


Booking and Referral Standard (DAPB4060) Requirements Specification



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Reviewers

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Data Alliance Partnership Board

The Data Alliance Partnership Board (DAPB), which holds delegated authority from the Secretary of State for Health and Social Care, has approved a [new] [change to an existing] information standard for publication under [section 250 of the Health and Social Care Act 2012](#).

Assurance that this information standard meets the requirements of the Act and is appropriate for the use specified in the specification document has been provided by the Data Standards Assurance Service (DSAS) and endorsed by the Data Alliance Partnership Sub Board (DAPSB).

This information standard comprises the following documents:

- Implementation Guidance
- Requirements Specification.

An Information Standards Notice (DAPB4060 Amd 99/2021) has been issued as a notification of use and implementation timescales. Please read this alongside the documents for the standard.

The controlled copies of these documents can be found on the [NHS England website](#). Any copies held outside of that area, in whatever format (e.g. paper, email attachment), are considered to have passed out of control and should be checked for currency and validity.

Date of publication: 13 April 2023

Glossary of Terms

Term / Abbreviation	What it stands for
API	Application Programming Interface
API-M	API Management
BaRS	Booking and Referral Standard
CAS	Clinical Assessment Service
DoS	Urgent and Emergency Care Directory of Services
ED	Emergency Department
EDDI	Emergency Department Digital Integration
FHIR	Fast Healthcare Interoperability Resource
FOT	First of Type
ITK	Interoperability Toolkit
IUC	Integrated Urgent Care
ISN	Information Standards Notice
NHSE	NHS England
OOH	Out of Hours
Payload	The contextual information relating to the actual booking or referral that is carried from the sender to the receiver and is separate from the information required by the transport layer for routing, authentication, authorisation and access control.
PRSB	Professional Records Standard Body
UTC	Urgent Treatment Centre

Contents

1. Supporting Information	7
2. Definition	7
3. Background	8
4. Scope	8
5. Benefits	9
6. Requirements	9
7. Endorsement of the BaRS	10
7.1 Future use case endorsements	10
7.2 111 – ED use case	11
7.3 111 – UTC use case	11
8. Timescale	11
9. Conformance	12
10. Legal position	12
11. Helpdesk	13
Appendix A: Future use cases	14
Appendix B: Useful links	15

1. Supporting Information

The following table supports the details and information contained in the Information Standard, this requirements specification document and the implementation guidance. The items (and links) in the table will be used in conjunction with the Information Standards Notice (ISN).

Ref	Item	Purpose	Location
1	Booking and Referral Standard	Provides an overview of the Booking and Referral Standard	BaRS website
2	Implementation Guide (detailed)	To support system providers as they develop against the Booking and Referral Standard	Simplifier website
3	API Specification	To support developers in using the API to send booking and referral information between NHS service providers.	API-M Developer Guide
4	Implementation Guidance (high level)	To support developers to conform with the ISN	Information standards and data collections website

2. Definition

A patient journey – from the patient presenting with symptoms, to appropriate treatment, and then discharge - will often involve two or more NHS services. Throughout the patient journey, bookings of care and associated clinical and administrative information is required to follow the patient at all stages of their journey. This often involves paper and/or electronic processes across multiple patient record systems, and often these systems are unable to interact, which can be inefficient and lead to multiple issues in a care journey. The Booking and Referral Standard (hereafter known as BaRS) is an interoperability standard that aims to mitigate the issues of systems being unable to interact by supporting and driving interoperability. Adoption of the BaRS by system providers aims to ensure healthcare professionals receive the information they need, in a format they can use, integrated into their existing patient record systems. The BaRS will support a consistent approach to Booking and Referring patients across multiple use cases¹ for those that fall within scope of the BaRS implementation, and therefore, this standard.

The BaRS will facilitate information that will be shared for the direct care of the patient, e.g. with healthcare workers who will:

- send and/or receive booking and referral data that is integrated into existing patient record systems - this avoids working across 2 or more systems and saves time
- receive the information they require, and in sufficient detail, to enable them to undertake the patient care activity requested

¹ The BaRS is the standard upon which numerous interoperable use cases are being developed over time. An example of a single use case is NHS 111/clinical assessment services (CAS) to emergency departments (or A&E). Use cases are also referred to as applications on the BaRS website.

- be able to triage the patient without asking them to unnecessarily repeat information already collected earlier in their journey

The BaRS has initially been implemented, tested and made available across two use cases, this has confirmed and tested the validity and utility of the Standard as well as the underpinning architecture. These two use cases, which are available now are:

- NHS 111/clinical assessment services (CAS) to emergency departments (or A&E)
- NHS 111/clinical assessment services (CAS) to Urgent Treatment Centres (UTC)

These initial use cases of the BaRS represent the first in a range of anticipated use cases that the BaRS will support, building upon the current standard to increase its scope and utility. As the BaRS is expanded into new care settings/use cases then these will be managed via a minor update to the information standard and minor amendment to the extant ISN version (a representative list of anticipated future use cases for BaRS is included in [Appendix A](#)). Any significant changes that are made to the BaRS will be updated in the ISN as a change and a new ISN version will be published.

3. Background

BaRS was commissioned to provide an interoperability standard for patients who require a Booking and Referral across the NHS. Part of the emergency response to Covid-19 was the introduction of the Emergency Department Digital Integration (EDDI) product, to enable referrals from 111 to Emergency Departments. This interim, tactical product was built and deployed by NHS Digital and was based on the CareConnect standard that required the deprecated standard known as the interoperability toolkit (ITK). For expedience, ITK was used as the short-term fix during Covid-19 in the knowledge that a long-term, strategic interoperability standard, based on the Fast Healthcare Interoperability Resources (FHIR) UK Core 4 would be available in the near future; this would be supplier focussed and created to enable supplier systems to be fully digitally integrated between care settings and providers to enable the progression towards the NHS any-to-any vision.

The creation of the BaRS delivers the strategic interoperability standard to facilitate a booking to be made and any associated referral information to be shared between a sending organisation such as an NHS 111 Provider and a receiving organisation such as an Emergency Department. The BaRS (the subject of this Information Standard) is therefore an interoperability standard between patient record systems that enables booking and referral information to be sent between NHS healthcare providers quickly, safely and in a format that is useful to clinicians. The current work is part of the overarching programme to update and modernise all bookings, referrals and appointments management in the NHS. The BaRS has been developed and fully endorsed by the NHSE Architectural Board as the long-term Booking and Referral Standard that should be adopted over time, and will become the ubiquitous booking and referral standard available to the NHS and its suppliers, and which will be adapted and implemented for a range of use cases.

4. Scope

The scope of this Information Standard includes all those system providers and healthcare providers that have a requirement to book and or refer patients between care settings. The BaRS is the standard upon which numerous interoperable use cases are being developed

over time. The BaRS has been proven and is available now (live) for use between two care settings (111– ED and 111-UTC). Further use cases for the BaRS will be developed and become available over the coming years.

A list of anticipated future use cases for the BaRS is available at [Appendix A](#) to this Requirements Specification.

The BaRS involves no collection or submission of data as part of its use.

5. Benefits

The delivery of the BaRS introduces the following benefits for different stakeholders:

- **For the Patient** – The aim is to make the process simpler and more efficient, so patients do not have to repeatedly provide the same or similar information and that this information is then used appropriately throughout their care journey.
- **For the Healthcare professionals** – The aim is to provide staff with relevant patient booking and referral information that is easy to understand and with sufficient detail so that they can accept the patient, prepare for their arrival, and support the onward management of their care.
- **For the System** – The aim is to provide information/data that is easy to digest and integrate into workflows without the need for manual intervention across different scenarios and/or care settings.
- **For System Providers and Healthcare Providers** – The aim is to provide a national standard that removes the need to support multiple and varied standards.

6. Requirements

The BaRS is a set of documentation, specifications and services that describe and support all the fundamental components of the standard that are always the same for all use cases. Examples include the underlying capabilities and patterns, and transport layer elements such as security, authorisation and access control.

The BaRS informs individual use cases (or applications of the BaRS) as they are created (e.g. the current 111-ED and 111-UTC use cases). The use case describes how particular operations and business flows map to the underlying technical capabilities and patterns of the BaRS along with the specific contextual information relating to the booking or referral (payload)

Full details on the distinction between BaRS and its use case usage is at [NHS Booking and Referral Standard about BaRS](#).

While the core fundamentals of the BaRS will remain broadly static over time, the individual BaRS use cases will be tailored and created to provide different functionality depending on:

- its use case (or application)
- whether it acts as a sender or receiver

There are a set of requirements in the central area of the BaRS functionality (the core) which every BaRS use case must adopt:

All BaRS users MUST:

- Provide a Capability Statement
- Read and interpret a Capability State
- Provide Message Definition(s) for a specific service
- Read and interpret Message Definition(s) for a specific service

All Booking Senders MUST:

- Request Slots for a specific service
- Make a Booking request
- Cancel a Booking request
- Make a Rebook request (two open Bookings during this routine)

All Booking Receivers MUST:

- Provide Slots for a specific service
- Create Booking
- Cancel Booking
- Accept Rebook request (two open Bookings during this routine)

All Referral Senders MUST:

- Make a Referral request
- Cancel a Referral request
- Re-request Service Request (revoke current open Referral prior to sending new Only one active/open Service Request during this routine)

All Referral Receivers MUST:

- Create a Referral
- Cancel a Referral
- Accept re-request Service Request (revoke current open Referral prior to sending new. Only one active/open Service Request during this routine)

7. Endorsement of the BaRS

The BaRS has been endorsed by the NHSE Architectural Board as being the long-term strategic solution for Booking and Referrals across the NHS.

To achieve this endorsement, the BaRS has been created alongside multiple vendor organisations including system provider and healthcare provider systems who have fed into and collaborated on the BaRS through its early life cycle, and who have validated and help design the approach. The Standard has also been endorsed and developed in conjunction with a range of professional bodies including the Professional Record and Standards Body (PRSB) who have partnered the early development of the BaRS, and in particular the application of BaRS from any 111 sending system.

7.1 Future use case endorsements

As they are developed, all future use cases will be subject to relevant endorsements during the development and piloting phases. During this, and prior to general release, the new use

cases will receive endorsement from the respective use case owner (or nominated professional body), and before the use case is made available for national rollout. As an example of this approach, the two initial use cases (111-ED and 111-UTC), and their relevant endorsements have been outlined below. This approach will result in the use cases being added to the ISN as a minor amendment as and when they become available. Progression of the use case developments through the development cycle will be updated and communicated on the Booking and Referral Standard site.

7.2 111 – ED use case

This application has been developed with support of the Professional Records Standards Body (PRSB) who have endorsed the content of the information in the use case from which the BaRS has derived the associated [information model](#). Extensive research was undertaken in parallel with the PRSB who examined the wider brief of 'referrals from NHS 111 to any other care setting'. PRSB have assured that the data being transferred from 111 to ED (in so doing they have also approved the information from 111 to any receiving healthcare provider) is clinically relevant and safe. The PRSB have published the [111 Referral Standard](#) and have endorsed an [information model](#) through consultation with the Royal College of Emergency Medicine. The PRSB published standard works for the senders (111) and receivers (ED) when referrals are made between the respective services.

7.3 111 – UTC use case

This use case has utilised the PRSB model for 111-ED bookings and referrals to support the 111 to UTC model, and this was endorsed for use in the UTC use case by the UTC Implementation Steering Group and the clinical regional leads who were satisfied that the 111-ED use case would be equally applicable to the UTC flow from 111.

8. Timescale

The BaRS is available now for review and for use between 111 to ED and 111 to UTC. These have been created as use cases of the BaRS, and system providers and healthcare providers supplying or using solutions relevant to those use cases (such as replacement for the EDDI) should utilise the BaRS as they plan or deploy any upgrades or system improvements.

The approach to create use cases of the BaRS over time means that the BaRS will become ubiquitous as the booking and referral standard is deployed across the health ecosystem, and in doing so it will deliver the any-to-any vision for the NHS. As a result, the timeline for the BaRS adoption will be progressive and delivered over a protracted time. The BaRS adoption will be achieved as system providers and healthcare providers upgrade their current solutions and adopt the BaRS as and when the additional use cases are available. The specific timelines for these individual use case adoptions will be subject to individual delivery schedules, use case prioritisation and direction and policy guidance on a case-by-case basis.

The list of future anticipated use cases for BaRS is outlined at [Appendix A](#), however, this list is not exhaustive, and it is subject to prioritisation changes. The prioritisation of the BaRS

use case developments will be reviewed regularly by the use case owners. The latest prioritised backlog will be maintained in the [Booking and Referral Standard site](#).

9. Conformance

The BaRS has been endorsed for use by the NHSE Architectural Board who underlined the Standard as the long-term strategic solution for booking and referrals in the NHS. To support this intent, where there have been use cases created, then over time the BaRS should be adopted as the single standard.

Conformance to the BaRS will be achieved when the requirements are met as outlined in Section 6 of this Requirements Specification. This will be supplemented by specific use case conformance requirements that will be published in individual use case implementation guides that will be available in the [Booking and Referral Standard site](#).

As they are developed, each use case will endeavour to have specific conformance criteria and timelines to support implementation and further information will be available here.

10. Legal position

NHS England

The Direction providing the legal justification for this standard can be found at [Booking and Referral Standard Directions 2022](#).

Healthcare Providers

The services delivered by the Healthcare Providers that will be using the Booking and Referral Standard are commissioned locally. The Healthcare Providers are Controllers for the personal data about patients that each Healthcare Provider processes to enable the booking and referral.

The BaRS API and associated NHS England service allows sender Controller organisations to exchange data with receiving Controller organisations.

Legal basis for collection and analysis²:

Health and Social Care Act 2012

Under the Booking and Referral Standard Direction 2022 NHS England can exercise the powers conferred by sections 254(1) and (6), and section 304(9), (10) and (12) of the Health and Social Care Act 2012¹ (the 2012 Act) and Regulation 32 of the National Institute for Health and Care Excellence (Constitution and Functions) and the Health and Social Care Information Centre (Functions) Regulations 2013² (the Regulations).

In accordance with sections 254(1) and 254(6) of the Health and Social Care Act 2012, NHS England is directed to establish and operate such systems for the collection and analysis of information as are necessary to provide the Booking and Referral Standard Services.

² The legal basis for collection and analysis was agreed prior to NHS Digital merging with NHS England on 1 February 2023.

In accordance with section 254(3) of the 2012 Act, NHS England considers that the information which could be obtained by complying with these Directions is information which it is necessary or expedient for NHS England to have in relation to its exercise of functions in connection with the provision of NHS services. 5.2

In accordance with Regulation 32 of the Regulations, NHS England is directed to exercise such systems delivery functions as are necessary for it to enable and facilitate the Booking and Referral Standard Service described in the Purpose.

11. Helpdesk

For more information on the Booking and Referral Standard please initially refer to the self-help information that is available on the [Booking and Referral Standard site](#). If you then require further information or to log a change request please contact:

NHS England

Email: enquiries@nhsdigital.nhs.uk

Please state 'Booking and Referral Standard' in the subject line.

Telephone: 0300 303 5678

Appendix A: Future use cases

This is not an exhaustive list.

999 → 111 (IUC inc CAS)
999 → Community Pharmacy
111 (IUC inc CAS) → Community Pharmacy
111 (IUC inc CAS) → Urgent Community Response team
999 → Urgent community response
111 (IUC inc CAS) → IUC Treatment Centre (OOH)
111 (IUC inc CAS) → Urgent Dental Care
999 → ED
999 → UTC
999 → IUC Treatment Centre (OOH)
111 (IUC inc CAS) → Ambulatory Care
111 (IUC inc CAS) → SDEC
999 → Ambulatory Care
999 → SDEC
999 → Dental
Hospital → Community Pharmacy
111 (IUC inc CAS) → GP Extended Access
Community Optom → Optom Hub
Optom Hub → Hospital
GP (inc. GPEA) → Community Pharmacy
GP (inc. GPEA) → Urgent Community Response
GP (inc. GPEA) → Ambulatory Care
GP (inc. GPEA) → ED
GP (inc. GPEA) → IUC Treatment Centre (OOH)
GP (inc. GPEA) → SDEC
GP (inc. GPEA) → UTC
999 → MH
999 → GP Extended Access
GP (inc. GPEA) → 999
GP (inc. GPEA) → Dentistry
GP (inc. GPEA) → Optometry
GP On-line Consultation → 999
GP On-line Consultation → Ambulatory Care
GP On-line Consultation → Community Pharmacy
GP On-line Consultation → Dentistry
GP On-line Consultation → ED
GP On-line Consultation → IUC Treatment Centre (OOH)
GP On-line Consultation → Optometry
GP On-line Consultation → SDEC
GP On-line Consultation → UTC
GP On-line Consultation → Urgent Community Response
999 → GP
111 (IUC inc CAS) → GP

Appendix B: Useful links

Resource	Full URL
Booking and Referral Standard	https://digital.nhs.uk/services/booking-and-referral-standard
Implementation Guide (detailed)	https://simplifier.net/guide/nhsbookingandreferralstandard
API Specification	https://digital.nhs.uk/developer/api-catalogue/booking-and-referral-fhir
Information Standards Notice	https://digital.nhs.uk/isce/publications/DAPB4060
111 Referral Standard	https://theprsb.org/standards/111referralstandard/
Information model	https://prsb2.vercel.app/page/111-referral?hsCtaTracking=daaa2fcc-83eb-4cc7-8170-a5d3ac964b48%7C43ee07dc-b2cb-4c3d-9423-0cb717b2a9fb
Booking and Referral Standard Directions 2022	https://digital.nhs.uk/about-nhs-digital/corporate-information-and-documents/directions-and-data-provision-notices/nhs-england-directions/booking-and-referral-standard-direction-2022