PRSB

Professional Record Standards Body
for health and social care

Ambulance transfer of care to emergency departments documentation standards

Final report

May 2016

Acknowledgements

This project was funded by the Health and Social Care Information Centre. The HSCIC is the trusted national provider of high-quality information, data and IT systems for health and social care. The HSCIC 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.

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Community Interest Company No 8540834

Document Management

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03	06.04.2016	Updated following project board review
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1.1	25.04.16	Updated for comments from David Pitcher about LPA and ADRT
2.0	17.05.16	Updated following comments from PRSB Advisory Board members

Glossary of Terms

Term / Abbreviation	What it stands for
AACE	Association of Ambulance Chief Executives
AoMRC	Academy of Medical Royal Colleges
CDA	Clinical Document Architecture
CoP	College of Paramedics
CPR	Cardiopulmonary Resuscitation
DMS	Domain Message Specification

ED	Emergency Department
HIU	Health Informatics Unit
HSCIC	Health and Social Care Information Centre
IHE	Integrating the Healthcare Enterprise
NWAS	North West Ambulance Service
PID	Project Initiation Document
PRSB	Professional Record Standards Body for Health and Social Care
RCEM	Royal College of Emergency Medicine
RCP	Royal College of Physicians
SPN	Special Patient Notes
ToC	Transfer of Care
UEC	Urgent and Emergency care

Reviewers

This document must be reviewed by the following people:

Reviewer name	**Title / Responsibility**
Munish Jokhani	HSCIC, Clinical Engagement Lead
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This document must be approved by the following people:

Name	Signature	Date	Version
Project board	Signed off	07.04.16	0.3
PRSB Advisory Board	Signed off	12.05.2016	1.1

Related Documents

These documents will provide additional information.

Ref no	Title
[1]	Transfer of care from ambulance to ED standard headings and content definitions (final draft)
[2]	Transfer of care from ambulance to ED information model spread sheets (final draft)
[3]	Transfer of care from ambulance to ED information model mind maps (final draft)
[4]	Crisis care summary standard headings and content definitions (final draft)
[5]	Crisis care summary information model spread sheets (final draft)
[6]	Crisis care summary information model mind maps (final draft)
[7]	Professional Guidance on the Structure and Content of Ambulance Records https://www.rcplondon.ac.uk/projects/professional-guidance-structure-and-content-ambulance-records
[8]	Standards for the Clinical Structure and Content of Patient Records. http://www.rcplondon.ac.uk/resources/standards-clinical-structure-and-content-patient-records
[9]	Palliative care co-ordination: core content
[10]	Draft Emergency Care Data Set
[11]	SPN Shortlisting by NHS 111 Regional Clinical Leads Briefing 26/01/2015
[12]	Clinical Documentation and Generic Record Standards Lessons Learned Report
[13]	Professional Records Standards Body Service Specification 2014/15
[14]	PRSB work programme 2015 Lessons Learned Report
[15]	Crisis care documentation draft message specification (DMS)
[16]	PRSB assurance criteria

Contents

1. Purpose

In order for health and care information to be shared and re-used safely in an electronic environment a standardised structure is required. The standard needs to meet the needs of patients and the healthcare professionals involved in their care and reflect the ways in which they work. Documentation completed by the ambulance services in urgent and emergency care (UEC) situations are important records required for the on-going treatment of patients. When transferring the care of a patient to a hospital emergency department (ED), pertinent information from the ambulance record needs to be shared quickly to ensure that clinicians have the information they need to deliver safe and effective care. This information needs to be both recordable by ambulance professionals and useful to ED professionals. The purpose of the project was to define a standard structure and content of the transfer of care information from ambulance to ED in consultation with patients and healthcare professionals.

2. Introduction

The Health and Social Care Information Centre (HSCIC) commissioned the Professional Record Standards Body (PRSB) to develop standard headings and content definitions, supported by information models for information which needs to be communicated when patients are transferred from ambulance to ED.

In 2014, the Royal College of Physicians (RCP) Health Informatics Unit (HIU) were commissioned by the HSCIC to develop professional guidance for ambulance records. The guidance has been endorsed by 25 patient and health/care professional representative groups, including the College of Paramedics (CoP), the Association of Ambulance Chief Executives (AACE) and the Royal College of Emergency Medicine (RCEM). The headings developed in the current project should be a subset of the 2014 ambulance guidance.

The 2014 ambulance guidance was based on the earlier Academy of Medical Royal Colleges (AoMRC) Clinical Documentation and Generic Record Standards (CDGRS), which include referral, outpatient letters, admission, handover and discharge summary. The standard headings and content definitions are generic across all record standards, so that they can be used consistently across different use cases and care settings.

The HIU carried out this project on behalf of the PRSB. A paramedic advisor from the North West Ambulance Service (NWAS) was part of the project team and the RCEM and COP were represented at all stages of the consultation (workshop, online survey and expert user group).

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

- Standard headings and content definitions
- Information models, comprising mind maps and spread sheets, whether they are mandatory or optional, the cardinality and the content (values) that can be recorded under the headings.
- Alignment with the Standards for the Clinical Structure and Content of Patient Records (2013) and the Professional Guidance on the Structure and Content of Ambulance Records (2014).
- Consideration of the related concurrent PRSB project to develop standards for crisis care documentation.

This report sets out the methods used in the project and the stakeholders with whom the project team engaged. It accompanies the information model mind maps and spreadsheets, which are separate documents.

3. Using the standard

A full electronic health record (EHR) in the ambulance service should include all the headings in section 5, which will be displayed for data recording, reviewing and communicating.

It is not anticipated that information will need to be recorded under all headings in all circumstances, only where they are relevant to a specific patient. Furthermore any headings under which information is not recorded, should not be included in the ambulance transfer of care message.

A small number of the headings are identified as 'mandatory', meaning that they must be included in every ambulance to ED transfer of care. Others are identified as 'required', meaning that it is good practice to include them in transfer communications, where information has been recorded for a specific patient and others are 'optional', meaning that it is a local decision whether or not to include them in transfer of care communications. Local agreements will be need to be reached between participating organisations regarding which of the optional headings will be included in local communications.

The order or sequence in which the headings appear in EHR systems and communications can be agreed locally by system providers and end users.

4. Methodology

The following approach was taken to develop the standard headings and content definitions (with supporting information models):

Mapping of existing standards and documentation currently used
The project team identified a number of relevant data standards and documentation currently used in UEC across the UK. This information was mapped to identify commonality and to inform an initial draft to be consulted on at the first consultation workshop. The data standards and documentation included:

- Academy of Medical Royal Colleges (AoMRC): Standards for the Structure and Content of Clinical Records
- HSCIC and RCEM: Draft Emergency Care Data Set
- HSCIC: NHS 111 Domain Message Specification
- HSCIC: Professional Guidance on the Structure and Content of Ambulance Records
- HSCIC: Summary Care Record inclusion/exclusion datasets
- Integrating the Healthcare Enterprise (IHE): Patient Care Plan Content Profile
- NHS National Services Scotland. National Information Systems Group: Key Information Summary
- South West Ambulance Service: Acute Executive Summary Referral Form

Consultation workshop
The initial draft headings were discussed in a consultation workshop held on 18 January 2016, including patient representation, health/care professionals, academics and informaticians. Attendees are listed in Appendix A. The outcome of the workshop discussions informed a second draft of standard headings and content definitions and associated information models.

Online consultation survey
An online consultation survey was carried out between 05 February - 01 March 2016. A total of 219 people responded to the survey. Details of the online consultation survey were circulated to identified stakeholders including PRSB members, the PRSB vendor forum and the RCP HIU register. Contacted stakeholders are listed in Appendix A. The survey was used to obtain views on the content to be carried under the headings and informed updated versions of the standard headings and content definitions

and associated information models (version 3). The findings from the survey can be found in Appendix B. The survey also raised a number of implementation and clinical safety issues which are discussed in section 4.

Expert user group meeting
The findings from the online consultation survey were discussed in an expert user group held on 14 March 2016, including patient representation, health/care professionals and vendors. Attendees are listed in Appendix A. The discussions informed an update of the standard headings and content definitions and associated information models (version 4), which was then circulated to the project board for their review and feedback. The expert user group also raised a number of implementation and clinical safety issues which are discussed in section 4.

Information models
Information models, in the form of mind maps and spreadsheets (separate documents) were developed by the project team. The team considered that the outputs would not be suitable for review by a general patient and health/care professional audience, e.g. due to the language used (e.g. model cardinalities, business values). Business values were identified through review of existing data sets. The consultation gained consensus on whether headings should be categorised as mandatory, required or optional. This is detailed in the information model spread sheets and mind maps. These are defined as:

- Mandatory headings: These headings should always be included in the message. Where there is no information then the message will contain appropriate coded text to identify this. Mandatory headings will be able to be tested technically to ensure that information is present.
- Optional headings mean that they may or may not contain information and hence cannot be technically tested. Guidance related to optional headings relates to good clinical recording practice. There are two types of optional heading:
    - Required, where information should be recorded (and communicated) if available.
    - Optional, where local decisions can be made about whether or not to record/communicate the information. For optional headings, where there is no information recorded under a heading, then the heading does not need to be included in the message.

The assured information models will be used by the HSCIC technical teams to develop a detailed Clinical Document Architecture (CDA) message specification which will be used by suppliers in the transfer of care messages from ambulance to ED.

5. Transfer of care from ambulance to ED headings

This section presents the standard headings and content definitions that the consultation suggested should be used during transfer of care from ambulance to ED. It also describes which headings the consultation recommended should be mandatory (must be included in every transfer communication), required (should be included if information is available under the heading) or optional (may be included, a local decision).

Incident details		
Subheadings	**Description**	**Mandatory/required/optional**
Source of call	Where the call originated from e.g. 999, NHS 111, police, GP, hospital etc.	O
Caller details	The name and phone number and address of the caller and the relationship of the caller to the person	O

	if known (especially if the person is a child). Record if the caller is a child. Also whether the caller is with the person.	
Ambulance service	The ambulance service provider. This could be NHS, air ambulance, voluntary or private provider.	M
Incident number	The number that identifies the incident and is generated by the dispatcher in response to a call.	M
Incident date	The date of the incident.	M
Incident time	The time the incident occurred.	M
Time call received	The time that the call is connected to the ambulance control centre switchboard.	R
Time of symptom onset	The approximate time the person's symptoms began. Where there is a prodrome of intermittent pain the time recorded should be the time of onset of those symptoms which led the person to call for help.	R
Incident details	Information about the incident recorded by the dispatcher.	O
Incident location	The location of the incident.	O
Normal place of residence?	Is this the person's normal place of residence - yes/no?	O
Time at person side	The moment of arrival at the person's side.	R
Individual accompanying person	Individual who has family, carer or other relationship who accompanies the person.	R
Person demographics		
Subheadings	**Description**	**Mandatory/required/optional**
Person name	The full name of the person.	M
Person preferred name	The name by which a person wishes to be addressed.	R
Person alias	Record details where a person is known to use assumed identities to access health/care services.	R
Date of birth	The date of birth of the person	M
Sex	The person's phenotypic sex. Determines how the person will be treated clinically.	R
Gender	The person's stated gender (how the person wishes to portray themselves).	R
Ethnicity	The ethnicity of a person as specified by the person.	O
Religion	The religious affiliation as specified by the person.	O
NHS number	The unique identifier for a person within the NHS in England and Wales.	R

Other identifier	Country specific or local identifier, e.g., Community Health Index (CHI) in Scotland. Two data items: • type of identifier • identifier.	R
Person address	Person's usual place of residence.	M
Person telephone number	Telephone contact details of the person. To include, e.g., mobile, work and home number if available.	O
Relevant contacts	Include the most important contacts including: *Personal contacts e.g., next of kin, in case of emergency contact, lasting power of attorney, dependants, informal carers etc. *Health/care professional contacts e.g., social worker, hospital clinician, care coordinator, Independent Mental Capacity Advocate (IMCA) etc. Name, relationship, role (if formal role), contact details and availability, eg out of hours.	R
Educational establishment	If the person is a child, name and address of where the child attends, eg play group, nursery, school.	0
Participation in research		
Subheadings	**Description**	**Mandatory/required/optional**
Participation in research	This is to flag participation in a clinical trial. This may include whether participation in a trial has been offered, refused or accepted, the name of the trial, the organisation responsible, drug/intervention tested, enrolment date, duration of treatment and follow-up, and contact number for adverse events or queries.	R
Individual requirements		
Subheadings	**Description**	**Mandatory/required/optional**
Individual requirements	Individual requirements that a person has. These may be communication, cultural, cognitive or mobility needs. E.g., level of language (literacy); preferred language (interpreter required); bariatric ambulance required; support for any disability or impairment etc.	R
GP practice		

Subheadings	Description	Mandatory/required/optional
GP name	Where the person or person's representative offers the name of a GP as their usual GP.	R
GP practice details	Name, address and telephone number of the person's registered GP practice.	M
GP practice identifier	The identifier of the registered GP practice.	R
Health and care professional details		
Subheadings	**Description**	**Mandatory/required/optional**
Responsible health or care professional	The name, designation and/or personal identification number (if used) of the health or care professional with responsibility for the person within this contact. Where multiple professionals have responsibility, provide details of the duration and extent of responsibility held. State whether identified professional was present, in communication, on call etc.	M
Health or care professional(s) present	The name, designation and/or personal identification number (if used) of all other health or care professionals present.	R
Other agencies present		
Subheadings	**Description**	**Mandatory/required/optional**
Other agencies present	Identifier, name and/or designation of individuals from attending agencies e.g. police, air ambulance, GP, community first responder, fire, coast guard, midwife, chemical hazards team, voluntary services etc.	R
Relevant clinical risk factors		
Subheadings	**Description**	**Mandatory/required/optional**
Clinical risk assessment	Specific risk assessments required/undertaken, including thromboembolic risk assessment, spinal risk assessment etc.	R
Risk mitigation	Advice given or action taken to reduce the clinical risk, including action and date and time actioned.	R
Environmental risk factors	Factors in the person's environment with immediate risk for the person's health and wellbeing, eg loose carpets, steep stairs, damp etc.	R
Relevant clinical risk factors	Factors that have been shown to be associated with the development of a medical condition being considered as a diagnosis/ differential diagnosis. Eg pregnancy, being overweight, smoker, no use of sun screen, enzyme	R

	deficiency, poor sight (can impact on falls), etc.	
Presenting complaints or issues		
Subheadings	**Description**	**Mandatory/required/optional**
Presenting complaints or issues	The list and description of the health problems and issues experienced by the person resulting in their attendance. These may include disease state, medical condition, response and reactions to therapies. Eg, blackout, dizziness, chest pain, follow up from admission, falls, a specific procedure, investigation or treatment.	M
History of each presenting complaint or issue	Information directly related to the development and characteristics of each presenting complaint, (eg, including travel history). Time of onset should be recorded when appropriate e.g. stroke, cardiac arrest. Record whether the information is given by the person or their carer.	R
Management to date	Referrals, management, investigations procedures and treatment that have already been undertaken, including person managing their symptoms.	R
Relevant past medical, surgical and mental health history		
Subheadings	**Description**	**Mandatory/required/optional**
Information brought by person	Eg, Patient Passport, diary data, pre-completed questionnaire, hand held maternity record, personal child health record etc.	O
Relevant past medical, surgical and mental health history	The record of the person's significant medical, surgical and mental health history (will include dental and obstetric history). Including relevant previous diagnoses, problems and issues, procedures, investigations, specific anaesthesia issues, etc.	R
Medications and medical devices		
Subheadings	**Description**	**Mandatory/required/optional**
Medication status	Whether or not a medication is currently used, previously used, authorised for future use.	M
Medication name	May be generic name or brand name	M

	(as appropriate).	
Medication form	Eg capsule, drops, tablet, lotion etc.	R
Route	Medication administration description (oral, IM, IV, etc.): may include method of administration, (eg, by infusion, via nebuliser, via NG tube) and/or site of use, (eg, 'to wound', 'to left eye', etc.).	R
Dose	This is a record of the total amount of the active ingredient(s) to be given at each administration. It should include, eg, units of measurement, number of tablets, volume/concentration of liquid, number of drops, etc.	R
Medication frequency	Frequency of taking or administration of the therapeutic agent or medication.	R
Additional instructions	Allows for: * requirements for adherence support, eg, compliance aids, prompts and packaging requirements * additional information about specific medicines, eg, where specific brand required * person requirements, eg, unable to swallow tablets.	R
Reason for medication	Reason for medication being prescribed, where known.	R
Medication recommendations	Suggestions about duration and/or review, ongoing monitoring requirements, advice on starting, discontinuing or changing medication.	R
Medicine administered	Record of administration to the person, including self-administration.	R
Medical devices	Any therapeutic medical device of relevance that does not have representation in the NHS dictionary of medicines and medical devices (dm+d).	R
Allergies and adverse reactions		
Subheadings	**Description**	**Mandatory/required/optional**
Causative agent	The agent such as food, drug or substances that has caused or may cause an allergy, intolerance or adverse reaction in this person.	M
Description of the reaction	A description of the manifestation of the allergic or adverse reaction experienced by the person. For example, skin rash.	R
Safety alerts		
Subheadings	**Description**	**Mandatory/required/optional**

Risks to self	Risks the person poses to themselves, e.g., suicide, overdose, self-harm, self-neglect.	R
Risks to others	Risks to care professional or others.	R
Risk from others	Details of where an adult or child is at risk from an identified person e.g. family member etc.	R
Legal information		
Subheadings	**Description**	**Mandatory/required/optional**
Consent for information sharing	This is a record of consent for information sharing. It should state the purpose and scope of the consent. Where consent has not been obtained or sought, the reason why must be provided. Include best interests decision where person lacks capacity or decision related to a minor.	R
Parental responsibility	For children this is a record of person(s) with parental responsibility.	R
Record of refusal	The record of the objections to assessment, treatment or conveyance made by the person and the reasons for their objections. Also include the information given when person refuses, including signature and designation of staff and person signature.	R
Mental capacity assessment	Whether an assessment of the mental capacity of the (adult) person has been undertaken, if so what decision the capacity relates to, who carried it out, when and the outcome of the assessment. Also record best interests decision if person lacks capacity.	R
Deprivation of Liberty Safeguards or equivalent	Record of Deprivation of Liberty Safeguards (DoLS) or equivalent, including the reasons for this.	R
Mental Health Act or equivalent status	Record where a person diagnosed with a mental disorder is formally detained under the Mental Health Act or equivalent, including the section number.	R
Advance decision to refuse treatment (ADRT)	A record of an advance decision to refuse one or more specific types of future treatment, made by a person who had capacity at the time of recording the decision. The decision only applies when the person no longer has the capacity to consent to or refuse the specific treatment being considered. An ADRT must be in writing, signed and witnessed. If the	R

	ADRT is refusing life-sustaining treatment it must state specifically that the treatment is refused even if the person's life is at risk.	
Lasting power of attorney for personal welfare or court-appointed deputy (or equivalent)	Record of one or more people who have been given power (LPA) by the person when they had capacity to make decisions about their health and welfare should they lose capacity to make those decisions. To be valid, an LPA must have been registered with the Court of Protection. If life-sustaining treatment is being considered the LPA document must state specifically that the attorney has been given power to consent to or refuse life-sustaining treatment. Details of any person (deputy) appointed by the court to make decisions about the person's health and welfare. A deputy does not have the power to refuse life-sustaining treatment.	R
Organ and tissue donation	Whether the person has given consent for organ and/or tissue donation or opted out of automatic donation where applicable. The location of the relevant information/documents.	R
Safeguarding issues	Any legal matters relating to safeguarding of a vulnerable child or adult, e.g., child protection plan, protection of vulnerable adult.	R
Social context		
Subheadings	**Description**	**Mandatory/required/optional**
Household composition	Eg, lives alone, lives with family, lives with partner, etc. This may be free text.	R
Lifestyle	The record of lifestyle choices made by the person which are pertinent to his or her health and well-being, eg, the record of the person's physical activity level, pets, hobbies, sexual habits.	R
Smoking	Latest or current smoking observation.	R
Alcohol intake	Latest or current alcohol consumption observation.	R
Drug/substance use	Record of current or previous drug/substance use.	R
Social circumstances	The record of a person's social background, network and personal circumstances, eg, housing, religious, ethnic/spiritual needs and social concerns.	R

	May include reference to safeguarding issues that are recorded elsewhere in the record.	
Dependants	Provide details of any responsibility the person has for dependants. In the case of minors provide additional details e.g., date of birth etc.	R
Occupational history	The current and/or previous relevant occupation(s) of the person. This may include educational history.	R
Services and care	The description of services and care providing support for person's health and social well-being.	R
Family history		
Subheadings	**Description**	**Mandatory/required/optional**
Family history	The record of relevant illness in family relations deemed to be significant to the care or health of the person, including mental illness and suicide, genetic information etc.	R
Review of systems		
Subheadings	**Description**	**Mandatory/required/optional**
Review of systems	The clinical review of systems. The record of clinical information gathered in responses to questions to the person about general symptoms from various physiological systems, including food intake (increasing/decreasing), weight change, swallowing difficulties, mood/anxiety, etc.	R
Person and carers concerns, expectations and wishes		
Subheadings	**Description**	**Mandatory/required/optional**
Person and carer concerns, expectations and wishes	Description of the concerns, wishes or goals of the person as expressed by the person, their representative or carer. Where the person lacks capacity this may include their representatives concerns, expectations or wishes.	R
Advance statement	Written requests and preferences made by a person with capacity conveying their wishes, beliefs and values for their future care should they lose capacity. Include the location of the document if known.	R
Examination findings		
Subheadings	**Description**	**Mandatory/required/optional**

General appearance	The record of a clinician's 'first impression' assessment including general clinical examination finding, eg, clubbing, pallor, jaundice, obese/malnourished/cachectic, height, weight, etc.	R
Vital signs	The record of essential physiological measurements, eg, heart rate, blood pressure, temperature, pulse, respiratory rate, SpO2, level of consciousness etc. Use of Early Warning Score (which may be computed) chart where appropriate.	R
Mobility	Person's mobility e.g. requirement for walking aid, wheel chair, etc.	R
Mental state	Formal mental state examination or general description Eg, depression, anxiety, confusion, delirium, dementia.	R
Cardiovascular system	The record of findings from the cardiovascular system examination (including ECG etc).	R
Respiratory system	The record of findings from the respiratory system examination.	R
Abdomen	The record of findings from the abdominal examination.	R
Musculoskeletal system	The record of findings from the musculoskeletal system examination.	R
Skin	The record of findings from examination of the skin.	R
Nervous system	The record of findings from the nervous system examination.	R
Genitourinary	The record of findings from the genitourinary examination.	R
Head and neck examination	The record of findings from the head and neck examination.	R
Oral examination	The record of findings from oral examination.	R
Obstetrics and gynaecology	The record of relevant findings related to obstetrics and gynaecology.	R
Major trauma	The record of relevant findings related to major trauma.	R
Assessment scales		
Subheadings	**Description**	**Mandatory/required/optional**
Assessment scales	Assessment scales used, eg, Glasgow Coma scale, AVPU (alert, voice, pain, unresponsive) scale, Wong Baker Pain scale, etc.	O
Problems and issues		
Subheadings	**Description**	**Mandatory/required/optional**

Problems and issues	Summary of current problems and issues. This would include significant symptoms or examination findings which are likely to have relevance, yet are not a diagnosis. In mental health and psychiatry, this may be the place for formulation.	R
Clinical risks	Description of clinical risks identified e.g. problematic intubation, person with brittle diabetes, immuno-compromised/risk of infection etc.	R
Diagnoses		
Subheadings	**Description**	**Mandatory/required/optional**
Diagnosis	Confirmed active diagnosis. Include the stage of the disease where relevant.	R
Clinical impression		
Subheadings	**Description**	**Mandatory/required/optional**
Clinical impression	The clinical impression the clinician has made based on available evidence.	R
Procedures		
Subheadings	**Description**	**Mandatory/required/optional**
Procedure	The therapeutic procedure performed. This could include site and must include laterality where applicable.	R
Complications related to procedure	Details of any complications during the procedure or associated with the procedure.	O
Specific anaesthesia issues	Details of any adverse reaction to any anaesthetic agents including local anaesthesia. Problematic intubation, transfusion reaction, etc.	O
Treatments and interventions		
Subheadings	**Description**	**Mandatory/required/optional**
Treatments and interventions	Record here any specific treatments and interventions that were carried out. Where appropriate record the rationale for the decision to treat and the information sources reviewed e.g. end of life care plan etc. All medications should be recorded under the medications heading.	R
Clinical summary		
Subheadings	**Description**	**Mandatory/required/optional**

Clinical summary	Narrative summary of the episode. Where possible, very brief. This may include interpretation of findings and results; differential diagnoses, opinion and specific action(s). Planned actions will be recorded under 'plan'. In mental health and psychiatry, this may be the place for formulation.	M
Plan		
Subheadings	**Description**	**Mandatory/required/optional**
Existing care plan and care management information	Record that there is a care plan or similar information held by the person or held on other health or social care registers eg, Coordinate My Care, palliative/end of life care care plan, Hampshire Health Record, Summary Care Record, etc. Where the person is a child this may include a 'child in need plan', 'child protection plan', 'looked after child plan', or may reference a particular adult care plan.	R
Aims and limitations of treatment and special instructions	The current aim of treatment including limitations to treatment and communication issues.	R
Cardio-pulmonary resuscitation (CPR) decision	Whether a decision has been made, the decision, who made the decision, the date of decision, date for review and location of documentation. Where the person or their family member/carer have not been informed of the clinical decision please state the reason why.	R
Person receiving handover		
Subheadings	**Description**	**Mandatory/required/optional**
Name	The name of the person receiving the handover, preferably in a structured format.	M
Professional identifier	Professional identifier for the person receiving the handover e.g., GMC number, HCPC number etc or the personal identifier used by the local organisation.	R
Role	The role the person is playing within the organisation at the time of handover.	R
Specialty	The specialty of the person receiving the handover.	R
Date and time of clinical handover	The date and time responsibility for the person was handed over to a hospital clinician.	M

Person completing record		
Subheadings	**Description**	**Mandatory/required/optional**
Name	The name of the person completing the record, preferably in a structured format.	M
Professional identifier	Professional identifier for the person completing the record e.g., GMC number, HCPC number etc or the personal identifier used by the local organisation.	R
Organisation	The organisation the person completing the record works for.	M
Role	The role the person is playing within the organisation at the time record was updated.	M
Date and time completed	The date and time the record was updated.	M

6. Implementation principles

This section sets out issues identified from the workshop, online survey and expert user group which relate to implementation of the headings. They are noted in this section so that they can be used to inform implementation of the ambulance transfer of care to ED messages. They are not intended to be comprehensive, but just those issues identified at this stage. It is expected that further guidance will be produced from the experience of initial implementations.

Please also note the risk mitigations included in the clinical safety case (a separate document) as these should also be addressed during implementation.

General Points

- It is not anticipated that all headings will need to be used in all circumstances, only where they are relevant to a specific patient, ie headings should not be included in the message where there is no data recorded/available.
- Data quality and accuracy of coded data entry needs to be monitored and implementers will need to ensure sufficient training and monitoring of record keeping.
- Although this report details the transfer of care standards only, the full ambulance record should also be available to ED if needed.
- The extent to which information can be taken into the hospital system in structured/coded format will depend on the capabilities of the hospital systems. Local decisions need to be made about what information is ingested into hospital systems in a structured coded format and what information is attached as a document.
- Local implementation plans need to be developed, including 'trading agreements' and associated information governance agreements between the organisations involved. These trading agreements should include:
    - Which fields can be automatically populated by drawing information from other records, such as the Summary Care Record, Integrated Digital Care Records, GP records etc. This will depend on the systems available locally, frequency of updates, etc.

- The way that the content is laid out, including sequence or ordering of the headings, and which headings should be most prominently displayed.
- Which of the headings should be mandatory/optional. This may be based on local requirements or system capabilities.
- Which health/care professionals will have access to the information and in what circumstances, including any restrictions applied to specific sections.
- Mechanisms to validate the information during implementation.

Person demographics

- NHS number (or equivalent, e.g. CHI number in Scotland) is mandatory, but with the option to record not known or not available. Existing national guidance should be followed, including how to handle patients without an NHS number, eg overseas visitors, services personnel, prisoners.
- Spine compliant systems are needed to obtain traced NHS numbers. Where an organisation does not have a system linked to the Personal Demographics Service, other demographics fields will need to be used, with local person identity matching software.
- Hospital numbers are not unique so either avoid including them or reference the organisation where the number was generated.
- It is not anticipated that the 'sex' heading will be recorded for every person – only in situations where it is pertinent to do so, e.g. transgender people.
- System design should allow the display of separate sections for health/care contacts and personal contacts (e.g. family, friends, relatives etc) under the 'relevant contacts' heading.

GP practice

- 'GP practice identifier' does not need to be a displayed field. It is intended to be used to provide the GP practice details via lookup from national registers.
- Many people will not offer a named GP. Only the 'GP practice details' heading would need to be completed in these situations.

Individual requirements

- Some of the information under this heading could be populated from the patient demographic service (e.g. person's language etc), where it is recorded.

Safety alerts

- The safety alerts heading could potentially contain sensitive information. Therefore sufficient role based access controls should be in place to ensure this information is only shared with those care professionals where there is a need to do so.
- There may be situations where it not advisable to share information in this section with the person to whom it relates. Appropriate policies and technical solutions need to be in place for these situations.
- All information needs to be reviewed on a regular basis, but it is particularly important for this type of information, given its sensitive nature. There must be mechanisms in place to validate the information in this section and for it to be reviewed regularly.

Examination findings and Assessment scales

- There is overlap between the clinical risk assessment, examination findings and assessment scales headings and further work may be needed to define more precisely.
- The examination finding headings may include validated or locally approved structured assessments.
- Assessment scales may be included in examination findings or separate, eg holistic assessments such as CURB65 (pneumonia assessment), NIHSS (stroke) or interRAI (http://www.interrai.org).

Treatments and interventions

- Rationale will not need to be recorded for every decision to treat - only where it is pertinent to do so. Training will need to be given to users so they are aware of when it is appropriate to record rationale.

Medications and medical devices

- System design must allow separate sections for display of current medications, previous medications and those authorised for future use, so that the status of each medication item is clear.
- Systems should also allow separate sections for medication history (provided by patient or representative) and drugs administered/prescribed during the ambulance transfer, including self administration.
- Each attribute of the medication item (e.g. name, route, dose, frequency etc) should be presented in a clear and logical format (e.g. in tabular form). See National Patient Safety Agency (NPSA) guidance (http://www.nrls.npsa.nhs.uk/resources/collections/design-for-patient-safety/?entryid45=66713).
- System design should allow for certain medications of particular importance (e.g. anticoagulants, steroids etc) to be prominently displayed so that they are not overlooked.

Allergies

- Separating out type of allergy/ adverse reaction/intolerance could require guidance/education
- System design should allow for serious allergic reactions to be prominently displayed so that they are not overlooked.

Legal information

- Systems should allow copies of legal documentation to be attached to the record where it would be necessary to see the original documents (e.g. ‘advance decision to refuse treatment’, ‘lasting power of attorney for personal welfare’).
- Mental capacity assessment may include decisions about the use of physical restraint of the person. Where it is necessary this should be recorded under this heading.

- The legislation relating to mental capacity in England is set out in the Mental Capacity Act 2005. The legislation in Scotland is set out in the Adults with Incapacity (Scotland) Act 2000 and in Northern Ireland, the Northern Ireland Mental Capacity Bill, was passed by the Northern Ireland Assembly on 15 March 2016, but has not yet come into force.
- A clinician should satisfy themselves that the ADRT is valid and that the circumstances that they are dealing with are those envisaged when the person made the ADRT. A valid and applicable ADRT is legally binding. The record should include the location of the legal document. A clinician should satisfy themselves that the ADRT is valid and that the circumstances that they are dealing with are those envisaged when the person made the ADRT. A valid and applicable ADRT is legally binding.
- Lasting power of attorney (LPA) should include details of one or more people who have been given power by the person when they had capacity to make decisions about their health and welfare should they lose capacity to make those decisions. To be valid, an LPA must have been registered with the Court of Protection. If life-sustaining treatment is being considered the LPA document must state specifically that the attorney has been given power to consent to or refuse life-sustaining treatment.
- To improve the accuracy of the 'organ and tissue donation' heading systems should link directly to the organ donation register where possible.

Person completing record

- 'Professional identifier' would not need to be a displayed field. It would be used to provide the professional's details.

Appendix A - Stakeholders

1. Individuals who participated in the consultation workshop (18 January 2016)

Name	Organisation
Howard Leicester	Accessible Info
Keith Strahan	Association of Directors of Adult Social Services
Ian Turner	Care Provider Alliance
Sarah Montgomery	College of Occupational Therapists
Andy Jones	College of Paramedics
Andrew McFarlane	College of Paramedics
David Beck	Diabetes UK
Lis Warren	Diabetes UK
Charity Tshuma	East London Foundation Trust
Vena Jones-Pryce	East London Foundation Trust
David Barnett	Health and Social Care Information Centre
Munish Jokhani	Health and Social Care Information Centre
Afia Ansah	Healthy London Partnership
Bernadette Worman	Healthy London Partnership
Matthew Stevens	Healthy London Partnership
John Arnett	Healthy London Partnership
Tom Henderson	Healthy London Partnership
Rosa McNamara	Imperial College NHS Trust
Debbie Thomas	London Ambulance Service
Patrick O'Shea	Mencap
Harriet Harvey	NHS 111
Kate Griffiths	NHS 111
Miles Boyden	NHS 111
Helen O'Shaughnessy	NHS 111
Ossie Rawsthorne	NHS 111
Mark Bamlett	NHS England

Name	Organisation
Sonia Patel	NHS London
James Marple	NHS Lothian
Lea Agambar	North East London NHS Trust
Joseph Dent	North West Ambulance Service
Susan Rayment	Northamptonshire Healthcare NHS Foundation Trust
Paul Barratt	Partnership of East London Cooperatives
Annette Gilmore	Professional Record Standards Body
Lorraine Foley	Professional Record Standards Body
Neil Betteridge	Professional Record Standards Body
Philip Scott	Professional Record Standards Body
Anne Nevinson	RCP Patient and Carer Network
Deidre McLellan	RCP Patient and Carer Network
Jacky Macleod-Bridge	RCP Patient and Carer Network
Kim Fligelstone	RCP Patient and Carer Network
Ron Newall	RCP Patient and Carer Network
Sharon Ann North	RCP Patient and Carer Network
David Pitcher	Resuscitation Council
Darren Wooldridge	Royal College of Physicians
Jan Hoogewerf	Royal College of Physicians
Nicola Quinn	Royal College of Physicians
Paul Rastall	Royal College of Physicians
Julia Riley	Royal Marsden NHS Trust
Robin Lawrenson	Scottish Ambulance Service
Frances Gillen	South West Ambulance Service
Phil Koczan	UCL Partners
Caroline Stirling	University College London Hospital Palliative Care Service
Giles Armstrong	Whittington Hospital

2. Stakeholders who were invited to participate in the online consultation survey (05 February-01 March 2016)

- Accessible Info
- Age UK
- Allied Health Professions Federation
- Alzheimer's Society
- Association of Air Ambulances
- Association of Ambulance Chief Executives
- Association of Directors of Adult Social Services
- Asthma UK
- British Association For Immediate Care
- British Cardiovascular Society
- British Heart Foundation
- British Red Cross
- Care Provider Alliance
- Care UK
- Carers UK
- Chief Clinical Information Officers leaders network
- Clinical commissioning group lay members
- College of Paramedics
- Coordinate My Care
- Diabetes UK
- Epilepsy Society
- Genetic Alliance
- Health and Social Care Information Centre
- Health Chief Information Officers network
- Health Watch
- Healthy London Partnership
- HSCIC digital leaders community
- Independent Ambulance Association
- Mencap
- Mind
- Mumsnet
- National Care Alliance
- National Council for Palliative Care
- NHS 111
- NHS 24
- NHS England
- Nursing Home Association
- PRSB members
- PRSB vendor forum
- RCP HIU register (individuals who have expressed an interest in the work of the HIU)
- RCP Patient and Carer Network
- Registered Nursing Home Association
- Resuscitation Council
- Royal College of Emergency Medicine
- Royal College of General Practitioners
- Royal College of Midwives
- Royal College of Nursing
- Royal College of Paediatrics and Child Health
- Royal College of Psychiatrists
- Royal Pharmaceutical Society
- TechUK
- UCL Partners
- UK Ambulance Services
- Young Minds

3. Individuals who participated in the expert user group meeting (14 March 2016)

Name	Organisation
Joseph Dent	College of Paramedics
Andy Jones	College of Paramedics
Diana Howard	Coordinate My Care
David Barnet	Health and Social Care Information Centre
Munish Jokhani	Health and Social Care Information Centre
Afia Ansah	Healthy London Partnership

Name	Organisation
Matthew Stephens	Healthy London Partnership
James Marple	NHS Lothian
Ossie Rawsthorne	NHS111
Neil Betteridge	Professional Record Standards Body
Annette Gilmore	Professional Record Standards Body
Ian Turner	Registered Nursing Home Association
David Pitcher	Resuscitation Council
Tom Hughes	Royal College of Emergency Medicine
James Bird	Royal College of Nursing
Jan Hoogewerf	Royal College of Physicians
Paul Rastall	Royal College of Physicians
Darren Wooldridge	Royal College of Physicians
Hashim Reza	Royal College of Psychiatrists
Francis Gillen	South West Ambulance Service
David Partlow	South West Ambulance Service

Appendix B – Survey analysis

Total responses
There were a total of 219 responses, with the majority being paramedics (45) and ED doctors (27). There were no social care responses, as this group was not relevant to this use case. The breakdown was as follows:

Role	Number
Patient	14
Carer	5
General Practitioner	17
Out of hours General Practitioner	3
Palliative care doctor	7
ED doctor	27
Psychiatrist	6
Paediatrician	4
Any other doctor	25
ED nurse	7
Palliative care nurse	2
Mental health nurse	3
Hospital nurse	2
Any other nurse	6
Midwife	4
Paramedic	45
Any other allied health professional	8
NHS111/ NHS24	2
Health/care manager	11
Health informatician	3
Vendor/developer	2
Other	16
Total	**219**

Survey results and identified issues
The survey asked whether any changes were required to the ToC headings, subheadings and descriptions. This section describes the results and issues which were identified from the textual

responses and the decisions taken by the project team to address the issues. The results were discussed at the expert user group to gain consensus that changes were appropriate.

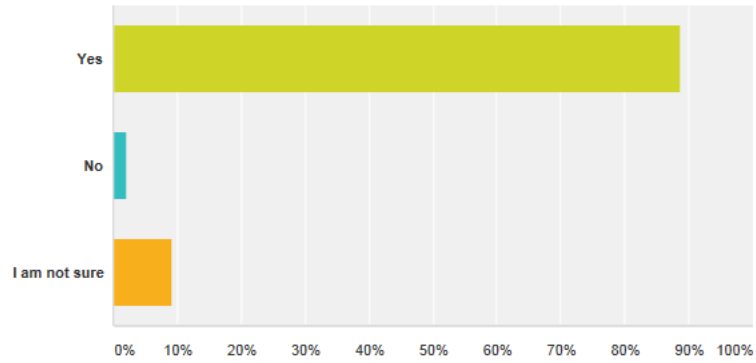
Please note: The following issues will have relevance for the 2014 ambulance guidance and where changes are made in the ToC headings they may need to be reflected in the 2014 ambulance headings. This will be done as part of PRSB support and maintenance of the headings.

Person demographics/incident details	
ISSUE	**RESPONSE**
Request for 'pre-alerts' and 'post-dispatch instructions' subheadings to be included.	This was discussed at the expert user group and it was agreed to not include these subheadings as they will have been superceded by the information recorded by the ambulance paramedics.
Request for certain date/time fields (e.g. 'dispatch time', 'arrival time at incident') to be included.	Attendees at the expert user group felt it was important that times needed for national clinical audits should be included.
Request for the 'educational establishment' subheading to be included.	This heading was included as attendees at the expert user group said this is occasionally important for ED staff to know.

Participation in research	
ISSUE	**RESPONSE**
64% of survey respondents felt the 'participation in research' heading was not required.	Although the majority of survey responses felt that the heading should not be included, the expert user group felt it should be retained as an optional heading as some ambulance trusts carry out research and need to be able to record this in the record as it may have an impact on treatment in hospital. The expert user group also felt the research facility name should be included.

<u>Risks from others</u>

The survey asked whether respondents agreed with the addition of a 'risk from others' subheading to the 'safety alerts' heading. The results are presented below:

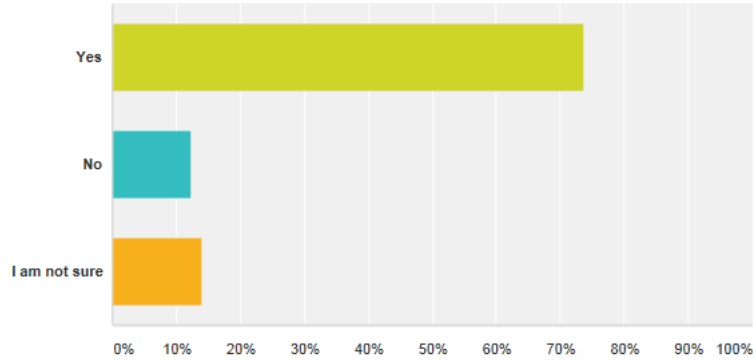


Due to the high level of agreement this heading was included in the transfer of care information model.

Allergies and adverse reactions	
ISSUE	**RESPONSE**
Request to remove some subheadings: 'certainty', 'evidence' and 'severity'.	These subheadings were removed. This was agreed at the expert user group as these would rarely be recorded by the ambulance service and not usually required by ED.

Relevant contacts

The survey asked whether respondents agreed with not including the 'important patient relationships' heading as it was unnecessary duplication with the 'relevant contacts' heading. The results are presented below:

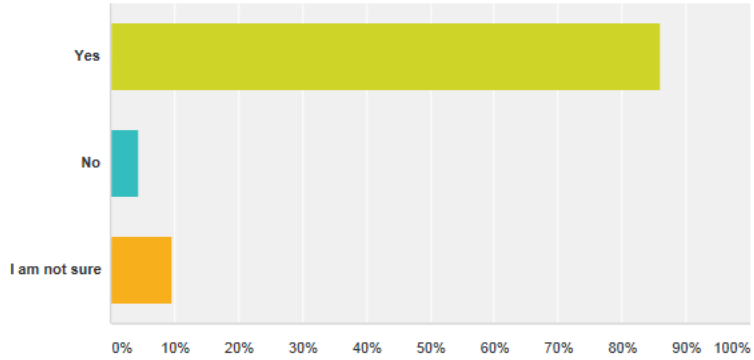


Due to the high level of agreement this heading was omitted from the transfer of care information model.

Dependants	
ISSUE	**RESPONSE**
There was a request in the survey for a specific subheading on 'dependants'.	The expert user group agreed that this should be a subheading of 'social context' as this is generally where ambulance paramedics would record this information and where ED would tend to look for it.

Investigations and results

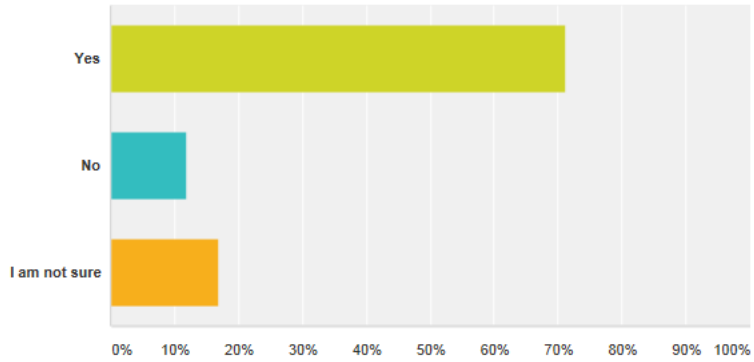
The survey asked whether respondents agreed with not including the 'investigations and results' heading as investigation results could be recorded under the 'examination findings' heading. The results are presented below:



The expert user group agreed that that investigation results could be recorded under the 'examinations findings' heading. This would mean that these headings would need to be able to accommodate information models for investigation results once these have been developed nationally. They also agreed that additional subheadings of 'major trauma' and 'maternity' should be included in the examination findings headings.

Information and advice given

The survey asked whether respondents agreed with not including the 'information and advice given' heading. The results are presented below:



Due to the high level of agreement this heading was omitted from the transfer of care information model.

Plan	
ISSUE	**RESPONSE**
Some survey respondents felt the plan heading and subheadings should be retained.	The expert user group agreed that the plan headings and subheadings should be retained.

Mandatory/required/optional headings
The survey asked respondents to rate each heading as mandatory, required or optional. More than 80% of respondents felt the following headings should be mandatory:

- Advance decisions to refuse treatment
- Allergic agent
- Assessment scales
- Clinical impression
- Clinical risk assessment
- Clinical summary
- General appearance
- Handover details
- History of each presenting complaint or issue
- Incident details
- Medications and medical devices
- Mental health act status
- Person demographics
- Presenting complaints or issues
- Problems and issues
- Procedures
- Safeguarding issues
- Safety alerts
- Treatments and interventions
- Vital signs

The expert user group believed that it was important to have very few mandatory headings as if they are mandatory and not completed their absence would prevent communications going electronically to the hospital, meaning that important information would not be available to ED. Also some of the headings would not be relevant to all patients, eg Mental Health Act Status is only relevant to those who are subject to a MHA section.

Additionally 20-40% of respondents felt the following headings were not required during transfer of care from ambulance to ED:

- Ethnicity
- Family history
- GP practice identifier
- Lifestyle
- Medical devices
- Medication recommendations
- Occupational history
- Person demographics (other identifier)
- Person receiving handover (identifier)
- Person receiving handover (specialty)
- Religion
- Smoking
- Social circumstances

However, the expert user group suggested that the headings should be retained but may need to be optional headings. Additionally the expert group made recommendations about business values which have been taken into account in the information models.