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ACHI COMMENTS

on the

Information Requirements

Event Summary

Version 0.5.1 - 20 May 2011

Draft for External Review

Please note our overarching comments in the Key Points document. Many of the comments on the Shared Health Summary document are also applicable to this Event Summary document.

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Document Information

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Document authorisation

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Preface

Document Purpose

This document presents the information requirements for an Event Summary, which are recommended for use within Australia.

The Event Summary Information Requirements are a logical set of data items for exchange and are therefore independent of any particular platform, technology, exchange format or presentation format.

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

Intended Audience

This document is intended for all interested stakeholders including:

- Clinicians, such as general practitioners
- Early adopter hospitals and health departments in the process of planning, implementing or upgrading eHealth systems
- Software vendors developing eHealth system products
- Early adopter general practitioner desktop software vendors
- Senior managers and policy makers, clinical experts, health information managers, IT operations and support teams, system integrators
- Stakeholders associated with the development and use of upcoming eHealth initiatives relating to 'continuity of care'
- Both technical and non-technical readers.

Document Status

This document is a draft subject to external consultation and review; therefore the document content will evolve with iterations of the package development process.

Definitions, Acronyms and Abbreviations

For a list of abbreviations, acronyms and abbreviations, see the Definitions section at the end of the document, on page 45.

References and Related Documents

For a list of all referenced documents, see the References section at the end of the document, on page 46.

1 Introduction

1.1 Overview

This document presents the Information Requirements for Event Summaries, as recommended for use in Australian eHealth systems.

The Information Requirements are the minimum set of data items that are recommended for implementation in any system that creates and transfers Event Summaries, to support the delivery of quality collaborative care. The inclusion of data in this minimum set is determined by two criteria:

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

As these specifications define the Information Requirements for exchange, it is anticipated that some Event Summary templates may contain additional types of data to satisfy specific local or specialty healthcare requirements.

1.2 Scope

1.2.1 Scope Inclusions

The aim of an Event Summary (ES) is to provide information to the individual's Personally Controlled Electronic Health Record (PCEHR) of significant health care events, at the discretion of the clinician, with the consent of the individual. This information could also inform other providers involved in the patient care including the individuals nominated primary provider.

The information may be used by the nominated primary provider to update their local record and the individual's Shared Health Summary (SHS).

The PCEHR Concept of Operations [PCO-2011] states that "an Event Summary is used to capture key health information about significant healthcare events that are relevant to the ongoing care of an individual." Event Summaries can be submitted to the PCEHR System by any participating organisation. For example, it could be used by an after hours GP clinic, an emergency department, an outpatient clinic, a community pharmacy or an allied health clinic. However, the scope of the ES design for release 1 will be built around the needs of GPs but is a generic Event Summary and events from other healthcare providers are also envisaged in due course.

1.2.2 Scope Exclusions

Out of scope is information gathering for the full patient records within the GP clinical information system, the way the data is transferred from GP desktop to PCEHR and how the information is formatted for display.

1.3 Purpose

The purpose of the Event Summary Information Requirements is to define the information requirements for a nationally-agreed exchange of information between healthcare providers in Australia, independent of exchange or presentation formats.

It is anticipated that these Information Requirements will:

- Promote a common understanding of the requirements for constructing and consumption of Event Summaries

- Provide a common framework for development and use of semantically interoperable information components to be exchanged between applications, providers, jurisdictions
- Provide a common framework for defining queries using these information requirements at logical levels, which may be adopted for implementations in local, jurisdictional or national Electronic Health Record environments
- Provide a common framework upon which to define nationally-agreed, specialty-specific information requirements
- Provide a common framework for nationally-defined mappings to specific exchange formats
- Provide a framework (along with other documents and structures) suitable for the development of national terminology sets that associate specific data items with valid values. These values will be derived from nationally endorsed terminologies maintained and distributed on behalf of Australia by NEHTA's National Clinical Terminology and Information Service (NCTIS). The current terminology sources that will provide this content are LOINC for defined areas of Pathology content, SNOMED CT-AU for all other clinical content and Australian Medicines Terminology (AMT) for medicinal products. Administrative content will be derived either from SNOMED CT-AU or specifically defined external codesets.

ACHI Comments:

In reviewing this document, the question who is the intended user of the PCEHR arises in many places. This is an important distinction as the information expectations and needs of patients and doctors are quite different, in some areas they contradict each other.

Depending on for whom this Event Summary (ES) is being created will determine who provides the content and how this content is provided into the PCEHR: If the PCEHR is intended for the patient, which doctor(s) will provide the clinical content? If the PCEHR is intended for clinicians, will it be populated electronically and how will the data quality be assured?

Recommendation ES.1: *That the intended user(s) of the ES in the context of the PCEHR be clarified by the Continuity of Care Program Team and Workshop to ensure that the "right" data is provided from the "right" sources to ensure optimal useability of the ES.*

The assumption is that this PCEHR project is aiming for Event Summaries created by (a) nominated provider(s) and that is interoperable with the PCEHR. However, how would providers be encouraged to share the private and confidential information they have on their patients with unknown others, unless they can see value in sharing e.g. for decision support.

Recommendation ES.2: *That the source(s) and quality of the data for the Event Summary in the context of the PCEHR be clarified by the Continuity of Care Program Team and Workshop to ensure optimal useability of the PCEHR ES.*

The College notes that this document mixes fact with professional opinion. This approach is of concern because there is a real risk of the design being detrimentally affected by individual assumptions and human error. The Continuity of Care Program materials make assertions that are not supported by evidence; for example chronic or complex illnesses are reduced to a homogeneous condition when in fact we are speaking of a heterogeneous and complex range of conditions. The College prefers an evidence-based design ap-

proach and believes that the distinction between facts and professional opinions should be reflected in all PCEHR design documents.

Recommendation ES.3: *That the Continuity of Care Program Team identify and advise the Workshop what sources, research and other evidence was leveraged to create these Event Summary information requirements.*

1.4 Exchange and Presentation Formats

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

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

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

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

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

1.5 Adding Data

Note that some of the data elements included in this specification are required for ALL Event Summaries whereas others need only be completed where appropriate. That is, a conformant Event Summary implementation must be capable of collecting and transferring/receiving all Information Requirement elements.

However:

- Not all data elements require a value in each and every Event Summary (e.g. items that are categorised with '0..1' or '0..Many'). For example, "Diagnostic Investigations (0..Many)" some clinical circumstances do not require that an ES contain diagnostic investigations.
- Not all data elements are required to be displayed to users, and their labels may be different from those used in the 'Item' column of the Proposed Data Model table in the following sections.

2 Core Components

2.1 Overview

The information components include:

Component
Individual
Event Details
Event Summary Author
Allergies and Adverse Reactions
Medicines
Diagnoses
Interventions
Immunisations
Diagnostic Investigations
Observations
Document Control

Each component is firstly described in terms of what the requirements are, providing a rationale.

A small number of indicative samples for usage are included to provide additional clarity but are not intended to be a prescription for display. Note also that all content in the samples is completely fictitious.

This is followed with a representation of the proposed data model for each.

Following recent stakeholder engagement with this draft version, a number of requests were made for consideration. These items have been included into the relevant sections, as known issues. The following request for an additional component stands alone and is therefore described here.

Known Issue #1

> ***Considerable interest has been expressed to include a section on Alerts. Example alerts were suggested, such as "difficult intubation", "mechanical heart valves", "patient is a VRE carrier", "pacemaker", or other medical devices etc.***

ACHI Comments:

The College agrees that clinical ("mechanical heart valves") and administrative ("can be aggressive to female healthcare staff") alerts would be of great value to the ES. It is assumed that the information content of any such alert will include all the information that might be needed to validate the source and content of the alert.

Recommendation ES.4: *That clinical and administrative alerts be added to the Event Summaries ensure their optimal useability.*

2.2 Guide to this document

The proposed data model for each of the components is defined below, using the following columns:

- *Component*: A high level section or group of data elements
- *Item*: An individual data element or data group. A data item may be a single unit of data (e.g. "Date of Birth"), or a set of data that has a standard structure (e.g. "Address")
- *Type*: The type of data associated with the component or data item. Note that this may be a simple data type (e.g. text, date) requiring a single field, or a predefined structure requiring a group of fields. Refer to legend in section 2.2.1 below.
- *Number of Values Allowed*: The number of times that the given component/item may be included in an Event Summary. For items, this is the number of times that the given item may be included, each time the component. Refer to legend in section 2.2.2 below.

The following legends are included to assist the reader with the content of the tables that follow.

2.2.1 Data Type legend

Datatype	Notes
Boolean	A Boolean value can be either true or false, or may be empty.
Codeable Text	Codeable Text is a flexible data type to support various ways of holding text - both free text and coded text.
Coded Text	Values in this data type must come from the bound value list, with no exceptions.
DateTime	DateTime is used for specifying a single date and/or time. It can indicate a level of precision, and define estimated or partial dates.
Integer	Whole numbers.
Quantity	The Quantity data type is used for recording many real world measurements and observations. Includes the magnitude, value and the unit.
Text	Free text string.
Time Interval	Time Interval contains a Start DateTime and (optionally) an End DateTime.
Unique Identifier	An identifier that uniquely identifies a given entity.

2.2.2 "Number of Values Allowed" legend

Value	Minimum	Maximum	Notes	Example
1	1	1	Must have 1 value and only 1	Vaccine Brand Name (i.e. per each immunisation record)
0..1	0	1	Does not need a value in every ES, but when it does, it can only ever have 1	Medicine Additional Comments (i.e. additional comments are not required for all medicines)
1..Many	1	Many	Must have at least 1 value, and can contain multiples	Individual Address
0..Many	0	Many	Does not need a value in every ES, but when it does, it can contain multiples	Immunisation

ACHI Comments:

This is a standard approach to data typing and the College is comfortable with this methodology.

The approach to "Number of Values Allowed' is non-standard.

Recommendation ES.5: *That the standard approach and notation to data item cardinality be adopted in the Shared Health Summary information requirements.*

3 Component: Individual

Description: The individual is the person about whom the healthcare event has been captured – that is, the subject of the information or the individual.

3.1 Requirements

Data item	Requirement statement	Rationale
Component	Each ES shall always contain information about the individual and shall always contain the following mandatory items.	AN ES is only created pertaining to an individual and one cannot exist without that individual.
Person Name	The name of the individual shall be recorded in every ES.	Clinical safety. Identification of the individual. Supports the indexing of clinical documents.
	The recording of individual name shall be consistent with Australian Standards of naming.	Allows interoperability. Eliminates ambiguity.
Person Identifier	Every ES shall contain the individual's Individual Healthcare Identifier (IHI).	Allows interoperability. Eliminates ambiguity. Clinical safety. Supports the indexing of clinical documents.
	AN ES shall also be allowed to contain multiple individual identifiers.	Optionally the individual's local identifier to support transition to the use of national identifiers.
Date of Birth	Every ES shall contain the individual's date of birth.	Clinical safety. Identification of the individual. Supports the indexing of clinical documents.
	An approximation for the date of birth shall be allowed (such as only the year, or the month and year) only when the exact date is not known. That is, when the exact date is known, the full date shall be provided.	The individual's exact date of birth may not be known.
	When the date of birth is an approximation, an indication of such shall be included.	Eliminates ambiguity
Sex	The individual's sex shall be recorded in every ES.	Clinical safety. Identification of the individual. Supports the indexing of clinical documents.
	The individual's sex shall be recorded using (and be restricted to) the Australian Institute of Health and Welfare Person—Sex Data Element Concept values.	Allows interoperability. Eliminates ambiguity.
Address	The individual's address shall be recorded in every ES.	Identification of the individual.
	The recording of individual address shall be consistent with Australian Standards of address recording.	Allows interoperability. Eliminates ambiguity.

Data item	Requirement statement	Rationale
	There shall be provision for recording the individual's address as not known or that they have no fixed address.	Individuals may not always have a fixed place of abode nor may the address be known in all cases.
Communication Details	The ES shall have the provision to record contact details for the individual.	Allows ready access to contact the individual, should the recipient not have those details at hand.
	A value for individual's communication detail shall only be included when it is deemed to relevant/appropriate to do so (i.e. optional to include a value).	An individual's contact may not be available or appropriate to include.
	An ES shall be allowed to contain multiple individual communication details.	This allows recording of (for example) a home landline, a work mobile and an email address.
	The contact details record shall include provision for the medium (e.g. telephone, email), usage (e.g. home, work) as well as the actual details.	Allows interoperability. Eliminates ambiguity.
Indigenous Status	An indication of whether a person identifies as being of Aboriginal or Torres Strait Islander origin (or an indication of it being not stated etc) shall be recorded in every ES.	Members of the indigenous community are eligible for a range of specific services. This will contribute to improved data quality on indigenous health.

3.2 Samples & usage

a. The individual has only provided the least amount of information - that is, one address and no contact details. They have declined to state their Indigenous status.

INDIVIDUAL			
Name	Mr William SMITH		
IHI	8003600200002222		
Date of Birth	01/01/1946	(63 years)[1]	**DOB approx?** No
Sex	Male		
Address	Residence:	20 Chapel Street, Lilydale, VIC, 3002	
Contact			
Indigenous Status	Not stated		

b. Later, the same individual provides more demographic information.

INDIVIDUAL			
Name	Mr William SMITH		
IHI	8003600200002222		
Date of Birth	01/01/1946	(63 years)	**DOB approx?** No
Sex	Male		
Address	Residence: Postal:	20 Chapel Street, Lilydale, VIC, 3002 PO Box 123, Lilydale, VIC, 3002	
Contact	Home Phone: Mobile:	03 3988 7156 0411 378 942	

[1] The age of the individual would be a calculated value rather than being a separate data item.

	Email: mwsmith@internetprovider.com.au
Indigenous Status	Neither Aboriginal nor Torres Strait Islander origin

c. Another individual does not recall the exact date of their birth.

INDIVIDUAL		
Name	Mr Albert HENRY	
IHI	8003600200003333	
Date of Birth	1946 (63 years)	**DOB approx?** Yes
Sex	Male	
Address	Residence: 1 General Street, Broome, WA, 6725	
Contact	Home Phone: 06 1212 1212	
Indigenous Status	Aboriginal but not Torres Strait Islander origin	

3.3 Proposed Data model

Data items	DataType	Number of Values Allowed	Notes
Person Name	Person Name data group	1	The individual's name, structured using a predefined type, consistent with Australian standards of naming (e.g. family name and first name etc).
Person Identifier	Unique Identifier	1..Many	The unique identifier of the individual. This must include the individual's Individual Healthcare Identifier (IHI) and optionally the individual's local identifier.
Date of Birth	DateTime	1	The individual's date of birth. Where the exact date of birth is not known, this may be an approximation, which includes only the year, or the month and year.
Date of Birth accuracy Indicator	Boolean	0..1	The level of certainty or estimation of an individual's date of birth.
Sex	Coded Text	1	The sex of the individual. Sex is the biological distinction between male and female. Where there is an inconsistency between anatomical and chromosomal characteristics, sex is based on anatomical characteristics.[2]
Address	Address data group	1..Many	The address of the individual, recorded in a structured format, consistent with Australian standards of address recording. Where the individual's address is not known, the address line can be populated with text entry of "individual has no known address." This may include "No fixed address" if appropriate.
Communication Details	Electronic Communication Details data group	0..Many	The individual's preferred means of contact should be included to facilitate clinical follow-up. Each Contact Details data item includes the medium (e.g. telephone), usage (e.g. home) and details. A value is not always required because it may not be available or appropriate.
Indigenous Status	Coded Text	1	A description of whether a person identifies as being of Aboriginal or Torres Strait Islander origin. Refer to the AIHW definition and code set.[3]

[2] Source of definition: Australian Institute of Health and Welfare; Person—sex Data Element Concept (METeOR identifier: 269716) http://meteor.aihw.gov.au/content/index.phtml/itemId/269716 (accessed 19 May 2011)

[3] Australian Institute of Health and Welfare, METeOR, Metadata Online Registry. Person—Indigenous status http://meteor.aihw.gov.au/content/index.phtml/itemId/291036 (accessed 19 May 2011)

ACHI Comments:

The "Number of Values Allowed" attribute does not follow the standard approach to indicate cardinality. This makes it very difficult for implementers to create systems that comply with these Information Requirements. It also make is impossible to undertake formal conformance checking. The ISO Standard 11179:2005 "Information technology - Specification and standardization of data elements"[4] gives very detailed and clear information on how meta data and data dictionaries are to be constructed. The College believes it would be beneficial that this Information Requirements document uses these Standard guidelines.

Recommendation ES.6: *That the Continuity of Care Program Team apply the principles of ISO 11179 to this Information Requirements document and ensure that the conformance points in this document are clearly documented.*

The use of and reference to the METeOR data item definitions (eg. "Sex", "Indigenous Status", etc.) is acknowledged and appreciated. However it is unclear why references to all other available meteor definitions (eg person date of birth[5], etc.) are not included in the "Proposed Data Model" tables.

Recommendation ES.7: *That METeOR data item definitions are included for every data item, where available.*

[4] http://en.wikipedia.org/wiki/ISO/IEC_11179

[5] http://meteor.aihw.gov.au/content/index.phtml/itemId/287007

4 Component: Event Details

Description: This section captures the narrative of the event whereby the health provider describes the event.

4.1 Requirements

Data item	Requirement statement	Rationale
Component	As a minimum, each Event Summary shall include details regarding the event.	The narrative information regarding the individual's event is of high clinical safety value.
Reason for Visit	Every ES shall include the provision for a narrative note regarding the reason for the presentation.	The narrative information regarding the individual's event is of high clinical safety value.
Event Date	Every ES shall include the date at which the event occurred.	Event chronology is crucial in understanding a individual's history.

4.2 Samples & usage

1. An individual is travelling from interstate but requires the assistance of a local GP after they fall and cut their leg. The individual finds a GP and is consequently managed by the new GP who writes an event summary.

EVENT DETAIL	
Event Date	Monday, 20 December 2010
Reason for Visit	William presented to me today after a fall in a local shopping centre. Suffered a deep laceration to his right calf which required cleaning and 4 sutures.

4.3 Proposed Data model

Data items	DataType	Number of Values Allowed	Notes
Event Date	DateTime	1	The date at which the event occurred.
Reason for Visit	Text	0..1	The Reason for Visit contains summary information or comments about the presentation, in narrative form.

Known Issue #2

Request was made for Event categorisation. Given that patients in time will accumulate a large number of ES's, the request was made to have some means of sorting through them, possibly 'emergency', 'routine'. Some content would be critical and it could be a medico-legal risk if this information is not tagged for easy retrieval.

Known Issue #3

Request was made to identify the type of event – telehealth, phone or face to face etc.

5 Component: Event Summary Author

Description: The healthcare provider who has attended to the individual and decides to upload an event summary to the PCEHR.

5.1 Requirements

Data item	Requirement statement	Rationale
Component	Each ES shall record details about the author of the event summary, with details as described below.	From a medico-legal perspective, it is important to know the author of the Evert summary.
Person Name	The ES shall have the provision to record the name of the ES author.	Clearly identifies the ES author.
	The name of the ES author shall be consistent with Australian Standards of naming.	Allows interoperability. Eliminates ambiguity.
	When recorded, only 1 name record shall be allowed for the ES author.	Avoids unnecessary complexity.
Person Identifier	The ES shall record the Healthcare Provider Identifier of the ES author (HPI-I).	Allows interoperability. Eliminates ambiguity. Clinical safety.
	An ES shall be allowed to contain multiple personal identifiers of the ES author, as required.	Such as provider or prescriber numbers.
Healthcare Role	The ES shall record the role of the author in the course of consulting the individual and subsequently writing an ES.	In the first instance, events will pertain to GPs, but in future will encompass a broader range of healthcare providers.
	The Reference set for Healthcare Role shall be derived in such a way that it can be integrated with other related codes sets, such as that required for NESAF.	Allows interoperability and system integration.
Organisation Name	The ES shall record the name of the organisation/practice to which the ES author is affiliated.	Eliminates ambiguity.
Organisation Identifier	The ES shall record the unique organisation identifier to which the ES author is affiliated.	Allows interoperability.
	A value for the Healthcare Provider Identifier of the organisation (HPI-O) shall be included.	Allows interoperability.
Address	The ES author's practicing address shall be recorded in every ES.	Whilst the ES author may practice at multiple organisations, an individual is generally managed at one of those organisations.
	The recording of the ES author's address shall be consistent with Australian Standards of address recording.	Allows interoperability. Eliminates ambiguity.

Data item	Requirement statement	Rationale
	An ES shall be allowed to contain multiple addresses for the ES author.	Caters for the street address as well as the postal address.
Communication Details	At least one contact detail for the ES author shall be recorded in every ES.	Downstream readers of the ES may need to contact the ES author.
	An ES shall be allowed to contain multiple ES author communication details.	This allows relevant telephone numbers (i.e. daytime, after hours, mobile, etc.) and email addresses to be recorded for future reference.
	The contact details record shall include provision for the medium (e.g. telephone, email), usage (e.g. after hours) as well as the actual details.	Allows interoperability. Eliminates ambiguity.

5.2 Samples & usage[6]

1. The event summary is written by a locum GP.

AUTHOR	
Name	Dr Henry SMITH [HPI-I: 8003610200002389]
Healthcare Role	Locum General Practitioner
Practice	Port Douglas Super Clinic [HPI-O: 8003620000000222]
Address	2 The Esplenade, Port Douglas QLD 4444
Contact	Phone: 07 7777 7777 After hours: 07 7777 8888 Email: podougSC@internet.com

[6] Health identifier numbers are predominantly for system to system usage and it is likely that they would not be displayed to end users. The HI numbers are only displayed here to provide additional clarity for these specifications and as such, the reader should not consider this a display requirement.

5.3 Proposed Data model

Data items	DataType	Number of Values Allowed	Notes
Person Name	Person Name data group	1	The name of the ES author, structured using a predefined type consistent with Australian standards of naming (e.g. family name and first name etc).
Person Identifier	Unique Identifier	1..Many	The unique individual identifier of the ES author which must include the Healthcare Provider Identifier of the ES author (HPI-I) and optionally other identifiers (such as provider or prescriber numbers).
Healthcare Role	Codeable Text	1	The role the author is playing in the course of consulting the individual and subsequently writing an ES. For example, 'Usual GP' or 'Locum GP'.
Organisation Name	Organisation Name data group	1	The name of the healthcare provider organisation at which the ES author practices.
Organisation Identifier	Unique Identifier	1..Many	The unique organisation identifier of the ES author's practice, for which the Healthcare Provider Identifier of the organisation (HPI-O) must be provided. Optionally, local identifiers may also be included.
Address	Address data group	1..Many	The address of the ES author, recorded in a structured format consistent with Australian standards of address recording.
Communication Details	Electronic Communication Details data group	1..Many	The contact details for the ES author. The preferred means of contact should be included and should include at least one method of communication. Each Contact Details includes the medium (e.g. telephone), usage (e.g. work) and details.

6 Component: Newly Identified Allergies and Adverse Reactions

Description: This section includes allergies and adverse reaction to all substances that were identified at the given event. This might include food allergies, bee sting allergies as well as prescription and non-prescription medicines. NB: An indicator of compliance with the RACGP Practice Standard 1.7 on health summaries is that a practice can demonstrate that at least 90% of their active patient records contain a current health summary that includes, where appropriate, a record of known allergies.

These requirements have been developed in collaboration with a specific MMRG Project Working Group and following discussions within Standards Australia.

6.1 Requirements

Data item	Requirement statement	Rationale
Component	The Event Summary shall include the provision to include information regarding Allergies and Adverse Reactions should it be relevant to do so.	Information regarding an individual's allergies and adverse reactions is of high clinical safety value.
	Each ES shall have the option to include one (or more) Allergies and Adverse Reactions.	Individuals often have multiple Allergies and Adverse Reactions and allows for future decision support capability.
	When Allergies and Adverse Reactions are added to an ES, the types of information to include are as follows.	
Agent Description	Every allergy and adverse reaction listed in the ES shall contain a description of the causative agent.	Clinical safety.
	Values for the description of the allergy and adverse reaction agent shall be derived from a SNOMED code set with the option for free text.	Allows for the potential for machine processing / decision support.
Reaction Description	There shall be the provision for an allergy and adverse reaction record to include the description of the reaction that was caused by the aforementioned agent.	Unambiguous description of the reaction for clinical safety and allows better informed future management.
	There shall be the provision for more than one reaction to be recorded for a single agent, when appropriate.	An individual may experience multiple adverse reactions to a single agent.
	Preferably, values for the description of the reaction shall be derived from a SNOMED code set (whilst allowing for the option for free text).	Allows for the potential for machine processing / decision support.

Data item	Requirement statement	Rationale
	A value for the reaction description shall only be included at the discretion of the ES author, i.e. when it is deemed relevant / appropriate to do so (i.e. optional to include a value).	It may not always be known what the specific reaction is to a given agent. Individuals may report that they have been told that they have a reaction to a given agent but it may not be clear to them what the reaction was specifically. For example, an adult reporting that they were told as a child that they react to a given agent but they cannot recall what happened to them specifically.

6.2 Samples & usage

1. There is no information about any allergies and adverse reactions.

   Individuals may be acutely unwell or otherwise indisposed and unable to provide the relevant health information to their health provider. Further, there may be none that pertain to this event. The individual may not actually have any allergies or adverse reactions, this information is not known. In these circumstances it is suggested that the event summary would not display this section.

2. An individual has been asked and a number of reactions are recorded. Note that the individual has 2 reactions to penicillin.

ALLERGIES / ADVERSE REACTIONS	
Agent	**Reaction description**
Penicillin	Severe urticaria on trunk and legs; Nausea and vomiting

6.3 Proposed Data model

Data items		DataType	Number of Values Allowed	Notes
Allergies / Adverse Reaction		Group	0..Many	The data group for the newly identified allergies and adverse reactions for the individual containing the relevant reaction details. Multiple reactions are allowed and the following 2 data items apply for each reaction added.
	Agent Description	Codeable Text	1	The agent / substance causing the allergy / adverse reaction experienced by the individual. The agent must always be recorded.
	Reaction Description	Codeable Text	0..Many	The signs and/or symptoms experienced or exhibited by the individual as a result of the allergies / adverse reaction to the specific agent/substance.

Known Issue #4

Given that Allergies and Adverse Reactions (AAR) included here are those 'newly identified' at the event, they may have actually occurred at some date prior to the event. Therefore, should there also be a requirement to capture the date at which the AAR occurred?

7 Component: Medicines

Description: Medicines that the individual is considered by the healthcare provider to be relevant to the event. This list should contain prescribed medications, as well as over the counter medications such as aspirin and possibly complementary medicines. NB: An indicator of compliance with the RACGP Practice Standard 1.7 on health summaries is that a practice can demonstrate that at least 75% of their active patient records contain a current health summary that includes, where appropriate, a current medicines list.

These requirements have been developed in collaboration with a specific MMRG Project Working Group and following discussions within Standards Australia.

Note that the medicines included herein do not constitute a full medications profile but rather those which have specifically changed as a result of the event, or those directly relevant to it.

7.1 Requirements

Data item	Requirement statement	Rationale
Component	The Event Summary shall include the provision to include information regarding medicines should it be relevant to do so.	Clinical safety
	Each ES shall have the option to include one (or more) medicine.	Individuals often have multiple medicines and allows for future decision support capability.
	When medicines are added to an ES, the types of information to include are as follows:	
Item Description	Every medicine listed in the ES shall include details that fully describe it, including the name of the medicine (must include the active ingredient and where available, the brand name), strength and dose form, where appropriate.	Allows interoperability, eliminates ambiguity and is vital to ensure high quality safe clinical care.
	Preferably, where the medicine can be identified by an Australian Medicines Terminology (AMT) concept, this shall be the AMT ConceptID and Preferred Term.	Allows interoperability, eliminates ambiguity and is vital to ensure high quality safe clinical care.
	Where the medicine cannot be identified by an Australian Medicines Terminology (AMT) concept, the item description shall be allowed to be carried in free text.	This enables the ability to enter medicines not recognised by AMT e.g. overseas medicines such as those taken by international visitors and students.

Data item	Requirement statement		Rationale
Status	Every medicine listed in the ES shall include an indication of its corresponding status.		It is important for the recipient, in particular the usual GP, to differentiate which medicines may require their attention. For example a medicine with a status of "change recommended" will require action by the usual GP compared to a medicine that has been unchanged.
	The medicine status vales shall be exclusively derived from a predetermined code set, that includes the following options:		Provides clarity to other healthcare providers. This allows software to group like information together and to provide display or validation intelligence (e.g. medications with a status of 'change' must also have a value in the data item 'reason for change').
		"Existing – changed"	As a result of the event consultation, a medicine that was previously taken by the individual may actually be changed at the event as it required immediate attention.
		"Existing – change recommended"	As a result of the event consultation, it may be recommended to the usual GP that a medicine that was previously taken by the individual be changed. The change may not be urgent or there may be an arrangement that all medicine changes are to be enacted by the usual GP as the coordinator of the individual's overall care.
		"Existing - ceased"	As a result of the event consultation, a medication that was previously taken by the individual may actually be ceased by the event clinician as it required immediate attention.
		"Existing - cease recommended"	As a result of the event consultation, it may be recommended to the usual GP that a medicine that was previously taken by the individual be ceased. The change may not be urgent or there may be an arrangement that all medicine changes are to be enacted by the usual GP as the coordinator of the individual's overall care.
		"New – prescribed"	As a result of the event consultation, a new medication may be prescribed for the individual.
		"New – prescription recommended"	As a result of the event consultation, it may be recommended that the usual GP prescribe a new medicine to be taken by the individual. The addition may not be urgent or there may be an arrangement that all medicine changes are to be enacted by the GP as the coordinator of the individual's overall care.
Dose Instructions	Every medicine listed in the ES shall include the dose instructions, describing how the individual is taking the medicine.		Vital to ensure high quality safe clinical care.
Reason for Medicine	There shall be the provision for a medicine record to include the reason why the individual is taking the medicine.		It is important for the GP and other recipients to understand the rationale for relevant medicine, particularly given that some medications may have multiple purposes.

Data item	Requirement statement	Rationale
	A value for Reason for Medicine for a given medicine shall only be included when it is relevant / appropriate to do so (i.e. optional to include a value).	The reason an individual may be taking an over-the-counter or complementary medicine may not be clear to the ES author.
Additional Comments	There shall be the provision for a medicine record to include additional information that may be needed to ensure the continuity of supply, continued proper use, or appropriate medication management. This may include comments regarding medication duration.	Clinical safety.
	A value for a value for Additional Comments for a given medication shall only be included when it is deemed by the event summary author to relevant/appropriate to do so (i.e. optional to include a value).	Not always required.
Reason for Change	There shall be the provision for a medication record to include the reason that the change was made (or recommended to be made) to a medicine as a result of the event consultation.	It is particularly important for any medicine changes to be well understood by the recipients of the letter.
	An ES shall include a description of the Reason for Change for a given medicine, whenever (and only when) the status of that medicine is: - "Existing – changed" - "Existing – change recommended" - "Existing - ceased" - "Existing - cease recommended"	Only medicines that have been changed/ceased (or recommended to be changed/ceased) should logically require a reason for that change.

7.2 Samples & usage

1. There is no information about any medicines.

   Individuals may be acutely unwell or otherwise indisposed and unable to provide the relevant health information to their health provider. Further, the individual may not actually be taking any medications, this information is not known or there may be none that pertain to this event. In these circumstances, it is suggested that the event summary would not display this section.

2. It has been determined that the individual taking a number of medications.

MEDICINES					
Status	**Medicine**	**Dose Instructions**	**Reason for Medicine**	**Additional Comments**	**Reason for Change**
New – prescribed	Lasix (frusemide 40 mg) tablet	1 tablet once daily oral	Fluid retention		
Existing - changed	Spiriva (tiotropium bromide 18mg per inhalation) inhalant	1 inhalation per day	COPD		Weaning off
Ceased	St John's Wort	As directed by packaging	Depression		No longer required

7.3 Proposed Data model

Data items		DataType	Number of Values Allowed	Notes
Medicine		Group	0..Many	The data group for the medicines that have been modified or added/ceased subsequent to the event. Multiple medications are allowed and the following data items apply for each medicine added.
	Item Description	Codeable Text	1	The details that fully describe a medicine, including the name of the medicine (must include the active ingredient and where available, the brand name), strength and dose form, where appropriate.
	Dose Instructions	Text	1	A description of how a particular product is being taken by the individual. This must include the route, dose quantity, frequency and any additional instructions required to safely describe the appropriate dosage. This should also include the administration schedule. In systems which support the discrete collection of dosage instructions data elements, this item only needs to be populated when the discrete dosage items are not.
	Status	Coded Text	1	The status of the medicine item at the time of the event summary.
	Reason for Medicine	Codeable Text	0..1	The clinical justification (e.g. specific therapeutic effect intended) for the use of the medicine.
	Additional Comments	Text	0..1	Any additional information that may be needed to ensure the continuity of supply, continued proper use, or appropriate medicine management – e.g. "Patient requires an administration aid", "Dosage to be reviewed in 10 days", "Target INR for warfarin management". This may include comments regarding medication duration.
	Reason for Change	Text	0..1	The justification for the stated change in medicine. Required when the medicine status is not equal to 'new' or 'unchanged'.

ACHI Comments:

Comments as per SHS document

It is noted that the 'reason for medicine' field is optional. A similar field was added to the national inpatient medication charts as it felt to be an important data element to capture. However, given the national inpatient medication chart is a paper record there is no means of mandating the completion of this field; as a result national audits have shown that this field is very rarely, if ever, gets completed. Therefore applying this learning to an electronic system, by making this field optional, we are effectively not going to see this field used. Given that the PCEHR is all about communication between patient and health care providers, it should be considered

whether this very important field is actually made mandatory (or at least an opt out field, where the user has to actively select that they do not wish to disclose the indication of a particular medicine, but otherwise complete the indication information.

Many medicines have multiple indications and having the medicine without the indication, is analogous to being told a patient has a reaction, without knowing the severity of the reaction or what the actual reaction is. A great deal of Pharmaceutical Benefit Scheme dollars could potentially be saved each year if the indication for medications was always included whenever a medication was written. Far too many medications are just 'left as they are' even if they seem to be inappropriate, as a care providers cannot easily see or understand why some patients on a particular medication. Large advances would be made in the area of quality use of medicines if this field was adopted as a mandatory field. The National Prescribing Service is also likely to strongly endorse this view. Added to this, there is clear benefit from a patient perspective if they are actually see the reason they have been placed on various medications. Again, this would be one of the key benefits from a patient perspective of the entire record; yet this opportunity would be missed if left as an optional field.

From the learnings as described above in 6.1, if this field is optional, it will rarely, if ever for some patients, be completed. This would be certainly be seen as a terrible loss for communication between health care providers and dilute the benefit to the patient, as they are not able to easily see why they are on certain medicines. This is a very common and frequent issue when patients are brought into hospital and asked about their medications. Often patients will carry and present a paper list of their medications, however rarely do they list (or know) which medications are for which conditions. One of many commonly seen examples where this issues occurs is; proton pump inhibitors initiated in hospital in an acute setting (intended for a short period of time), however because the reason for medicine is not stated, subsequent health care providers along the line assume (falsely) that the patient must need this long term as it was initiated in hospital and therefore there must be a valid reason for using it. As a result many patients are left on these medications unnecessarily for sometimes years, adding to person cost, PBS cost and risk of longer term adverse outcomes. Such situations could be easily prevented with mandating these 'reason for medicine' fields.

Recommendation ES.8: *That this data model be further reviewed regarding the mandating of fields.*

8 Component: Diagnoses

Description: Data structure for capturing information about Diagnoses that are relevant to the particular clinical event. That is, diagnoses that were identified at the event that are significant to it.

8.1 Requirements

Data item	Requirement statement	Rationale
Component	The Event Summary shall include the provision to include information regarding Diagnoses should it be relevant to do so.	Information regarding an individual's Diagnoses is of high clinical value.
	Each ES shall have the option to include one (or more) Diagnoses.	Individuals often have multiple Diagnoses and allows for future decision support capability.
	When Diagnoses are added to an ES, the types of information to include are as follows:	
Diagnosis Description	Every Diagnosis listed in the ES shall contain a corresponding description.	
	Preferably, values for the description of the Diagnosis item shall be derived from a SNOMED code set with the option for free text.	Allows for electronic transmission of information and decision support.
Additional comments	There shall be the provision for a Diagnosis record to have an associated comment.	Provides flexibility to add context or notes etc.

8.2 Samples & usage

1. There is no information about diagnoses.

   Individuals may be acutely unwell or otherwise indisposed and unable to provide the relevant health information to their health provider. The individual may not actually have any diagnoses, this information is not known or that there are none that pertain to this event. In these circumstances, it is suggested that the event summary would not display this section.

2. During the particular event, a patient is treated for acute bronchitis with antibiotics.

DIAGNOSES	
Description	**Additional Comments**
Acute bronchitis	Treated with antibiotics

8.3 Proposed Data model

Data items		DataType	Number of Values Allowed	Notes
Diagnoses		Group	0..Many	The data group for recording the diagnoses. Multiple diagnoses are allowed and the following data items apply for each one added.
	Diagnoses Description	Codeable Text	1	A description of the problem or diagnosis. The datatype of Codeable text allows for free text entry in the short term, with coded options in the longer term.
	Additional Comments	Text	0..1	Free text comments providing additional information relevant to the diagnosis in question.

9 Component: Interventions

Description: Data structure for capturing information about Interventions that are relevant to the particular clinical event. That is, any interventions performed during the event or those occurring in the past that are significant to it.

9.1 Requirements

Data item	Requirement statement	Rationale
Component	The Event Summary shall include the provision to include information regarding Interventions should it be relevant to do so.	Information regarding Interventions is of high clinical value.
	Each ES shall have the option to include one (or more) Interventions.	Individuals often have multiple Interventions and allows for future decision support capability.
	When Interventions are added to an ES, the types of information to include are as follows:	
Interventions Description	Every Intervention listed in the ES shall contain a corresponding description.	Information regarding Interventions is of high clinical value.
	Preferably, values for the description of the Intervention items shall be derived from a SNOMED code set with the option for free text.	Allows for electronic transmission of information and decision support.
Additional comments	There shall be the provision for an Intervention record to have an associated comment.	Provides flexibility to add context or notes etc.

9.2 Samples & usage

1. There is no information about interventions.

   As a result of the event, no intervention was performed. In these circumstances, it is suggested that the event summary would not display this section.

2. The individual undergoes an intervention following a calf laceration.

INTERVENTIONS	
Description	**Additional Comments**
Deep right calf laceration cleaned & sutured	5 x 3\0 sutures under LA

9.3 Proposed Data model

Data items		DataType	Number of Values Allowed	Notes
Interventions		Group	0..Many	The data group for recording the Interventions that were performed at the event. Multiple interventions are allowed and the following data items apply for each one added.
	Interventions Description	Codeable Text	1	A description of the intervention. The datatype of Codeable text allows for free text entry in the short term, with coded options in the longer term.
	Additional Comments	Text	0..1	Free text comments providing additional information relevant to the intervention in question.

10 Component: Immunisations

Description: A section that groups together details of immunisation/vaccination program(s) that has/have been administered (or reported to be administered) to the person/individual by a health care provider during the event. NB: An indicator of compliance with the RACGP Practice Standard 1.7 on health summaries is that a practice can demonstrate that at least 75% of their active patient records contain a current health summary that includes, where appropriate, a record of immunisations.

These requirements have been developed in collaboration with a specific MMRG Project Working Group and following discussions within Standards Australia.

10.1 Requirements

Data item	Requirement statement	Rationale
Component	The Event Summary shall include the provision to include information regarding immunisations should it be relevant to do so.	Ensures individuals are appropriately immunised.
	Each ES shall have the option to include one (or more) immunisations.	An individual would typically have multiple immunisations.
	When immunisations are added to an ES, the types of information to include are as follows.	
Vaccine Name	Every immunisation included in the ES shall include its brand name.	Ensures unambiguous identification of the particular immunisation.
	Preferably, where the immunisation can be identified by an Australian Medicines Terminology (AMT) concept, this shall be the AMT ConceptID and Preferred Term. The name shall include both the brand and generic names.	Allows interoperability, eliminates ambiguity and is vital to ensure high quality safe clinical care.
	Where the immunisation cannot be identified by an Australian Medicines Terminology (AMT) concept, the item description shall be allowed to be carried in free text.	This enables the ability to enter vaccinations not recognised by AMT e.g. vaccinations administered overseas.

10.2 Samples & usage

1. There is no information about any immunisations.

   The nature of the event did not require the individual to have any new immunisations. In this circumstance, it is suggested that the event summary would not display this section.

2. The individual has one immunisation at the particular event.

IMMUNISATIONS
Vaccine Name
Boostrix

10.3 Proposed Data model

Data items		DataType	Number of Values Allowed	Notes
Immunisation		Group	0..Many	The data group for recording the immunisation details, which can include details of immunisations that have been administered. Multiple immunisations are allowed and the following data items apply for each one added.
	Vaccine Brand Name	Codeable Text	1	The vaccine product's generic and brand name.

Known Issue #5

As immunisations are given by a wide range of healthcare providers, an immunisation may not be recorded in the PCEHR. As such, Clinical Leads queried whether the nominated provider would always know what a given immunisation's sequence was up to, if this information was not included in the ES. Therefore, should the immunisation sequence number also be recorded?

11 Component: Diagnostic Investigations

Description: Describes any diagnostic investigations performed on the individual, relevant to the event. This allows the results to be included as an attached report, or as a reference (i.e. link) to where the results are located. Pending results can be indicated using a Result Status of 'pending'.

11.1 Requirements

Data item	Requirement statement	Rationale
Component	An ES shall have the provision for attaching diagnostic imaging and results if required.	The inclusion of Diagnostic Investigation results can provide recipients with important supporting information to the assessment and plans.
	Multiple Diagnostic Investigations shall be allowed to be conveyed in an ES.	Flexibility
Investigation Type	Each investigation included in an ES shall include designation of the 'investigation type'; e.g. 'Pathology', 'Diagnostic Imaging'.	This allows software at either end to group like investigation types together, thereby aiding readability.
Investigation Name	Each investigation included in an ES shall include the corresponding name of that investigation.	Clinical safety. Eliminates ambiguity.
Result Status	Each investigation included in an ES shall include the corresponding status of that investigation; e.g. final, pending.	Clinical safety.
Result content	There shall be the provision for Diagnostic Investigations to be associated with an ES either as embedded data or as a URL link to an external repository where the investigation results are located.	Flexibility. Some readers will want the information included and others may not. Also, since very fast broadband is not likely to be ubiquitous for some time, the option of a link would help reduce payload in the interim (and also storage problems at the receiver's end).

11.2 Samples & usage

1. A number of diagnostic investigations are included within the event summary. Due to the size of the images, sending the actual picture file is considered inappropriate and a URL link to the web portal may available to view the image. Conversely, the pathology results are sent within the message and can be opened by the recipient, potentially as a popup window within the application.

DIAGNOSTIC INVESTIGATIONS - Pathology		
Name	**Status**	**Results available at…**
UECs	Pending	
FBE	Pending	
LFT	Final	Show[7]
DIAGNOSTIC INVESTIGATIONS – Diagnostic Imaging		
Right knee x-ray	Final	Show[8]
CT head	Interim	Show

[7] The hyperlink is only provided as an indication of what may be seen by the end user. In the case of data that has been embedded within the message, clicking this hyperlink would invoke the application to display that result by some means within the application (e.g. opening a window).

[8] The hyperlink is only provided as an indication of what may be seen by the end user. The result may not be embedded as data but a URL link included as a reference to an external repository where the investigation result is stored. Clicking this hyperlink would allow the user to navigate to the internet site of the external repository before using the appropriate local application to display that result (e.g. opening a browser window).

11.3 Proposed Data model

Data items			DataType	Number of Values Allowed	Notes
Diagnostic Investigation			Group	0..Many	The data group for recording the Diagnostic Investigation(s). Multiple Diagnostic Investigations are allowed and the following data items apply for each one added.
	Investigation Type		Codeable Text	1	The type or category of investigation performed on the individual – e.g. 'Pathology', 'Diagnostic Imaging'. Whilst the type of investigation will be obvious to the majority of clinical readers, the purpose of this data item is to allow the software to sort/group like types together (i.e. all pathology results to be grouped together).
	Investigation Name		Codeable Text	1	The name of the investigation performed on the individual (e.g. 'INR').
	Result Status		Codeable Text	1	The status of the investigation result (e.g. 'pending', 'interim', 'final').
	The Diagnostic Investigation can be provided as EITHER / OR the following:				
		Link	Link	0..1	A reference to an external repository where the investigation results are stored. This reference will be presented to the user as a clickable hyperlink which allows them to navigate to the internet site of the external repository using appropriate web services and authentication protocols.
		Data	Encapsulated Data	0..1	The actual content of the investigation report. The report may use one of a variety of formats, including PDF, structured text, or XML using a NEHTA-defined template.

12 Component: Observations

Description: Health or physical assessment and/or observation undertaken on the individual, during the particular event. 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.

12.1 Requirements

Data item	Requirement statement	Rationale
Component	An ES shall have the provision for attaching observations, if required.	The inclusion of observations can provide recipients with important supporting information to the assessment.
	Multiple observations shall be allowed to be conveyed in an ES.	Flexibility
Observation Description	Every Observation listed in the ES shall contain a corresponding description.	
	Preferably, values for the description of the Observation items shall be derived from a SNOMED code set with the option for free text.	Allows for electronic transmission of information and decision support.
Observation Value	Every Observation listed in the ES shall contain a corresponding value.	Provides the actual value.
	The value for an observation may be numeric or text or potentially another datatype. Therefore, represent this data item as a datatype allowing greatest flexibility.	Flexibility
Observation Note	There shall be the provision for an Observation record to have an associated note.	Provides flexibility to add context or notes etc.

12.2 Samples & usage

1. A number of observations were made during the event and are considered sufficiently significant to include in the event summary. ns

OBSERVATIONS		
Observation	**Value**	**Comment**
Blood Pressure	120 / 80	Supine
Temperature	37.4^{o}	tympanic

12.3 Proposed Data model

Data items		DataType	Number of Values Allowed	Notes
Observation		Group	0..Many	The data group for recording the Observation(s). Multiple Observations are allowed and the following data items apply for each one added.
	Observation Description	Codeable Text	1	Captures the name of the Observation taken. For example, 'blood pressure'.
	Observation Value	Any	1	The actual value of the observation. For example, '160/80'.
	Observation Note	Text	0..1	An optional accompanying note.

13 Component: Document Control

Description: A section that describes information about the event summary document. Much of the information contained in Document Control is technical in nature and as such is not described here, but is included in the following section. Described below are those elements which have clinical relevance.

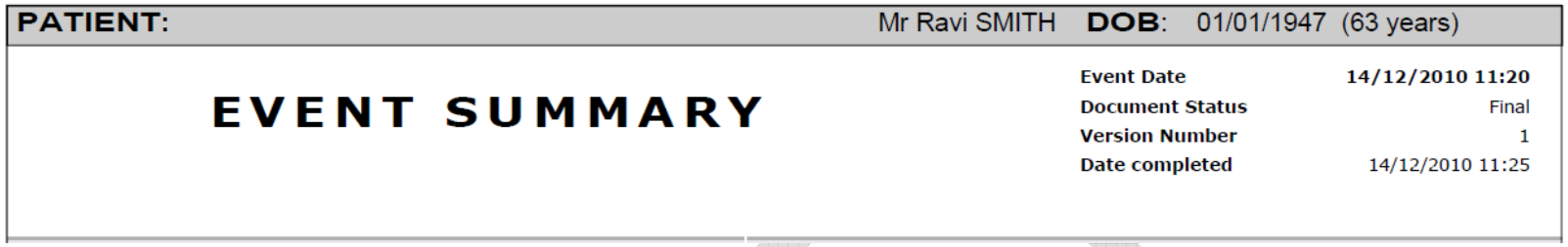
13.1 Requirements

Data item	Requirement statement	Rationale
Component	Each Event Summary document shall include metadata about the document.	Document management requirements.
	Document control information is predominantly technical and as such does not require display for end users.	
Document Status	Each event summary shall include the status of the document.	Documents may have varying states of completion and it assists the reader knowing what the latest version of the document is. Provides assurance to the reader that they are looking at the latest document.
	Values for Document Status shall be sourced from a coded reference set that includes 'Interim', 'Final', 'Amended'.	Assists clarity
DateTime Attested	The date/time when the ES document was attested (or finalised, or signed off) by the document author.	Clinical safety requirement to ensure that the reader knows exactly when the document was written.

13.2Samples & usage

1. Document Header

An event summary may display various elements of the document control near the top of the summary.



13.3 Proposed Data model

Data items	DataType	Number of Values Allowed	Notes
Document Status	Coded Text	1	The status of the document (e.g. 'Interim', 'Final', 'Amended')
DateTime Attested	DateTime	1	The date/time when the ES document was attested (or finalised, or signed off) by the document author.

14 Technical Document Control Requirements

The following data items are included for completeness as they represent technical requirements to ensure correct identification of each document etc.

Data items	DataType	Number of Values Allowed	Notes
Document Instance Identifier	Unique Identifier	1	The universally unique identifier of this instance of the Event Summary document.
Document Set Identifier	Unique Identifier	1	The universally unique identifier of the set of documents related to the same healthcare encounter, of which the Event Summary document is a versioned instance.
Version Number	Integer	1	The version number of the Event Summary document instance.
Document Originating System Identifier	Unique Identifier	1	A universally unique identifier of the system used to create the Event Summary document.
Business Document Type	Coded Text	1	The name of the Event Summary document type used – e.g. 'Event Summary'
Business Document Type Version Number	Integer	1	The version number of the Event Summary document type used to create the Event Summary.
Language	Coded Text	1	The language primarily used within the document (e.g. 'en-AU')
Structured / unstructured clinical document flag	Coded Text	1	The PCEHR Concept of Operations describes 2 options for this flag: - A "structured clinical document", which has all the above fields and also contain additional structured data describing the details of the event (e.g. medicines, allergies, etc); or - An "unstructured clinical document", which has all the above fields and also contains information in the form of an attached PDF.

15 Event Summary Scenario

An example scenario is as follows:

A patient John has a complex chronic illness and is actively managed by his usual GP. The usual GP has regularly maintained an up-to-date SHS for John, which has been published to John's PCEHR record. John has a holiday interstate, falls ill and needs to see a GP for management. The new GP reviews John's SHS and gets acquainted with John's available history.

As a result of the presenting problem, the GP makes some changes to John's medications and decides to create an Event Summary which is published to the PCEHR.

On return to home, John is seen by his usual GP and rather than relying upon John's memory of the recent event, he reviews the event summary written by the other GP.

The usual GP decides to incorporate the new medications listed in the Event Summary into her own clinical records and then updates John's SHS if appropriate.

Definitions

This section explains the specialised terminology used in this document.

Shortened Terms

This table lists abbreviations and acronyms in alphabetical order.

Term	Description
AMT	Australian Medicines Terminology
CDA	Clinical Document Architecture
GP	General Practitioner
HI	Health Identifiers
HL7	Health Level 7
HPI-I	Healthcare Provider Identifier of the individual
HPI-O	Healthcare Provider Identifier of the organisation
IHI	Individual Healthcare Identifier
LOINC	Logical Observation Identifiers Names and Codes
MMRG	NEHTA Medication Management Reference Group
NCTIS	NEHTA's National Clinical Terminology and Information Service
PCEHR	Personally Controlled Electronic Health Record
SNOMED CT	Systemised Nomenclature of Medicine, Clinical Terminology

Glossary

This table lists specialised terminology in alphabetical order.

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

References

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

References

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

Reference Documents			
[REF]	Document Name	Publisher	Link
[PCO-2011]	DRAFT Concept of Operations PCEHR System, April 2011 Release, Version 0. 13.6 — 8 April 2011	DOHA & NEHTA	http://www.yourhealth.gov.au/internet/yourhealth/publishing.nsf/Content/pcehr-document

Related Reading

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

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