



Core Information Components

Electronic Referrals Release 1.0

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Release for Public Comment

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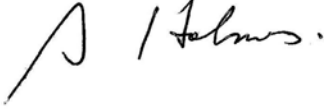

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Preface

Document Purpose

This document presents the core information components of the Electronic Referrals Release 1.0 package, which are recommended for use when sending referrals from general practitioners to specialists in Australia. It is suggested that readers familiarise themselves with the Business Requirements Specification and Solution Design, also part of this package, before using this document.

The Electronic Referral Core Information Components are a logical set of data items for exchange and are therefore independent of any particular platform, technology, exchange format or presentation format.

The e-Referrals package describes the specifications and guidelines to be adopted by implementers when developing interoperable referral solutions within the Australian healthcare community. Detailed supporting documentation will become available that will provide specific implementation guidance.

This document is designed to maintain a high level of the information requirements.

Updates to this document will be published as additional package components are developed with feedback from the sector.

Intended Audience

This document is intended for all interested stakeholders including:

- Early Adopter hospitals and health departments in the process of planning, implementing or upgrading referral systems
- Software vendors developing referral system products
- Early Adopter GP desktop software vendors
- Senior managers and policy makers, clinical experts, Health Information Managers, IT operations and support teams, and system integrators
- Clinicians, such as general practitioners and specialists
- Technical and non-technical readers.

Document Map

The following diagram represents the relationship between this document and others within the referral package.



Figure 1 Electronic Referral Package Document Map

The Solution Design defines current, interim and future solution states supported by the Business Requirements Specification. The Core Information Components document defines the minimum set of data groups and elements

that are recommended for implementation in any system that creates and transfers discharge summary information within Australia.

Document Status

This document has been released for public comment, following internal/external review.

Definitions, Acronyms and Abbreviations

For a lists of abbreviations, acronyms and abbreviations, see the [Definitions section](#) at the end of the document, on page 23.

References and Related Documents

For a list of all referenced documents, see the [References](#) section at the end of the document, on page 24.

1 Introduction

1.1 Overview

This document presents the Core Information Components of a general practitioner-to-specialist referral, which are recommended for use when sending referrals in Australia. Their implementation is therefore recommended in any GP system that creates or transfers referrals.

The Core Information Components are defined as the minimum set of data items that are considered necessary to support the delivery of quality collaborative care. The inclusion of data in this minimal set is determined by two criteria:

1. The clinical relevancy of the data
2. The need for the data to ensure clinical safety in a collaborative care environment.

These inclusion criteria have been applied to each information component and data item included in this document (see Section 3 Justification Summary).

As these specifications define the Core Information Components for exchange, it is anticipated that some referral templates will contain additional types of data to satisfy specific local or specialty healthcare requirements. It is expected that national extensions to the Core Information Components will be defined to support particular specialty areas.

For referral definitions and business-related discussion, please see the Business Requirements Specification document, also part of the Electronic Referrals Release 1.0 package [ER-BRS2010].

1.2 Scope

1.2.1 Scope Inclusions

The scope of the Electronic Referrals Release 1.0 package includes electronic referral processes, between general practitioners and specialists. That is, the creation, delivery, receipt and confirmation of patient referral documents in electronic form.

1.2.2 Scope Exclusions

The scope of this package excludes the following:

- The 'decision to refer' process
- The 'booking/scheduling' process at either the general practice or the specialist clinic.

1.3 Purpose

This Core Information Components document defines the information requirements for a nationally-agreed exchange of referrals between healthcare providers in Australia, independent of exchange or presentation formats.

It is anticipated that these Core Information Components will:

- Promote a common understanding of the core information components for consistent clinical interpretation when sending referrals to different clinical specialties, implementations and jurisdictions

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- Support the semantic interoperability of core information components exchanged between different implementations and jurisdictions, irrespective of the exchange format being used
 - Support cross-implementation and cross-jurisdictional querying over common referral components at the logical level, as may be required for Electronic Health Record implementations
 - Provide a common framework upon which to define nationally-agreed, specialty-specific referral components (e.g. for Allied Health)
 - Provide a common framework for nationally-defined mappings to specific exchange formats
 - Provide a framework which inputs (along with other documents and structures) into the development of national terminology sets that associate specific data items with valid values.

1.4 Methodology

The Referral Core Information Components were developed through a process of consultation with stakeholders. This consultation process has led to the endorsement of these Core Information Components by a number of national and local clinical and standards bodies.

The starting point for the Referral Core Information Components was the Data Content Specification that was developed by NEHTA for exchange from a General Practitioner (GP) to a specialist (private or public) and from a General Practitioner to Allied Health care provider [RDCS2007]. From this specification, many of the optional data elements were removed, and the remaining data elements summarised into the table shown in Section 2.3.

Additionally, the following stakeholders were invited to comment on this document: ACT Division of General Practice, Australian Capital Territory Department of Health, Australian College of Rural and Remote Medicine, Australian Commission on Safety and Quality in Health Care, Australian General Practice Network, Australian Healthcare & Hospitals Association, Department of Defence (Australian Government), Department of Health and Families (Northern Territory Government), Department of Health and Human Services (Tasmania), Department of Health (Government of Western Australia), Department of Human Services (State Government of Victoria), Department of Veterans' Affairs, General Practice Network NT, General Practice NSW, General Practice Queensland, General Practice SA, General Practice Tasmania, General Practice Victoria, GP Workforce Tasmania, Health Workforce Queensland, Mater Health Services, NSW Department of Health (New South Wales Government), NSW Rural Doctors Network, Queensland Health, Royal Australasian College of Surgeons, Rural Doctors Workforce Agency, Rural Health West, Rural Workforce Agency (Victoria), SA Health, The Australian Indigenous Doctors' Association Ltd, The Royal Australasian College of Physicians, The Royal Australian College of General Practitioners and the Western Australian General Practice Network.

As the Referral Core Information Components continue to evolve through consultation and feedback, it is intended that a full set of Referral Components will be maintained as a superset of both the core information components and any specialty Referral Components that are developed.

1.5 Exchange and Presentation Formats

The information presented here is defined at the logical level, and is therefore independent of specific exchange or presentation formats (e.g. HL7 v2 or HL7 CDA).

Consequently, the Core Information Components may be mapped to multiple exchange formats. It is anticipated that such mappings will be defined and published following the endorsement of the Core Information Components.

Similarly, the requirement that a particular piece of data be exchanged in a referral does not imply a requirement on the user interface. Some data elements (e.g. 'Document Originating System Identifier') are intended purely for purposes of internal processes within the receiving system. Similarly, other data elements (e.g. 'Date of Birth') have a number of different presentation options available (e.g. 'Birth Day' + 'Year of Birth' etc), which are not considered here. In addition to this, the names given to data components and data items are in many cases not appropriate to be used as field labels on a user interface.

Implementations which modify the data item names in the 'Item' column of Section 2.3 'Definition' to accommodate local practices (e.g. 'Person name' represented as 'Patient Name') may still conform to this specification, but only if the meaning of the variables listed in the other columns (e.g. 'Purpose', 'Type') are not modified.

Please also note that the order in which the data items are listed in this document is not indicative of the order in which this data should be exchanged or presented to the user.

1.6 Adding Data

It is expected that the referral author will use their clinical judgement to manually enter some of the data into the Referral Core Information Components. However, it is envisaged that Clinical Information Systems operating at the source healthcare facility should be capable, wherever possible, of transferring relevant data into many of the core information components. This will minimise data entry and may reduce the issues of recording data redundantly in multiple data stores. It is expected that where feeder systems are used, the author's discretion is exercised in only allowing information relevant to the ongoing care of the patient to be included in the referral, and that the author's due diligence is applied to ensure that the information included from feeder system is current and accurate.

Note that some of the data elements included in this specification are required for ALL referrals whereas others need only be completed where appropriate. That is, a conformant e-referral implementation must be capable of collecting and transferring/receiving all Core Information Components (CIC) elements. However:

- Not all data elements require a value in each and every referral (e.g. items that are categorised with '0..1' or '0..Many')
- Not all data elements are required to be displayed to users, and their labels may be different from those used in the 'Item' column of the Definition table in section 2.3..

2 Core Components

2.1 Overview

The information components of the Referrals Core Information Components (as defined in Section 2.3) define the minimum set of data that is recommended for best practice implementation in a system that creates and exchanges referrals within Australia.

The current Referral Core Information Components are:

- Patient
- Benefits Card Details
- Patient's Contact
- Referrer
- Usual GP
- Referred To
- Referral Details
- Current and Past Medical History
- Current Medications
- Allergies / Adverse Reactions
- Diagnostic Investigations
- Attachments
- Document Control

2.2 Definition Description

The Core Information Components are defined below, using the following columns:

- *Component*: A high level section or group of data elements
- *Item*: An individual data element or data group. A data item may be a single unit of data (e.g. "Date of Birth"), or a set of data that has a standard structure (e.g. "Address")
- *Purpose*: The main purposes for exchanging this data, including:
 - C: Clinician to Clinician Communication
 - S: System to System Communication
 - D: Decision Support
 - E: Epidemiology and Statistics
 - Q: Safety and Quality
- *Type*: The type of data associated with the component or data item. Note that this may be a simple data type (e.g. text, date) requiring a single field, or a predefined structure requiring a group of fields. For a full list of types used please refer to Section 3
- *Number of Values Allowed*: The number of times that the given component/item may be included in a Referral. For items, this is the number of times that the given item may be included, each time the component to which it belongs is included. The number of values may be either:
 - 0..1 (Zero or One): At most one data value

- 1 (One) Exactly one data value
- 0..Many (Zero to Many) Any number of data values
- 1..Many (One to Many) At least one data value
- *Notes:* Additional comments that clarify, explain or constrain the given data.

2.3 Definition

The following table uses three shades to differentiate data structures: yellow indicates component sections, white indicates data items within the preceding component section, while light grey indicates predominately system-to-system requirements.

If a value of one or one-to-many (i.e. [1] and [1..Many]) appears in the 'No. of Values Allowed' column, an actual value (e.g. character string, integer) is required for all referrals.

Component	Item	Purpose	Type	No. of Values Allowed	Notes
Patient		C, S, D, E, Q	Participation Person	1	Identifies the person about whom the clinical interaction has been captured and interchanged, that led to the creation of the referral, i.e. the subject of the referral.
	Participation Type	S	Codeable Text	1	The kind of Participation or involvement the person is playing with regard to making the referral. Value of this data element is constrained to "patient" and is used by the receiving system to properly group/display the information.
	Person Identifier	S, D, E, Q	Entity Identifier	1..Many	The unique identifier of the patient. This must include the patient's Individual Healthcare Identifier (IHI) when available. In the absence of an IHI, this may contain the patient's local identifier.
	Person Name	C, S, Q	Person Name	1..Many	The patient's name, in a structured format (e.g. family name and first name – for details refer to section 4.2). Multiples allow for addition of 'preferred name' as required.
	Date of Birth	C, S, D, E, Q	Date Time	1	The patient's date of birth. If necessary, this may be an approximation, which includes only the year, or the month and year.
	Sex	C, S, D, E, Q	Coded Text	1	The sex of the patient. Sex is the biological distinction between male and female. Where there is an inconsistency between anatomical and chromosomal characteristics, sex is based on anatomical characteristics.
	Address	C, S, E, Q	Address	1..Many	The address of the patient, recorded in a structured format (for details refer to section 4.2). Allows for multiple addresses such as 'temporary' or 'postal'. May include "No fixed address" if

Component	Item	Purpose	Type	No. of Values Allowed	Notes
					appropriate.
	Communication Details	C, S	Electronic Communication Details	1..Many	The patient's preferred means of contact should be included to facilitate clinical follow-up. Each Communication Details data item includes the medium (e.g. telephone), usage (e.g. home) and details. For details refer to section 4.2.
	Indigenous Status	C, S, Q, E	Coded Text	1	A description of the patient's indigenous origin.
Benefits Card Details		C, S, E, Q	Section	0..Many	Details pertaining to the identification of patient held benefits cards, where applicable. For example, Medicare Number, Government Benefits or DVA membership.
	Benefit Type	C, S, E, Q	Coded Text	1	Identifies the type of benefit with which the patient is eligible to receive benefits. Note - a Medicare Number must be recorded if the patient has one. Similarly, when a patient is receiving a Government Benefit, that must be provided along with the number. When a patient is a DVA Card holder, the corresponding details should be provided.
	Benefit Number	C, S, E, Q	Identifier	1	An identification number identifying a patient's eligibility to receive the stated benefits.
Patient's Contact		C, Q, S, E	Participation	0..Many	Details pertaining to the organisation or individual(s) nominated to act as the contact to receive about the patient. The patient themselves may not be the primary point of contact (e.g. dementia or paediatrics).
	Participation Type	S	Codeable Text	1	The kind of Participation or involvement the person is playing with regard to being an alternate contact. Value of this data element may be 'preferred contact', 'emergency contact' etc. This is used by the receiving system to properly group/display the information.
	Name	C, Q	Person Name or Organisation Name	1	The contact person's or organisation name, in a structured format (e.g. family name and first name - for details refer to section 4.2).

Component	Item	Purpose	Type	No. of Values Allowed	Notes
	Address	C, S, E, Q	Address	0..Many	The address of the contact person, recorded in a structured format. For details refer to section 4.2. For the purpose of facilitating contact, either an address or an Electronic Communication Detail must be provided.
	Communication Details	C, S	Electronic Communication Details	0..Many	The contact person's preferred means of contact. Each Communication Details data item includes the medium (e.g. telephone), usage (e.g. home) and details. For details refer to section 4.2. For the purpose of facilitating contact, either an address or an Electronic Communication Detail must be provided.
	Relationship to Patient	C, Q	Codeable Text	1	The relationship of the contact person to the patient.
Referrer		C, S, E, Q	Participation	1	The General Practitioner who is doing the referring.
	Participation Type	S	Codeable Text	1	The kind of Participation or involvement the Referrer is playing with regard to making the referral. This allows the medical practitioner who authored the referral to be identified.
	Person Identifier	S, E, Q	Entity Identifier	1..Many	Must contain the referrer's Provider Number and the Healthcare Provider Identifier – Individual (HPI-I) when relevant (and when available). It may also be used to carry other identifiers for the Referrer.
	Person Name	C, Q	Person Name	1	The name of the referrer, in a structured format. For details refer to section 4.2.
	Healthcare Role	C, Q, S	Codeable Text	1	The role the referrer is playing in the course of initiating the referral. For example, 'Usual GP' or 'Locum GP'.
	Organisation Identifier	S, E, Q	Entity Identifier	0..Many	The identifier of the referring organisation. When an Organisation Name is provided, the Organisation Identifier should be included.
	Organisation Name	C, Q	Organisation Name	0..1	The name of the referring organisation. When an Organisation Identifier is provided, the

Component	Item	Purpose	Type	No. of Values Allowed	Notes
					Organisation Name should be included.
	Address	C	Address	1..Many	The structured address of the referrer. For details refer to section 4.2.
	Communication Details	C	Electronic Communication Details	1..Many	The contact details for the referrer. The Referrer's preferred means of contact should be included and should include at least one method of communication. Each Communication Details data item includes the medium (e.g. telephone), usage and details. For details refer to section 4.2.
Usual GP		C, S, E	Participation	0..1	The medical practitioner nominated by the patient as his/her "usual GP". Note that where the 'Referrer' is not the Usual GP, this component must be completed.
	Person Identifier	S, E, Q	Entity Identifier	0..Many	This must include the Healthcare Provider Identifier for the individual (HPI-I) when available. Person Identifier has a value exactly when Person Name has a value. It may also be used to carry other identifiers for the Usual GP.
	Person Name	C, Q	Person Name	0..1	The name of the usual GP. Person Name has a value exactly when Person Identifier has a value. For details of the name structure refer to section 4.2.
	Healthcare Role	S	Codeable Text	1	Defaulted to 'Usual GP'.
	Organisation Identifier	S, E	Entity Identifier	0..Many	This must include the Healthcare Provider Identifier for the organisation (HPI-O) when available. Organisation Identifier has a value exactly when Organisation Name has a value.
	Organisation Name	C, Q	Organisation Name	0..1	The name of the GP Practice. Organisation Name has a value exactly when Organisation Identifier has a value.
	Communication Details	C, S	Electronic Communication Details	0 .. Many	The GP's preferred means of contact. Each Communication Details data item includes the medium (e.g. telephone), usage (e.g. work) and details. For details refer to section 4.2.

Component	Item	Purpose	Type	No. of Values Allowed	Notes
Referred To		C, S, E, Q	Participation	1	The specialist to whom the patient is being referred.
	Participation Type	S	Codeable Text	1	The kind of Participation or involvement the person is playing with regard to receiving the referral. Value of this data element is defaulted to "Referred to provider" and is used by the receiving system to properly group/display the information.
	Organisation Identifier	S	Entity Identifier	0..Many	The identifier of the organisation to which the patient is being referred. When an Organisation Name is provided, the Organisation Identifier should be included.
	Organisation Name	C, Q, S	Organisation Name	0..1	The name of the organisation to which the patient is being referred. When an Organisation Identifier is provided, the Organisation Name should be included
	Person Identifier	S	Entity Identifier	0..Many	The Healthcare Provider Identifier – Individual (HPI-I) when relevant (and available) for the individual to which the patient is being referred. It may also be used to carry other identifiers for the Referred-to participant. This must contain a Person Identifier exactly when there is a Person Name.
	Person Name	C, Q, S	Person Name	0..1	The name of the individual to which the patient is being referred (if available), in a structured format. For details refer to section 4.2. This must contain a Person Name exactly when there is a Person Identifier. An individual's name must be provided for Medicare reimbursable referrals.
	Specialty	C, Q, S, E	Codeable Text	1	The clinical specialty of the clinician being referred to. For example, 'Orthopaedic Surgeon'.
	Address	C	Address	1..Many	The structured address of the party to which the patient is being referred. For details refer to section 4.2.
	Communication Details	C	Electronic Communication	1..Many	The contact details for the party to which the patient is being referred. The preferred means of contact should be included and should include at

Component	Item	Purpose	Type	No. of Values Allowed	Notes
			Details		least one method of communication. Each Communication Details data item includes the medium (e.g. telephone), usage (e.g. home) and details. For details refer to section 4.2.
Referral Details		C, S, E, Q	Section	1	This section captures detailed information about the clinical referral.
	Date of Referral	C, S, Q, E	Date Time	1	The date/time when the Referral document was sent.
	Reason For Referral	C	Text	1	This free text data element is intended to summarise the reasons for referral in a single text field. It is the narrative of the presenting problems, clinical presentation etc.
	Referral Validity Duration	C, S, Q	Time Interval	1	The length of time the referral is valid from the date of the first patient/specialist encounter. Captures the valid duration of the referral which may be constrained by, e.g. Medicare funding policy.
Current and Past Medical History		C, Q	Section	1..Many	Describes all relevant diagnoses and health/medical problems pertaining to the patient, as well as any relevant clinical interventions that have been performed on or for the patient.
	Medical History Description	C, S, D, E, Q	Codeable Text	1	A description of the problem, diagnosis or intervention. The datatype of Codeable text allows for free text entry in the short term, with coded options in the longer term.
	Medical History comments	C, Q	Text	0..1	Free text comments providing additional information relevant to the problem, diagnosis or intervention in question.
	Medical History DateTime Range	C, Q	Time Interval	0..1	The date range (start date and/or end date) during which a patient's problem/diagnosis was active, or that the clinical intervention was performed. If necessary, this may be an estimate (such as April 2005, or 1998 - 2007).

Component	Item	Purpose	Type	No. of Values Allowed	Notes
Current Medications		C, S, D, E, Q	Item Detail	1..Many	Medications that the patient is currently taking.
	Current Medications Indicator	C, S, E, Q	Coded Text	1	Indicates whether or not the patient has any known current medications. For example 'Known', 'None known'.
					IF Known THEN. The Number of Values Allowed below are only applicable if Current Medications Indicator is set to 'Known'.
	Item Description	C, S, D, E, Q	Codeable Text	1	The details that fully describe a medication, including the name of the medication (active ingredients or brand name), strength and dose form, where appropriate.
	Dose Instruction	C, Q	Text	1	A description of how a particular product is being taken by the patient, at the time of the referral. This must include the route, dose quantity, frequency and any additional instructions required to safely describe the appropriate dosage. This should also include the administration schedule. In Referral systems, which support atomic dosage instructions, this item only needs to be populated when the atomic dosage items are not.
Allergies / Adverse reactions		C, S, D, E, Q	Section	1..Many	Describes the known allergies and adverse reactions for the patient, and any relevant reaction details.
	Allergies / Adverse Reactions Indicator	C, S, E, Q	Coded Text	1	Indicates the status of knowledge about the patient's Allergies / Adverse Reactions For example 'Known', 'None known', 'Unknown' or 'Not asked'.
					IF Known THEN. The 'Number of Values Allowed' below are only applicable if Allergies / Adverse Reactions Indicator is set to 'Known'.
	Agent Description	C, S, D, E, Q	Codeable Text	1	The agent / substance causing the allergy / adverse reaction experienced by the patient.

Component	Item	Purpose	Type	No. of Values Allowed	Notes
	Reaction Description	C, S, D, E, Q	Codeable Text	1..Many	The signs and/or symptoms experienced or exhibited by the patient as a consequence of the allergies / adverse reaction to the specific agent/substance.
Diagnostic Investigations		C, S, D, E, Q	Section	0..Many	Describes any diagnostic investigations performed on the patient, that are considered to be relevant to the patient's ongoing care. This allows the results to be included as an attached report, or as a reference (ie. link) to where the results are located. Pending results can be indicated using a Result Status of 'pending'.
	Investigation Type	C, S, D, E, Q	Codeable Text	1	The type or category of investigation performed on the patient – e.g. 'Pathology', 'Diagnostic Imaging'.
	Investigation Name	C, S, D, E, Q	Codeable Text	1	The name of the investigation performed on the patient – e.g. 'INR'.
	Investigation Date	C, S, D, E, Q	Date Time	1	The date (or date and time) that the diagnostic investigation was performed (in the case of diagnostic imaging investigations), or the specimen was taken (in the case of pathology investigations).
	Result Status	C, S, Q	Codeable Text	1	The status of the investigation result – e.g. 'pending', 'interim', 'final'.
	Document Control	S	Document Control	0..1	Information about the attached results or pending result (such as the version number, identifiers, document type, status and date attested) that will assist in the processing and document management of the attachment.
	EITHER				
	Link	C, S, E, Q	Link	0..1	A reference to an external repository where the investigation results are stored.
	OR				
	Data	C, S, E, Q	Encapsulated Data	0..1	The actual content of the investigation report. The report may use one of a variety of formats (as indicated in the Document Control details), including PDF, structured text, or XML using a NEHTA-defined template.

Component	Item	Purpose	Type	No. of Values Allowed	Notes
Attachments		C, S, E, Q	Attachment	0..Many	Documents that have been attached to the Referral (either as a link or as data), because they are relevant to the ongoing care of the patient. For example, pathology reports, diagnostic imaging reports, referral letters, care plans and assessments.
	Document Name	C	Text	1	The name of the attached document, to be used when referencing the attachment (e.g. "Full Blood Count")
	Document Control	S	Document Control	0..1	Information about the attachment (such as the version number, identifiers, document type and date attested) that will assist in the processing and document management of the attachment.
	Section Reference	S	Codeable Text	0..Many	The section in the Referral from which the attachment should be referenced – e.g. Pathology, Physical Assessment. This information may be used to organise references to the attachments into appropriate groups.
	Link	C, S, E, Q	Link	0..1	A reference to where the contents of the attachment can be found. This may either be an internal link that references a document within the same message, or a reference to an external repository where the attachment is stored.
	Data	C, S, E, Q	Encapsulated Data	0..1	The actual content of the attachment. The attachment may use one of a variety of formats (as indicated in the Document Control details), including PDF, structured text or XML structured using a NEHTA-defined template.
Document Control		C, S, E, Q	Document Control	1	Versioning and other document control information associated with the Referral document. These details are required for the technical exchange of the document and do not necessarily need to be displayed to the user. However, there may be value in displaying some items, e.g. date of referral.
	Document Instance Identifier	S	Identifier	1	The unique identifier of this instance of the Referral document.

Component	Item	Purpose	Type	No. of Values Allowed	Notes
	Document Set Identifier	S	Identifier	1	The unique identifier of the set of all document revisions, related to a single healthcare event, of which the Referral document is a versioned instance.
	Version Number	C, S, Q	Integer	1	Identifier of a referral document within the same document set used to version successive replacement documents. The version number of the Referral document instance.
	Document Originating System Identifier	S	Identifier	1	A unique identifier of the system used to create the Referral document.
	Business Document Type	S	Coded Text	1	The name of the Structured Document Template used to create the referral document instance – e.g. “NEHTA Core Referral”
	Business Document Type Version Number	S	Integer	1	Identifier of the version of the Structured Document Template used to create the referral document instance.
	Confidentiality Indicator	S	Coded Text	0..1	The degree to how sensitive information might be and the extent to which the information can be shared. This is currently reserved for future application and values have not been assigned to this indicator.
	DateTime Attested	C, S, Q	Date Time	1	The date/time when the Referral document was attested (or finalised, or signed off) by the document authoriser.
	Document Status	C, S, Q	Coded Text	1	The status of the document (e.g. completed and amended)
	Language	S	Coded Text	1	The human language primarily used within the document (defaulted to “en-AU”)

3 Justification Summary

The table below lists the reason for including each of the core information components in the Core GP Referral, based on the inclusion criteria defined in Section 1.1.

Data Item	Reason for Inclusion
Benefits Card Details	Provides relevant Medicare/DVA information and other benefits.
Patient's Contact	Provides contact person(s) nominated by patient, especially in case of emergency.
Referrer	Provides correct identification of the healthcare provider who initiates the referral.
Referred To	Provides correct identification of the healthcare provider individual and/or organization receiving the referral.
Referral Details	Conveys information relevant to the referral such as reason(s) for referral. This item has both clinical and administrative relevance.
Current and Past Medical History	Clinical safety requirement and critical for ensuring safe management of the patient.
Current Medications	Clinical safety requirement and critical for ensuring safe management of the patient if current medication history exists.
Allergies/Adverse Reactions	Clinical safety requirement and critical for ensuring safe management of the patient if adverse reactions information exists.
Usual GP	Provides details of the usual GP, particularly significant if the referrer was not the patient's usual GP.
Diagnostic Investigations	Clinical safety requirement and critical for ensuring safe management of the patient if any investigation results relevant to patient's condition currently exist.
Attachments	Includes relevant investigation results as attachments.
Document Control	Provides version control and document lifecycle management.

4 Component and Item Types

4.1 Component Types

The following component types are referred to in the Referral Core Information Components definition.

4.1.1 Allergies / Adverse Reaction

Describes the known allergies and/or adverse reactions for the patient and any relevant reaction details.

4.1.2 Attachment

Documents that have been attached to the Referral (either as a link or as data), because they are relevant to the ongoing care of the patient. For example, relevant pathology reports, relevant diagnostic imaging reports, referral letters, a care plan, and assessments.

4.1.3 Document Control

Holds versioning information about the document instance that belongs to the same logical document set, i.e. that are related to the same healthcare event/encounter/clinical interaction.

4.1.4 Medication Item Detail

Describes a single unique medication product. This data group is repeated for every instance of a medication item being included.

4.1.5 Participation

Refers to the individuals, organisations and IT systems operating within a defined healthcare domain, and the roles that these entities are playing within that domain.

4.1.6 Participation Organisation

Refers to an organisation operating within a defined healthcare domain, and the roles that it plays within this domain.

4.1.7 Participation Person

Refers to an individual within a defined healthcare domain, and the roles that s/he plays within this domain.

4.1.8 Section

Groups related information together and provides a way to navigate through the data items within the document.

4.2 Item Types

This section briefly describes the item types referred to in the Core Referral definition.

4.2.1 Address

An Address is a structured description of a physical or postal location, which includes the following sub-elements:

- No Fixed Address Indicator (Boolean)
- Address Line (Text)
- Suburb/Town/Locality (Codeable Text)
- State/Territory/Province (Codeable Text)
- Postcode (Codeable Text)
- Country (Codeable Text)
- Australian Delivery Point Identifier (Identifier)
- Address Purpose (CodedText)
- Address Purpose Date Range (Time Interval).

4.2.2 Any

This item type is used where the data type may vary considerably depending on the context – e.g. free text, numeric values, or data structures.

4.2.3 Boolean

A simple datatype, which has one of two values: true or false.

4.2.4 Codeable Text

Codeable Text is a flexible datatype used to hold either free text or coded text. Codeable Text includes the following sub-elements:

- Display Name (Text)
- Original Text (Text)
- Translation (Coded Text)
- Code (Text)
- Code System (UUID)
- Code System Name (Text)
- Code System Version (Text)
- Value Set (Text)
- Value Set Version (Text).

4.2.5 Coded Text

Coded Text is used to hold both a text description and code mappings. Coded Text includes the following sub-elements:

- Display Name (Text)
- Original Text (Text)
- Translation (Coded Text)
- Code (Text)
- Code System (UUID)
- Code System Name (Text)
- Code System Version (Text)

- Value Set (Text)
- Value Set Version (Text).

4.2.6 Date Time

Data Time is used to specify a single date and/or time. String representations of known dates should conform to the non-extended format within [ISO21090] – that is “YYYYMMDDHHMMSS.UUUU[+|-ZZzz]”.

4.2.7 Document Control

Versioning and other document control information associated with the Referral document. These details are required for the technical exchange of the document and do not necessarily need to be displayed to the user. However, there may be value in displaying some items – e.g. Version Number, DateTime of Referral or Document Status.

4.2.8 Electronic Communication Details

Electronic Communication Details is used to describe methods for electronically contacting a person or organisation, including telephone numbers, fax numbers, pager numbers, email addresses and URLs. Electronic Communication Details include the following sub-elements:

- Electronic Communication Medium (Coded Text)
- Electronic Communication Usage Code (Coded Text)
- Electronic Communication Details (Text).

4.2.9 Encapsulated Data

Data that is primarily intended for human interpretation or for further machine processing outside the scope of this specification. This includes unformatted or formatted written language, multimedia data, or structured information as defined by a different standard (e.g. XML-signatures).

4.2.10 Unique Identifier

A number or code issued for the purpose of identifying an entity (person, organisation or organisation sub-unit) within a healthcare context.

For further description of Entity Identifier details, please refer to the NEHTA Participation Data Specification, Version 2.0 — 30 Nov 2009 [PDS2009].

4.2.11 Integer

The mathematical datatype comprising the exact integral values [ISO11404].

4.2.12 Link

A link is a reference or pointer to an object, data or application that exists logically or is stored electronically in a computer system (e.g. URL or path).

4.2.13 Organisation Name

The name by which an organisation is known, which includes the following sub-elements:

- Organisation Name (Text)
- Department/Unit (Text)

- Organisation Name Usage (Coded Text)
- Organisation Name Usage Date Range (Time Interval).

4.2.14 Participation by Organisation

Participation by Organisation refers to an organisation operating within a defined healthcare domain, and the role that it plays within this domain. It includes the following sub-elements:

- Participation Type (Codeable Text)
- Healthcare Role (Codeable Text)
- Participation Period (TimeInterval)
- Entity Identifier (Unique Identifier)
- Address (Address)
- Electronic Communication (Electronic Communication Details)
- Organisation Name (Organisation Detail).

4.2.15 Participation by Healthcare Provider

A healthcare provider is any person who is involved in or associated with the delivery of healthcare to a patient, or caring for patient wellbeing. It includes the following sub-elements:

- Participation Type (Codeable Text)
- Healthcare Role (Codeable Text)
- Participation Period (TimeInterval)
- Entity Identifier (UniqueIdentifier)
- Address (Address)
- Electronic Communication (Electronic Communication Detail)
- Person Name (Person Name)
- Healthcare Provider Practice (Healthcare Provider Practice Detail)
- Employer Organisation Detail (Employer Organisation Detail).

4.2.16 Participation by Non-Healthcare Provider (Patient)

This data group is most often used for a subject of care (patient). It includes the following sub-elements:

- Participation Type (Codeable Text)
- Healthcare Role (Codeable Text)
- Participation Period (TimeInterval)
- Entity Identifier (UniqueIdentifier)
- Address (Address)
- Electronic Communication (Electronic Communication Detail)
- Person Name (Person Name)
- Relationship to Subject of Care (Codeable Text)
- Employment Detail (Employment Detail)
- Demographic Data (Demographic Data).

4.2.17 Participation by Non-Healthcare Provider (Person)

This data group is used where the participant is a person who is not participating in the role of a healthcare provider and is not the patient, e.g. carer, document recipient related to the subject of care (patient), recipient of a recommendation. The role of these persons is neither a healthcare provider nor a subject of care. It includes the following sub-elements:

- Participation Type (Codeable Text)
- Healthcare Role (Coded Text)
- Participation Period (TimeInterval)
- Entity Identifier (UniqueIdentifier)
- Address (Address)
- Electronic Communication (Electronic Communication Detail)
- Person Name (Person Name)
- Relationship to Subject of Care (Codeable Text)
- Employment Detail (Employment Detail).

4.2.18 Person Name

Person Name captures the name details of a person. A person may have more than one name recorded. It includes the following sub-elements:

- Name Title (Text)
- Family Name (Text)
- Given Name (Text)
- Name Suffix (Coded Text)
- Preferred Name Indicator (Boolean)
- Name Conditional Use Flag (Coded Text)
- Person Name Usage (Coded Text)
- Person Name Usage Date Range (TimeInterval)

4.2.19 Quantity

Used for recording many real world measurements and observations. This includes:

- the magnitude value
- the units
- and may also include precision.

4.2.20 Quantity Range

Two Quantity values that define the minimum and maximum values, i.e. lower and upper bounds. This is typically used for defining the valid range of values for a particular measurement or observation. Unbounded quantity ranges can be defined by not including a minimum and/or a maximum Quantity value.

4.2.21 Text

Text refers to a character string (with optional language). Unless otherwise constrained by an implementation, it can be any combination of alpha,

numeric or symbols from the Unicode character set. This is sometimes referred to as free text.

4.2.22 Time Interval

A time interval is a period of time, which may have a:

- Start DateTime
- an End Date Time
- and/or a Duration/Width.

Definitions

This section explains the specialised terminology used in this document.

Shortened Terms

This table lists abbreviations and acronyms in alphabetical order.

Term	Description
CC	Core Connectivity
CI	Clinical Information
CT	Clinical Terminology
EHR	Electronic Health Record
ICT	Information and Communication Technology
NASH	National Authentication Service for Health
SIL	Service Instance Locator
SNOMED CT	Systemised Nomenclature of Medicine, Clinical Terminology
UHI	Unique Healthcare identifiers

Glossary

This table lists specialised terminology in alphabetical order.

Term	Description
Endpoint	Where a web service connects to the network. Source: http://www.looselycoupled.com/glossary/endpoint
Interoperability	The ability of software and hardware on multiple machines from multiple vendors to communicate. Source: The Free On-line Dictionary of Computing. Denis Howe. 21 Apr. 2008. From: Dictionary.com - http://dictionary.reference.com/browse/Interoperability
Solutions Architect	The Solutions Architect is typically responsible for matching technologies to the problem being solved. Source: http://www.developer.com
Technical Architect	The technical architect is responsible for transforming the requirements into a set of architecture and design documents that can be used by the rest of the team to actually create the solution. Source: http://www.developer.com
Business Architect	A Business Architect is anyone who looks at the way work is being directed and accomplished, and then identifies, designs and oversees the implementation of improvements that are harmonious with the nature and strategy of the organisation. Source: http://www.businessarchitects.org
Development Team	The Developer writes the code for the specifications that the Development leads provide. Source: http://www.developer.com

References

At the time of publication, the document versions indicated are valid. However, as all documents listed below are subject to revision, readers are encouraged to use the most recent versions of these documents.

Package Documents

The documents listed below are part of the suite delivered in the Electronic Referrals Package.

Electronic Referrals Package Documents			
[REF]	Document Name	Publisher	Link
[ER-ES2010]	Electronic Referrals Release 1.0 - Executive Summary v0.4	NEHTA 2010	http://www.nehta.gov.au/e-communications-in-practice/ereferral Open menu: e-Referrals Package
[ER-RN2010]	Electronic Referrals Release 1.0 - Release Notification v0.1		
[ER-BRS2010]	Electronic Referrals Release 1.0 - Business Requirements Specification v0.14		
[ER-SD2010]	Electronic Referrals Release 1.0 - Solution Design v0.9		
[ER-CIC2010]	Electronic Referrals Release 1.0 - Core Information Components v0.26		

References

The documents listed below are non-package documents that have been cited in this document.

Reference Documents			
[REF]	Document Name	Publisher	Link
[ISO11404]	ISO11404:2007 Information technology – General-Purpose Datatypes (GPD)	ISO 2007	[ISO11404]
[ISO21090-2008]	Draft International Standard ISO/DIS 21090 Health Informatics - Harmonized data types for information exchange	ISO 2008	[ISO21090-2008]
[MBSB2009]	Medicare Benefits Schedule Book, Australian Government Department of Health and Ageing. July 2009 (accessed 9 July 2009). Copyright Commonwealth of Australia, reproduced by permission.	Medicare 2009	http://www.health.gov.au/internet/mbsonline/publishing.nsf/Content/A3178B4C24FCC8C2CA2575C700802D9B/\$File/200907-MBS.pdf
[PDS2009]	Participation Data Specification, Version 2.0 — 30 Nov 2009	NEHTA 2009	http://www.nehta.gov.au/connecting-australia/clinical-terminologies/clinical-information-mi Open menu at bottom of web page: 'Clinical Information Data Specification - Specifications, Context and Requirements'
[RDSCS2007]	GP and Specialist/Critical Care Referral Data Content Specifications Version 1.0 - 28/2/2007,	NEHTA 2007	http://nehta.gov.au/e-referral Open menu at bottom of web page: 'e-Referral Information Specification, Content and

Reference Documents			
			Requirements'
[XSPP2009]	XML Secured Payload Profile, Version 1.2 — 30 June 2009	NEHTA 2009	http://nehta.gov.au/secure-messaging Open menu at bottom of web page: 'Secure Messaging Technical Publications and Specifications'

Related Reading

The documents listed below may provide further information about the issues discussed in this document.

Related Documents			
[REF]	Document Name	Publisher	Link
[NEHTAWEB]	NEHTA Web Site	NEHTA	http://www.nehta.gov.au/