PRSB

Professional Record Standards Body

Better records for better care

INTEGRATED URGENT CARE INFORMATION SHARING REQUIREMENTS

FINAL REPORT V1.0

NOVEMBER 2018

Contents

1 Summary

NHS England aims to standardise information recording and sharing by integrated urgent care (IUC) services, including the information available to and recorded by IUC services, and that communicated to other care providers.

As a first step, NHS England commissioned the Professional Record Standards Body (PRSB) to undertake an initial scoping requirements study. This is the report of the study. It sets out the proposed information recording and sharing requirements of the Integrated Urgent Care Clinical Assessment Service (IUC CAS) together with principles for information sharing and recommendations for implementation of an IUC data set to support interoperability of IUC services. The requirements set out in this document were identified through input by the project steering group, interviews with clinicians working in IUC CAS, a consultation workshop, and an expert review meeting. These requirements will serve as a basis for further work by NHS England and the wider system to develop, implement, pilot and deploy an IUC data set as part of an Urgent & Emergency Care-wide integrated approach.

A **glossary** of the terms used throughout this document is provided in Appendix B.

2 Context, objectives and scope

Project Context

The context for the work is the NHS England IUC transformation programme and the Integrated Urgent Care Service Specification (2017) and this project will build on the requirements identified in the document:

NHS England has worked to develop a new national service specification for the provision of an integrated 24/7 urgent care access, clinical advice and treatment service which incorporates NHS 111 call-handling and former GP out-of-hours services. There is an expectation that a new Clinical Assessment Service (CAS) – accessed through the NHS 111 telephone number - will become the key co-ordinating function for all urgent care needs. The CAS will know the current demand on services and be able to direct patients to the most appropriate service which is available, including those it delivers itself. Services commissioned in this way will move us to a consistent 24/7 urgent care offer for patients.

Commissioners have adopted a range of models for the provision of NHS 111, GP Out-of-Hours (OOH) and urgent care services. In some areas a comprehensive model of integration has been implemented. More often, however, there are separate working arrangements between NHS 111 and OOH services; and a lack of connectivity with community, emergency departments and ambulance services. This position reflects the way that policy has evolved; but it no longer fully meets the needs of patients, health professionals or the wider health and social care system.

The NHS 111 number provides access to a service that clinically assesses callers during their first contact and directs them to the right local service. It receives around 16 million calls a year.

The transformation of integrated urgent care services requires improved information sharing between NHS 111, GP Out-of-Hours, urgent care services, emergency departments and ambulance services.

Urgent care is the range of responses that health and care services provide to people who require–or who perceive the need for–urgent advice, care, treatment or diagnosis. People using services and carers should expect 24/7 consistent and rigorous assessment of the urgency of their care need and an appropriate and prompt response to that need (The Department of Health in England).

The NHS 111 and IUC service and a number of the 999 providers are using a nationally commissioned Clinical Decision Support System (CDSS), developed and delivered by NHS Digital. The current CDSS is NHS Pathways which supports non-clinical and clinical call handlers safely triage calls and provide access to a range of dispositions. Outside of records created within the CDSS, patient records, most often created by clinicians, are mainly free text notes, which make it difficult to review consultations in a systematic way, undertake systematic audit and review, and to ensure that appropriate information is communicated in a usable form at transfer of care. This is a particular issue with up to 50% of all calls needing clinical input within the IUC CAS (Clinical Assessment Service).

NHS England Digital Urgent and Emergency Care Board have commissioned this project to support the transformation agenda and address gaps in current structured records. It has been commissioned through London Central & West Unscheduled Care Collaborative. The project reports to Digital Urgent and Emergency Care (DUEC) Board at NHS England. The Professional Records Standards Body (PRSB) was commissioned to build evidence and consensus-based requirements and recommendations. The Royal College of Physicians Health Informatics Unit is a strategic partner to the PRSB and has carried out the delivery of the project, working with patients and multi-disciplinary stakeholders.

Project objectives

The overall aim of standardising the information content of IUC records is to support person-centred integrated care by enabling interoperable information sharing between IUC providers at different points along the patient journey, and to enable information to be used for secondary uses, such as clinical audit and research.

The objectives of this requirements scoping project are to:

- Identify all information flows relevant to IUC and define, at a high level, the content of the information flows and of IUC records.

- To provide recommendations and indications of the scale of work required for a further project to develop a national standard with minimum and standard amount of data that is required to deliver care to the patient during their journey, and based on the specified requirements and in line with recommendations.

Project scope

The scope comprises setting out the requirements for IUC records and information sharing together with recommendations for detailed standards development and implementation, including:

- Record keeping by IUC remote telephone services – including the NHS 111 and Clinical Assessment Service (CAS – Clinical Hub) services in England, which should also be applicable in the rest of the UK.
- Transfers of information into IUC services to inform their work.
- Transfers of information from IUC services to support referral, discharge and transfers of care to other services (including ambulance, ED and urgent treatment centres).
- Information needed for care delivery, from which information can be extracted for secondary uses, such as professional development, service audit and management.
- Cases transferred to ambulance [999] up until point of handover.

The scope excludes:

- Development of record standards, information models and associated implementation guidance, including clinical safety report.
- Technical specifications.
- Information governance issues.
- Information accessed by IUC services from existing patient records held elsewhere.
- Information recorded in services to which the IUC may transfer information.
- Technical solutions, their design and potential applicability for use with IUC.
- IUC Minimum Data Set (MDS) (previously known as NHS111 MDS) collecting data on the IUC Service for secondary uses.
- 999 call handling (though commonality of CDSS and patient group lead to inherent potential alignment to Ambulance Data Set).

Patient journey and current information flows

The high-level patient journey overview (figure 1) illustrates how a person can access different services and how information needs to be shared.

Currently there is a digital document that is transmitted to GP practices and other relevant parties at the end of an NHS 111 Call, known as a Post Event Message (PEM) [IUC CDA Document]. It is a lengthy document and includes information from CDSS on what has been ruled out during assessment, with limited free text from clinician at the end of the document. Other health and care providers receive very little or no information about the reasons for clinical concern, and only information about a referral.

In line with the aims of this project, it is planned that the existing PEM would be enhanced with the additional information contained within the proposed draft data set.

Figure 1. High level patient journey
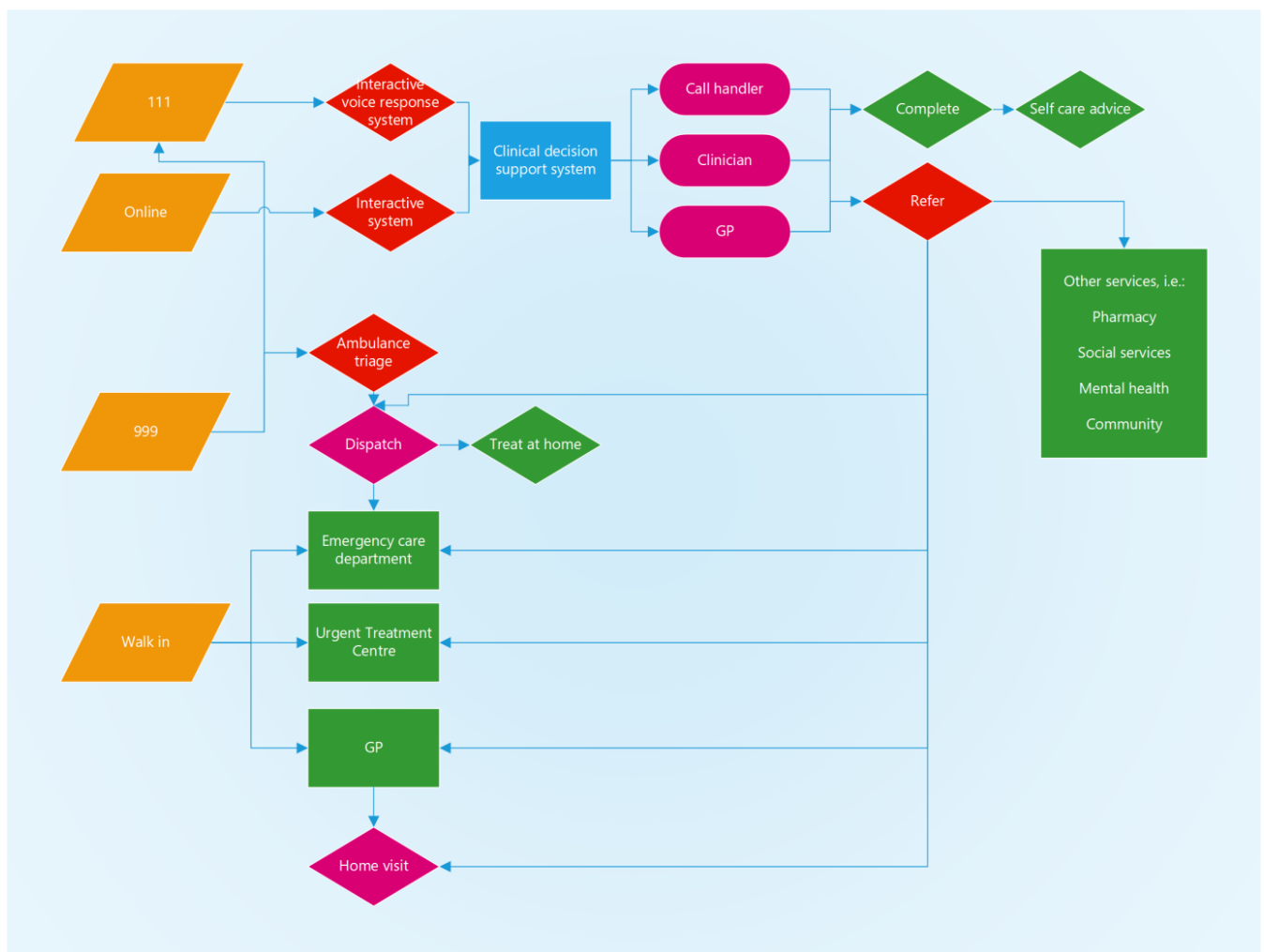
3   Methodology

This section describes the approach taken to develop the information sharing requirements.

Project initiation

A project brief was first produced, before being refined and extended into a project initiation document (PID). The PID gave the direction and scope of the project and formed the 'contract' between the project management team and the project board. For the project board membership, see Appendix D.

The PID also included an engagement and communications plan. This plan set out how engagement with stakeholders would be carried out from the start to ensure that they were aware of the project and engaged in the consultation. Contact was made at the start of the project with the IUC provider forum, commissioners' network, clinical advisers' network, IUC Steering Group and the UEC regional offices to make them aware of the work and to seek their engagement in the project.

Evidence review

Evidence review included a review of current guidance (see Appendix C), current practice (examples of current records and communications, output from clinical decision support systems), relevant related projects and standards in this area (e.g. Emergency Care Data Set).

There was also detailed investigation into current processes and information flows, through observation, and discussion with clinicians and support staff. The project team visited the Clinical Assessment Services (CAS) in London Ambulance Service NHS Trust, South Central Ambulance Service NHS Foundation Trust and Integrated Care 24 Ltd. Input from other IUC providers was sought at the consultation workshop and expert review meeting.

The evidence review informed an initial draft set of requirements to provide a basis for consultation at the workshop.

Consultation workshop

A consultation workshop was held on 4 July 2018 with citizen representatives, health and care professionals and industry (attendees are listed in Appendix D) with the purpose of reviewing and contributing to the draft information requirements and to ensure that recommendations are practical and fit for purpose.

Expert review meeting

Following analysis of the workshop feedback the requirement was updated and initial recommendations developed for an IUC data set work programme. The requirements were reviewed by an expert/steering group, with representation from IUC providers and commissioners and industry (attendees are listed in Appendix D).

Final report

A final version of the information requirements and recommendations (this report) has been submitted to the PRSB Assurance Committee and the project board for review and to Digital Urgent and Emergency Care Board at NHS England for approval.

4 Requirements for information sharing

This section describes the requirements that have been agreed through the methods listed in the previous section. In this document they have been separated into:

- requirements for information to be available to IUC services;
- requirements for information recording and transfers of information from IUC services;
- additional requirements;
- principles of information sharing and requirement of feedback to clinicians.

4.1 Information available to IUC CAS

The types of information that clinicians within IUC CAS require access to, to make a sound decision about patients' health and care needs, are identified in the table below.

These requirements are to view information held elsewhere and are not necessary to be incorporated into NHS 111 [IUC] records. The GP record would be the main source of much of the below information but there may be other sources available in some areas and will depend on local circumstances, e.g. whether there is a local health and care record, the extent of implementation of Summary Care Record, etc. Local areas would need to consider the most appropriate way of providing the information to NHS 111 [IUC].

For each of the information requirements below the provenance or source needs to be recorded to inform the CAS as to where the information has come from to help CAS clinicians to make valid clinical decisions.

Data type	Comments	Information source
Patient demographics	Patient details and contact information.	Personal Demographics Service (PDS) / Caller
Recent clinical contacts	Multiple recent contacts which the patient has had should be flagged. There would be three types of information under this heading: 1. Repeat caller: Identifies repeat caller that calls the 111 service on multiple occasions over a short period of time.	Generated by NHS Digital Pathways

	2. Recent discharge: A record of a person being discharged from hospital or ED within 7 days. 3. Patients seen in OOH/GP surgery in the last 3 days.	Hospital system or GP system (discharge summary) OOH system / GP system
Long-term conditions (comorbid conditions) [1,2]	Long term conditions which the patient has. This information is to assist with making a decision about patient. There is a SNOMED CT long term conditions subset containing 65 members, which could provide an initial constrained list.	GP system problem list or Summary Care Record
Current and previous medications	Recent acute medications, repeat prescriptions, and discontinued items.	GP system or Summary Care Record
Allergies and adverse reactions	Allergies and adverse reactions.	GP system or Summary Care Record
Care and support plans	Any care and support plans (including contingency plans and End of Life Care plans) the individual may have to support long-term conditions.	GP system or local health and care record or digital care and support plan, End of Life Care System. Includes ReSPECT crisis care extract, and CMC care plans.
Safeguarding	Safeguarding information relating to the patient. This should include safeguarding issues of both children and adults. It should also include factual information such as child on protection register (CPIS) as well as safeguarding concerns noted recently by other healthcare professionals. Based on our consultation, we suggest that sharing safeguarding concerns should be constrained to those recorded during the previous 12 months. This or an alternative period should be tested further.	Child Protection Information Sharing (CPIS) data. Emergency care discharge summary – safeguarding concerns Healthy child and maternity record – safeguarding concerns GP system – special patient notes Adult social care system – currently no standard way of recording this information.
Individual requirements	Individual requirements that a person has. These may be communication, cultural, cognitive or mobility needs.	GP system or Reasonable Adjustment Flag on Spine when available or local health and care electronic record

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[1] https://www.gov.uk/government/publications/better-care-for-people-with-2-or-more-long-term-conditions

[2] https://dd4c.digital.nhs.uk/dd4c/publishedmetadatas/intid/700

Hospital encounters	If the person has been in the hospital and had a discharge summary within the last 4 weeks or attended outpatient clinical within the last 4 weeks. This may include results of pathology or radiology investigations from all care settings.	GP system, hospital system (transfer of care)
Clinical Frailty Scale	A validated score which is linked to increased likelihood of admission or complex assessment. For example Rockwood Clinical Frailty Scale[3], or the electronic frailty index (eFI). A validated dementia scale should also be considered.	GP system
Special Patient Notes (SPN)	May include relevant information recorded about patients with complex health and social care needs.	GP system / NHS111 SPN

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[3] https://www.england.nhs.uk/publication/toolkit-for-general-practice-in-supporting-older-people-living-with-frailty/

4.2 Information recorded by IUC CAS clinicians

The types of information that should be recorded within IUC CAS and shared with the next health or care provider along the patient journey are identified below. Not all information may be relevant to record in all circumstances. Please note that the full detail of each of the item is to be defined as part of work going forward.

Information type	Description
Person making the call	This may be the patient, but if not the name, relationship and contact details of the person making the call should be recorded.
Presenting or chief complaint	The chief complaint or problem as specified by clinician or CDSS, based on the information reported by the individual or third party caller. To consider expanding this into two items, distinguishing the patient reported problems from the chief complaint as specified by the clinician, for further consultation and development.
Chief clinical concern	The primary clinical condition that has been considered by the clinician within the IUC CAS which may require confirming or ruling out by the next care provider based on the information that's taken directly from the patient. This may include a differential diagnosis but the chief concern condition must be clearly distinguished.
Clinical narrative	A summary of the history taken directly from the caller that leads to the development of the ongoing patient's requirements. This should include the key factors which have led to the clinical concern and recommendations. Where the call is made by third party it should include the information provided by that person. This section can also be used for additional information gained, such as investigations, interpretation of findings and results, as well as recording information and advice given.
Patient concerns, expectations and wishes	Description of the concerns, wishes or goals of the person in relation to their care, as expressed by the person, their representative or carer. Record who has expressed these (patient or carer/ representative on behalf of the patient). Where the person lacks capacity this may include their representative's concerns, expectations or wishes.
Declared medication history	Medication history as declared by the person, including newly-supplied and over the counter medications. This should be recorded if clinically relevant.
Declared allergies and adverse reactions	History of adverse reactions to medications according to the person. This should be recorded if clinically relevant.
Prescription generated (EPS)	If prescription was generated and what it was. This should use the medication information model developed for transfers of care.
Safeguarding concerns	Where the clinician has new or escalated safeguarding concerns as a result of the consultation with the caller these should be recorded. These may include where the patient is a carer and there are concerns about the safety of the person for whom the patient is a carer.

	The data recorded in this area ranges from simple information which presents through screening to validated concerns from either a system or an individual clinician.
Plan and requested actions	Including planned investigations, procedures, interventions and treatments for a patient's identified conditions and priorities. For each action the following should be identified: a) person responsible - name and designation / department / hospital / patient etc or role (eg GP) responsible for carrying out the proposed action, and where action should take place. b) status - requested, planned or completed. c) When action requested for - requested date, time, or period - as relevant. d) suggested strategies - suggested strategies for potential problems. e) outcome expectations, including patient's expectations
Disposition	A disposition is considered as an activity and an acuity. In triage systems, the activity will be constrained to giving information, signposting to a service (advising self-referral), or direct referral to a service. This will be associated with an acuity, or level of urgency. Where the result of assessment indicates that care details are passed to another service (even as a different function of the same service), this is noted as a referral. Where the episode is concluded with information only, this is noted as information giving. This includes self-care advice, service availability advice, etc. To make the acuity objective, the time frame that is clinically indicated for subsequent intervention should be recorded. (Above description taken from '*SNOMED CT in Digital Urgent and Emergency Care*' document, NHS Digital) To consider: • Discharge Status: Consult and Complete or Referral Made / Transfer of Care • Discharge Destination
Referral to	Name and address of the organisation to which a referral is being made, if person is being referred elsewhere. Information will be obtained from the NHS Directory of Services (DoS).
Repeat caller	Identifies repeat caller that calls the 111 service on multiple occasions over a short period of time.
Acuity	Acuity score, which helps identify the timeframe in which the person should be assessed i.e. within 1 hour, 2 hours, 4 hours, 6 hours, 12 hours, 24 hours. To consider the need to develop an acuity scale.

An example report illustrating how this information may look when it is rendered and communicated to other services is provided in Appendix A.

4.3   Additional requirements

During the project some additional requirements relating to IUC system functionality were identified. Although the focus of the project is on the information requirements, they have been included in this report as they were considered important during the consultation for the provision of effective and efficient IUC services. Functional IT Systems requirements to support IUC services:

1. Directory of Services that will facilitate onward referrals and treatment, and this may include investigations (e.g. x-rays, blood tests) and relevant contacts in clinical services (e.g. dental service, pharmacy). This means access to the NHS Directory of Services (DoS) would be integrated into the IUC system to enable users to identify and relevant services and incorporate their details automatically into a system generated referral.
2. Visible assessment to facilitate diagnosis or treatment. This could be video consultation or viewing of an image, e.g. for rash, assess wound or non-urgent lump assessment.

Requirements to support IUC services by integrating with the following organisations and services:

Organisation/ service	Integrated Urgent Care use case
NHS 111	Information held on NHS 111 records and NHS111 Online.
GP Surgeries	Access to view patient information during consultation, send notifications and referrals to patient's GP following consultation.
Out of Hours (OOH) GP Services	Send referrals, access recent contact information.
Urgent Treatment Centres	Send referrals.
Ambulance Services	Send referrals or dispatch.
Hospital Services	Access to view recent patient records, care plans, results, discharge information and outpatient letters.
Emergency Departments	Send referrals, access to view recent attendance to emergency department. Information recorded during NHS111 [IUC] consultation needs to be available to be accessed by an emergency care department where the patient is booked in.
Pharmacy services	Refer for emergency medicine supplies (NUMSAS), or for over the counter treatments or self-care advice.
Dental Services	Refer for emergency dental care.
Mental Health services	Access recent mental health records and contact information, send referrals.
Social Care services	View social care information e.g. current care package.
Personal Demographics Service (PDS)	Access patient demographic details.

National Repeat Caller Service	Access repeat caller information.
Electronic Prescription Service (EPS)	Communicate electronic prescriptions.
National Record Locator Service	Find out what records exist for a patient across local and national care record solutions.
Summary Care Record (SCR)	View data from the Summary Care Record.
Electronic Palliative Care Co-ordination Systems (EPaCCS)	Access End Of Life care plan information.
Local health and care record	Access local health and care records to obtain any of the information above where such records exist.
Child Protection Information Sharing (CPIS) register	Access safeguarding information.

4.4 Principles of information sharing

The following are principles of information sharing and ownership that were identified as being important during the consultation. These need to be considered when implementing the requirements:

1. Every care service should have access to information about the patient needed for clinicians to make an informed decision.

2. IUC CAS should only communicate information that they recorded in the consultation. They should not generally forward information obtained from other sources unless it is unavailable to the recipient. For example, if CAS viewed a patient's medication from the GP record they should not forward the GP medication record unless it is unavailable to the recipient. Where information from other sources is communicated its provenance should be clearly identified.

3. The provenance / source of information should be available to IUC clinicians to enable them to make judgment on the validity of information that is obtained from other sources.

4. Where a document has a legal status, i.e. Do Not Attempt Resuscitation (DNAR) status and Advance Directive – where a caller declares a presence of this document, this should be communicated in the clinical narrative so that care providers receiving them know to ask

5. Consent should be noted for the person's details to be shared with the next care provider.

6. There should be a method in place to share back the information on the patient outcome at a later point in the patient journey to the system and clinicians, for use in clinical audit and service improvement.

5   Recommendations

This section sets out recommendations to take forward the information requirements through into implementation in the NHS. It identifies the key stakeholders to engage in the work and provides an initial draft plan.

Recommendations for further work

The integrated urgent care information sharing requirements scoping project has identified the following recommendations to take forward the information requirements identified in this report through to implementation in the NHS:

1. Information requirements should be built up into an IUC Data Set which should include minimum amount of data that is required to deliver care, and that is structured and coded where appropriate – this should be done in consultation with patients, clinicians, industry and following the PRSB process. The use cases for sharing information with other services (e.g. at referral) should also be defined.

2. This should be carried out in parallel with investigation of the technical solutions that need to be in place to support the implementation of the IUC requirements so that the information models and associated processes can inform the technical solutions. Technical solutions will need to take account of the capabilities of existing local IUC systems, which differ, and it may be helpful to provide a roadmap or other guidance to help local organisations to plan implementation. Adoption of SNOMED CT is a dependency, as it is not yet adopted universally in the NHS. This work should take into account and be aligned with a separate project by NHS Digital outlining the strategy for implementation of SNOMED CT within Digital Urgent and Emergency Care.

3. It should also be done in parallel with the identification of sites that want to become early adopters and implementers so that they are engaged in the process and ready to implement the information models.

4. The work has to be scheduled in to the FHIR curation process so that there are resources available when needed to take those models through the curation process to produce technical FHIR specifications which suppliers can implement on their systems.

5. The IUC project needs to be planned so that it fits or aligns with other projects or programmes being undertaken in this area including the proposed Ambulance Data Set, Ambulatory Emergency Care Data Set, implementation of Emergency Care Data Set (ECDS) and discharge summary. Further, it should also align with wider Digital Urgent & Emergency Care programmes such as the Ambulance Digital Strategy, the UEC Data Strategy, the UEC

Access to Records programme, the Clinical Triage Platform programme, the Access to Service Information programme and the UEC Integration work stream. Relevant professional and data standards already in use in the NHS should also be considered. Governance and approval processes should be clearly defined so that appropriate stakeholders have been involved and have oversight of the elements. The ownership and maintenance function of any SNOMED CT reference set should be established from the start.

6. There are associated costs to providers if systems need to change. Commercial arrangements are required to enable the process of implementation. It should be ensured that NHS England and NHS Digital contractual arrangements with GP systems suppliers take into account the requirements that come out of the next stage of the work. NHS England will need to consider the commercial implications of other types of system (that are not GP) where there is likely to be a cost incurred, but where there are no central contractual arrangements with the suppliers.

7. The IUC data set will need to go through the NHS Digital ISCE process for developing a new information standard. The steps required should be incorporated in the plan for the IUC data set development.

8. The IUC data may be required to change to reflect the needs of the dataset, clinical practice, or other reasons. There should be an IUC Data Set maintenance group, hosted by NHS Digital which will be responsible for the structural detail of the data set.

9. Clinical leadership for the maintenance of the clinical content should be assigned to a designated Clinical Reference Group selected by the DUEC Board. Clinical changes to the dataset would require DUEC Board approval following recommendation by the Clinical Reference Group. PRSB assurance and approval would be required for updates and releases to ensure continuing endorsement of the dataset.

10. It should be noted that once IUC Data Set is implemented, this will result in an impact to the IUC Minimum Data Set and the way it is collected. IUC Minimum Data Set (MDS) is a method of collecting data on the IUC Service for secondary uses. It is supplied to the NHS Digital Strategic Data Collection System (SDCS) and used to produce the IUC Key Performance Indicators (KPI). These two projects should work alongside, to understand any changes to data collection, identify opportunities to expand and improve data collection for secondary purposes and to consider the impact of how information is to be collected.

11. Initial and ongoing development of the IUC data set should be done in conjunction with urgent & emergency care policy.

12. IUC Data Set should be developed in partnership with IUC Delivery Group and IUC Clinical Leads.

13. System suppliers should be engaged during the development of IUC Data Set.

Stakeholders to engage in future work

The following stakeholders have been identified during a stakeholder mapping exercise as important to engage in the development of the IUC data set.

Citizen representatives	Main engagement route
Patients and carers	▪ Royal College of Physicians Patient Carer Network ▪ Relevant patient representative organisations, e.g. Age UK, Diabetes UK, etc.

Professionals	Professional body
General practitioners	▪ Royal College of General Practitioners ▪ Royal College of General Practitioners Health Informatics Group ▪ Joint GP/IT Committee to the British Medical Association
Secondary care clinicians	▪ Royal College of Physicians ▪ Royal College of Paediatrics and Child Health ▪ Royal College of Emergency Medicine ▪ Society of Acute Medicine
Paramedics	▪ College of Paramedics
Midwives	▪ Royal College of Midwives
Nurses – hospital and community including district nurses, mental health and practice nurses	▪ Royal College of Nursing ▪ Queens Nursing Institute
Obstetricians and gynaecologists	▪ Royal College of Obstetricians and Gynaecologists
Occupational therapists	▪ Royal College of Occupational Therapists
Pharmacists	▪ Royal Pharmaceutical Society ▪ Pharmaceutical Services Negotiating Committee

Dentists (urgent dental care)	▪ British Dental Association

Other Stakeholders	Organisation / engagement route
Chief Clinical Information Officers	▪ Chief Clinical Information Officers network, Digital Healthcare forum
Chief Information Officers	▪ Chief Information Officers network, Digital healthcare forum
Commissioners	▪ NHS England DUEC Board ▪ NHS England NHS 111/ IUC Team ▪ Health Education England ▪ NHS Improvement ▪ NHS Pathways
Urgent and emergency care providers	▪ NHS 111 / IUC provider forum ▪ GP out of hours providers ▪ IUC commissioners' network ▪ IUC clinical advisers' network ▪ IUC Steering Group ▪ UEC regional offices
NHS Digital	▪ NHS Digital leaders community forum ▪ Clinical engagement lead, Urgent & Emergency Care ▪ Technical lead, Urgent & Emergency Care ▪ UK Terminology Centre ▪ Summary Care Record Programme team ▪ GP IT Futures team ▪ Emergency Care Data Set (ECDS) ▪ National Record Locator Service ▪ Information Standards and Collections (including Extractions) (ISCEs)
Four nations of the UK	▪ PRSB nominees for Northern Ireland, Scotland and Wales
Public Health	▪ Public Health England via PRSB advisory board member
Social care providers (care homes and domiciliary care) and local authorities (social workers	▪ Care Provider Alliance ▪ National Care Homes Association ▪ The society for IT practitioners in the public sector (SOCITM) ▪ Association of Directors of Adult Social Services ▪ Association of Directors of Children's Services ▪ Local Government Association
Suppliers	▪ Tech UK ▪ INTEROPen ▪ BCS Health and Care ▪ Electronic Prescription Service ▪ Directory of Services ▪ HL7 UK ▪ NHS Digital vendor network ▪ Individual contacts at IUC system

			suppliers (e.g. Cleric, Advanced, IC24)	

Plan for development of an Integrated Urgent Care dataset

The following are considerations and a plan for development, implementation, pilot and deployment of the IUC data set. The considerations listed here are those that have been explored thus far in a limited context and the plan will need to be adapted and developed further. Successful implementation will result in achieving the following outcomes:

• For patients – information obtained during the consultation is included and supports their journey by being communicated on to other providers along the journey.
• For health system – we are able to record detailed clinical information in a standard way along a pathway to enable analysis of process, outcomes and patient experience.
• For safety – able to monitor and understand trends and use to support public health.
• For staff that work at IUC CAS – able to have richer information, including feedback, about their activity that can be benchmarked and feature in their supervision and revalidation.

Item	Activity	Lead organisation / owner	How	When/ how long
1	Consider linkage across all of UEC patient pathways (e.g. Ambulance Data Set, AECDS, ECDS)	NHS England	Identify other initiatives and meet with project leads to agree appropriate linkages with other work.	Precursor to starting the work
2	Consider and direct the next steps for implementing clinical standard	NHS England	Following national NHS business case guidelines	Precursor to starting the work
3	Meeting to understand organisational priorities and exploring iterative/agile working approaches and vendor-led approach to design and their timelines.	NHS England, NHS Digital, INTEROPen, suppliers	Via meetings and documenting agreed approach/ timelines	Precursor to starting the work

4	Engage vendors through INTEROPen Collaborative.	NHS England, INTEROPen, PRSB	Hold an engagement workshop/forum, discuss plans, get their buy-in, add to roadmap, explore technical barriers, involve in design, etc	Precursor to starting the work
5	Identify pilot sites to be early adopters of the standard	All above – working with LHCREs, GDEs and places with most established IUC services (eg, West Mids, Herts, SCAS)	Communicate via networks and identify potential sites, define criteria and select sites. NB: funding may be required to upgrade systems.	In parallel with action 2 above. If funding is required this could have an impact on timescales and process.
6	Produce information model and clinical guidelines and a clinical safety report	PRSB/INTEROPen, working with NHS England and NHS Digital (SNOMED CT/ Data Dictionary).	Draft information models and professional guidelines, test via workshop, on-line survey and detailed models via Ryver. Where possible existing PRSB information models should be reused.	6 – 8 months
7	Engage with interrelated initiatives such as pharmacy leads, UTC leads, ambulance and ED.	Project team and board.	Engage in the work at all stages – document in comms and engagement strategy and plan.	Throughout all stages, particularly important during information modelling to get endorsement of the standard.
8	Produce technical specifications. These are necessary for suppliers to estimate resources for implementation required	PRSB/INTEROPen, working with NHS England and NHS Digital (SNOMED CT/ Data Dictionary).	NHS Digital technical architects define technical approach based on models/guidance. NHS Digital map models to FHIR profiles and INTEROPen curation process to produce validated FHIR profiles.	Following from above, 2 months.
9	Include in NHS England IUC service	NHS England, informed by the	Engage programme	

			work above.	delivery team. Link this into roadmap at items 3 and 4.	
	specification			
10	Engage GP IT Futures team	Project team	Feedback interoperability requirements for the next round of GP contracts	In parallel with item 1 and throughout development of the data set
11	Implement in early adopters and evaluate	Early adopters working with all above	First of type testing (NHS Digital), update information models/FHIR profiles (INTEROPen and PRSB). Produce implementation materials (technical – NHS Digital/INTEROPen, professional PRSB)	Timing dependent on funding requirements and GP systems contract. Allow 1 year for pilot and evaluation (6 months develop/ configure and 6 months test/ implement/ evaluate).
12	Obtain information standards approval	Data Collections Board, NHS Digital coordination.	Information standards (ISCE process).	Process for IUC dataset needs to follow the ISCE process throughout – it should not add to the length of the process.
13	Wider rollout	IUC service providers and other providers (eg GP, UTC). Oversight by NHS England	PRSB/NHS Digital/INTEROPen ongoing support and maintenance process.	Timescale/target date for full implementation to be defined and included in IUC specification.
14	Commissioning for Quality and Innovation (CQUIN) framework	NHS England	A CQUIN could be proposed to monitor the quality of this new data set by daily reporting and monitoring of outcomes.	In parallel with item 12.

6 Next steps

Development of an IUC Data Set

This paper will be reviewed by the Digital Urgent and Emergency Care (DUEC) Board at NHS England where the recommendations will be considered to serve as a basis for commissioning subsequent stages of the project to develop, implement, pilot and deploy an IUC dataset.

It should be considered that IUC Data Set (IUCDS) may benefit from being developed in parallel and as part of the same project as Ambulance Data Set (ADS) due to the fact that IUC CAS work involves close communication of information to and from ambulance services. The overlap, evolution and the need for integration between existing data sets and those being developed, is illustrated in Figure 2.

Figure 2: Evolution of patient data along a pathway
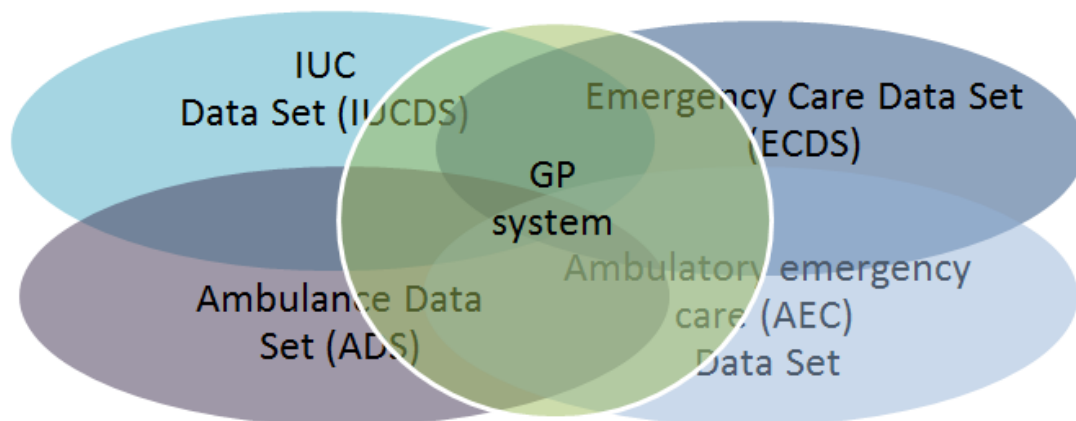
7 Appendices

7.1   Appendix A – Example of an IUC report

This is an example document that may potentially be used to inform hospital or other health or care provider of an expected visit from a patient who has called NHS111. Please note it is illustrative rather than exhaustive in content, and non-prescriptive in the structure used.

Name:	James Smith	**Time & Date of Contact with NHS 111**	17-Apr-2018
Date of Birth: **Age:**	01-Jan-1950 68	**Caller:** **Repeat caller:**	James Smith 2 times in 96 hours
Gender:	Male	**IUC CAS clinician**	Dr Kate Brown, General Practitioner, 0208 789 1551
NHS Number: **Address:** **Postcode:** **Preferred Contact:**	999 254 122 46 Birch Close AG2 6SL 07123 987453	**GP Details:**	Dr Joe Collins U Health Centre, 12 High Road, AG1 2RD (01234) 956412
Presenting/Chief Complaint: Chest pain		**Long Term Conditions:** Asthma	
Chief clinical concern: Acute Coronary Syndrome (ACS)		**Declared Medication History:** N/A	
Clinical narrative: Central chest pain associated with sweating and nausea. Smoking history and positive family history of IHD		**Declared Allergies:** No known allergies or adverse reaction	
Disposition: Ambulance dispatch, C2		**Acuity:** Within 1 hour	
Referral to: Type 1 ED Main Hospital NHS Trust 30 High Rd, AG1 8SD			

7.2 Appendix B – Glossary of Terms

Term / Abbreviation	What it stands for
999	Free to call telephone number for emergency service (i.e. Ambulance Service).
Accident and Emergency Department (A&E)	An A&E department (also known as emergency department or casualty) deals with genuine life-threatening emergencies.
Acuity	Timeframe to assessment
CCG	Clinical Commissioning Group
Clinical Decision Support System (CDSS)	A health information technology system that is designed to provide Clinical Assessors and Health Advisors with clinical decision support (CDS), that is, assistance with clinical decision-making tasks.
Clinical Outcome	The result of receiving medical advice or treatment, and can be measured through subsequent patient activity data such as hospital admission or re-admission.
Commissioner	The entity responsible for the process of planning, contracting and monitoring services.
Data set	A collection of related sets of information that is composed of separate elements but can be manipulated as a unit by a computer.
Directory of Service (DoS)	An NHS directory that: describes the services that organisations offer; enables referring clinicians to search for appropriate services to which they can refer patient; provides a window through which providers can display their services.
Disposition	The perceived clinical need of a patient in the form of a skillset and time frame.
DUEC	Digital Urgent and Emergency Care Board at NHS England
EPS	The Electronic Prescription Service. EPS allows prescribers to send prescriptions electronically to a dispenser (such as a pharmacy) of the patient's choice.
FHIR	Fast Healthcare Interoperability Resources
General Practice Out of Hours (GP OOH)	A general medical practice that is open outside of normal business operating hours and provides emergency Primary care services to the public.
GP	General Practitioner
Health Outcomes	Refers to impact of over triage or under triage to patient wellbeing, as well as the impact on patients when they follow advice given or the impact of not following the advice e.g. mortality, hospitalization, or re-presentation of symptoms. Health outcomes require longer term monitoring of the patient than immediate clinical outcomes outcomes; the health outcome is not always immediately obvious.
HIU	Health Informatics Unit

Input Data	Data sourced from medical systems that hold patient information and care records to be used as input in patient triage.
Integrated Urgent Care Clinical Assessment Service (IUC CAS)	Physical and/or virtual hub providing clinical advice to patients contacting the 111 or 999 services, as well as providing clinical support to clinicians (particularly ambulance staff such as paramedics and emergency technicians) to ensure that no decision is made in isolation. Also known as Care Advice Service or Clinical Assessment Service, previously known as a Clinical Navigation Hub.
IUC	Integrated Urgent Care
ISCE	Information Standards and Collections (including Extractions)
NHS	National Health Service
NHS111	A national NHS service that provides medical support to patients over the telephone for cases where a 999 call is not thought to be required by the patient.
Patient	A person receiving or ready to receive treatment some form of clinical/ medical treatment
Patient Compliance	Refers to whether a patient adhered to the disposition given as a result of triage. A patient missing an urgent OOH GP appointment that was arranged for them subsequent to triage is an example of non-compliance.
Personal Demographic Service (PDS)	The national electronic database of NHS patient details such as name, address, date of birth and NHS Number (known as demographic information).
Post Event Message (PEM)	Electronic document that is transmitted to GP practices at the end of an NHS 111 Call.
Primary Care Service	This could include GP Practice, Walk-in Centre, District Nurse etc.
PRSB	Professional Record Standards Body for health and social care
RCGP	Royal College of General Practitioners
RCP	Royal College of Physicians
Service Provider	Entity contracted by a commissioner to provide a service. An organization supplying services to one or more internal or external customers.
Summary Care Record (SCR)	An electronic record of important patient information, created from GP medical records. It can be seen and used by authorised staff in other areas of the health and care system involved in the patient's direct care.
Supplier	An entity providing a system or system components to Providers or the Clinical Triage Platform
Systemised Nomenclature of Medicine - Clinical Terms (SNOMED CT)	A structured clinical vocabulary for use in an electronic health record. It is the most comprehensive and precise clinical health terminology product in the world.
Triage	The process of determining the priority of patients' treatments based on the severity of their condition

Triage Outcomes Data	Information about what happened to a patient subsequent to triaging. This is determined by collating data that indicates where a patient went after triage and what treatment they may have received, if any.
UEC	Urgent and Emergency Care
Urgent Treatment Centres	Medical treatment facility where patients can be treated for minor emergencies and injury.
Walk In Centre (WIC)	NHS walk-in centres (WICs) offer convenient access to a range of treatments. WICs are managed by Clinical Commissioning Groups (CCGs), dealing with minor illnesses and injuries.

7.3 Appendix C – References

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7.4 Appendix D – Stakeholders

This appendix describes the stakeholders who were members of the project board, participated in the workshop and expert review meeting.

Project board membership

Organisation	Name
NHS England (Digital Urgent & Emergency Care)	David Davis
West Midlands Integrated Urgent Care	Gareth Stuttard
Royal College of Physicians – Project manager	Haroldas Petkus
Citizen representative	Helen Patterson
NHS England (Digital Urgent & Emergency Care) – Project clinical lead	James Ray
Royal College of Physicians	Jan Hoogewerf
NHS England	John Hutchison
PRSB	Martin Orton
NHS Digital	Matt Stibbs
NHS England	Nick Hall
PRSB	Phil Koczan
NHS Digital (ECDS)	Thomas Hughes

Workshop attendees (4 June 2018) by organisation

Organisation	Name
NHS Digital	Adnan Riaz
Citizen representative	Alan Craig
Advanced	Alex Yeates
NHS West Kent CCG	Andrew Brownless
NHS Digital	Barry Lafferty
Coastal West Sussex CCG	Caroline Butler
Integrated Care 24	David Brown
Primary Care Foundation	David Carson
North West Ambulance Service	Ged Davies
Royal College of Physicians – Project manager	Haroldas Petkus
Citizen representative	Helen Patterson
PRSB – Facilitator	Helene Feger
NHS Improvement	Jacqui Crossley
NHS England (Digital Urgent & Emergency Care) – Project clinical lead	James Ray
South East Coast Ambulance Service	Jon Amos
Royal College of General Practitioners	Julian Costello

FCMS (NW) Limited	Julie Davies
NHS Digital	Keith Strahan
Integrated Care 24	Kieran Kelly
PRSB – Facilitator	Lizzie Cernik
Oxfordshire CCG	Maggie Lay
Royal College of Physicians – Facilitator	Malvina Rossi
PRSB	Martin Orton
NHS Digital	Matthew Stibbs
Oxfordshire CCG	Merlin Dunlop
FCMS/PDS Medical	Michelle Sproston
Newcastle upon Tyne Hospitals NHS Foundation Trust & NHS England	Paula Russell
Local Care Direct	Peter Davies
Medlinc CCG/NHS Surrey	Peter Stott
Herts Urgent Care	Rafid Aziz
North West Ambulance Service	Robin Ellis
FCMS and PDS Medical	Samantha Marsh
Citizen representative	Sharon-Ann North
Royal College of Physicians – Facilitator	Sheena Jagjiwan
NEMS Community Benefit Services	Simon Browes
North Hampshire Urgent Care	Simon White
NHS Digital	Stephen Robinson
Surrey County Council	Steve Abbott
North East Ambulance Service	Sue Tucker
TPP	Tom Gray
NHS England	Tony Carson

Workshop attendees (4 June 2018) by sector/role

Role	Number
Ambulance	5
Citizen	3
Commissioner	5
Emergency Medicine	1
Industry	4
Informatician	4
IUC Provider	8
Other	3
Pharmacy	2
Professional Body	4
Social care	2

Expert review meeting attendees (16 July 2018)

Organisation	Name
Care UK	Adnan Ali
NHS Digital	Alastair Pickering
Advanced	Alex Yeates
NHS England (Digital Urgent & Emergency Care)	David Davis
West Midlands IUC	Gareth Stuttard
Royal College of Physicians – Project manager	Haroldas Petkus
NHS England (Digital Urgent & Emergency Care) – Project clinical lead	James Ray
NHS England	John Hutchison
RCGP / Joint GP IT Committee	Julian Costello
Integrated Care 24	Kieran Kelly
Medvivo	Leonora Anderson
NHS England	Mark Douglas
PRSB	Mark Simpson
NHS England	Paula Russell
Integrated Care 24	Sanjeev Rana