Professional Record Standards Body

Better records for better care

# AMBULANCE HANDOVER TO SECONDARY CARE: STANDARD REVISION - FINAL REPORT

SEPTEMBER 2019

# Document Management

## Revision History

| Version | Date | Summary of Changes |
|---|---|---|
| 0.1 | 18.03.2019 | First draft created by Darren Wooldridge (Royal College of Physicians, Health Informatics Unit, Project Manager) |
| 0.3 | 28.03.19 | Draft for project board and assurance committee to review |
| 0.4 | 24.05.19 | Revised draft after project board and assurance committee review comments |
| 0.6 | 06.06.19 | Updates from the clinical leads |
| 0.7 | 18.07.19 | Updates after finalising the information model |
| 0.8 | 20.08.19 | Update after review with clinical leads |
| 1.0 | 04.10.19 | Update to introduction and to version 1 after assurance committee and project board sign off |

## Reviewers

This document must be reviewed by the following people:

| Name | Status | Date |
|---|---|---|
| PRSB Assurance Committee | | 12.04.19 |
| Project Board | | 12.04.19 |

## Approved by

This document must be approved by the following people:

| Name | Status | Date |
|---|---|---|
| PRSB Assurance Committee | Approved | 24.9.18 |
| Project Board | Approved | 29.8.29 |

## Planned Review Date and Route for User Feedback

The next maintenance review of this document is planned for November 2022, subject to agreement with NHS Digital as the commissioning body.

Please direct any comments or enquiries related to the project report and implementation of the standard to support@theprsb.org.

# Table of Contents

# 1. Introduction

In 2016, the Professional Record Standard Body (PRSB) was commissioned by NHS Digital to develop standards for ambulance transfers of care to emergency departments.

The development of the Emergency Care Data Set and related work, has generated new opportunities for integrating data in Urgent and Emergency Care.

In 2018 NHS England commissioned a new project to deliver a set of national standards and national capabilities to enable the electronic transfer of an ambulance report from the ambulance service to a hospital.

As part of this project, the PRSB have been requested to revise the standards for ambulance handover to emergency care. A key deliverable is that this work must be endorsed by key stakeholders including the Royal College of Emergency Medicine (RCEM) which represents the recipients of the data.

The standard aims to improve patient safety, clinical effectiveness and improve patient experience. When implemented in ambulance and emergency care systems, standards for handover will improve continuity of care as emergency care will have the information they need available to them on a timely basis. Whichever ambulance service brings the patient there will be a consistent set of information available. The use of standards will improve the quality of the information. Patient safety will be improved eg emergency care will know what medications have been administered, whether the patient has any allergies and other important information.

The PRSB have collaborated with the Royal College of Physicians Health Informatics Unit on this project. Clinical leadership has been provided by clinicians from the RCEM and the College of Paramedics (CoP).

This document is the PRSB final report for the Ambulance handover to secondary care standard revision. It describes the methods used and the results of the consultation process.

# 2. Methodology

The following sections describe the approach taken to develop the information models.

## 2.1. Development of first draft information models

The project team conducted a mapping exercise to identify similarities and differences between the following standards:

- Original 2016 PRSB ambulance transfer of care to emergency departments standard
- PRSB emergency care discharge summary standard https://theprsb.org/standards/emergencycaredischarge/
- Draft Ambulance Data Set (constructed in conjunction with the main Ambulance Data Set project run by NHS England / Improvement.

This mapping was reviewed and refined in collaboration with the project clinical leads to create the first draft information models. A number of issues to be explored further during the consultation were identified at this stage.

### 2.2. Consultation Webinar

A consultation webinar was held with identified stakeholders on 27 February 2019 (attendees are listed in Appendix A). The purpose of the meeting was to consult as widely as possible with identified stakeholders on the initial draft. The outputs from the meeting are provided in Appendix B. Feedback from the meeting was used by the project team to update the initial draft information models.

### 2.3. Expert reference group webinar

An expert reference group meeting was held with identified stakeholders on 18 March 2019 (attendees are listed in Appendix A). The purpose of the meeting was to discuss any issues which had not been fully resolved during the earlier consultation webinar. The outputs from the meeting are provided in Appendix C.

Following this process, where there were outstanding questions, dedicated consultations regarding more complex issues e.g. End of Life Care and Do Not Resuscitate / Respect forms were conducted with specific experts in the field.

Feedback from the meeting was used by the project team to update the final draft information models.

## 3. Next Steps

This report will be reviewed by the PRSB Assurance Committee and the project board. Following this, a project board meeting will be held to seek sign off of this document before circulating to relevant professional bodies and key stakeholders to seek their endorsement.

NHS Digital will use the information model to develop a FHIR message technical specification to support implementation of the transfer of care message.

Further work is recommended to consult on the draft pre-arrival message content shown in Appendix D.

Further work is recommended, possibly as part of the local health and care record (LHCR) programme, to develop the methods and processes needed to manage advanced decision to refuse treatment and cardio-pulmonary resuscitation(CPR) decisions to ensure that the provenance and currency of these items can be shown and assured. Without this clinicians cannot act on the information.

# 4. Appendix A – Stakeholders

## 4.1. Consultation Webinar (27 February 2019)

| Organisation | Representative |
|---|---|
| Association of Ambulance Chief Executives | Cathryn James * |
| Chartered Society of Physiotherapists | Euan McComiskie * |
| College of Paramedics | David Davis * |
| College of Paramedics | Gerry Egan |
| Leeds Teaching Hospital NHS Trust | Andy Webster * |
| London Ambulance Service | Victoria Ward |
| NHS Digital | Gillian Johnston |
| NHS Digital | Chris Knowles |
| NHS England | James Ray * |
| NHS England | Claire Joss |
| North East Ambulance Service | Warren Tivnen* |
| North East Ambulance Services | Dan Haworth* |
| North West Ambulance Service | Steven Scholes * |
| Patient Representative | Richard Cross |
| Patient Representative | Evelyn Bitcon |
| Patient Representative | Katie Clarke-Day |
| Professional Record Standards Body | Martin Orton |
| Resuscitation Council | Peter-Marc Fortune * |
| Royal College of Emergency Medicine | Tom Hughes * |
| Royal College of Midwives | Mandy Forrester * |
| Royal College of Physicians | Darren Wooldridge |
| Royal College of Physicians | Sheena Jagjiwan |
| Royal College of Physicians | Jan Hoogewerf |
| Royal College of Surgeons | Katerina Sarafidou |
| South Central Ambulance Service | Dave Sherwood * |
| South Central Ambulance Service | Matt Strellis * |

## 4.2. Expert Reference Group Webinar (18 March 2019)

| Organisation | Representative |
|---|---|
| Association of Ambulance Chief Executives | Cathryn James* |
| Brighton And Sussex University Hospitals NHS Trust | Fay Dayman* (Nursing Representative) |
| College of Paramedics | David Davis* |
| SECAM / KSS AAT | Magnus Nelson* |
| Leeds Teaching Hospital NHS Trust | Andy Webster* |
| NHS Digital | Gillian Johnstone |
| NHS England | James Ray* |
| Professional Record Standards Body | Martin Orton |
| Royal College of Emergency Medicine | Tom Hughes* |
| Royal College of Nursing | Suman Shrestha* |

| | |
|---|---|
| Royal College of Physicians | Darren Wooldridge |
| Royal College of Physicians | Sheena Jagjiwan |
| Royal College of Physicians | Jan Hoogewerf |
| Royal College of Psychiatrists | Hashim Reza* |

# 5. Appendix B – Consultation Webinar: Outputs

This appendix provides a summary of the outputs from the consultation webinar held on 27 February 2019.

## 5.1. Overseas visitor status

Respondents explained this information was rarely collected by paramedics, and often it is not appropriate to ask this question to patients who are very unwell. There was agreement that this information would be difficult to collect from a paramedic perspective, but that this might be mandated, as has occurred in Emergency Departments.

**Recommendation: Retain this item however implementation guidance to clarify that if this information is collected it should be communicated to save time for the hospital services.**

## 5.2. Other patient demographics

Respondents were asked about the utility of collecting the person's email address, telephone number and relevant contacts. It was explained that this information is currently often collected by paramedics.

**Recommendation: Retain these items. Implementation guidance to explain that this information could be accessed centrally from the Spine.**

## 5.3. Patient reported complaints or issues

Respondents were asked whether patient reported concerns should be recorded separately to the clinician identified presenting complaints. It was agreed this information is important and should either be recorded as a separate heading or as part of the clinical summary.

**Recommendation: Discuss further at the expert reference group.**

## 5.4. Individual accompanying patient

Respondents explained that this is not robustly collected by paramedics. However there was agreement that if this information is collected it should be coded and shared with the secondary care services.

**Recommendation: Retain this item.**

## 5.5. Details of other referrals

Respondents felt that although this information is important for the ambulance service, it is not needed for the handover to secondary care.

**Recommendation: Remove this item from the information model.**

## 5.6. Other agencies present

Respondents agreed there was no need for this to be a separate heading. If this information is thought to be important it can be included in the clinical summary.

**Recommendation: Remove this item from the information model.**

## 5.7. Observations

Respondents were asked about the recording of observations. It was agreed that for adults the existing NEWS2 (National Early Warning Score) FHIR (Fast Healthcare Interoperability Resources) specifications produced by NHS Digital should be the values for this heading. Implementation guidance to explain that this specification should not be used for children.

**Recommendation: NEWS2 FHIR specification to be included in value section of the information model. Implementation guidance to explain that this specification should not be used for children.**

## 5.8. Person and carer concerns

Respondents were asked about the person and carer concerns, expectations and wishes and the advance statement items. It was agreed that where there is an advance statement this should be recorded and shared.

**Recommendation: Retain both items. Where advance statement is recorded, this should be shared with secondary care.**

## 5.9. Individual requirements

Respondents were asked about the utility of the individual requirements heading. It was agreed that this information can be important, but is not robustly collected.

**Recommendation: Retain. Where the information is recorded, this should be shared with secondary care.**

## 5.10. Medications

Respondents were asked about how much information should be recorded regarding medications. It was agreed that only the medications administered by the paramedics should be communicated with secondary care.

**Recommendation: This section to only cover medications administered by the paramedics.**

# 6. Appendix C – Expert Reference Group Meeting: Outputs

This appendix provides a summary of the outputs from the expert reference group meeting held on 18 March 2019.

## 6.1. Individual requirements

The expert group explained that this information is often captured but not coded.

**Recommendation: Implementation guidance to explain that this information should be accessible via the Spine.**

## 6.2. Important timings

The expert group were asked about the pertinent timings that secondary care would need to know. There was agreement that the following times should be included in the information model:

- Incident date/time
- Time of symptom onset
- Arrival time at incident
- Time at person side
- Time left incident location
- Time of arrival at handover destination

**Recommendation: Information model to include the above timings under the incident details section.**

## 6.3. Patient reported complaints or issues

The expert group were asked if this information should be a separate heading or captured in the clinical narrative. There was agreement that this information was important as it often differs from the healthcare professional defined presenting complaint.

**Recommendation: Include separate heading for patient reported presenting complaints or issues**

## 6.1. Plan

The expert group were asked whether plans that the paramedics made for them to follow up on (e.g. other referrals, safeguarding issues) should be shared with secondary care. It was explained that there is a section in the standard to capture safeguarding concerns. None of the expert group could think of a scenario where a plan would be relevant to share with secondary care.

**Recommendation: Remove the plan item from the ambulance service.**

## 6.4. Cardio-pulmonary resuscitation decision

The expert group were asked about how this information should be captured and shared. It was agreed that this is a complex issue and the issue should be discussed further with the Resuscitation Council and clinicians working in end of life care.

A consultation was conducted [7 May 2019] with expert representatives of EOL / DNAR / Respect [Jennifer Green - Surrey & Sussex end of life lead, Jim Walmsley - SECAM end of life lead] and separately with Peter-Marc Fortune of the Resus Council UK.

The discussions were heavily influenced by Clinical Safety issues involved, specifically

- Any information transmitted must be actionable, otherwise it should not be transmitted.
- The need for a clear and tamperproof 'chain of evidence' e.g. using distributed ledger technology to ensure that data was current and valid.
- It was thought that this information would be best held centrally and then pulled by clinical records as necessary.

**Recommendation: DNAR decisions should not be conveyed by this work, but that non-binding instructions regarding care preferences should be transmitted.**

## 6.5. Medications

The expert group were asked how much information should be captured about medications administered by paramedics. There was agreement that the following information was sufficient:

- Medication name
- Form
- Dose
- Route
- Method
- Indication

**Recommendation: Information model to include the above information under the medications section.**

In finalising the information model, form and method were considered to be covered in route (which will include or imply form and method) and indication is covered in the clinical summary. These items therefore weren't included in their own right in the medications section.

# 7. Appendix D – Draft Pre-Arrival Message Specification

This appendix provides a proposal for the content of a pre-arrival message. It is based upon feedback from the project clinical leads, South Central Ambulance Service and NHS Digital.

Currently pre-arrival messages are always sent by voice, which is not always desirable or possible, and therefore a 'minimum viable product' approach is used.
Key considerations were thought to be:

- What information is likely to be available / valid / reliable in the pre-hospital practice?
- What is minimum amount of data necessary to be able to transmit a useful message?

Therefore what is proposed is the 'minimum viable product' that meets these criteria.

**It is important to note that this is draft specification and has not had a formal multi-disciplinary consultation, and whether or not this is necessary and the timing is to be decided.**

1. Ambulance Service
2. Incident Number
3. Incident Date/Time
4. Time of Symptom Onset
5. Time of Arrival at Handover destination
   (estimated, based on either machine or human input)
6. Patient Unique Identifier
7. Person Name
8. NHS Number
9. Other Identifier
10. Date of Birth
11. Gender
12. Person Address
13. Person Telephone Number
14. Relevant Contacts
15. Individual Requirements
16. Injury Mechanism
17. Relevant Past Medical, Surgical and Mental Health History
18. Assessment Scales
19. Diagnosis and Qualifier
20. Clinical Summary
21. Allergies and Adverse Reactions
22. Chief Complaint
23. Observations
24. Safeguarding
25. Infectious State
26. Attachments