



Diagnostic Imaging

Data Specifications

Version 1.0 - 13/07/2007

National E-Health Transition Authority Ltd

Level 25
56 Pitt Street
Sydney, NSW, 2000
Australia.
<http://www.nehta.gov.au>

Disclaimer

NEHTA makes the information and other material ("Information") in this document available in good faith but without any representation or warranty as to its accuracy or completeness. NEHTA cannot accept any responsibility for the consequences of any use of the Information. As the Information is of a general nature only, it is up to any person using or relying on the Information to ensure that it is accurate, complete and suitable for the circumstances of its use.

Document Control

This document is maintained in electronic form. The current revision of this document is located on the NEHTA Web site and is uncontrolled in printed form. It is the responsibility of the user to verify that this copy is of the latest revision.

Copyright © 2007, NEHTA.

This document contains information which is protected by copyright. All Rights Reserved. All copies of this document must include the copyright and other information contained on this page.

Document information

Change history

Version	Date	Comments
1.0	13.07.2007	Initial public release

Acknowledgements

NEHTA would like to thank the following organisations and individuals for their contribution to these Data Specifications:

- Standards Australia;
- Royal Australian College of General Practitioners;
- Society of Hospital Pharmacists of Australia;
- Members of the Australian DataTypes Project;
- Australian Institute of Health & Welfare; and
- Ocean Informatics.

Contents page

Document information	3
Acknowledgements	4
Contents page	5
1 Introduction	8
1.1 Purpose and Scope	8
1.2 Intended Audience	8
1.3 Background	8
1.4 Document Roadmap	9
1.5 NEHTA Clinical Standards Metamodel	11
1.6 Development Overview	12
1.7 Terminology	14
1.8 Diagnostic Imaging Data Group Overview	15
1.9 Glossary of Terms	17
1.10 Use Case Documentation	17
1.11 Use Case 1: Create Request	20
1.12 Use Case 2: Amend Request (Clinician)	23
1.13 Use Case 3: Create Request (Specimen Radiography Request)	26
1.14 Use Case 4: Create Report	28
2 Specifications	32
2.1 Obligation Legend	32
2.2 NEHTA Data Specifications ICON Legend	32
Diagnostic imaging	36
Diagnostic Imaging Procedure	43
Procedure Identifier	45
Procedure Description	46
Procedure Details	48
Clinical Intervention Description	50
Imaging Modality	51
Procedure Anatomical Site	52
Anatomical Site Description	53
Laterality	54
Procedure Qualifier	55
View Aspect	57
Position	58
Contrast Medium	59
Specimen Details	60
Specimen Identifier	62
Specimen Type	63
Specimen Anatomical Site	64
Specimen Qualifier	65
DateTime Specimen Collected	66
DateTime Specimen Received	67
Preparation Instructions	68
Preparation Regimen Description	69
Medications	70
Procedure Performance Details	71
DateTime Performed	73
Procedure Substitution Details	74
Reason for Substitution	76
Requester Consulted Regarding Substitution	77
DateTime Requester Consulted	78
Procedure Method	79
Procedure Note	80
Procedure Performer Identification	81

Administered Medication	.82
Administered Medication Item	.83
Has Adverse Reaction	.85
Adverse Reaction Presence	.86
Medication Item Details	.87
Digital Imaging Details	.89
Image Identifier	.91
Non-DICOM Reference	.92
Colour Depth	.94
Image Resolution	.95
Compression Ratio	.96
Digital Image	.97
Series Identifier	.98
Study Identifier	.100
DICOM Accession Number	.101
Digital Image Reference	.102
Procedure Request	.103
Requested Procedure	.105
Clinical Reason for Request	.107
Special Requirements	.108
Procedure Location	.110
Preferred Results Delivery Mode	.111
Request Priority	.112
Request Priority Indicator	.113
Request Priority Reason	.114
Time Interval to Provide Requested Service	.115
Requester Identification	.116
Request Recipient Identification	.118
Subject of Care Identification	.120
Request Copy To Recipient Identification	.122
Consent Details	.123
Consent Status	.125
DateTime Consented	.126
Consenting Party Identification	.127
Consent Witness Identification	.129
Request Version Tracking	.131
DateTime Recorded	.134
DateTime Requested	.135
Request Status	.136
Episode Identifier	.138
Request Identifier	.140
Request Version Number	.141
Insurance Details	.142
Benefit Type	.144
Membership Number	.145
Insurer Identification	.146
Billing Policy	.148
Special RelationshipsAuthorisation	.149
Claim Number	.151
Authorising Party Identification	.152
Authorising Person Occupation	.154
Relevant Clinical Status	.155
Relevant Current Medication	.157
Relevant Adverse Reaction	.158
Relevant Alert	.160
Alert Presence	.162
Clinical Synopsis Comment	.163
Relevant Problem/Diagnosis	.164
Reference to Relevant Diagnostic Imaging Procedure	.166
Reference to Relevant Pathology Test	.167
Relevant Observation	.168
Test Name	.170
Observation Details	.171

DateTime of Observation	172
Observation Description	173
Atomic Result	174
Observation Abnormal Flag	175
Aggregate Score	176
Observation Note	177
Relevant Event	178
Relevant Event Description	180
Expected DateTime of Relevant Event	181
Relevant Event Note	182
Diagnostic Imaging Reporting	183
Report	185
Report Authoring Details	186
Report Author	187
Report Review Details	189
Reviewing Specialist	190
DateTime Report Reviewed	192
Report Issue Details	193
Report Issued By	194
DateTime Report Issued	196
Report Received Details	197
Report Primary Recipient	199
DateTime Report Received	201
Report Read Details	202
Report Read By	204
DateTime Report Read	206
Report Copy To Recipient	207
Report Version Tracking	209
Report Identifier	211
Report Version Number	212
Report Status	213
DateTime Report Created	215
Report Details	216
Result Description	218
Interpretive Note	219
Abnormal Result Indicator	220
Problem/Diagnosis Based on Procedure Result	221
Reference to Other Relevant Diagnostic Imaging Procedure	223
Acronyms	224
Index	225

1 Introduction

1.1 Purpose and Scope

The Diagnostic Imaging (DI) data group specification forms part of a suite of data specifications that NEHTA is developing for the Australian Health Informatics Community. The suite comprises specifications for a range of health topics (represented as “data groups”), which are generally agreed to be of high priority to standardise in order to achieve the benefits brought about by semantic interoperability in the Australian healthcare setting.

Diagnostic imaging is considered one of the key components of healthcare/medical services. Not only does this speciality generate significant amounts of data, the data and quality of DI services directly impact on the quality of healthcare services and outcomes. It is therefore recognised as a priority area for information structure, terminology and exchange format specifications development within the NEHTA work program.

This specification describes diagnostic imaging data elements that are required within inter-healthcare provider communications for requesting DI services and reporting on DI procedure results. It identifies data necessary for capture, communication and display. It details the metadata necessary for meaningful and contextual representation. It aims to standardise the language used to name and describe clinical concepts specific to DI procedures and reporting on those procedures, and will provide a basis for further development of context-targeted specifications that can be implemented by system designers.

While this specification defines the data groups and data elements required to support diagnostic imaging requests and reporting, it is important to note that this specification does not cover the following:

- Implementation guide describing how the data groups are intended to be implemented in electronic applications/systems such as Clinical Information/Electronic Healthcare Record Systems (CIS/EHRS), Radiology Information Systems (RIS) or Picture Archive and Communication System (PACS);
- Terminologies for diagnostic imaging procedures and reporting, their development and binding to the diagnostic imaging data elements;
- Structured document specifications for diagnostic imaging requests and reporting; and
- Electronic interchange format specifications for diagnostic imaging requests and reports.

These specifications may become targets of future NEHTA work programs. The timelines for the further development of diagnostic imaging specifications and relevant extensions to SNOMED CT will be guided by the priorities identified by the NEHTA Board, and the international priorities of the International Health Terminology Standards Development Organization.

1.2 Intended Audience

This document is intended to be read by jurisdictional ICT managers, clinicians involved in Clinical Information System specifications, software architects and developers, and implementers of Clinical Information Systems in various healthcare settings.

It is reasonably technical in nature and expects the audience to be familiar with the language of health data specification and have some familiarity with health information standards and specifications. Definitions and examples are provided to clarify relevant terminology usage and intent.

1.3 Background

There are several e-health priority areas being addressed by NEHTA specifications. One area of priority is identification of the data to be communicated and its

structure. NEHTA is addressing this through Data Specifications which detail the Data Elements their interrelationships, and their associated value domains. Data Specifications need to be independent of messaging formats. They are concerned with providing an information framework in which to achieve semantic interoperability.

Data specifications have been developed:

- Based on jurisdiction and clinician identified priorities;
- Specifically to suit the Australian model for a shared EHR;
- To define collections of related information, i.e. event summaries, data groups, data elements;
- To allow for expansion and extension as electronic systems mature;
- So they are 'human readable', (with information enhanced by the hierarchical structure);
- Incorporating clinical examples of use to enhance utility and adoption; and
- To provide a set of clinical terminologies, specific to the requirements of the Australian healthcare system.

Whilst shared EHR is referred to in these documents the implementation of the shared EHR is not dealt with here.

Diagnostic imaging (DI) is one of the critically important diagnostic services in clinical medicine and health services. Increasing population size, aging of the population and advances in imaging technologies have combined to escalate the demand on DI services. The cost of DI services is estimated to be at \$5.72 billion from 2003-2008 under the current Commonwealth Government's Memoranda of Understanding with peak professional bodies¹. The average growth in DI services of 4.92% per annum (2005-2006 Radiology MoU trend) is expected to continue. With the upward trends in DI demand and spending, the healthcare industry and professional colleges recognise the important contributions of quality use of diagnostic imaging procedures and access to digital imaging towards improvement of healthcare services quality and outcomes. Improving the efficiency and effectiveness of DI requests and service provision through optimal use of technology has received increasing attention.

The Diagnostic Imaging domain has a long history of computerisation. Computerised Tomography (CT) scans, Magnetic Resonance Imaging (MRI), various ultrasonographies are some of the well known examples. However, DI procedure requests and reporting remain largely paper-based. Advances in Picture Archiving and Communication System (PACS) and Radiology Information Systems (RIS) have facilitated further computerisation in DI request, reporting and imaging access. The DI data group is intended to complement the computerisation efforts, especially those of PACS, which are already in place within the DI domain, and to facilitate the electronic request and reporting of DI procedures performed by providing a set of standardised data structure and consistent language for use in the electronic communication environment.

It is expected that the Diagnostic Imaging data group specification, like other NEHTA standards specifications, will evolve over time, as healthcare practice and knowledge change, and as a result of feedback from actual implementations, particularly those that share clinical information between systems.

1.4 Document Roadmap

This document is one of a series of documents used for clinical communications within the Diagnostic Imaging domain as shown in the document roadmap in Figure 1 below.

1. <http://www.ranzcr.edu.au/collegroups/committees/DEC/memoranda.cfm>

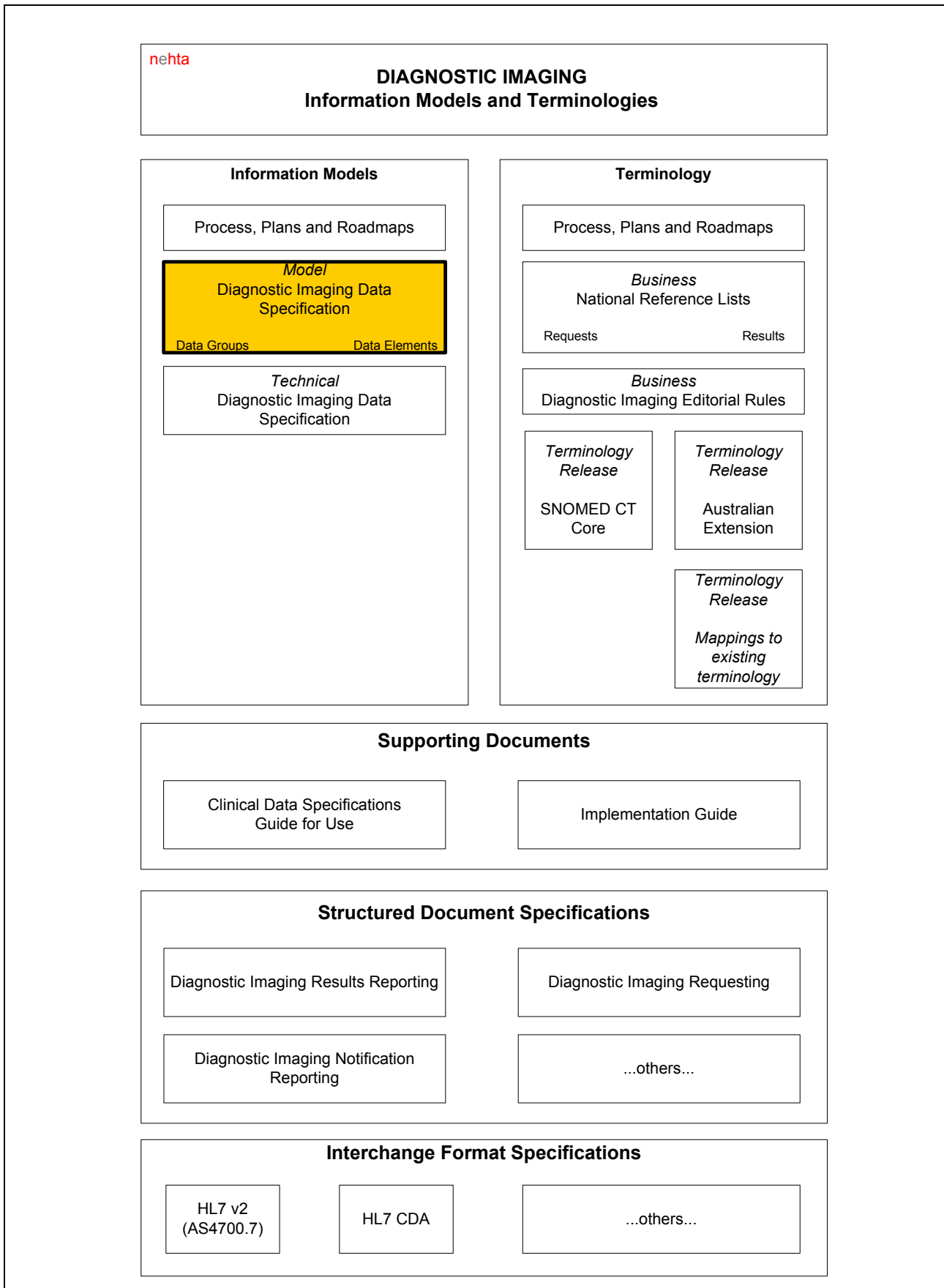


Figure 1 Diagnostic Imaging Domain Document Roadmap

1.5 NEHTA Clinical Standards Metamodel

The NEHTA Event Summary and Clinical Data Standards metamodel is used to provide a high level overview of a family of structured documents which includes Diagnostic Imaging. Within this metamodel, clinical information is organised hierarchically into five levels:

- Event Summary;
- Section;
- Data Group;
- Data Element; and
- Value Domain.

Event summary collection in a shared EHR System shows the role and structure of an event summary in a shared EHR environment.

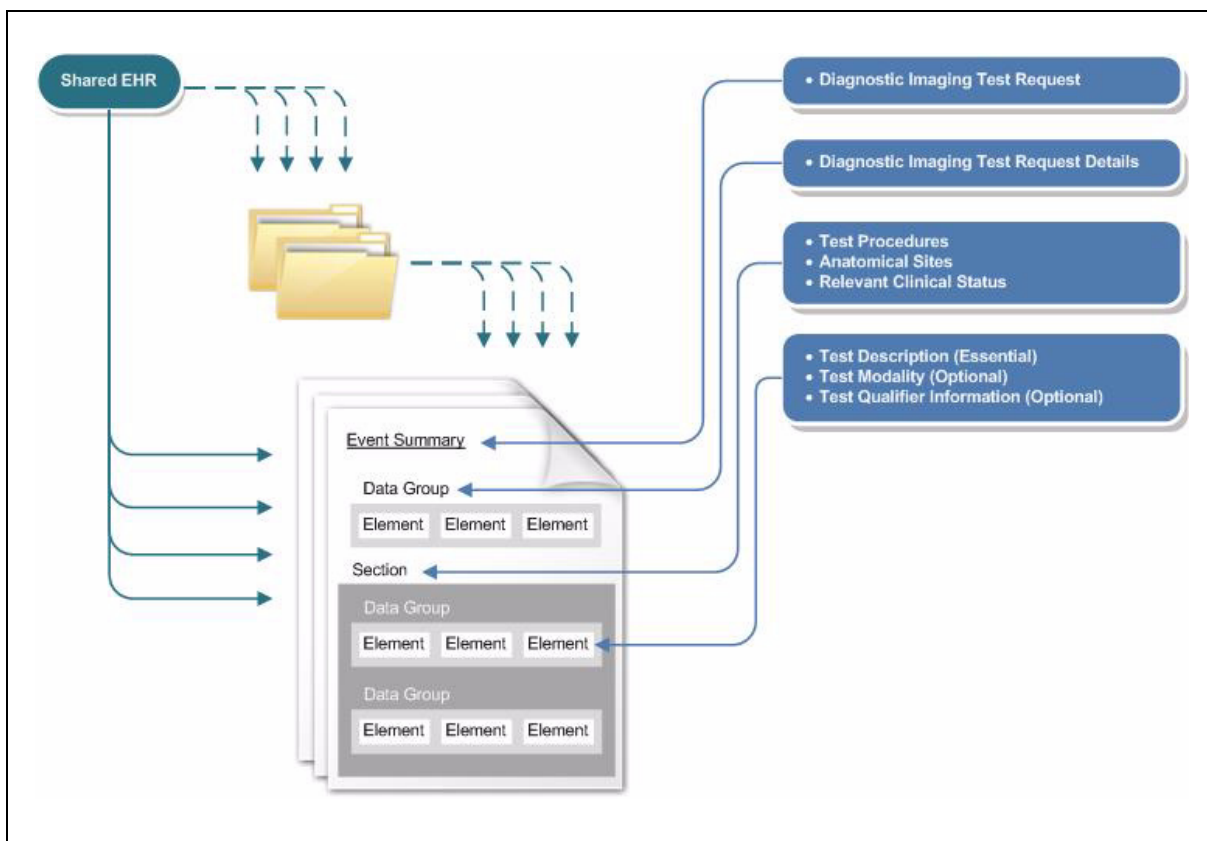


Table 1 Event summary collection in a shared EHR system

1.5.1 Event Summary

An event summary is a collection of health information pertinent to a subject of care and is derived from a healthcare event that is relevant to the ongoing care of that individual. The event summary (which is one of a family of care record summaries) is composed of one or more data groups and/or possibly data elements, which are organised into section(s) (see Section below).

Examples of commonly used care record summaries include Referral, Hospital Discharge and Diagnostic Imaging Results.

1.5.2 Section

The contents of an event summary may be organised into one or more sections. A section is an organising container. Its purpose is to organise information in the manner that is suitable for the primary purpose it is collected, and that is useful for healthcare providers. A section also provides a way to navigate through the data items within an event summary, thereby enabling more efficient querying to be made.

1.5.3 Data Group

A data group is a composite data structure (a collection of data elements or smaller data groups) for holding related items of information. Values of all the component data elements are often required to provide unambiguous meaning in a given context. A data group “organises” the data it holds. A data group can only be assigned values through the data elements that are contained within it. Examples of data groups are ADVERSE REACTION, ALERT, and MEDICATION.

1.5.4 Data Element

A data element is the smallest named unit of information in the model that can be assigned a value. Data elements are identified as being either simple or as a component.

A component data element is one that occurs as a member of a composite data structure. A data element that occurs in a segment outside the defined boundaries of a composite data structure is identified as a simple data element. The distinction between simple and component data elements is strictly a matter of context since a data element can be used in either capacity².

The permissible values for a data element are constrained by a value domain (see Value Domain).

The same data element can be reused in any number of data groups; e.g. the “DateTime:Start” data element is used in both the ADVERSE REACTION and the ALERT data groups, however a data element may refer to different value domains depending on the context in which it is used.

1.5.5 Value Domain

A value domain constrains the permissible values for a data element. The value domain may specify the type of data value that is valid for a specific data element or be more specific about the coding system the values are drawn from or subset of codes. The values may be a subset of values based on a generic data type. Value domains are reusable components and therefore, the same value domain can be referred to by different data elements in different situations.

Value domains constrain by either specifying a lower and/or upper bound on the range of permissible values or else specify a finite set of prescribed values. Such a set of prescribed values can be specified directly with the definition of the data element, or in a separate but associated specification or else by reference to one or more external vocabulary/terminology sets. Value domain examples (below) are shown below:

Data Element	Data Type	Example of Value Set	Example of Value Domain
Severity	Coded text	Code-set that describes severity of problem, diagnosis, or allergic reaction	“mild”, “disabling”, “life threatening”
Diagnosis	Coded text	Code set that describe diagnosis, problems, or issues	Valid SNOMED CT codes drawn from the disorders hierarchy

Table 2 Value domain examples

1.6 Development Overview

Under the Clinical Information Program, development of DI data groups was initiated in 2004. This involved specific consultation with members of the Royal Australian and New Zealand College of Radiologists. Some preliminary data items

2. Adapted from the Texas Department of State Health Services, *THCIC Hospital Discharge Data Collection*, THCIC 837\ Technical Specifications (version 13), November 19, 2004.

were identified as part of the process for development of the following NEHTA documents.

- Index for NEHTA Specifications;
- Priority Event Summary Descriptions;
- National Referral Data Content;
- Draft DI data group - developed for internal use; and
- Draft Pathology data group.

Other documents that have been reviewed include:

- RANZCR: *Review of Diagnostic Imaging Requests* which contained draft data descriptions for DI referrals as part of the Quality Use of Diagnostic Imaging Project;
- Standards Australia: AS4700 Implementation of Health Level Seven (HL7) Version 2.3.1, Part 7: Diagnostic imaging orders and results;
- Standards Australia: Pathology electronic Messaging – Guidelines for pathology messaging between pathology providers and health service providers – Implementation Guide. HB 262 - 2002;
- Integrating the Healthcare Enterprise, IHE Technical Framework. Volume I-4, Revision 7.0 – Final Text 2005 May 15; and
- HL7, Clinical Document Architecture (CDA), Normative Edition, May 2005.

The following section provides an overview of the consultation processes undertaken in the development of the diagnostic imaging data group.

Development of the diagnostic imaging data group followed the standard iterative cycle of “analysis-consultation-refinement”. The development processes involved the following activities:

- Extensive literature; review, diagnostic imaging request forms and report contents analysis
- Evaluation of current related work: national and international activities on diagnostic imaging data specification development (including RANZCR report on Review of Diagnostic Imaging Requests);
- Development of clinical scenarios, use cases and draft data content for diagnostic imaging request and reporting;
- Clinical reference group and stakeholder consultations (including focus group interviews, email and conference calls) on draft data content;
- Development of draft diagnostic imaging data specification;
- Validation of draft data specification using “clinical scenarios” and “use cases” walk-through;
- External consultant review, further stakeholder consultations and iterative refinement of diagnostic imaging data specification based on stakeholder feedback; and
- Confirmation of stakeholder agreement that issues raised were adequately addressed.

The following stakeholder groups were involved in providing input throughout the iterative development process:

- Jurisdictional representatives;
- Peak and professional colleges including the Royal Australia and New Zealand College of Radiologists;
- Diagnostic Imaging Service Providers;
- Clinical advisors; and
- External consultants.

1.6.1 Classification Scheme

A classification scheme is a terminological system used to classify objects. It is organised in some specified structure, limited in content by a scope, and designed for assigning objects to concepts defined within it. Concepts are usually assigned to an object by linking the terms representing those concepts in the terminological

system to the object. This process is called classification, and the terms assigned through classification are used for retrieval. In general, any terminological system is a classification scheme if its intent is for classifying objects³.

A classification scheme is used to encompass terminologies and vocabularies used for various uses such as direct clinical use and statistical analysis. Classification schemes are referred to in NEHTA's data specifications where they exist externally and are required in value domains. Often these classification schemes are underpinned by a set of codes, where each code maps to one or more entries in the classification scheme. Classification schemes are sometimes referred to as codesets.

A value domain may consist of permissible values sourced from zero or more existing, external classification schemes, depending upon the completeness and sufficiency of those classification schemes. Values that are not available in one classification scheme may be obtained from other classification schemes, or depending upon the context and/or local system requirements, a preferred classification scheme may be used from a selection of valid classification schemes for that value domain.

1.7 Terminology

The Medicare Benefit Schedule⁴ (MBS) contains a full set of "orderable" diagnostic imaging test item names. These "test items" combine the name of the test, the modality, the anatomical site, test method, e.g. "M-Mode and 2 dimensional real time echocardiographic examination of the heart from at least 2 acoustic windows ..."; "Computerised tomography scan of soft tissues of neck, including larynx, upper oesophagus and salivary glands without intravenous contrast...". Each "test item" is associated with an item number, which is used for reimbursement claims. However, these test item names are not normally used as standard names for either requests or reporting. In addition, the MBS Diagnostic Imaging test items do not cover all diagnostic imaging procedures that are requested in hospital and community care settings. If decision support is to be used, e.g. in assessing the level of appropriateness in a DI procedure request, then a comprehensive list of standardized diagnostic imaging procedure names that cover both the MBS and non MBS items should be developed and used.

NEHTA is defining a national approach to clinical terminology. An interim licence with the College of American Pathology (CAP) for use of SNOMED CT® within Australia was in place from 2006. The International Health Terminology Standards Development Organisation (IHTSDO) was formed in April 2007 and Australia is one of the foundation member countries. New national SNOMED CT licence arrangements are now in place, managed by NEHTA.

Although SNOMED CT is a comprehensive clinical reference terminology it is recognised that this does not provide a total solution and will need to be supplemented by local extensions. NEHTA is therefore establishing a National Terminology Service to manage Australian extensions to SNOMED CT. Future revisions to the SNOMED CT core, or to Australian extensions may incorporate those components of the RSNA RadLex lexicon or other terms required to support this specification which are not currently within SNOMED CT.

NEHTA plans to work with Jurisdictions, professional bodies, e.g. the Royal Australia and New Zealand College of Radiologists, and diagnostic imaging service providers to analyse and develop an appropriate National Reference List for diagnostic imaging procedure items. The reference list is likely to cover terms for different aspects of the procedure item including procedure name, modality, view, position and anatomical site. The Diagnostic Imaging data group also incorporates other data groups such as "Specimen Details" "Administered Medications", etc. It is expected that terms from the Diagnostic Imaging and other Clinical Terminology Reference Lists (e.g. Medicine, Problem/Diagnosis) published by NEHTA will be used in data elements of these data groups. As mentioned in Section 1.1, the timelines for the further development of relevant extensions to SNOMED CT will be guided by the priorities identified by the NEHTA Board, and the international

3. As defined by ISO/IEC 11179.

4. Schedule of diagnostic imaging test item – MBS November 2007, p.521-597.

priorities of the International Health Terminology Standards Development Organization.

1.8 Diagnostic Imaging Data Group Overview

The focal class of the Diagnostic Imaging Data Group is the "Diagnostic Imaging Procedure" data which is a composite data group that describes:

- The diagnostic imaging modality (e.g. plain radiography/x-ray, computerized tomography, magnetic resonance imaging, molecular imaging, ultrasonography, etc.);
- The anatomical site or specimen for the procedure;
- Qualifier information (e.g. view aspect, position, use of contrast); and
- Preparation requirements.

In the clinical context, the DI Procedure data group is only meaningful when it is used in requesting a procedure, in the documentation of the performance of a requested procedure, or in the reporting of a performed procedure. As such, the Diagnostic Imaging Data Group contained in this specification includes all relevant data groups and elements required to support the request, documentation and reporting of performed DI procedures.

The UML diagram in Figure 2 below represents the relationships between a collection of data group and data elements to be used to support diagnostic imaging DI Procedure request and reporting in clinical communications.

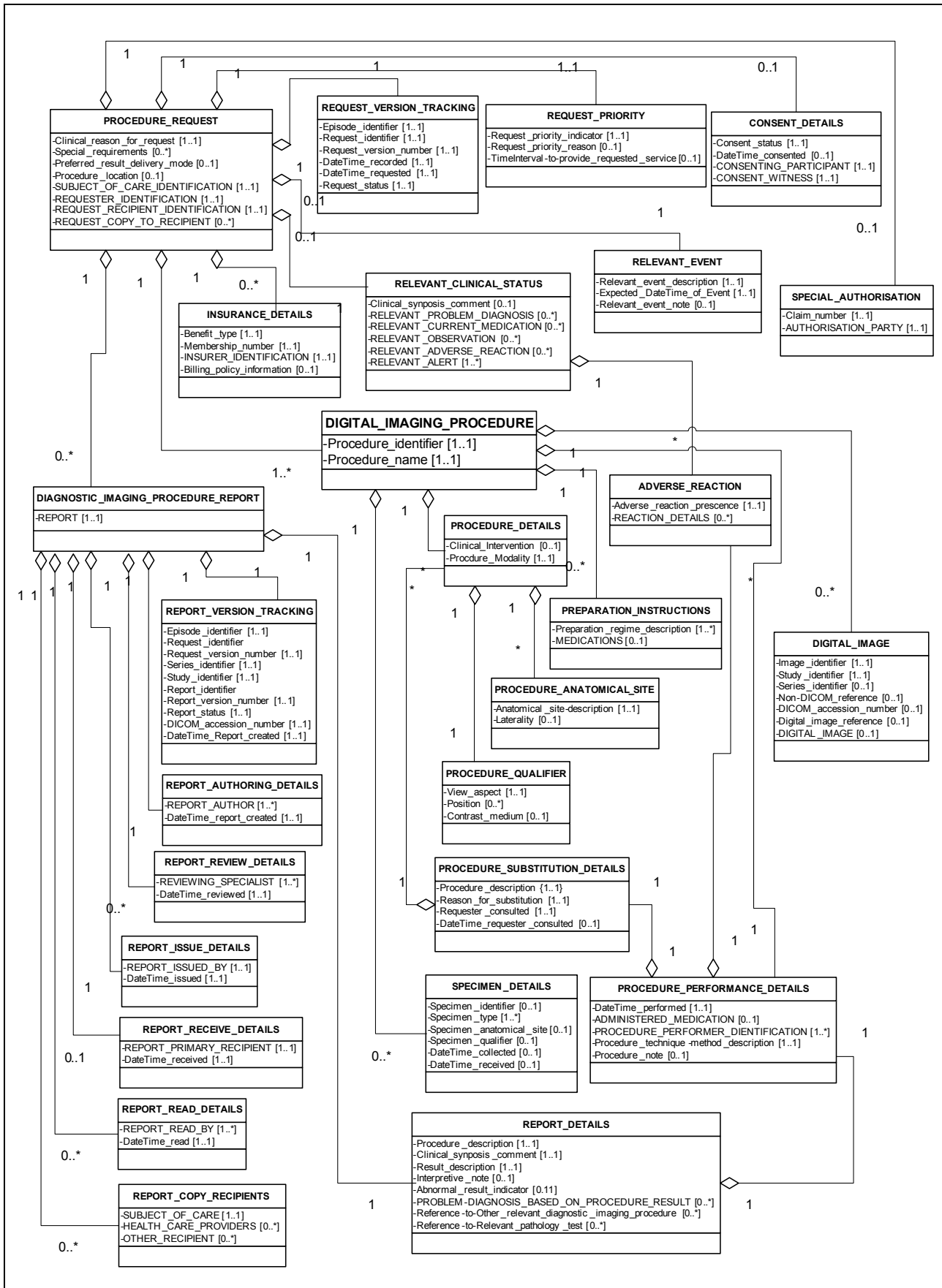


Figure 2 Diagnostic Imaging Data Group UML Class Diagram

1.9 Glossary of Terms

Term/ Acronym	Brief Description
CDA	Clinical Document Architecture – a standardised structured document exchange format based on the HL7 Reference Information Model.
Diagnostic imaging	Imaging or production of images for use in the rendering of diagnostic imaging services (Source: Medicare Benefit Schedule Book, Nov. 2006, p.523). The use of x-rays, gamma rays, high-frequency sound waves, and magnetic fields to produce images of organs and other internal structures of the body. In diagnostic imaging the purpose is to detect and diagnose disease. In interventional imaging, the imaging procedures are combined with other techniques to treat certain diseases and abnormalities.
Diagnostic imaging modality	Methods and technology (especially the energy source/type) used in producing images of body organs and other internal structures of the body. Imaging modality examples include: plain radiography (plain x-ray), positron emission tomography/ computed tomography (PET), single photon emission computed tomography (SPECT), ultrasonography, Magnetic Resonance Imaging (MRI).
MBS	Medical Benefits Schedule.
PACS	Picture Archive and Communication System.
RIS	Radiology Information System.
SNOMED CT	The Systematized Nomenclature of (Human and Veterinary) Medicine – Clinical Terminology.

Table 3 Glossary of terms

1.10 Use Case Documentation

1.10.1 Use Case Overview

A number of use cases, supported by relevant clinical scenarios, have been developed to illustrate the interactions between the different human and information system ACTORS during typical diagnostic imaging episodes. They provide examples of the type of diagnostic imaging data that are generated and exchanged during these episodes. They also provide illustrations on how the diagnostic imaging data groups and elements are used. The following use cases are included:

- Create request (for procedure on subject of care);
- Amend request (clinician);
- Create request (Specimen radiography request);
- Create report;
- Amend report;
- Review report;
- Authorise release of report; and
- Read report.

The following definitions and actors are applicable to these use cases.

1.10.2 Definitions

Property Name	Brief Description
Brief description	A brief description of the primary goal, role and purpose of the use case.

Pre-Condition	A pre-condition of a use case is a state that must be present prior to a use case being performed.
Trigger	Trigger events are the events which result in the use case being initiated and are distinctly separate from the pre-conditions.
Flow of Events	A stepped granular description of what occurs during the use case (not how specific problems are solved by the system). The description should be understandable by the business user or customer. Where the flow of events becomes cluttered due to complex behaviours, sub-flows can be used to improve clarity and manage the complexity.
Alternate flow of events	An alternate list of steps which may occur in a use case based on a decision point or transaction that may occur. Alternate flows of the use case may be used when the level of granularity required does not warrant separation of the decision points into separate use cases.
Exception	An exception is an event that may occur which will prevent the use case from executing completely. The number and level of detail specified in handling exception points is determined by the level of detail required to be contained in the use case.
Policy	A policy is a special requirement or constraint on the use case. Examples of policy include legal and regulatory requirements, application standards, and quality attributes of the system to be built including usability, reliability, performance or supportability requirements.
Post-Condition	A post-condition of a use case is a list of possible states the system can be in immediately after a use case has finished.
Extension Points	A list of locations within the flow of events of the use case at which additional behaviour can be inserted using the extend relationship.
Relationship	The relationships, such as communicates-associations, include-, generalisation-, and extend-relationships in which the use case participates.
Notes	Any other relevant notes, documents or files which add value to the understanding of the use case.

1.10.3 Use Case Actors

1.10.3.1 Clinician

Description	An individual clinical care provider providing care to an Individual/subject of care.
Aliases	Specialist, Consultant, Registrar, General Practitioner (GP), Radiologist.
Inherits	
Actor Type	Person, Primary.

1.10.3.2 Requester

Description	A Clinician who has requested a diagnostic imaging service for an individual, results of which will be used in the clinical care of the individual.
Aliases	Requesting doctor, Requesting clinician.
Inherits	Clinician.
Actor Type	Person, Primary.

1.10.3.3 **Report Author**

Description	A Clinician who reports on the result of a diagnostic imaging procedure performed on a subject of care.
Aliases	Reporting radiologist.
Inherits	Clinician.
Actor Type	Person, Primary.

1.10.3.4 **Report Reviewer**

Description	A Clinician who reviews the diagnostic imaging report against images/results produced by a diagnostic imaging procedure performed on a subject of care.
Aliases	Reviewing radiologist.
Inherits	Clinician.
Actor Type	Person, Primary.

1.10.3.5 **Report Release Authoriser**

Description	A Clinician who authorises the release of a diagnostic imaging report produced after a diagnostic imaging procedure performed on a subject of care.
Aliases	Authorising radiologist.
Inherits	Clinician.
Actor Type	Person, Primary.

1.10.3.6 **Clinical Information System**

Description	The information system used by the clinician to manage the clinical information required to support the clinical care of the subject of care. This system should support the request of diagnostic imaging procedure (e.g. through DI Procedure Request Application) and rendering of the diagnostic images and reports produced from the performance of the requested procedure(s).
Aliases	GP Desktop system, Practice EHR System, Hospital Clinical Information System.
Inherits	None.
Actor Type	System, Primary.

1.10.3.7 **Diagnostic Imaging Information System**

Description	The information system used by diagnostic imaging service providers to support the provision of diagnostic imaging services.
Aliases	Includes Radiology Information System and Picture Archive and Communication System.
Inherits	None.
Actor Type	System, Primary.

1.11 Use Case 1: Create Request

Use Case Identifier	UC-DIP-1
Brief Description	Information from a CIS is used, in conjunction with Terminology, by the diagnostic imaging procedure request application to populate elements from the Diagnostic Imaging data group to create one or more requests for Diagnostic Imaging procedures.
Pre-Condition(s)	The Diagnostic Imaging Procedure Request application (of CIS) is designed to place diagnostic imaging procedure requests and create electronic communication event(s) based on the Structured Document Specification for diagnostic imaging procedure request, using existing patient demographic data and clinical data (linked to terminology) to populate data elements from the Diagnostic Imaging data group.
Trigger(s)	A request is placed within the Diagnostic Imaging Procedure Request application and requires information to be transferred to a Diagnostic Imaging Service Information System (DIS).
Flow of Events	The Requester treating an individual decides to request one or more diagnostic imaging procedure(s). The Requester uses the Diagnostic Imaging Procedure Request application to initiate the request(s). The Diagnostic Imaging Procedure Request application creates the electronic communication event(s) detailing the information and transmits it to the DIS for processing.
Alternative flow of Events	A Request may be generated on paper.
Exception(s)	Requester may abort a request; or request for non diagnostic imaging procedures.
Policy/Policies	A request for Diagnostic Imaging Procedure must meet Health Insurance Commission Policy Standards where necessary, e.g. when procedure requested is an MBS item.
Post-Condition(s)	Diagnostic imaging procedure request created and ready for transfer to DIS.
Extension Point(s)	Amend request (clinician).
Relationship(s)	none.
Note(s)	none.

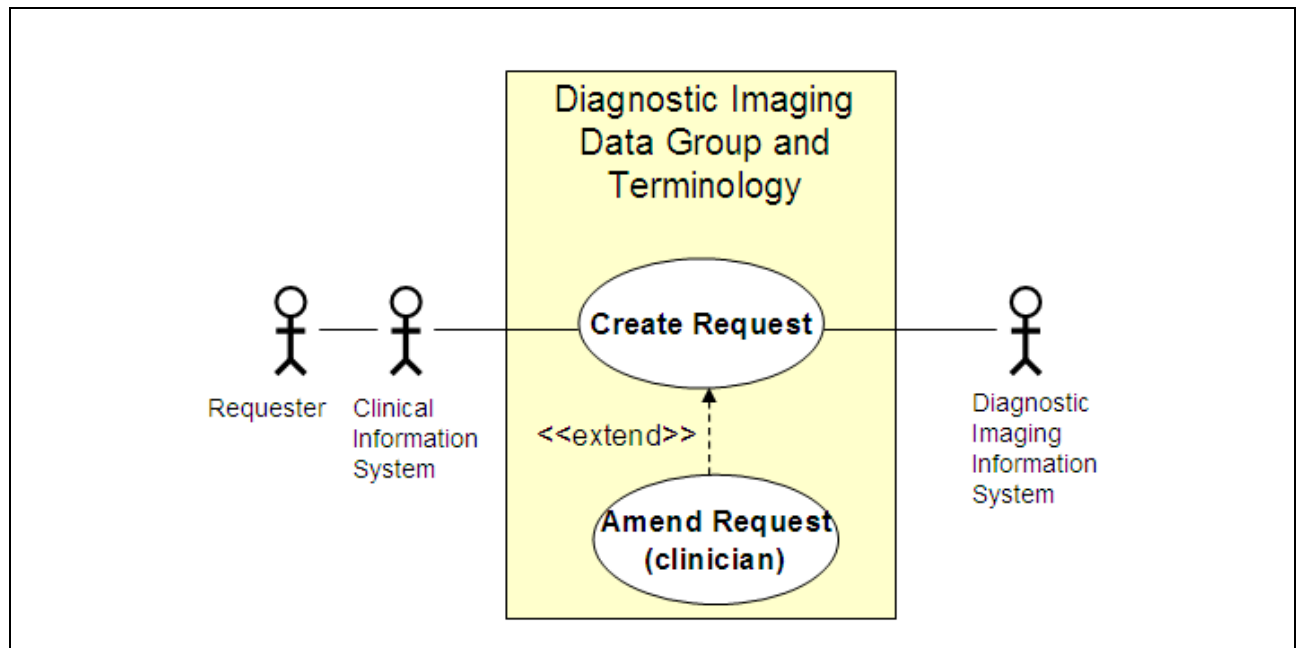


Figure 3 Use Case(s): Create Request; Amend Request (clinician)

1.11.1 Scenarios and Examples

Date: 28 March 2007

An emergency physician was assigned to attend a 9-year old boy who presented to the Emergency Department with blunt head trauma. He was knocked off his bike by a car while he was riding on the street in front of his home. The patient sustained a 5cm deep laceration on the right temporo-parietal region of the skull. The patient's mother was uncertain whether he had suffered any loss of consciousness. Initial neurological examination did not reveal any neurological

deficit or alteration in consciousness level. At 1:28 pm (13:28) the attending emergency physician requested an x-ray examination of the skull.

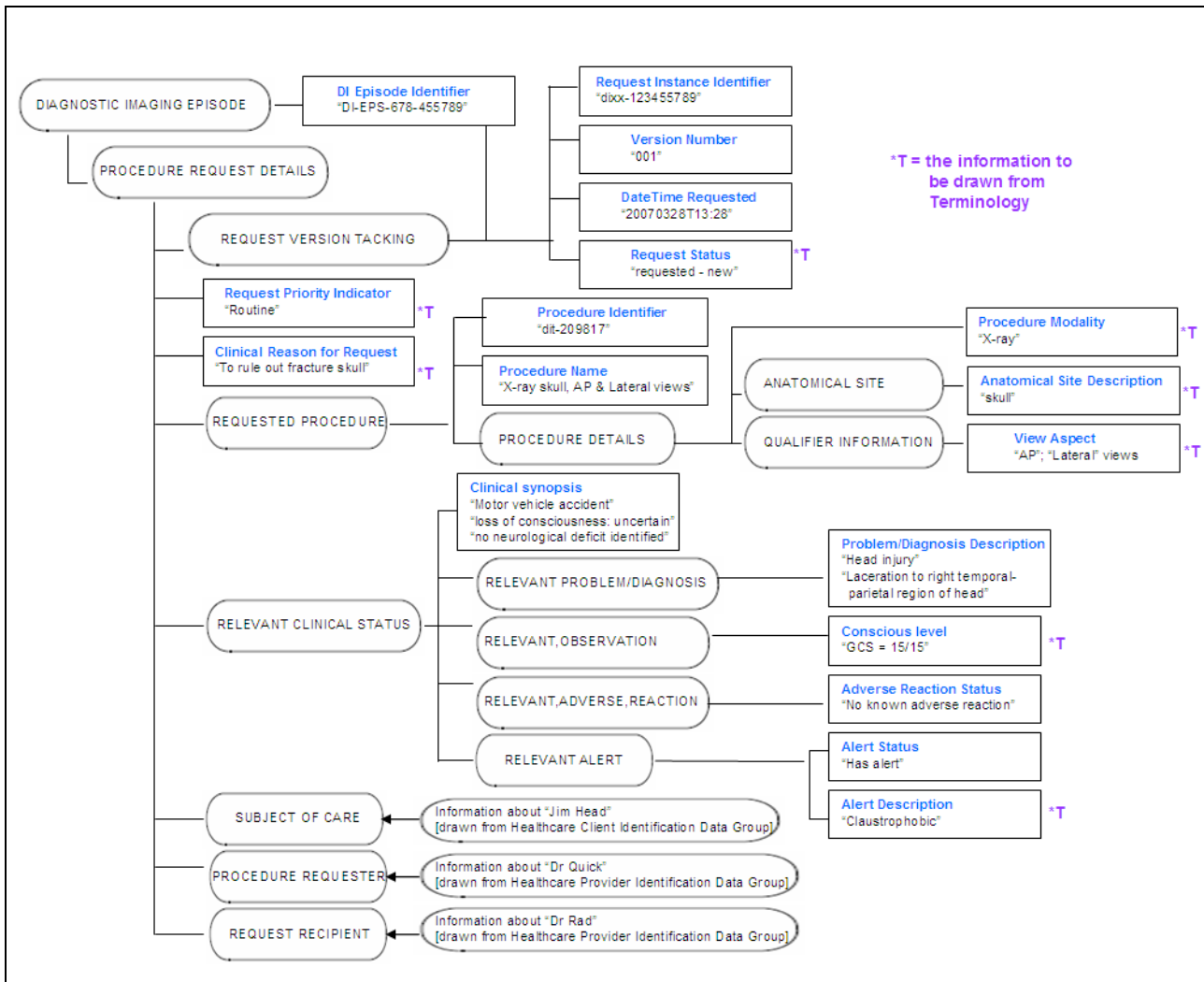


Figure 4 Diagnostic Imaging Data Group – Example of use in DI procedure request

1.12 Use Case 2: Amend Request (Clinician)

Use Case Identifier	UC-DIP-2
Brief Description	Information from a CIS is used, in conjunction with Terminology, by the diagnostic imaging procedure request application to populate elements from the Diagnostic Imaging data group to amend one or more requests for Diagnostic Imaging Procedures.
Pre-Condition(s)	The Diagnostic Imaging Procedure Request application is designed to place diagnostic imaging procedure requests and create electronic communication event(s) based on the Structured Document Specification for diagnostic imaging procedure request, using existing patient demographic data and clinical data (linked to terminology) to populate data elements from the Diagnostic Imaging data group.
Trigger(s)	Changes to an existing Request made within the Diagnostic Imaging Procedure Request application and requires new information to be transmitted to the Diagnostic Imaging Service Information System.
Flow of Events	The Requester treating an individual decides to amend a request of one or more diagnostic imaging procedure(s). The Requester uses the Diagnostic Imaging Test Request application to amend an existing Diagnostic Imaging Procedure request. The Diagnostic Imaging Test Request application generates an electronic communication event detailing the information and transmits it to the Diagnostic Imaging Service Information System for processing.
Alternative flow of Events	An amended Request may be generated on paper.
Exception(s)	Requester may abort the request amendment.
Policy/Policies	A request for Diagnostic Imaging Procedure must meet Health Insurance Commission Policy Standards where necessary, e.g. when procedure requested is an MBS item.
Post-Condition(s)	An amended Diagnostic Imaging procedure request is generated and ready for transfer to Diagnostic Imaging Information System.
Extension Point(s)	none.
Relationship(s)	none.
Note(s)	none.

1.12.1 Use Case Diagram

See Figure 3 .

1.12.2 Scenarios and Examples

Date: 28 March 2007

At 3:50 pm (15:50) Dr. the attending emergency physician was informed by the patient's nurse that the patient's Glasgow Coma Scale score had declined for two successive hours and is now 11/15. His left pupil was slightly less reactive to light. The attending physician performed another detailed neurological examination on the patient and decided to amend the diagnostic imaging procedure requested.

The attending physician used the Diagnostic Imaging Procedure Request application in the Emergency Department's Clinical Information System to amend the previous Diagnostic Imaging procedure request (ID = dixx-123456789). The application issued a cancel request on Request Identifier = dixx-123456789. A new procedure request of "CT Scan of Head" was processed.

Information stored within the Emergency Department Clinical Information System together with terminology (where appropriate) would be used to populate the diagnostic imaging data group as showed in Figure 5 (for cancellation) and Figure 6 (for a new request).

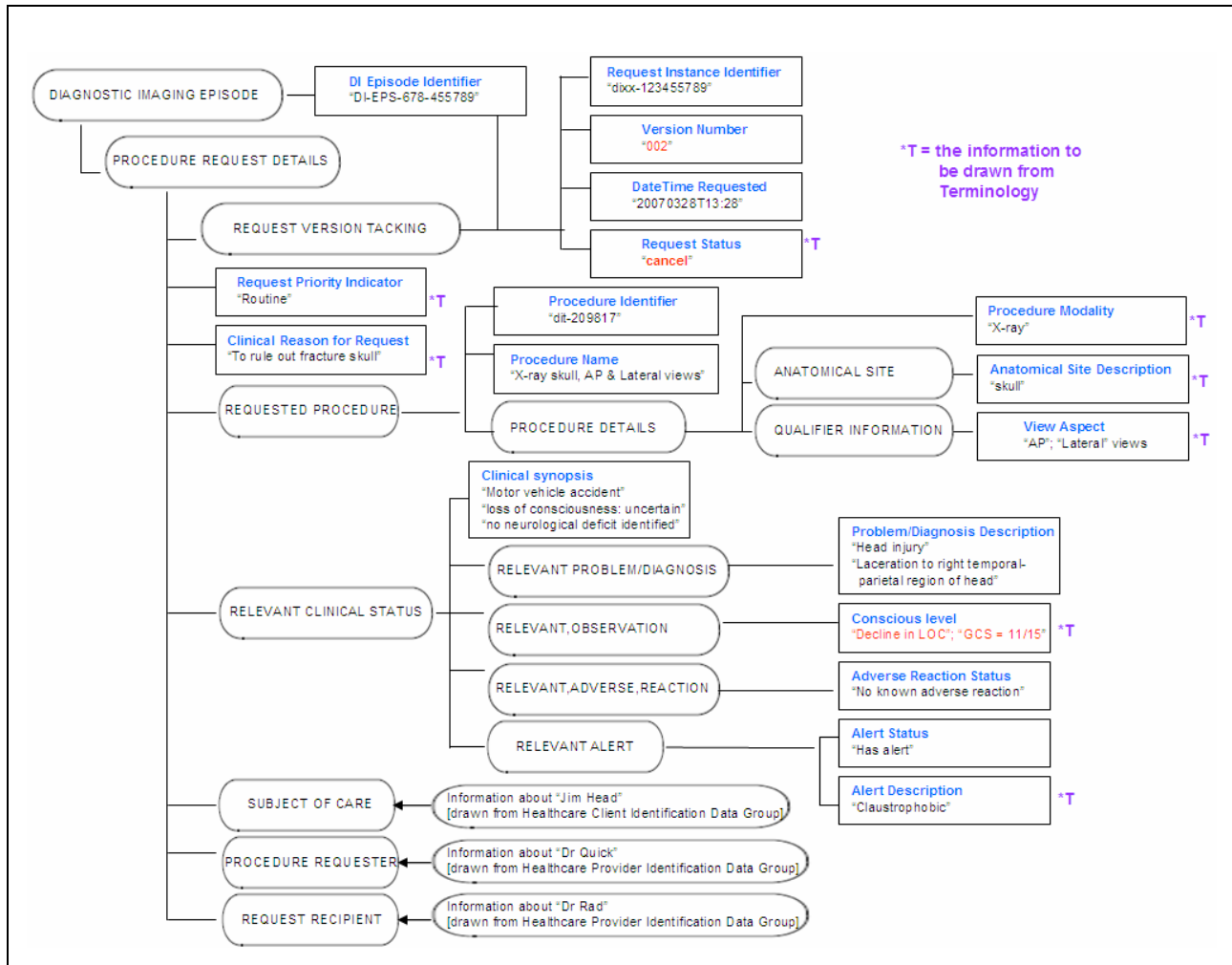


Figure 5 Diagnostic Imaging Data Group – Example of use in DI Procedure cancellation

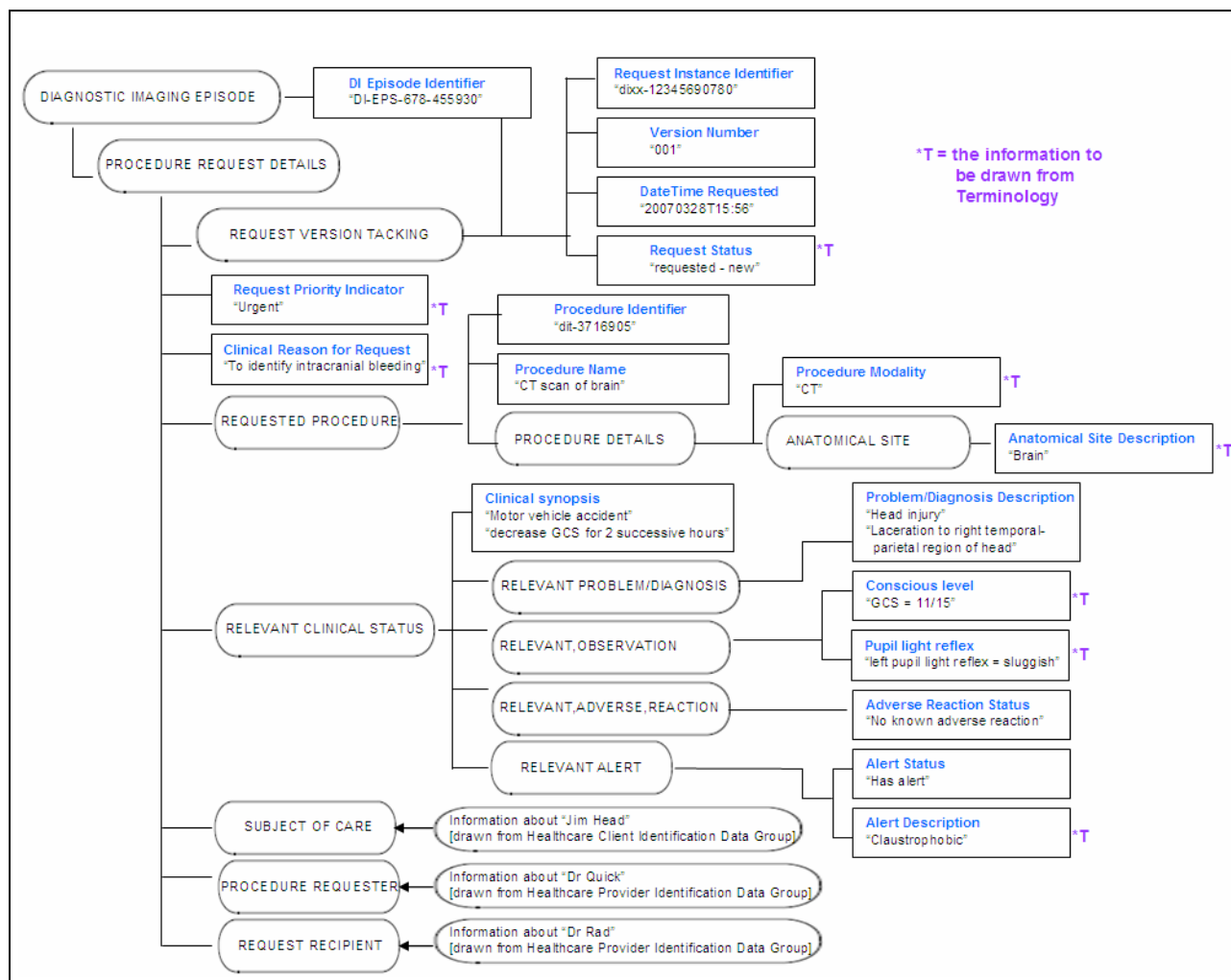


Figure 6 Diagnostic Imaging Data Group – Example of use in DI Procedure request (replacing x-ray skull)

Should any modification to this request (for example, contrast medium required) be later considered to be necessary (e.g. by the radiologist), further amendment of the procedure request may be made. If such change is required, then requested procedure amendment processes will be activated similar to what has been described. Changes to the data element values would include:

- "Version Number" value = 002;
- "Request Status" value = "replace"; and
- "Contrast" value = "IV contrast".

If the radiologist considers a different procedure (e.g. MRI) is required, the requested procedure is then substituted with a new procedure (MRI scan of brain). The procedure substitution may be done in consultation with the requesting doctor. The "PROCEDURE SUBSTITUTION DETAILS" data group will be used if this clinical scenario eventuates.

1.13 Use Case 3: Create Request (Specimen Radiography Request)

Use Case Identifier	UC-DIP-3.
Brief Description	Information from a CIS is used, in conjunction with terminology, by the diagnostic imaging procedure request application to populate elements from the Diagnostic Imaging data group to create one or more requests for Diagnostic Imaging procedures on tissue specimen(s) surgically removed from Subject of Care.
Pre-Condition(s)	The Diagnostic Imaging Procedure Request application (of CIS) is designed to place diagnostic imaging procedure requests and create electronic communication event(s) based on the Structured Document Specification for diagnostic imaging procedure request, using existing patient demographic data and clinical data (linked to terminology) to populate data elements from the Diagnostic Imaging data group. This includes the use of "Specimen Details" data group from the "Pathology" data group.
Trigger(s)	A request is placed within the Diagnostic Imaging Procedure Request application and requires information to be transferred to a Diagnostic Imaging Service Information System (DIS).
Flow of Events	The Requester treating an individual decides to request one or more diagnostic imaging procedure(s). The Requester uses the Diagnostic Imaging Procedure Request application to initiate the request(s). The Diagnostic Imaging Procedure Request application creates the electronic communication event(s) detailing the information and transmits it to the DIS for processing.
Alternative flow of Events	A Request may be generated on paper.
Exception(s)	Requester may abort a request; or request for non diagnostic imaging procedures.
Policy/Policies	A request for Diagnostic Imaging Procedure must meet Health Insurance Commission Policy Standards where necessary, e.g. when procedure requested is an MBS item.
Post-Condition(s)	Diagnostic imaging procedure request created and ready for transfer to DIS.
Extension Point(s)	Amend request (clinician).
Relationship(s)	none.
Note(s)	none.

1.13.1 Use Case Diagram

See Figure 3 .

1.13.2 Scenarios and Examples

Date: 18 March 2007

A 54 year old female patient had discovered an irregular lump in her left breast 3 weeks ago leading to positive mammograph findings. A senior surgeon admitted the patient into the local hospital for surgical removal of the breast mass. The breast lesion was localised by insertion of thin needles and fine wires under ultrasonographic guide immediately before the operation. The breast mass was then surgically removed by the surgeon. A core of tissue was excised around and along the wire to include the lesion and a margin. The removed breast tissue specimen was then sent for specimen radiography. The specimen radiographic images were compared with the pre-operative mammography images to be certain that the lesion of concern was excised with a clear margin of healthy tissue.

Note – Sometimes the specimen may be prepared by the pathologist. The specimen may be sliced at 3-5 mm intervals and radiography of the sliced specimen obtained to assist the pathologist in correct identification of the lesion. In such cases, the pathology department may supply additional information including “Specimen Identifier” and “Specimen qualifier” (e.g. size and weight) values.

Other examples of diagnostic imaging procedures undertaken on a specimen include tissue specimen radiography for lymph node detection.

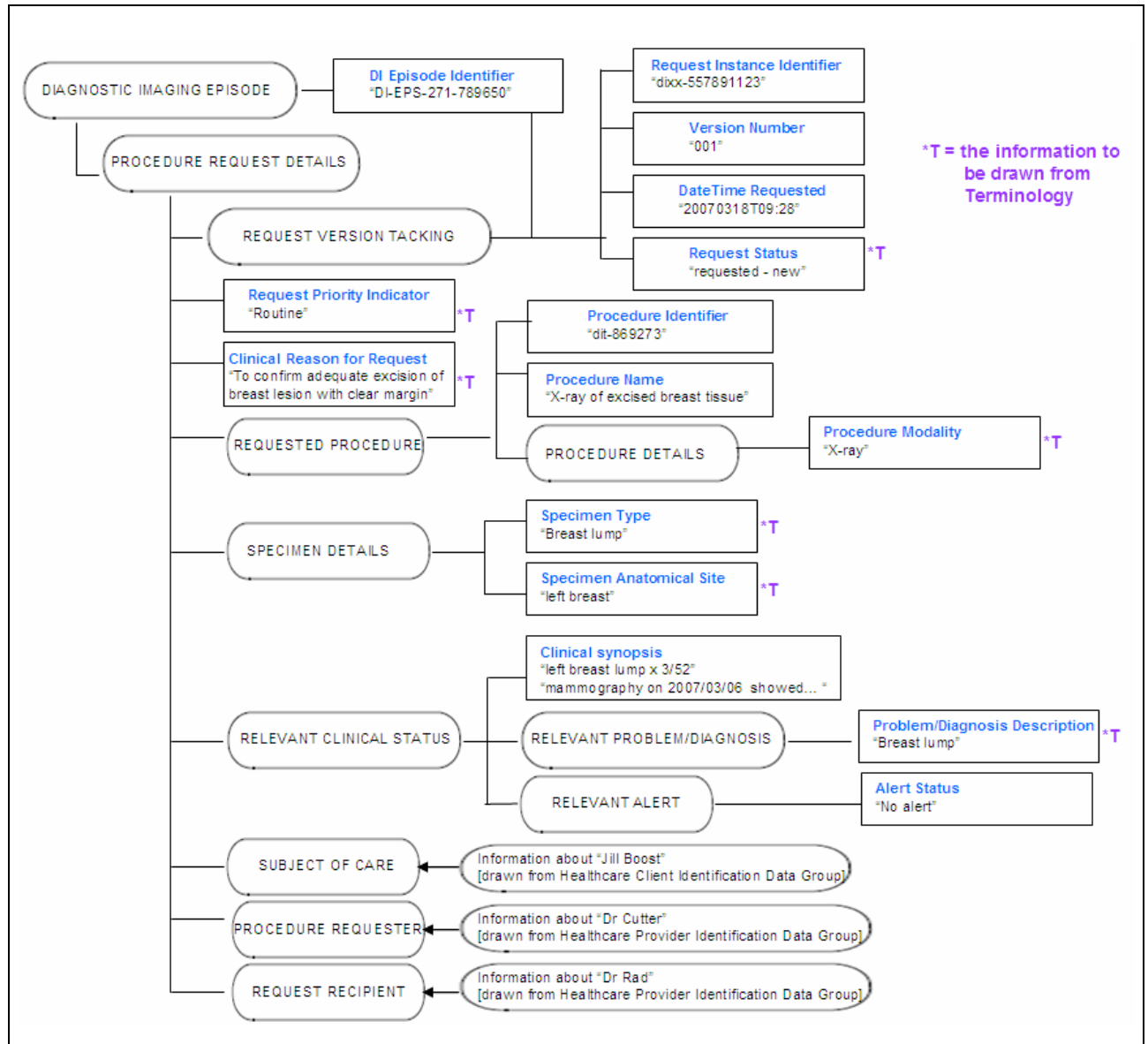


Figure 7 Diagnostic Imaging Data Group – Example of use in Request for DI procedure on tissue specimen

1.14 Use Case 4: Create Report

Use Case Identifier	UC-DIP-4.
Brief Description	Information from a Diagnostic Imaging Service Information System (DIS) is used, in conjunction with terminology to populate elements from the Diagnostic Imaging data group to create a diagnostic imaging procedure report.
Pre-Condition(s)	The Diagnostic Imaging Service Information System (DIS) has functionality to generate information for DI procedure reports based on the Structured Document Specification for diagnostic imaging procedure report, using data (linked to terminology) to populate data elements from the Diagnostic Imaging data group.
Trigger(s)	A notification system may be built into the Diagnostic Imaging Service Information System (DIS) which notifies reporting and reviewing clinicians about the availability of procedure results (i.e. diagnostic images) for reporting and for reviewing. Report details are entered into the Diagnostic Imaging Service Information System (DIS) by the reporting diagnostic imaging result reporting provider. In some cases the authored report needs to be reviewed by a senior clinician or expert. The DIS has built-in functionality to support the review processes. The final report is authorised by either the reporting or the review clinician for release. The information is then transmitted to a Clinical Information System.
Flow of Events	Diagnostic imaging reports are stored within the Diagnostic Imaging Service Information System (DIS). The DIS generates an electronic communication event which transfers the report information to the CIS.
Alternative flow of Events	A Report may be generated on paper.
Exception(s)	Report creation may be aborted by reporting clinician at any point after initiation of report creation processes.
Policy/Policies	none
Post-Condition(s)	Diagnostic imaging procedure report completed and ready (after authorisation) for transfer to Clinical Information System.
Extension Point(s)	Review and amend report (Figure 9); Approve and issue report (Figure 10); Receive report (Figure 11); and Notify report read (Figure 12).
Relationship(s)	none.
Note(s)	none.

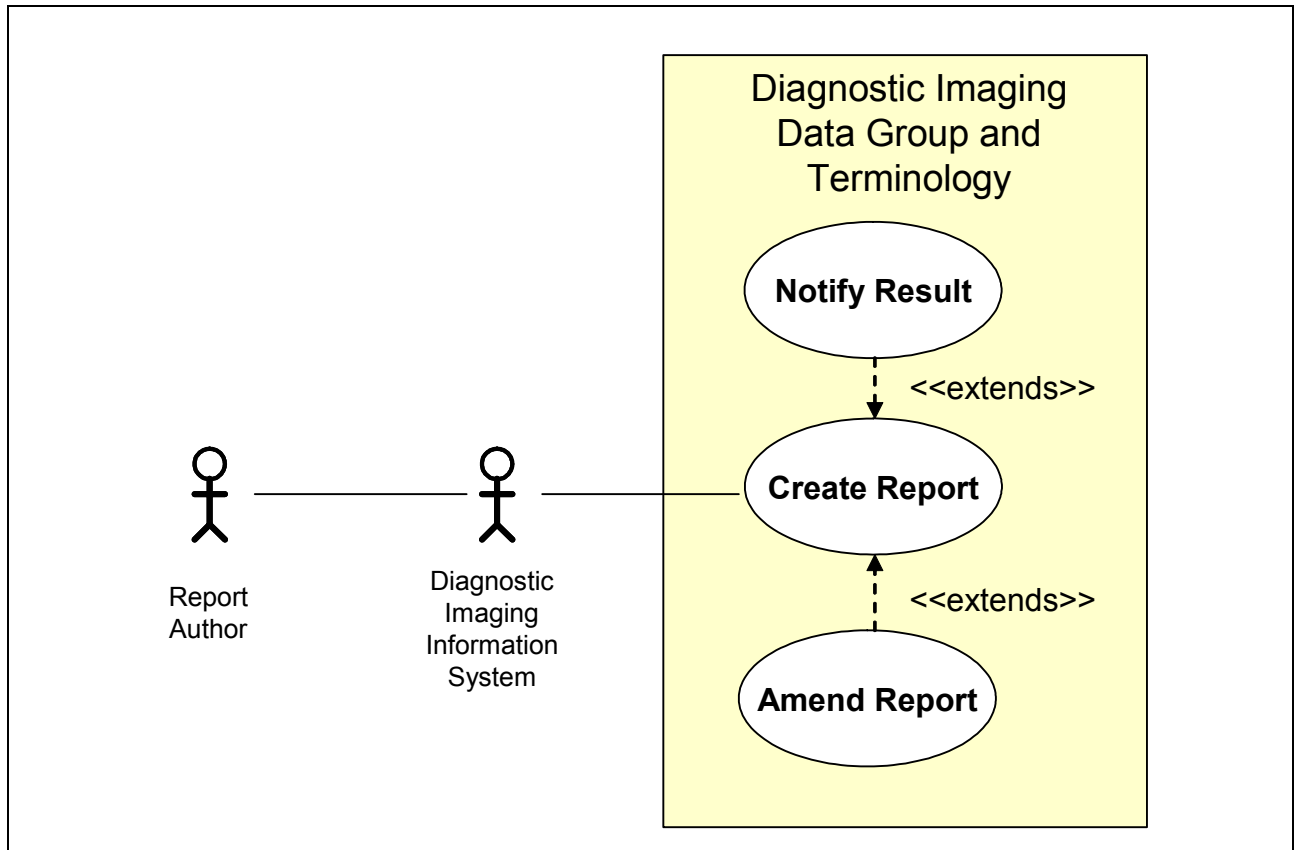


Figure 8 Use Case(s): Create Report; Amend Report

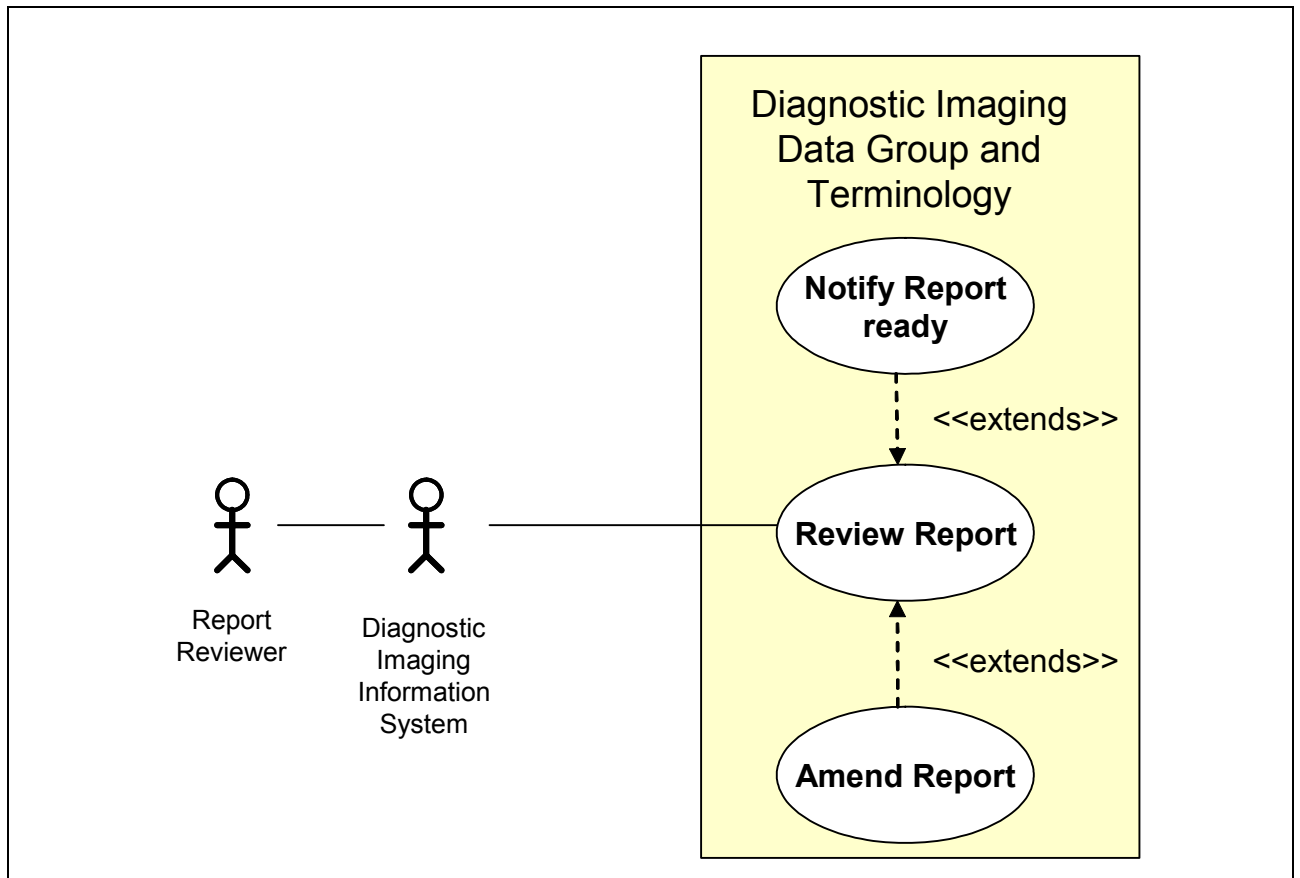


Figure 9 Use Cases: Review Report

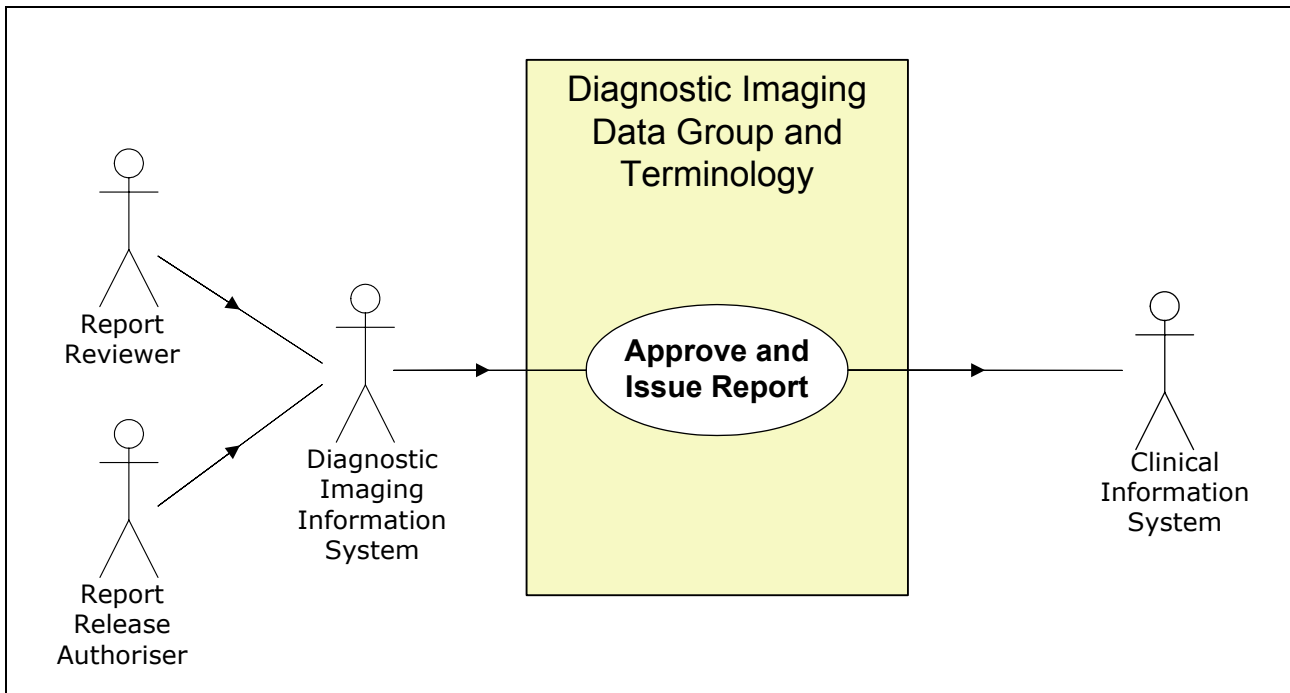


Figure 10 Use Cases: Approve Report; Issue Report

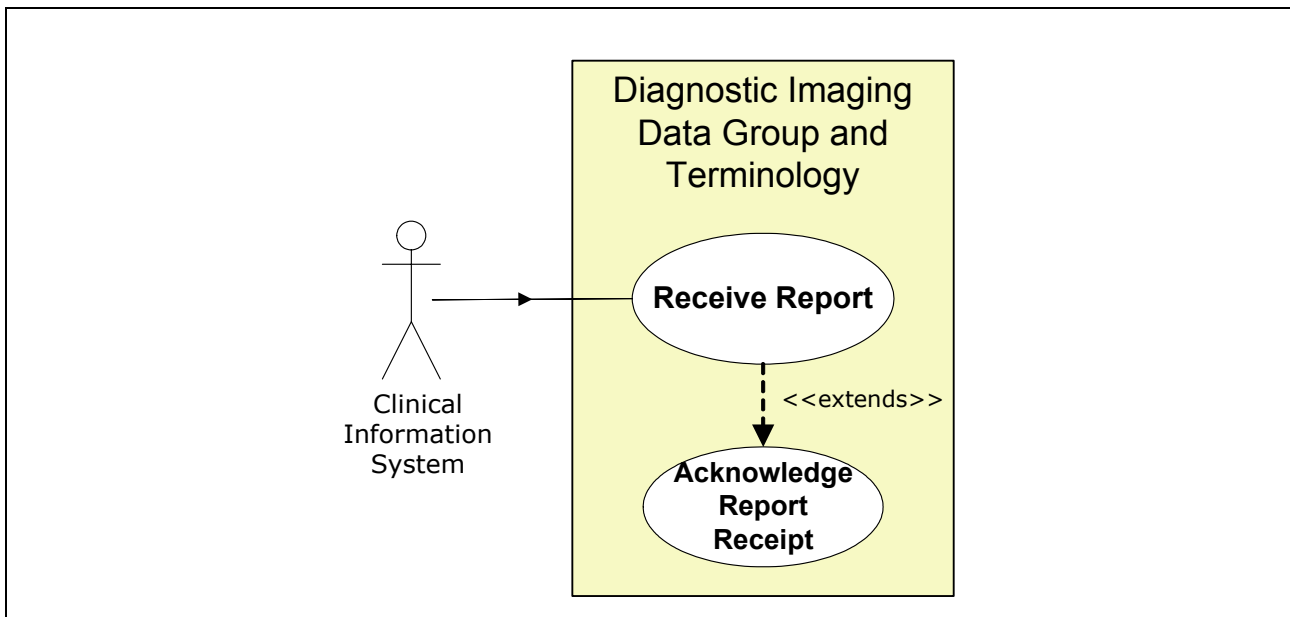


Figure 11 Use Cases: Receive Report

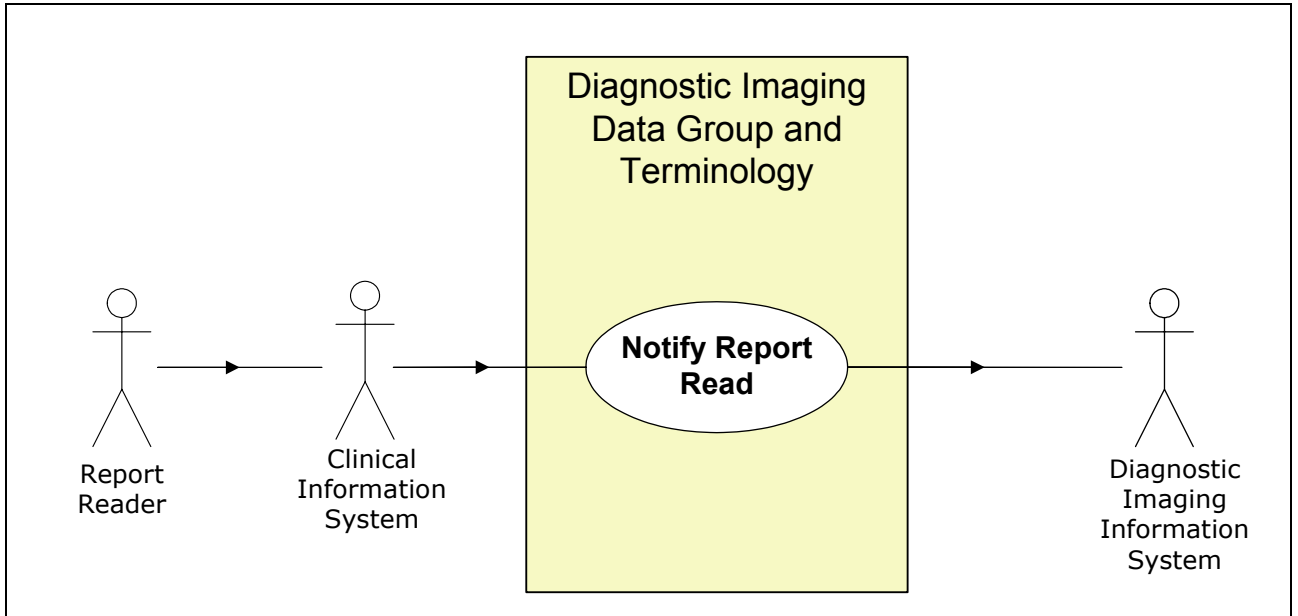


Figure 12 Use Cases: Notify Report Read

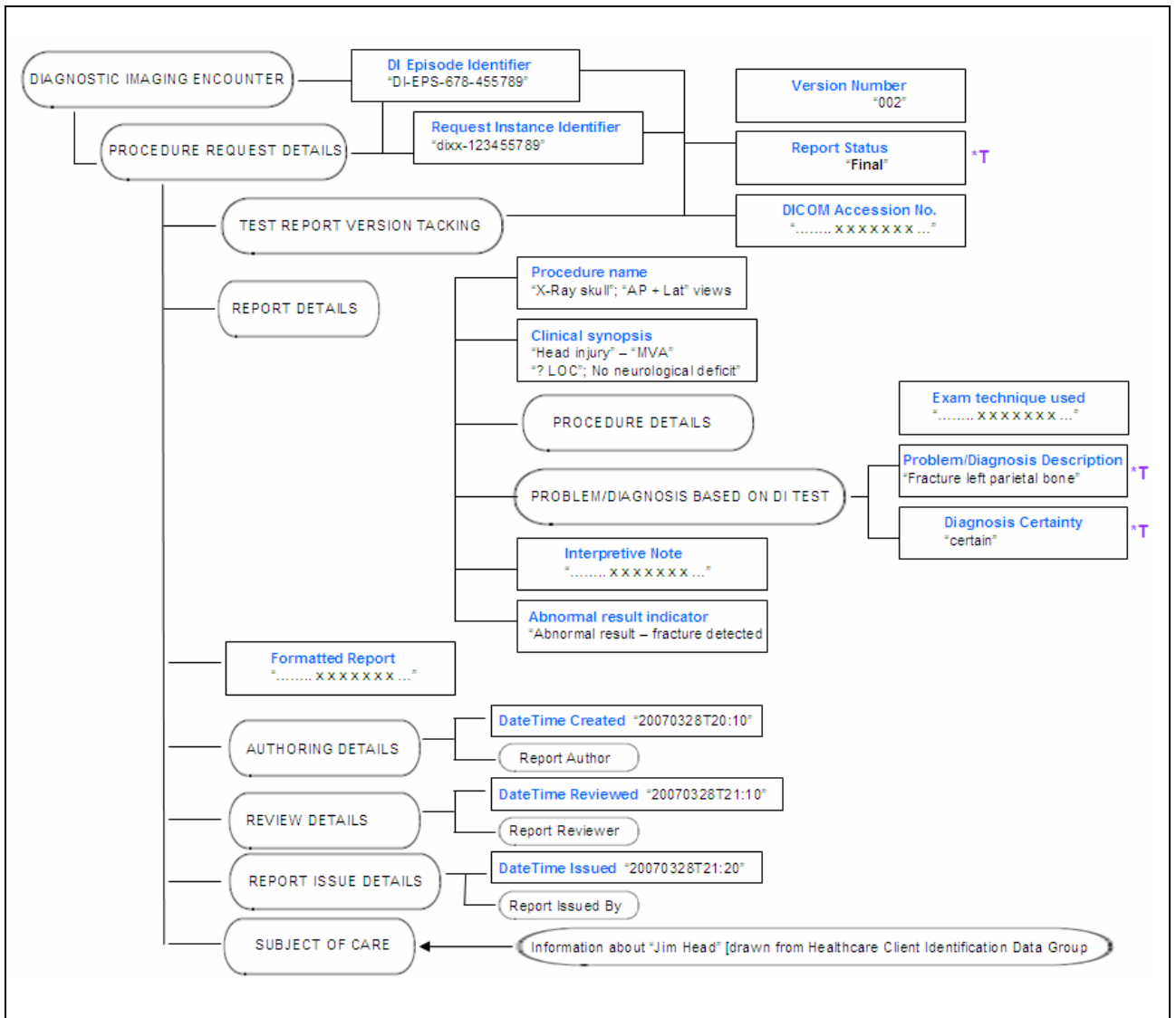


Figure 13 Diagnostic Imaging Data Group – Example of use in reporting DI procedure findings

2 Specifications




The objective of this specification is to provide detailed information regarding the data elements (and their associative hierarchies and value domains) relevant to the transfer of information within the Diagnostic Imaging domain.

The specification references other data group information, the details of which may be found in other NEHTA Specifications.

A Section can be thought of as an organisational heading. A data group is a collection of related data elements and/or data groups that can be treated as a single block, which might be subject to cardinality and obligation constraints.

2.1 Obligation Legend

In the following specifications, data obligation may be categorised as:

- Essential:**  Indicating that the data item is considered to be a core component of information and required in order for the entry to make sense, e.g. Alert without an Alert description does not make sense;
- Desirable:**  Indicating that the data item is considered worthy of being supplied where the data is known. The data item is deemed important in terms of providing additional or supplementary information in conjunction with essential data items. The data item should be supplied to provide as much context as possible for users to make informed decisions and/or to support various implementation requirements such as efficient indexing, querying and electronic decision support;
- Optional:**  Indicating that the data item may be supplied if required within a context and if the data is available, but it is not necessary for the data entry to make sense. It is recognised that for more complex or specialised healthcare provider settings, some items deemed optional may be viewed essential to them; or
- Conditional:** *a→b* Indicating that the data item is required on the condition of some other data item(s) being supplied, or based on the value(s) of another data item(s).

2.2 NEHTA Data Specifications ICON Legend







Icon	Metadata Types
	Event Summary
	Sections
	Packages
	Data Groups
	Data Elements
	Value Domains

Table 4 Metadata types





Icon	Explanation
	"Choice data group" - a single data group to be chosen from a set of data groups. Data groups of the same hierarchical depth within a hierarchical data group that make up a "choice set" are indicted using this icon.
	Multiple occurrences.*
	Externally sourced specifications.
	Externally sourced Data Group Specifications.

Table 5 Other Icons







Icon	Datatype	Explanation
	Text	Character strings (with optional language). Unless otherwise constrained by an implementation, can be any combination of alpha, numeric or symbols from the Unicode character set. (Sometimes referred to as free text).
	CodedText	Coded text <i>without</i> exceptions; text with code mappings.
	CodeableText	Coded text with exceptions; flexible datatype to support various ways of holding text, both free text, coded text and combinations of free + coded.
	DateTime	Used for specifying a single date and/or time. Has the ability to indicate a level of precision, as well as an indication that the date/time is estimated. String representations of known dates should conform to ISO 8601.
	Duration	The period of time during which something continues. Usage/Examples Example (1) 3 hours. Example (2) 6 months. Example (3) 1 year.
	Number	A whole number or positive integer, and where (according to ISO 11404) - <i>integer</i> is the mathematical datatype comprising the exact integral values Usage/Examples Example (1) 1. Example (2) 50. Example (3) 125.

Table 6 Datatypes






Icon	Datatype	Explanation
	Boolean	A value of true or false. Usage/Example Example (1) An actual value entered by the user might be "yes" or could be chosen by a mouse click on an icon such as <input checked="" type="checkbox"/>
ID	UniqueIdentifier	A general unique identifier to identify a physical or virtual object or concept.
	TimeInterval	Two Date/Time values that define the initial and later points in time. Usage/Examples Example (1) 12:00 – 18:00. Example (2) 1:30 a.m. – 6:00 p.m.
	Quantity	Used for recording many real world measurements and observations. Consists of the property being recorded, the magnitude value, and the units. It may also include precision and number of decimal places. Usage/Examples Example (1) Property = width. Example (2) Units = centimetres. Example (3) Value = 100.
	QuantityRange	Two <i>Quantity</i> 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. Usage/Examples Example (1) Temperature range of -20 to 100 °C Example (2) 30-50 mg of a prescribed drug.
	EncapsulatedData	Used to specify how to supply metadata such as the type of data encapsulated (such as JPEG images, HTML, etc. using RFC 1521 MIME types), whether the data is inline or passed by reference, what character set is used to encode the data, any low resolution "thumbnail" representation included, any compression algorithm or integrity check information included.

Table 6 Datatypes


Icon	Datatype	Explanation
	Link	<p>This is a general link, reference or pointer to an object, data, or application that exists logically or stored electronically in a computer system.</p> <p>Usage/Examples</p> <p>Example (1) URL (Uniform Resource Locator) – the World Wide Web address of a site on the Internet, such as the URL for the Google Internet search engine – “http://www.google.com”.</p> <p>Example (2) An absolute or relative path within a file/directory structure – e.g. in Windows operating system, the ‘link’ or absolute path to a particular letter (Word document) may be - “C:\Documents and Settings\guestUser\My Documents\Letter.doc”.</p>
A:B	Ratio	<p>The relative magnitudes of two Quantity values (usually expressed as a quotient).</p> <p>Usage/Examples</p> <p>Example (1) 1/3. Example (2) 1:3.</p>
a,b,c...	Sequence	<p>Ordered collection of items.</p> <p>Usage/Example</p> <p>Example (1) A person’s given names, e.g. “David Phillip Andrew” would be held as 3 items grouped in order to form a single entity.</p>
{b,a,c}	Set	<p>Unordered collection of items with values that must be unique within the set.</p>

Table 6 Datatypes

DIAGNOSTIC IMAGING





Identification

Name	DIAGNOSTIC IMAGING	
Metadata Type	Data Group	
Identifier	DG-12000	<i>External Identifier</i>
Version	1.0	

Definition

Definition	A data group that covers radiology (such as X-ray, fluoroscopy computerised tomography - CT), and other diagnostic imaging procedures such as ultrasound; echogram (e.g. echocardiogram); nuclear medicine, magnetic resonance imaging (MRI); positron emission tomography (PET) and bone densitometry that may be performed on the subject of care by qualified healthcare providers.
Definition Source	NEHTA
Synonymous Names	
Scope	<p>Diagnostic Imaging Data Group represents the data elements available to support the following clinical requirements:</p> <ul style="list-style-type: none"> (1) Request of diagnostic imaging procedures; (2) Reporting of results of diagnostic imaging procedures ; and (3) Querying of information pertinent to diagnostic imaging procedures including requests and DI procedure results. The data elements that have been included will enable a clinician to query the EHR and retrieve useful information relevant to clinical decision making. <p>Diagnostic imaging procedures can be grouped into two major categories: “Diagnostic” and “Interventional”.</p> <p>The “Diagnostic” category mainly concerns the use of different imaging modalities to identify changes in body tissues/structures thereby assisting in the identification of any problem or diagnosis that a subject or care may or may have suffered.</p> <p>The “Interventional” category mainly concerns the use of different imaging modalities to guide other diagnostic and therapeutic procedures, e.g. ultrasound guided liver or kidney needle biopsy; fluoroscopic x-ray guided coronary angiography and/or angioplasty</p>
Scope Source	NEHTA
Assumptions	<ul style="list-style-type: none"> 1) Diagnostic Imaging Procedure providers can supply the specified data elements from their Information Systems to the subject of care's Electronic Health Record System (EHRS) for it to populate its record/data store. 2) copies of diagnostic images may or may not be stored in the subject's EHRS. In the case when diagnostic images are stored in a Picture Archive & Communication System (PACS), references or links to the diagnostic images may be stored in the subject's EHR.

Hierarchical Structure

 DIAGNOSTIC IMAGING	Obligation
 DIAGNOSTIC IMAGING PROCEDURE	! ↻
ID Procedure Identifier	!
T/T₀₁₀ Procedure Description	C
 PROCEDURE DETAILS	C
T/T₀₁₀ Clinical Intervention Description	O
T₀₁₀ Imaging Modality	!
 PROCEDURE ANATOMICAL SITE	! ↻
T/T₀₁₀ Anatomical Site Description	!
T/T₀₁₀ Laterality	O

DIAGNOSTIC IMAGING		Obligation
		O denotes optional
PROCEDURE QUALIFIER		!
T/T ₀₁₀ View Aspect		! ↻
T/T ₀₁₀ Position		O ↻
T/T ₀₁₀ Contrast Medium		O
SPECIMEN DETAILS		O ↻
ID Specimen Identifier		O
T/T ₀₁₀ Specimen Qualifier		O ↻
T/T ₀₁₀ Specimen Type		!
T/T ₀₁₀ Specimen Anatomical Site		O
🕒 DateTime Specimen Collected		✓
🕒 DateTime Specimen Received		✓
PREPARATION INSTRUCTIONS		O
T Preparation Regimen Description		O ↻
MEDICATIONS		O
MEDICATION ITEM DETAILS		↻
PROCEDURE PERFORMANCE DETAILS		O
🕒 DateTime Performed		!
PROCEDURE SUBSTITUTION DETAILS		O
T/T ₀₁₀ Procedure Description		C
PROCEDURE DETAILS		C
T ₀₁₀ Imaging Modality		!
PROCEDURE ANATOMICAL SITE		! ↻
T/T ₀₁₀ Anatomical Site Description		!
T/T ₀₁₀ Laterality		O
PROCEDURE QUALIFIER		O
T/T ₀₁₀ View Aspect		!
T/T ₀₁₀ Position		O
T/T ₀₁₀ Contrast Medium		O
T Reason for Substitution		!
✓✗ Requester Consulted Regarding Substitution		!
🕒 DateTime Requester Consulted		O
ADMINISTERED MEDICATION		O

DIAGNOSTIC IMAGING		Obligation
		O denotes optional
	Administered Medication Item	!
	Has Adverse Reaction	O
	RELEVANT ADVERSE REACTION	a→b
	T/T ₀₁₀ Procedure Method	!
	PROCEDURE PERFORMER IDENTIFICATION	!
	T Procedure Note	O
	DIGITAL IMAGING DETAILS	a→b
	ID Image Identifier	!
	ID Study Identifier	!
	ID Series Identifier	O
	NON-DICOM REFERENCE	a→b
	T Colour Depth	!
	T Image Resolution	!
	T Compression Ratio	O
	T DICOM Accession Number	a→b
	Digital Image Reference	C
	Digital Image	C
	PROCEDURE REQUEST	!
	REQUEST VERSION TRACKING	!
	ID Episode Identifier	!
	ID Request Identifier	!
	1 ₂ 3 Request Version Number	!
	DateTime Recorded	!
	DateTime Requested	!
	T/T ₀₁₀ Request Status	!
	REQUESTED PROCEDURE	!
	ID Procedure Identifier	!
	T/T ₀₁₀ Procedure Description	C
	PROCEDURE DETAILS	C
	Specimen Details	a→b
	T/T ₀₁₀ Clinical Reason for Request	!
	T Special Requirements	O

DIAGNOSTIC IMAGING		Obligation
		O denotes optional
T	Procedure Location	0
T	Preferred Results Delivery Mode	0
	REQUEST PRIORITY	!
T/T_{o1o}	Request Priority Indicator	!
T	Request Priority Reason	0
	Time Interval to Provide Requested Service	0
	CONSENT DETAILS	0
T/T_{o1o}	Consent Status	!
	DateTime Consented	✓
	CONSENTING PARTY IDENTIFICATION	!
	CONSENT WITNESS IDENTIFICATION	!
	INSURANCE DETAILS	0
T/T_{o1o}	Benefit Type	!
	Membership Number	!
	INSURER IDENTIFICATION	0
T/T_{o1o}	Billing Policy	0
	SPECIAL RELATIONSHIPS AUTHORISATION	0
	Claim Number	!
	AUTHORISING PARTY IDENTIFICATION	!
T/T_{o1o}	Authorising Person Occupation	0
	RELEVANT CLINICAL STATUS	!
T	Clinical Synopsis Comment	0
	RELEVANT PROBLEM/DIAGNOSIS	0 ↻
	Reference to Relevant Pathology Test	0 ↻
	Reference to Relevant Diagnostic Imaging Procedure	0 ↻
	RELEVANT CURRENT MEDICATION	0
	MEDICATION ITEM DETAILS	! ↻
	RELEVANT OBSERVATION	0 ↻
	RELEVANT ADVERSE REACTION	0 ↻
T/T_{o1o}	Adverse Reaction Presence	!
	RELEVANT ALERT	0 ↻
T/T_{o1o}	Alert Presence	!

DIAGNOSTIC IMAGING		Obligation
		O denotes optional
RELEVANT EVENT		O ↻
T/T ₀₁₀ Relevant Event Description		!
Expected DateTime of Relevant Event		!
T Relevant Event Note		O
REQUESTER IDENTIFICATION		!
REQUEST RECIPIENT IDENTIFICATION		!
SUBJECT OF CARE IDENTIFICATION		!
REQUEST COPY TO RECIPIENT IDENTIFICATION		O ↻
DIAGNOSTIC IMAGING REPORTING		!
REPORT VERSION TRACKING		!
ID Episode Identifier		!
ID Request Identifier		!
1 ² 3 Request Version Number		!
ID Series Identifier		O
ID Study Identifier		!
ID Report Identifier		!
1 ² 3 Report Version Number		!
T/T ₀₁₀ Report Status		!
DateTime Report Created		!
REPORT DETAILS		!
T/T ₀₁₀ Procedure Description		!
T Clinical Synopsis Comment		!
Procedure Performance Details		!
T Result Description		!
T Interpretive Note		O
T/T ₀₁₀ Abnormal Result Indicator		O
PROBLEM/DIAGNOSIS BASED ON PROCEDURE RESULT		O
T DICOM Accession Number		a→b
Digital Image Reference		a→b
Reference to Other Relevant Diagnostic Imaging Procedure		O ↻
Reference to Relevant Pathology Test		O ↻

DIAGNOSTIC IMAGING		Obligation
 Report		O
 REPORT AUTHORIZING DETAILS		!
 DateTime Report Created		!
 REPORT AUTHOR		!
 REPORT REVIEW DETAILS		O
 DateTime Report Reviewed		!
 REVIEWING SPECIALIST		!
 REPORT ISSUE DETAILS		a→b
 DateTime Report Issued		!
 REPORT ISSUED BY		!
 REPORT RECEIVED DETAILS		a→b
 DateTime Report Received		!
 REPORT PRIMARY RECIPIENT		!
 REPORT READ DETAILS		a→b
 DateTime Report Read		!
 REPORT READ BY		!
 REPORT COPY TO RECIPIENT		O


Usage






Conditions of Use	This data group is used to support information exchange resulting from a diagnostic imaging request or encounter.
Conditions of Use Source	NEHTA
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider (requester or diagnostic imaging procedure reporting provider). Sender Organisation(s) can include: Healthcare institution, Medical practice.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider (diagnostic imaging procedure reporting provider or requester). Recipient Organisation Role(s) can include: Healthcare institution, Medical practice.

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	DIAGNOSTIC IMAGING PROCEDURE	1.0	Essential		Multiple

	PROCEDURE REQUEST	1.0	Essential		Multiple
	INSURANCE DETAILS	1.0	Optional		Single
	SPECIAL RELATIONSHIPS AUTHORISATION	1.0	Optional		Single
	RELEVANT CLINICAL STATUS	1.0	Essential		Single
	DIAGNOSTIC IMAGING REPORTING	1.0	Essential		Single

DIAGNOSTIC IMAGING PROCEDURE

Identification

Name	DIAGNOSTIC IMAGING PROCEDURE		
Metadata Type	Data Group		
Identifier	DG-12001	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	<p>An imaging procedure for:</p> <p>(a) ‘The production of diagnostic images (e.g. x-rays, computerised tomography scans, ultrasound scans, magnetic resonance imaging scans and nuclear scans) for use in the rendering of diagnostic imaging services’; or</p> <p>(b) ‘The performance of invasive interventional procedures (under the guidance of imaging procedure)’. The imaging procedure may also provide a diagnostic function at the same time. For example, coronary angioplasty (interventional procedure) is done under guidance of coronary angiography - imaging of the coronary arteries which also provides the diagnostic function to identify the site and type of coronary vascular lesion.</p>
Definition Source	NEHTA; Medicare Benefits Schedule (MBS) Book, November 2006, p.475
Synonymous Names	Diagnostic Imaging Study.
Scope	<p>Diagnostic imaging procedures can be grouped into two major categories: “Diagnostic” and “Interventional”.</p> <p>The “Diagnostic” category mainly concerns the use of different imaging modalities to identify changes in body tissues/structures thereby assisting in the identification of any problem or diagnosis of the subject of care.</p> <p>The “Interventional” category mainly concerns the use of different imaging modalities to identify the exact location of the lesion to guide:</p> <ul style="list-style-type: none"> • Invasive diagnostic procedures, e.g. ultrasound guided liver or kidney needle biopsy; and • Therapeutic interventional procedures, e.g. coronary angiography guided angioplasty.
Scope Source	NEHTA
Assumptions	

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow






Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	DIAGNOSTIC IMAGING	1.0	Essential		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
ID	Procedure Identifier	1.0	Essential		Single
T/T₀₁₀	Procedure Description	1.0	Essential	required if 'Procedure Details' data group not populated	Single
	PROCEDURE DETAILS	1.0	Essential	required if 'Procedure name' details not provided	Single
	SPECIMEN DETAILS	1.0	Optional	required if request is for imaging of tissue specimen obtained from subject of care	Single
	PREPARATION INSTRUCTIONS	1.0	Optional		Single
	PROCEDURE PERFORMANCE DETAILS	1.0	Optional	required to document procedure performed and in reports	Single
	DIGITAL IMAGING DETAILS	1.0	Optional	required after procedure has been performed	Single

DE Procedure Identifier

Identification

Name	PROCEDURE IDENTIFIER		
Metadata Type	Data Element		
Identifier	DE-12001	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	A unique identifier that identifies the diagnostic imaging procedure being requested and/or performed.
Definition Source	NEHTA
Synonymous Names	Diagnostic imaging procedure identifier, Diagnostic imaging item number.
Context	<p>The Medicare Benefits Schedule (MBS) contains a set of diagnostic imaging item numbers for diagnostic imaging procedures that may be requested by registered healthcare providers - (MBS November 2006, p.544-587).</p> <p>However, diagnostic imaging procedures not included in the MBS schedule may also be requested in the community settings (e.g. by GPs or Specialists in private practice to community diagnostic imaging service providers). Currently local procedure names and (non unique, non MBS) identifiers are used.</p> <p>A SNOMED CT Diagnostic Imaging Procedure Ref Set (which covers both MBS and non MBS procedures) may be defined by NEHTA. The SNOMED CT diagnostic imaging procedure concept IDs for the fully specified test names may be mapped to the MBS Diagnostic Imaging Item Numbers.</p>
Context Source	NEHTA
Assumptions	
Data Type	ID
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	DIAGNOSTIC IMAGING PROCEDURE	1.0	Essential		Single

Procedure Description

Identification

Name	Procedure Description	
Metadata Type	Data Element	
Identifier	DE-12002	<i>External Identifier</i>
Version	1.0	

Definition

Definition	Standardised descriptive name for a procedure.
Definition Source	NEHTA
Synonymous Names	
Context	<p>In diagnostic imaging, the Procedure Description is used for identification/description of the available diagnostic imaging procedure or study that:</p> <ul style="list-style-type: none"> (a) May be requested; (b) Has been performed as requested; or (c) Performed in substitution to the requested procedure as necessitated by the subject's clinical status. <p>It may comprise one or more of:</p> <ul style="list-style-type: none"> (a) The imaging modality(ies) such as x-ray, computerised tomography scan, ultrasound scan, magnetic resonance imaging scan and radionuclide scan; (b) The anatomical site(s), e.g. brain, skull, neck; (c) Procedure qualifier information, including 'views' (e.g. AP, lateral, lordotic); 'position' (e.g. erect, supine); 'contrast' (i.e. whether contrast medium is used and route of contrast administration. In some cases the procedure name alone will infer the use of contrast medium, e.g. intravenous pyelography; and (d) intervention procedure name may also be included, e.g. angioplasty, angiography and stent insertion.
Context Source	
Scope	
Scope Source	
Assumptions	
Data Type	CodeableText
Value Domain	

Usage

Conditions of Use	
Conditions of Use Source	
Examples	<p>Example 1) X-ray skull AP & lateral views.</p> <p>Example 2) X-ray abdomen supine and erect.</p> <p>Example 3) CT brain without intravenous contrast medium.</p> <p>Example 4) MRI angiography of brain.</p> <p>Example 5) coronary angiography with insertion of medicated stent.</p> <p>Example 6) exercise stress echocardiography.</p>
Misuse	




Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>

Recipient Type	Either system or human.
Recipient Role(s)/ Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	DIAGNOSTIC IMAGING PROCEDURE	1.0	Essential	(required if 'PROCEDURE DETAILS' data group within the 'Diagnostic Imaging Procedure' package not populated)	Single
	PROCEDURE SUBSTITUTION DETAILS	1.0	Essential	(required if 'PROCEDURE DETAILS' data group within the 'Procedure Substitution Details' package not populated)	Single
	REPORT DETAILS	1.0	Conditional	(required if requested procedure has not been substituted - in that case 'Procedure name' or 'PROCEDURE DETAILS' data group within the 'Procedure Substitution Details' package will be used)	Single

PROCEDURE DETAILS

Identification

Name	PROCEDURE DETAILS		
Metadata Type	Data Group		
Identifier	DG-12002	External Identifier	
Version	1.0		

Definition

Definition	<p>Details pertinent to the imaging procedure that may be requested or that has been performed on a subject of care.</p> <p>An imaging procedure is defined as a procedure for:</p> <p>(a) ‘The production of images (e.g. x-rays, computerised tomography scans, ultrasound scans, magnetic resonance imaging scans and nuclear scans) for use in the rendering of diagnostic imaging services’ (i.e. diagnostic imaging); or</p> <p>(b) ‘The performance of invasive interventional procedures (under the guidance of imaging)’. The imaging procedure may also provide diagnostic function at the same time (i.e. interventional imaging).</p>
Definition Source	NEHTA
Synonymous Names	Diagnostic Imaging Procedure.
Scope	<p>The PROCEDURE DETAILS data group provides fully structured data elements for capturing details about the imaging modalities, procedure anatomical sites, procedure qualifying information (e.g. view, position, contrast medium required) and the clinical intervention which requires the guidance of imaging procedure requested.</p> <p>This data group is intended to provide a machine-processable Relationships data structure in addition to the textual information captured by the Procedure Description data element contained in the Diagnostic Imaging Procedure data group.</p>
Scope Source	NEHTA
Assumptions	

Usage



Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow



Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	DIAGNOSTIC IMAGING PROCEDURE	1.0	Essential	(required if 'Procedure name' data element in Diagnostic Imaging Procedure data group not populated)	Single
	PROCEDURE SUBSTITUTION DETAILS	1.0	Essential	(required if 'Procedure name' data element in Procedure Substitution data group not populated. If no procedure substitution is made, it is assumed that the requested procedure is performed)	Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
T / T ₀₁₀	Clinical Intervention Description	1.0	Optional		Single
T ₀₁₀	Imaging Modality	1.0	Essential		Single
	PROCEDURE ANATOMICAL SITE	1.0	Essential		Single
	PROCEDURE QUALIFIER	1.0	Essential		Single

CLINICAL INTERVENTION DESCRIPTION

Identification

Name	CLINICAL INTERVENTION DESCRIPTION		
Metadata Type	Data Element		
Identifier	DE-12003	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	A description of the clinical intervention or procedure undertaken on or provided to the subject of care by a healthcare provider. An intervention is defined as a procedure or treatment carried out to improve, or maintain the health of a subject of care, in a clinical situation. <i>Clinical interventions include invasive, non invasive procedures, and psycho-cognitive interventions.</i>
Definition Source	NEHTA
Synonymous Names	Diagnostic intervention, Therapeutic intervention, Diagnostic procedure, Therapeutic procedure, Treatment, Procedure.
Context	In the context of 'Diagnostic Imaging Procedure', a clinical intervention is a therapeutic or interventional procedure that is performed under the guidance of an imaging procedure. It may be requested by the requesting provider and performed by the diagnostic imaging service provider or by a healthcare provider with expertise in performing the procedure.
Context Source	NEHTA
Assumptions	
Data Type	CodeableText
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	Example 1) Balloon angioplasty or stenting. Example 2) Thrombolysis, embolisation or embolectomy. Example 3) percutaneous vertebroplasty.
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	PROCEDURE DETAILS	1.0	Optional		Single

Imaging Modality

Identification

Name	IMAGING MODALITY		
Metadata Type	Data Element		
Identifier	DE-12004		<i>External Identifier</i>
Version	1.0		

Definition

Definition	The imaging method, including the electro-magnetic energy type, applied to produce diagnostic quality images of body structures or internal organs performed during a diagnostic imaging procedure.
Definition Source	NEHTA
Synonymous Names	
Context	For identification/description of the diagnostic imaging modalities that are: (1) Available for request; or (2) Used in reporting.
Context Source	NEHTA
Scope	
Scope Source	
Assumptions	
Data Type	CodeableText
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	Example 1) X-ray. Example 2) CT scan. Example 3) MRI. Example 5) PET scan.
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	PROCEDURE DETAILS	1.0	Essential		Single

PROCEDURE ANATOMICAL SITE

Identification

Name	PROCEDURE ANATOMICAL SITE		
Metadata Type	Data Group		
Identifier	DG-12003	External Identifier	
Version	1.0		

Definition

Definition	Details pertinent to the anatomical site or location on which the procedure is being performed.
Definition Source	NEHTA
Synonymous Names	Body site
Scope	<p>This is a data group that captures information about the anatomical/body site details which include the site description and qualifying information that adds precision to the site description, e.g. the laterality (i.e. right or left) of the body site/structure. It is possible that more than one anatomical site may be identified in a request, for example: CT of Head and Neck.</p> <p>While the above example is covered by different MBS test items, there are test items involving multiple anatomical sites that have one single test item number, e.g. MBS item 57515 - radiographic (x-ray) examination of Hand and Wrist, or Hand, Wrist and Forearm (MBS November 2006, p.568).</p>
Scope Source	NEHTA
Assumptions	

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	PROCEDURE DETAILS	1.0	Essential		Multiple

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
T/T ₀₁₀	Anatomical site description	1.0	Essential		Single
T/T ₀₁₀	Anatomical site laterality	1.0	Optional		Single

Anatomical Site Description

Identification

Name	Anatomical Site Description		
Metadata Type	Data Element		
Identifier	DE-12005		<i>External Identifier</i>
Version	1.0		

Definition

Definition	The name or description of the anatomical site/location on which the procedure is performed or is to be performed.		
Definition Source	NEHTA		
Synonymous Names			
Context			
Context Source			
Assumptions			
Data Type	CodeableText		
Value Domain			

Usage


Conditions of Use	
Conditions of Use Source	
Examples	<p>Example 1) Brain.</p> <p>Example 2) Head.</p> <p>Example 3) Neck.</p> <p>Example 4) Cervical spine.</p> <p>Example 5) Chest.</p> <p>Example 6) Abdomen.</p>
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	PROCEDURE ANATOMICAL SITE	1.0	Essential		Single



Identification

Name	LATERALITY		
Metadata Type	Data Element		
Identifier	DE-12006	External Identifier	
Version	1.0		

Definition

Definition	A descriptor or qualifier used to localise the anatomical site in question to either the right or the left.
Definition Source	NEHTA
Synonymous Names	
Context	It is used to further refine the description of geographic location or anatomical site to add clarity and precision to the site description.
Context Source	NEHTA
Assumptions	
Data Type	CodeableText
Value Domain	

Usage

Conditions of Use	
Conditions of Use Source	
Examples	Example 1) Right. Example 2) Left.
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	PROCEDURE ANATOMICAL SITE	1.0	Optional		Single

PROCEDURE QUALIFIER

Identification

Name	PROCEDURE QUALIFIER		
Metadata Type	Data Group		
Identifier	DG-12004	External Identifier	
Version	1.0		

Definition

Definition	Additional/Qualifying information that adds clarity or precision to the procedure requested or performed.
Definition Source	NEHTA
Synonymous Names	
Scope	<p>In diagnostic imaging tests, the 'Procedure Qualifier' data group is used to provide additional information on a requested procedure, including:</p> <p>(a) The view (i.e. the direction or orientation of the electro-magnetic emitting source/probe in relations to the procedure anatomical site) in which the diagnostic image is taken ;</p> <p>(b) The position of the subject in which the diagnostic image is taken.</p> <p>Combination of "view" and "position" qualifiers may be used in test request, e.g. <i>lateral decubitus view of chest to detect small area of air in upper most pleural space</i>; and</p> <p>(c) Whether contrast medium is required/used.</p>
Scope Source	NEHTA
Assumptions	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/ Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/ Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	PROCEDURE DETAILS	1.0	Essential		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
T/T₀₁₀	View Aspect	1.0	Essential		Multiple

T/T₀₁₀	Position	1.0	Optional)	Multiple
T/T₀₁₀	Contrast Medium	1.0	Optional)	Single

View Aspect

Identification

Name	View Aspect		
Metadata Type	Data Element		
Identifier	DE-12007	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Description that specifies the view (i.e. direction/orientation of the electro-magnetic emitting source/probe) with which the diagnostic image is taken.		
Definition Source	NEHTA		
Synonymous Names			
Context			
Context Source			
Assumptions			
Data Type	CodeableText		
Value Domain			

Usage


Conditions of Use			
Conditions of Use Source			
Examples	Example 1) PA (postero-anterior). Example 2) AP (antero-posterior). Example 3) lateral. Example 4) oblique. Example 5) lordotic.		
Misuse			

Data Flow

Sender Type	Either system or human.		
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.		
Recipient Type	Either system or human.		
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.		

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	PROCEDURE QUALIFIER	1.0	Essential		Single

 **Position**
Identification

Name	Position		
Metadata Type	Data Element		
Identifier	DE-12008	External Identifier	
Version	1.0		

Definition

Definition	Description that specifies the subject of care's position in which the procedure is performed.
Definition Source	NEHTA
Synonymous Names	
Context	
Context Source	
Assumptions	
Data Type	CodeableText
Value Domain	


Usage

Conditions of Use	
Conditions of Use Source	
Examples	Example 1) Supine or decubitus. Example 2) Erect.
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships**Parents**

Data Type	Name	Version	Obligation	Condition	Occurrence
	PROCEDURE QUALIFIER	1.0	Optional		Multiple

DE Contrast Medium

Identification

Name	CONTRAST MEDIUM		
Metadata Type	Data Element		
Identifier	DE-12009	External Identifier	
Version	1.0		

Definition

Definition	Description of the type of contrast medium that may be used to enhance the diagnostic imaging study.
Definition Source	NEHTA
Synonymous Names	
Context	
Context Source	
Assumptions	
Data Type	CodeableText
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	Example 1) Nil; no contrast medium. Example 2) Intravenous contrast. Example 3) orally administered contrast medium.
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	PROCEDURE QUALIFIER	1.0	Optional		Single

SPECIMEN DETAILS

Identification

Name	SPECIMEN DETAILS	
Metadata Type	Data Group	
Identifier	DG-12005	<i>External Identifier</i>
Version	1.0	

Definition

Definition	Details pertinent to specimen which is obtained from a subject of care for an investigation or analysis.
Definition Source	NEHTA
Synonymous Names	
Context	<p>Captures details pertinent to a tissue specimen obtained from a subject of care on which diagnostic imaging procedure/study has been requested.</p> <p>Example: Two view radiography of surgically removed breast masses/specimen mammography in breast conservation therapy (for management of invasive breast cancer or nonpalpable breast mass). Obtaining tumour-negative margins when performing breast-conserving surgery is the standard of care to prevent local recurrence. Two-view specimen mammography is a useful method for intraoperative determination of adequacy of excision.</p> <p>Multiple tissue specimens may be surgically removed, e.g. in case of multiple breast lumps.</p>
Context Source	NEHTA
Scope	
Scope Source	NEHTA
Assumptions	All tissue specimens are obtained/collected within the healthcare institution or medical practices, which are therefore the specimen collection settings.

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow



Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	DIAGNOSTIC IMAGING	1.0	Optional		Multiple

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
ID	Specimen Identifier	1.0	Optional	(specimen identifier is available when request and tissue specimen are from Pathology)	Single
T/T ₀₁₀	Specimen Type	1.0	Essential		Single
T/T ₀₁₀	Specimen Anatomical Site	1.0	Optional		Single
T/T ₀₁₀	Specimen Qualifier	1.0	Optional		Multiple
	DateTime Specimen Collected	1.0	Desirable		Single
	DateTime Specimen Received	1.0	Desirable		Single

DE Specimen Identifier

Identification

Name	Specimen Identifier	
Metadata Type	Data Element	
Identifier	DE-12010	<i>External Identifier</i>
Version	1.0	

Definition

Definition	A unique identifier code assigned to a specimen after it is collected from the subject of care.
Definition Source	NEHTA
Synonymous Names	
Context	<p>The assignment of an identification code to a specimen by the laboratory allows tracking of the specimen through receipt, processing, analysis, reporting and storage phases.</p> <p>A tissue specimen that has been surgically removed from a subject of care may be sent for diagnostic imaging study directly from the requesting provider (i.e. surgeon) immediately after surgically removal of the specimen from the subject of care. In such case a unique identifier code may not be assigned. Any identification code assigned in such case may be arbitrary and cannot necessarily be treated as unique identifier. A Diagnostic imaging study on a tissue specimen may also be requested by a pathologist to assist in identification of correct tissue block for a histological study (e.g. paraffin breast tissue block radiography). In such cases, a unique specimen identifier would have been assigned to the specimen.</p>
Context Source	NEHTA
Assumptions	
Data Type	ID
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	SPECIMEN DETAILS	1.0	Optional	(specimen identifier is available when request and tissue specimen are from Pathology)	Single

DE Specimen Type

Identification

Name	Specimen Type		
Metadata Type	Data Element		
Identifier	DE-12012	External Identifier	
Version	1.0		

Definition

Definition	The type of specimen collected from the subject of care for the analysis or examination requested.
Definition Source	NEHTA
Synonymous Names	
Context	A tissue specimen often comprises multiple tissue types, e.g. a breast tissue specimen is likely to contain glandular tissue, connective/adipose tissue and muscular tissue, depending on the extent of the excisional biopsy. The composition of tissue types of a tissue specimen is not expected to be specified in a diagnostic imaging test request or report.
Context Source	NEHTA
Assumptions	
Data Type	CodeableText
Value Domain	

Usage


Conditions of Use	The specimen type is information which a requester should include in a request for diagnostic testing.
Conditions of Use Source	NEHTA
Examples	Example 1) colo-rectal tissue (<i>for radiographic imaging of lymph nodes</i>). Example 2) breast tissue.
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	SPECIMEN DETAILS	1.0	Essential		Single

Specimen Anatomical Site

Identification

Name	Specimen Anatomical Site		
Metadata Type	Data Element		
Identifier	DE-12013	External Identifier	
Version	1.0		

Definition

Definition	The physical site, in or on the subject of care's body, where the specimen originated.
Definition Source	NEHTA
Synonymous Names	Specimen site of origin, Anatomical site.
Context	The anatomical site provides relevant clinical information to the pathologist/radiologist for the purposes of interpretation and diagnostic decision making. Where the description of specimen anatomical site may provide more specific information, such information is expected to be included in the test request or report. For example, when the tissue specimen type is "colon tissue", the anatomical site information of "hepatic flexure", "left transverse colon", etc. may be included.
Context Source	NEHTA
Assumptions	
Data Type	CodeableText
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	Example 1) right breast.
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	SPECIMEN DETAILS	1.0	Optional		Single

DE Specimen Qualifier

Identification

Name	Specimen Qualifier		
Metadata Type	Data Element		
Identifier	DE-12011	External Identifier	
Version	1.0		

Definition

Definition	Information which further defines the characteristics of the specimen which is either (a) required to be taken into account when analysing the specimen and/or interpreting the results; or (b) provides additional and/or more precise information about the specimen.
Definition Source	NEHTA
Synonymous Names	
Context	Information about the patient that affects the specimen and test analysis. This information can be the source of specimen characteristic information in the result. In the context of tissue specimen as the target for a diagnostic imaging study, it is used to provide additional information about the specimen such as the size and weight.
Context Source	NEHTA
Assumptions	
Data Type	CodeableText
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	Example 1) size = 5 cm x 6 cm x 3.5 cm. Example 2) weight = 263 gm.
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	SPECIMEN DETAILS	1.0	Optional		Multiple

DateTime Specimen Collected

Identification

Name	DateTime Specimen Collected		
Metadata Type	Data Element		
Identifier	DE-12014	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	The date and time at which a specimen for the requested test is obtained from a subject of care.
Definition Source	NEHTA
Synonymous Names	
Context	
Context Source	
Assumptions	
Data Type	DateTime
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	SPECIMEN DETAILS	1.0	Desirable		Single

DE DateTime Specimen Received

Identification

Name	DateTime Specimen Received		
Metadata Type	Data Element		
Identifier	DE-12015	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	The date and time the specimen is received at the Diagnostic Imaging department or practice for the requested test.		
Definition Source	NEHTA		
Synonymous Names			
Context			
Context Source			
Assumptions			
Data Type	DateTime		
Value Domain			

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	SPECIMEN DETAILS	1.0	Desirable		Single

PREPARATION INSTRUCTIONS

Identification

Name	PREPARATION INSTRUCTIONS		
Metadata Type	Data Group		
Identifier	DG-12006	External Identifier	
Version	1.0		

Definition

Definition	Details pertinent to preparatory actions or a regimen required to be undertaken by the subject of care prior to undertaking the procedure in question.
Definition Source	NEHTA
Synonymous Names	
Scope	Preparation instructions are designed to properly prepare the subject of care for the requested diagnostic imaging procedure to ensure success of the examination or procedure which includes achieving the best possible quality diagnostic image obtainable from the test procedure. A diagnostic imaging procedure may require no special preparation or may have one to many preparatory requirements, such as: <ul style="list-style-type: none"> • Oral contrast medium; and • Bowel preparation medications such as orally administered laxative or enemas.
Scope Source	NEHTA
Assumptions	

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow


Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	DIAGNOSTIC IMAGING PROCEDURE	1.0	Optional		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
T	Preparation regimen description	1.0	Optional		Multiple
	MEDICATIONS	1.0	Optional		Single

DE Preparation Regimen Description

Identification

Name	Preparation Regimen Description		
Metadata Type	Data Element		
Identifier	DE-12016	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Description of specific preparation required to be undertaken by the subject of care prior to undertaking the requested procedure.		
Definition Source	NEHTA		
Synonymous Names			
Context			
Context Source			
Assumptions			
Data Type	Text		
Value Domain			

Usage


Conditions of Use	
Conditions of Use Source	
Examples	Example 1) Fast from mid-night; low residue diet for 3 days prior to test. Example 2) Drink 2 litres of water 2 hours prior to commencing test/arriving at the diagnostic imaging facility; hold micturition 2 hours before test to ensure a full bladder.
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	PREPARATION INSTRUCTIONS	1.0	Essential		Single

MEDICATIONS

Identification

Name	MEDICATIONS		
Metadata Type	Data Group		
Identifier	DG-12007	External Identifier	
Version	1.0		

Definition

Definition	Details pertinent to the therapeutic or diagnostic enhancement agent administered to, or to be administered to, the subject of care.
Definition Source	NEHTA
Synonymous Names	
Scope	<p>This captures information about medications required to adequately prepare the subject of care to ensure that the diagnostic imaging procedure can be performed successfully or to ensure the production of best possible imaging quality as required by the clinical status of the subject or the type of diagnostic imaging test procedure requested/recommended. One or more medication(s) may be administered prior to or during the diagnostic test procedure.</p> <p>Example:</p> <ul style="list-style-type: none"> Orally administered “gastroview”: a contrast medium for organ or tissue enhancement in CT or fluoroscopy imaging procedure; Intravenously administered iodinated contrast medium; and Radio pharmaceutical tagged with radioisotope for radionuclide imaging.
Scope Source	NEHTA
Assumptions	

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow


Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	PREPARATION INSTRUCTIONS	1.0	Optional		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	MEDICATION ITEM DETAILS	1.0	Essential		Multiple

PROCEDURE PERFORMANCE DETAILS

Identification

Name	PROCEDURE PERFORMANCE DETAILS		
Metadata Type	Data Group		
Identifier	DG-12010	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Details pertinent to the performance of a requested procedure.		
Definition Source	NEHTA		
Synonymous Names			
Context	<p>This data group is used to capture details about the performance of requested diagnostic imaging procedure(s). Details included in this data group are:</p> <ul style="list-style-type: none"> (a) date and time when the procedure is performed; (b) procedure substitution details, if procedure different to the one requested is performed; (c) medications administered during procedure, if given; and (d) the procedure performer(s). 		
Context Source	NEHTA		
Scope			
Scope Source	NEHTA		
Assumptions			

Usage



Conditions of Use	
Conditions of Use Source	
Misuse	Used to capture descriptions of pathology tests and test results.

Data Flow





Sender Type	Either system or human.		
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>		
Recipient Type	Either system or human.		
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>		

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	DIAGNOSTIC IMAGING PROCEDURE	1.0	Optional	(required when requested procedure has been)	Single
	REPORT DETAILS	1.0	Essential		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	DateTime Performed	1.0	Essential		Single
	PROCEDURE SUBSTITUTION DETAILS	1.0	Optional	(required when a substituted test is performed instead of one that is requested as determined by test performer based on subject's clinical status)	Single
	ADMINISTERED MEDICATION	1.0	Optional		Single
T / T ₀₁₀	Procedure Method	1.0	Essential		Single
T	Procedure Note	1.0	Optional		Single
	PROCEDURE PERFORMER IDENTIFICATION	1.0	Essential		Multiple

DateTime Performed

Identification

Name	DateTime Performed		
Metadata Type	Data Element		
Identifier	DE-12017	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	The date or date and time that the requested procedure was performed by a registered/qualified healthcare provider.
Definition Source	NEHTA
Synonymous Names	DateTime Procedure Performed, DateTime Procedure done, DateTime Test performed.
Context	
Context Source	
Assumptions	A diagnostic imaging procedure is performed over a duration of time. Within the “Diagnostic Imaging Information System”, the duration is recorded with a start and end DateTime value. For reporting purpose, it is assumed that the date and time completed value will be communicated.
Data Type	DateTime
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	PROCEDURE PERFORMANCE DETAILS	1.0	Essential		Single

PROCEDURE SUBSTITUTION DETAILS

Identification

Name	PROCEDURE SUBSTITUTION DETAILS		
Metadata Type	Data Group		
Identifier	DG-12011	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Details pertinent to the performance of a procedure different to the one requested.
Definition Source	NEHTA
Synonymous Names	
Scope	This data group is used to capture details about the performance of a diagnostic imaging procedure that is different to the one requested by the requesting provider. Procedure substitution may be initiated by the diagnostic imaging service provider based on clinical judgement of clinical status information about the subject of care provided by the requester, or based on assessment of the subject of care at the time of presentation for the requested procedure to be performed.
Scope Source	NEHTA
Assumptions	

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	Used to capture descriptions of pathology tests and test results.

Data Flow





Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	PROCEDURE PERFORMANCE DETAILS	1.0	Optional	(required when requested procedure has been substituted with a different procedure)	Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	Procedure Description	1.0	Essential	(required if 'Procedure Details' data group not populated with substituted procedure details)	Single
	PROCEDURE DETAILS	1.0	Essential	(required if 'Procedure name' data element not populated with substituted procedure details)	Single
T	Reason for Substitution	1.0	Essential		Single
	Requester Consulted Regarding Substitution	1.0	Essential		Single
	DateTime Requester Consulted	1.0	Optional		Single

Reason for Substitution

Identification

Name	Reason for Substitution		
Metadata Type	Data Element		
Identifier	DE-12025	External Identifier	
Version	1.0		

Definition

Definition	The clinical reason why the any aspects of the requested procedure is substituted with a different one.
Definition Source	NEHTA
Synonymous Names	
Context	Describes the clinical reason for substituting any aspect of the requested diagnostic imaging procedure, such as imaging modality, anatomical site, view aspect, position or use of contrast media.
Context Source	
Assumptions	
Data Type	Text
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	Example 1) revised imaging modality. Example 2) revised view aspect and position.
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	PROCEDURE SUBSTITUTION DETAILS	1.0	Condition	(when a requested test or test modality or both has/ have been substituted by the performing provider with a different test or test modality)	Single

Requester Consulted Regarding Substitution

Identification

Name	Requester Consulted Regarding Substitution		
Metadata Type	Data Element		
Identifier	DE-12026	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Indication whether the requester of a procedure has been consulted before a requested procedure is substituted with a different one.
Definition Source	NEHTA
Synonymous Names	
Context	It is possible that the diagnostic imaging service provider, upon assessment of the clinical information provided by the requester, and/or evaluation of the subject's clinical status, determines that a different diagnostic imaging procedure(s) is more appropriate. If a substitution is considered clinically appropriate, the diagnostic imaging service provider making such a decision often consults with the requester before the substituted procedure is performed.
Context Source	
Assumptions	
Data Type	Boolean
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	PROCEDURE SUBSTITUTION DETAILS	1.0	Essential		Single

DateTime Requester Consulted

Identification

Name	DateTime Requester Consulted		
Metadata Type	Data Element		
Identifier	DE-12027	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	The date and time when the requester of the procedure is consulted by the service provider regarding the need to substitute the requested procedure with a different procedure(s).		
Definition Source	NEHTA		
Synonymous Names			
Context			
Context Source			
Assumptions			
Data Type	DateTime		
Value Domain			

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	PROCEDURE SUBSTITUTION DETAILS	1.0	Optional		Single

DE Procedure Method

Identification

Name	Procedure Method		
Metadata Type	Data Element		
Identifier	DE-12030	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Description of the technique or method used in performing the procedure or providing the service.		
Definition Source	NEHTA		
Synonymous Names			
Context	May include a description of the use of an instrument/equipment, the positioning and orientation of the electro-magnetic emitting device, etc.		
Context Source			
Assumptions			
Data Type	Text		
Value Domain			

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	PROCEDURE PERFORMANCE DETAILS	1.0	Essential		Single

Procedure Note

Identification

Name	Procedure Note		
Metadata Type	Data Element		
Identifier	DE-12031	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Comments providing additional information relevant to the procedure in question.		
Definition Source	NEHTA		
Synonymous Names			
Context			
Context Source			
Assumptions			
Data Type	Text		
Value Domain			

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	PROCEDURE PERFORMANCE DETAILS	1.0	Optional		Single

PROCEDURE PERFORMER IDENTIFICATION

Identification

Name	PROCEDURE PERFORMER IDENTIFICATION		
Metadata Type	Data Group		
Identifier	DG-12018	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Details pertinent to the identification of the healthcare provider who performs a requested procedure on the subject of care or specimen obtained from the subject of care.
Definition Source	NEHTA
Synonymous Names	
Context	Identifiers the healthcare provider who performs a requested diagnostic imaging procedure on the subject of care or specimen (e.g. colo-rectal tissue; breast tissue) obtained from the subject of care. The healthcare provider performer can be a radiologist or a technical, e.g. an ultra-sonographer or a radiographer.
Context Source	NEHTA
Scope	
Scope Source	NEHTA
Assumptions	One or more healthcare provider(s) may be involved in performing the requested diagnostic imaging procedure.

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	PROCEDURE PERFORMANCE DETAILS	1.0	Essential		Multiple

Children

refer to separate Provider Identification Data Specification for details.

ADMINISTERED MEDICATION

Identification

Name	ADMINISTERED MEDICATION		
Metadata Type	Data Group		
Identifier	DG-12015	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Details pertinent to medication(s) that has/have been administered to the subject of care by the healthcare provider, or self-administered by subject of care (e.g. orally administered contrast medium) as instructed by the healthcare provider.
Definition Source	NEHTA
Synonymous Names	
Context	Description of medications administered to the subject of care required to prepare the subject of care for the diagnostic imaging procedure (e.g. sedatives) or as contrast study (e.g. contrast media; radio pharmaceuticals) to enhance the diagnostic image as required by the clinical status of the subject or the type of diagnostic imaging test procedure requested/recommended. A claustrophobic or restless subject may be administered a sedative immediately prior to or during the procedure.
Context Source	NEHTA
Scope	
Scope Source	NEHTA
Assumptions	

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow


Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	TEST PROCEDURE	1.0	Optional		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	ADMINISTERED MEDICATION ITEM	1.0	Optional		Multiple

ADMINISTERED MEDICATION ITEM

Identification

Name	ADMINISTERED MEDICATION ITEM		
Metadata Type	Data Group		
Identifier	DG-12016	External Identifier	
Version	1.0		

Definition

Definition	Details pertinent to the therapeutic or diagnostic enhancement agent administered to the subject of care.
Definition Source	NEHTA
Synonymous Names	
Context	<p>One or more medication(s) may be administered prior to or during the diagnostic test procedure. Examples:</p> <ul style="list-style-type: none"> Orally administered “gastroview”: a contrast medium for organ or tissue enhancement in CT or fluoroscopy imaging procedure; Intravenously administered iodinated contrast medium; Radio pharmaceutical tagged with radioisotope for radionuclide imaging; and Sedative for agitated or restless subjects.
Context Source	NEHTA
Scope	
Scope Source	NEHTA
Assumptions	

Usage


Conditions of Use	This data group is repeated for every medication administered.
Conditions of Use Source	
Misuse	

Data Flow


Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>



Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	ADMINISTERED MEDICATION	1.0	Essential		Multiple

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	MEDICATION ITEM DETAILS	1.0	Essential		Single

	Has Adverse Reaction	1.0	Essential		Single
	RELEVANT ADVERSE REACTION	1.0	Conditional	(required if "Has adverse reaction" value = "yes")	Multiple

DE Has Adverse Reaction

Identification

Name	Has Adverse Reaction		
Metadata Type	Data Element		
Identifier	DE-12028	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	An indication of whether the subject of care has exhibited/experienced an adverse reaction to the medication.
Definition Source	NEHTA
Synonymous Names	
Context	Medications may be administered to the subject of care prior to and/or during the diagnostic imaging test procedure. Some patients may experience adverse reactions to the administered medications, especially to contrast media.
Context Source	
Assumptions	
Data Type	Boolean
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	ADMINISTERED MEDICATION	1.0	Essential		Single

Adverse Reaction Presence

Identification

Name	Adverse Reaction Presence		
Metadata Type	Data Element		
Identifier	DE-12029	External Identifier	
Version	1.0		

Definition

Definition	Description of a person's situation with regard to an adverse reaction to an agent or a substance.
Definition Source	NEHTA
Synonymous Names	
Context	
Context Source	NEHTA
Assumptions	
Data Type	CodableText
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	Example 1) No known adverse reaction. Example 2) Has known adverse reaction. Example 3) Unable to obtain adverse reaction status from subject and family.
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	RELEVANT ADVERSE REACTION	1.0	Essential		Single

MEDICATION ITEM DETAILS

Identification

Name	MEDICATION ITEM DETAILS		
Metadata Type	Data Group		
Identifier	DG-12008	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Detailed description of a single, unique therapeutic agent that may be listed within a medication administration record and may also appear within the current medications list of a subject of care.
Definition Source	NEHTA
Synonymous Names	
Context	This data group captures information about a single medication item that is (a) planned to be administered (as part of the preparatory requirements for the requested diagnostic imaging procedure (e.g. contrast medium, radio pharmaceutical, sedatives/ premedications, bowel preparation medications); (b) administered to the subject of care prior to or during the diagnostic imaging procedure (e.g. contrast medium, sedatives); and (c) administered to the subject of care routinely or near the time of the diagnostic imaging procedure. Such medication may impact on the requested procedure or may impact on the clinical status of the subject of care undergoing the requested diagnostic imaging procedure (e.g. Metformin).
Context Source	NEHTA
Scope	
Scope Source	NEHTA
Assumptions	

Usage




Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/ Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging procedure/study. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging procedure/study.
Recipient Type	Either system or human.
Recipient Role(s)/ Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging services.

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	PREPARATION INSTRUCTIONS.MEDICATIONS	1.0	Essential		Multiple
	PROCEDURE PERFORMANCE DETAILS.ADMINISTERED MEDICATION	1.0	Essential		Multiple
	PROCEDURE REQUEST.RELEVANT CLINICAL STATUS.RELEVANT CURRENT MEDICATION	1.0	Essential		Multiple

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	DateTime to be administered	1.0	Essential	(required for Medication data group as part of Preparation Instruction information package)	Single
	DateTime administered	1.0	Essential	(required for Administered Medication data group as part of Procedure Performance Details information package)	Single
	Route	1.0	Essential		Single
	Dose	1.0	Essential		Single
	Frequency	1.0	Essential	(required as part of the Relevant Current Medication information package)	Single
	Duration	1.0	Essential	(required as part of the Relevant Current Medication information package)	Single
	PRODUCT	1.0	Essential		Single
	Has reaction	1.0	Essential	(required for Administered Medication data group as part of Procedure Performance Details information package)	Single

DIGITAL IMAGING DETAILS

Identification

Name	DIGITAL IMAGING DETAILS		
Metadata Type	Data Group		
Identifier	DG-12019	External Identifier	
Version	1.0		

Definition

Definition	Details pertinent to digital images produced from diagnostic imaging procedure/study performed on the subject of care.		
Definition Source	NEHTA		
Synonymous Names			
Scope			
Scope Source	NEHTA		
Assumptions			

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow


Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	DIAGNOSTIC IMAGING PROCEDURE	1.0	Optional	(required for reporting test results)	Multiple

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
ID	Image Identifier	1.0	Essential		Single
ID	Study Identifier	1.0	Essential		Single
ID	Series Identifier	1.0	Optional		Single
	Non-DICOM Reference	1.0	Conditional	(required if digital image is of non-DICOM format)	Single



T	DICOM Accession Number	1.0	Conditional	(required if both "Digital image reference link" and "Digital image" are not included)	Single
	Digital Image Reference	1.0	Conditional	(required if both "DICOM accession number" and "Digital image" are not included)	Single
	Digital Image	1.0	Conditional	(required if both "DICOM accession number" and "Digital image reference link" are not included)	Single

Image Identifier

Identification

Name	Image Identifier		
Metadata Type	Data Element		
Identifier	DE-12032	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	A unique identifier that uniquely identifies each digital image produced from a diagnostic imaging procedure being performed.
Definition Source	NEHTA
Synonymous Names	Diagnostic Image Identifier.
Context	The “image identifier” value uniquely identifies an image object (DICOM or non-DICOM image). This allows software to easily determine if an image is already present, rather than having to compare a large number of (DICOM/image) tags. Example: X-ray skull AP and lateral views study produces two images each with a unique image identifier assigned by the system. Source - The DICOM Standard White Paper - DICOM Part 1: Introduction and Overview, National Electrical Manufacturers Association, Rosslyn, VA, USA, 2000.
Context Source	
Assumptions	It is assumed that the Diagnostic Imaging information system or Picture Archive and Communicating System (PACS) generates a unique identifier for each diagnostic image produced from the test procedure performed. To ensure global uniqueness, the “image identifier” value may have to be used/associated with the unique “Organisation identifier” value.
Data Type	ID
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	DIGITAL IMAGING DETAILS	1.0	Essential		Single

Non-DICOM Reference

Identification

Name	NON-DICOM REFERENCE		
Metadata Type	Data Group		
Identifier	DG-12020	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Details pertinent to non-DICOM digital images produced from diagnostic imaging test procedure performed on the subject of care, or provided by the Diagnostic Imaging System to the receiving system.
Definition Source	NEHTA
Synonymous Names	
Context	Images not in DICOM format may be provided to the receiving system/recipient. The image may be produced in diagnostic quality image but may be sent to receiving system in non-DICOM format as compressed image format, e.g. jpeg. This data group provides image reference information if non-DICOM image formats are use.
Context Source	NEHTA
Assumptions	

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	DIAGNOSTIC IMAGING PROCEDURE	1.0	Conditional	(required if digital image is of non-DICOM format)	Multiple

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
T	Colour Depth	1.0	Essential		Single

T	Image Resolution	1.0	Essential		Single
T	Compression Ratio	1.0	Conditional	(required if compressed image is produced from original image)	Single

Colour Depth

Identification

Name	Colour Depth		
Metadata Type	Data Element		
Identifier	DE-12035	External Identifier	
Version	1.1		

Definition

Definition	The number of distinct colours that can be represented or that are used in an image.
Definition Source	NEHTA
Synonymous Names	Bit depth, Bits per pixel.
Context	The colour depth value represents the number of distinct colours that can be represented or that are used in a diagnostic image. The higher the number of colours the more realistic the image will appear. A diagnostic image with a colour depth of 2 to the 24th power (about 16.7 million) colours has a colour depth of 24 bits.
Context Source	
Assumptions	
Data Type	Text
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	NON-DICOM REFERENCE	1.0	Essential		Single

DE Image Resolution

Identification

Name	Image Resolution		
Metadata Type	Data Element		
Identifier	DE-12036	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	The number of (horizontal and vertical) addressable points that make up an image. It describes the detail an image holds.		
Definition Source	NEHTA		
Synonymous Names			
Context			
Context Source			
Assumptions			
Data Type	Text		
Value Domain			

Usage


Conditions of Use			
Conditions of Use Source			
Examples	Example 1) 1920 x 1080.		
Misuse			

Data Flow

Sender Type	Either system or human.		
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.		
Recipient Type	Either system or human.		
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.		

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	NON-DICOM REFERENCE	1.0	Essential		Single

Compression Ratio

Identification

Name	Compression Ratio		
Metadata Type	Data Element		
Identifier	DE-12037	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	The ratio at which the image is compressed.		
Definition Source	NEHTA		
Synonymous Names			
Context	Captures information about the compression ratio applied to the diagnostic image sent to the receiving system.		
Context Source			
Assumptions			
Data Type	Text		
Value Domain			

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	NON-DICOM REFERENCE	1.0	Optional	(required if images supplied to receiving system have been produced as compressed images from the original diagnostic quality images)	Single

Digital Image

Identification

Name	Digital Image	
Metadata Type	Data Element	
Identifier	DE-12040	<i>External Identifier</i>
Version	1.0	

Definition

Definition	Digital form of a diagnostic image.
Definition Source	NEHTA
Synonymous Names	
Context	See also Digital Image Reference
Context Source	
Assumptions	
Data Type	Encapsulated data
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	DIGITAL IMAGING DETAILS	1.0	Conditional	(required if “DICOM accession number” and “Digital image reference link” are not included)	Single

Series Identifier

Identification

Name	Series Identifier
Metadata Type	Data Element
Identifier	External Identifier
Version	1.0

Definition

Definition	A unique identifier that uniquely identifies all diagnostic images in a series of studies.
Definition Source	NEHTA
Synonymous Names	
Context	<p>A series of studies is a logical collection of related diagnostic imaging studies which may be used to monitor the clinical progress of a specific clinical problem experienced a subject of care. Common examples include:</p> <ul style="list-style-type: none"> Serial CT/MRI scans of the brain/abdomen to monitor, the progress over time, of tumour after surgical, chemotherapy, radiation therapy, or combination therapy; and Serial echocardiography to monitor the response of heart failure to medication therapy. <p>NOTE: The “Series identifier” is similar to the “Episode identifier” in its use. The “Series identifier” value is generated by the Digital Imaging System while the “Episode identifier” value is generated by the Requesting System (Clinical Information System). It will be useful if harmonisation can be facilitated so that one identifier is used instead of the two. This will make cross referencing between a request and the imaging output much easier and less error prone.</p>
Context Source	The DICOM Standard White Paper - DICOM Part 1: Introduction and Overview, National Electrical Manufacturers Association, Rosslyn, VA, USA, 2000.
Assumptions	
Data Type	ID
Value Domain	

Usage

Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	



Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
-----------	------	---------	------------	-----------	------------

	DIAGNOSTIC IMAGING DETAILS	1.0	Essential		Single
	REPORT VERSION TRACKING	1.0	Optional		Single

DE Study Identifier

Identification

Name	Study Identifier
Metadata Type	Data Element
Identifier	<i>External Identifier</i>
Version	1.0

Definition

Definition	A unique identifier that uniquely identifies the set of diagnostic images produced in a study. A DICOM study is a set of images with the same Study ID.
Definition Source	NEHTA
Synonymous Names	Diagnostic Image Identifier.
Context	A study/procedure may produce one or more digital image(s). For example, a request for plain x-ray of the chest, PA view will generate one digital image. In cases where more than one images are produced in a single study, e.g. in CT, MRI, echocardiography, the multiple images that logically belong to the same study set are linked by the Study ID.
Context Source	The DICOM Standard White Paper - DICOM Part 1: Introduction and Overview, National Electrical Manufacturers Association, Rosslyn, VA, USA, 2000.
Assumptions	The Diagnostic Imaging information system or Picture Archive and Communicating System (PACS) generates a unique identifier for each diagnostic image produced from the diagnostic imaging study performed and a unique “study identifier” for each study. However, this “study identifier” may only be unique to the local environment. To ensure global uniqueness, the “study identifier” may have to be used/associated with the unique “Organisation identifier”.
Data Type	ID
Value Domain	

Usage



Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	DIGITAL IMAGING DETAILS	1.0	Essential		Single
	REPORT VERSION TRACKING	1.0	Essential		Single

DICOM Accession Number

Identification

Name	DICOM Accession Number		
Metadata Type	Data Element		
Identifier	DE-12038	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	The Diagnostic Imaging and Communications in Medicine (DICOM) code number relating the image to the diagnostic imaging test procedure.
Definition Source	NEHTA
Synonymous Names	
Context	A DICOM accession number, coupled with patient identification, specifies a subject of care's diagnostic image in relation to a diagnostic imaging procedure. It is assigned by the RIS and placed in the image header to allow the diagnostic image and reports to be associated with the correct study.
Context Source	
Assumptions	
Data Type	Text
Value Domain	

Usage



Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	DIAGNOSTIC IMAGING DETAILS	1.0	Conditional	(required if both "Digital image reference link" and "Digital image" are not included)	Single
	REPORT DETAILS	1.0	Conditional	(required if both "Digital image reference link" and "Digital image" are not sent with the report)	Single

Digital Image Reference

Identification

Name	Digital Image Reference
Metadata Type	Data Element
Identifier	<i>External Identifier</i>
Version	1.0

Definition

Definition	The linkage information/URL that identifies the location where the diagnostic image is stored and can be viewed.
Definition Source	NEHTA
Synonymous Names	Link to digital image.
Context	see also Digital Image .
Context Source	
Assumptions	
Data Type	Link
Value Domain	

Usage



Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	DIGITAL IMAGING DETAILS	1.0	Conditional	(required if “DICOM accession number” and “Digital image” are not included)	Single
	REPORT DETAILS	1.0	Conditional	(required if “DICOM accession number” and “Digital image” are not sent with report)	Single

PROCEDURE REQUEST

Identification

Name	PROCEDURE REQUEST		
Metadata Type	Data Group		
Identifier	DG-12021	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Details pertinent to the requesting of procedure(s) by a healthcare provider to be performed on the subject of care.
Definition Source	NEHTA
Synonymous Names	
Scope	Captures all information associated with the requesting of diagnostic imaging procedure(s). It includes administrative, financial, clinical and identification details associated with a request for diagnostic imaging service. Includes administrative/financial (e.g. priority, insurance/debate), system (version tracking) and clinical information relevant to a diagnostic imaging test request.
Scope Source	NEHTA
Assumptions	A clinical consultation has taken place between the requester and the subject of care leading to the request for diagnostic imaging test.

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow



Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.











Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	DIAGNOSTIC IMAGING	1.0	Optional	required when a test is requested	Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	REQUEST VERSION TRACKING	1.0	Essential		Single
	REQUESTED PROCEDURE	1.0	Essential		Single

T/T₀₁₀	Clinical Reason for Request	1.0	Essential		Single
T	Special Requirements	1.0	Optional		Multiple
T	Procedure Location	1.0	Optional		Single
T/T₀₁₀	Preferred Results Delivery Mode	1.0	Optional		Single
	REQUEST PRIORITY	1.0	Essential		Single
	CONSENT DETAILS	1.0	Essential		Single
	Insurance Details	1.0	Optional		Multiple
	Special RelationshipsAuthorisation	1.0	Optional		Single
	Relevant Clinical Status	1.0	Essential		Single
	Relevant Event	1.0	Optional		Single
	REQUESTER IDENTIFICATION	1.0	Essential		Single
	REQUEST RECIPIENT IDENTIFICATION	1.0	Essential		Single
	SUBJECT OF CARE IDENTIFICATION	1.0	Essential		Single
	REQUEST COPY TO RECIPIENT IDENTIFICATION	1.0	Optional		Single

REQUESTED PROCEDURE

Identification

Name	REQUESTED PROCEDURE		
Metadata Type	Data Group		
Identifier	DG-12023	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Details pertinent to the specific procedure requested by a healthcare provider to be performed on the subject of care.
Definition Source	NEHTA
Synonymous Names	
Scope	Captures specific details about a diagnostic imaging procedure that has been requested to be performed on the subject of care.
Scope Source	NEHTA
Assumptions	A clinical consultation has taken place between the requester and the subject of care leading to the request for diagnostic imaging test.

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.



Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	PROCEDURE REQUEST	1.0	Essential		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
ID	Procedure Identifier	1.0	Essential		Single
T/T₀₁₀	Procedure Description	1.0	Essential	(required if 'Procedure Details' data group is not populated)	Single

	PROCEDURE DETAILS	1.0	Essential	(required if 'Procedure name' data element is not populated)	Single
	SPECIMEN DETAILS	1.0	Conditional	(required if imaging procedure is to be performed on tissue specimens)	Single

Clinical Reason for Request

Identification

Name	Clinical Reason for Request		
Metadata Type	Data Element		
Identifier	DE-12050	External Identifier	
Version	1.0		

Definition

Definition	The clinical reason provided by the requesting healthcare provider about why a procedure is requested.
Definition Source	NEHTA
Synonymous Names	
Context	The Clinical Reason for Request information is different from the “Clinical synopsis” (also known as “Clinical Note”) which describes the clinical circumstances/problems that had affected the subject of care. The “Clinical synopsis” data element is included in the “Relevant Clinical Status” data group.
Context Source	NEHTA
Assumptions	
Data Type	CodeableText
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	<p>Example 1) ‘to rule out intracranial haemorrhage’. (the accompanying “Clinical synopsis” details may be: “head injury in motor vehicle injury with altered level of consciousness”).</p> <p>Example 2) ‘to rule out pneumonia or other cause’. (the accompanying “Clinical synopsis” details may be: “cough, moderate grade pyrexia and pleuritic chest pain”).</p> <p>Example 3) ‘to rule out bowel obstruction’. (the accompanying “Clinical synopsis” details may be: “projectile vomiting and abdominal mass on left upper quadrant, tender on palpation”).</p>
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	PROCEDURE REQUEST	1.0	Essential		Single

Special Requirements

Identification

Name	Special Requirements
Metadata Type	Data Element
Identifier	DE-12051 <i>External Identifier</i>
Version	1.0

Definition

Definition	Description of the type of special requirement that may be needed by the subject of care for safe and/or satisfactory completion of the requested procedure.
Definition Source	NEHTA
Synonymous Names	
Context	<p>Describes the special requirement needed by the subject of care before, during and after undertaking the requested diagnostic imaging procedure. The type(s) of special requirement needed is/are determined by the healthcare provider at the time of making the request, and is based on the subject of care's clinical condition as determined by the subject's physical, psychological, cognitive status, etc.</p> <p>It provides additional information to the relevant parties including the diagnostic imaging service provider when preparing and caring for the subject prior to, during and after the imaging procedure. Categories of special requirements include:</p> <ul style="list-style-type: none"> • Nurse escort; • Special portable equipment during transport such as IV infusion, oxygen, cardiac monitor; and • Transport requirements such as wheel chair, bed or trolley transport.
Context Source	NEHTA
Assumptions	
Data Type	Text
Value Domain	

Usage


Conditions of Use	This data element is repeated for every special requirement needed
Conditions of Use Source	
Examples	<p>Example 1) Nurse escort required.</p> <p>Example 2) portable oxygen administration required during transport.</p> <p>Example 3) portable cardiac monitor required during transport.</p>
Misuse	<p>To describe special (reimbursement) authorisation for diagnostic imaging test.</p> <p>To describe preparation requirements for diagnostic imaging test.</p>

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	PROCEDURE REQUEST	1.0	Optional		Multiple

Procedure Location

Identification

Name	Procedure Location		
Metadata Type	Data Element		
Identifier	DE-12052	External Identifier	
Version	1.0		

Definition

Definition	An indication of the physical location where the requested procedure is expected to be performed.		
Definition Source	NEHTA		
Synonymous Names			
Context	<p>Conditions may exist that require the requested diagnostic imaging procedure to be performed outside the diagnostic imaging service facility. Examples of such situation include:</p> <ul style="list-style-type: none"> The requested imaging procedure is required to assist in performance of an interventional procedure to be performed in the operating theatre; and The subject of care's clinical status is not sufficiently stable for the subject to be transported to the diagnostic imaging facility, e.g. subjects in intensive care unit, subject under MET (medical emergency team) management. 		
Context Source			
Assumptions			
Data Type	Text		
Value Domain			

Usage


Conditions of Use			
Conditions of Use Source			
Examples	<p>Example 1) Operating theatre 7. Example 2) ICU. Example 3) Ward S8 (subject under MET management).</p>		
Misuse			

Data Flow

Sender Type	Either system or human.		
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>		
Recipient Type	Either system or human.		
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>		

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	PROCEDURE REQUEST	1.0	Optional		Single

DE Preferred Results Delivery Mode

Identification

Name	Preferred Results Delivery Mode		
Metadata Type	Data Element		
Identifier	DE-12053	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Descriptor that specifies the preferred medium or mechanism through which the study results may be delivered as indicated by the requesting healthcare provider.		
Definition Source	NEHTA		
Synonymous Names	Result delivery preferred medium, Result delivery preferred method.		
Context			
Context Source			
Assumptions			
Data Type	CodeableText		
Value Domain			

Usage


Conditions of Use	
Conditions of Use Source	
Examples	<p>Example 1) Phone.</p> <p>Example 2) Fax.</p> <p>Example 3) Pager.</p> <p>Example 4) Email.</p> <p>Example 5) Electronic - via diagnostic imaging results reporting application.</p> <p>Example 6) Post/mail.</p> <p>Example 7) special messenger.</p>
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	PROCEDURE REQUEST	1.0	Optional		Single

REQUEST PRIORITY

Identification

Name	REQUEST PRIORITY		
Metadata Type	Data Group		
Identifier	DG-12026	External Identifier	
Version	1.0		

Definition

Definition	Details that specify the priority/urgency of the request as determined by the requester.
Definition Source	NEHTA
Synonymous Names	
Context	Captures details about the priority or urgency of a requested diagnostic imaging procedure, based on the clinical status of the subject of care, as determined by the requesting healthcare provider.
Context Source	NEHTA
Scope	
Scope Source	NEHTA
Assumptions	

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow


Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	PROCEDURE REQUEST	1.0	Essential		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
T/T ₀₁₀	Request Priority Indicator	1.0	Essential		Single
T	Request Priority Reason	1.0	Optional		Single
	Time Interval to Provide Requested Service	1.0	Optional		Single

Request Priority Indicator

Identification

Name	Request Priority Indicator		
Metadata Type	Data Element		
Identifier	DE-12054	External Identifier	
Version	1.0		

Definition

Definition	Descriptor that identifies the priority level or level of urgency of the requested procedure as specified by the requesting healthcare provider.
Definition Source	NEHTA
Synonymous Names	Request urgency indicator.
Context	Use to indicate the level of urgency of the requested diagnostic imaging procedure based on the requester's assessment of the subject's clinical status. The request priority indicator is intended to be considered by the Diagnostic Imaging service provider when scheduling the requested study/procedure.
Context Source	NEHTA
Assumptions	
Data Type	CodeableText
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	<p>Example 1) Routine.</p> <p>Example 2) High / urgent (for critical cases, e.g. patient suspected of suffering from malignant tumour).</p> <p>Example 3) Very high / very urgent (for life threatening cases).</p>
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	REQUEST PRIORITY	1.0	Essential		Single

Request Priority Reason

Identification

Name	Request Priority Reason		
Metadata Type	Data Element		
Identifier	DE-12055	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	The description or reason why a high priority has been set for a requested procedure.
Definition Source	NEHTA
Synonymous Names	Request urgency reason
Context	Use in requests when the Request Priority Indicator has been set by the requesting healthcare provider to 'urgent' or 'very urgent' level. It services as a justification for urgent requests.
Context Source	NEHTA
Assumptions	
Data Type	Text
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	Example 1) 'Clinical symptoms suggestive of high probably of malignancy'. Example 2) 'multi-organ failure, patient is critically ill'.
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	REQUEST PRIORITY	1.0	Optional		Single

DE Time Interval to Provide Requested Service

Identification

Name	Time Interval to Provide Requested Service		
Metadata Type	Data Element		
Identifier	DE-12056	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	An interval of how soon or the latest that the requesting healthcare provider would like the requested service to be provided to the subject of care.
Definition Source	NEHTA
Synonymous Names	
Context	Used usually when the Request Priority Indicator value = “routine” to indicate, if necessary, how soon or the latest that the requesting provider would like the requested diagnostic imaging test procedure to be performed on the subject of care.
Context Source	
Assumptions	
Data Type	TimeInterval
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	Example 1) within 1 week from request.
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	REQUEST PRIORITY	1.0	Optional		Single

REQUESTER IDENTIFICATION

Identification

Name	REQUESTER IDENTIFICATION		
Metadata Type	Data group		
Identifier	DG-12044	External Identifier	AS
Version	1.0		

Definition

Definition	Details pertinent to the identification of a healthcare provider individual and affiliated healthcare provider organisation who/which is making a request for a service to be provided to a subject of care.
Definition Source	NEHTA
Synonymous Names	
Context	Captures identification information of a healthcare provider responsible for requesting a diagnostic imaging procedure to be performed on a subject of care.
Context Source	NEHTA
Scope	
Scope Source	NEHTA
Assumptions	Healthcare provider individuals eligible to make a diagnostic imaging test request is usually employed or associated with a health provider organisation.

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow


Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.






Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	PROCEDURE REQUEST	1.0	Essential		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	HEALTHCARE PROVIDER IDENTIFIER-INDIVIDUAL (see external reference for full specification: AS4846 - 2006)	1.0	Desirable		Single

	<p>PERSON NAME (see external reference for full specification: AS4846 - 2006)</p>	1.0	Essential		Single
	<p>ORGANISATION NAME (see external reference for full specification: AS4846 - 2006)</p>	1.0	Conditional	(required if requesting healthcare provider facility is external to the Diagnostic Imaging Service provider facility)	Single
	<p>ADDRESS (see external reference for full specification: AS4846 - 2006)</p>	1.0	Conditional	(required if requesting healthcare provider facility is external to the Diagnostic Imaging Service provider facility)	Single
	<p>ELECTRONIC COMMUNICATION DETAILS (see external reference for full specification: AS4846 - 2006)</p>	1.0	Essential		Single
	<p>Provider Occupation Category</p>	1.0	Optional	(may be required for certain test requests, e.g. MRI)	Single

REQUEST RECIPIENT IDENTIFICATION

Identification

Name	REQUEST RECIPIENT IDENTIFICATION		
Metadata Type	Data group		
Identifier	DG-12045	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Details pertinent to the identification of a healthcare provider individual and affiliated healthcare provider organisation who/which receives the request for services to be provided to the subject of care.
Definition Source	NEHTA
Synonymous Names	
Scope	
Scope Source	NEHTA
Assumptions	Healthcare provider individuals eligible to provide the requested diagnostic imaging procedure or study is usually employed or associated with a health provider organisation.

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow



Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.




Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	PROCEDURE REQUEST	1.0	Essential		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	HEALTHCARE PROVIDER IDENTIFIER-INDIVIDUAL (see external reference for full specification: AS4846 - 2006)	1.0	Desirable		Single
	PERSON NAME (see external reference for full specification: AS4846 - 2006)	1.0	Essential		Single

	<p>ORGANISATION NAME (see external reference for full specification: AS4846 - 2006)</p>	1.0	Conditional	(required if the Diagnostic Imaging Service provider facility is external to the requesting healthcare provider facility)	Single
	<p>ADDRESS (see external reference for full specification: AS4846 - 2006)</p>	1.0	Conditional	(required if the Diagnostic Imaging Service provider facility is external to the requesting healthcare provider facility)	Single
	<p>ELECTRONIC COMMUNICATION DETAILS (see external reference for full specification: AS4846 - 2006)</p>	1.0	Essential		Single
<p>T/T₀₁₀</p>	<p>Provider Occupation Category</p>	1.0	Optional		Single

SUBJECT OF CARE IDENTIFICATION

Identification

Name	SUBJECT OF CARE IDENTIFICATION		
Metadata Type	Data group		
Identifier	DG-12046	External Identifier	AS 5017-2006
Version	1.0		

Definition

Definition	Details pertinent to the identification of the healthcare client (subject of care).
Definition Source	NEHTA
Synonymous Names	Patient details; Patient identification, Subject of care identification.
Scope	Captures identification information about the subject of care for whom the diagnostic imaging procedure has been requested, performed or study result reported.
Scope Source	NEHTA
Assumptions	

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow



Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.






Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	PROCEDURE REQUEST	1.0	Essential		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	INDIVIDUAL HEALTHCARE IDENTIFIER (see external reference for full specification: AS5017 - 2006)	1.0	Desirable		Single
	PERSON NAME (see external reference for full specification: AS5017 - 2006)	1.0	Essential		Single

	ADDRESS (see external reference for full specification: AS5017 - 2006)	1.0	Essential	(not required for hospital admitted subject if the test is performed within the in-hospital encounter)	Single
	ELECTRONIC COMMUNICATION DETAILS (see external reference for full specification: AS5017 - 2006)	1.0	Essential	(not required for hospital admitted subject if the test is performed within the in-hospital encounter)	Single
T/T₀₁₀	Sex	1.0	Essential		Single
	Date of Birth	1.0	Essential		Single
	Age	1.0	Optional	(required if Date of Birth value not given)	Single
	DateTime of Death	1.0	Conditional	(required if request is for diagnostic imaging of cadaver)	Single

REQUEST COPY TO RECIPIENT IDENTIFICATION

Identification

Name	REQUEST COPY TO RECIPIENT IDENTIFICATION		
Metadata Type	Data Group		
Identifier	DG-12047	External Identifier	
Version	1.0		

Definition

Definition	Details pertinent to identification of the service (diagnostic imaging test) request recipients other than the Healthcare Provider requested to provide the service.
Definition Source	NEHTA
Synonymous Names	Other recipients of request.
Scope	Certain parties may receive a “copy” notification of the diagnostic imaging test request. They may include: (a) the subject of care; (b) the subject of care’s GP, e.g. when the diagnostic imaging test is requested by a specialist to whom the GP had previously made a referral requesting specialist management of the subject’s problem; and (c) the authorisation party, e.g. Workcover or Traffic Accident Commission. The purpose is to inform the authorisation party that a test request has been made. It is rare that this is required. But it will be complied with at the request of the authorisation party.
Scope Source	NEHTA
Assumptions	

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	PROCEDURE REQUEST	1.0	Optional		Multiple

CONSENT DETAILS

Identification

Name	CONSENT DETAILS		
Metadata Type	Data Group		
Identifier	DG-12027	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Details pertinent to consent given by the subject of care or party with legal or entrusted authority to consent on behalf of the subject to the requested/planned procedure.
Definition Source	NEHTA
Synonymous Names	
Scope	Certain diagnostic imaging procedures, especially those of “Interventional” category, may require consent to the procedure before such procedures can be performed. This data group captures details about consent to the requested procedure.
Scope Source	NEHTA
Assumptions	

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow



Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.



Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	PROCEDURE REQUEST	1.0	Optional		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	Consent Status	1.0	Essential		Single
	DateTime Consented	1.0	Essential	(required if ‘Consent status’ value = consent completed)	Single

	CONSENTING PARTY IDENTIFICATION	1.0	Essential	(required if 'Consent status' value = consent completed)	Single
	CONSENT WITNESS IDENTIFICATION	1.0	Essential	(required if 'Consent status' value = consent completed)	Single

DE Consent Status

Identification

Name	Consent Status		
Metadata Type	Data Element		
Identifier	DE-12057	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	The condition, position or state of consenting to a requested/planned procedure by the subject of care or the legal/authorised representative thereof.
Definition Source	NEHTA
Synonymous Names	
Context	
Context Source	NEHTA
Assumptions	
Data Type	CodeableText
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	Example 1) Consented completed. Example 2) Consent pending - parent/legal guardian contacted.
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	CONSENT DETAILS	1.0	Essential		Single

DateTime Consented

Identification

Name	DateTime Consented		
Metadata Type	Data Element		
Identifier	DE-12058	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	The date or date and time that consent to the requested/planned procedure has been given by or obtained from the subject of care or the subject's legal/authorised representative.
Definition Source	NEHTA
Synonymous Names	
Context	
Context Source	NEHTA
Assumptions	
Data Type	DateTime
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	CONSENT DETAILS	1.0	Essential	(required if 'Consent status' value = consent completed)	Single

CONSENTING PARTY IDENTIFICATION

Identification

Name	CONSENTING PARTY IDENTIFICATION		
Metadata Type	Data Group		
Identifier	DG-12028	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Details pertinent to the identification of subject of care or the subject's legal/authorised representative who has given consent to the performance of requested or planned procedure.		
Definition Source	NEHTA		
Synonymous Names			
Scope	<p>The consenting participant may be one of the following:</p> <ol style="list-style-type: none"> (1) the subject of care; (2) the genetic parent of the subject of care; (3) the legal guardian of the subject of care; (4) the authorised representative of the subject of care; and (5) an officer of the court of the law (e.g. in case of the mentally ill). 		
Scope Source	NEHTA		
Assumptions			

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow





Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	CONSENT DETAILS	1.0	Essential	(required if 'Consent status' value = consent completed)	Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	INDIVIDUAL HEALTHCARE IDENTIFIER (see external reference for full specification: AS5017 - 2006)	1.0	Conditional	(required if consenting party is the subject of care)	Single
	PERSON NAME (see external reference for full specification: AS5017 - 2006)	1.0	Essential		Single
	ADDRESS (see external reference for full specification: AS5017 - 2006)	1.0	Optional		Single
	ELECTRONIC COMMUNICATION DETAILS (see external reference for full specification: AS5017 - 2006)	1.0	Optional		Single
T/T₀₁₀	Relationship to Subject of Care	1.0	Essential		Single

CONSENT WITNESS IDENTIFICATION

Identification

Name	CONSENT WITNESS IDENTIFICATION		
Metadata Type	Data Group		
Identifier	DG-12029	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Details pertinent to the identification of party who witnessed the consent being given to a requested/planned procedure to be performed on the subject of care.
Definition Source	NEHTA
Synonymous Names	
Scope	Capture details of the Healthcare Provider who witnessed the signing of the consent allowing the requested/planned procedure to be performed on the subject of care. This Healthcare Provider is also the person who explained to the consenting party, the reason for, the risks and benefits of the procedure in question. This healthcare provider may or may not be the person who requested the procedure in question.
Scope Source	NEHTA
Assumptions	

Usage


Conditions of Use	Used for identification of the Witness to the completion of the consenting procedure only. This data group should not be used for identification of the “Authorisation Party” required for special authorisation.
Conditions of Use Source	
Misuse	

Data Flow




Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	CONSENT DETAILS	1.0	Essential	(required if 'Consent status' value = consent completed)	Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	HEALTHCARE PROVIDER IDENTIFIER - INDIVIDUAL (see external reference for full specification: AS4846 - 2006)	1.0	Desirable		Single
	PERSON NAME (see external reference for full specification: AS4846 - 2006)	1.0	Essential		Single
	ELECTRONIC COMMUNICATION DETAILS (see external reference for full specification: AS4846 - 2006)	1.0	Essential		Single
T/T₀₁₀	Provider occupation category	1.0	Optional		Single

REQUEST VERSION TRACKING

Identification

Name	REQUEST VERSION TRACKING	
Metadata Type	Data Group	
Identifier	DG-12022	<i>External Identifier</i>
Version	1.0	

Definition

Definition	Details pertinent to the identification and tracking of different versions of a procedure request that belong to the same logical set, i.e. different versions of the request that have the same request identifier value.
Definition Source	NEHTA
Synonymous Names	For correct identification and tracking of different versions of Diagnostic Imaging procedure requests that belong to the same logical set. The following data elements form the integral version tracking component of a diagnostic imaging procedure request: <ul style="list-style-type: none"> (1) Episode Identifier; (2) Request Identifier; (3) Request Version Number; (4) DateTime Recorded: provide date and time stamp at which each version is created; (5) DateTime Requested (i.e. Date and Time procedure request is sent); and (6) Request status (e.g. new, replaced, or cancelled).
Scope	<p>The “Episode Identifier” is intended to function in a similar way to the “Series Identifier” defined by DICOM - the DICOM White Paper - DICOM Part 1: Introduction and Overview, National Electrical Manufacturers Association, Rosslyn, VA, USA, 2000).</p> <p>It provides a unique identifier for linking the different diagnostic imaging procedures that are related to a course of a specific health problem or illness (e.g. bronchogenic carcinoma) affecting the subject of care.</p> <p>Request Set version tracking:</p> <p>For each diagnostic imaging procedure request, it is probable that changes may be made to the requested procedure, or to any clinical, demographic, or authorisation information provided in support of a diagnostic imaging procedure request. A new version of the request will need to be generated and sent if any such changes become necessary.</p> <p>The “Request identifier” and “Version number” values will provide the linkage and version tracking to link and track changes to a request.</p> <p>Each procedure request will have a unique “Request Identifier” value and a new “Version Number” value. Any subsequent changes to the request that do not result in the cancellation of the original request retains the same “Request Identifier” value but will have new “Version number” and “Request status” values. The same Episode and Request Identifier values provide the logical linkage for the different versions of the requests.</p>
Scope Source	NEHTA
Assumptions	If the change(s) involve(s) the type of diagnostic imaging procedure requested, whether it is the change of the study anatomical site or the diagnostic imaging modality, this should be treated as a new request and the previous/replaced request should be cancelled.

Usage


Conditions of Use	<p>Example: A subject admitted to The ED after being struck by a motor vehicle. A request for a skull X-ray is issued to rule out any fractures.</p> <ul style="list-style-type: none"> • Episode ID = 1234567. • Request ID = dix-1122. • Request Version Number = 001. • Request status = new. • Procedure requested = x-ray skull, AP and lateral views. <p>* Two hours later, the subject showed decreased level of consciousness and unequal pupil size. The requesting doctor change the skull X-ray request to a brain CT</p> <ul style="list-style-type: none"> • Episode ID = 1234567. • Request ID = dix-1122. • Request Version Number = 002. • Request status = cancelled. <p>* New procedure request:</p> <ul style="list-style-type: none"> • Episode ID = 1234567. • Request ID = dix-5566. • Request Version Number = 001. • Request status = new. • Procedure requested = CT-brain. <p>* The radiologist reviews the request and suggests change of the brain CT request to Brain CT Brain contrast:</p> <ul style="list-style-type: none"> • Episode ID = 1234567. • Request ID = dix-5566. • Request Version Number = 002. • Request status = substituted. • Procedure requested = CT-brain with contrast.
Conditions of Use Source	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>



Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	PROCEDURE REQUEST	1.0	Optional		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
ID	Episode Identifier	1.0	Essential		Single
ID	Request Identifier	1.0	Essential		Single
123	Request Version Number	1.0	Essential		Single

	DateTime Recorded	1.0	Essential		Single
	DateTime Requested	1.0	Essential		Single
T/T ₀₁₀	Request Status	1.0	Essential		Single

DateTime Recorded

Identification

Name	DateTime Recorded		
Metadata Type	Data Element		
Identifier	DE-12044	External Identifier	
Version	1.0		

Definition

Definition	The date and time that authoring or creation of a procedure request by a healthcare provider is started or done.
Definition Source	NEHTA
Synonymous Names	DateTime Created, DateTime Authored.
Context	Captures the date and time when a diagnostic imaging procedure request has been created on the request authoring application/system. This data element is displayed on the request authoring application to inform clinician/requester of the request creation date and time. However it need not be displayed on the request information package received by the diagnostic imaging information system.
Context Source	NEHTA
Assumptions	The DateTime Recorded value may or may not be the same as the DateTime Requested (Sent) value. The authoring of a procedure requested may be started and then placed on halt (from transmission/sent) pending some additional information, e.g. authorisation of the request or additional clinical information. Authoring of the request is resumed and completed when the approval is given or addition information required becomes available. The request sent at some time after the authoring processes started may have a different "Recorded" and "Requested" Date and Time value.
Data Type	DateTime
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	Example 1) 31/03/2006. Example 2) 31/03/2006 09:50.
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	REQUEST VERSION TRACKING	1.0	Essential		Single

DateTime Requested

Identification

Name	DateTime Recorded		
Metadata Type	Data Element		
Identifier	DE-12045	External Identifier	
Version	1.0		

Definition

Definition	The date and time that a procedure request is sent by a healthcare provider.
Definition Source	NEHTA
Synonymous Names	DateTime Sent, DateTime Request Sent.
Context	The value identifies the date and time that a diagnostic imaging procedure requested is sent from the authoring application/system to the diagnostic imaging information system or radiology information system.
Context Source	
Assumptions	The authoring of a request on a diagnostic imaging request application/system may span over a time interval during which the request authoring procedure. (The authoring Date and Time are represented as the 'DateTime Recorded' data element). The 'DateTime Requested' represents the Date and Time when the request or a new version of the request is sent/transmitted by the request application.
Data Type	DateTime
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	Example 1) 31/03/2006. Example 2) 31/03/2006 18:10.
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	REQUEST VERSION TRACKING	1.0	Essential		Single

Request Status

Identification

Name	Request Status
Metadata Type	Data Element
Identifier	DE-12046 External Identifier
Version	1.0

Definition

Definition	The status of a request made by a healthcare provider.
Definition Source	NEHTA
Synonymous Names	
Context	<p>In the context of the Diagnostic Imaging procedure request cycle, this data element captures the status of a request. It has clinical and medico-legal importance. When a request is first created, it may have acquired certain initial status, e.g. new. Thereafter, changes to the subject's clinical status and/or changes to clinical or related information may necessitate certain changes to be made to the request. When such changes happen, a new version may be created which may append new contents to the previous version, the Request Status value will be "Append". Or a new "request" may be initiated in response to findings/result of a diagnostic imaging study that has just been performed. The Request Status value will be self-determined - based on previous study/procedure result.</p> <p>The following potential values may be applicable to versions of a diagnostic imaging procedure request:</p> <ol style="list-style-type: none"> (1) 'new' (for a new request); (2) 'referred' (for request that is generated as a result of recommendation of a radiologist or a specialist); (3) 'substituted' (for a substitute procedure determined by a diagnostic imaging service provider, e.g. a radiologist, to replace the original procedure requested); (4) 'self-determined' (for procedure that is initiated by the diagnostic imaging service provider based on the findings/results of the originally requested procedure); (5) 'cancelled' (when a requested procedure is deemed no longer appropriate due to changed clinical or administrative reasons); and (6) 'append' (when additional clinical or administrative information is added to the original request).
Context Source	
Assumptions	
Data Type	CodeableText
Value Domain	to be developed

Usage

Conditions of Use	
Conditions of Use Source	
Examples	<p>Example 1) New.</p> <p>Example 2) Append.</p> <p>Example 3) Cancelled.</p> <p>Example 4) Referred.</p> <p>Example 5) Substituted.</p> <p>Example 6) Self-determined.</p>
Misuse	


Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/ Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>

Recipient Type	Either system or human.
Recipient Role(s)/ Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	REQUEST VERSION TRACKING				

DE Episode Identifier

Identification

Name	Episode Identifier	
Metadata Type	Data Element	
Identifier	DE-12041	External Identifier
Version	1.0	

Definition

Definition	A unique identifier that for a specific healthcare episode. It serves to link the series of occurrences within the same healthcare episode.
Definition Source	NEHTA
Synonymous Names	Diagnostic Imaging Episode Identifier; Diagnostic imaging series identifier.
Context	<p>A diagnostic imaging episode may include a series of related diagnostic imaging events. These multiple diagnostic imaging events occur during the course of patient's specific health/medical problems. For example, a series of diagnostic imaging procedures may be requested, performed and the studies reported upon during the course of lung cancer. During the course of this problem/illness, multiple diagnostic imaging requests (e.g. CT, MRI, virtual bronchoscopy, nuclear imaging, etc.) may be made.</p> <p>The Episode Identifier is a unique identifier that links all these inter-related diagnostic imaging procedures together. It is the equivalent of the "Series Unique Identifier" defined in the DICOM white paper (DICOM Part 1: Introduction and Overview, National Electrical Manufacturers Association, Rosslyn, VA, USA, 2000). It serves as the "Set" identifier, i.e. used for grouping together the series of imaging events that belong to the same logical request set as defined by the course of the health problem in question.</p> <p>NOTE: The Series Identifier is similar to the Episode Identifier in its use. The Series Identifier value is generated by the Digital Imaging System while the Episode Identifier value is generated by the Requesting System (Clinical Information System). It will be useful if these could be harmonised so that one identifier is used instead of the two. This will make cross referencing between a request and the imaging output much easier and less error prone.</p>
Context Source	NEHTA
Assumptions	The Episode Identifier is intended for system/computer consumption and does not need to be seen/consumed by human user, e.g. the requester.
Data Type	ID
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	<p>A subject admitted to The ED after being struck by a motor vehicle. A request for X-ray skull is issued to rule out any fractures.</p> <ul style="list-style-type: none"> • Episode ID = 1234567. • Request ID = dix-1122. • Request Version Number = 001. • Request status = new. • Procedure requested = x-ray skull, AP and lateral views. <p>* Two hours later, the subject shows decreased level of consciousness and unequal pupil size. The requesting doctor changes the X-ray skull request to CT brain</p> <ul style="list-style-type: none"> • Episode ID = 1234567. • Request ID = dix-1122. • Request Version Number = 002. • Request status = cancelled. <p>* New procedure request:</p> <ul style="list-style-type: none"> • Episode ID = 1234567. • Request ID = dix-5566. • Request Version Number = 001. • Request status = new. • Procedure requested = CT brain.
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	REQUEST VERSION TRACKING	1.0	Essential		Single

Request Identifier

Identification

Name	Request Identifier
Metadata Type	Data Element
Identifier	DE-12042 External Identifier
Version	1.0

Definition

Definition	Unique system identifier that uniquely identifies a request for a procedure.
Definition Source	NEHTA
Synonymous Names	Diagnostic imaging request identifier.
Context	<p>It is recommended that the Request Identifier value should be globally unique. The global uniqueness of the value of this Identifier may be achieved by: System ID (instance ID generated by System) + state identifier + organisation identifier</p> <p>When unique national healthcare provider organisation identifiers (e.g. HPI-O) are available, uniqueness of the value of this Identifier may be achieved by: System ID (instance ID generated by System) concatenated with HPI-O (of requesting organisation).</p> <p>For a specific request, the Request Identifier and “Request Version Number” provide the version tracking facility to link and track all related versions of a specific request set.</p>
Context Source	
Assumptions	The value of “Request identifier” is intended for machine/computer consumption. It does not need to be used by a human user, e.g. test requester or the recipient of a test request.
Data Type	ID
Value Domain	

Usage



Conditions of Use	
Conditions of Use Source	
Examples	See examples given in “Episode identifier” and “Request identifier” data elements.
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	REQUEST VERSION TRACKING	1.0	Essential		Single
	REPORT VERSION TRACKING	1.0	Essential		Single

Request Version Number

Identification

Name	Request Version Number		
Metadata Type	Data Element		
Identifier	DE-12043	External Identifier	
Version	1.0		

Definition

Definition	Unique identifier of a version of a request enabling any particular version of the request to be differentiated from other versions within the same request set.
Definition Source	NEHTA
Synonymous Names	
Context	Uniquely identifies a specific version of a diagnostic imaging procedure request within the same request set (i.e. request set having the same Episode Identifier value).
Context Source	
Assumptions	The Request Version Number is intended for a human user (e.g. test requester or recipient of the test request) use. It enables a human user to differentiate one version of test request from another when multiple versions of requests that belong to the same logical test request set exist/have been created).
Data Type	Number
Value Domain	

Usage



Conditions of Use	
Conditions of Use Source	
Examples	Example 1) Version 001. Example 2) Version 023.
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	REQUEST VERSION TRACKING	1.0	Essential		Single
	REQUEST VERSION TRACKING	1.0	Essential		Single

INSURANCE DETAILS

Identification

Name	INSURANCE DETAILS		
Metadata Type	Data Group		
Identifier	DG-12030	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Details pertinent to any private health insurance, government pension/benefits, compensable insurance or Department of Veterans Affairs entitlements relevant to a subject of care.
Definition Source	NEHTA
Synonymous Names	
Context	<p>While a significant number of Diagnostic Imaging procedures are covered by Medicare Benefit Schedule, the subject of care may be entitled to various insurance or healthcare benefits such as:</p> <ul style="list-style-type: none"> • Private health insurance; • Department of Veterans Affairs (DVA) entitlements; and • Compensable insurance (e.g. Workcover, Traffic Accident Compensation). <p>This data group captures information about a subject of care's insurance cover which may contribute to the funding of the requested diagnostic imaging procedures.</p>
Context Source	NEHTA
Scope	
Scope Source	NEHTA
Assumptions	

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow





Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	PROCEDURE REQUEST	1.0	Optional		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	Benefit Type	1.0	Essential		Single
	Membership Number	1.0	Essential		Single
	Insurer Identification	1.0	Optional		Single
	Billing Policy	1.0	Optional		Single

Benefit Type

Identification

Name	Benefit Type		
Metadata Type	Data Element		
Identifier	DE-12059	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	A description of the type of private, government or Department of Veterans Affairs health benefit that the subject of care is entitled to.
Definition Source	NEHTA
Synonymous Names	
Context	Captures the type of health insurance benefit that may partially or fully fund the requested diagnostic imaging procedure.
Context Source	NEHTA
Assumptions	
Data Type	Text/Codeable text
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	<p>Example 1) Medicare Benefit Schedule.</p> <p>Example 2) Aged Pension.</p> <p>Example 3) Unemployment Benefit.</p> <p>Example 4) Department of Veterans Affairs pension.</p> <p>Example 5) Private insurance.</p> <p>Example 6) Workcover.</p>
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	INSURANCE DETAILS	1.0	Essential		Single

Membership Number

Identification

Name	Membership Number		
Metadata Type	Data Element		
Identifier	DE-12047	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	An identification number indicating membership of health insurance or government benefit schemes.
Definition Source	NEHTA
Synonymous Names	
Context	
Context Source	NEHTA
Assumptions	
Data Type	Externally sourced identifier
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	INSURANCE DETAILS	1.0	Essential		Single

INSURER IDENTIFICATION

Identification

Name	INSURER IDENTIFICATION		
Metadata Type	Data Group		
Identifier	DG-12032	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Details pertinent to the identification of party/organisation providing insurance or health benefit cover to the subject of care.
Definition Source	NEHTA
Synonymous Names	
Context	Identification of the party or organisation which provides payment or co-payment for the requested diagnostic imaging procedure.
Context Source	NEHTA
Scope	
Scope Source	NEHTA
Assumptions	

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow


Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.



Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	INSURANCE DETAILS	1.0	Optional		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	ORGANISATION NAME (see external reference for full specification: AS4846 - 2006)	1.0	Essential		Single

	ADDRESS (see external reference for full specification: AS4846 - 2006)	1.0	Optional		Single
	ELECTRONIC COMMUNICATION DETAILS (see external reference for full specification: AS4846 - 2006)	1.0	Optional		Single

Billing Policy

Identification

Name	Billing Policy		
Metadata Type	Data Element		
Identifier	DE-12060	External Identifier	
Version	1.0		

Definition

Definition	A description of the payment and/or co-payment policy under which the requested services can be billed.		
Definition Source	NEHTA		
Synonymous Names			
Context			
Context Source			
Assumptions			
Data Type	CodeableText		
Value Domain			

Usage


Conditions of Use			
Conditions of Use Source			
Examples	<p>Example 1) 85% Medicare/MBS and 25% patient co-payment.</p> <p>Example 2) 70% private insurance and 30% Medicare/MBS.</p> <p>Example 3) 100% Medicare/MBS - Medicare rebate eligible item (e.g. for approved cases of mammography, bone density study, etc.).</p>		
Misuse			

Data Flow

Sender Type	Either system or human.		
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>		
Recipient Type	Either system or human.		
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>		

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	INSURANCE DETAILS	1.0	Optional		Single

SPECIAL RELATIONSHIPS AUTHORIZATION

Identification

Name	SPECIAL RELATIONSHIPS AUTHORIZATION		
Metadata Type	Data Group		
Identifier	DG-12033	External Identifier	
Version	1.0		

Definition

Definition	Details pertinent to special approval given by nominated person and organisation authorising the requested services to be provided to the subject of care.
Definition Source	NEHTA
Synonymous Names	
Scope	This data group provides information about (reimbursement) authorisation status of diagnostic imaging procedure requested to be performed on the subject of care. Special approval (for reimbursement) may be required for some cases such as subjects under Workcover or Traffic Accident compensation claims cover. For these cases, the subject's case manager will supply a "Claim Number" which is used as the authorisation number in the request.
Scope Source	NEHTA
Assumptions	Procedures such as MRI can only be requested by a consultant or a specialist. In a hospital setting where paper systems are generally used, it is possible for junior medical staff to request an MRI test with Special Relationships Authorisation from the consultant/specialist given in the form of the consultant's provider number. In an electronic system, it is assumed that the request for an MRI test will be made directly by the consultant on an electronic request system; or the request may be made by junior medical staff and later electronically "countersigned" by the consultant. In community settings, an MRI test can only be requested by a registered specialist.

Usage


Conditions of Use	Used for special administrative authorisation only. Excludes the use by consultant/specialist "countersigning" of a request for an MRI by junior medical staff.
Conditions of Use Source	
Misuse	

Data Flow



Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	PROCEDURE REQUEST	1.0	Optional		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	Claim Number	1.0	Essential		Single
	Authorising Party Identification	1.0	Essential		Single

Claim Number

Identification

Name	Claim Number
Metadata Type	Data Element
Identifier	DE-12048 <i>External Identifier</i>
Version	1.0

Definition

Definition	An identification number that signifies the eligibility for reimbursement claim for the requested service.
Definition Source	NEHTA
Synonymous Names	
Context	The Claim Number is issued by the case manager from organisations such as Workcover or Traffic Accident Commission to a subject of care when his/her health condition is covered by Workcover or Traffic Accident insurance. The Claim Number represents approval for reimbursement of service requested, in this case the Diagnostic Imaging Test.
Context Source	NEHTA
Assumptions	
Data Type	Externally sourced identifier
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	SPECIAL RELATIONSHIPS AUTHORISATION	1.0	Essential		Single

AUTHORISING PARTY IDENTIFICATION

Identification

Name	AUTHORISING PARTY IDENTIFICATION		
Metadata Type	Data Group		
Identifier	DG-12035	External Identifier	
Version	1.0		

Definition

Definition	Details pertinent to the identification of a party (other than a Healthcare Provider or Healthcare Provider Facility/Organisation) who/which provides special authorisation for the requested service to be performed.
Definition Source	NEHTA
Synonymous Names	
Scope	For identification of the case manager and the organisation who/which has the authority to provide (reimbursement) approval for the requested diagnostic imaging test to be performed.
Scope Source	NEHTA
Assumptions	The Authorising Parties (e.g. Workcover, Traffic Accident Commission and their employees) are unlikely to be registered with the national health provider identification service. As such, they are unlikely to be issued with Unique Health Identifiers.

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow



Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.



Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	SPECIAL RELATIONSHIPS AUTHORISATION	1.0	Essential		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	PERSON NAME (see external reference for full specification: AS4846 - 2006)	1.0	Essential		Single
	ORGANISATION NAME (see external reference for full specification: AS4846 - 2006)	1.0	Essential		Single

	ELECTRONIC COMMUNICATION DETAILS (see external reference for full specification: AS4846 - 2006)	1.0	Essential		Single
	Authorisation Person Occupational Category	1.0	Essential		Single

Authorising Person Occupation

Identification

Name	Authorising Person Occupation		
Metadata Type	Data Element		
Identifier	DE-12021	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	The profession, occupation or employment position of an individual who provides special (reimbursement-related) authorisation for the requested test to be performed.		
Definition Source	NEHTA		
Synonymous Names			
Context			
Context Source			
Assumptions			
Data Type	CodeableText		
Value Domain			

Usage


Conditions of Use	
Conditions of Use Source	
Examples	Example 1) Case Manager.
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	AUTHORISING PARTY IDENTIFICATION	1.0	Optional		Single

RELEVANT CLINICAL STATUS

Identification

Name	RELEVANT CLINICAL STATUS		
Metadata Type	Data Group		
Identifier	DG-12036	External Identifier	
Version	1.0		

Definition

Definition	Details pertinent to a subject of care's clinical status that are considered by the healthcare provider(s) to be relevant to the care/management of the subject.
Definition Source	NEHTA
Synonymous Names	Relevant clinical information, Relevant clinical summary, Relevant clinical history.
Context	Includes any clinical information considered: (a) by the requesting clinician to be relevant to supporting the request of diagnostic imaging procedure in question. (b) to be useful to the diagnostic imaging service provider in: <ul style="list-style-type: none"> assessing the appropriateness of the procedure requested; determining the approach to/methods appropriate for performing the requested procedure; and/or required to be taken into consideration when reporting on the study findings.
Context Source	NEHTA
Scope	
Scope Source	NEHTA
Assumptions	

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow






Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	REQUESTED PROCEDURE	1.0	Essential		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
T	Clinical Synopsis Comment	1.0	Optional		Single
	RELEVANT PROBLEM/DIAGNOSIS	1.0	Essential		Multiple
	RELEVANT CURRENT MEDICATION	1.0	Essential		Multiple
	RELEVANT OBSERVATION	1.0	Optional		Multiple
	RELEVANT ADVERSE REACTION	1.0	Essential	(minimal information required is an indication of whether the subject has any known adverse reaction)	Multiple
	RELEVANT ALERT	1.0	Essential	(minimal information required is whether the subject has any know alerts)	Multiple

RELEVANT CURRENT MEDICATION

Identification

Name	RELEVANT CURRENT MEDICATION		
Metadata Type	Data Group		
Identifier	DG-12038	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Details pertinent to a subject of care's current medication status that are considered by the healthcare provider(s) to be relevant to the care/management of the subject.
Definition Source	NEHTA
Synonymous Names	
Context	Captures a subject's current medications that are considered useful to the diagnostic imaging service provider in determining the approach to/methods appropriate for performing the requested procedure.
Context Source	NEHTA
Scope	
Scope Source	NEHTA
Assumptions	

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow


Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	PROCEDURE REQUEST	1.0	Optional	(required if subject's current medication status is considered by requesting healthcare provider to be relevant to the procedure requested)	Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	MEDICATION ITEM DETAILS	1.0	Essential		Multiple

RELEVANT ADVERSE REACTION

Identification

Name	RELEVANT ADVERSE REACTION		
Metadata Type	Data Group		
Identifier	DG-12041	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Details pertinent to a harmful or undesirable response to an agent/substance that is known to the healthcare provider during a healthcare encounter.
Definition Source	NEHTA
Synonymous Names	
Context	For specifying any known relevant adverse reaction details that may be considered relevant to the diagnostic imaging procedure requested by the requesting healthcare provider. It includes information about known adverse reactions to medication and/or food substance, e.g. seafoods. Known adverse reaction to seafoods (which is often manifestation of reaction to seafood proteins and has a different reaction mechanism to iodine) does not translate to increased risk of adverse reaction to iodine. (Leder R. How well does a history of seafood allergy predict the likelihood of an adverse reaction to IV contrast material? AJR Am J Roentgenol 1997; 169(3):906-7). However, it is prudent to provide the adverse reaction information when requesting for diagnostic imaging test, especially if IV iodinated contrast medium is expected to be used in the procedure.
Context Source	NEHTA
Scope	
Scope Source	NEHTA
Assumptions	

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow


Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	RELEVANT CLINICAL STATUS	1.0			

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
T / T ₀₁₀	Adverse Reaction Presence	1.0	Essential		Single
	ADVERSE REACTION	1.0	Conditional	(required if “adverse reaction status” value = “has known adverse reaction)	Multiple

Relevant Alert

Identification

Name	RELEVANT ALERT		
Metadata Type	Data Group		
Identifier	DG-12042	External Identifier	
Version	1.0		

Definition

Definition	Alert information pertaining to a subject of care that is known to the healthcare provider during a healthcare encounter.
Definition Source	NEHTA
Synonymous Names	
Context	<p>Captures relevant alert information about a subject of care, which may need special consideration by a diagnostic imaging test service provider :</p> <ul style="list-style-type: none"> • To avert an unfavourable healthcare event; or • To ensure safety of the subject of care, staff and/or other individuals before, during and immediately after the test procedure <p>It includes clinical and administrative alerts.</p> <p>Clinical alerts include examples such as risks of infection to others (e.g. MRSA, HIV, TB infection status); behaviour risks; medication alerts (e.g. use of Metformin); modality specific alerts. Administrative alerts include examples such as communication/language issues.</p>
Context Source	NEHTA
Scope	
Scope Source	NEHTA
Assumptions	

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow


Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	RELEVANT CLINICAL STATUS	1.0	Essential		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
T / T ₀₁₀	Alert presence	1.0	Essential		Single
	ALERT	1.0	Conditional	(required if "alert status" value = "has known alert")	Multiple

Alert Presence

Identification

Name	Alert Presence		
Metadata Type	Data Element		
Identifier	DE-12024	External Identifier	
Version	1.0		

Definition

Definition	Description of a person's alert situation which may require to be taken into special consideration when planning and delivery of a healthcare service in order to advert an unfavourable healthcare event and to ensure safety of the person, service provider and/or any other related person, immediately prior to, during and immediately after the service provision.
Definition Source	NEHTA
Synonymous Names	
Context	
Context Source	NEHTA
Assumptions	
Data Type	CodableText
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	Example 1) No known alert. Example 2) Has known alert. Example 3) Unable to obtain alert reaction status from subject and family.
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	RELEVANT ALERT	1.0	Essential		Single

DE Clinical Synopsis Comment

Identification

Name	Clinical Synopsis Comment		
Metadata Type	Data Element		
Identifier	DE-12061	External Identifier	
Version	1.0		

Definition

Definition	A summary or comment on the subject of care's health issues/problems (from the perspective of the healthcare provider). This may include a summary of the issues/problems, management strategies, outcomes/progress and possible prognosis.
Definition Source	NEHTA
Synonymous Names	
Context	In diagnostic imaging , the Clinical Synopsis Comment is used by the requesting healthcare provider to describe the clinical status, problems or issues that are considered to be relevant to the procedure requested and/or to assist the decision making of the diagnostic imaging service provider regarding the services to be provided.
Context Source	NEHTA
Assumptions	
Data Type	Text
Value Domain	

Usage



Conditions of Use	
Conditions of Use Source	
Examples	Example 1) Brain tumour removed 3 months ago. Now presents with sudden onset severe headache.
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	RELEVANT CLINICAL STATUS	1.0	Optional		Single
	REPORT DETAILS	1.0	Optional		Single

RELEVANT PROBLEM/DIAGNOSIS

Identification

Name	RELEVANT PROBLEM/DIAGNOSIS	
Metadata Type	Data Group	
Identifier	DG-12037	<i>External Identifier</i>
Version	1.0	

Definition

Definition	<p>A data group describing a diagnostic label or problem statement assigned by the healthcare provider to describe the diagnosis or health/medical problem pertaining to the subject of care during a healthcare event/visit.</p> <p>Diagnosis: a concise technical description of medical condition/problem or situation pertaining to a subject of care. The decision to apply the diagnostic label or problem description/statement by the healthcare provider is based on his/her assessment and interpretation of the cause, nature, or manifestation of the subject of care's medical/health condition(s). A diagnosis represents the nature and identification of a disease.</p> <p>Problem: a description of a subject of care's condition for which a specific diagnosis has not yet been identified.</p>
Definition Source	NEHTA
Synonymous Names	<p>Purposes of providing relevant diagnosis or problem information include:</p> <p>(1) To support the request of a diagnostic imaging procedure; and</p> <p>(2) To facilitate the diagnostic imaging service provider to determine the appropriateness of the requested procedure, to plan/adopt the most appropriate approach or methods in performing the requested procedure.</p> <p>For example, a Problem/Diagnosis of “diabetes” may trigger extra precaution in the use of intravenous iodinated contrast. IV administration of iodinated contrast is associated with a potential risk of acute alteration (decline) of renal function, hence increases the risk of acute renal insufficiency in those with pre-existing or predisposition to renal compromised state such as diabetes. Given the diagnosis, the radiologist may want to access recent pathology test results (e.g. renal function test) before considering the choice of the type of IV iodinated contrast to be used in the diagnostic imaging test.</p> <p>Reference to previous/existing pathology and/or diagnostic imaging test(s) may also be included, which serve(s) to provide additional or clarifying information on the problem/diagnosis information given by the test requester.</p> <p>For example, the relevant “Problem/Diagnosis” given may be “risk of bleeding” for a request of interventional diagnostic imaging such as DSA of kidney. A reference to a recent haematology test may be included.</p> <p>(3) To facilitate the diagnostic imaging service provider to arrive at the most appropriate interpretive findings after the study.</p>
Scope Source	NEHTA
Assumptions	

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow



Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	RELEVANT CLINICAL STATUS	1.0	Essential		Multiple

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	Problem/Diagnosis Description	1.0	Essential		Single
	DateTime Problem Started	1.0	Desirable		Single
	Date Problem Resolved	1.0	Optional		Single
	Problem Progress Status	1.0	Optional		Single
	Problem/Diagnosis Note	1.0	Optional		Single
	PROBLEM/DIAGNOSIS AWARENESS	1.0	Optional		Multiple
	Reference to Relevant Pathology Test	1.0	Optional		Multiple
	Reference to Relevant Diagnostic Imaging Procedure	1.0	Optional		Multiple

Reference to Relevant Diagnostic Imaging Procedure

Identification

Name	Reference to Relevant Diagnostic Imaging Procedure		
Metadata Type	Data Element		
Identifier	DE-12063	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	A reference to diagnostic imaging procedure(s) result(s) relevant to the specific problem/diagnosis in question
Definition Source	NEHTA
Synonymous Names	
Context	Intended to provide reference to other recent and relevant diagnostic imaging study results that may provide additional information about or add precision to the problem/diagnosis, relevant to the diagnostic imaging procedure requested. For example a previous diagnostic imaging test provided support to the diagnosis of injury to the thoraco-lumbar spine (e.g. compressed fracture of T11 - L2). The current request is to check the healing progress/stability of the fracture.
Context Source	
Assumptions	
Data Type	Link/URL
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	RELEVANT PROBLEM/DIAGNOSIS	1.0	Optional		Multiple

Reference to Relevant Pathology Test

Identification

Name	Reference to Relevant Pathology Test		
Metadata Type	Data Element		
Identifier	DE-12062	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	A reference to the pathology test(s) result(s) relevant to the specific problem/diagnosis in question.
Definition Source	NEHTA
Synonymous Names	
Context	<p>Used to provide reference to recent and relevant pathology test results that may provide additional information about or increase precision of the problem/diagnosis considered to be relevant to the diagnostic imaging procedure requested.</p> <p>Example: a reference to a haematology test (e.g. INR) is provided to add more precise information about the asserted problem of “bleeding risk”. Such information is important if invasive procedures are involved in the requested diagnostic imaging study.</p> <p>May also be used by healthcare provider reporting on the diagnostic imaging procedure results. The pathology result may provide relevant referencing information which influence the interpretation of the imaging result by the reporting provider.</p> <p>Example: a healthcare provider reporting on Brain or lung CT/MRI scan images may reference histo-pathology result on tissue specimens previously obtained from the subject of care.</p>
Context Source	
Assumptions	
Data Type	Link/URL
Value Domain	

Usage



Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	RELEVANT PROBLEM/DIAGNOSIS	1.0	Optional		Multiple
	REPORT DETAILS	1.0	Optional		Multiple

RELEVANT OBSERVATION

Identification

Name	RELEVANT OBSERVATION		
Metadata Type	Data Group		
Identifier	DG-12040	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Health or physical assessment and/or observation undertaken on the subject of care. The assessment or observation may be subjective, e.g. description of symptoms, appearance; or it may be objective, e.g., body weight, height, heart rate, etc.
Definition Source	NEHTA
Synonymous Names	Health Assessment, Physical Assessment.
Context	Provides relevant clinical assessment/observation information of the subject of care: <ul style="list-style-type: none"> To support the request of the diagnostic imaging test. For the diagnostic imaging test provider to determine the appropriateness of the requested test, to plan/adopt the most appropriate approach or methods in performing the requested test, and to assist in arriving at the most appropriate interpretive findings after the test. For example, LMP (last menstrual period) and pregnancy observation/assessment information may be used by the radiologist to determine the risk-benefits of performing a radiological examination on a pregnant woman requiring an important radiological study.
Context Source	NEHTA
Scope	
Scope Source	NEHTA
Assumptions	

Usage


Conditions of Use	The current generic data group structure in this version of the specification supports many, but not all of the tests that may be undertaken on an individual. In particular, it supports simple reporting of single valued and battery (2-level compound tests such as height, weight, blood-pressure, Apgar Score. More specialised structures may be required to report certain tests and/or test results for some conditions.
Conditions of Use Source	
Misuse	Should not be used to include all diagnostic imaging or pathology test results.

Data Flow


Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	RELEVANT CLINICAL STATUS	1.0	Optional		Multiple

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
T / T ₀₁₀	Test Name	1.0	Essential		Single
	OBSERVATION DETAILS	1.0	Essential		Multiple
123	Aggregate Score	1.0	Optional		Single
T	Observation Note	1.0	Optional		Single

Test Name

Identification

Name	Test Name		
Metadata Type	Data Element		
Identifier	DE-12087	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	The name of a diagnostic procedure or investigation/observation undertaken.		
Definition Source	NEHTA		
Synonymous Names			
Context	Captures the name of the investigation, test or measurement. Some tests or measurements may be compound, in which case the individual components may be described in Observation Description .		
Context Source			
Assumptions			
Data Type	CodeableText		
Value Domain			

Usage


Conditions of Use			
Conditions of Use Source			
Examples	Example 1) Pregnancy status / LMP. Example 2) Cognitive status of subject. Example 3) Conscious status.		
Misuse			

Data Flow

Sender Type	Either system or human.		
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.		
Recipient Type	Either system or human.		
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.		

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	RELEVANT OBSERVATION	1.0	Essential		Single

OBSERVATION DETAILS

Identification

Name	OBSERVATION DETAILS		
Metadata Type	Data Group		
Identifier	DG-12024	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Details of a health or physical assessment and/or observation undertaken on the subject of care. The assessment or observation may be subjective, e.g. description of symptoms, appearance; or it may be objective, e.g., body weight, height, heart rate, etc.		
Definition Source	NEHTA		
Synonymous Names			
Scope	Captures detailed information on Investigations (other than Pathology and Diagnostic Imaging tests).		
Scope Source	NEHTA		
Assumptions			

Usage


Conditions of Use			
Conditions of Use Source			
Misuse	Should not be used to include all diagnostic imaging or pathology test results.		

Data Flow





Sender Type	Either system or human.		
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.		
Recipient Type	Either system or human.		
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.		

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	RELEVANT OBSERVATION	1.0	Essential		Multiple

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	DateTime of Observation	1.0	Essential		Single
	Observation Description	1.0	Essential		Single
	Atomic Result	1.0	Essential		Single
	Observation Abnormal Flag	1.0	Conditional	(if result is out of normal range)	Single

DateTime of Observation

Identification

Name	DateTime of Observation		
Metadata Type	Data Element		
Identifier	DE-12088	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	The date or date and time that the health assessment/observation was performed.		
Definition Source	NEHTA		
Synonymous Names			
Context			
Context Source			
Assumptions			
Data Type	DateTime		
Value Domain			

Usage


Conditions of Use			
Conditions of Use Source			
Examples	Example 1) 31/03/2004. Example 2) 2004-05-19. Example 3) 2004. Example 4) 31/03/2004 13:10.		
Misuse			

Data Flow

Sender Type	Either system or human.		
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.		
Recipient Type	Either system or human.		
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.		

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	OBSERVATION DETAILS	1.0	Essential		Single

Observation Description

Identification

Name	Observation Description		
Metadata Type	Data Element		
Identifier	DE-12089	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	A description of the type of Observation taken (on the subject of care).		
Definition Source	NEHTA		
Synonymous Names			
Context	Captures the name of the investigation, or the entity or level of function being observed. For each observation description, there is a corresponding finding or value - see Atomic Result . There may also be associated qualifiers such as Observation Abnormal Flag , or Observation Note .		
Context Source			
Assumptions			
Data Type	CodeableText		
Value Domain			

Usage


Conditions of Use	
Conditions of Use Source	
Examples	Example 1) Pregnancy status / LMP. Example 2) Cognitive status of subject. Example 3) Conscious status.
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	OBSERVATION DETAILS	1.0	Essential		Single

Atomic Result

Identification

Name	Atomic Result		
Metadata Type	Data Element		
Identifier	DE-12090		<i>External Identifier</i>
Version	1.0		

Definition

Definition	The outcome or finding of the observation or measurement undertaken.
Definition Source	NEHTA
Synonymous Names	Observation Value.
Context	
Context Source	
Assumptions	
Data Type	Text or Quantity or Quantity Range or Ratio
Value Domain	

Usage


Conditions of Use	<p>Future versions of this specification may:</p> <ul style="list-style-type: none"> • Support coded or codeable text values; • Support more complex observation structures; or • Explicitly differentiate between measurable values (e.g. 23 kilogrammes) and qualitative findings (e.g. obese).
Conditions of Use Source	
Examples	<p>Example 1) 24 weeks pregnant.</p> <p>Example 2) Cognitively impaired - unable to comprehend instructions.</p>
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	OBSERVATION DETAILS	1.0	Essential		Single

DE Observation Abnormal Flag

Identification

Name	Observation Abnormal Flag		
Metadata Type	Data Element		
Identifier	DE-12091		<i>External Identifier</i>
Version	1.0		

Definition

Definition	A flag indicating the degree of abnormality from the normal limits of the result.		
Definition Source	NEHTA		
Synonymous Names	Abnormal Flag		
Context			
Context Source			
Assumptions			
Data Type	CodeableText		
Value Domain			

Usage


Conditions of Use	
Conditions of Use Source	
Examples	<p>Example 1) Abnormal (applies to non numeric result).</p> <p>Example 2) critical high (markedly above upper limit of reference range).</p> <p>Example 3) below low normal.</p> <p>Example 4) above upper panic limit.</p>
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	OBSERVATION DETAILS	1.0	Conditional		Single

Aggregate Score

Identification

Name	Aggregate Score		
Metadata Type	Data Element		
Identifier	DE-12092		<i>External Identifier</i>
Version	1.0		

Definition

Definition	An aggregated score for a compound observation, such as an assessment test.		
Definition Source	NEHTA		
Synonymous Names			
Context			
Context Source			
Assumptions			
Data Type	Number, Quantity or Ration		
Value Domain			

Usage


Conditions of Use	
Conditions of Use Source	
Examples	Example 1) 7/10 (<i>Apgar 1 min.</i>). Example 2) 9/15 (<i>Glasgow coma scale</i>).
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	RELEVANT OBSERVATION	1.0	Conditional		Single

DE Observation Note

Identification

Name	Observation Note		
Metadata Type	Data Element		
Identifier	DE-12093	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Free text comment relevant to the observation in question.		
Definition Source	NEHTA		
Synonymous Names			
Context	Used to provide additional information not included in/catered for by Atomic Result .		
Context Source			
Assumptions			
Data Type	Text		
Value Domain			

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	RELEVANT OBSERVATION	1.0	Optional		Single

RELEVANT EVENT

Identification

Name	RELEVANT EVENT		
Metadata Type	Data Group		
Identifier	DG-12043	External Identifier	
Version	1.0		

Definition

Definition	Details pertinent to the event that is relevant to or may impact on the planning/scheduling of the requested procedure.
Definition Source	NEHTA
Synonymous Names	Relevant key event.
Context	<p>A diagnostic imaging procedure may be requested to be performed to guide or support other clinical events concurrently. In this case, the requested diagnostic imaging procedure needs to be scheduled to coincide with the date and time for which the clinical event in question is planned.</p> <p>Other administrative events, e.g. discharge or transfer, may also be planned at the time when the diagnostic imaging is requested. Such events may impact on the scheduling decision by the diagnostic imaging service.</p> <p>Example of relevant events include:</p> <ul style="list-style-type: none"> • Example 1) Intramedullary fixation of fracture femur under X-ray control. • Example 2) planned discharge from hospital. • Example 3) planned inter-department transfer (e.g. from ICU to general ward).
Context Source	NEHTA
Scope	
Scope Source	NEHTA
Assumptions	

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow


Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	PROCEDURE REQUEST	1.0	Optional		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
T / T ₀₁₀	Relevant event description	1.0	Essential		Single
	Expected DateTime of relevant event	1.0	Essential		Single
T	Relevant event note	1.0	Optional		Single

Relevant Event Description

Identification

Name	RELEVANT EVENT DESCRIPTION		
Metadata Type	Data Element		
Identifier	DE-12064	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Description of the relevant event that may need to be taken into consideration when scheduling the procedure/service requested.
Definition Source	NEHTA
Synonymous Names	
Context	Captures information about a clinical or administrative event which may impact the scheduling of a requested diagnostic imaging event.
Context Source	NEHTA
Assumptions	
Data Type	CodeableText
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	Example 1) Surgical (e.g. needle biopsy) or orthopaedic procedures requiring to be performed under guidance of diagnostic imaging procedure. Example 2) planned discharge of the subject. Example 3) planned transfer of the subject.
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	RELEVANT EVENT	1.0	Essential		Single

Expected DateTime of Relevant Event

Identification

Name	Expected DateTime of Relevant Event		
Metadata Type	Data Element		
Identifier	DE-12065	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	The date or date and time when the relevant event in question is expected to happen.
Definition Source	NEHTA
Synonymous Names	
Context	The date or date and time when the relevant event in question is expected to happen is important information that needs to be taken into consideration when scheduling the requested diagnostic imaging procedure. Example 1) the date and time of a surgical event requiring to be performed under the guidance of the requested diagnostic imaging procedure. Example 2) the date of planned discharge.
Context Source	NEHTA
Assumptions	
Data Type	DateTime
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	RELEVANT EVENT	1.0	Essential		Single

Relevant Event Note

Identification

Name	Relevant Event Note		
Metadata Type	Data Element		
Identifier	DE-12066	External Identifier	
Version	1.0		

Definition

Definition	Free text commentary providing additional information relevant to the event in question.
Definition Source	NEHTA
Synonymous Names	
Context	Provides additional information about the event relevant to the requested diagnostic imaging procedure.
Context Source	NEHTA
Assumptions	
Data Type	Text
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	RELEVANT EVENT	1.0	Optional		Single

DIAGNOSTIC IMAGING REPORTING

Identification

Name	DIAGNOSTIC IMAGING REPORTING		
Metadata Type	Data Group		
Identifier	DG-12048	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Information pertinent the details of the report on a diagnostic imaging procedure/study performed on a subject of care, or performed on specimen(s) obtained from the subject. Such details include information about the generation of the report, its contents, the confirmation of receipt and reading of a report.
Definition Source	NEHTA
Synonymous Names	Report
Scope	This data group contains the following components: (1) report generation (i.e. authoring) details; (2) the report content; (3) details of report review, where necessary, by a specialist with expertise in the field of the procedure; (4) authorisation for release details; and (5) report receipt and reading/accessing confirmation details.
Scope Source	NEHTA
Assumptions	

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow










Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a sender of the diagnostic imaging test report. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team that produced the diagnostic imaging test report.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test and designated recipient of the test report. Recipient Organisation Role(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging tests.

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	DIAGNOSTIC IMAGING	1.0	Optional	(required when a test report is produced)	Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	REPORT VERSION TRACKING	1.0	Essential		Single
	REPORT DETAILS	1.0	Essential		Single
	Report	1.0	Optional		Single
	REPORT AUTHORIZING DETAILS	1.0	Essential		Single
	REPORT REVIEW DETAILS	1.0	Optional		Single
	REPORT ISSUE DETAILS	1.0	Conditional	(required when a report has been issued)	Single
	REPORT RECEIVED DETAILS	1.0	Conditional	(required when an issued report has been received by authorised receiving healthcare provider)	Single
	REPORT READ DETAILS	1.0	Conditional	(required when an issued report has been read by authorised receiving healthcare provider)	Single
	REPORT COPY TO RECIPIENT IDENTIFICATION	1.0	Essential	(Subject of care should receive a copy of the report)	Multiple

Report

Identification

Name	Report
Metadata Type	Data Element
Identifier	DE-12080 <i>External Identifier</i>
Version	1.0

Definition

Definition	The actual report of the Imaging procedure or study.
Definition Source	NEHTA
Synonymous Names	
Context	<p>The report format allows for sections of:</p> <ul style="list-style-type: none"> structured data; unstructured data such as free text; and if necessary images highlighting “regions of interest”. <p>The result reported may not be in machine-interpretable structured format, but should be available in a format for rendering verbatim to a clinician. Its contents should reflect exactly the contents specified in the “REPORT DETAILS” data group.</p>
Context Source	NEHTA
Assumptions	
Data Type	Encapsulated Data
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a sender of the diagnostic imaging test report.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team that produced the diagnostic imaging test report.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test and designated recipient of the test report.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging tests.</p>

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	DIAGNOSTIC IMAGING REPORTING	1.0	Optional	(used to support specific content display or rendition requirements)	Single

REPORT AUTHORIZING DETAILS

Identification

Name	REPORT AUTHORIZING DETAILS		
Metadata Type	Data Group		
Identifier	DG-12053	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Details pertinent to the authoring of the diagnostic imaging test report.		
Definition Source	NEHTA		
Synonymous Names			
Scope			
Scope Source	NEHTA		
Assumptions			

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow



Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a sender of the diagnostic imaging test report. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team that produced the diagnostic imaging test report.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test and designated recipient of the test report. Recipient Organisation Role(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging tests.

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	DIAGNOSTIC IMAGING REPORTING	1.0	Essential		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	Report Author	1.0	Essential		Single
	DateTime Report Created	1.0	Essential		Single

REPORT AUTHOR

Identification

Name	REPORT AUTHOR	
Metadata Type	Externally sourced data group specification	
Identifier	DG-12054	External Identifier AS4846-2006
Version	1.0	

Definition

Definition	Details pertinent to the identification of a healthcare provider individual (and the affiliated healthcare provider organisation) who has authored a report on a requested (diagnostic imaging) procedure/study performed on a subject of care.
Definition Source	NEHTA
Synonymous Names	
Scope	The authoring provider may or may not be the same as the performer of the diagnostic imaging test.
Scope Source	NEHTA
Assumptions	Healthcare provider individuals eligible to author reports on diagnostic imaging test performed is usually employed or associated with a health provider organisation or facility.

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow



Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a sender of the diagnostic imaging test report. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team that produced the diagnostic imaging test report.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test and designated recipient of the test report. Recipient Organisation Role(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging tests.




Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	REPORT AUTHORIZING DETAILS	1.0	Essential		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	HEALTHCARE PROVIDER IDENTIFIER-INDIVIDUAL (see external reference for full specification: AS4846 - 2006)	1.0	Desirable		Single
	PERSON NAME (see external reference for full specification: AS4846 - 2006)	1.0	Essential		Single

	ORGANISATION NAME (see external reference for full specification: AS4846 - 2006)	1.0	Conditional	(required if the organisation affiliation of the reporting author is not the same as the provider who performed the requested test)	Single
	ADDRESS (see external reference for full specification: AS4846 - 2006)	1.0	Conditional	(required if the organisation affiliation of the reporting author is not the same as the provider who performed the requested test)	Single
	ELECTRONIC COMMUNICATION DETAILS (see external reference for full specification: AS4846 - 2006)	1.0	Essential		Single
T/T₀₁₀	Provider Occupation Category	1.0	Optional		Single

REPORT REVIEW DETAILS

Identification

Name	REPORT REVIEW DETAILS		
Metadata Type	Data Group		
Identifier	DG-12055	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Details pertinent to the review of a report after it has been authored by a qualified healthcare provider.		
Definition Source	NEHTA		
Synonymous Names			
Scope			
Scope Source	NEHTA		
Assumptions			

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow



Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a sender of the diagnostic imaging test report. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team that produced the diagnostic imaging test report.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test and designated recipient of the test report. Recipient Organisation Role(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging tests.

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	DIAGNOSTIC IMAGING REPORTING	1.0	Optional		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	Reviewing Specialist	1.0	Essential		Single
	DateTime Report Reviewed	1.0	Essential		Single

REVIEWING SPECIALIST

Identification

Name	REVIEWING SPECIALIST
Metadata Type	Externally sourced data group specification
Identifier	<i>External Identifier</i>
Version	1.0

Definition

Definition	Details pertinent to the identification of a healthcare provider individual (and the affiliated healthcare provider organisation) who has reviewed a report produced on a requested (diagnostic imaging) test performed on a subject of care.
Definition Source	NEHTA
Synonymous Names	
Scope	Some diagnostic imaging procedure/study reports may need to be reviewed, e.g. by a senior clinician/specialist before it can be released to the external parties.
Scope Source	NEHTA
Assumptions	Healthcare provider individuals eligible to review diagnostic imaging test reports is usually employed or associated with a health provider organisation.

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow



Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a sender of the diagnostic imaging test report. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team that produced the diagnostic imaging test report.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test and designated recipient of the test report. Recipient Organisation Role(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging tests.





Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	REPORT REVIEW DETAILS	1.0	Essential		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	HEALTHCARE PROVIDER IDENTIFIER-INDIVIDUAL (see external reference for full specification: AS4846 - 2006)	1.0	Desirable		Single
	PERSON NAME (see external reference for full specification: AS4846 - 2006)	1.0	Essential		Single

	<p>ORGANISATION NAME (see external reference for full specification: AS4846 - 2006)</p>	<p>1.0</p>	<p>Optional</p>	<p>(may be required if the organisation affiliation of the reviewer of the report is not the same as the provider who authored the report)</p>	<p>Single</p>
	<p>ADDRESS (see external reference for full specification: AS4846 - 2006)</p>	<p>1.0</p>	<p>Optional</p>	<p>(may be required if the organisation affiliation of the reviewer of the report is not the same as the provider who authored the report)</p>	<p>Single</p>
	<p>ELECTRONIC COMMUNICATION DETAILS (see external reference for full specification: AS4846 - 2006)</p>	<p>1.0</p>	<p>Essential</p>		<p>Single</p>
	<p>Provider Occupation Category</p>	<p>1.0</p>	<p>Optional</p>		<p>Single</p>

DateTime Report Reviewed

Identification

Name	DateTime Report Reviewed		
Metadata Type	Data Element		
Identifier	DE-12082	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	The date and time that a report is reviewed by a qualified healthcare provider.
Definition Source	NEHTA
Synonymous Names	
Context	
Context Source	NEHTA
Assumptions	
Data Type	DateTime
Value Domain	

Usage


Conditions of Use	This data element is intended for machine/system use only hence it need not be displayed on the report sent to the diagnostic imaging procedure requester. However, this data element should be displayed on the report authoring application to inform the authoring and reviewing clinicians of the date and time that a report has been reviewed, if a review is necessary.
Conditions of Use Source	NEHTA
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a sender of the diagnostic imaging test report. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team that produced the diagnostic imaging test report.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test and designated recipient of the test report. Recipient Organisation Role(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging tests.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	REPORT REVIEW DETAILS	1.0	Essential		Single

REPORT ISSUE DETAILS

Identification

Name	REPORT ISSUE DETAILS		
Metadata Type	Data Group		
Identifier	DG-12057	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Details pertinent to the issue or release of a report on an imaging procedure or study to external parties.		
Definition Source	NEHTA		
Synonymous Names			
Scope			
Scope Source	NEHTA		
Assumptions			

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow



Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a sender of the diagnostic imaging test report. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team that produced the diagnostic imaging test report.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test and designated recipient of the test report. Recipient Organisation Role(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging tests.

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	DIAGNOSTIC IMAGING REPORTING	1.0	Conditional	(required if a report has been issued)	Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	Report Issued By	1.0	Essential		Single
	DateTime Report Issued	1.0	Essential		Single

REPORT ISSUED BY

Identification

Name	REPORT ISSUED BY		
Metadata Type	Externally sourced data group specification		
Identifier	DG-12058	External Identifier	AS4846-2006
Version	1.0		

Definition

Definition	Details pertinent to the identification of a healthcare provider individual (and the affiliated healthcare provider organisation) who has authorised the release of a report produced on a requested procedure/study.
Definition Source	NEHTA
Synonymous Names	
Scope	The provider who releases the report may be the report author, reviewer, or some other clinicians who is given the responsibility/authority to release reports.
Scope Source	NEHTA
Assumptions	Healthcare provider individuals eligible to release a diagnostic imaging test report is usually employed or associated with a health provider organisation.

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow



Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a sender of the diagnostic imaging test report. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team that produced the diagnostic imaging test report.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test and designated recipient of the test report. Recipient Organisation Role(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging tests.




Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	REPORT ISSUE DETAILS	1.0	Essential		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	HEALTHCARE PROVIDER IDENTIFIER-INDIVIDUAL (see external reference for full specification: AS4846 - 2006)	1.0	Desirable		Single
	PERSON NAME (see external reference for full specification: AS4846 - 2006)	1.0	Essential		Single

	ORGANISATION NAME (see external reference for full specification: AS4846 - 2006)	1.0	Optional		Single
	ADDRESS (see external reference for full specification: AS4846 - 2006)	1.0	Optional		Single
	ELECTRONIC COMMUNICATION DETAILS (see external reference for full specification: AS4846 - 2006)	1.0	Optional		Single
T/T₀₁₀	Provider Occupation Category	1.0	Optional		Single

DateTime Report Issued

Identification

Name	DateTime Report Issued		
Metadata Type	Data Element		
Identifier	DE-12083	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	The date and time that a report has been issued to the external parties.
Definition Source	NEHTA
Synonymous Names	DateTime Report Sent, DateTime Test Report Released.
Context	
Context Source	
Assumptions	The authoring of a report on a reporting application/system may span over a duration of time. (The authoring Date and Time are represented as the “DateTime report created” data element.) The DateTime Report Issued represents the date and time when a version of the report has been authorised by a reporting provider or responsible healthcare provider for release from the diagnostic imaging information system.
Data Type	DateTime
Value Domain	

Usage


Conditions of Use	Used in conjunction with Report Identifier , Report Version Number , Report Status and DateTime Report Created for version tracking as described in Report Version Tracking .
Conditions of Use Source	
Examples	Example 1) 31/03/2006. Example 2) 31/03/2006 18:10.
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a sender of the diagnostic imaging test report. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team that produced the diagnostic imaging test report.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test and designated recipient of the test report. Recipient Organisation Role(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging tests.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	REPORT ISSUE DETAILS	1.0	Essential		Single

REPORT RECEIVED DETAILS

Identification

Name	REPORT RECEIVED DETAILS		
Metadata Type	Data Group		
Identifier	DG-12059	External Identifier	
Version	1.0		

Definition

Definition	Details pertinent to the receipt of an issued report
Definition Source	NEHTA
Synonymous Names	
Context	<p>This data group captures information about:</p> <ul style="list-style-type: none"> The Date and Time when a report on diagnostic imaging diagnostic imaging procedure/study report is received by the intended receiving system (used by the primary recipient of the report); and The healthcare provider designated to be the primary recipient of the report (usually the requesting provider or nominee). <p>For medico-legal purpose, it is important that the report issuing system receives an acknowledgement of receipt of the issued report and the date and time the issued report is received by the intended receiving system/application without error.</p>
Context Source	NEHTA
Scope	
Scope Source	NEHTA
Assumptions	<p>Acknowledgement of receipt of issued diagnostic imaging procedure/study report: In the electronic environment, it is more likely that acknowledgement of the receipt of the issued test report is issued by the EHRS of the nominated report recipient (e.g. the requester of the test). In this case, no recipient person details may be available.</p> <p>In the paper environment, it is more likely that the (sealed) issued report is received by a non-clinical person, or clinical person who is not necessary the requester of the test or the nominated recipient of the test report.</p>

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow



Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a sender of the diagnostic imaging test report.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team that produced the diagnostic imaging test report.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test and designated recipient of the test report.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging tests.</p>

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	DIAGNOSTIC IMAGING REPORTING	1.0	Conditional	(required if a report has been issued)	Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	Report Primary Recipient	1.0	Essential		Single
	DateTime Report Received	1.0	Essential		Single

REPORT PRIMARY RECIPIENT

Identification

Name	REPORT PRIMARY RECIPIENT		
Metadata Type	Externally sourced data group specification		
Identifier	DG-12060	External Identifier	AS4846-2006
Version	1.0		

Definition

Definition	Details pertinent to the identification of a healthcare provider individual (and the affiliated healthcare provider organisation) who/which is the intended primary recipient of a report.
Definition Source	NEHTA
Synonymous Names	
Scope	
Scope Source	NEHTA
Assumptions	The intended primary recipient of the issued diagnostic test report is usually the requester of the diagnostic test performed.

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	Used for identification of “Copy To” recipient of an issued diagnostic test report.

Data Flow




Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a sender of the diagnostic imaging test report. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team that produced the diagnostic imaging test report.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test and designated recipient of the test report. Recipient Organisation Role(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging tests.




Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	REPORT RECEIVED DETAILS	1.0	Essential		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	HEALTHCARE PROVIDER IDENTIFIER-INDIVIDUAL (see external reference for full specification: AS4846 - 2006)	1.0	Desirable		Single
	PERSON NAME (see external reference for full specification: AS4846 - 2006)	1.0	Essential		Single
	ORGANISATION NAME (see external reference for full specification: AS4846 - 2006)	1.0	Essential		Single

	<p>ADDRESS (see external reference for full specification: AS4846 - 2006)</p>	1.0	Conditional	(required if electronic communication details not provided)	Single
	<p>ELECTRONIC COMMUNICATION DETAILS (see external reference for full specification: AS4846 - 2006)</p>	1.0	Essential		Single
	<p>Provider Occupation Category</p>	1.0	Optional		Single

DE DateTime Report Received

Identification

Name	DateTime Report Received		
Metadata Type	Data Element		
Identifier	DE-12084	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	The date and time when an issued report is received.
Definition Source	NEHTA
Synonymous Names	DateTime Report Received; DateTime Received.
Context	For recording and communication of the Date and Time when a diagnostic imaging procedure or study report issued from the Diagnostic Imaging Information System is received by the requester’s EHRS or clinical information system or the intended recipient.
Context Source	NEHTA
Assumptions	In the electronic environment, the receiving electronic system (e.g. EHRS) of the intended recipient (e.g. the test requester) will return to the report issuing system a machine/computer generated acknowledgement of receipt and the receipt Date and Time value. In the paper environment, it is likely that a person may sign and return an acknowledgement of receipt of the issued report.
Data Type	DateTime
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a sender of the diagnostic imaging test report. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team that produced the diagnostic imaging test report.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test and designated recipient of the test report. Recipient Organisation Role(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging tests.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	REPORT RECEIVED DETAILS	1.0	Essential		Single

REPORT READ DETAILS

Identification

Name	REPORT READ DETAILS		
Metadata Type	Data Group		
Identifier	DG-12061	External Identifier	
Version	1.0		

Definition

Definition	Information indicating that the released report has been read by the intended/clinical recipient after it is received from the report issuing system.
Definition Source	NEHTA
Synonymous Names	
Context	<p>This data group captures information about:</p> <ul style="list-style-type: none"> the date and time when an issued diagnostic imaging procedure/study report has been read by the intended/clinical recipient; and identification details of the healthcare provider who has read the report. <p>For medico-legal purposes, it is important that the issue system receives notification of the date and time when the issued diagnostic imaging procedure/study report is first read after its release to the intended recipient. This is especially important in case the report reflects any problems or issues identified by the study finding that may have significant impact on the patient and/or indicate further intervention.</p>
Context Source	NEHTA
Scope	
Scope Source	NEHTA
Assumptions	

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow



Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	DIAGNOSTIC IMAGING REPORTING	1.0	Conditional	(required if an issued report has been read)	Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	Report Read By	1.0	Essential		Single
	DateTime Report Read	1.0	Essential		Single

REPORT READ BY

Identification

Name	REPORT READ BY		
Metadata Type	Externally sourced data group specification		
Identifier	DG-12062	External Identifier	AS4846-2006
Version	1.0		

Definition

Definition	Details pertinent to the identification of an authorised healthcare provider individual (and affiliated healthcare provider organisation) who has read the issued report.
Definition Source	NEHTA
Synonymous Names	
Context	For identification of healthcare provider who has read the issued diagnostic imaging procedure or study report.
Context Source	NEHTA
Scope	
Scope Source	NEHTA
Assumptions	Healthcare provider individuals authorised to have access to the issued report is usually a provider responsible for or involved in the care of the subject and is employed or associated with a health provider organisation.

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow


Sender Type	Either system or human
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services. Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.





Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	REPORT READ DETAILS	1.0	Essential		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	HEALTHCARE PROVIDER IDENTIFIER-INDIVIDUAL (see external reference for full specification: AS4846 - 2006)	1.0	Desirable		Single

	PERSON NAME (see external reference for full specification: AS4846 - 2006)	1.0	Essential		Single
	ORGANISATION NAME (see external reference for full specification: AS4846 - 2006)	1.0	Essential		Single
	ADDRESS (see external reference for full specification: AS4846 - 2006)	1.0	Optional		Single
	ELECTRONIC COMMUNICATION DETAILS (see external reference for full specification: AS4846 - 2006)	1.0	Essential		Single
T/T₀₁₀	Provider Occupation Category	1.0	Optional		Single

DateTime Report Read

Identification

Name	DateTime Report Read		
Metadata Type	Data Element		
Identifier	DE-12085	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	The date and time when the issued report is first read.
Definition Source	NEHTA
Synonymous Names	
Context	Specifies when the issued diagnostic imaging procedure/study report is first read by the intended healthcare provider recipient or healthcare provider responsible for the care of the subject.
Context Source	NEHTA
Assumptions	
Data Type	DateTime
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a sender of the diagnostic imaging test report. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team that produced the diagnostic imaging test report.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test and designated recipient of the test report. Recipient Organisation Role(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging tests.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	REPORT READ DETAILS	1.0	Essential		Single

REPORT COPY TO RECIPIENT

Identification

Name	REPORT COPY TO RECIPIENT		
Metadata Type	Data Group		
Identifier	DG-12063	External Identifier	AS4846-2006
Version	1.0		

Definition

Definition	Details pertinent to identification of the recipients (other than the intended primary recipient) to whom a copy of the report is sent.
Definition Source	NEHTA
Synonymous Names	Other recipients of report.
Scope	<p>Certain parties may receive a “copy” of the diagnostic imaging procedure/study report. They may include:</p> <p>(a) the subject of care;</p> <p>(b) the subject of care’s GP, e.g. when the diagnostic imaging test is requested by a specialist to whom the GP had previously made a referral requesting specialist management of the subject’s problem; and</p> <p>(c) the authorisation party, e.g. Workcover or Traffic Accident Commission. It is extremely rare that copy of the report should go to such party. However, if the request specifically indicates that a copy of the report should also go to such party, the request is usually complied with.</p>
Scope Source	NEHTA
Assumptions	The REPORT COPY TO RECIPIENT s usually include parties nominated by the test requester and/or the subject of care.

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow




Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging test.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider of the diagnostic imaging test services.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution or practice providing diagnostic imaging test services.</p>

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	DIAGNOSTIC IMAGING REPORTING	1.0	Essential	(subject of care should receive a copy of report)	Multiple

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	SUBJECT OF CARE RECIPIENT	1.0	Essential		Single
	HEALTHCARE PROVIDER RECIPIENT	1.0	Optional		Single
	OTHER RECIPIENT	1.0	Optional		Single

REPORT VERSION TRACKING

Identification

Name	REPORT VERSION TRACKING	
Metadata Type	Data Group	
Identifier	DG-12049	<i>External Identifier</i>
Version	1.0	

Definition

Definition	Details pertinent to the identification and tracking of different versions of reports that belong to the same logical set.
Definition Source	NEHTA
Synonymous Names	
Scope	<p>A diagnostic imaging report may undergo different stages of changes during its lifecycle. It may be in the process of being “authored”, may undergo the “review” process, may be authorised for release as “interim” or “final” report. Even after its release, a report may undergo changes including new contents added, i.e. “appended”, a new release may “replace” a previous version with the previous version being “cancelled”. When any such changes occur, a new version of the report will be generated and sent. The new version will have:</p> <ul style="list-style-type: none"> • The same “Series identifier” value (if such identifier exists or is used), “Study identifier” value, and “Report identifier” value; and • A different “Report version number”, “DateTime Recorded” and “DateTime Sent” values. <p>NOTE: A report will need to be linked to the Diagnostic Imaging request so that the requesting system and requesting healthcare provider can be correctly informed of the progress of the request. This linking is managed using the following data elements:</p> <ul style="list-style-type: none"> • Episode Identifier; • Request Identifier; and • Request Version Number. <p>The “Episode Identifier” is used as a “set identifier” to link all requests in the same diagnostic imaging episode. It is desirable that the Episode Identifier is harmonized with the DICOM defined “Series Identifier” to remove the need of using different data elements for similar purpose.</p>
Scope Source	NEHTA
Assumptions	

Usage


Conditions of Use	<p>A diagnostic imaging procedure was performed on a request for CT of brain</p> <ul style="list-style-type: none"> • Episode ID = 12345668. • Request ID = dix-2837. • Request Version Number = 001. <p>An interim report was produced and sent to the requester:</p> <ul style="list-style-type: none"> • Series ID = SRR-1234576. • Study ID = SDIX-2800. • Report ID = DIX-RPT-1233. • Report Version Number = 001. • Report Status = interim. <p>After review by a senior radiologist and a final report was produced and sent:</p> <ul style="list-style-type: none"> • Series ID = SRR-1234576. • Study ID = SDIX-2800. • Report ID = DIX-RPT-1233. • Report Version Number = 002. • Report Status = final, replace interim <p>For a single study, the “Study Identifier”, “Report Identifier” and “Report Version Number” provide the version tracking facility for related reports that belong to a specific study set.</p>
Conditions of Use Source	
Misuse	

Data Flow


Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a sender of the diagnostic imaging test report. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team that produced the diagnostic imaging test report.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test and designated recipient of the test report. Recipient Organisation Role(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging tests.

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	TEST REPORT	1.0	Optional		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
ID	Episode Identifier (used for correctly linking report to request)	1.0	Essential		Single
ID	Request Identifier (used for correctly linking report to request)	1.0	Essential		Single
123	Request version number (used for correctly linking report to request)	1.0	Essential		Single
ID	Series identifier	1.0	Optional	(if procedure is part of a study series)	Single
ID	Study identifier	1.0	Essential		Single
ID	Report identifier	1.0	Essential		Single
123	Report version number	1.0	Essential		Single
T/T₀₁₀	Report status	1.0	Essential		Single
	DateTime report created	1.0	Essential		Single

Report Identifier

Identification

Name	Report Identifier
Metadata Type	Data Element
Identifier	DE-12067 <i>External Identifier</i>
Version	1.0

Definition

Definition	Unique system identifier that uniquely identifies a procedure or study report being created.
Definition Source	NEHTA
Synonymous Names	Diagnostic imaging report identifier.
Context	<p>Unique identification of a diagnostic imaging procedure/study report. It is recommended that the Report Instance Identifier value should be globally unique. The global uniqueness of the value of this Identifier may be achieved by: System ID (instance ID generated by System) + state identifier + organisation identifier If unique national healthcare provider organisation identifiers (e.g. HPI-O) are available, uniqueness of the value of this Identifier may be achieved by: System ID (instance ID generated by System) + HPI-O + Report Identifier</p> <p>For a single study, the “Study Identifier”, “Report Identifier” and “Report Version Number” values provide the version tracking facility for related reports that belong to a specific study set.</p>
Context Source	
Assumptions	The value of “Report Identifier” is intended for machine/computer consumption. It does not need to be used/consumed by the human user, e.g. reporting provider or the recipient of a test report.
Data Type	ID
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a sender of the diagnostic imaging test report.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team that produced the diagnostic imaging test report.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test and designated recipient of the test report.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging tests.</p>

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	REPORT VERSION TRACKING	1.0	Essential		Single

Report Version Number

Identification

Name	Report Version Number		
Metadata Type	Data Element		
Identifier	DE-12068	External Identifier	
Version	1.0		

Definition

Definition	Unique identifier of different versions of a specific report enabling any particular version of the report to be differentiated from other versions within the same report set.
Definition Source	NEHTA
Synonymous Names	Diagnostic imaging report version number.
Context	For a single study, the “Study Identifier”, “Report Identifier” and “Report Version Number” provide the version tracking facility for related reports that belong to a specific study set.
Context Source	
Assumptions	The “Version Number” value is intended for human user (e.g. reporting provider or recipient of the test report) use. It enables a human user to differentiate one version of test report from another when multiple versions of reports that belong to the same logical test report set exist/ have been created).
Data Type	Number
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	Example 1) Version 001. Example 2) Version 023.
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/ Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a sender of the diagnostic imaging test report. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team that produced the diagnostic imaging test report.
Recipient Type	Either system or human.
Recipient Role(s)/ Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test and designated recipient of the test report. Recipient Organisation Role(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging tests.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	REPORT VERSION TRACKING	1.0	Essential		Single

DE Report Status

Identification

Name	Report Status
Metadata Type	Data Element
Identifier	DE-12069 <i>External Identifier</i>
Version	1.0

Definition

Definition	The status of a specific report in its lifecycle and thus in relation to other reports within the same logical report set.
Definition Source	NEHTA
Synonymous Names	
Context	<p>In the context of the Diagnostic Imaging report lifecycle, the status of a report has important clinical and medico-legal implications/impacts. When a report is first created, it may have a status value = “interim”, or “final” and there is no preceding version of the same report. Additions or changes to any of the report contents may later be made, e.g. changes made by a reviewing expert. Any such change necessitates a new version of the report to be created and sent. The new version can take the following forms:</p> <p>(a) a final report (replacing the “interim”);</p> <p>(b) an addition - only the additional information required is included in the new version which effectively requires information contained in the new version to be appended to the previously sent version, the status value of the new version = “appended”, i.e. it is intended to complement the previous version and its contents must be read in conjunction to the previous version; and</p> <p>(c) amendment - the new information requires some contents of the previous version to be replaced or correction of errors in the previous version. The revised version will have a status value = “replaced”, i.e. it completely replaces the previous version.</p>
Context Source	
Assumptions	
Data Type	CodeableText
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	<p>Example 1) Interim.</p> <p>Example 2) Final.</p> <p>Example 3) Replacement.</p> <p>Example 4) Addition.</p>
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a sender of the diagnostic imaging test report.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team that produced the diagnostic imaging test report.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test and designated recipient of the test report.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging tests.</p>

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	REPORT VERSION TRACKING				

DE DateTime Report Created

Identification

Name	DateTime Report Created		
Metadata Type	Data Element		
Identifier	DE-12081	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	The date and time that a report by the reporting healthcare provider is started or completed.
Definition Source	NEHTA
Synonymous Names	DateTime Created; DateTime Authored.
Context	Used in conjunction with Report Identifier , Report Version Number , Report Status and DateTime Report Issued for version tracking as described in Report Version Tracking .
Context Source	NEHTA
Assumptions	The DateTime Report Created may or may not be the same as the DateTime Report Issued . The authoring of a diagnostic imaging procedure/study report may be started and then placed on halt (from transmission/sent) pending some additional information, e.g. reference information to related pathology or other diagnostic imaging results. Authoring of the report is resumed and completed when the addition information required becomes available. The completed report may need to be authorised for release before it can be issued.
Data Type	DateTime
Value Domain	

Usage



Conditions of Use	This data element is intended for machine/system use only hence it need not be displayed on diagnostic imaging study report sent to the diagnostic test requester. However, this data element should be displayed on the test report authoring application to inform the authoring clinicians of the report creation date and time.
Conditions of Use Source	NEHTA
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a sender of the diagnostic imaging test report. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team that produced the diagnostic imaging test report.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test and designated recipient of the test report. Recipient Organisation Role(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging tests.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	REPORT VERSION TRACKING	1.0	Essential		Single
	REPORT AUTHORIZING DETAILS	1.0	Essential		Single

REPORT DETAILS

Identification

Name	REPORT DETAILS		
Metadata Type	Data Group		
Identifier	DG-12050	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	The descriptive and interpretive details of a report.
Definition Source	NEHTA
Synonymous Names	
Context	<p>The descriptive and interpretive contents are structured into sections based on a structured diagnostic imaging report format, allowing for sections of:</p> <ul style="list-style-type: none"> structured data; unstructured data such as free text (to be used for results unable to be sent and or received as structured, machine-interpretable data); and if necessary images highlighting “regions of interest”. <p>The results reported may not be in a machine-interpretable structured format. Such data are sent as text and images constrained within a structured report format.</p>
Context Source	NEHTA
Scope	
Scope Source	NEHTA
Assumptions	

Usage


Conditions of Use	
Conditions of Use Source	
Misuse	

Data Flow






Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a sender of the diagnostic imaging test report.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team that produced the diagnostic imaging test report.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test and designated recipient of the test report.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging tests.</p>

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	DIAGNOSTIC IMAGING REPORTING	1.0	Essential		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
T/T ₀₁₀	Procedure Description	1.0	Essential	(usually the requested procedure name is repeated in the report, name of requested procedure. If a substitute procedure is done - details are given in the "Procedure Substitution Details" data group)	Single
T	Clinical Synopsis Comment	1.0	Essential	(usually the report contains a "clinical note" or "synopsis" which is a summary of "clinical synopsis" givens by the requester)	Single
	PROCEDURE PERFORMANCE DETAILS	1.0	Essential		Single
T	Result Description	1.0	Essential		Single
T	Interpretive Note	1.0	Optional		Single
T/T ₀₁₀	Abnormal Result Indicator	1.0	Optional		Single
	PROBLEM/DIAGNOSIS BASED ON PROCEDURE RESULT	1.0	Optional		Single
T	DICOM Accession Number	1.0	Conditional	(if "digital image" or reference link not sent with report)	Single
	Digital Image Reference	1.0	Conditional	(if "digital image" or "DICOM accession number not sent with report)	Single
	Reference to Other Relevant Diagnostic Imaging Procedure	1.0	Optional		Multiple
	Reference to Relevant Pathology Test	1.0	Optional		Multiple

Result Description

Identification

Name	Result Description		
Metadata Type	Data Element		
Identifier	DE-12073	<i>External Identifier</i>	
Version	1.0		

Definition

Definition	Detailed Description of the results of the procedure/study performed.
Definition Source	NEHTA
Synonymous Names	
Context	<p>It may include for example:</p> <ul style="list-style-type: none"> the contour, size, shape, (tissue) density of the anatomical structures studied reflecting findings identified on the digital images produced by the diagnostic imaging procedure performed; and where appropriate, highlights of regions of interest.
Context Source	NEHTA
Assumptions	
Data Type	Text
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a sender of the diagnostic imaging test report.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team that produced the diagnostic imaging test report.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test and designated recipient of the test report.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging tests.</p>

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	REPORT DETAILS	1.0	Essential		Single

DE Interpretive Note

Identification

Name	Interpretive Note		
Metadata Type	Data Element		
Identifier	DE-12074	External Identifier	
Version	1.0		

Definition

Definition	Interpretive comments relevant to the requested procedure/study result as provided by the reporting and reviewing healthcare provider.
Definition Source	NEHTA
Synonymous Names	
Context	<p>The interpretive note represents the clinical judgement formed by the reporting and reviewing healthcare provider based on</p> <ul style="list-style-type: none"> • The result of the diagnostic imaging study; • The patterns identified through comparative analysis of one or more previously performed diagnostic imaging studies; and • Additional information including relevant clinical information about the subject and from referencing relevant pathology test results.
Context Source	NEHTA
Assumptions	
Data Type	Text
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a sender of the diagnostic imaging test report.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team that produced the diagnostic imaging test report.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test and designated recipient of the test report.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging tests.</p>

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	REPORT DETAILS	1.0	Optional		Single

Abnormal Result Indicator

Identification

Name	Abnormal Result Indicator
Metadata Type	Data Element
Identifier	<i>External Identifier</i>
Version	1.0

Definition

Definition	An indication that the procedure/study finding(s) is/are abnormal or outside the normal reference range.
Definition Source	NEHTA
Synonymous Names	Conclusion.
Context	Used to indicate that the diagnostic imaging procedure/study finding(s) is/are, as determined by the clinical judgement of the reporting and/or reviewing specialist, to be: <ul style="list-style-type: none"> - abnormal (in studies such as X-rays, CT, MRI scans); or - outside the normal reference range/values (as in studies such as echocardiograms).
Context Source	NEHTA
Assumptions	
Data Type	Text/Codeable text
Value Domain	Abnormal Result Indicator values - to be developed

Usage


Conditions of Use	
Conditions of Use Source	
Examples	Example 1) abnormal. Example 2) outside normal reference range.
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a sender of the diagnostic imaging test report. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team that produced the diagnostic imaging test report.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test and designated recipient of the test report. Recipient Organisation Role(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging tests.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	REPORT DETAILS	1.0	Essential		Single

PROBLEM/DIAGNOSIS BASED ON PROCEDURE RESULT

Identification

Name	PROBLEM/DIAGNOSIS BASED ON PROCEDURE RESULT
Metadata Type	Data Group
Identifier	<i>External Identifier</i>
Version	1.0

Definition

Definition	<p>A grouping describing a diagnostic label or problem statement assigned by the healthcare provider to describe the diagnosis or health/medical problem pertaining to the subject of care during a healthcare event/visit.</p> <p>Diagnosis: a concise technical description of medical condition/problem or situation pertaining to a subject of care. The decision to apply the diagnostic label or problem description/statement by the healthcare provider is based on his/her assessment and interpretation of the cause, nature, or manifestation of the subject of care's medical/health condition(s). A diagnosis represents the nature and identification of a disease.</p> <p>Problem: a description of a subject of care's condition for which a specific diagnosis has not yet been identified.</p>
Definition Source	NEHTA
Synonymous Names	
Context	<p>This data group provides problem/diagnosis information that the subject of care may suffer, as determined by the reporting healthcare provider, based on the findings on the diagnostic imaging procedure/study performed.</p> <p>Problem may be identified and/or diagnosis may be made based on diagnostic imaging findings alone, e.g. fracture of bones, osteo-arthritis/arthritis changes of joints, pleural effusion, pneumothorax, cardiac valve lesions (echocardiogram).</p> <p>Problems may also be identified and/or diagnosis may also be made based on relevant clinical and pathology information about the subject in conjunction to diagnostic imaging findings, e.g. epidural, subdural, intracranial lesions (identified by CT and MRI scans + relevant clinical information).</p>
Context Source	NEHTA
Scope	
Scope Source	NEHTA
Assumptions	

Usage


Conditions of Use	For reporting the problem/diagnosis the subject of care may suffer based on the diagnostic image findings and relevant clinical information about the subject.
Conditions of Use Source	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	<p>Sender Role(s) can include: Healthcare provider who is a sender of the diagnostic imaging test report.</p> <p>Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team that produced the diagnostic imaging test report.</p>
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	<p>Recipient Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test and designated recipient of the test report.</p> <p>Recipient Organisation Role(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging tests.</p>

Relationships

Parents

Data Type	Name	Version	Obligation within parent	Condition within parent	Occurrence within parent
	REPORT DETAILS	1.0	Optional		Single

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
T / T ₀₁₀	Problem/Diagnosis description	1.0	Essential		Single
T / T ₀₁₀	Problem/Diagnosis certainty	1.0	Optional		Single

DE Reference to Other Relevant Diagnostic Imaging Procedure

Identification

Name	Reference to Other Relevant Diagnostic Imaging Procedure
Metadata Type	Data Element
Identifier	<i>External Identifier</i>
Version	1.0

Definition

Definition	A reference to other diagnostic imaging procedure(s) previously/recently performed and their results.
Definition Source	NEHTA
Synonymous Names	
Context	Used to provide reference to one or more previously/recently performed diagnostic imaging procedures/studies and their results that may provide relevant comparative information and may: <ul style="list-style-type: none"> • have influenced the interpretation of the current diagnostic imaging study findings by the reporting provider; or • provide useful progress/trending comparison information for reader(s) on the current diagnostic imaging study.
Context Source	NEHTA
Assumptions	
Data Type	Link/URL
Value Domain	

Usage


Conditions of Use	
Conditions of Use Source	
Examples	
Misuse	

Data Flow

Sender Type	Either system or human.
Sender Role(s)/Organisation(s)/Jurisdiction(s)	Sender Role(s) can include: Healthcare provider who is a sender of the diagnostic imaging test report. Sender Organisation(s) can include: Healthcare institution representing a healthcare provider team that produced the diagnostic imaging test report.
Recipient Type	Either system or human.
Recipient Role(s)/Organisation(s)/Jurisdiction(s)	Recipient Role(s) can include: Healthcare provider who is a requester of the diagnostic imaging test and designated recipient of the test report. Recipient Organisation Role(s) can include: Healthcare institution representing a healthcare provider team requesting the diagnostic imaging tests.

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	REPORT DETAILS	1.0	Optional		Single

Acronyms

AIHW	Australian Institute of Health & Welfare
EHR	Electronic Health Record
HL7	Health Level Seven
MBS	Medical Benefits Scheme
METeOR	MEtadata On-line Registry (http://meteor.aihw.gov.au)
NEHTA	National E-Health Transition Authority
SEHR	Shared Electronic Health Record

Index

A

abnormal flag 175
 Abnormal Result Indicator 220
 Administered Medication 82
 Administered Medication Item 83
 adverse reaction 85, 158
 Adverse Reaction Presence 86
 aggregate result 176
 Aggregate Score 176
 alert 160
 Alert Presence 162
 anatomical site
 specimen 64
 Anatomical Site Description 53
 aspect
 view 57
 assessment 168
 Atomic Result 174
 author 187
 authorisation 149
 Authorising Party Identification 152
 Authorising Person Occupation 154

B

Benefit Type 144
 Billing Policy 148

C

Claim Number 151
 Clinical Intervention Description 50
 Clinical Reason for Request 107
 Colour Depth 94
 Compression Ratio 96
 conditional 32
 consent date 126
 Consent Details 123
 Consent Status 125
 Consent Witness Identification 129
 Consenting Party Identification 127
 Contrast Medium 59
 creation date 215

D

Data Element
 DE-12001 - Procedure Identifier 45
 DE-12002 - Procedure Description 46
 DE-12003 - Clinical Intervention
 Description 50
 DE-12004 - Imaging Modality 51
 DE-12005 - Anatomical Site Description
 53
 DE-12006 - Laterality 54
 DE-12007 - View Aspect 57
 DE-12008 - Position 58
 DE-12009 - Contrast Medium 59
 DE-12010 - Specimen Identifier 62
 DE-12011 - Specimen Qualifier 65

DE-12012 - Specimen Type 63
 DE-12013 - Specimen Anatomical Site
 64
 DE-12014 - DateTime Specimen
 Collected 66
 DE-12015 - DateTime Specimen
 Received 67
 DE-12016 - Preparation Regimen
 Description 69
 DE-12017 - DateTime Performed 73
 DE-12021 - Authorising Person
 Occupation 154
 DE-12024 - Alert Presence 162
 DE-12025 - Reason for Substitution 76
 DE-12026 - Requester Consulted
 Regarding Substitution 77
 DE-12027 - DateTime Requester
 Consulted 78
 DE-12028 - Has Adverse Reaction 85
 DE-12029 - Adverse Reaction Presence
 86
 DE-12030 - Procedure Method 79
 DE-12031 - Procedure Note 80
 DE-12032 - Image Identifier 91
 DE-12035 - Colour Depth 94
 DE-12036 - Image Resolution 95
 DE-12037 - Compression Ratio 96
 DE-12038 - DICOM Accession Number
 101
 DE-12040 - Digital Image 97
 DE-12041 - Episode Identifier 138
 DE-12042 - Request Identifier 140
 DE-12043 - Request Version Number
 141
 DE-12044 - DateTime Recorded 134
 DE-12045 - DateTime Requested 135
 DE-12046 - Request Status 136
 DE-12047 - Membership Number 145
 DE-12048 - Claim Number 151
 DE-12050 - Clinical Reason for Request
 107
 DE-12051 - Special Requirements 108
 DE-12052 - Procedure Location 110
 DE-12053 - Preferred Results Delivery
 Mode 111
 DE-12054 - Request Priority Indicator
 113
 DE-12055 - Request Priority Reason 114
 DE-12056 - Time Interval to Provide
 Requested Service 115
 DE-12057 - Consent Status 125
 DE-12058 - DateTime Consented 126
 DE-12059 - Benefit Type 144
 DE-12060 - Billing Policy 148
 DE-12061 - Clinical Synopsis Comment
 163
 DE-12062 - Reference to Relevant
 Pathology Test 167
 DE-12063 - Reference to Relevant
 Diagnostic Imaging Procedure
 166
 DE-12064 - Relevant Event Description
 180

DE-12065 - Expected DateTime of Relevant Event 181	DG-12036 - Relevant Clinical Status 155
DE-12066 - Relevant Event Note 182	DG-12037 - Relevant Problem/Diagnosis 164
DE-12067 - Report Identifier 211	DG-12038 - Relevant Current Medication 157
DE-12068 - Report Version Number 212	DG-12040 - Relevant Observation 168
DE-12069 - Report Status 213	DG-12041 - Relevant Adverse Reaction 158
DE-12073 - Result Description 218	DG-12042 - Relevant Alert 160
DE-12074 - Interpretive Note 219	DG-12043 - Relevant Event 178
DE-12080 - Report 185	DG-12044 - Requester Identification 116
DE-12081 - Report Version Number 215	DG-12045 - Request Recipient Identification 118
DE-12082 - DateTime Report Reviewed 192	DG-12046 - Subject of Care Identification 120
DE-12083 - DateTime Report Issued 196	DG-12047 - Request Copy To Recipient Identification 122
DE-12084 - DateTime Report Received 201	DG-12048 - Diagnostic Imaging Report 183
DE-12085 - DateTime Report Read 206	DG-12049 - Report Version Tracking 209
DE-12087 - Test Name 170	DG-12050 - Report Details 216
DE-12088 - DateTime of Observation 172	DG-12053 - Report Authoring Details 186
DE-12089 - Observation Description 173	DG-12054 - Report Author 187
DE-12090 - Atomic Result 174	DG-12055 - Report Review Details 189
DE-12091 - Observation Abnormal Flag 175	DG-12057 - Report Issue Details 193
DE-12092 - Aggregate Score 176	DG-12058 - Report Issued By 194
DE-12093 - Observation Note 177	DG-12059 - Report Received Details 197
Data Group	DG-12060 - Report Primary Recipient 199
DG-12000 - Diagnostic imaging 36	DG-12061 - Report Read Details 202
DG-12001 - Diagnostic Imaging Procedure 43	DG-12062 - Report Read By 204
DG-12002 - PROCEDURE DETAILS 48	DG-12063 - Report Copy To Recipient 207
DG-12003 - PROCEDURE ANATOMICAL SITE 52	DateTime Consented 126
DG-12004 - Procedure Qualifier 55	DateTime of Observation 172
DG-12005 - Specimen Details 60	DateTime Performed 73
DG-12006 - Preparation Instructions 68	DateTime Report Created 215
DG-12007 - Medications 70	DateTime Report Issued 196
DG-12008 - Medication Item Details 87	DateTime Report Read 206
DG-12010 - Procedure Performance Details 71	DateTime Report Received 201
DG-12011 - Procedure Substitution Details 74	DateTime Report Reviewed 192
DG-12015 - Administered Medication 82	DateTime Requester Consulted 78
DG-12018 - Procedure Performer Identification 81	DateTime Specimen Collected 66
DG-12019 - Digital Imaging Details 89	DateTime Specimen Received 67
DG-12020 - Non-DICOM Reference 92	desirable 32
DG-12021 - Procedure Request 103	diagnosis 164
DG-12022 - Request Version Tracking 131	Diagnostic imaging 36
DG-12023 - Requested Procedure 105	Diagnostic Imaging Procedure 43
DG-12024 - Observation Details 171	Diagnostic Imaging Reporting 183
DG-12026 - Request Priority 112	diagnostic test 170
DG-12027 - Consent Details 123	DICOM
DG-12028 - Consenting Party Identification 127	non 92
DG-12029 - Consent Witness Identification 129	DICOM Accession Number 101
DG-12030 - Insurance Details 142	Digital Image 97
DG-12032 - Insurer Identification 146	Digital Image Reference 102
DG-12033 - Special Authorisation 149	Digital Imaging Details 89
DG-12035 - Authorising Party Identification 152	E
	Episode Identifier 138

- essential 32
 Expected DateTime of Relevant Event 181
- F**
- finding 168, 173, 174, 176
- H**
- Has Adverse Reaction 85
- I**
- identifier
 authorising party 152
 episode 138
 image 91
 insurance 146
 report 211
 request 140
 series 98
 specimen 62
 study 100
 image 97
 link to 102
 Image Identifier 91
 Image Resolution 95
 Imaging Modality 51
 Insurance Details 142
 Insurer Identification 146
 Interpretive Note 219
 investigation 173
 issue date 196
 issued by 194
- L**
- Laterality 54
 laterality 54
 link
 to digital image 102
 location
 of procedure 110
- M**
- measurement 168, 173, 174, 176
 medication
 current 157
 Medication Item Details 87
 MEDICATIONS 70
 Medications 70
 Membership Number 145
 method 79
- N**
- Non-DICOM Reference 92
 note
 interpretive 219
 observation 177
 procedure 80
- O**
- obligation
 Conditional 32
 Desirable 32
- Essential 32
 Optional 32
 observation 168, 170
 date 172
 result
 aggregate 176
 atomic 174
 Observation Abnormal Flag 175
 Observation Description 173
 Observation Details 171
 Observation Note 177
 occupation 154
 optional 32
- P**
- Position 58
 position
 patient 58
 Preferred Results Delivery Mode 111
 Preparation Instructions 68
 Preparation Regimen Description 69
 Problem/Diagnosis Based on Procedure
 Result 221
 Procedure Anatomical Site 52
 Procedure Description 46
 Procedure Details 48
 Procedure Location 110
 Procedure Method 79
 Procedure Note 80
 Procedure Performance Details 71
 Procedure Qualifier 55
 Procedure Request 103
 Procedure Substitution Details 74
- R**
- Reason for Substitution 76
 Reference to Other Relevant Diagnostic
 Imaging Procedure 223
 Reference to Relevant Diagnostic Imaging
 Procedure 166
 Reference to Relevant Pathology Test 167
 Relevant Adverse Reaction 158
 Relevant Alert 160
 Relevant Clinical Status 155
 Relevant Current Medication 157
 Relevant Event 178
 Relevant Event Description 180
 Relevant Event Note 182
 Relevant Observation 168
 Relevant Problem/Diagnosis 164
 Report 185
 Report Author 187
 Report Authoring Details 186
 Report Copy To Recipient 207
 Report Details 216
 Report Identifier 211
 Report Issue Details 193
 Report Issued By 194
 Report Primary Recipient 199
 Report Read By 204
 Report Read Details 202
 Report Received Details 197

Report Review Details 189		service window 115
Report Status 213		Special Authorisation 149
Report Version Number 212		Special Requirements 108
Report Version Tracking 209		Specifications 32
reporting 183		specimen
Request Copy To Recipient Identification 122		received date 67
Request Identifier 140		Specimen Anatomical Site 64
Request Priority 112		specimen collection date 66
Request Priority Indicator 113		Specimen Details 60
Request Priority Reason 114		Specimen Identifier 62
Request Recipient Identification 118		Specimen Qualifier 65
Request Status 136		Specimen Type 63
Request Version Number 141		Study Identifier 100
Request Version Tracking 131		substitution
Requested Procedure 105		consultation 77
Requester	Consulted	consultation date 78
Substitution 77	Regarding	T
Requester Identification 116		Test Name 170
resolution 95		Time Interval to Provide Requested Service 115
result 173		total score 176
Result Description 218		V
Reviewing Specialist 190		version number
S		request 141
score		View Aspect 57
total 176		
Series Identifier 98		

End of
Diagnostic Imaging Data Specifications