PRSB

PROFESSIONAL RECORD STANDARDS BODY
for health and social care

Discharge Summary Phase 2

Summary report accompanying final version of information models and implementation guidance

May 2017

Better records
for better care

Acknowledgements

This project was funded by NHS Digital. NHS Digital is the trusted national provider of high-quality information, data and IT systems for health and social care. NHS Digital collects, analyses and publishes national data and statistical information as well as delivering national IT systems and services to support the health and care system. The information services and products are used extensively by a range of organisations to support the commissioning and delivery of health and care services, and to provide information and statistics that are used to inform decision-making and choice.

The Professional Record Standards Body

The independent Professional Record Standards Body (PRSB) was registered as a Community Interest Company in May 2013 to oversee the further development and sustainability of professional record standards. Its stated purpose in its Articles of Association is: “to ensure that the requirements of those who provide and receive care can be fully expressed in the structure and content of health and social care records”. Establishment of the PRSB was recommended in a Department of Health Information Directorate working group report in 2012.

Professional Record Standards Body
32-36 Loman Street
London SE1 0EH

www.theprsb.org
support@theprsb.org

Community Interest Company No 8540834

Document Management

Project	Discharge summary phase 2		
Project Director	Martin Orton		
Owner	Jan Hoogewerf	**Version**	1.5
Authors	Jan Hoogewerf		
Version Date	26.05.2017	**Status**	Final

Revision History

Version	Date	Summary of Changes
01	15.05.2016	First draft created by Jan Hoogewerf
02	08.07.16	Draft updated following production of final draft version of information models and implementation guidance
1.0	21.07.16	Final version, updated for comments from project board members
1.1	22.07.16	Final version, updated for further comments from project board members.
1.2	28.07.16	Final version, updated from further comments from Philip Scott, Annette Gilmore and Lorraine Foley following discussion with Munish Jokhani and Jan Hoogewerf.
1.3	31.08.16	Final version, updated for comments from Advisory Board members
1.4	12.12.16	Final version, road map section updated
1.5	26.05.17	Final version, formatting and links updated; minor typographical updates; embedded items removed to be published separately.

Glossary of Terms

Term / Abbreviation	What it stands for
AoMRC	Academy of Medical Royal Colleges
CDA	Clinical Document Architecture

CKM	Clinical Knowledge Manager
dm+d	NHS dictionary of medicines and medical devices
HIU	Health Informatics Unit
IHE	Integrating the Healthcare Enterprise
PID	Project Initiation Document
PRSB	Professional Record Standards Body for Health and Social Care
RCGP	Royal College of General Practitioners
RCP	Royal College of Physicians
SNOMED CT	Sytematized Nomenclature of Medicine Clinical Terms
ToC	Transfer of Care

Reviewers

This document must be reviewed by the following people:

Reviewer name	**Title / Responsibility**
Munish Jokhani	NHS Digital, Clinical Engagement Lead
Dave Barnett	NHS Digital, messaging team
Libby Morris	RCGP
Martin Orton	PRSB, Director
Lorraine Foley	PRSB, CEO
Philip Scott	PRSB, technical assurance
Annette Gilmore	PRSB clinical and patient assurance
Neil Watson	Chief Pharmacist, Newcastle University Hospitals Foundation Trust
Neil Betteridge	PRSB, patient and carer representative
Gerry Bolger	CCIO and RCN
John Williams	RCP

Approved by

This document must be approved by the following people:

Name	Signature	Date	Version
Project board	Signed off	28/07/2016	1.2

Related Documents

These documents will provide additional information.

Ref no	Title	Version
[1]	NHS Digital discharge domain message specification https://developer.nhs.uk/downloads-data/structured-headings-hl7v3-cda/	4.1
[2]	Standards for the Clinical Structure and Content of Patient Records. http://www.rcplondon.ac.uk/resources/standards-clinical-structure-and-content-patient-records	2.1
[3]	PRSB Projects 2015 Lessons Learned Report	1.0
[4]	Professional Records Standards Body Service Specification 2014/15	1.1
[5]	PRSB assurance criteria	0.7
[6]	AoMRC Discharge summary (meds only), Draft Template [Internet]. UK Clinical Models, UK Clinical Models Clinical Knowledge Manager [cited: 2016-01-06]. Available from: http://clinicalmodels.org.uk/ckm/#showTemplate_1051.57.37	2016-01-06
[7]	e-discharge summary stage 1 project report	1.0

Contents

1. Introduction

Purpose of the project

In order for health and care information to be shared and re-used safely in an electronic environment, a standardised structure is required. The standards must meet the needs of patients and the healthcare professionals involved in their care and reflect the ways in which those professionals work.

Discharge summaries are important documents, required for the on-going treatment of patients. When a patient moves from hospital to general practice care, pertinent information from the hospital record must be shared quickly to ensure that primary care clinicians have the information that they need to deliver safe and effective care. This information must be both relevant and useful to GPs and their clinical teams, and it must be practicable for hospital clinicians to record the information. A copy of the discharge summary must also be provided to the patient.

This project built on the Academy of Medical Royal Colleges (AoMRC) hospital discharge summary headings, published in 2013, which are endorsed by fifty professional bodies. The main output of the project and the content of this report are information models which are technical in nature and require specialist expertise to interpret. They are intended for use by NHS Digital (NHS Digital) to develop technical specifications which NHS IT systems suppliers can implement on electronic patient record systems.

The purpose of the project was to enable structured and coded (SNOMED CT and dm+d) data on key clinical information (diagnoses, procedures, allergies and medications) to be communicated in electronic discharge summaries from hospital to GP practice. This will enable information to be incorporated into GP systems, following reconciliation, without rekeying, thus avoiding transcription errors and improving continuity of care.

The outputs from the project will be used by NHS Digital to develop technical specifications for electronic discharge summaries, which will be implemented throughout the NHS in England through NHS Standard Contracts. It is anticipated that the 2017 Contract will require use of structured headings and the 2018 Contract will require coded clinical information as specified by this project, to be carried. The consultation will extend across the four nations so that the outputs are also suitable for implementation in the other nations.

Background

NHS Digital commissioned the Professional Record Standards Body (PRSB) to develop standardised electronic discharge summaries, based on the 2013 AoMRC approved and PRSB adopted clinical record standards. The PRSB covers the four nations and consults across them all, hence the standards are intended for use in all four nations.

This project was the second phase in the development of these standards. The first phase of the project, completed in April 2015, developed information models for 11 key headings in the discharge summary. The second phase focused on medicines and on the validation of the previously developed information models for diagnoses, procedures, allergies and adverse reactions and some administrative headings.

The project was managed by the RCP HIU, under subcontract from the PRSB and following PRSB processes and methodology. The clinical lead was from the RCGP and there were also clinical advisors from the RCP.

The project was carried out in collaboration with NHS Digital Information Standards Delivery (ISD) function. NHS Digital uploaded the information models produced by the project team into their Clinical

Knowledge Manager (CKM) software and will subsequently use these models to develop Clinical Document Architecture (CDA) message specifications which can be used by suppliers to develop e-discharge summaries. It is anticipated that there will be requirement in future NHS Standard Contracts to use the structured and coded standards for e-discharge summaries.

The scope of the project was set out in the Project Initiation Document (PID) to include:

- Discharge summary use case only – all headings.
- Expert review of OpenEHR archetypes created by NHS Digital for specific headings (diagnoses, procedures, allergies and some administrative headings)
- A simple medication information model, including for medication item:
    - Medication name, constrained to code (i.e. dm+d SNOMED CT code and dm+d term text/display name. Free text on its own would not be allowable as the coded medication name is an essential pre-requisite for future structured dose syntax).
    - Form / route / site, coded, but including text as an option.
    - Structured medication dose amount, medication dose frequency and duration. These will be optional in the simple model (i.e. does not need these to have entries), but they will be essential for dose syntax. All human readable textual entries for dose will need to be supported in the simple model.
    - Consideration will be given to whether 'prescriber' identity for each medication should be added to the information model. (Whilst this is clearly essential in the prescription, the project will consider whether identity can and should be carried in the discharge communication).
- Implementation guidance, including requirements for medicines reconciliation at the receiving end associated with the transfer of human responsibility. This will be initial guidance only, obtained during the project, and it is expected that it will be supplemented subsequently through experience from actual implementations. This will be done through the support and maintenance contract being established by NHS Digital with the PRSB.
- A road map for the 'smart medication model' that supports interoperable dose syntax. The road map will identify the work to be done and estimated timescales/effort.
- All other discharge summary headings will be reviewed. The headings and their definitions, whether they are mandatory or optional and the content (values) that can be recorded under the headings will be consulted upon and agreed.

This report sets out the methods used in the project and the stakeholders with whom the project team engaged. It accompanies the information models, implementation guidance and road map report, which are separate documents. The report has been approved by the PRSB advisory board.

2. Methodology

The following approach was taken to develop the information models and other project deliverables:

First draft medication information models

An initial medication and medical devices information model was drafted, based on the AoMRC 2013 clinical record headings and drawing on the detailed Scottish Clinical Information Management in Practice (SCIMP) community medication information model and information models used in GP2GP record transfer. The information model created was a Word document and was sent to an expert clinical group (both GP and hospital backgrounds) to review (see membership in Appendix A).

The medication and medical devices information model was updated for comments from the expert clinical group. Copies of the comments and responses made by the project Clinical Lead to the comments are recorded in an audit trail and available on request.

First draft full set discharge summary information models

Information models for diagnoses, procedures and allergies and adverse reactions were produced, based on the AoMRC 2013 clinical record headings. These were Word documents and were circulated to the expert clinical group for review. They were updated for comments from this group.

Information models were created for those headings for which models had not been developed in the first phase discharge summary project in 2015. Mindmaps and spreadsheets were created. At this point the administrative models produced by NHS Digital in the first phase of the discharge summary project were not reviewed.

In creating all the information models, queries or comments provided to the project team by NHS Digital were considered and responded to. This led to some changes to draft information models.

Consultation workshop

The initial draft information models were converted into a form in which they could be understood by a general audience, including patients and clinicians. Mindmaps were produced and the detailed information models were broken down and specific questions identified on which advice was needed.

A consultation workshop was held on 24 March 2016, including patient representation, health/care professionals, academics and informaticians. Attendees are listed in Appendix A. The outcome of the workshop discussions is provided in Appendix B and informed a second draft of the information models.

Second draft full set discharge summary information models

A second draft set of discharge summary information models was produced, taking account of workshop comments.

The administrative models developed by NHS Digital in CKM following the first phase discharge summary project in 2015 were reviewed and comments fed back to NHS Digital.

The updated information models (Word documents, mind maps and spreadsheets) were provided to NHS Digital to upload into the CKM software. Various iterations of the CKM models were reviewed by the Clinical Lead and Project Manager and comments fed back to NHS Digital until the models were considered to be suitable to open for wider review. This took longer than anticipated as this was the first time that NHS Digital/PRSB had worked with CKM and time was spent getting familiar with the software and determining the best way to present the models using the CKM tools. A final review by the expert clinical group was carried out before the information models were opened up for wider review.

Wider consultation – third draft discharge summary information models and implementation guidance

A change to the approach specified in the PID was made (following discussion and agreement by the project board members). An on-line general consultation on the headings was not carried out as they were based on the AoMRC 2013 headings and clinical definitions, which had been subject to extensive consultation and sign off by 50 professional organisations. They had also been consulted on in the 2015 phase 1 project, when minor changes only were made.

The revised approach was to provide information models in two formats a) Word documents and spreadsheets, and b) NHS Digital CKM information models, for review by email. A draft implementation guidance document was also produced for review. The documents/links were put onto the PRSB website so that they were generally available but communications about the survey were targeted to

informaticians and suppliers. This was because of the complexity of the documents, which were not suitable for a general audience.

The routes used to communicate about the review were as follows:

- TechUK
- PRSB vendor forum
- HIU register (people with an interest in informatics and HIU work programme)
- CCIO, CIO and CLN forums (operated by Digital Healthcare)
- Direct email communications to 30 CCIOs, with which HIU have regular contact.

Initially, there were few supplier responses and so an extension to the deadline of two weeks was agreed with the project board. This was used to resend the email and to contact some larger suppliers directly. However, it still did not elicit many responses from suppliers. This issue will be passed to the project board, so that the PRSB can address for future projects.

Road map

The scope of the project included exploring the work required to develop a 'smart medication model' that supports interoperable dose syntax. This builds on a previous PRSB project 'Scoping Medications Requirements' (2015) and the 'Closing the Loop' project in Scotland (eHealth Strategy 2014-2017 - The Scottish Government www.gov.scot/Publications/2015/03/5705/6), which identified a need for structured dose syntax to enable communication of medication from GP practices to hospitals and within hospital electronic prescribing and medications administration (HEPMA) systems.

The road map was initially drafted by the Clinical Lead, drawing on reference documents, including the NHS CfH Dose Syntax Abstract Model version 0.8 Draft dated 20/11/2008, the Scottish NHSS Dose Syntax Recommendation Final Report 15/12/2014 and the NHS CfH dm+d implementation guide (secondary care) version 5.0

The draft report was reviewed initially with pharmacist expert group members with detailed knowledge of dm+d and SNOMED CT. After five iterations it was shared with a wider set of experts with knowledge of this domain (listed in Appendix A, table 2). As a result of that wider review it underwent three further iterations. It was then submitted to the Project Board for formal review and approval.

3. Information models

Use of the models

Suppliers should be able to support all the headings set out above in an electronic discharge summary. However, it is not anticipated that all headings will need to be used for all patients in all circumstances, only where they are relevant to a specific patient, i.e. the general rule is that headings should not be included in the message where there is no data recorded/available.

The standard headings and content definitions are intentionally generic so that they can be used consistently across different use cases and care settings. The order in which the headings appear in e-discharge summary communications and letters can be agreed by system providers and end users.

Information Models

The final version of the information models are provided on the PRSB website at http://theprsb.org/publications/e-discharge-summary-standard. The four key areas (diagnoses, procedures, allergies and medications and medical devices) are presented as Word documents; all other

headings in the discharge summary are included in a spreadsheet named 'Other Discharge Summary Headings'.

Implementation Guidance

A final version of detailed guidance on implementing the models is provided at: http://theprsb.org/publications/e-discharge-summary-standard

Example discharge summary

An example discharge summary based on the above information models is on the PRSB website at http://theprsb.org/publications/e-discharge-summary-standard. It illustrates the way in which a discharge summary could appear for a patient in a given scenario.

4. Road map for a smart medication model

A road map was developed for a 'smart medication model' that supports interoperable dose syntax. The road map identifies the work to be done and estimated timescales.

Appendix A - Stakeholders

1. Individuals who participated in the consultation workshop (24 March 2016)

Name	Organisation
Andy Spencer	Royal College of Paediatrics and Child Health
Angus Wallace	Royal College of Surgeons(England)
Ann Slee	NHS England
Annette Gilmore	Assurance Lead, Professional Record Standards Body
Brett Lambert	Tees, Esk and Weir Valleys NHS
Chris Johnson	Respiratory Physician, Papworth Hospital
Darren Wooldridge	RCP HIU
Dave Barnet	NHS Digital
Devesh Sinha	Stroke physician, Southend
Emily Ward	Royal Pharmaceutical Society
Gerry Bolger	CCIO, Imperial Hospitals NHS Trust
Gill Otway	South Devon Healthcare NHS Trust
Howard Leicester	Patient/ accessibility issues
Ian McNicoll	OpenEHR
Ian Turner	National Care Home Association
James Reed	Royal College of Psychiatrists (link to MH Discharge)
Jan Hoogewerf	RCP HIU
John Williams	Clinical Lead (Royal College of General Practitioners)
Leo Fogarty	RCGP
Lis Warren	Diabetes UK patient representative
Liz Goodall	RCP Patient Carer Network
Liz Sheehan	Allied Health Professional Federation
Matt Butler	Royal College of Nursing
Munish Jokhani	NHS Digital
Neil Betteridge	PRSB patient representative
Nicola Quinn	RCP HIU
Paul Rastall	Gastroenterologist (RCP)
Philip Scott	PRSB (Technical Coordination Committee)
Ron Newall	Patient representative

Name	Organisation
Stephen Goundrey Smith	Royal Pharmaceutical Society
Susan Rayment	District nurse
Suzie Shepherd	RCP Patient Carer Network
Tom Armstrong	Radiology SpR Royal Free Hospital
Zein Toukan	Junior Doctor

2. Stakeholders who were members of the expert clinical group

Name	Organisation
Ann Slee	NHS England
Anoop Shah	RCP (HIU)
Colin Brown	NHS Scotland
Colin Brown (plus CCG colleagues)	CCIO, Morecambe Bay University Hospitals NHS Trust
Emma Melhuish	NHS Digital
Ian McNicoll	OpenEHR
Iain Thompson	NHS Lothian
Jo Goulding	NHS Digital
Keith Farrar	NHS England
Leo Fogarty	NHS Digital/RCGP/NHS Scotland
Munish Jokhani	NHS Digital
Paul Miller	Greater Glasgow HB/RCGP
Paul Rastall	RCP (HIU)
Phil Koczan	RCGP

3. Stakeholders who provided comments on the information models, when they were opened for general review

Name	Organisation
John Parry	TPP
Pete Hughes (and colleagues)	Cerner
Paul King	SystemC
Afzal Chaudhry	Cambridge University Hospitals NHS Foundation Trust
Rupert Fawdry	RCOG

Name	Organisation
Howard Leicester	Patient
Neil Betteridge	Patient
Kai Sanders	CCG/GP
Cath Jenson	GP
Dermot O'Riordan	CCIO
Tim Hoare	Hospital doctor
Mark Rickenbach	GP/trainer
Brian Elvey	Hospital doctor
Peter Isaacs	Hospital doctor
Andrew Jennings	GP
Bernard Fernando	GP
Beatrice Cooper	Hospital doctor
Andrew Jennings	CCIO
Jack Barker	CCIO
Zabeda Ali-Fogarty	Nurse/ Supplier
Ruth Caudwell	Paediatrician
Angus Wallace	Surgeon
Stephen Goundrey-Smith and colleagues	Royal Pharmaceutical Society
Gary Warner	Pinnacle Health (pharmacist)

Appendix B – Workshop Outcomes

This section lists changes to the information models proposed at the workshop and suggestions for implementation guidance.

Changes to information models

Heading	Changes
Medication and medical devices	The medication change cluster should move into the medication item cluster.
Investigation results	This should be a separate heading rather than a sub-heading of clinical summary.
Procedures	• Change clinical description to include diagnostic as well as therapeutic procedures. • Change anatomical site from zero to one to zero to many (eg veins).
Allergies and adverse reactions	• The coded text 'no known allergies' etc. should be recorded as an option against causative agent.
Investigations	• Clinical summary and investigation results should be separate sections.

The following issues were discussed but resulted in no changes to the model:

1. There was discussion about whether the medication and medical devices heading should be mandatory. This was proposed to help reduce transcription errors. However, it was felt that making it mandatory might mean that people recorded 'no changes', rather than taking time to complete the heading adequately, so it should not be mandatory, but covered by implementation guidance (see below).
2. There was discussion about whether the name should be changed to transfer of care, but as the term 'discharge summary' is currently commonly used and is an example of a transfer of care, it should be retained.
3. Whether the plan and requested actions should be mandatory was debated, but it was felt that this might not be relevant for all patients (eg simple elective admission).
4. Diagnoses discussion about whether this should be optional for circumstances where there is no definite diagnosis. In this instance symptom can be recorded, but it may be that a diagnosis with a qualifier, indicating the degree of certainty, or recording 'clinical signs' eg normal baby, is more appropriate in some cases. The discussion was inconclusive, so no change required to the model at this point, but changes may be needed in the future.

Implementation Guidance

The following issues relating to implementation of the headings were discussed. They will be included in the implementation guidance report.

General

1. Some places send out an initial discharge summary and follow up with a more detailed one subsequently. There should be a single discharge summary, containing all pertinent information, sent out on a timely basis (within 24 hours?).
2. The primary use of the discharge summary primary is for discharge from hospital care (day case or overnight stay) to GP.
3. There is no reason why the discharge summary content couldn't be used in other situations, (eg to inform care home of hospital discharge) but it has not been considered for use in them.
4. The expectation is that the GP should be able to receive and read the discharge summary and that some of the information in the summary should be machine readable so that it can be incorporated in the GP electronic record.
5. The discharge summary electronic communication is intended to be agnostic to the technical implementation. For example, it could be communicated from hospital to GP practice and/or could be held in a shared care record.
6. There was discussion about whether patients could understand the discharge summary. Patients should get a copy of the discharge summary so it is important that it is written in a way that is understandable for them.
7. The discharge summary may have contributions from multi-disciplinary team members, not just an individual clinician. The local hospital system should retain an audit trail of contributions.
8. The discharge summary should be brief, containing only pertinent information on the hospital episode, rather than duplicating information which GPs already have access to in their own records.

Diagnoses

9. Guidance is needed on what to record where there is no confirmed diagnosis to avoid misunderstandings, eg how to indicate suspected condition, working diagnosis or clinical impression.
10. Guidance is needed about how to record exclusions. For example, where a diagnosis has been excluded, it should not be recorded in the diagnosis field with a comment about the exclusion in the comment field as this completely changes the meaning.
11. Co-morbidities could be recorded as separate diagnoses or as problems and issues – guidance is needed as to situations where one or the other is appropriate.
12. Clinical coders use discharge summaries for coding hospital episodes. They need to know which diagnosis is primary and which are secondary. It was suggested that this could be noted in the 'comments' entry or by user guidance that the first diagnosis recorded should be the primary one.

Procedures

13. Guidance needed on which procedures to record (similar to diagnoses, above?).
14. Diagnostic as well as therapeutic procedures should be recorded.
15. Outcomes or results of procedures should be recorded under 'comments'.
16. It would be helpful to have SNOMED CT subsets defined for complications.

Medications and medical devices

17. A full record of any medications that the hospital wants the patient to continue on and any changes to medication whilst in hospital, including discontinuation, should be recorded in the discharge summary. Implementation guidance would need to emphasise the importance of recording changes, rather than making medication changes a mandatory heading (as this could lead to recording of no change, even where changes had occurred).
18. A definition is needed as to what constitutes a medication change. It should be made clear that the medication record of changes is generated by the hospital from the information that they have, which may not be complete/accurate.
19. Implementation guidance would be needed on what items to record should the hospital not have an e-prescribing system linked to the discharge summary system, where the clinician needs to enter the data manually.
20. Implementation guidance should be given about how to present medication information in the discharge summary safely. This should draw on existing guidance in the area eg NPSA.

Allergies and adverse reactions

21. Where the causative agent is not known, an allergic reaction should not be recorded, ie business rule causative agent – none, should be allergic reaction - none.
22. This should be a record of allergies that the patient tells the hospital about as well as an allergic reaction related to their admission.

Plan and requested actions

23. The plan should make clear who is expected to take responsibility for actions following discharge, ie the hospital, patient or GP. Shared decision making principles should apply to the development of the plan and where the patient's opinions differ, this should be recorded under the heading 'Patients concerns, expectations and wishes'.

Investigations and procedures (requested)

24. Investigations and procedures requested should be a separate section to investigations and procedures undertaken. Those investigations requested but not yet performed should be distinguished from those carried out where results are not available at the moment.
25. Only important or relevant results should be included in the discharge summary, ie those that the clinician wants to communicate to the GP. It was pointed out that trying to decide what the recipient might want can be difficult and requires time – consideration should be given to ways that a clinician could be helped in this task.
26. It is important for the clinician to record why they have done the test and who is going to follow up (ie GP or hospital)

Distribution list

27. This should be a list of people that the discharge summary is being sent to (as the patient and GP need to know where it is being sent). Where local systems are capable of doing so, they may use this information to trigger the message to be sent, where it is possible to do so, via a CDA message.

Appendix C – Outcomes of wider consultation

This section sets out the outcome of the wider consultation held with suppliers and informaticians.

In addition to the expert clinical group (14 members) there were a total of 23 other responses on the draft deliverables. 11 were hospital doctors, 5 GPs/CCGs, 2 patients, 1 pharmacist (Royal Pharmaceutical Society) and 4 suppliers, of which one was also a nurse. Most comments were provided in emails, but a few people had recorded comments in the documents themselves.

The number of responses was very low. The majority of the responses came from direct email approaches to individuals, rather than distribution lists/on-line forums. There were only 2 responses from PRSB advisory board members.

Almost all of the comments related to implementation of the information models or were requests for further clarification of the meaning of items in information models. None of these comments necessitated changes to the information models and all have been addressed through changes in the implementation guidance. They are logged in an issues log together with responses provided by the project team.

There was one comment which did indicate a possible need for a change to the information model for procedures. This is set out on the table below:

Heading	Clinical description	Issue
Specific anaesthesia issues	Details of any adverse reaction to any anaesthetic agents including local anaesthesia. Problematic intubation, transfusion reaction, etc.	Adverse reactions should be recorded under 'allergies and adverse reactions'.

In discussion with the project board, it was agreed that adverse reactions should be recorded under the 'Allergies and Adverse Reactions' heading, but should also be displayed under the 'Specific Anaesthesia Issues' heading. This would be covered in the implementation guidance and hence no change would be needed to the information model.