	2
}		
]		
[{ AIP	Appointment Information - Personnel Resource	10
[{ NTE }]	Notes and Comments	2
}		
]		
}		

Message type MDM^T02 (Original document notification and content)

This table shows the segments used in the MDM^T02 message type, which is used to notify that a document has been created and to send the document's content:

Segment ID	Name	Chapter
MSH	Message Header	2
[{SFT}]	Software Segment	2
EVN	Event Type	3
PID	Patient Identification	3
PV1	Patient Visit	3
[{		
ORC	Common order segment	4
[{		
TQ1	Timing/Quantity	4
[{TQ2}]	Timing/Quantity Order Sequence	4
}]		
OBR	Observation request segment	4
[{ NTE }]	Notes and comments about the observation (OBR)	2
}]		
TXA	Document Notification	9
{		
OBX	Observation/Result (one or more required)	9
[{ NTE }]	Notes and comments about the observation (OBX)	2
}		

Message type ACK (General acknowledgement)

This table shows the segments used in the ACK message type, which is used as a system acknowledgement for creation of a document above:

Segment ID	Name	Chapter
MSH	Message Header	2
MSA	Message Acknowledgment	2
[ERR]	Error	2

Message type QRY^T12 (Document query)

This table shows the segments used in the QRT^T12 message type, which requests a document or list of documents:

Segment ID	Name	Chapter
MSH	Message Header	2
QRD	Query Definition	2
[QRF]	Query Filter	2

Message type DOC^T12 (Document response)

This table shows the segments used in the DOC^T12 message type, which returns the requested document or list of documents:

Segment ID	Name	Chapter
MSH	Message Header	2
MSA	Message Acknowledgement	2
[ERR]	Error	2
[QAK]	Query Acknowledgement	5
QRD	Query Definition	2
{		
[EVN]	Event Type	3
PID	Patient Identification	3
PV1	Patient Visit	3
TXA	Document Notification	9
[{OBX}]	Observation	7
}		
[DSC]	Continuation Pointer	2

4   Message segments

In the HL7 Standard, each message consists of a combination of defined message segments. A message segment contains the data fields and components needed to transmit or receive a specific type of information — for example, the OBX segment defines the data fields and components for a single observation or observation fragment, while the PID segment defines patient identification information. The HL7 Standard includes a full segment table definition for each HL7 message segment.

This chapter describes each of the 25 HL7 message segments that are supported by the General Practice Messaging Standard. It includes the following sections:

- Segment naming conventions

- Segment table conventions

- Note about the CE data type

- Note about the HD and IS data types

- Supported message segments

Segment naming conventions

The Standard uses the HL7 naming conventions and structure. HL7 names each message segment using a three-character alphanumeric — for example, the message header segment is named the MSH segment. Within this segment, each data field name consists of the segment name and a number indicating its position in the sequence of data fields. For example, the third data field in the MSH segment is the Sending Application field (MSH.3). Each data field can have a number of components. Each component is named using the data field name, together with a component name plus sequence number. Continuing the earlier example, the Sending Application data field (MSH.3) has three components. These components all use the designation HD, followed by their position in the sequence of components:

- MSH.3/HD.1 for the name of the sending application
- MSH.3/HD.2 for the code of the sending application
- MSH.3/HD.3 for the coding system

This example shows the hierarchy within each message segment:

- **Segment Name (MSH)** –the message segment, Message Header, defines how the header of the message is structured.
- **Data Field (MSH.3)** — the third data field in the segment, Sending Application, contains information about the application sending the message.
- **Component (MSH.3/HD.2)** — the second component in the segment's third data field lists the code associated with the application sending the message.

The name of each data field uses the standard format

{seg}.{num}

where

- {seg} is the 3-character, HL7 segment name.
- {num} is the sequence of the data field in the segment.

For example, the data field name MSH.3 consists of:

- {MSH} indicating the HL7 message header segment
- {3} indicating the third data field in the MSH segment — Sending Application, which identifies the application sending the message.

The name of each component uses the standard format {seg}.{num}/{comp}.{cnum}

 where

- {seg} is the 3-character, HL7 segment name.
- {num} is the sequence of the data field in the segment.
- {comp} is the 2- or 3-character, HL7 component name.
- {cnum} is the sequence of the component within the data field.

For example, the component name MSH.3/HD.1 consists of:

- {MSH} indicating the HL7 message header segment
- {3} indicating the third data field in the MSH segment — Sending Application, which is the application sending the message.
- {HD.1} indicating the first HD component of the MSH.3 data field Sending Application — this component lists the name of the sending application.

Segment table conventions

This section describes the column names used in message segment tables:

Column Name	Description
Data Field Name	This column lists the name of this HL7 message data field or component.
Data Field Full Name	This column indicates the full name of the data field.
Item	This column lists the HL7 item number, which is a small integer that uniquely identifies this data item throughout the HL7 Standard.
Data Type	This column lists the HL7 data type and the maximum character length (if any) in brackets after — for example, HD(1). This maximum applies to all repeating values. For more information, see Chapter 2 of the HL7 Standard specification, available at www.hl7.org. N/A means that no maximum applies.
Required	This column indicates whether the field is required, as defined here:

Req	Description	HOMS
Req	This field is mandatory. If it is missing or incorrect, the message may not be delivered or may have limited value.	RC
Opt	This field is discretionary. If it is not included, the message is unaffected.	RNC, O, OR
Cond	This field is conditional. A trigger event or another field in the message determines whether this field is mandatory or optional	C, RNC
Back	This field is retained for backward compatibility.	B
X	This field is not used.	

Description	This column provides a detailed description of recommended use of the field.
	It also indicates if a field can repeat, with the permitted number of

	repetitions.
Table	This column indicates the HL7 table that defines values for this element name.

The corresponding data fields HL7 segment table defines all data fields and components for each segment. HL7 segment tables cannot be redefined locally but they can be extended to accommodate locally defined values. As a result, three types of segment table are supported:

Type	Values are...
HL7 table	Set locally or by site
User-defined table	Set by the HL7 Standard
Extended table	Set by another standards organisation

Note about the CE data type

The CE data type consists of six components and is used to transmit coded information. The components of the data type include:

- identifier
- text
- name of coding system
- alternative identifier
- alternative text
- name of alternative coding system.

The identifier component contains a sequence of characters (the code) that uniquely identifies the item being referenced by the text component. The name of coding system component will serve to identify the coding scheme being used in the identifier component. The combination of the identifier and name of coding system components will be a unique code for a data item. HL7 permits local codes to be carried in the first three components.

The three alternative components are defined analogously to the above for an alternate or local coding system. If the alternate text component is absent, and the alternate identifier is present, the alternate text will be taken to be the same as the text component. If the alternate coding system component is absent, it will be taken to mean the locally-defined system.

Note about the HD and IS data types

The HD data type is used in fields that, in earlier versions of HL7, used the IS data type. Thus, a single component HD (only the first component valued) will look like a simple IS data type for older systems expecting a single component in the place of the HD data type. If the first component for the HD data type is present, the second and third components are optional. If the third component is present, then the second must also be present (although in this case the first is optional).

The second and third components must either both be valued (both non-null), or both be not valued (both null).This means that if all three components of the HD are valued, the entity identified by the first component is the same as the entity identified by components two and three taken together.

However, implementers may choose, by site agreement, to specify that if all three components of the HD are valued, the first component defines a member in the set defined by the second and third components.

4.1 Supported message segments

This table lists the HL7 message segments that the General Practice Messaging Standard (GMPS) supports.

Segment	Full Name	Description
MSH	Message header	This segment defines the intent, source, destination, and some specifics of the syntax of a message.
PID	Patient identification	The PID segment is used by all applications as the primary means of communicating patient identification information. This segment contains permanent patient identifying and demographic information that, for the most part, is not likely to change frequently.
EVN	Event	The EVN segment is used to communicate necessary trigger event information to receiving applications.
PV1	Event type/ patient visit	The PV1 segment is used by registration/patient administration applications to communicate information on an account or visit-specific basis.
PV2	Event type additional information	The PV2 segment is a continuation of information contained on the PV1 segment.
PR1	Procedures	The PR1 segment contains information about various types of procedures that can be performed on a patient – for example, surgical, nuclear medicine, and so on. The segment can be used to send information about multiple procedures, such as for medical record encoding or for billing.
PRD	Provider data	The PRD segment will be employed as part of a patient referral message and its related transactions.
NTE	Notes and comments	The NTE segment is commonly used for sending notes and comments.

DG1	Diagnosis	The DG1 segment contains patient diagnosis information of various types, for example, admitting, primary, etc. The DG1 segment is used to send multiple diagnoses (for example, for medical records encoding).
AL1	Patient Allergy Information	The AL1 segment contains patient allergy information, with each AL1 segment describing a different patient allergy.
OBR	Observation request	The OBR segment is used to transmit information specific to an order for a diagnostic study or observation, physical exam, or assessment. In the reporting of clinical data, the OBR serves as the report header. It includes the relevant ordering information when that applies. It contains many of the fields that usually apply to all of the included observations. When a set of observations is ordered, the order message contains an OBR segment. However, observations can be collected and reported without an antecedent order. When observations are reported, the report message also includes one or more OBR segments.
OBX	Observation result	The OBX segment is used to transmit a single observation or observation fragment. It represents the smallest indivisible unit of a report.
PDA	Patient death and autopsy	The PDA segment carries information on a patient's death and possible autopsy.
SCH	Scheduling activity information	The SCH segment contains general information about the scheduled appointment
RGS	Resource group	The RGS segment is used to identify relationships between resources identified for a scheduled event.
MSA	Message acknowledgement	The MSA segment contains information sent while acknowledging another message.
ERR	Message error	The ERR segment is used to add error comments to acknowledgment messages.

AIP	Appointment information — personnel resources	The AIP segment contains information about the personnel types that can be scheduled.
AIL	Appointment information — location resource	The AIL segment contains information about location resources (meeting rooms, operating rooms, examination rooms, or other locations) that can be scheduled. Resources included in a transaction using this segment are assumed to be controlled by a schedule on a schedule filler application. Resources not controlled by a schedule are not identified on a schedule request using this segment. Location resources are identified with this specific segment because of the specific encoding of locations used by the HL7 Standard.
ORC	Common order segment	The ORC segment is used to transmit fields that are common to all orders (all types of services that are requested).
SAC	Specimen container detail	The SAC segment is the data necessary to maintain the containers that are being used throughout the laboratory automation system.
TXA	Transcription document header	The TXA segment contains information specific to a transcribed document but does not include the text of the document
QRD	Query definition	The QRD segment is used to define a query.
QRF	Query filter	The QRF segment is used with the QRD segment to further refine the content of a query
QAK	Query response	The QAK segment contains information sent with responses to a query
RF1	Referral information	The RF1 segment represents information that may be useful when sending referrals from the referring provider to the referred-to provider

| **DSC** | Continuation Pointer | The DSC segment is used in the continuation protocol. |

The remainder of this chapter provides the full segment tables for all supported HL7 message segments.

The MSH segment (message header)

The MSH segment defines the intent, source, destination, and some specifics of the syntax of a message.

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
MSH.1	Field Separator	00001	ST (1)	Req	This field contains the separator between the segment ID and the first real field, MSH-2-encoding characters. As such it serves as the separator and defines the character to be used as a separator for the rest of the message. Recommended value is |, (ASCII 124).	
MSH.2	Encoding Characters	00002	ST (4)	Req	This field contains the four characters in the following order: the component separator, repetition separator, escape character, and subcomponent separator. Recommended values are ^~\& (ASCII 94, 126, 92, and 38, respectively).	

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
MSH.3	Sending Application	00003	HD (180)	Req	This field uniquely identifies the sending application among all other applications within the network enterprise. The network enterprise consists of all those applications that participate in the exchange of HL7 messages within the enterprise. This field further describes the sending application, MSH-3-sending application. The field structure is System or System.Middleware or System.Middleware.Message Number. The optionality of this field is further constrained than the HL7 Standard optionality of (O). The HD data type is used in fields that in earlier versions of HL7 used the IS data type. Thus, a single component HD (only the first component valued) will look like a simple IS data type for older systems expecting a single component in the place of the HD data type. If the first component for the HD data type is present, the second and third components are optional. If the third component is present, then the second must also be present (although in this case the first is optional). The second and third components must either both be valued (both non-null), or both be not valued (both null).This means that if all three components of the HD are valued, the entity identified by the first component is the same as the entity identified by components two and three taken together. However, implementers may choose, by site agreement, to specify that if all three components of the HD are valued, the first component defines a member in the set defined by the second and third components.	

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
MSH.3/HD.1			IS	Cond	The name of the sending application. This field further describes the sending application, MSH-3-sending application. The field structure is: System or System.Middleware or System.Middleware.Message Number.	Table 0361
MSH.3/HD.2			ST	Cond	The code associated with the sending application.	
MSH.3/HD.3			ID	Cond	The coding system used to identify the sending application.	
MSH.4	Sending Facility	00004	HD (180)	Req	The field is used to define the health agency where the message originated. In the acute setting this may be the department or clinic, in the general practice setting this will be the general practice. This field further describes the sending application, MSH-3-sending application. The optionality of this field is further constrained than the HL7 Standard optionality of (O).	
MSH.4/HD.1			IS	Opt	The name of the sending facility.	Table 0362
MSH.4/HD.2			ST	Cond	The code associated with the sending facility.	
MSH.4/HD.3			ID	Cond	The coding system used to identify the sending facility.	
MSH.5	Receiving Application	00005	HD (180)	Opt	This field uniquely identifies the receiving application among all other applications within the network enterprise.	

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
MSH.5/HD.1			IS	Cond	The name of the receiving application.	0361
MSH.5/HD.2			ST	Cond	The code associated with the receiving application.	
MSH.5/HD.3			ID	Cond	The coding system used to identify the receiving application.	
MSH.6	Receiving Facility	00006	HD (180)	Req	The field is used to define the health agency where the message is destined. In the acute setting this may be the department or clinic, in the general practice setting this will be the general practice. The optionality of this field is further constrained than the HL7 Standard optionality of (O).	
MSH.6/HD.1			IS	Cond	The name of the receiving facility.	0362
MSH.6/HD.2			ST	Cond	The code associated with the receiving facility.	
MSH.6/HD.3			ID	Cond	The coding system used to identify the receiving facility.	
MSH.7	Date/ Time Of Message	00007	TS (26)	Req	This field contains the date/time that the sending system created the message.	
MSH.8	Security	00008	ST(40)	Not used	Not currently used.	

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
MSH.9	Message Type	00009	CM (13)	Req	The first component is the message type code defined by HL7 Table 0076 - Message type. This table contains values such as ACK, ADT, ORM, ORU etc. The second component is the trigger event code defined by HL7 Table 0003 - Event type. This table contains values like A01, O01, R01 etc.	
MSH.9/MSG.1			ID	Req	This field is the message type code defined by HL7 Table 0076 - Message type. This table contains values such as ACK, ADT, ORM, ORU etc.	0076
MSH.9/MSG.2			ID	Req	This field is the trigger event code defined by HL7 Table 0003 - Event type. This table contains values like A01, O01, R01 etc.	0003
MSH.10	Message Control ID	00010	ST (20)	Req	This field contains a number or other identifier that uniquely identifies the message. The receiving system echoes this ID back to the sending system in the Message acknowledgment segment (MSA) where applicable.	
MSH.11	Processing ID	00011	PT (3)	Req	This field is used to decide whether to process the message as defined in HL7 Application (level 7) Processing rules.	0301/ 0207
MSH.11/PT.1			ID	Req	This should be set to: P for live messages T for training messages D for debugging messages.	

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
MSH.12	Version ID	00012	VID (60)	Req	The version id. This should be 2.4.	0104
MSH.13	Sequence number	00013	NM(15)	Not used	Not currently used.	
MSH.14	Continuation pointer	00014	ST(180)	Not used	Not currently used.	
MSH.15	Accept Acknowledgment Type	00015	ID (2)	Opt*	This field identifies the conditions under which accept acknowledgments are required to be returned in response to this message. *Required for enhanced acknowledgment mode.	0155
MSH.16	Application acknowledgement type	00016	ID(2)	Not used	Not currently used.	0155
MSH.17	Country code	00017	ID (3)	Opt	This field defines the country of origin for the message. Recommended values are in the ISO table 3166.	0399
MSH.18	Character set	00018	ID(16)	Not used	Not currently used.	0211
MSH.19	Principal language of message	00019	CE(250)	Opt	This field contains the principal language of the message. HL7 recommends using ISO table 639 as the suggested values.	
MSH.20	Alternate character set handling scheme	00020	ID(20)	Not used	Not currently used.	0356

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
MSH.21	Conformance statement ID	00021	ID(20)	Not used	Not currently used.	0449

The PID segment (patient identification)

The PID segment is used by all applications as the primary means of communicating patient identification information. This segment contains permanent patient identifying and demographic information that, for the most part, is not likely to change frequently.

Note. If default values are supplied in this segment, they **must** be identified using the PID.32 component. The PID.32 component value indicates the reliability of patient/person identifying data transmitted via a transaction. Values could indicate that certain fields on a PID segment for a given patient/person are known to be false — for example, the use of default or system-generated values for date of birth or person name. For a list of permitted values, see Table 0445 - Identity reliability code.

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
PID.1	Set ID	000104	SI(4)	OPT	This field contains the number that identifies this transaction. For the first occurrence of the segment, the sequence number shall be one, for the second occurrence, the sequence number shall be two, etc.	
PID.2	Patient ID	00105	CX (20)	X	Not currently used.	
PID.3	Patient Identifier List	00106	CX (250)	REQ	**Repeats.** This field contains the list of identifiers (one or more) used by the healthcare facility to uniquely identify a patient (e.g., medical record number, billing number, national unique individual identifier, etc.).	

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
PID.3/CX.1			ST	REQ	The patient identifier.	
PID.3/CX.4/HD.1			ST	REQ	The name of the authority that assigned the patient identifier.	0363
PID.3/CX.4/HD.2			IS	OPT	The code of the assigning authority.	
PID.3/CX.4/HD.3			ID	OPT	The coding system used to identify the assigning authority. (The universal id of the system that received the order.)	0301
PID.3/CX.5			ID	OPT	The type of identifier in PID.3/CX.1.	0203
PID.4	Alternative Patient ID	00107	CX (20)	X	Repeats. Not currently used.	
PID.5	Patient Name	00108	XPN (250)	REQ	**Repeats.** This field contains the names of the patient.	
PID.5/XPN.1/FN.1			ST	REQ	Patient's Family Name.	
PID.5/XPN.2			ST	REQ	Patient's First Name.	
PID.5/XPN.3			ST	OPT	Middle Names/and or initials.	
PID.5/XPN.4			ST	OPT	A name suffix follows a person's full name and provides additional	

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
					information about the person, for example M.A, M.F.A, MBA, Ph.D.	
PID.5/XPN.5			ST	OPT	A name prefix precedes a person's full name and provides additional information about the person, for example Dr, Mr.	
PID.5/XPN.6			IS	OPT	Qualifications.	0360
PID.5/XPN.7			ID	OPT	Name type code.	0200
PID.6	Mother's Maiden Name	00109	XPN (250)	OPT	**Repeats.** This field contains the family name under which the mother was born (i.e., before marriage).	
PID.7	Date/Time of Birth	00110	TS (26)	COND	This field contains the patient's date and time of birth. This field should be populated if known. The structure of the field is YYYYMMDD. Thus, YYYY is used to specify a precision of "year", YYYYMM specifies a precision of "month" and YYYYMMDD specifies a precision of "day". The optionality of this field is further constrained than the HL7 Standard optionality of (O). If the date of birth is known then it is strongly recommended that is supplied. If the date of birth is unknown, a default date of birth may be supplied and it is recommended that this is indicated using the PID.32 field.	
PID.8	Administra	00111	IS (1)	REQ	This field contains the patient's sex. The optionality of this field is	0001

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
	tive Sex				further constrained than the HL7 Standard optionality of (O).	
PID.9	Patient Alias	00112	XPN (250)	B	**Repeats. This field has been retained for backward compatibility only.** It is recommended to use PID-5 - patient name for all patient names. This field contained the name(s) by which the patient has been known at some time.	
PID.10	Race	00113	CE (250)	OPT	**Repeats.** This field refers to the patient's race.	0005
PID.11	Patient Address	00114	XAD (250)	OPT	**Repeats.** This field contains the mailing address of the patient.	
PID.11/XAD.1/ SAD.1			ST	OPT	Street Address.	
PID.11/XAD.2			ST	OPT	Address line 2.	
PID.11/XAD.3			ST	OPT	Address line 3.	
PID.11/XAD.4			ST	OPT	Address line 4.	
PID.11/XAD.5			ST	OPT	Postal code.	

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
PID.12	County Code	00115	IS (4)	B	**This field has been retained for backward compatibility only.** It contains the patient's county code.	0289
PID.13	Phone Number - Home	00116	XTN (250)	OPT	**Repeats.** This field contains the patient's personal phone numbers.	
PID.13/XTN.1			TN	OPT	This field is a telephone number to call when communicating with a patient	
PID.13/XTN.2			ID	OPT	Telecommunications use code.	0201
PID.13/XTN.3			ID	OPT	Telecommunications equipment type.	0202
PID.13/XTN.4			ST	OPT	Email address	
PID.13/XTN.6			NM	OPT	Area/city code	
PID.13/XTN.7			ID	OPT	Telephone number	
PID.14	Phone Number - Business	00117	XTN (250)	OPT	**Repeats.** This field contains the patient's business telephone numbers.	
PID.14/XTN.1			TN	OPT	This field is a telephone number to call when communicating with	

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
					a provider or organisation	
PID.14/XTN.2			ID	OPT	Telecommunications use code.	0201
PID.14/XTN.3			ID	OPT	Telecommunications equipment type.	0202
PID.14/XTN.4			ST	OPT	Email address	
PID.14/XTN.6			NM	OPT	Area/city code	
PID.14/XTN.7			ID	OPT	Telephone number	
PID.15	Primary Language	00118	CE (250)	OPT	This field contains the patient's primary language. HL7 recommends using ISO table 639 as the suggested values.	0296
PID.15/CE.1			ST	OPT	Primary language code.	
PID.15/CE.2			ST	OPT	Description of coded language.	
PID.15/CE.3			IS	OPT	Name of coding system used.	
PID.16	Marital Status	00119	CE (250)	OPT	This field contains the patient's marital status.	0002

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
PID.17	Religion	00120	CE (250)	OPT	This field contains the patient's religion.	0006
PID.18	Patient Account Number	00121	CX (250)	OPT	This field contains the patient account number assigned by accounting to which all charges, payments, etc., are recorded.	
PID.19	SSN Number - Patient	00122	ST (16)	B	**This field has been retained for backward compatibility only.** It is recommended to use PID-3 - Patient Identifier List for all patient identifiers. However, in order to maintain backward compatibility, this field should also be populated.	
PID.20	Driver's License Number - Patient	00123	DLN	X	Not currently used.	
PID.21	Mother's Identifier	00124	CX (250)	OPT	**Repeats.** This field is used, for example, as a link field for newborns. Typically a patient ID or account number may be used.	
PID.22	Ethnic Group	00125	CE (250)	OPT	**Repeats.** This field further defines the patient's ancestry.	0189
PID.23	Birth Place	00126	ST (250)	OPT	This field indicates the location of the patient's birth.	
PID.24	Multiple	00127	ID (1)	OPT	This field indicates whether the patient was part of a multiple birth.	0136

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
	Birth Indicator					
PID.25	Birth Order	00128	NM (2)	OPT	When a patient was part of a multiple birth, a value (number) indicating the patient's birth order is entered in this field.	
PID.26	Citizenship	00129	CE (250)	OPT	**Repeats.** This field contains the patient's country of citizenship.	0171
PID.27	Veterans Military Status	00130	CE (250)	OPT	This field contains the military status assigned to a veteran.	0172
PID.28	Nationality	00739	CE (250)	B	**This field has been retained for backward compatibility only.** This field contains a code that identifies the nation or national grouping to which the person belongs. This information may be different from a person's citizenship in countries in which multiple nationalities are recognised (for example, Spain: Basque, Catalan, etc.).	0212
PID.29	Patient Death Date and Time	00740	TS (26)	COND	This field contains the date and time at which the patient death occurred. Please refer to the Death Notification message flow for specific usage of this field.	

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
PID.29/TS.1			TS	COND	The date and time of the patient's death.	
PID.30	Patient Death Indicator	00741	ID (1)	COND	This field indicates whether the patient is deceased. Please refer to the Death Notification message flow for specific usage of this field.	0136
PID.31	Identity Unknown Indicator	01535	ID (1)	OPT	This field indicates whether or not the patient's/person's identity is known.	0136
PID.32	Identity Reliability Code	01536	IS (20)	OPT	**Repeats.** This field contains a coded value used to communicate information regarding the reliability of patient/person identifying data transmitted via a transaction. Values could indicate that certain fields on a PID segment for a given patient/person are known to be false (e.g., use of default or system-generated values for Date of Birth)	0445
PID.33	Last Update Date/Time	01537	TS (26)	X	Not currently used.	
PID.34	Last Update Facility	01538	HD (40)	X	Not currently used.	

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
PID.35	Species Code	01539	CE (250)	X	Not currently used.	0446
PID.36	Breed Code	01540	CE (250)	X	Not currently used.	0447
PID.37	Strain	01541	ST (250)	X	Not currently used.	
PID.38	Production Class Code	01542	CE (250)	X	Not currently used.	0429

The EVN segment (event)

The EVN segment is used to communicate necessary trigger event information to receiving applications.

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
EVN.1	Event Type Code	00099	ID (3)	B	**This field has been retained for backward compatibility only.** HL7 recommend using the second component (trigger event) of MSH-9 - Message Type to transmit event type code information. This field contains the events corresponding to the trigger events described in this section, e.g., admission, transfer, or registration.	0003
EVN.2	Recorded Date/Time	00100	TS (26)	Req	The date/time that the event was recorded on the source system.	
EVN.2/TS.1			TS	Req	The date/time that the event was recorded on the source system.	
EVN.3	Date/Time Planned Event	00101	TS (26)	X	Not currently used.	
EVN.4	Event Reason Code	00102	IS (3)	X	Not currently used.	
EVN.5	Operator ID	00103	XCN (250)	X	Not currently used.	
EVN.6	Event Occurred	01278	TS (26)	X	Not currently used.	
EVN.7	Event Facility	01534	HD (180)	X	Not currently used.	

The PV1 segment (event type/patient visit)

The PV1 segment is used by registration/patient administration applications to communicate information on an account or visit-specific basis.

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
PV1.1	Set ID	00131	SI(4)	OPT	This field contains the number that identifies this transaction. For the first occurrence of the segment, the sequence number shall be one, for the second occurrence, the sequence number shall be two, etc.	
PV1.2	Patient Class	00132	IS(1)	REQ	This field identifies the class of the patient in terms of Inpatient, Outpatient, Emergency, Unknown etc.	0004
PV1.3	Assigned Patient Location	00133	PL(80)	OPT	This field contains the patient's initial assigned location or the location to which the patient is being moved e.g. Radiology Department. The first component may be the nursing station for inpatient locations, or clinic or department, for locations other than inpatient.	
PV1.3/PL.4/HD.1			IS	OPT	The name of the assigned patient location.	
PV1.3/PL.4/HD.2			ST	OPT	The code associated with the assigned patient location.	
PV1.3/PL.4/HD.3			ID	OPT	The coding system used to identify the assigned patient location.	
PV1.3/PL.9			ST	OPT	The location of the patient as plain text.	
PV1.4	Admission Type	00134	IS	OPT	This field indicates the circumstances under which the patient was or will be admitted.	0007
PV1.5	Preadmit Number	00135	CX (250)	X	Not currently used.	

PV1.6	Prior Patient Location	00136	PL (80)	X	Not currently used.	
PV1.7	Attending Doctor	00137	XCN (250)	OPT	**Repeats.** This field identifies the healthcare practitioner responsible for care of the patient. It is recommended that the doctors' name and professional identifier are supplied.	0010
PV1.7/XCN.1			ST	OPT	The identifier for the attending doctor.	
PV1.7/XCN.2/FN.1			ST	OPT	The family name of the attending doctor.	
PV1.7/XCN.3			ST	OPT	The first name of the attending doctor.	
PV1.7/XCN.4			ST	OPT	Middle names/and or initials.	
PV1.7/XCN.5			ST	OPT	The name suffix. A name suffix follows a person's full name and provides additional information about the person, for example M.A, M.F.A, MBA, Ph.D.	
PV1.7/XCN.6			ST	OPT	A name prefix precedes a person's full name and provides additional information about the person, for example Dr, Mr.	
PV1.8	Referring Doctor	00138	XCN(250)	OPT	**Repeats.** This field identifies the healthcare practitioner responsible for referring the patient. It is recommended that the doctors' name and professional identifier is supplied.	0010
PV1.8/XCN.1			ST	OPT	The identifier for the doctor.	
PV1.8/XCN.2/FN.1			ST	OPT	The family name of the referring doctor.	
PV1.8/XCN.3			ST	OPT	The first name of the referring doctor.	
PV1.8/XCN.4			ST	OPT	Middle names/and or initials.	

PV1.8/XCN.5			ST	OPT	The name suffix. A name suffix follows a person's full name and provides additional information about the person, for example M.A, M.F.A, MBA, Ph.D.	
PV1.8/XCN.6			ST	OPT	The name prefix. A name prefix precedes a person's full name and provides additional information about the person, for example Dr, Mr.	
PV1.9	Consulting Doctor	00139	XCN (250)	B	**This field has been retained for backward compatibility only. Repeats.** This field contains the consulting physician information. Some hospital use this field to identify other healthcare professionals involved in this episode of care.	0010
PV1.9/XCN.1			ST	OPT	The identifier for the consulting doctor.	
PV1.9/XCN.2/FN.1			ST	OPT	The family name of the consulting doctor.	
PV1.9/XCN.3			ST	OPT	The first name of the consulting doctor.	
PV1.9/XCN.4			ST	OPT	The middle names/and or initials of the consulting doctor.	
PV1.9/XCN.5			ST	OPT	The name suffix. A name suffix follows a person's full name and provides additional information about the person, for example M.A, M.F.A, MBA, Ph.D.	
PV1.9/XCN.6			ST	OPT	The name prefix. A name prefix precedes a person's full name and provides additional information about the person, for example Dr, Mr.	
PV1.10	Hospital Service	00140	IS (3)	X	Not currently used.	0069
PV1.11	Temporary Location	00141	PL (80)	X	Not currently used.	

PV1.12	Preadmit Test Indicator	00142	IS (2)	X	Not currently used.	0087
PV1.13	Re-admission Indicator	00143	IS (2)	X	Not currently used.	0092
PV1.14	Admit Source	00144	IS (6)	COND	This field indicates where the patient was admitted. Please refer to the A&E Notification and Admission Notification workflows for specific usage of this field.	0023
PV1.15	Ambulatory Status	00145	IS(2)	OPT	**Repeats.** This field indicates any permanent or transient disability.	0009
PV1.16	VIP Indicator	00146	IS(2)	X	Not currently used.	0099
PV1.17	Admitting Doctor	00147	XCN(250)	X	Repeats. Not currently used.	0010
PV1.18	Patient Type	00148	IS(2)	X	Not currently used.	0018
PV1.19	Visit Number	00149	CX(250)	OPT	This field contains the unique number assigned to each patient visit.	
PV1.19/CX.1			ST	OPT	The hospitals episode number.	
PV1.20	Financial Class	00150	FC(50)	OPT	**Repeats.** This field contains the financial class(es) assigned to the patient for the purpose of identifying sources of reimbursement.	0064
PV1.20/FC.1			IS	OPT	Financial class code of the patient, as per the user defined table.	
PV1.20/FC.2			TS	OPT	Effective date.	
PV1.21	Charge Price Indicator	00151	IS (2)	X	Not currently used.	0032

PV1.22	Courtesy Code	00152	IS (2)	X	Not currently used.	0045
PV1.23	Credit Rating	00153	IS (2)	X	Not currently used.	0046
PV1.24	Contract Code	00154	IS (2)	X	Repeats. Not currently used.	0044
PV1.25	Contract Effective Date	00155	DT(8)	X	Repeats. Not currently used.	
PV1.26	Contract Amount	00156	NM(12)	X	Repeats. Not currently used.	
PV1.27	Contract Period	00157	NM(3)	X	Repeats. Not currently used.	
PV1.28	Interest Code	00158	IS(2)	X	Not currently used.	0073
PV1.29	Transfer to Bad Debt Code	00159	IS(1)	X	Not currently used.	0110
PV1.30	Transfer to Bad Debt Date	00160	DT(8)	X	Not currently used.	
PV1.31	Bad Debt Agency Code	00161	IS(10)	X	Not currently used.	0021

PV1.32	Bad Debt Transfer Amount	00162	NM(12)	X	Not currently used.	
PV1.33	Bad Debt Recovery Amount	00163	NM(12)	X	Not currently used.	
PV1.34	Delete Account Indicator	00164	IS(1)	X	Not currently used.	0111
PV1.35	Delete Account Date	00165	DT(8)	X	Not currently used.	
PV1.36	Discharge Disposition	00166	IS(3)	COND	This field contains the disposition of the patient at time of discharge (i.e., discharged to home, expired, etc.). The optionality of this field is further constrained than the HL7 Standard optionality of (O). Please refer to message flow Discharge Summary message flow for specific usage of this field.	0112
PV1.37	Discharged to Location	00167	CM(25)	COND	This field indicates the healthcare facility to which the patient was discharged. The optionality of this field is further constrained than the HL7 Standard optionality of (O). Please refer to discharge summary message flow for specific usage of this field.	0113
PV1.37/DLD.1			IS	OPT	If the patient is discharged to another coded location it should be indicated here.	
PV1.38	Diet Type	00168	CE(250)	X	Not currently used.	0114

PV1.39	Servicing Facility	00169	IS(2)	X	Not currently used.	0115
PV1.40	Bed Status	00170	IS(1)	X	Not currently used.	0116
PV1.41	Account Status	00171	IS(2)	X	Not currently used.	0117
PV1.42	Pending Location	00172	PL(80)	X	Not currently used.	
PV1.43	Prior Temporary Location	00173	PL(80)	X	Not currently used.	
PV1.44	Admit Date/Time	00174	TS(26)	COND	The date/time the patient was admitted. The optionality of this field is further constrained than the HL7 Standard optionality of (O). Please refer to the A&E Notification and Admission Notification workflow for specific usage of this field.	
PV1.45	Discharge Date/Time	00175	TS(26)	COND	**Repeats.** The date/time the patient was discharged. The optionality of this field is further constrained than the HL7 Standard optionality of (O). Please refer to message flow Please refer to Discharge Notification and Discharge summary message flow	
PV1.46	Current Patient Balance	00176	NM(12)	X	Not currently used.	
PV1.47	Total Charges	00177	NM(12)	X	Not currently used.	

PV1.48	Total Adjustments	00178	NM(12)	X	Not currently used.	
PV1.49	Total Payments	00179	NM(12)	X	Not currently used.	
PV1.50	Alternate Visit ID	00180	CX(250)	X	Not currently used.	0203
PV1.51	Visit Indicator	01226	IS(1)	OPT	This field specifies the level on which data are being sent.	0326
PV1.52	Other Healthcare Provider	01274	XCN(250)	X	Repeats. Not currently used.	0010

The PV2 segment (event type additional information)

The PV2 segment is a continuation of information contained on the PV1 segment.

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
PV2.1	Prior Pending Location	00181	PL(80)	X	Not currently used.	
PV2.2	Accommodation Code	00182	CE(250)	X	Not currently used.	0129
PV2.3	Admit Reason	00183	CE(250)	X	Not currently used.	
PV2.4	Transfer Reason	00184	CE(250)	X	Not currently used.	
PV2.5	Patient Valuables	00185	ST(25)	X	Repeats. Not currently used.	
PV2.6	Patient Valuables Location	00186	ST(25)	X	Not currently used.	
PV2.7	Visit User Code	00187	IS(2)	X	Repeats. Not currently used.	0130
PV2.8	Expected Admit Date/Time	00188	TS(26)	X	Not currently used.	
PV2.9	Expected Discharge Date/Time	00189	TS(26)	X	Not currently used.	
PV2.10	Estimated Length of Inpatient Stay	00711	NM(3)	X	Not currently used.	
PV2.11	Actual Length of Inpatient Stay	00712	NM(3)	X	Not currently used.	

PV2.12	Visit Description	00713	ST(50)	X	Not currently used.	
PV2.13	Referral Source Code	00714	XCN(250)	X	Repeats. Not currently used.	
PV2.14	Previous Service Date	00715	DT(8)	X	Not currently used.	
PV2.15	Employment Illness Related Indicator	00716	ID(1)	X	Not currently used.	0136
PV2.16	Purge Status Code	00717	IS(1)	X	Not currently used.	0213
PV2.17	Purge Status Date	00718	DT(8)	X	Not currently used.	
PV2.18	Special Program Code	00719	IS(2)	X	Not currently used.	0214
PV2.19	Retention Indicator	00720	ID(1)	X	Not currently used.	0136
PV2.20	Expected Number of Insurance Plans	00721	NM(1)	X	Not currently used.	
PV2.21	Visit Publicity Code	00722	IS(1)	X	Not currently used.	0215
PV2.22	Visit Protection Indicator	00723	ID(1)	X	Not currently used.	0136
PV2.23	Clinic Organisation Name	00724	XON(250)	X	Repeats. Not currently used.	
PV2.24	Patient Status Code	00725	IS(2)	X	Not currently used.	0216
PV2.25	Visit Priority Code	00726	IS(1)	X	Not currently used.	0217
PV2.26	Previous Treatment Date	00727	DT(8)	X	Not currently used.	
PV2.27	Expected Discharge Disposition	00728	IS(2)	X	Not currently used.	0112

PV2.28	Signature on File Date	00729	DT(8)	X	Not currently used.	
PV2.29	First Similar Illness Date	00730	DT(8)	X	Not currently used.	
PV2.30	Patient Charge Adjustment Code	00731	CE(250)	X	Not currently used.	0218
PV2.31	Recurring Service Code	00732	IS(2)	X	Not currently used.	0219
PV2.32	Billing Media Code	00733	ID(1)	X	Not currently used.	0136
PV2.33	Expected Surgery Date and Time	00734	TS(26)	X	Not currently used.	
PV2.34	Military Partnership Code	00735	ID(1)	X	Not currently used.	0136
PV2.35	Military Non-Availability Code	00736	ID(1)	X	Not currently used.	0136
PV2.36	Newborn Baby Indicator	00737	ID(1)	X	Not currently used.	0136
PV2.37	Baby Detained Indicator	00738	ID(1)	X	Not currently used.	0136
PV2.38	Mode of Arrival Code	01543	CE(250)	OPT	Identifies how the patient was brought to the healthcare facility.	0430
PV2.38/CE.1			ST	OPT	The code indicating how the patient arrived at the healthcare facility.	
PV2.38/CE.2			ST	OPT	The accompanying text for the code in PV2.38/CE.1.	
PV2.38/CE.3			IS	OPT	The coding system used in PV2.38/CE.1.	0396

PV2.39	Recreational Drug Use Code	01544	CE(250)	X	Repeats. Not currently used.	0431
PV2.40	Admission Level of Care Code	01545	CE(250)	X	Not currently used.	0432
PV2.41	Precaution Code	01546	CE(250)	X	Repeats. Not currently used.	0433
PV2.42	Patient Condition Code	01547	CE(250)	X	Not currently used.	0434
PV2.43	Living Will Code	00759	IS(2)	X	Not currently used.	0315
PV2.44	Organ Donor Code	2	IS(2)	X	Not currently used.	0316
PV2.45	Advance Directive Code	250	CE(250)	X	Repeats. Not currently used.	0435
PV2.46	Patient Status Effective Date	01549	DT(8)	X	Not currently used.	
PV2.47	Expected LOA Return Date/Time	01550	TS(26)	X	Not currently used.	

The PR1 segment (provider data)

This segment will be employed as part of a patient referral message and its related transactions.

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
PR1.1	Set ID	00391	SI (4)	REQ	The unique identifier for this transaction, iterated for each occurrence of the segment.	
PR1.2	Procedure Coding Method	00392	IS(3)	Back	Backward compatibility. (Replaced by PR1.3.) The methodology used to assign a code to the procedure.	0089
PR1.3	Procedure Code	00393	CE(250)	REQ	The unique identifier for the procedure. (Replaces PR1.2 and PR.4)	0088
PR1.4	Procedure Description	00394	ST(40)	Back	Free text description of the procedure. (Replaced by PR1.3.)	
PR1.5	Procedure Date /Time	00395	TS(26)	REQ	The date/time that the procedure was performed.	
PR1.6	Procedure Functional Type	00396	IS(2)	OPT	An optional code that further defines the type of procedure.	0230
PR1.7	Procedure Minutes	00397	NM(4)	OPT	The length of time, in whole minutes, that the procedure took to complete.	
PR1.8	Anesthesiologist	00398	XCN(250)	Back	The anaesthesiologist who administered the anesthesia.	0010
PR1.9	Anesthesia Code	00399	IS(2)	OPT	The unique identifier for the anesthesia used during the procedure.	0019
PR1.10	Anesthesia Minutes	00400	NM(4)	OPT	The length of time, in minutes, that the anesthesia was administered.	

PR1.11	Surgeon	00401	XCN(250)	Back	The name of the surgeon who performed the procedure.	0010
PR1.12	Procedure Practitioner	00402	XCN(250)	Back	The identifier type code for other practitioners associated with this procedure.	0010, 0133
PR1.13	Consent Code	00403	CE(250)	OPT	The type of consent that was obtained for permission to treat the patient.	0059
PR1.14	Procedure Priority	00404	ID(2)	OPT	The unique identifier for the significance or priority of the procedure code.	0418
PR1.15	Associated Diagnosis Code	00772	CE(250)	OPT	The diagnosis that is the reason for this procedure being performed.	0051
PR1.16	Procedure Code Modifier	01316	CE(250)	OPT	The procedure code modifier to the procedure code from PR1.3, as defined by regulatory agencies.	0340
PR1.17	Procedure DRG Type	01501	IS(20)	OPT	The priority of the procedure ranked relative to its DRG.	0416
PR1.18	Tissue Type Code	01502	CE(250)	OPT	The code representing the type of tissue removed from a patient during this procedure.	0417

The PRD segment (provider data)

This segment will be employed as part of a patient referral message and its related transactions.

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
PRD.1	Provider Role	01155	CE(250)	REQ	Repeats. This field contains the contact role that defines the relationship of the person described in this segment to the patient being referred.	
PRD.1/CE.1			ST	REQ	The provider role. This field contains the contact role that defines the relationship of the person described in this segment to the patient being referred.	0286
PRD.1/CE.2			ST	OPT	This field contains the free text for information concerning the provider role.	
PRD.1/CE.3			IS	OPT	This field contains the name of the coding system for the provider role.	
PRD.2	Provider Name	01156	XPN(250)	COND	**Repeats.** This field contains the name of the provider. Please refer to the Online Referral workflow for specific usage of this field.	
PRD.2/XPN.1			ST	OPT	The provider's family name.	
PRD.2/XPN.2			ST	OPT	The provider's first name.	

PRD.2/XPN.3			ST	OPT	Middle names and/or initials
PRD.2/XPN.4			ST	OPT	Name suffix. A name suffix follows a person's full name and provides additional information about the person, for example M.A, M.F.A, MBA, Ph.D.
PRD.2/XPN.5			ST	OPT	Name prefix. A name prefix precedes a person's full name and provides additional information about the person, for example Dr, Mr.
PRD.2/XPN.6			IS		The degree (e.g., MD) for the provider role
PRD.3	Provider Address	01157	XAD(250)	COND	**Repeats.** This field contains the mailing address of the provider identified in this segment. Please refer to the Online Referral work flow for specific usage of this field.
PRD.3/XAD.1/SAD.1			ST	OPT	Street Address.
PRD.3/XAD.2			ST	OPT	Address Line 2.
PRD.3/XAD.3			ST	OPT	Address Line 3.
PRD.3/XAD.4			ST	OPT	Address Line 4.

PRD.4	Provider Location	01158	PL(60)	COND	This field contains the location of the provider as needed when a provider that may be external to a given enterprise must be referenced. Please refer to the Online Referral work flow for specific usage of this field.	
PRD.4/PL.1			IS	OPT	Point of Care.	
PRD.4/PL.6			IS	OPT	Person Location Type.	
PRD.4/PL.9			ST	OPT	Location Description.	
PRD.5	Provider Communication Information	01159	XTN(250)	COND	**Repeats.** This field contains information, such as the phone number or electronic mail address, used to communicate with the provider or organisation. Please refer to the Online Referral workflow for specific usage of this field.	
PRD.5/XTN.1			TN	OPT	This field is a telephone number to call when communicating with a patient	
PRD.5/XTN.2			ID	OPT	Telecommunications use code.	0201
PRD.5/XTN.3			ID	OPT	Telecommunications equipment type.	0202
PRD.5/XTN.4			ST	OPT	Email address	
PRD.5/XTN.6			NM	OPT	Area/city code	

PRD.5/XTN.7			ID	OPT	Telephone number	
PRD.6	Preferred Method of Contact Provider	00684	CE(250)	X	Not currently used.	0185
PRD.7	Provider Identifiers	01162	CM(100)	COND	**Repeats.** Provider identifiers. Please refer to the Online Referral workflow for specific usage of this field.	
PRD.7/PI.1			ID	OPT	This repeating field contains the provider's unique identifiers.	
PRD.7/PI.2			IS	OPT	Type of ID number (IS).	
PRD.7/PI.3			ST	OPT	Other qualifying information.	
PRD.8	Effective Start Date of Provider Role	01163	TS(26)	X	Not currently used.	
PRD.9	Effective End Date of Provider Role	01164	TS(26)	X	Not currently used.	

The NTE segment (notes and comments)

The NTE segment is commonly used for sending notes and comments.

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
NTE.1	Set ID - NTE	00096	SI(4)	OPT	This field may be used where multiple NTE segments are included in a message. Their numbering must be described in the application message definition.	
NTE.2	Source of Comment	00097	ID(8)	OPT	This field is used when source of comment must be identified.	0105
NTE.3	Comment	00098	FT(65536)	OPT	**Repeats.** This field contains the comment contained in the segment.	
NTE.4	Comment Type	01318	CE(25)	X	Not currently used.	0364

The DG1 segment (diagnosis)

The DG1 segment contains patient diagnosis information of various types, for example, admitting, primary, etc. The DG1 segment is used to send multiple diagnoses (for example, for medical records encoding).

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
DG1.1	Set ID – DG1	00375	SI(4)	REQ	This field contains the number that identifies this transaction. For the first occurrence of the segment the sequence number shall be 1, for the second occurrence it shall be 2, etc.	
Dg1.2	Diagnosis Coding Method	00376	ID(2)	(B) REQ	This field has been retained for backward compatibility only. Use the components of DG1.3 instead of this field.	0053
DG1.3	Diagnosis Code	00377	CE(250)	OPT	This field contains the diagnosis code. Use this field instead of DG1.2 and DG1.4.	0051
DG1.3/CE.1			ST	OPT	Local Code for the diagnosis.	0051
DG1.3/CE.2			ST	OPT	The diagnosis text associated with the code in DG1.3/CE.1.	

DG1.3/CE.3			IS	OPT	The coding system used in DG1.3/CE.1. They should contain 'L' if used.	
DG1.4	Diagnosis Description	00378	ST(40)	B	**This field has been retained for backward compatibility only.** It is recommended to use the components of DG1.3 - diagnosis code DG1 field instead of this field.	
DG1.5	Diagnosis Date/Time	00379	TS(26)	OPT	This field contains the date/time that the diagnosis was determined.	
DG1.6	Diagnosis Type	00380	IS(2)	REQ	This field contains a code that identifies the type of diagnosis being sent.	0052
DG1.7	Major Diagnostic Category	00381	CE(250)	X	Not currently used.	0118
DG1.8	Diagnostic Related Group	00382	CE(250)	X	Not currently used.	0055
DG1.9	DRG Approval Indicator	00383	ID(1)	X	Not currently used.	0136

DG1.10	DRG Grouper Review Code	00384	IS(2)	X	Not currently used.	0056
DG1.11	Outlier Type	00385	CE(250)	X	Not currently used.	0083
DG1.12	Outlier Days	00386	NM(3)	X	Not currently used.	
DG1.13	Outlier Cost	00387	CP(12)	X	Not currently used.	
DG1.14	Grouper Version And Type	00388	ST(4)	X	Not currently used.	
DG1.15	Diagnosis Priority	00389	ID(2)	X	Not currently used.	0359
DG1.16	Diagnosing Clinician	00390	XCN	OPT	**Repeats.** This field contains the individual responsible for generating the diagnosis information.	
DG1.16/XCN.1			ST	OPT	The individual responsible for the diagnosis.	
DG1.16/XCN.2/FN.1			ST	OPT	The family name of the diagnosing clinician.	
DG1.16/XCN.3			ST	OPT	The first name of the diagnosing clinician.	
DG1.16/XCN.4			ST	OPT	Middle names and/or initials.	

DG1.16/XCN.5			ST	OPT	The name suffix. A name suffix follows a person's full name and provides additional information about the person, for example M.A, M.F.A, MBA, Ph.D.	
DG1.16/XCN.6			ST	OPT	The name prefix. A name prefix precedes a person's full name and provides additional information about the person, for example Dr, Mr.	
DG1.17	Diagnosis Classification	00766	IS(3)	X	Not currently used.	0228
DG1.18	Confidential Indicator	00767	ID(1)	X	Not currently used.	0136
DG1.19	Attestation Date/Time	00768	TS(26)	X	Not currently used.	

The AL1 segment (patient allergy information)

This segment will contains patient allergy information, with each segment describing a separate allergy.

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
AL1.1	Set ID	00203	CE(250)	REQ	The number that identifies this transaction, iterated for each occurrence of the segment.	
AL1.2	Allergen Type Code	00204	CE(250)	OPT	The general category of allergy, such as drug, food, or pollen.	0127
AL1.3	Allergen Code /Mnemonic/Description	00205	CE(250)	REQ	The unique identifier for this allergen, which can conform to an external coding system (that must be identified) or to a local, largely textual mnemonic description.	
AL1.4	Allergy Severity Code	00206	CE(250)	OPT	The severity of the allergy.	0128
AL1.5	Allergy Reaction Code	00207	ST(15)	OPT	**Repeats.** The specific allergic reaction that was documented, which can conform to an external coding system (that must be identified) or to a local, largely textual mnemonic description.	
AL1.6	Identification Date	00208	DT(8)	Back	Backward compatibility. The date on which the allergy was identified.	

The OBR segment (observation request)

The observation request segment is used to transmit information specific to an order for a diagnostic study or observation, physical exam, or assessment. In the reporting of clinical data, the OBR serves as the report header. It includes the relevant ordering information when that applies. It contains many of the fields that usually apply to all of the included observations. When a set of observations is ordered, the order message contains an OBR segment. However, observations can be collected and reported without an antecedent order. When observations are reported, the report message also includes one or more OBR segments.

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
OBR.1	Set ID	00237	SI(4)	REQ	For the first order transmitted, the sequence number shall be 1; for the second order, it shall be 2 and so on. The optionality of this field is further constrained than the HL7 Standard optionality of (O).	
OBR.2	Placer Order Number	00216	EI(22)	COND	This field is a case of the Entity Identifier data type. Please refer to message flow Laboratory Order and Referral workflows for specific usage of this field.	
OBR.2/EI.1			ST	COND	If the system that placed the order provided a reference to the filler, then it should be entered here.	

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
OBR.3	Filler Order Number	00217	EI(22)	COND	This field is the order number associated with the filling application. Please refer to message flow Laboratory and Radiology Results work flows for specific usage of this field. The optionality of this field is further constrained than the HL7 Standard optionality of (O). It is strongly recommended that one of OBR.3/EI.1, OBR.3/EI.2 or OBR.3/EI.3 is populated.	
OBR.3/EI.1			ST	COND	The order number of the system that received the order.	0363
OBR.3/EI.2			IS	COND	The numeric identifier of the system that received the order.	
OBR.3/EI.3			ST	COND	The name of the system that received the order.	
OBR.3/EI.4			ID	COND	The universal id of the system that received the order.	0301
OBR.4	Universal Service Identifier	00238	CE(250)	REQ	This field is the identifier code for the requested observation/test/battery.	
OBR.4/CE.1			ST	OPT	The code for observation/test.	

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
OBR.4/CE.2			ST	REQ	Meaningful description of the test being ordered or a meaningful description of the overall set of OBX's included under each OBR. For example: Hemoglobin, Urea & Electrolytes.	
OBR.4/CE.3			IS	OPT	The coding system used in OBR.4/CE.1.	0396
OBR.4/CE.4			ST	OPT	Code for the observation/test. Reserved for adoption of national coding system.	
OBR.4/CE.5			ST	OPT	Meaningful description of the Lab/Radiology Test. Reserved for adoption of national coding system.	
OBR.4/CE.6			IS	OPT	Coding system used in OBR.4/CE.4. Reserved for adoption of national coding system.	0396
OBR.5	Priority OBR	00239	ID(2)	X	Not currently used.	
OBR.6	Requested Date/Time	00240	TS(26)	X	Not currently used.	

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
OBR.7	Observation Date/Time	00241	TS(26)	COND	This field is the clinically relevant date/time of the observation. When the OBR is transmitted as part of a report message, the field **must** be filled in. If it is transmitted as part of a request **and** a sample has been sent along as part of the request, this field must be filled in because this specimen time is the physiologically relevant date/time of the observation. Please refer to Laboratory Results and Radiology Results message flows for specific usage of this field.	
OBR.7/TS.1			TS	COND	The date and time the specimen was collected or obtained.	
OBR.8	Observation End Date/Time	00242	TS(26)	OPT	This field contains the end date and time of a study or timed specimen collection.	
OBR.9	Collection Volume	00243	CQ(20)	OPT	For laboratory tests, the collection volume is the volume of a specimen.	
OBR.10	Collector Identifier	00244	XCN(250)	OPT	**Repeats.** When a specimen is required for the study, this field will identify the person, department, or facility that collected the specimen.	
OBR.11	Specimen Action Code	00245	ID(1)	OPT	This field identifies the action to be taken with respect to the specimens that accompany or precede this order.	0065

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
OBR.12	Danger Code	00246	CE(250)	OPT	This field contains the code and/or text indicating any known or suspected patient or specimen hazards, e.g., patient with active tuberculosis or blood from a hepatitis patient.	
OBR.13	Relevant Clinical Info.	00247	ST(300)	OPT	This field contains any additional clinical information about the patient or specimen. It is strongly recommended that this field is populated where clinically appropriate.	
OBR.14	Specimen Received Date/Time	00248	TS(26)	COND	The time that the specimen was received at dispatch. Please refer to message flow Laboratory Order and Laboratory Results workflow for specific usage of this field.	
OBR.15	Specimen Source	00249	CM(300)	OPT	This field identifies the site where the specimen should be obtained or where the service should be performed.	0070
OBR.15/SPS.1/CE.1			ST	OPT	The specimen source code.	
OBR.15/SPS.1/CE.2			ST	OPT	Meaningful specimen source code description.	0070
OBR.15/SPS.1/CE.3			IS	OPT	Coding system used in CE.1	
OBR.15/SPS.1/CE.4			ST	OPT	Alternate specimen source code.	

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
OBR.15/SPS.1/CE.5			ST	OPT	Alternate specimen description.	
OBR.15/SPS.1/CE.6			IS	OPT	Alternate coding system used in CE.4	
OBR.15/SPS.2			ST	OPT	Text describing additives.	
OBR.15/SPS.3			ST	OPT	Simple free text.	
OBR.15/SPS.4/CE.1			ST	OPT	Identifier of body site.	0163
OBR.15/SPS.4/CE.2			ST	OPT	Text description of body site.	
OBR.15/SPS.4/CE.3			IS	OPT	Name of coding system.	
OBR.15/SPS.5/CE.1			ST	OPT	Identifier of site modifier.	
OBR.15/SPS.5/CE.2			ST	OPT	Text description of site modifier.	
OBR.15/SPS.5/CE.3			IS	OPT	Name of coding system.	
OBR.15/SPS.6/CE.1			ST	OPT	Identifier of collection method.	
OBR.15/SPS.6/CE.2			ST	OPT	Text description of collection method.	
OBR.15/SPS.6/CE.3			IS	OPT	Name of coding system.	

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
OBR.16	Ordering Provider	00226	XCN(250)	OPT	**Repeats.** This field identifies the provider who ordered the test. Either the identifier code or the name, or both, may be present. This is the same as ORC-12-Ordering provider.	
OBR.16/XCN.1			ST	OPT	Identifier of the person ordering.	
OBR.16/XCN.2			FN	OPT	Family name.	
OBR.16/XCN.3			ST	OPT	Given name.	
OBR.16/XCN.4			ST	OPT	Second or further given names or initials thereof.	
OBR.16/XCN.5			ST	OPT	A name suffix follows a person's full name and provides additional information about the person, for example M.A, M.F.A, MBA, Ph.D.suffix (e.g., JR or III).	
OBR.16/XCN.6			ST	OPT	Name prefix. A name prefix precedes a person's full name and provides additional information about the person, for example Dr, Mr.	
OBR.16/XCN.16			CE	OPT	<Copy To> Indicator Prefix. Please refer to use cases Unsolicited Laboratory Result, Unsolicited Radiology Result and Corrected Result for specific usage of this field.	0448

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
OBR.17	Order Callback Phone Number	00250	XTN(250)	OPT	**Repeats (2).** This field is the telephone number to call when reporting a status or a result.	
OBR.17/XTN.1			TN	OPT	This field is a telephone number to call when reporting a status or a result.	
OBR.17/XTN.2			ID	OPT	Telecommunications use code.	0201
OBR.17/XTN.3			ID	OPT	Telecommunications equipment type.	0202
OBR.17/XTN.4			ST	OPT	Email address.	
OBR.17/XTN.6			NM	OPT	Area/city code.	
OBR.17/XTN.7			ID	OPT	Telephone number.	
OBR.18	Placer Field 1	00251	ST(60)	X	Not currently used.	
OBR.19	Placer Field 2	00252	ST(60)	X	Not currently used.	
OBR.20	Filler Field 1	00253	ST(60)	X	Not currently used.	
OBR.21	Filler Field 2	00254	ST(60)	X	Not currently used.	

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
OBR.22	Results Rpt/Status Chng Date/Time	00255	TS(26)	COND	This field specifies the date/time when the results were reported or status changed.	
OBR.23	Charge to Practice	00256	CM(40)	X	Not currently used.	
OBR.24	Diagnostic Serv Sect ID	00257	ID(10)	COND	This field is the section of the diagnostic service where the observation was performed. If the study was performed by an outside service, the identification of that service should be recorded here. Please refer to message flow Laboratory Results, Radiology Results for specific usage of this field.	0074
OBR.25	Result Status	00258	ID(1)	COND	This field is the status of results for this order. Please refer to Laboratory Results and Radiology Results and Corrected Results work flows for specific usage of this field.	0123
OBR.26	Parent Result	00259	CM(400)	OPT	This field is defined to make it available for other types of linkages (e.g., toxicology). This important information, together with the information in OBR-29-parent, uniquely identifies the parent result's OBX segment related to this order. The value of this OBX segment in the parent result is the organism or chemical species about which this battery reports.	

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
OBR.27	Quantity/Timing	00221	TQ(200)	OPT	Repeats This field contains information about how many services to perform at one service time and how often the service times are repeated, and to fix duration of the request.	

The OBX segment (observation result)

The OBX segment is used to transmit a single observation or observation fragment. It represents the smallest indivisible unit of a report.

Note. Appendix B lists the value sets for OBX.3 and OBX.6 in antenatal care in Ireland.

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
OBX.1	Set ID	00569	SI(4)	REQ	This field contains the sequence number. For compatibility with ASTM. The optionality of this field is further constrained than the HL7 Standard optionality of (O).	
OBX.2	Value Type	00570	ID(2)	COND	This field contains the format of the observation value in OBX. It must be valued if OBX-11-Observ result status is not valued with an 'X" meaning the result cannot be obtained or this observation.	0125
OBX.3	Observation Identifier	00571	CE(250)	REQ	This field should contain a unique identifier for the observation.	
OBX.3/CE.1			ST	REQ	The code for the OBX.3/CE.2 description.	
OBX.3/CE.2			ST	REQ	A description of the test or observation.	

OBX.3/CE.3			IS	REQ	The coding system used in CE.1.
OBX.3/CE.4			ST	OPT	Alternate code for the test or observation.
OBX.3/CE.5			ST	OPT	Alternate description of the radiology test.
OBX.3/CE.6			IS	OPT	The alternate coding system used in CE.4.
OBX.4	Observation Sub-ID	00572	ST(20)	OPT	This field is used to distinguish between multiple OBX segments with the same observation ID organised under one OBR.
OBX.5	Observation Value	00573	*(65536)	COND	**Repeats.** This field contains the value observed by the observation producer. OBX-2-value type contains the data type for this field according to which observation value is formatted. It is not a required field because some systems will report only the normalcy/abnormalcy (OBX-8), especially in product experience reporting.
OBX.6	Units	00574	CE(250)	OPT	When an observation's value is measured on a continuous scale, one must report the measurement units within the units field of the OBX segment.
OBX.6/CE.1			ST	OPT	The code for the units used.

OBX.6/CE.2			ST	OPT	The actual units used as text (not a code).	
OBX.6/CE.3			IS	OPT	The coding system used for the units.	
OBX.7	References Range	00575	ST(60)	OPT	This field contains the reference range for this particular test.	
OBX.8	Abnormal Flags	00576	IS(5)	OPT	**Repeats (5 times).** This field contains a table lookup indicating the normalcy status of the result. This field may not be valued for certain laboratory results e.g. Microbiology Results.	0078
OBX.9	Probability	00577	NM(5)	X	Not currently used.	
OBX.10	Nature of Abnormal Test	00578	ID(2)	X	Repeats. Not currently used.	0080
OBX.11	Observation Result Status	00579	ID(1)	REQ	This field contains the observation result status. This field reflects the current completion status of the results for one Observation Identifier. Please refer to message flow Unsolicited Laboratory Result, Unsolicited Radiology Result and Corrected Result workflow for updated results for specific usage of this field.	0085

OBX.12	Date Last Observation Normal Value	00580	TS(26)	X	Not currently used.
OBX.13	User Defined Access Checks	00581	ST(20)	X	Not currently used.
OBX.14	Date/Time of the Observation	00582	TS(20)	OPT	In the case of tests performed on specimens, the relevant date-time is the specimen's collection date-time. In the case of observations taken directly on the patient (e.g., X-ray images, history and physical), the observation date-time is the date-time that the observation was performed.
OBX.15	Producer's ID	00583	CE(250)	OPT	This field contains a unique identifier of the responsible producing service. It should be reported explicitly when the test results are produced at outside laboratories.
OBX.16	Responsible Observer	00584	XCN(250)	OPT	**Repeats.** When required, this field contains the identifier of the individual directly responsible for the observation (i.e., the person who either performed or verified it).

OBX.17	Observation Method	00936	CE(250)	X	Repeats. Not currently used.
OBX.18	Equipment Instance Identifier	01479	EI(22)	X	Repeats. Not currently used.
OBX.19	Date/Time of the Analysis	01480	TS(26)	X	Not currently used.

The PDA segment (patient death and autopsy)

This segment carries information on a patient's death and possible autopsy.

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
PDA.1	Death Cause Code	01574	CE(250)	COND	**Repeats.** This field is valued with the reason of the death. Please see the Death Notification workflow for specific recommendations.	
PDA.1/CE.1			ST	OPT	The code indicating the cause of death.	
PDA.1/CE.2			ST	OPT	The text for the cause of death.	
PDA.1/CE.3			IS	OPT	The coding system used in PDA.1/CE.1.	
PDA.2	Death Location	01575	PL(80)	COND	This field is valued with the place the death occurred. Please see the Death Notification workflow for specific recommendations.	
PDA.2/PL.9			ST	OPT	The free text location of patient's death.	
PDA.3	Death Certified Indicator	01576	ID(1)	X	Not currently used.	0136
PDA.4	Death Certificate Signed Date/Time	01577	TS(26)	OPT	This field is valued with the date and time the death certificate was signed.	

PDA.4/TS.1			TS	OPT	The date and time the death certificate was signed.	
PDA.5	Death Certified By	01578	XCN(250)	X	Not currently used.	
PDA.6	Autopsy Indicator	01579	ID(1)	X	Not currently used.	0136
PDA.7	Autopsy Start and End Date/Time	01580	DR(53)	X	Not currently used.	
PDA.8	Autopsy Performed By	01581	XCN(250)	X	Not currently used.	
PDA.9	Coroner Indicator	01582	ID(1)	X	Not currently used.	0136

The SCH segment (scheduling activity information)

The SCH segment contains general information about the scheduled appointment.

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
SCH.1	Placer Appointment ID	00860	EI(75)	X	Not currently used.	
SCH.2	Filler Appointment ID	00861	EI(75)	COND	This field contains the filler application's permanent identifier for the appointment request (and the scheduled appointment itself, when it has been confirmed as a booked slot by the filler application).	
SCH.2/EI.1			ST	OPT	Entity identifier.	
SCH.2/EI.2			IS	OPT	Namespace ID.	
SCH.2/EI.3			ST	COND	Universal ID.	
SCH.2/EI.4			ID	COND	Universal ID Type.	
SCH.3	Occurrence Number	00862	NM(5)	COND	This field is used in conjunction with SCH-1-Placer appointment ID and/or SCH-2-Filler appointment ID to uniquely identify an individual occurrence (a child) of a parent repeating schedule appointment.	
SCH.4	Placer Group Number	00218	EI(22)	X	Not currently used.	
SCH.5	Schedule ID	00864	CE(250)	X	Not currently used.	

SCH.6		Event Reason	00883	CE(250)	REQ	This field contains an identifier code for the reason that the notification event was triggered. This field may contain a code describing the cancel reason, the delete reason, the discontinue reason, the add reason, the block reason or any other code describing the reason that a specific event will occur.	
SCH.6/CE.1				ST	OPT	The code (local code) for the event reason.	
SCH.6/CE.2				ST	REQ	The reason for this message event.	
SCH.6/CE.3				IS	OPT	The coding system used in SCH.6/CE.1.	
SCH.7		Appointment Reason	00866	CE(250)	X	Not currently used.	0276
SCH.8		Appointment Type	00867	CE(250)	X	Not currently used.	0277
SCH.9		Appointment Duration	00868	NM(20)	X	Not currently used.	
SCH.10		Appointment Duration Units	00869	CE(250)	X	Not currently used.	
SCH.11		Appointment Timing Quantity	00884	TQ(200)	REQ	**Repeats.** This field contains the scheduled appointment's timing and quantity, as scheduled by the filler application.	
SCH.11/TQ.4				TS	REQ	The start time of the appointment.	
SCH.11/TQ.6				ST	OPT	The priority time of the appointment. The following are suggested values based on HL7 v2.4 for the priority component:	

					Priority component (ST) Definition: This field describes the urgency of the request. The following values are suggested (the default for Priority is R): S = Stat With highest priority A = ASAP Fill after S orders R = Routine Default P = Preop C = Callback T = Timing critical A request implying that it is critical to come as close as possible to the requested time, e.g., for a trough antimicrobial level. PRN = As needed
SCH.12	Placer Contact Person	00874	XCN(250)	X	Not currently used.
SCH.13	Placer Contact Phone Number	00875	XTN(250)	X	Not currently used.
SCH.14	Placer Contact Address	00876	XAD(250)	X	**Repeats.** Not currently used.
SCH.15	Placer Contact Location	00877	PL(80)	X	Not currently used.
SCH.16	Filler Contact Person	00885	XCN(250)	REQ	**Repeats.** This field identifies the person responsible for the scheduling of the requested appointment. Most often, this person will be the same person responsible for maintaining the schedule and for reviewing appointment requests.

SCH.16/XCN.1			ST	OPT	The identifier of the filler contact person.
SCH.16/XCN.2/FN.1			ST	OPT	The family name of the filler contact person.
SCH.16/XCN.3			ST	OPT	The first name of the filler contact person.
SCH.16/XCN.4			ST	OPT	The middle names of the filler contact person.
SCH.16/XCN.5			ST	OPT	The name suffix of filler contact person. A name suffix follows a person's full name and provides additional information about the person, for example M.A, M.F.A,MBA, Ph.D.
SCH.16/XCN.6			ST	OPT	The name prefix of filler contact person. A name prefix precedes a person's full name and provides additional information about the person, for example Dr, Mr.
SCH.17	Filler Contact Phone Number	00886	XTN(250)	X	Not currently used.
SCH.18	Filler Contact Address	00887	XAD(250)	X	**Repeats.** Not currently used.
SCH.19	Filler Contact Location	00888	PL(80)	X	Not currently used.
SCH.20	Entered by Person	00878	XCN(250)	REQ	**Repeats.** This field identifies the person responsible for entering the request for the scheduling of an appointment. It is included to provide an audit trail of persons responsible for the request. This

					person may be someone other than the placer contact person, who is responsible for entering orders and requests.
SCH.20/XCN.1			ST	OPT	The identifier of the entered by contact person.
SCH.20/XCN.2/FN.1			ST	OPT	The family name of the entered by contact person.
SCH.20/XCN.3			ST	OPT	The first name of the entered by contact person.
SCH.20/XCN.4			ST	OPT	The middle names and/or initials of the entered by contact person.
SCH.20/XCN.5			ST	OPT	The name suffix of the entered by contact person. A name suffix follows a person's full name and provides additional information about the person, for example M.A, M.F.A, MBA, Ph.D.
SCH.20/XCN.6			ST	OPT	The name prefix. A name prefix precedes a person's full name and provides additional information about the person, for example Dr, Mr.
SCH.21	Entered by Phone Number	00879	XTN(250)	X	Repeats. Not currently used.
SCH.22	Entered by Location	00880	PL(80)	X	Not currently used.
SCH.23	Parent Placer Appointment ID	00881	EI(75)	X	Not currently used.
SCH.24	Parent Filler	00882	EI(75)	X	Not currently used.

	Appointment ID					
SCH.25	Status Code	00889	CE(250)	OPT	This field contains a code describing the status of the appointment with respect to the filler application.	
SCH.25/CE.1			ST	OPT	The status code of the appointment as seen by the filler (hospital).	0278
SCH.25/CE.2			ST	OPT	The status text.	
SCH.25/CE.3			IS	OPT	The coding system used in CE.1.	0396
SCH.26	Placer Order Number	00216	EI(22)	X	Repeats. Not currently used.	
SCH.27	Filler Order Number	00217	EI(22)	X	Repeats. Not currently used.	

The RGS segment (resource group)

The RGS segment is used to identify relationships between resources identified for a scheduled event.

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
RGS.1	Set ID	01203	SI(4)	REQ	This field contains a number that uniquely identifies the information represented by this segment in this transaction for the purposes of addition, change or deletion.	
RGS.2	Segment Action Code	0763	ID(3)	COND	This field contains the action to be taken when updating or modifying information in this segment from previously sent interface transactions.	0206
RGS.3	Resource Group ID	01204	CE(250)	OPT	This field contains an identifier code describing the group of resources following this RGS segment.	

The MSA segment (message acknowledgement)

The MSA segment contains information sent while acknowledging another message.

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
MSA.1	Acknowledgement Code	00018	ID(2)	REQ	This field contains an acknowledgement code.	0008
MSA.2	Message Control ID	00010	ST(20)	REQ	This field contains the message control ID of the message sent by the sending system. It allows the sending system to associate this response with the message for which it is intended.	
MSA.3	Text Message	00020	ST(80)	OPT	This optional field further describes an error condition. This text may be printed in error logs or presented to an end user. Use the ERR Segment rather than MSA.3 or MSA.6 for descriptions of error conditions.	
MSA.4	Expected Sequence Number	00021	NM(15)	OPT	This optional numeric field is used in the sequence number protocol.	
MSA.5	Delayed Acknowledgment Type	00022	ID(1)	B		0102
MSA.6	Error Condition	00023	CE(250)	OPT	This field allows the acknowledging system to use a user-defined error code to further specify AR or AE type acknowledgments. This field is a generalised replacement for MSA-3-text message.	0357

The ERR segment (message error)

The ERR segment is used to add error comments to acknowledgment messages.

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
ERR.1	Error Code and Location		CM(80)	REQ	**Repeats.** This field identifies an erroneous segment in another message. The second component is an index if there is more than one segment of type \. For systems that do not use the HL7 Encoding Rules, the data item number may be used for the third component. The fourth component (which references HL7 Table 0357 - Message error condition codes, is restricted from having any subcomponents as the subcomponent separator is now the CE's component separator.	

The AIP segment (appointment information — personnel resources)

The AIP segment contains information about the personnel types that can be scheduled.

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
AIP.1	Set ID	00906	SI(4)	REQ	This field contains a number that uniquely identifies the information represented by this segment in this transaction for the purposes of addition, change or deletion.	
AIP.2	Segment Action code	00763	ID(3)	COND	This field contains the action to be taken when updating or modifying information in this segment from previously sent interface transactions.	0206
AIP.3	Personnel Resource ID	00913	XCN(250)	COND	**Repeats.** This field contains the ID number and name of the person being requested or scheduled for an appointment.	
AIP.4	Resource Role	00907	CE(250)	REQ	This field identifies the role of the personnel requested/scheduled for an appointment.	
AIP.5	Resource Group	00899	CE(250)	X	Not currently used.	
AIP.6	Start Date/Time	01202	TS(26)	X	Not currently used.	

AIP.7	Start Date/Time Offset	00891	NM(20)	X	Not currently used.	
AIP.8	Start Date/Time Offset Units	00892	CE(250)	X	Not currently used.	
AIP.9	Duration	00893	NM(20)	X	Not currently used.	
AIP.10	Duration Units	00894	CE(250)	X	Not currently used.	
AIP.11	Allow Substitution Code	00895	IS(10)	X	Not currently used.	0279
AIP.12	Filler Status Code	00889	CE(250)	X	Not currently used.	0278

The AIL segment (appointment information — location resource)

The AIL segment contains information about location resources (meeting rooms, operating rooms, examination rooms, or other locations) that can be scheduled. Resources included in a transaction using this segment are assumed to be controlled by a schedule on a schedule filler application. Resources not controlled by a schedule are not identified on a schedule request using this segment. Location resources are identified with this specific segment because of the specific encoding of locations used by the HL7 Standard.

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
AIL.1	Set ID	00902	SI(4)	REQ	This field contains a number that uniquely identifies the information represented by this segment in this transaction for the purposes of addition, change or deletion.	
AIL.2	Segment Action Code	00763	ID(3)	COND	This field contains the action to be taken when updating or modifying information in this segment from previously sent interface transactions.	0206
AIL.3	Location Resource ID	00903	PL(80)	COND	This field contains a coded identification of the location being requested or scheduled for an appointment.	
AIL.4	Location Type	00904	CE(250)	REQ	This field identifies the role of the location requested/scheduled for this appointment.	
AIL.5	Location Group	00905	CE(250)	X	Not currently used.	

AIL.6	Start Date/Time	01202	TS(26)	X	Not currently used.	
AIL.7	Start Date/Time Offset	00891	NM(20)	X	Not currently used.	
AIL.8	Start Date/Time Offset Units	00892	CE(250)	X	Not currently used.	
AIL.9	Duration	00893	NM(20)	X	Not currently used.	
AIL.10	Duration Units	00894	CE(250)	X	Not currently used.	
AIL.11	Allow Substitution Code	00895	IS(10)	X	Not currently used.	0279
AIL.12	Filler Status Code	00889	CE(250)	X	Not currently used.	0278

The ORC segment (common order segment)

The common order segment is used to transmit fields that are common to all orders (all types of services that are requested).

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
ORC.1	Order Control	00215	ID(2)	REQ	Repeats N Determines the function of the order segment.	0119
ORC.2	Placer Order Number	00216	EI(22)	OPT	This field is the placer application's order number.	
ORC.3	Filler Order Number	00217	EI(22)	X	Not currently used.	
ORC.4	Placer Group Number	00218	EI(22)	X	Not currently used.	
ORC.5	Order Status	00219	ID(2)	X	Repeats N Not currently used.	0038
ORC.6	Response Flag	00220	ID(1)	X	Not currently used.	0121
ORC.7	Quantity/Timing	00221	TQ(200)	X	Repeats Not currently used.	
ORC.8	Parent	00222	CM(200)	X	Not currently used.	
ORC.9	Date/Time of Transaction	00223	TS(26)	X	Not currently used.	
ORC.10	Entered By	00224	XCN(250)	X	Repeats Not currently used.	

ORC.11	Verified By	00225	XCN(250)	X	Repeats Not currently used.	
ORC.12	Ordering Provider	00226	XCN(250)	X	Repeats Not currently used.	
ORC.13	Enterer's Location	00227	PL(80)	X	Not currently used.	
ORC.14	Call Back Phone Number	00228	XTN(250)	OPT	**Repeats (2)** This field contains the telephone number to call for clarification of a request or other information regarding the order.	
ORC.14/XTN.1			TN	OPT	This field is a telephone number displayed as an emergency number	
ORC.14/XTN.2			ID	OPT	Telecommunications use code.	0201
ORC.14/XTN.3			ID	OPT	Telecommunications equipment type.	0202
ORC.14/XTN.4			ST	OPT	Email address.	
ORC.14/XTN.6			NM	OPT	Area/city code.	
ORC.14/XTN.7			ID	OPT	Telephone number.	
ORC.15	Order Effective Date/Time	00229	TS(26)	X	Not currently used.	
ORC.16	Order Control Code Reason	00230	CE(250)	X	Not currently used.	
ORC.17	Entering Organisation	00231	CE(250)	X	Not currently used.	

ORC.18	Entering Device	00232	CE(250)	X	Not currently used.	
ORC.19	Action By	00233	XCN(250)	X	Repeats Not currently used.	
ORC.20	Advanced Beneficiary Notice Code	01310	CE(250)	X	Not currently used.	0339
ORC.21	Ordering Facility Name	01311	XON(250)	X	Repeats Not currently used.	
ORC.22	Ordering Facility Address	01312	XAD(250)	X	Repeats Not currently used.	
ORC.23	Ordering Facility Phone Number	01313	XTN(250)	X	Repeats Not currently used.	
ORC.24	Ordering Provider Address	01314	XAD(250)	X	Repeats Not currently used.	
ORC.25	Order Status Modifier	01473	CWE(250)	X	Repeats (N) Not currently used.	

The SAC segment (specimen container detail)

The container detail segment is the data necessary to maintain the containers that are being used throughout the laboratory automation system.

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
SAC.1	External Accession Identifier	EI(80)	OPT	01329	This field identifies the laboratory accession (see section Glossary). This identifier is assigned by the external laboratory information system. Example: If laboratory A sends a specimen to laboratory B, then within laboratory B this field contains accession identifier of lab A.	
SAC.2	Accession Identifier	EI(80)	X	01330	Not currently used.	
SAC.3	Container Identifier	EI(80)	X	01331	Not currently used.	
SAC.4	Primary (parent) Container Identifier	EI(80)	X	01332	Not currently used.	
SAC.5	Equipment Container Identifier	EI(80)	X	01333	Not currently used.	
SAC.6	Specimen Source	CM(300)	X	00249	Not currently used.	0070/ 0369
SAC.7	Registration Date/Time	TS(26)	X	01334	Not currently used.	

SAC.8	Container Status	CE(250)	X	01335	Not currently used.	0370
SAC.9	Carrier Type	CE(250)	X	01336	Not currently used.	0378
SAC.10	Carrier Identifier	EI(80)	X	01337	Not currently used.	
SAC.11	Carrier Identifier	NA(80)	X	01338	Not currently used.	
SAC.12	Tray Type SAC	CE(250)	X	01339	Not currently used.	0379
SAC.13	Tray Identifier	EI(80)	X	01340	Not currently used.	
SAC.14	Position in Tray	NA(80)	X	01341	Not currently used.	
SAC.15	Location	CE(250)	X	01342	**Repeats.** Not currently used.	
SAC.16	Container Height	NM(20)	X	01343	Not currently used.	
SAC.17	Container Diameter	NM(20)	X	01344	Not currently used.	
SAC.18	Barrier Delta	NM(20)	X	01345	Not currently used.	
SAC.19	Bottom Delta	NM(20)	X	01346	Not currently used.	
SAC.20	Container Height/Diameter/Delta Units	CE(250)	X	01347	Not currently used.	

SAC.21	Container Volume	NM(20)	X	00644	Not currently used.	
SAC.22	Available Volume	NM(20)	X	01349	Not currently used.	
SAC.23	Initial Specimen Volume	NM(20)	X	01350	Not currently used.	
SAC.24	VolumeUnits	CE(250)	X	01351	Not currently used.	
SAC.25	Separator Type	CE(250)	X	01352	Not currently used.	0380
SAC.26	Cap Type	CE(250)	X	01353	Not currently used.	0381
SAC.27	Additive	CE(250)	X	00647	**Repeats.** Not currently used.	0371
SAC.28	Specimen Component	CE(250)	X	01355	Not currently used.	
SAC.29	Dilution Factor	SN(20)	X	01356	Not currently used.	
SAC.30	Treatment	CE(250)	X	01357	Not currently used.	0373
SAC.31	Temperature	SN(20)	X	01358	Not currently used.	
SAC.32	Hemolysis Index	NM(20)	X	01359	Not currently used.	
SAC.33	Hemolysis Index Units	CE(250)	X	01360	Not currently used.	
SAC.34	Lipemia Index	NM(20)	X	01361	Not currently used.	

SAC.35	Lipemia Index Units	CE(250)	X	01362	Not currently used.	
SAC.36	Icterus Index	NM(20)	X	01363	Not currently used.	
SAC.37	Icterus Index Units	CE(250)	X	01364	Not currently used.	
SAC.38	Fibrin Index	NM(20)	X	01365	Not currently used.	
SAC.39	Fibrin Index Units	CE(250)	X	01366	Not currently used.	
SAC.40	System Induced Contaminants	CE(250)	X	01367	**Repeats.** Not currently used.	0374
SAC.41	Drug Interference	CE(250)	X	01368	**Repeats.** Not currently used.	0382
SAC.42	Artificial Blood	CE(250)	X	01369	Not currently used.	0375
SAC.43	Special Handling Considerations	CE(250)	X	01370	**Repeats.** Not currently used.	0376
SAC.44	Other Environmental Factors	CE(250)	X	01371	**Repeats.** Not currently used.	0377

The TXA segment (transcription document header segment)

The TXA segment contains information specific to a transcribed document but does not include the text of the document.

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
TXA.1	Set ID- TXA	00914	SI(4)	REQ	This field contains a number that uniquely identifies this transaction for the purpose of adding, changing, or deleting the transaction.	
TXA.2	Document Type	00915	IS(30)	REQ	This field identifies the type of document (as defined in the transcription system). Refer to User-defined Table 0270 - Document type for suggested values. The organisation is free to add more entries.	0270
TXA.3	Document Content Presentation	00916	ID(2)	COND	This is a conditional field which is required whenever the message contains content as presented in one or more OBX segments. This field identifies the method by which this document was obtained or originated. Refer to HL7 Table 0191 — Type of referenced data for valid values.	0191

TXA.4	Activity Date/Time	00917	TS(26)	OPT	This field contains the date/time identified in the document as the date a procedure or activity was performed. This date can identify date of surgery, non-invasive procedure, consultation, examination, etc.
TXA.5	Primary Activity Provider Code/Name	00918	XCN(250)	COND	**Repeats.** This field contains the name of the person identified in the document as being responsible for performing the procedure or activity. This field includes the code and name (if available) of the caregiver. This field is conditional based upon the presence of a value in TXA-4-Activity date/time
TXA.6	Origination Date/Time	00919	TS(26)	OPT	This field contains the date and time the document was created (i.e., dictated, recorded, etc.).
TXA.7	Transcription Date/Time	00920	TS(26)	COND	This field contains the date and time the input was actually transcribed. This field is conditional based upon the presence of a value in TXA-17-Document completion status of anything except "dictated."
TXA.8	Edit Date/Time	00921	TS(26)	OPT	**Repeats.** This field contains the date and time the document was edited.

TXA.9	Originator Code/Name	00922	XCN(250)	OPT	**Repeats.** This field identifies the person who originated (i.e., dictated) the document. The document originator may differ from the person responsible for authenticating the document.
TXA.10	Assigned Document Authenticator	00923	XCN(250)	OPT	**Repeats.** This field identifies the person(s) responsible for authenticating the document, who may differ from the originator. Multiple persons may be responsible for authentication, especially in teaching facilities. This field is allowed to repeat an undefined number of times.
TXA.11	Transcriptionist Code/Name	00924	XCN(250)	COND	**Repeats.** This field identifies the person transcribing the document. This is a conditional value; it is required on all transcribed documents.

TXA.12	Unique Document Number	00925	EI(30)	REQ	This field contains a unique document identification number assigned by the sending system. This document number is used to assist the receiving system in matching future updates to the document, as well as to identify the document in a query. When the vendor does not provide a unique document ID number, some type of document identifier should be entered here, or the Unique Document File name should be utilized. See Chapter 2, Section 2.9.55, "XTN - extended telecommunication number." Where the system does not customarily have a document filler number, this number could serve as that value, as well.
TXA.13	Parent Document Number	00926	EI(30)	COND	This field contains a document number that identifies the parent document to which this document belongs. The parent document number can be used to assist the receiving system in matching future updates to this document. This is a conditional field that is always required on T05 (document addendum notification), T06 (document addendum notification and content), T09 (document replacement notification), and T10 (document replacement notification and content) events.

TXA.14	Placer Order Number	00216	EI(22)	OPT	**Repeats.** This field is the placer application's order number. This is a composite field. The first component is a string of characters that identifies an individual order (e.g., OBR). It is assigned by the placer (ordering application). It identifies an order uniquely among all orders from a particular ordering application. The second through fourth components contain the (filler) assigning authority of the placing application. The (filler) assigning authority is a string of characters that will be uniquely associated with an application. A given institution or group of intercommunicating institutions should establish a unique list of applications that may be potential placers and fillers and assign unique entity identifiers. The components are separated by component delimiters

TXA.15	Filler Order Number	00217	EI(22)	OPT	This field is the order number associated with the filling application. Where a transcription service or similar organisation creates the document and uses an internally unique identifier, that number should be inserted in this field. Its first component is a string of characters that identifies an order detail segment (e.g., OBR). This string must uniquely identify the order (as specified in the order detail segment) from other orders in a particular filling application (e.g., transcription service). This uniqueness must persist over time. Where a number is reused over time, a date can be affixed to the non-unique number to make it unique.	
TXA.16	Unique Document File Name	00927	ST(30)	OPT	This field contains a unique name assigned to a document by the sending system. The file name is used to assist the receiving system in matching future updates to the document.	
TXA.17	Document Completion Status	00928	ID(2)	REQ	This field identifies the current completion state of the document. This is a required, table-driven field. Refer to HL7 table 0271 - Document completion status for valid values.	0271

TXA.18	Document Confidentiality Status	00929	ID(2)	OPT	This is an optional field which identifies the degree to which special confidentiality protection should be applied to this information. The assignment of data elements to these categories is left to the discretion of the healthcare organisation. Refer to HL7 table 0272 - Document confidentiality status for valid values.	0272
TXA.19	Document Availability Status	00930	ID(2)	OPT	This is an optional field which identifies a document's availability for use in patient care. If an organisation's business rules allow a document to be used for patient care before it is authenticated, the value of this field should be set to "AV." If a document has been made available for patient care, it cannot be changed or deleted. If an erroneous document has been made available at any point in time and a replacement is not appropriate, then it may be marked as "Cancelled" and removed, as in the case of a document being assigned to the wrong patient. Additional information must be provided via an addendum, which is separately authenticated and date/time stamped. If the content of a document whose status is "Available" must be revised, this is done by issuing a replacement, which is separately authenticated and date/time stamped. Refer to HL7 table 0273 - Document availability status for valid values.	0273

TXA.20	Document Storage Status	00932	ID(2)	OPT	This optional field identifies the storage status of the document. Refer to HL7 table 0275 - Document storage status for valid values.	0275
TXA.21	Document Change Reason	00933	ST(30)	COND	This free text field (limited to 30 characters) contains the reason for document status change.	
TXA.22	Authentication Person, Time Stamp	00934	PPN(250)	COND	**Repeats.** This is a conditional field. When the status of TXA-17-Document completion status is equal to AU (authenticated) or LA (legally authenticated), all components are required. This field contains a set of components describing by whom and when authentication was performed. Whenever any one of the ID number - Name type code components is valued, the when authenticated component, which is time stamp, must be valued as non-null. If the time component of a set is valued as non-null, the person component becomes required. These subcomponents are normally delimited by an ampersand (&). See Chapter 2.	
TXA.23	Distributed Copies (Code and Name of Recipients)	00935	XCN(250)	OPT	**Repeats.** This component identifies the person who has authenticated the document (either manually or electronically).	

The QRD segment (query definition segment)

The QRD segment is used to define a query.

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
QRD.1	Query Date/Time	25	TS(26)	REQ	Date the query was generated by the application program.	
QRD.2	Query Format Code	26	ID(1)	REQ	Valid format codes are given in HL7 Table 0106 - Query/response format code.	0106
QRD.3	Query Priority	27	ID(1)	REQ	Time frame in which the response is expected. Table values and subsequent fields specify time frames for response. HL7 Table 0091 - Query priority gives valid codes.	0091
QRD.4	Query ID	28	ST(10)	REQ	Unique identifier for the query. Assigned by the querying application. Returned intact by the responding application.	
QRD.5	Deferred Response Type	29	ID(1)	OPT	Valid entries are from HL7 Table 0107 - Deferred response type, to indicate before or later than the date/time specified.	0107
QRD.6	Deferred Response Date/Time	30	TS(26)	OPT	Date/time before or after which to send a deferred response. If not present, the response can be sent when it is available.	
QRD.7	Quantity Limited request	31	CQ(1)	REQ	Maximum length of the response that can be accepted by the requesting system. Valid responses are numerical values given in units specified in the second HL7 Table 0126- Quantity limited request gives valid entries, with codes for characters, lines, pages, records, or locally defined. The default value is lines.component.	0126

QRD.8	Who Subject Filter	32	XCN(60)	REQ	The subject of the query or who the inquiry is about. The field is allowed to repeat.	
QRD.9	What Subject Filter	33	CE(60)	REQ	Describes the kind of information required to satisfy the request. Valid codes are given in HL7 Table 0048 - What subject filter and may be extended locally during implementation	0048
QRD.10	What Department Data Code	34	CE(60)	REQ	Can include drug code, item number, etc., consistent with the subject in 2.24.4.9. Can contain multiple occurrences separated by repetition delimiters.	
QRD.11	What data Code Value Qualifier	35	CM(20)	OPT	Further refines the inquiry by data code qualifiers by providing a window or range to further refine the inquiry. This field contains components giving start and stop code values.	
QRD.12	Query Results Level	36	ID(1)	OPT	Used to control level of detail in results. HL7 Table 0108 - Query results level gives valid values valid values.	0108

The QRF segment (query filter segment)

The QRF segment is used with the QRD segment to further refine the content of a query.

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
QRF.1	Where subject filter	00037	ST(20)	REQ	**Repeats.** This field identifies the department, system, or subsystem to which the query pertains. This field may repeat as in LAB~HEMO, etc	
QRF.2	When data start date/time	00038	TS(26)	OPT	This field has been retained for backward compatibility only. It is recommended to use QRF-9 — When quantity/timing qualifier. When used for backward compatibility, this field contains the dates and times equal to or after which this value should be included.	
QRF.3	When data end date/time	00039	TS(26)	OPT	This field has been retained for backward compatibility only. It is recommended to use QRF-9 — When quantity/timing qualifier. When used for backward compatibility, this field contains the dates and times equal to or before which this date should be included. This field contains the dates and times equal to or before which this date should be included.	
QRF.4	What user qualifier	00040	ST(60)	OPT	**Repeats.** This field contains an identifier to further define characteristics of the data of interest.	
QRF.5	Other query subject filter	00041	ST(60)	OPT	**Repeats.** This field contains a filter defined locally for use between two systems. This filter uses codes and field definitions that have specific meaning only to the applications and/or site involved.	

QRF.6	Which date/time qualifier	00042	ID(12)	OPT	**Repeats.** This field specifies the type of date referred to in QRF-2-When data start date/time and QRF-3-When data end date/time.	0156
QRF.7	Which date/time status qualifier	00043	ID(12)	OPT	**Repeats.** This field specifies the status type of objects selected in date range defined by QRF-2-When data start date/time and QRF-3-When data end date/time.	0157
QRF.8	Date/time selection qualifier	00044	ID(12)	OPT	**Repeats.** This field allows the specification of certain types of values within the date/time range.	0158
QRF.9	When quantity/timing qualifier	00694	TQ(60)	OPT	This field allows an interval definition to be used for specifying multiple responses to a query. With the addition of this filter, new query specifications should no longer use QRF-2-When data start date/time and QRF-3-When data end date/time in future implementations.	
QRF.10	Search confidence threshold	01442	NM(10)	OPT	This field contains a numeric value used to establish the minimum threshold match. The value instructs the responding system to return no records for patients whose "match weight" on the look-up was lower than this user-defined value.	

The QAK segment (query response status)

The QAK segment contains information sent with responses to a query.

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
QAK.1	Query Tag	00696	ST(32)	COND	This field may be valued by the initiating system to identify the query, and may be used to match response messages to the originating query. If it is valued, the responding system is required to echo it back as the first field in the query acknowledgment segment (QAK). This field differs from MSA-2-message control ID in that its value remains constant for each message (i.e., all continuation messages) associated with the query, whereas MSA-2-Message control ID may vary with each continuation message, since it is associated with each individual message, not the query as a whole. QAK-1-Query tag is not conditional on the presence of the QRD-1-Query ID field in the original mode queries: in the original mode queries QAK-1-Query tag is not used.	
QAK.2	Query Response Status	00708	ID(2)	OPT	This field allows the responding system to return a precise response status. It is especially useful in the case where no data is found that matches the query parameters, but where there is also no error. It is defined with HL7 Table 0208 - Query response status.	0208
QAK.3	Message Query Name	01375	CE(250)	OPT	This field contains the name of the query. These names are assigned by the function-specific chapters of this specification. Site-specific event replay query names begin with the letter "Z." Refer to User defined table 0471 - Query name for suggested values.	

QAK.4	Hit Count	01434	NM(10)	OPT	This field, when used, contains the total number of records found by the server that matched the query. For tabular responses, this is the number of rows found. For other response types, the Conformance Statement defines the meaning of a "hit."
QAK.5	This Payload	01622	NM(10)	OPT	This field, when used, contains the total number of matching records that the Server sent in the current response. Where the continuation protocol is used to transmit the response in partial instalments, this number will differ from the value sent in QAK-4-Hit count total.
QAK.6	Hits Remaining	01623	NM(10)	OPT	This field, when used, contains the number of matching records found by the Server that have yet to be sent. It is only meaningful when the Server uses the continuation protocol to transmit partial responses.

The RF1 segment (referral information)

This segment represents information that may be useful when sending referrals from the referring provider to the referred-to provider.

Data Field Name	Data Field Full Name	Item	Data Type	Req	Description	Table
RF1.1	Referral Status	01137	CE(250)	COND	This field contains the status of the referral as defined by either the referred-to or the referred-by provider. Please refer to the Online Referral workflow for specific usage of this field.	0283
RF1.2	Referral Priority	01138	CE(250)	COND	This field contains the urgency of the referral. Please refer to the Online Referral workflow for specific usage of this field.	0280
RF1.3	Referral Type	01139	CE(250)	COND	This field contains the type of referral. It is loosely associated with a clinical specialty or type of resource. Please refer to the Online Referral work flow for specific usage of this field.	0281
RF1.4	Referral Disposition	01140	CE(250)	OPT	**Repeats.** This field contains the type of response or action that the referring provider would like from the referred-to provider.	0282
RF1.5	Referral Category	01141	CE(250)	OPT	This field contains the location at which the referral will take place.	0284
RF1.6	Originating Referral Identifier	01142	EI(30)	REQ	This field contains the originating application's permanent identifier for the referral. This is a composite field.	

RF1.7	Effective Date	01143	TS(26)	COND	This field contains the date on which the referral is effective. Please refer to the Online Referral work flow for specific usage of this field.	
RF1.8	Expiration Date	01144	TS(26)	OPT	This field contains the date on which the referral expires.	
RF1.9	Process Date	01145	TS(26)	OPT	This field contains the date on which the referral originated.	
RF1.10	Referral Reason	01228	CE(250)	OPT	**Repeats.** This field contains the reason for which the referral will take place.	0336
RF1.11	External Referral Identifier	01300	EI(30)	OPT	**Repeats.** This field contains an external application's permanent identifier for the referral.	

5   Reference tables

This section lists all the HL7 reference tables used in the segment tables in the Standard.

HL7 Table 0001 — Administrative sex

This table is user defined.

Value	Description	Value	Description
F	Female	A	Ambiguous
M	Male	N	Not applicable
O	Other	S	Unspecific
U	Unknown		

HL7 Table 0002 — Marital status

This table is user-defined.

Value	Description	Value	Description
A	Separated	N	Annulled
D	Divorced	I	Interlocutory
M	Married	B	Unmarried
S	Single	U	Unknown
W	Widowed	O	Other
C	Common law	T	Unreported
G	Living together	J	Civil Partner

P	Domestic partner	K	Former Civil Partner
R	Registered domestic partner	L	Surviving Civil Partner
E	Legally Separated	N	Annulled

HL7 Table 0003 — Event type

Value	Type	Description
A01	ADT/ACK	Admit/visit notification
A03	ADT/ACK	Discharge/end visit
I12	REF/RRI	Patient referral
O21	OML	Laboratory order
O22	ORL	General laboratory order response message to any OML
R01	ORU/ACK	Unsolicited transmission of an observation message
S12	SIU/ACK	Notification of new appointment booking
S13	SIU/ACK	Notification of appointment rescheduling
S14	SIU/ACK	Notification of appointment modification
S15	SIU/ACK	Notification of appointment cancellation
S16	SIU/ACK	Notification of appointment discontinuation
S17	SIU/ACK	Notification of appointment deletion

HL7 Table 0004 — Patient class

This table is user defined.

Value	Description	Value	Description
E	Emergency	B	Obstetrics
I	Inpatient	C	Commercial Account
O	Outpatient	N	Not Applicable
P	Preadmit	U	Unknown
R	Recurring patient	G	General Practitioner

HL7 Table 0005 — Race

This table is user defined. The HL7 Standard does not suggest any values.

HL7 Table 0006 — Religion

This table is user defined.

Value	Description	Value	Description
AGN	Agnostic	COP	Christian: Other Pentecostal
ATH	Atheist	PRE	Christian: Presbyterian
BAH	Baha'i	PRO	Christian: Protestant
BUD	Buddhist	QUA	Christian: Friends
BMA	Buddhist: Mahayana	REC	Christian: Reformed Church
BTH	Buddhist: Theravada	REO	Christian: Reorganized Church of Jesus Christ-LDS
BTA	Buddhist: Tantrayana	SAA	Christian: Salvation Army
BOT	Buddhist: Other	SEV	Christian: Seventh Day Adventist
CFR	Chinese Folk Religionist	SOU	Christian: Southern Baptist
CHR	Christian	UCC	Christian: United Church of Christ
ABC	Christian: American Baptist Church	UMD	Christian: United Methodist
AMT	Christian: African Methodist Episcopal	UNI	Christian: Unitarian
AME	Christian: African Methodist Episcopal Zion	UNU	Christian: Unitarian Universalist
ANG	Christian: Anglican	WES	Christian: Wesleyan

AOG	Christian: Assembly of God	**WMC**	Christian: Wesleyan Methodist
BAP	Christian: Baptist	**CNF**	Confucian
CAT	Christian: Roman Catholic	**ERL**	Ethnic Religionist
CRR	Christian: Christian Reformed	**HIN**	Hindu
CHS	Christian: Christian Science	**HVA**	Hindu: Vaishnavites
CMA	Christian: Christian Missionary Alliance	**HSH**	Hindu: Shaivites
COC	Christian: Church of Christ	**HOT**	Hindu: Other
COG	Christian: Church of God	**JAI**	Jain
COI	Christian: Church of God in Christ	**JEW**	Jewish
COM	Christian: Community	**JCO**	Jewish: Conservative
COL	Christian: Congregational	**JOR**	Jewish: Orthodox
EOT	Christian: Eastern Orthodox	**JOT**	Jewish: Other
EVC	Christian: Evangelical Church	**JRC**	Jewish: Reconstructionist
EPI	Christian: Episcopalian	**JRF**	Jewish: Reform
FWB	Christian: Free Will Baptist	**JRN**	Jewish: Renewal

FRQ	Christian: Friends	**MOS**	Muslim	
GRE	Christian: Greek Orthodox	**MSU**	Muslim: Sunni	
JWN	Christian: Jehovah's Witness	**MSH**	Muslim: Shiite	
LUT	Christian: Lutheran	**MOT**	Muslim: Other	
LMS	Christian: Lutheran Missouri Synod	**NAM**	Native American	
MEN	Christian: Mennonite	**NRL**	New Religionist	
MET	Christian: Methodist	**NOE**	Nonreligious	
MOM	Christian: Latter-day Saints	**OTH**	Other	
NAZ	Christian: Church of the Nazarene	**SHN**	Shintoist	
ORT	Christian: Orthodox	**SIK**	Sikh	
COT	Christian: Other	**SPI**	Spiritist	
PRC	Christian: Other Protestant	**VAR**	Unknown	
PEN	Christian: Pentecostal			

HL7 Table 0007 — Admission type

This table is user defined.

Value	Description	Value	Description
A	Accident	N	Newborn (Birth in healthcare facility)
E	Emergency	U	Urgent
L	Labor and Delivery	C	Elective
R	Routine		

HL7 Table 0008 — Acknowledgment code

Value	Mode	Description
AA	Original mode	Application Accept
	Enhanced mode	Application acknowledgment: Accept
AE	Original mode	Application acknowledgment: Error
	Enhanced mode	Application Error
AR	Original mode	Application acknowledgment: Reject
	Enhanced mode	Application Reject
CA	Enhanced mode	Accept acknowledgment: Commit Accept
CE	Enhanced mode	Accept acknowledgment: Commit Error
CR	Enhanced mode	Accept acknowledgment: Commit Reject

HL7 Table 0009 — Ambulatory status

This table is user defined.

Value	Description	Value	Description
A0	No functional limitations	A9	Functional level unknown
A1	Ambulates with assistive device	B1	Oxygen therapy
A2	Wheelchair/stretcher bound	B2	Special equipment (tubes, IVs, catheters)
A3	Comatose; non-responsive	B3	Amputee
A4	Disoriented	B4	Mastectomy
A5	Vision impaired	B5	Paraplegic
A6	Hearing impaired	B6	Pregnant
A7	Speech impaired	B7	Not Pregnant
A8	Non-English speaking	B8	Pregnancy Unknown

HL7 Table 0010 — Physician ID

This table is user defined. The HL7 Standard does not suggest any values.

HL7 Table 0019 — Anesthesia code

This table is user defined. The HL7 Standard does not provide any values.

HL7 Table 0023 — Admit source

This table is user defined.

Value	Description	Value	Description
A	Accident	N	Newborn (Birth in healthcare facility)
E	Emergency	U	Urgent
L	Labor and Delivery	C	Elective
R	Routine		

HL7 Table 0051 — Diagnosis code

This table is user defined. The HL7 Standard does not provide any values.

HL7 Table 0052 — Diagnosis type

This table is user defined.

Value	Description	Value	Description
A	Admitting	F	Final
D	Discharge	W	Working

HL7 Table 0053 — Diagnosis coding method

This table is user defined. The HL7 Standard does not suggest any values.

HL7 Table 0059 — Consent code

This table is user defined. The HL7 Standard does not provide any values.

HL7 Table 0064 — Financial class

This table is user defined.

Value	Description	Value	Description
1	Medical Card	3	Semi Private Patient
2	Public Patient	4	Private Patient

HL7 Table 0065 — Specimen action code

Value	Description
A	Add ordered tests to the existing specimen
G	Generated order; reflex order
L	Lab to obtain specimen from patient
O	Specimen obtained by service other than Lab
P	Pending specimen; Order sent prior to delivery
R	Revised order
S	Schedule the tests specified below

HL7 Table 0070 — Specimen source code

Value	Description	Value	Description
ABS	Abscess	PAFL	Pancreatic fluid
AMN	Amniotic fluid	PAT	Patient
ASP	Aspirate	PRT	Peritoneal fluid /ascites
BPH	Basophils	PLC	Placenta
BIFL	Bile fluid	PLAS	Plasma
BLDA	Blood arterial	PLB	Plasma bag
BBL	Blood bag	PLR	Pleural fluid (thoracentesis fld)
BLDC	Blood capillary	PMN	Polymorphonuclear neutrophils
BPU	Blood product unit	PPP	Platelet poor plasma
BLDV	Blood venous	PRP	Platelet rich plasma
BON	Bone	PUS	Pus
BRTH	Breath (use EXHLD)	RT	Route of medicine
BRO	Bronchial	SAL	Saliva
BRN	Burn	SEM	Seminal fluid
CALC	Calculus (=Stone)	SER	Serum
CDM	Cardiac muscle	SKN	Skin
CNL	Cannula	SKM	Skeletal muscle
CTP	Catheter tip	SPRM	Spermatozoa
CSF	Cerebral spinal fluid	SPT	Sputum
CVM	Cervical mucus	SPTC	Sputum - coughed

CVX	Cervix	**SPTT**	Sputum - tracheal aspirate
COL	Colostrum	**STON**	Stone (use CALC)
CBLD	Cord blood	**STL**	Stool = Fecal
CNJT	Conjunctiva	**SWT**	Sweat
CUR	Curettage	**SNV**	Synovial fluid (Joint fluid)
CYST	Cyst	**TEAR**	Tears
DIAF	Dialysis fluid	**THRT**	Throat
DOSE	Dose med or substance	**THRB**	Thrombocyte (platelet)
DRN	Drain	**TISS**	Tissue
DUFL	Duodenal fluid	**TISG**	Tissue gall bladder
EAR	Ear	**TLGI**	Tissue large intestine
EARW	Ear wax (cerumen)	**TLNG**	Tissue lung
ELT	Electrode	**TISPL**	Tissue placenta
ENDC	Endocardium	**TSMI**	Tissue small intestine
ENDM	Endometrium	**TISU**	Tissue ulcer
EOS	Eosinophils	**TUB**	Tube NOS
RBC	Erythrocytes	**ULC**	Ulcer
EYE	Eye	**UMB**	Umbilical blood
EXHLD	Exhaled gas (=breath)	**UMED**	Unknown medicine
FIB	Fibroblasts	**URTH**	Urethra
FLT	Filter	**UR**	Urine

FIST	Fistula	**URC**	Urine clean catch
FLU	Body fluid, unsp	**URT**	Urine catheter
GAS	Gas	**URNS**	Urine sediment
GAST	Gastric fluid/contents	**USUB**	Unknown substance
GEN	Genital	**VOM**	Vomitus
GENC	Genital cervix	**BLD**	Whole blood
GENL	Genital lochia	**BDY**	Whole body
GENV	Genital vaginal	**WAT**	Water
HAR	Hair	**WICK**	Wick
IHG	Inhaled Gas	**WND**	Wound
IT	Intubation tube	**WNDA**	Wound abscess
ISLT	Isolate	**WNDE**	Wound exudate
LAM	Lamella	**WNDD**	Wound drainage
WBC	Leukocytes	**XXX**	To be specified in another part of the message
LN	Line	**B**	Blood
LNA	Line arterial	**BX**	Biopsy
LNV	Line venous	**E**	Effusion
LIQ	Liquid NOS	**ED**	EDTA
LYM	Lymphocytes	**GC**	Guthrie Card
MAC	Macrophages	**GS**	Gallstones
MAR	Marrow	**HP**	Heparinised Plasma

MEC	Meconium	**NF**	Sodium Flouride
MBLD	Menstrual blood	**NT**	No type
MLK	Milk	**RS**	Renal Stones
MILK	Breast milk	**STORE**	STORE
NAIL	Nail	**UFB**	Urine Faeces EDTA
NOS	Nose (nasal passage)	**VAULT**	VAULT
ORH	Other		

HL7 Table 0074 — Diagnostic service section ID

Value	Description	Value	Description
AU	Audiology	**OTH**	Other
BG	Blood Gases	**OSL**	Outside Lab
BLB	Blood Bank	**PHR**	Pharmacy
CUS	Cardiac Ultrasound	**PT**	Physical Therapy
CTH	Cardiac Catheterization	**PHY**	Physician (Hx. Dx, admission note, etc.)
CT	CAT Scan	**PF**	Pulmonary Function
CH	Chemistry	**RAD**	Radiology
CP	Cytopathology	**RX**	Radiograph
EC	Electrocardiac (e.g., EKG, EEC, Holter)	**RUS**	Radiology Ultrasound
EN	Electroneuro (EEG, EMG,EP,PSG)	**RC**	Respiratory Care (therapy)

HM	Hematology	**RT**	Radiation Therapy
ICU	Bedside ICU Monitoring	**SR**	Serology
IMM	Immunology	**SP**	Surgical Pathology
LAB	Laboratory	**TX**	Toxicology
MB	Microbiology	**VUS**	Vascular Ultrasound
MCB	Mycobacteriology	**VR**	Virology
MYC	Mycology	**XRC**	Cineradiograph
NMS	Nuclear Medicine Scan	**HIS**	Histopathology
NMR	Nuclear Magnetic Resonance	**CAR**	Cardiology
NRS	Nursing Service Measures	**BS**	Blood Sciences
OUS	OB Ultrasound	**ML**	Molecular Testing
OT	Occupational Therapy		

HL7 Table 0076 — Message Type

Value	Chapter	Chapter
ACK	General acknowledgment message	2
ADT	ADT message	3
OML	Laboratory order message	4
ORL	Laboratory acknowledgment message (unsolicited)	7
ORU	Unsolicited transmission of an observation message	7
REF	Patient referral	11
RRD	Pharmacy/treatment dispense acknowledgment message	4
RRE	Pharmacy/treatment encoded order acknowledgment message	4
RRG	Pharmacy/treatment give acknowledgment message	4
RRI	Return referral information	11
SIU	Schedule information unsolicited	10

HL7 Table 0078 — Abnormal flags

This table is user defined.

Value	Description
L	Below low normal
H	Above high normal
LL	Below lower panic limits
HH	Above upper panic limits
<	Below absolute low-off instrument scale

>	Above absolute high-off instrument scale
N	Normal (applies to non-numeric results)
A	Abnormal (applies to non-numeric results)
AA	Very abnormal (applies to non-numeric units, analogous to panic limits for numeric units)
null	No range defined, or normal ranges don't apply
U	Significant change up
D	Significant change down
B	Better--use when direction not relevant
W	Worse--use when direction not relevant
S	Susceptible. Indicates for microbiology susceptibilities only.
R	Resistant. Indicates for microbiology susceptibilities only.
I	Intermediate. Indicates for microbiology susceptibilities only.
MS	Moderately susceptible. Indicates for microbiology susceptibilities only.
VS	Very susceptible. Indicates for microbiology susceptibilities only.

HL7 Table 0085 — Observation results status codes interpretation

Value	Description
C	Record coming over is a correction and thus replaces a final result
D	Deletes the OBX record
F	Final results; Can only be changed with a corrected result.
I	Specimen in lab; results pending
N	Not asked; used to affirmatively document that the observation identified in the OBX was not sought when the universal service ID in OBR-4 implies that it would be sought.
O	Order detail description only (no result)
P	Preliminary results
R	Results entered -- not verified
S	Partial results
X	Results cannot be obtained for this observation
U	Results status change to final without retransmitting results already sent as 'preliminary.' E.g., radiology changes status from preliminary to final
W	Post original as wrong, e.g., transmitted for wrong patient

HL7 Table 0088 — Procedure code

This table is user defined. The HL7 Standard does not provide any values.

HL7 Table 0089 — Procedure coding method

This table is user defined. The HL7 Standard does not provide any values.

HL7 Table 0102 — Delayed acknowledgment type

Value	Description
D	Message received, stored for later processing
F	Acknowledgment after processing

HL7 Table 0103 — Processing ID

Value	Description	Value	Description
D	Debugging	T	Training
P	Production		

HL7 Table 0104 — HL7 version identifier

Value	Release	Date
2.0	Release 2.0	September 1988
2.0D	Demo 2.0	October 1988
2.1	Release 2. 1	March 1990
2.2	Release 2.2	December 1994
2.3	Release 2.3	March 1997
2.3.1	Release 2.3.1	May 1999
2.4	Release 2.4	November 2000

HL7 Table 0105 — Source of comment

Value	Description
L	Ancillary (filler) department is source of comment
P	Orderer (placer) is source of comment
O	Other system is source of comment

HL7 Table 0112 — Discharge disposition

This table is user defined.

Value	Description
01	Discharged to home or self care (routine discharge)
02	Discharged/transferred to another short term general hospital for inpatient care
03	Discharged/transferred to skilled nursing facility (SNF)
04	Discharged/transferred to an intermediate care facility (ICF)
05	Discharged/transferred to another type of institution for inpatient care or referred for outpatient services to another institution
06	Discharged/transferred to home under care of organised home health service organisation
07	Left against medical advice or discontinued care
08	Discharged/transferred to home under care of Home IV provider
09	Admitted as an inpatient to this hospital
10 ...19	Discharge to be defined at state level, if necessary
20	Expired (i.e. dead)
21 ... 29	Expired to be defined at state level, if necessary

30	Still patient or expected to return for outpatient services (i.e. still a patient)
31 ... 39	Still patient to be defined at state level, if necessary (i.e. still a patient)
40	Expired (i.e. died) at home
41	Expired (i.e. died) in a medical facility; e.g., hospital, SNF, ICF, or free standing hospice
42	Expired (i.e. died) - place unknown

HL7 Table 0113 — Discharged to location

This table is user defined. The HL7 Standard does not suggest any values.

HL7 Table 0123 — Result status

Value	Description
O	Order received; specimen not yet received
I	No results available; specimen received, procedure incomplete
S	No results available; procedure scheduled, but not done
A	Some, but not all, results available
P	Preliminary: A verified early result is available, final results not yet obtained
C	Correction to results
R	Results stored; not yet verified
F	Final results; results stored and verified. Can only be changed with a corrected result.
X	No results available; Order canceled.
Y	No order on record for this test. (Used only on queries)
Z	No record of this patient. (Used only on queries)

HL7 Table 0125 — Value type

Value	Description	Value	Description
AD	Address	RP	Reference Pointer
CE	Coded Entry	SN	Structured Numeric
CF	Coded Element With Formatted Values	ST	String Data
CK	Composite ID With Check Digit	TM	Time
CN	Composite ID And Name	TN	Telephone Number
CP	Composite Price	TS	Time Stamp (Date & Time)
CX	Extended Composite ID With Check Digit	TX	Text Data (Display)
DT	Date	XAD	Extended Address
ED	Encapsulated Data	XCN	Extended Composite Name And Number For Persons
FT	Formatted Text (Display)	XON	Extended Composite Name And Number For Organisations
MO	Money	XPN	Extended Person Name
NM	Numeric	XTN	Extended Telecommunications Number
PN	Person Name		

HL7 Table 0127 — Allergen type code

Value	Description	Value	Description
DA	Drug allergy	EA	Environmental Allergy
FA	Food allergy	AA	Animal Allergy
MA	Miscellaneous allergy	PA	Plant Allergy
MC	Miscellaneous contraindication	LA	Pollen Allergy

HL7 Table 0128 — Allergen severity code

Value	Description	Value	Description
SV	Severe	MI	Mild
MO	Moderate	U	Unknown

HL7 Table 0133 — Procedure practitioner identifier code type

This table is user defined.

Value	Description	Value	Description
AN	Anesthesiologist /Anesthetist	PS	Primary Surgeon
AS	Assistant Surgeon	RD	Radiologist
CM	Certified Nurse Midwife	RS	Resident
NP	Nurse Practitioner	SN	Scrub Nurse
PR	Procedure MS/ Surgeon		

HL7 Table 0136 — Yes/no indicator

Value	Description	Value	Description
Y	Yes	N	No

HL7 Table 0155 — Acknowledgement type

Value	Description	Value	Description
AL	Always	ER	Error/reject conditions only
NE	Never	SU	Successful completion only

HL7 Table 0161 — Acknowledgement type

Value	Description
N	Substitutions are NOT authorized. (This is the default - null.)
G	Allow generic substitutions.
T	Allow therapeutic substitutions

HL7 Table 0161 — Route of Administration

Value	Description	Value	Description
AP	Apply Externally	MM	Mucous Membrane
B	Buccal	NS	Nasal
DT	Dental	NG	Nasogastric
EP	Epidural	NP	Nasal Prongs*
ET	Endotrachial Tube*	NT	Nasotrachial Tube
GTT	Gastrostomy Tube	OP	Ophthalmic
GU	GU Irrigant	OT	Otic
IMR	Immerse (Soak) Body Part	OTH	Other/Miscellaneous
IA	Intra-arterial	PF	Perfusion
IB	Intrabursal	PO	Oral
IC	Intracardiac	PR	Rectal
ICV	Intracervical (uterus)	RM	Rebreather Mask*
ID	Intradermal	SD	Soaked Dressing
IH	Inhalation	SC	Subcutaneous
IHA	Intrahepatic Artery	SL	Sublingual
IM	Intramuscular	TP	Topical
IN	Intranasal	TRA	Tracheostomy*
IO	Intraocular	TD	Transdermal
IP	Intraperitoneal	TL	Translingual
IS	Intrasynovial	UR	Urethral
IT	Intrathecal	VG	Vaginal
IU	Intrauterine	VM	Ventimask
IV	Intravenous	WND	Wound
MTH	Mouth/Throat	MM	Mucous Membrane

HL7 Table 0163 — Administration site

This table is user defined.

Value	Description	Value	Description
BE	Bilateral Ears	LVL	Left Vastus Lateralis
OU	Bilateral Eyes	NB	Nebulized
BN	Bilateral Nares	PA	Perianal
BU	Buttock	PERIN	Perineal
CT	Chest Tube	RA	Right Arm
LA	Left Arm	RAC	Right Anterior Chest
LAC	Left Anterior Chest	RACF	Right Antecubital Fossa
LACF	Left Antecubital Fossa	RD	Right Deltoid
LD	Left Deltoid	RE	Right Ear
LE	Left Ear	REJ	Right External Jugular
LEJ	Left External Jugular	OD	Right Eye
OS	Left Eye	RF	Right Foot
LF	Left Foot	RG	Right Gluteus Medius
LG	Left Gluteus Medius	RH	Right Hand
LH	Left Hand	RIJ	Right Internal Jugular
LIJ	Left Internal Jugular	RLAQ	Rt Lower Abd Quadrant
LLAQ	Left Lower Abd Quadrant	RLFA	Right Lower Forearm
LLFA	Left Lower Forearm	RMFA	Right Mid Forearm
LMFA	Left Mid Forearm	RN	Right Naris
LN	Left Naris	RPC	Right Posterior Chest
LPC	Left Posterior Chest	RSC	Right Subclavian
LSC	Left Subclavian	RT	Right Thigh
LT	Left Thigh	RUA	Right Upper Arm
LUA	Left Upper Arm	RUAQ	Right Upper Abd Quadrant

LUAQ	Left Upper Abd Quadrant	**RUFA**	Right Upper Forearm
LUFA	Left Upper Forearm	**RVL**	Right Vastus Lateralis
LVG	Left Ventragluteal	**RVG**	Right Ventragluteal

HL7 Table 0164 — Administration device

This table is user defined.

Value	Description	Value	Description
AP	Applicator	IVS	IV Soluset
BT	Buretrol	MI	Metered Inhaler
HL	Heparin Lock	NEB	Nebulizer
IPPB	IPPB	PCA	PCA Pump
IVP	IV Pump	IVS	IV Soluset

HL7 Table 0165 — Administration method

This table is user defined.

Value	Description	Value	Description
CH	Chew	NB	Nebulized
DI	Dissolve	PT	Pain
DU	Dust	PF	Perfuse
IF	Infiltrate	SH	Shampoo
IS	Insert	SO	Soak
IR	Irrigate	WA	Wash
IVPB	IV Piggyback	WI	Wipe
IVP	IV Push	NB	Nebulized

HL7 Table 0166 — RX component type

This table is user defined.

Value	Description	Value	Description
B	Base	A	Additive

HL7 Table 0167 — Substitution status

This table is user defined.

Value	Description
N	No substitute was dispensed. This is equivalent to the default (null) value.
G	A generic substitution was dispensed.
T	A therapeutic substitution was dispensed.
0	No product selection indicated
1	Substitution not allowed by prescriber
2	Substitution allowed - patient requested product dispensed
3	Substitution allowed - pharmacist selected product dispensed
4	Substitution allowed - generic drug not in stock
5	Substitution allowed - brand drug dispensed as a generic
7	Substitution not allowed - brand drug mandated by law
8	Substitution allowed - generic drug not available in marketplace

HL7 Table 0171 — Citizenship

This table is user defined. The HL7 Standard does not suggest any values.

HL7 Table 0172 — Veterans military status

This table is user defined. The HL7 Standard does not suggest any values.

HL7 Table 0189 — Ethnic group

This table is user defined. The HL7 Standard does not suggest any values.

HL7 Table 0200 — Name type

Value	Description
A	Alias Name
B	Name at Birth
C	Adopted Name
D	Display Name
I	Licensing Name
L	Legal Name
M	Maiden Name
N	Nickname /"Call me" Name/Street Name
P	Name of Partner/Spouse (retained for backward compatibility only)
R	Registered Name (animals only)
S	Coded Pseudo-Name to ensure anonymity
T	Indigenous/Tribal/Community Name
U	Unspecified

HL7 Table 0201 — Telecommunication use code

Value	Description	Value	Description
PRN	Primary Residence Number	ASN	Answering Service Number
ORN	Other Residence Number	EMR	Emergency Number
WPN	Work Number	NET	Network (email) Address
VHN	Vacation Home Number	BPN	Beeper Number

HL7 Table 0202 — Telecommunication equipment type

Value	Description
PH	Telephone
FX	Fax
MD	Modem
CP	Cellular Phone
BP	Beeper
Internet	Internet Address: Use Only If Telecommunication Use Code Is NET
X.400	X.400 email address: Use Only If Telecommunication Use Code Is NET

HL7 Table 0203 — Identifier type

This table is user defined.

Value	Description	Value	Description
BUPA	BUPA Number	MRN	Medical Record Number
CCEI	Central Client Eligibility Index	**NCIN**	National Client Index Number
CN	Chart Number	**OTH**	Other
COOP	Out of Hours Number	**PASPID**	Patient Admin System Patient ID No
CSP ID	Cervical Check patient id	**PMS**	Practice Management System
GMS	General Medical Services Number	**PPSN**	Personal Social Services Number
GPN	GP Electronic Patient Record Number	**RAD**	Radiology Chart Number
HLID	eHealthIreland ID	**RIS**	Radiology Information System
IHINumber	Individual Health Identifier Number	**UNK**	Unknown
LAB	Laboratory Number	**VHI**	Voluntary Health Insurance Number

HL7 Table 0206 — Segment action code

Value	Description	Value	Description
A	Add/Insert	**U**	Update
D	Delete		

HL7 Table 0207 — Processing mode

Value	Description
A	Archive
R	Restore from archive
I	Initial load
T	Current processing, transmitted at intervals (scheduled or on demand)
Not present	Not present (the default, meaning current processing)

HL7 Table 0227 — Substance manufacturer name

Value	Description	Value	Description
AB	Abbott Laboratories (includes Ross Products Division)	MED	MedImmune, Inc.
AD	Adams Laboratories	MIL	Miles [Inactive–use BAY]
ALP	Alpha Therapeutic Corporation	MIP	Bioport Corporation (formerly Michigan Biologic Products Institute)
AR	Armour [Inactive–use CEN]	MSD	Merck & Co., Inc.
AVI	Aviron	NAB	NABI (formerly North American Biologicals, Inc.)
BA	Baxter Healthcare Corporation	NYB	New York Blood Center
BAY	Bayer Corporation(includes Miles, Inc. and Cutter Laboratories)	NAV	North American Vaccine, Inc.
BP	Berna Products [Inactive–use BPC]	NOV	Novartis Pharmaceutical Corporation (includes Ciba-Geigy Limited and Sandoz Limited)
BPC	Berna Products Corporation (includes Swiss Serum and Vaccine Institute Berne)	OTC	Organon Teknika Corporation
CEN	Centeon L.L.C. (includes Armour Pharmaceutical Company)	ORT	Ortho Diagnostic Systems, Inc.
CHI	Chiron Corporation	PD	Parkedale Pharmaceuticals (formerly

			Parke-Davis)
CON	Connaught [Inactive–use PMC]	**PMC**	Aventis Pasteur Inc. (formerly Pasteur Merieux Connaught; includes Connaught Laboratories and Pasteur Merieux)
EVN	Evans Medical Limited (an affiliate of Medeva Pharmaceuticals, Inc.)	**PRX**	Praxis Biologics [Inactive–use WAL]
GRE	Greer Laboratories, Inc.	**SCL**	Sclavo, Inc.
IAG	Immuno International AG	**SI**	Swiss Serum and Vaccine Inst. [Inactive–use BPC]
IM	Merieux [Inactive–use PMC]	**SKB**	SmithKline Beecham
IUS	Immuno-U.S., Inc.	**USA**	United States Army Medical Research and Materiel Command
JPN	The Research Foundation for Microbial Diseases of Osaka University (BIKEN)	**WA**	Wyeth-Ayerst [Inactive–use WAL]
KGC	Korea Green Cross Corporation	**WAL**	Wyeth-Ayerst (includes Wyeth-Lederle Vaccines and Pediatrics, Wyeth Laboratories, Lederle Laboratories, and Praxis Biologics)
LED	Lederle [Inactive–use WAL]	**OTH**	Other manufacturer
MA	Massachusetts Public Health Biologic Laboratories	**UNK**	Unknown manufacturer

HL7 Table 0230 — Procedure functional type

Value	Description
A	Anesthesia
P	Procedure for treatment (therapeutic, including operations)
I	Invasive procedure not classified elsewhere (for example, IV, catheter, and so on)
D	Diagnostic procedure

HL7 Table 0278 — Filler status codes

This table is user defined.

Value	Description
Pending	Appointment has not yet been confirmed
Waitlist	Appointment has been placed on a waiting list for a particular slot, or set of slots
Booked	The indicated appointment is booked
Started	The indicated appointment has begun and is currently in progress
Complete	The indicated appointment has completed normally (was not discontinued, canceled, or deleted)
Cancelled	The indicated appointment was stopped from occurring (canceled prior to starting)
Dc	The indicated appointment was discontinued (DC'ed while in progress, discontinued parent appointment, or discontinued child appointment)
Deleted	The indicated appointment was deleted from the filler application
Blocked	The indicated time slot(s) is(are) blocked
Overbook	The appointment has been confirmed; however it is confirmed in an

overbooked state	

HL7 Table 0280 — Referral priority

This table is user defined.

Value	Description	Value	Description
A	Add/Insert	**U**	Update
D	Delete		

HL7 Table 0281 — Referral type

This table is user defined.

Value	Description	Value	Description
Lab	Laboratory	**Breast**	Breast
Rad	Radiology	**Lung**	Lung
Med	Medical	**Gastrointestinal**	Gastrointestinal
Skn	Skilled Nursing	**Neurology**	Neurology
Psy	Psychiatric	**Chest**	Chest
Hom	Home Care	**MRI**	MRI
Prostate	Prostate	**General**	General

HL7 Table 0282 — Referral disposition

This table is user defined.

Value	Description	Value	Description
WR	Send Written Report	**AM**	Assume Management
RP	Return Patient After Evaluation	**SO**	Second Opinion

HL7 Table 0283 — Referral status

This table is user defined.

Value	Description	Value	Description
A	Accepted	R	Rejected
P	Pending	E	Expired

HL7 Table 0284 — Referral category

This table is user defined.

Value	Description	Value	Description
I	Inpatient	A	Ambulatory
O	Outpatient	E	Emergency

HL7 Table 0286 — Provider role

This table is user defined.

Value	Description	Value	Description
CP	Consulting Provider	RT	Referred to Provider
PP	Primary Care Provider	TC	Triaging Clinician
RP	Referring Provider		

HL7 Table 0289 — County code

This table is user defined. The HL7 Standard does not suggest any values.

HL7 Table 0292 — County code

This table is user defined. The HL7 Standard does not suggest any values.

HL7 Table 0296 — Primary language

This table is user defined. The HL7 Standard does not suggest any values.

HL7 Table 0301 — Universal ID type

This table is user defined.

Value	Description
DNS	An Internet dotted name. Either in ASCII or as integers
GUID	Same as UUID.
HCD	The CEN Healthcare Coding Scheme Designator. (Identifiers used in DICOM follow this assignment scheme.)
HL7	Reserved for future HL7 registration schemes
ISO	An International Standards Organization Object Identifier
L,M,N	These are reserved for locally defined coding schemes
Random	Usually a base64 encoded string of random bits.The uniqueness depends on the length of the bits. Mail systems often generate ASCII string "unique names," from a combination of random bits and system names. Obviously, such identifiers will not be constrained to the base64 character set.
UUID	Usually a base64 encoded string of random bits.
x400	The uniqueness depends on the length of the bits. Mail systems often
x500	generate ASCII string "unique names," from a combination of random bits
DOH	Department of Health
MCN.HLPracticeID	This code uses Ireland's national Medical Council Number concatenated using a '.' to the eHealthIreland Practice ID code to identify a GP at a practice.

HL7 Table 0302 — Point of care

This table is user defined.

Value	Description	Value	Description
MED	Medical	PAE	Paediatric
SUR	Surgical	EME	Emergency
PSY	Psychiatric	OTH	Other
MAT	Maternity		

HL7 Table 0321 — Dispense method

This table is user defined.

Value	Description	Value	Description
TR	Traditional	F	Floor Stock
UD	Unit Dose	TR	Traditional

HL7 Table 0326 — Visitor indicator

This table is user defined.

Value	Description	Value	Description
A	Account level (default)	V	Visit level

HL7 Table 0336 — Referral reason

This table is user defined.

Value	Description	Value	Description
S	Second Opinion	O	Provider Ordered
P	Patient Preference	W	Work Load

HL7 Table 0340 — Procedure code modifier

This table is user defined. The HL7 Standard does not suggest any values.

HL7 Table 0357 — Message error condition codes

This table lists the codes, texts, and description for each error condition.

Code	Text	Description
Success		
0	Message accepted	Success. Optional, as the AA conveys success. Used for systems that must always return a status code.
Errors		
100	Segment sequence error	The message segments were not in the proper order, or required segments are missing.
101	Required field missing	A required field is missing from a segment
102	Data type error	The field contained data of the wrong data type, e.g. an NM field contained "FOO".
103	HL7 Table value not found	A field of data type ID or IS was compared against the corresponding HL7 Table, and no match was found.
Rejection		
200	Unsupported message type	The Message Type is not supported.
201	Unsupported event code	The Event Code is not supported.
202	Unsupported processing id	The Processing ID is not supported.
203	Unsupported version id	The Version ID is not supported.
204	Unknown key identifier	The ID of the patient, order, etc., was not found. Used for transactions other than additions, e.g. transfer of a non-existent patient.

205	Duplicate key identifier	The ID of the patient, order, etc., already exists. Used in response to addition transactions (Admit, New Order, etc.).
206	Application record locked	The transaction could not be performed at the application storage level, e.g. database locked.
207	Application internal error	A catchall for internal errors not explicitly covered by other codes.

HL7 Table 0360 — Degree

This table is user defined. The HL7 Standard does not suggest any values.

HL7 Table 0361 — Sending application

This table is user defined.

Value	Description
TOREX.HEALTHLINK.12	Torex, eHealthIreland Bridge Middleware, Discharge Notification Message
PAS.HEALTHLINK.12	Patient Administration System, eHealthIreland Bridge Middleware, Discharge Notification Message
IPMISOFT.HEALTHLINK.12	iPMiSoft, eHealthIreland Bridge Middleware, Discharge Notification Message
TOREX.HEALTHLINK.10	Torex, eHealthIreland Bridge Middleware, Message ID Lab Result
WOODARD.HEALTHLINK.10	Woodard, eHealthIreland Bridge Middleware, Message ID Lab Result
APEX.HEALTHLINK.10	Apex, eHealthIreland Bridge Middleware, Message ID Lab Result
MCKESSAN.HEALTHLINK.10	McKessan, eHealthIreland Bridge Middleware, Message ID Lab Result
TELEPATH.HEALTHLINK.10	Telepath, eHealthIreland Bridge Middleware, Message ID Lab Result Message
TOREX.HEALTHLINK.9	Torex, eHealthIreland Bridge, eHealthIreland Bridge Middleware, Waiting List Message
PAS.HEALTHLINK.9	Patient Administration System, eHealthIreland Bridge, eHealthIreland Bridge Middleware, Waiting List Message
TOREX.HEALTHLINK.8	Torex, eHealthIreland Bridge, eHealthIreland Bridge Middleware, OPD Appointment Message
PAS.HEALTHLINK.8	Patient Administration System, eHealthIreland Bridge

	Middleware, OPD Appointment Message
IPMISOFT.HEALTHLINK.8	iPMiSoft, eHealthIreland Bridge Middleware, OPD Appointment Message
IMS.HEALTHLINK.7	IMS, eHealthIreland Bridge Middleware, Radiology Message
KEOGHRIS.HEALTHLINK.7	Keogh Radiology System, eHealthIreland Bridge Middleware, Radiology Message
MCKESSAN.HEALTHLINK.7	KcKessan Radiology System, eHealthIreland Bridge Middleware, Radiology Message
PAS.HEALTHLINK.7	Patient Administration System, eHealthIreland Bridge Middleware, Radiology Message
IPMISOFT.HEALTHLINK.7	iPMiSoft, eHealthIreland Bridge Middleware, Radiology Message
TOREX.HEALTHLINK.6	Torex, eHealthIreland Bridge Middleware, Death Notification Message
PAS.HEALTHLINK.6	Patient Administration System, eHealthIreland Bridge Middleware, Death Notification Message
IPMISOFT.HEALTHLINK.6	iPMiSoft, eHealthIreland Bridge Middleware, Death Notification Message
TOREX.HEALTHLINK.5	Torex, eHealthIreland Bridge Middleware, Discharge Summary Message
PAS.HEALTHLINK.5	Torex, eHealthIreland Bridge Middleware, Discharge Summary Message
AE.HEALTHLINK.4	A&E Information System, eHealthIreland Bridge Middleware, A&E Notification Message

TOREX.HEALTHLINK.4	Torex, eHealthIreland Bridge Middleware, A&E Notification Message
IMS.HEALTHLINK.4	IMS A&E System, eHealthIreland Bridge Middleware, A&E Notification Message
HLONLINE.HEALTHLINK.1	eHealthIreland Online, eHealthIreland Bridge Middleware, Lab Order Message
HLONLINE.HEALTHLINK.14	eHealthIreland Online, eHealthIreland Bridge Middleware, Neurology Referral Message
HLONLINE.HEALTHLINK.15	eHealthIreland Online, eHealthIreland Bridge Middleware, Neurology Response Message
TOREX.HEALTHLINK.11	Torex, eHealthIreland Bridge, eHealthIreland Bridge Middleware, Laboratory Order NACK
IPMISOFT.HEALTHLINK.17	iPMiSoft, eHealthIreland Bridge Middleware, Cardiology Message
SUNQUEST	HSE NW Laboratory Information System
WINPATH HL7	HSE NE Laboratory Information System
KEOGHRIS	HSE NE Radiology Information System
ADASTRA	HSE NE Out of Hours Co-operative
iLAB.ICE	HSE SE Laboratory Information System with Anglia ICE Middleware
APEX.ICE	HSE S Laboratory Information System with Anglia ICE Middleware
TOREXRIS	St James's Hospital Radiology Information System
ADASTRA2	HSE SE Out of Hours Co-operative, CareDoc
HEALTHONE	Message Generated by HealthOne Practice Management

	System
HELIXPM	Message Generated by Helix Practice Manager Practice Management System
SOCRATES	Message Generated by Socrates Practice Manager Practice Management System
COMPLETEGP	Message Generated by CompleteGP Practice Management System
MEDICOM	Message Generated by Medicom Practice Management System
GPMAC	Message Generated by GPMAC Practice Management System
AGFA	Message Generated by AGFA
DMF_OPENLIS	Message Generated by DMF_OPENLIS
DWISI	Message Generated by DWISI
HIPEHOS	Message Generated by HIPEHOS
ILAB	Message Generated by ILAB
IPM	Message Generated by IPM
IWM	Message Generated by IWM
MAXIMS-RIS	Message Generated by MAXIMS-RIS
MILLENIUM	Message Generated by MILLENIUM
NETACQUIRE	Message Generated by NETACOUIRE
TEAMS	Message Generated by TEAMS
TOREXPAS	Message Generated by TOREXPAS

DMF_EDS	Message Generated by DMF_EDS
GE	Message Generated by Euromedics radiology
MLP-Appollo	Message Generated by MLP-Appollo

HL7 Table 0362 — Sending facility

This table is user defined.

Value	Description
0002	Caredoc
0003	Shannon Doc
0100	St. Mary's Hospital, Phoenix Park
0101	St. Colmcille's Hospital, Loughlinstown
0102	Naas General Hospital
0106	Cherry Orchard Hospital, Ballyfermot
0108	Connolly Hospital Blanchardstown
0201	Midland Regional Hospital, Portlaoise
0202	Midland Regional Hospital, Mullingar
0203	Midland Regional Hospital,Tullamore
0300	Midwestern Regional Hospital, Dooradoyle
0301	Midwestern Regional Maternity Hospital Limerick
0302	Midwestern Regional Orthopaedic Hospital, Croom
0304	Midwestern Regional Hospital, Nenagh
0305	Midwestern Regional Hospital, Ennis

0400	Louth County Hospital, Dundalk
0402	Cavan General Hospital
0403	Our Lady's Hospital, Navan
0404	Monaghan General Hospital
0500	Letterkenny General Hospital
0501	Sligo General Hospital
0502	Our Lady's Hospital, Manorhamilton
0600	Waterford Regional Hospital (Ardkeen)
0601	St. Luke's General Hospital, Kilkenny
0602	Lourdes Orthopaedic Hospital, Kilcreene
0605	Wexford General Hospital
0607	South Tipperary General Hospital, Clonmel
0608	Our Lady's Hospital, Cashel
0701	St. Mary's Orthopaedic Hospital, Gurranabraher
0703	Mallow General Hospital
0704	Bantry General Hospital
0705	St. Finbarr's Hospital, Cork
0724	Cork University Hospital
0726	Kerry General Hospital
0800	University College Hospital Galway (UCHG)
0801	Merlin Park University Hospital, Galway

0802	Mayo General Hospital
0803	Roscommon County Hospital
0805	Ballina District Hospital
0901	Adelaide Hospital, Dublin
0903	Meath Hospital, Dublin
0904	St. James's Hospital, Dublin
0908	Mater Misericordiae University Hospital, Dublin
0910	St. Vincent's University Hospital, Elm park
0912	St. Michael's Hospital, Dun Laoghaire
0913	Mercy University Hospital, Cork
0915	South Infirmary/Victoria, Cork
0918	St. John's Hospital, Limerick
0919	Portiuncula Hospital, Ballinasloe
0922	Our Lady of Lourdes Hospital, Drogheda
0923	Beaumont Hospital, Dublin
0925	Peamount Hospital, Newcastle
0930	Coombe Women and Infants University Hospital, Dublin
0931	National Maternity Hospital, Holles St, Dublin
093	Rotunda Hospital, Dublin
0934	Waterford Maternity Hospital
0940	The Children's University Hospital, Temple St, Dublin

0941	Our Lady's Children's Hospital, Crumlin
0943	National Children's Hospital, Harcourt St
0945	St. Anne's Hospital, Dublin
0946	Hume St. Hospital, Dublin
0947	St. Luke's Hospital, Rathgar
0950	Royal Victoria Eye & Ear Hospital, Dublin
0954	Incorporated Orthopaedic Hospital, Clontarf
0955	National Orthopaedic Hospital, Cappagh
0956	St. Mary's Auxiliary Hospital, Baldoyle
0960	National Rehabilitation Hospital, (NHR), Dun Laoghaire
0978	Our Lady's Hospice, Harold's Cross, Dublin
1225	St. Joseph's Unit, Harold's Cross
1270	Adelaide, Meath Incorporating National Children's Hospital (AMNCH), Tallaght
1762	St. Joseph's Hospital, Raheny

Note. Some of the hospitals listed are no longer acute hospitals or are now closed. They are included on this list to enable historical data analysis.

HL7 Table 0363 — Assigning Authority

This table is user defined.

Value	Description
0002	Caredoc
0003	Shannon Doc
0100	St. Mary's Hospital, Phoenix Park
0101	St. Colmcille's Hospital, Loughlinstown
0102	Naas General Hospital
0106	Cherry Orchard Hospital, Ballyfermot
0108	Connolly Hospital Blanchardstown
0201	Midland Regional Hospital, Portlaoise
0202	Midland Regional Hospital, Mullingar
0203	Midland Regional Hospital,Tullamore
0300	Midwestern Regional Hospital, Dooradoyle
0301	Midwestern Regional Maternity Hospital Limerick
0302	Midwestern Regional Orthopaedic Hospital, Croom
0304	Midwestern Regional Hospital, Nenagh
0305	Midwestern Regional Hospital, Ennis
0400	Louth County Hospital, Dundalk
0402	Cavan General Hospital
0403	Our Lady's Hospital, Navan
0404	Monaghan General Hospital

0500	Letterkenny General Hospital
0501	Sligo General Hospital
0502	Our Lady's Hospital, Manorhamilton
0600	Waterford Regional Hospital (Ardkeen)
0601	St. Luke's General Hospital, Kilkenny
0602	Lourdes Orthopaedic Hospital, Kilcreene
0605	Wexford General Hospital
0607	South Tipperary General Hospital, Clonmel
0608	Our Lady's Hospital, Cashel
0701	St. Mary's Orthopaedic Hospital, Gurranabraher
0703	Mallow General Hospital
0704	Bantry General Hospital
0705	St. Finbarr's Hospital, Cork
0724	Cork University Hospital
0726	Kerry General Hospital
0800	University College Hospital Galway (UCHG)
0801	Merlin Park University Hospital, Galway
0802	Mayo General Hospital
0803	Roscommon County Hospital
0805	Ballina District Hospital
0901	Adelaide Hospital, Dublin

0903	Meath Hospital, Dublin
0904	St. James's Hospital, Dublin
0908	Mater Misericordiae University Hospital, Dublin
0910	St. Vincent's University Hospital, Elm park
0912	St. Michael's Hospital, Dun Laoghaire
0913	Mercy University Hospital, Cork
0915	South Infirmary/Victoria, Cork
0918	St. John's Hospital, Limerick
0919	Portiuncula Hospital, Ballinasloe
0922	Our Lady of Lourdes Hospital, Drogheda
0923	Beaumont Hospital, Dublin
0925	Peamount Hospital, Newcastle
0930	Coombe Women and Infants University Hospital, Dublin
0931	National Maternity Hospital, Holles St, Dublin
0932	Rotunda Hospital, Dublin
0934	Waterford Maternity Hospital
0940	The Children's University Hospital, Temple St, Dublin
0941	Our Lady's Children's Hospital, Crumlin
0943	National Children's Hospital, Harcourt St
0945	St. Anne's Hospital, Dublin
0946	Hume St. Hospital, Dublin

0947	St. Luke's Hospital, Rathgar
0950	Royal Victoria Eye & Ear Hospital, Dublin
0954	Incorporated Orthopaedic Hospital, Clontarf
0955	National Orthopaedic Hospital, Cappagh
0956	St. Mary's Auxiliary Hospital, Baldoyle
0960	National Rehabilitation Hospital, (NHR), Dun Laoghaire
0978	Our Lady's Hospice, Harold's Cross, Dublin
1225	St. Joseph's Unit, Harold's Cross
1270	Adelaide, Meath Incorporating National Children's Hospital (AMNCH), Tallaght
1762	St. Joseph's Hospital, Raheny
PCRS	Primary Care Reimbursement Service

HL7 Table 0396 — Coding System

This table is user defined.

Value	Description
99zzz or L	Local general code (where z is an alphanumeric character)
ACR	American College of Radiology finding codes
ART	WHO Adverse Reaction Terms
AS4	ASTM E1238/ E1467 Universal
AS4E	AS4 Neurophysiology Codes
ATC	American Type Culture Collection
C4	CPT-4
C5	CPT-5
CAS	Chemical abstract codes
CD2	CDT-2 Codes
CDCA	CDC Analyte Codes
CDCM	CDC Methods/Instruments Codes
CDS	CDC Surveillance
CE	CEN ECG diagnostic codes
CLP	CLIP
CPTM	CPT Modifier Code
CST	COSTART
CVX	CDC Vaccine Codes
DCL	DICOM Class Label

DCM	DICOM modality codes
DQL	DICOM Query Label
E	EUCLIDES
E5	Euclides quantity codes
E6	Euclides Lab method codes
E7	Euclides Lab equipment codes
ENZC	Enzyme Codes
FDDC	First DataBank Drug Codes
FDDX	First DataBank Diagnostic Codes
FDK	FDA K10
HB	HIBCC
HCPCS	HCFA Common Procedure Coding System
HHC	Home Health Care
HI	Health Outcomes
HIDS	Health identifiers
HL7nnnn	HL7 Defined Codes where nnnn is the HL7 HL7 Table number
HPC	HCFA Procedure Codes (HCPCS)
I10	ICD-10
I10P	ICD-10 Procedure Codes
I9	ICD9
ICDO	International Classification of Diseases for Oncology

ICS	ICCS
ICSD	International Classification of Sleep Disorders
ISOnnnn	ISO Defined Codes where nnnn is the ISO HL7 Table number
IUPP	IUPAC/IFCC Property Codes
IUPC	IUPAC/IFCC Component Codes
JC8	Japanese Chemistry
LB	Local billing code
LN	Logical Observation Identifier Names and Codes (LOINC®)
MCD	Medicaid
MCR	Medicare
MDDX	Medispan Diagnostic Codes
MEDC	Medical Economics Drug Codes
MEDR	Medical Dictionary for Drug Regulatory Affairs (MEDDRA)
MEDX	Medical Economics Diagnostic Codes
MGPI	Medispan GPI
MVX	CDC Vaccine Manufacturer Codes
NDA	NANDA
NDC	National drug codes
NIC	Nursing Interventions Classification
NPI	National Provider Identifier
OHA	Omaha System

OHA	Omaha
POS	POS Codes
RC	Read Classification
SDM	SNOMED-DICOM Microglossary
SNM	Systemized Nomenclature of Medicine (SNOMED)
SNM3	SNOMED International
SNT	SNOMED topology codes (anatomic sites)
UC	UCDS
UMD	MDNS
UML	Unified Medical Language
UPC	Universal Product Code
UPIN	UPIN
W1	WHO rec# drug codes
W2	WHO rec# drug codes
W4	WHO rec# code with ASTM extension
WC	WHO ATC

HL7 Table 0416 — Procedure DRG type

Value	Description
1	1st non-Operative
2	2nd non-Operative
3	Major Operative
4	2nd Operative
5	3rd Operative

HL7 Table 0417 — Tissue Type Code

Value	Description	Value	Description
1	Insufficient Tissue	8	Non-malignant neoplasm
2	Not abnormal	9	Malignant neoplasm
3	Abnormal – not categorized	0	No tissue expected
4	Mechanical abnormal	B	Basal cell carcinoma
5	Growth alteration	C	Carcinoma – unspecified type
6	Degeneration & necrosis	G	Additional tissue required
7	Non-acute inflammation		

HL7 Table 0418 — Procedure DRG type

Value	Description
0	The admitting procedure
1	The primary procedure
2...	For ranked secondary procedures

HL7 Table 0430 — Mode of arrival code

This table is user defined.

Value	Description	Value	Description
A	Ambulance	P	Public Transport
C	Car	O	Other
F	On foot	U	Unknown
H	Helicopter		

HL7 Table 0445 — Identity reliability code

This table is user defined.

Value	Description
UD	Unknown/Default Date of Birth

Appendix A – History of the General Practice Messaging Standard

Recognising the importance of electronic messaging to and from GPs, and in keeping with its mandate under section 8 (1)(k) of the Health Act, 2007, the Health Information and Quality Authority (HIQA) began developing a General Practice Messaging Standard in 2009.

General Practice Messaging Standard version 1.0 was published in April 2010 and approved by the then Minister for Health and Children in May 2010. Subsequent versions incorporated new requirements identified by stakeholders. Version 2.0 included new scenarios for clinical settings, and version 3.0 included scenarios for electronic prescribing (e-prescribing) in the community. This version (4.0) includes antenatal care scenarios, letters from the Outpatients Department and the Emergency Department, radiology ordering and cardiology results.

Reflecting its commitment to consultation and engagement, the project was undertaken in conjunction with the eHealth Standards Advisory Group (eSAG). In existence since 2012, the eSAG is an expert advisory which is chaired by HIQA Technical Standards personnel. The membership of the group was revised in late 2015. Representing key stakeholders, the group consists of clinical experts, policy makers and methodological experts. The full membership of eSAG is listed at the end of this appendix.

The terms of reference of the eHealth Standards Advisory Group are:

- agree terms of reference and working procedures and processes and document these
- advise HIQA on the identification and prioritisation of those areas in which standards are required bearing in mind where there are short, intermediate and long term priorities
- agree and maintain a work plan of projects for the eHealth Standards Advisory Group
- advise HIQA on mechanisms for raising awareness of standards and the benefits of taking a standards-based approach when developing health information systems to the broader stakeholder community

- advise HIQA on the additional domain expert members required to undertake aspects of the work plan or specific projects
- delegate specific tasks to members of the eHealth Standards Advisory Group or domain experts co-opted to projects undertaken by the eHealth Standards Advisory Group, revoking and amending those delegations as required
- advise HIQA on the identification of key stakeholders e.g. user communities, professional bodies and domain experts who should be consulted on depending on the particular Standard being developed
- work to ensure the ongoing development and implementation of health information standards.

The membership of the eSAG is as follows:

Damon Berry	National Standard Authority of Ireland
David Reen	Irish Pharmacy Union
Fran Thompson	Health Service Executive — Office of the Chief Information Officer
George Mellotte	Royal College of Physicians of Ireland
Gerardine Sayers	Health Service Executive
Gerry Kelliher	Royal College of Surgeons in Ireland
Jack Shanahan	Irish Pharmacy Union
Kevin Conlon	Department of Health
Muiris O'Connor	Department of Health
Paul Gallagher	Irish Association of Directors of Nursing And Midwifery
Peter Connolly	Health Service Executive — Office of the Chief Information Officer
Yvonne Goff	Health Service Executive — Office of the Chief Information Officer
Dr Brian O'Mahony	General Practice Information Technology Group

Appendix B – LOINC and SNOMED CT codes for antenatal care

This table shows the possible OBX.3 and OBX.6 values for antenatal care visits in Ireland.

Description	Req	OBX.3		OBX.6
		SNOMED CT code	LOINC code	Units and possible values
Last menstrual period (LMP)	Req	21840007	8665-2	Date
Agreed/Final expected date of delivery (EDD)	Req	161714006	11778-8	Date. Initial EDD is based on LMP. It becomes final once agreed with the US scan.
Agreed EDD method	Req	246366009	Local code	Ultrasound or dates
Gravida	Req	161732006	11996-6	Numeric. Captured from booking form.
Parity	Req	364325004	11977-6	Numeric. Captured from booking form.
Fundal height	Opt	249016007	1181-0	Numeric (cm)
Body weight	Req	27113001	3141-9	Numeric (kg)
Body mass index (BMI)	Opt	60621009	39156-5	Numeric (kg/m^2)
Systolic blood pressure	Req	271649006	8480-6	Numeric (mmHg)
Diastolic	Req	271650006	8462-4	Numeric (mmHg)

blood pressure				
Oedema	Opt	423666004	44966-0	Values are -, +,++,+++
Proteinuria	Opt	29738008	20454-5	Values are -, +,++,+++
Urinalysis	Opt	27171005	24357-6	Text. Glucose, nitrates.
Haemoglobin	Opt	38082009	718-7	Numeric (g/dl)
Foetal movement	Opt	32279003	57088-7	Text. Values are *Yes*, *No*, *Reduced.*
Foetal heart	Opt	249042007	11615-2	Text. Values are *Detected*, *Not Detected.*
Number of foetuses	Opt	246435002	55281-0	Numeric
Uterine contractions	Opt	289699001	56866-7	Text. Values are *Irregular*, *None*, *Regular.*
Foetal presentation	Opt	271692001	11876-0	Text
Foetal engagement	Opt	47219002	Local code	Numeric. Values are *1/5, 2/5, 3/5, 4/5, 5/5.*
Clinical note	Req	169616000	34778-1	Text. Should include assessment, concerns, and management plan.
Date of next visit at this setting	Opt	390840006	57070-5	Text

Appendix C – LOINC codes for referrals

Value	Description	Value	Description
10155-0	History of allergies	24627-2	CT Scan
10157-6	History of family member diseases	24642-1	Chest X-Ray
10164-2	History of present illness	26436-6	Laboratory Studies
10167-5	History of surgical procedures	28189-9	Physical mobility impairment
10177-4	Respiratory Symptoms and Diseases	2857-1	PSA Test
10205-3	Physical Findings	28620-3	Urology Study
11329-0	History General	29762-2	Social History
11330-8	History of alcohol use	3137-7	Height
11348-0	History of past illness	3141-9	Weight
11366-2	History of tobacco use	32422-8	Breast Examination
11391-0	Details of Chest Signs	39156-5	Body Mass Index
11422-3	Chest signs	45669-9	History of Asthma
18726-0	Radiology Study Reports	8462-4	Diastolic Blood Pressure
19009-0	Current Medication	8480-6	Systolic Blood Pressure
22029-3	Physical exam.total	8663-7	Cigarettes Smoked per day
24357-6	Urinalysis	8893-0	Pulse
24605-8	Previous Mammogram	42349-1	Reason for Referral

Appendix D – HL7 message type to eHealthIreland message type

ID	eHealthIreland Message Type	HL7 Message Type
1	Laboratory Order	OML_O21
2	Inpatient Admission	ADT_A01
3	Outpatient Clinic Letter	REF_I12
4	A & E Notification	ADT_A01
5	Discharge Summary	REF_I12
6	Death Notification	ADT_A03
7	Radiology Result	ORU_R01
8	OPD Appointment	SIU_S12
9	Waiting List	SIU_S12
10	Laboratory Result	ORU_R01
11	Laboratory NACK	ORL_O22
12	Discharge Notification	ADT_A03
13	Acknowledgement	ACK
14	Neurology Referral	REF_I12
15	Neurology Referral Response	RRI_I12
16	Co-op Discharge	REF_I12
17	Cardiology Result	ORU_R01

18	Oesophageal and Gastric Cancer Referral	REF_I12
19	Emergency Department Letter	REF_I12
20	Prostate Cancer Referral	REF_I12
21	Prostate Cancer Referral Response	RRI_I12
22	Breast Cancer Referral	REF_I12
23	Breast Cancer Referral Response	RRI_I12
24	Lung Cancer Referral	REF_I12
25	Lung Cancer Referral Response	RRI_I12
26	Chest Pain Referral	REF_I12
27	Chest Pain Referral Response	RRI_I12
28	MRI Request	REF_I12
29	MRI Request Response	RRI_I12
30	General Referral	REF_I12
31	General Referral Response	RRI_I12
32	Pigmented Lesion Referral	REF_I12
33	Pigmented Lesion Referral Response	RRI_I12
36	Mental Health Home Treatment Team	REF_I12
37	Mental Health Home Treatment Team Response	RRI_I12
38	Ophthalmology Referral	REF_I12
39	Ophthalmology Referral Response	RRI_I12
40	Periodic Assessment	ORU_R01

41	Asthma Review	ORU_R01
42	Diabetes Review	ORU_R01
46	Endoscopy Referral	REF_I12
47	Endoscopy Referral Response	RRI_I12
48	Radiology Order	ORM_O01
49	Radiology Response	ORR_O02
52	Investigation Schedule	SIU_S12
53	ADT Notification (Outbound)	ADT_A04
54	Prescription	OMP_O09
55	Radiology Order Update	ORM_O01
56	ADT Notification (Inbound)	ADT_A04
58	Shared Care Antenatal Message (Outbound)	ORU_R01
59	Shared Care Antenatal Message (Inbound)	ORU_R01

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In the future, we expect to include many more survey instruments and questionnaires from third parties with permission (especially those required by the U.S. federal government for payment and reimbursement) and believe that cataloguing all of these data collection forms in one comprehensive system (the LOINC table) along with laboratory and other clinical variables will facilitate the use of this data in direct clinical care, research and practice management.

Source: http://www.loinc.org

Appendix F – Change history by version

This section lists the changes made to the General Practice Messaging Standard in each successive version:

- Changes included in GPMS version 4.0
- Changes included in GPMS version 3.0
- Changes included in GPMS version 2.0

Changes included in General Practice Messaging Standard version 4.0

This table shows the changes included in General Practice Messaging Standard version 4.0:

Change	Description
43	New use cases, covering the electronic transfer of information about antenatal visits, clinical letters from the outpatients departments and emergency departments, radiology ordering, cardiology results, patient registration request and GP Data returns added to the clinical use cases section.
44	New appendix added, covering the Irish antenatal care codes.
45	New appendix added, with matrix of use cases used in each e-prescribing scenario.
46	Restructured the General Practice Messaging Standard document.

Changes included in General Practice Messaging Standard version 3.0

This table shows the changes included in General Practice Messaging Standard version 3.0:

Change	Description
35	New section added to incorporate the electronic transfer of prescriptions from GP's to community pharmacy including the outpatients of hospitals.
36	Added new value to table 0070
37	Added new value to table 0004
38	Added new value to table 0301
39	Added new value to table 0074
40	Added new value to table 0361
41	Added new value to table 0201

| 42 | Added new value to table 0002 |

Changes included in General Practice Messaging Standard version 2.0

This table shows the changes included in General Practice Messaging Standard version 2.0:

Change	Description
1	Changed *ENV* to correct abbreviation *EVN* where needed.
2	MSH.3 — added comment to description field about HD Datatype.
3	MSH.3/HD.1/HD.2/HD.3 — changed cardinality from *R* to *C*.
4	MSH.4/HD.1/HD.2/HD.3 — changed cardinality from *R* to *C*.
5	MSH.5/HD.1/HD.2/HD.3 — changed cardinality from *R* to *C*.
6	MSH.6/HD.1/HD.2/HD.3 — changed cardinality from *R* to *C*.
7	Deleted length values from all subcomponents. Only top level components have datatypes.
8	PID.3/CX.4/HD.1 — included table value 0363 for HL7 element (copied contents of 0362 to 0363 and included value code and description for PCRS in table 0363.
9	PID.3/CX.4/HD.3 — removed table 0203, replaced with table 0301.
10	XTN.1/2/3/4/6 and 7 data types were updated for PID.13, PID.14, OBR.17 and PRD.XTN.5 (Country code) was excluded.
11	PID.19 — removed the comment "When used for backward compatibility, this field contains the patient's social security number"
12	OBR.25 — included a comment to refer the reader to the message flow for Corrected Results for workflow for updated results.
13	OBR.28/XCN.16 — included a comment to refer the reader "to use cases Unsolicited Laboratory Result, Unsolicited Radiology Result and Corrected Result for specific usage of this field".
14	OBX.11 — included a comment to refer the reader "Please refer to message flow Corrected Results for workflow for updated results".
15	SCH.11/TQ.6 — No table is available in HL7 v2.4 for priority component. The values suggested in the HL7 v2.4 spec are listed instead.
16	Included the segment PV2 Event Type/Additional information in the segments for the death notification message.
17	Added acknowledgement messages to the referral and response message flows.

18	Added the NTE Notes and Comments segment to the laboratory order message flow.
19	Added the following segments to the minimum laboratory acknowledgement message response ORL_O22: ▪ MSH Message Header ▪ MSA Message Acknowledgement ▪ ERR Message Error Segment
20	Acknowledgement messages were represented in the unsolicited radiology message flow.
21	Included status information and copy to information in the notes section of the unsolicited radiology result message flow.
22	Represented the acknowledgement messages in the unsolicited laboratory message flow.
23	Included status information and copy to information in the notes section of the unsolicited laboratory result message flow.
24	Created a new message flow for corrected results.
25	Created a new section describing LOINC codes. LOINC codes currently available for referral messages are now listed in appendix 5.
26	ACK message type added.
27	Added the value *HLID:Healthlink ID* to the user-defined Table 0203.
28	Updated Table 0281 with values provided by eHealthIreland.
29	Created a new table for HL7 User-defined Table 0301 — Universal ID type and populated with HL7v2.4 values and Department of Health (DOH).
30	Values (provided by eHealthIreland) were included in HL7 User-defined Table 0361 — sending application.
31	Created a new user-defined Table 0363 'assigning authority' was created. Copied the contents from Table 0362 and added the value *PCRS*.
32	Created a new, user-defined Table 0396 — coding system.
33	Created a new table for LOINC codes.
34	Reproduced copyright and licensing from LOINC terms of use.

Appendix G – Feedback form

We are happy to receive comments on the Standard and will endeavour to include them, where appropriate into the next revision of the Standard. Please complete the template below and sent your comment to:

Standards and Technology Manager

Health Information and Quality Authority

George's Court

George's Lane

Dublin 7.

or, by email to **Kevin O'Carroll** (kocarroll@hiqa.ie)

Name:					
Address:					
Organisation:					
Contact details:	**Phone:**			**Email:**	
Title of Standard:	*General Practice Messaging Standard — Version 4.0*				
General comments:					
Specific comments:					

No	Page number	Description of issue	Suggested change/alternative text
1			
2			
3			