

DAPB0092 Amd 64/2020

# Commissioning Data Sets v6.3 Implementation Guidance

Published 15 June 2021



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# Data Alliance Partnership Board

Acting on behalf of the Data Alliance Partnership Board (DAPB), which holds delegated authority from the Secretary of State for Health and Social Care, the Data Alliance Partnership Sub Board (DAPSB) has approved a 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 approved by the Data Alliance Partnership Board (DAPB).

This information standard comprises the following documents:

- Requirements Specification
- Change Specification
- Technical Output Specification
- Implementation Guidance

An Information Standards Notice (DAPB0092 Amd 64/2020) 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 Digital 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.

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## Glossary of Terms

A full Glossary of Terms for the CDS Information Standard can be found within the CDS v6.3 Requirements Specification.

# Contents

<b>1</b>	<b>Introduction</b>	<b>4</b>
1.1	Purpose of Document	4
1.2	Scope of Document	4
1.3	Out of Scope of Implementation Guidance	4
<b>2</b>	<b>Background</b>	<b>6</b>
2.1	Commissioning Data Sets v6.3 Background	6
2.2	Legal Basis	7
2.3	Information Standards Notice Process	7
2.4	Related Standards	8
2.5	Related Documents	9
<b>3</b>	<b>Organisational Guidance</b>	<b>11</b>
3.1	Implementation Resource Requirements and Associated Costs	11
3.2	Information Governance	12
3.3	Data Quality	16
3.4	Skill Mix Changes and Training	18
3.5	Step-by-Step Implementation Guide	21
<b>4</b>	<b>Human Behavioural Guidance</b>	<b>28</b>
4.1	Data Users	28
<b>5</b>	<b>Technical Guidance</b>	<b>30</b>
<b>6</b>	<b>Maintenance</b>	<b>31</b>
6.1	Implementation Strategy	31
6.2	Data Set Maintenance	31
6.3	Data Set Requirements	32
6.4	Data Alliance Partnership Board (DAPB) and Data Alliance Partnership Sub Board (DAPSB)	32
6.5	Information Standards Notice (ISN)	33
<b>7</b>	<b>Risk/Issues</b>	<b>34</b>
<b>8</b>	<b>Implementation Support</b>	<b>35</b>
8.1	Support	35
8.2	SUS+ service updates	35
8.3	Disclaimer	35

# 1 Introduction

## 1.1 Purpose of Document

The following guidance is intended to support preparations for the implementation of the Commissioning Data Sets (CDS) v6.3 data submissions which begin from 1 April 2022.

This document is not exhaustive but aims to make users aware of guidance available, draw attention to essential steps and help services assess their state of readiness. This document also includes information on a variety of topics that impact implementation of the data set such as information governance, training, and ongoing maintenance. All aspects of this Implementation Guidance should be considered during initial set up (for new submitters) and reviewed as a result of uplift to CDS v6.3 (for existing submitters).

Users should make use of this document when preparing a high-level plan for how their organisation intends to tackle this implementation to meet the anticipated timescales.

## 1.2 Scope of Document

This document provides guidance on how to implement the CDS data set, either as a new user or a current user looking to make changes resulting from the release of the CDS v6.3 Information Standards Notice (ISN). This document should be read in conjunction with the following documents:

- CDS v6.3 Requirements Specification
- CDS v6.3 Change Specification
- CDS v6.3 Technical Output Specification
- CDS v6.3 User Guidance
- Existing Secondary Uses Service (SUS+)<sup>1</sup> guidance
- NHS Data Model and Dictionary Change Request

Please see section 2.5 of this document for a full list and descriptions of each related document listed above and where they can be found.

## 1.3 Out of Scope of Implementation Guidance

The following areas are out of scope of this document:

- Detailed background and justification for the development of the Information Standard. This information is included in the *Change Specification*.
- Detailed commentary on the data submission framework (i.e. how data is submitted by data providers to SUS). Further information about this is available from the [SUS Guidance](#) web page.

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<sup>1</sup> SUS+ was implemented in April 2017, replacing the previous legacy version (SUS) as the repository for healthcare data in England. 'SUS' remains in use as a generic term for the Secondary Uses Service as a whole, whereas 'SUS+' is used in this document to refer to the actual landing portal which is used for submissions of CDS data.

- Restating information already accessible from the *Technical Output Specification*, such as the specific structure and content of CDS.
- Detailed submission guidance relating to new or amended data items to aid interpretation and implementation within submission extracts. This information is available in the *User Guidance*.

## 2 Background

### 2.1 Commissioning Data Sets v6.3 Background

The Commissioning Data Sets (CDS) are patient level, secondary uses data sets providing information about NHS provided secondary care activity. CDS is used for a variety of purposes, including national reporting through Hospital Episode Statistics (HES), the allocation of payments through the National Tariff Payment System and measurement of waiting times through Referral to Treatment (RTT). The data is submitted through SUS in an XML format on a weekly, monthly, or annual basis, depending on the CDS type (see Appendix A of the CDS v6.3 Requirements Specification).

As a secondary uses data set, CDS re-uses clinical and operational data for purposes other than direct patient care. It defines the data items, definitions, and associated value sets to be extracted or derived from local information systems.

CDS v6.3 is an interim update to the existing CDS v6.2. The 'tactical release' of CDS v6.3 is designed to rapidly introduce a number of high priority changes so that SNOMED CT codes (including recently authored codes that relate to COVID-19) can be submitted to CDS as soon as possible.

The CDS v6.3 changes are mainly designed to update CDS in line with current clinical and data recording practices, as well as to support recent policy initiatives and enable conformance with other information standards and legislation introduced since CDS v6.2 went live in 2012.

In summary, the high-level changes in v6.3 include:

- Introduction of SNOMED CT, as per the SCCI0034 information standard
- Removal of Read Version 2/Clinical Terms Version 3 (CTV-3) structures
- Changes to conform with other information standards, such as:
  - DCB0028 Treatment Function and Main Specialty Standard
  - DCB3017 Overseas Visitor Charging Category (OVCC)
  - DCB0090 Health and Social Care Organisation Reference Data
  - DCB2094 Sexual Orientation Monitoring Standard
- Removal of enumerated value lists from XML schema for some data items
- Various updates to NHS Data Model and Dictionary pages and data items to reflect changes since the CDS was last updated
- Retirement of redundant CDS types which are no longer utilised or represent duplication
- Introduction of the ability to submit multiple commissioners and SPECIALISED SERVICE CODE data item, to support specialised commissioning requirements
- Minor changes to support NHS England and NHS Improvement Outpatient Transformation Programme requirements
- Acute Data Alignment Programme (ADAPT) changes to support alignment with the Private Healthcare Information Network (PHIN) submissions of data for private patients
- Additional data items to match and enable linkage with the forthcoming Ambulance Data Set
- Changes to enable the capture of risk assessments completed for ophthalmology patients and an associated 'latest clinically appropriate date' for treatment
- Enabling the reporting of digitalised fit notes issued in secondary care within CDS, in support of the forthcoming DAPB4011 eMED3 (Fit Notes) in Secondary Care information standard.

CDS v6.3 will ultimately replace CDS v6.2 (ISB 0092 Amd 16/2010), which was published in September 2012. A 12 month transition period is planned between April 2022 and April 2023 to enable care providers to start submitting CDS v6.3 data, at which point they will stop submitting CDS v6.2 data.

## 2.2 Legal Basis

The Health and Social Care Act 2012 (HSCA) makes two specific provisions with regard to the flow of data through NHS Digital.

1. section 254 - In order to establish and operate a system for the collection or analysis of information, the Secretary of State, or devolved authority, must provide to NHS Digital a description of the requirement in the form of a Direction.
2. section 259 – In order to require and request the provision of information from any health or social care body; or any person (other than a public body) who provides health services, or adult social care in England, NHS Digital must publish a procedure for notifying persons of requirements imposed, and requests made.

In respect of section 254, NHS Digital has received Direction from the Secretary of State for Health and Social Care requiring NHS Digital to establish and operate systems for the collection and analysis of information as are necessary for it to deliver the Spine services, and to exercise such systems delivery functions of the Secretary of State as are necessary for it to deliver the Spine services. SUS is one of the Spine services, and is the single, comprehensive repository for healthcare data in England. SUS enables a range of reporting and analysis to support the NHS in the delivery of healthcare services, including acting as the national repository for all CDS submissions. A copy of the Directions is published on the [‘Secretary of State Directions’ webpage](#).

In addition, a separate Information Governance Specification has been produced covering CDS v6.3 specifically. This document sets out how the CDS data is collected and analysed and should be read alongside the direction. The Information Governance Specification is also published on the [‘Secretary of State Directions’ webpage](#).

In respect of section 259, NHS Digital has produced a section 259 Notification for CDS which is published on the NHS Digital [Data Provision Notices web pages](#).

## 2.3 Information Standards Notice Process

All approved new data standards, and changes to existing standards, are communicated to the providers and system suppliers through the publication of an ISN. These notices are published and available to view on the [ISN web pages](#).

This Information Standard amendment has been put through rigorous assurance prior to approval by the Data Alliance Partnership Sub Board (DAPSB). The resulting Standard has been assigned Release Number Amd 64/2020 and retains standard number DAPB0092. The ISN formally requires care providers to submit data as per the HSCA.

The ISN does not directly place any requirement on system suppliers to accommodate the CDS within their systems. It is the care providers who must ensure that they have a system or systems to deliver the requirements specified in the standard. The IT Suppliers need to be

aware of these requirements so that they can respond to the care providers they support. The contractual agreement between care providers and system suppliers will dictate whether system suppliers have to abide by the ISN and at what cost.

Similarly, many submissions of CDS data are made on behalf of care providers by XML middleware suppliers. The ISN does not directly place any requirement on middleware suppliers, but there may be contractual arrangements in place between care providers and middleware suppliers which impose specific requirements on middleware suppliers relating to data submissions. Nevertheless, much of the guidance contained within this document may apply to middleware suppliers as well as (or instead of) care providers.

The Information Standard including latest amendments can be found on the [DAPB0092 CDS ISN webpage](#).

More information on the stages of information standard development is available on the [NHS Digital information standards and data collections \(including extractions\) web page](#).

## 2.4 Related Standards

Reference	Title
DCB0092-2062	<a href="#">Commissioning Data Sets (CDS) Version 6.2.2: Emergency Care Data Set (ECDS)</a>
DCB1069	<a href="#">Community Services Data Set (CSDS)</a>
DCB0011	<a href="#">Mental Health Services Data Set (MHSDS)</a>
DCB1513	<a href="#">Maternity Services Data Set (MSDS)</a>
ISB 0149-02	<a href="#">NHS Number for Secondary Care</a>
SCCI0034	<a href="#">SNOMED CT</a>
SCCI0021	<a href="#">International Classification of Diseases and Health Related Problems (ICD-10)</a>
DCB0084	<a href="#">OPCS Classification of Interventions and Procedures (OPCS-4)</a>
DCB0090	<a href="#">Health and Social Care Organisation Reference Data</a>
ISB 1553	<a href="#">Read Clinical Terms Version 2 (Deprecated)</a>
ISB 1552	<a href="#">Read Clinical Terms Version 3 (Deprecated)</a>
SCCI0075	<a href="#">Neonatal Critical Care Minimum Data Set</a>
SCCI0076	<a href="#">Paediatric Critical Care Minimum Data Set</a>
ISB 0153	<a href="#">Critical Care Minimum Data Set</a>
DCB3017	<a href="#">Overseas Visitor Charging Category (OVCC)</a>
DCB0028	<a href="#">Treatment Function and Main Specialty Standard</a>
DCB2094	<a href="#">Sexual Orientation Monitoring Standard</a>
DCB2050	<a href="#">Aggregate Contract Monitoring</a>
DCB3003	<a href="#">Patient Level Contract Monitoring</a>
DCB3002	<a href="#">Devices Patient Level Contract Monitoring</a>
DCB2212	<a href="#">Drugs Patient Level Contract Monitoring</a>

Reference	Title
DCB0129	<a href="#">Clinical Risk Management: its Application in the Manufacture of Health IT Systems</a>
DCB0160	<a href="#">Clinical Risk Management: its Application in the Deployment and Use of Health IT Systems</a>

Further details regarding the above standards can be found on the [Standards and Collections webpage](#). This webpage also contains a list of all current DAPB, and predecessor Data Coordination Board (DCB), Standardisation Committee for Care Information (SCCI) and Information Standards Board (ISB) standards and collections.

## 2.5 Related Documents

A comprehensive set of documentation has been developed by the NHS Digital Data Set Development Service (DSDS) for the CDS v6.3 Information Standard. These documents are located across various areas of the NHS Digital website as follows:

- [DAPB0092 CDS ISN web page](#): Contains DAPB Information Standard documentation which defines the standard and remains static following publication.
- [CDS web page on NHS Digital website](#): Contains supporting guidance documentation as well as organisational assessment and planning tools. These documents and tools are continually reviewed by DSDS and updated where necessary.
- [SUS guidance web page on NHS Digital website](#): Contains technical documentation relating to CDS submissions via SUS+, which is updated as and when needed and will be amended prior to CDS v6.3 go-live.
- [Technology Reference data Update Distribution \(TRUD\) web page](#): Contains the XML schema used for CDS submissions.

A breakdown of the individual products can be found below:

Document/Product	Description	Publication Status
<b>DAPB Information Standard Documentation</b>		
<i>Information Standards Notice</i>	Notification of publication of a new or amended standard.	Published on DAPB web page
<i>Change Specification</i>	Outlines a list of changes made to the CDS information standard. For example, the addition of new data items or groups, the renaming of data items/groups to conform to NHS Data Model and Dictionary and the deletion of other items.	Published on DAPB web page
<i>Requirements Specification</i>	<ul style="list-style-type: none"> <li>• Outlines the scope of the Information Standard.</li> <li>• Gives an overview of the requirements for both care providers and system suppliers, and associated conformance criteria (the tests that can be measured to assess whether the standard is being used correctly)</li> </ul>	Published on DAPB web page

Document/Product	Description	Publication Status
	<ul style="list-style-type: none"> <li>Includes key dates including implementation completion dates for both care providers and systems.</li> </ul>	
<i>Technical Output Specification (TOS)</i>	<p>This is the specification for the output data set required of care providers which is part of the ISN and published on the DAPB website. The TOS fully defines each data item within the data set and splits the data set into a number of groups (tables), each containing data items and values.</p> <p>This TOS will remain static as part of this Information Standard release.</p>	Published on DAPB web page
<i>Implementation Guidance (THIS DOCUMENT)</i>	A document containing guidance to support care providers and their system suppliers with the implementation of the data set, including organisational guidance around data set users and information governance, and a step-by-step implementation plan.	Published on DAPB web page
<i>NHS Data Model and Dictionary Change Request</i>	Provides a detailed technical specification of all changes made to the NHS Data Model and Dictionary as a result of the changes to this information standard.	Published on DAPB web page
<b>Technical Documentation</b>		
<i>Enhanced Technical Output Specification (TOS)</i>	<p>The Enhanced TOS contains all of the information included in the Technical Output Specification, which will remain static as part of this Information Standard release.</p> <p>The Enhanced TOS also includes additional information relating to the validations carried out by the XML submission schema and at the landing portal. The validations are not controlled through the DAPB process and can therefore be subject to change.</p> <p>To be referred to alongside the Data Model.</p>	Published on CDS web page
<i>Data Model</i>	The Data Model provides a pictorial representation of the output data set.	Published on CDS web page
<i>User Guidance</i>	Guidance for care providers and system suppliers about the structure and content of the data set, including guidance about how to map/submit each individual data item.	Published on CDS web page
<i>Submitting CDS data to SUS guidance</i>	Guidance for data submitters about sending CDS data via SUS.	Published on SUS web page
<i>Detailed Change Specification</i>	<p>Provides a detailed breakdown of the changes from the CDS v6.2 Technical Output Specification introduced for CDS v6.3.</p> <p>Changes to the Data Item Names, Formats, National Codes and their Descriptions, Mandation Levels, Repeats and Business Rules are marked for individual CDS types.</p>	Published on CDS web page
<i>CDS v6.3 XML schema</i>	The XML schema used to make submissions of CDS v6.3 data. The schema contains validations and enumeration in order to ensure that valid data is submitted.	Published on TRUD web page (expected September 2021)

## 3 Organisational Guidance

The updated CDS Information Standard may be used across the range of service providers and system suppliers, including:

- Providers of NHS funded secondary care services (including NHS Trusts and Independent Sector Healthcare Providers)
- Suppliers of secondary care systems, including Patient Administration Systems (PAS), Clinical Care Records systems and other operational systems such as Maternity and Critical Care
- CDS XML middleware suppliers

CDS may also be used by other organisations, such as national bodies like NHS England and NHS Improvement.

Health and care organisations and system suppliers should be aware of the requirements and conformance criteria specified for the standard. These are outlined in the *Requirements Specification* document.

This section provides guidance with regards to various implementation considerations for organisations seeking to implement the CDS within their services.

### 3.1 Implementation Resource Requirements and Associated Costs

Providers of secondary care activity which is either NHS funded, and/or provided by NHS organisations will have a requirement to collect data for both clinical and patient administration primary purposes.

CDS is designed to build on this requirement by gathering information in order to deliver robust, comprehensive, nationally consistent, and comparable person-based information on activity to support a variety of secondary use purposes (i.e. not for the direct care of the patient).

These include:

- Monitoring and managing NHS service agreements
- Developing commissioning plans
- Supporting the National Tariff Payment System
- Enabling the calculation of Healthcare Resource Groups (HRGs)
- Monitoring Health Improvement Programmes
- Underpinning clinical governance
- Understanding the health needs of the population
- Enabling reporting against referral to treatment (RTT) targets

As such, funding is not available for local implementation. Care providers are expected to locally resource the following activities:

- procure or install data collection systems
- train staff in order to facilitate data collection
- obtain an XML middleware supplier to make submissions on the care provider's behalf

- undertake additional activities required to facilitate data extract submission.

It is not within the scope of this document to provide advice with regards to the procurement of systems or middleware suppliers, however further advice is available by contacting NHS Digital via the [enquiries@nhsdigital.nhs.uk](mailto:enquiries@nhsdigital.nhs.uk) email address.

Care providers should however expect some resource to be required in order to uplift data collection to enable extraction of the required data items and make any system changes required. Providers may optionally make use of an accredited XML middleware supplier to make data submissions, which may also incur a local cost.

This requirement for resource is likely to be the case whether the provider is new to the data set or making amendments following publication of the ISN and should be provided for as part of the contract between commissioner and provider.

## 3.2 Information Governance

All data providers should be aware of their legal and professional obligations with regards to information governance as it applies to the mandated CDS standard. The NHS and government publish a significant amount of guidance that can assist data providers to comply with their obligations. Some of this information is signposted below. Please also see the NHS Digital [Looking after information](#) web page for an overview of information published by NHS Digital.

- [Confidentiality: NHS Code of Practice \(2003\)](#)

*“This document is a guide to required practice for those who work within or under contract to NHS organisations concerning confidentiality and patients’ consent to the use of their health records.”*

- [Report of the Review of Patient Identifiable Information \(1997\) \(Caldicott Report\)](#)

*“A review commissioned in 1997 by the Chief Medical Officer of England which highlighted six key principles and made 16 specific recommendations regarding the transfer of patient-identifiable information from NHS organisations to other NHS and non-NHS organisations.”*

- [The Information Governance Review \(2013\) \(Caldicott 2\):](#)

*“The guidance in this report is intended to help health and social care professionals and staff in sharing information appropriately in their day-to-day activities. There will, however, always be exceptional and difficult circumstances where solutions are not obvious. In these situations, professionals and staff should seek advice from Caldicott Guardians or their professional bodies and use their judgement to act in the best interests of their patients and clients.”*

- [Guide to the General Data Protection Regulation \(GDPR\)](#)

*“The guide to the General Data Protection Regulation contains:*

- *information about consent*
- *an explanation of rights under GDPR*
- *descriptions of special category and criminal offence data*
- *guidance on protecting children’s data”*

- NHS Digital has also published [A Guide to Confidentiality in Health and Social Care](#) (2013) which provides good practice advice and guidance for healthcare staff.

All data providers must ensure compliance with the transparency/fair processing requirement of the [Data Protection Act 2018](#) and the [General Data Protection Regulation \(EU\) 2016/679 \(GDPR\)](#). To meet these requirements, data providers must make available information and guidance to patients and/or their legal guardians regarding the processing of their data (or their child's data where applicable) for secondary uses purposes (such as service development analysis and national statistical research).

Information must be provided in a concise, transparent, intelligible, and easily accessible form and should include details such as an understanding of the data in question, what it will be used for and the patient's rights. This should be in the form of transparency/fair processing wording. Further details can be found in the [IGA GDPR: implementation checklist](#) under '7) Comply with more stringent transparency requirements'.

As a result of new data being included in the CDS for the first time, existing users should review their transparency wording as part of a wider Data Protection Impact Assessment (DPIA).

NHS Digital is also required to provide a [Transparency notice](#).

Data providers should note that the transparency requirements under GDPR replace the prior requirement to provide 'fair processing' or 'privacy' information.

### 3.2.1 Patient identifiable data items

CDS includes several patient identifiable items as follows:

- NHS Number
- Local Patient Identifier (Extended)
- Patient Name
- Patient Usual Address
- Person Birth Date
- Postcode of Usual Address

CDS necessarily includes patient identifiers to support the linkage of activity to create a complete picture of the patient pathway, for example across Admitted Patient Care and Outpatient Appointments, to allow linkage with emergency care data submitted via ECDS, and also to support commissioning of health services and remuneration for activity undertaken by care providers.

To ensure confidentiality, any CDS data released by NHS Digital is always pseudonymised except where a Section 251 approval is in place allowing an organisation (such as a commissioner) to receive identifiable data for a specific purpose. Data sharing with external organisations always occurs through the [Data Access Request Service \(DARS\)](#) and under Data Sharing Agreement and with the involvement of the [Independent Group Advising on the Release of Data \(IGARD\)](#) as necessary. Approved users can also access HES data to perform analysis via the [Data Access Environment \(DAE\)](#) and the Monthly Managed Extract Service (MMES), which allows users to receive an extract from HES on a monthly basis. CDS data is accessible to approved researchers from trusted organisations through the NHS Digital Trusted Research Environment (TRE) service for England. TRE contains linked, de-identified health data to enable users to quickly answer COVID-19-related research questions. Other national NHS organisations also receive CDS data from SUS+ under similar approvals.

CDS v6.3 does not contain any new patient identifiable items, however the Local Patient Identifier field utilised in CDS v6.2 has been replaced with Local Patient Identifier (Extended), in order to futureproof CDS v6.3 by allowing longer identifiers to be used and to align it with other related data sets.

### 3.2.2 New sensitive data items/values

CDS v6.3 introduces the ability to flow SNOMED CT codes. There will be guidance issued to care providers, and made available on the NHS Digital website, detailing the types of codes that should be included in each field. However, due to the regular release cycle for new SNOMED CT codes there will not be a technical restriction on what codes a care provider could include, other than codes restricted for legal or copyright reasons (see below). Therefore, a care provider may enter a code which identifies additional information, such as marital status.

CDS v6.3 will also introduce other new data items, but these do not have specific information governance implications. Further details are available in the CDS v6.3 Change Specification.

### 3.2.3 Legally restricted codes

To ensure that the SUS+ service is processing CDS data in accordance with the law it uses a list of legally restricted codes. The list of codes regarded by SUS+ as being legally restricted is published separately [on the SUS website](#). This document will be updated with applicable SNOMED CT codes prior to CDS v6.3 submissions starting.

On submission of records containing legally restricted codes, or where a patient has submitted a withdrawal of consent request via the national data opt-out (see below), providers must anonymise the record by removing the patient identifiable data items listed in Section 3.2.1, with the exception of Local Patient Identifier (Extended), before submitting data to SUS.

Further information is available in the [Submitting CDS data to SUS](#) guidance.

### 3.2.4 Patient opportunity to object to data sharing as applied to CDS

NHS Digital is not reliant on “[section 251 support](#)” when mandated to collect data via Directions from NHS England and NHS Improvement or the Department of Health and Social Care and when acting as data controller. This is set out in sections 254 and 255 of the Health and Social Care Act 2012. As a result, explicit consent to flow data from providers to NHS Digital is not required; however, providers are required to inform patients that their information will be used to support secondary uses and should highlight the national data opt-out process as part of their transparency information.

The national data opt-out allows patients to opt-out of sharing their information for research or planning purposes once it reaches NHS Digital. This process replaces the previous ‘type 2’ opt-out which required NHS Digital to refrain from sharing a patient’s confidential patient information for purposes beyond their direct care. Further information about patient opt-outs is available on the [National data opt-out programme webpages](#), which include resources for health and care staff to use when informing patients of their rights.

#### Other potentially identifiable information

CDS also flows data with respect to staff members.

GDPR allows naming of health and social care professionals (and other persons) if the inclusion has been assessed that it is reasonable to disclose without that individual's consent considering the relevant circumstances, including:

- the type of information that you would disclose
- any duty of confidentiality you owe to the other individual
- any steps you have taken to seek consent from the other individual
- whether the other individual is capable of giving consent, and
- any express refusal of consent by the other individual.

Staff members should be notified by the care provider where their data will flow as part of CDS.

### 3.2.5 Compliance Against Statutory Requirements

The specification and guidance for implementing this data set have been designed to support organisations in adhering to their statutory responsibilities relating to Information Governance, Data Protection Act 2018, the Freedom of Information Act 2000 and GDPR 2018. It is the responsibility of the providing organisation to ensure that these statutory responsibilities are adhered to.

### 3.2.6 Potential Safety/Confidentiality/Risk Considerations

CDS utilises information already collected in a variety of potentially disparate provider systems and collated in a non-clinical setting for secondary uses purposes.

The primary purpose of the CDS v6.3 standard is for secondary uses only and will therefore have no direct impact on Clinical Safety. As such it is not in scope of [DCB0129 - Clinical Risk Management: its Application in the Manufacture of Health IT Systems](#). Consequently, a Clinical Safety Case Report is not required to support this standard.

However, changes made to CDS v6.3 may require modification to the health IT system(s), including any possible SNOMED CT changes, from which the collection or extraction is made. The safety implications of any modifications must be considered by the manufacturer and all other parties involved under DCB0129 and the health organisation under [DCB0160 - Clinical Risk Management: its Application in the Deployment and Use of Health IT Systems](#). It is expected that manufacturers and organisations will take ownership of this risk and make the necessary additions to their respective Clinical Safety Case Reports.

As with all secondary use data sets there is a small underlying risk that the capture of additional information may be time consuming thus potentially impacting upon patient care. To mitigate this risk every effort has been taken to ensure that all changes to the CDS are already routinely captured for primary use purposes.

Stakeholders including the NHS (NHS England and NHS Improvement, NHSX, care providers, commissioners), and the Department of Health and Social Care (DHSC) are actively encouraged to raise any potential safety risks or adverse incidents during definitional testing and consultation exercises throughout the development of each release of this standard. To date no significant issues relating to safety or potential adverse incidents have been identified.

Any concerns, potential safety risks identified or adverse incidents resulting from the implementation of these changes to CDS should be reported immediately to the user's local CDS lead and/or informatics team. This will then be escalated through the correct process.

### 3.2.7 Further Information

NHS Digital offers guidance on protecting data and handling information securely.

Our guidance is designed to help health and care organisations meet the standards required to handle care information:

<https://digital.nhs.uk/data-and-information/looking-after-information/data-security-and-information-governance>

## 3.3 Data Quality

### 3.3.1 Local Data Quality

Each organisation will have its own corporate framework for managing data quality in respect to data collection, submission, and publication. Such a framework is likely to involve a number of components such as leadership and direction from a senior officer, organisational and departmental data quality objectives, data quality audits and a performance management framework. It is recommended that appropriate components of the corporate data quality framework include CDS, so that data quality relating to the data set is at the heart of the organisation's data quality framework.

The care provider should also apply data quality requirements as outlined within the NHS Data Security and Protection Toolkit. Full details are available on the [Data Security and Protection Toolkit web page](#).

### 3.3.2 National Data Quality

There are two levels of validation applied to CDS interchanges - they are:

- XML schema validation applied at SUS+ landing. Before sending an interchange, users are advised to validate the interchange against the appropriate XML schema locally.
- SUS business validation applied at the SUS server. Following receipt of the interchange, a number of 'business' validations are applied. If the interchange fails any of the validations it is rejected, and a notification is sent to the registered user(s). A single error will cause failure of the entire interchange.

Details of the validation applied at CDS attribute level and the Mandatory/Optional status of each attribute can be found in the NHS Data Dictionary in the [Commissioning Data Sets](#) and [CDS Business Rules](#) sections, as well as in the *Enhanced Technical Output Specification*.

As part of the CDS v6.3 release, some XML schema validation has been removed and replaced by SUS business validations. This change applies to enumerated lists of applicable national codes which have been removed from the XML schema for certain data items. This change enables updates to these national code lists in CDS to be made in line with future updates to other standards, such as the Treatment Function and Main Specialty Standard.

Data quality checks will instead be applied by the SUS portal for these data items via a new business rule, to ensure that appropriate values are being submitted.

Additional Data Quality checks will be performed by the NHS Digital SUS/HES Data Quality Team. This will involve analysing submitted CDS v6.3 data to identify potential data quality issues for an individual care provider or nationally. This could result in NHS Digital working with the provider to ensure that they are aware of potential data quality issues and identifying the resolution. It may also result in publication of improved guidance or consideration of future changes to CDS.

VODIMN (Valid, Other, Default, Invalid, Missing, Not Applicable) reports will be made available to providers within SUS to flag potential data quality issues with submitted data. This will enable providers to identify and resolve any data quality issues prior to resubmitting the data to SUS.

### 3.3.3 Data Quality Risks

At organisational, departmental, and individual levels, risks related to data quality should be identified and mitigated. Examples of risks, which could be considered, are:

- Organisational - does the organisation have corporate policy and objectives for managing data? Is there a senior officer with overall responsibility for data quality?
- Team - are all relevant staff aware of the purpose and importance of collecting data for the national data set? Are there sufficient resources available to continue data collection during staff absences?
- Individuals - do staff have sufficient time within their work routine to collect the data? Is there a need for additional training so staff can possess appropriate skills to collect the data (especially where systems are upgraded)?

### 3.3.4 Organisational and Departmental Objectives

In any organisation, resources should be deployed towards organisational and departmental objectives. The organisation's performance management framework will identify the extent to which objectives are met, and where necessary, revised.

Where the data set is used to monitor progress towards objectives, there should be greater emphasis on collecting good quality data. It may be necessary to embed the data set subject area into the organisation's performance management framework (and therefore set local objectives) to ensure data is collected in a reliable and timely manner.

Some organisations will have well developed processes and systems that, with minimum effort, will accommodate the data set. Other organisations, for which processes and systems are underdeveloped or in their infancy or which are new to submission of the CDS, may require significant changes. In such instances, organisations may choose to plan the implementation of this Information Standard as a priority to ensure sufficient resources are deployed for conformance.

The implementation of a new or re-engineered process may be more successful where organisations use peer organisations to identify and replicate areas of good practice.

### 3.3.5 Timeliness

The data should be entered in local systems and submitted in a timely manner according to the prescribed submission frequency for each CDS Type as defined in the *Requirements Specification*, *Technical Output Specification* and NHS Data Model and Dictionary, and as per the [SUS+ submission timetable](#). This will ensure that the data set can deliver meaningful, relevant, and timely reports for stakeholders.

Submissions should be followed by a review of data quality feedback to implement improvement actions.

Data quality feedback will be provided at the point of submission to the data landing platform (in line with the restrictions defined in the XML schema), as well as by the NHS Digital SUS/HES Data Quality Team based on findings following additional Data Quality checks and analysis of the CDS data submitted, as described in section 3.3.2 National Data Quality.

In particular, providers should reference the mandate requirements and business rules section detailed within the *Enhanced Technical Output Specification* to understand the specific requirements defined for individual data groups, sub-groups as well as data items.

### 3.3.6 Utilisation of Data Quality Feedback

The validations applied to data submission files at the data landing platform, which are described in the *Enhanced Technical Output Specification*, are designed to report errors and inconsistencies within a single submission. The data suppliers are required to utilise these reports as early as possible following the initial submission.

Any data quality feedback, provided by the landing platform at the point of data submission or by the NHS Digital SUS/HES Data Quality team following data analysis and additional data quality checks, is not designed to replace local data validation but is designed to assist with this activity.

### 3.3.7 Local Data Validation

The validations, which are described in the *Enhanced Technical Output Specification*, only relate to the structure and validity of the submitted data. On submission it will be impossible to identify whether data is accurate and complete because the valid submission file may not contain all intended records. The accuracy and completeness of data should be assessed via local data quality measures.

## 3.4 Skill Mix Changes and Training

Care provider and system supplier organisations will benefit from developing a local implementation strategy that covers CDS. The strategy should ensure the identification of skills gaps which might impact on the implementation and maintenance of the CDS extract within the organisation. Staff affected will include clinicians, administration personnel, informatics personnel and IT services.

The data set is an output-based specification for data submission. Consequently, 'in scope' services will normally collect information locally using an electronic system, whether this is a commercial or a bespoke system. To ensure systems are used in the correct manner,

system suppliers and/or care providers will need to provide guidance for staff on how to use the local system.

Training that might need to be considered includes:

Technical skills:

- Data input training
- Using new technologies such as hand-held devices
- Using new applications
- Understanding of the latest CDS Information Standard and changes from the previous version
- Uploading data from remote devices to provider network/system
- Collation of data from clinical system(s), for example in a data warehouse
- Validation of extract
- Rectification of poor data quality
- Compilation of the submission in the XML schema
- Usage of the data landing platform including uploading and accessing extracts and data quality reports
- Analysis of data quality reports.

Soft skills:

- Interpersonal and communication skills in asking questions on sensitive data related areas.
- Collaboration between clinical and informatics staff to identify and resolve errors in data entry and address systemic data quality issues.
- Information governance

**Clinicians:** A local implementation strategy may require additional skills and training for clinicians in using new functions and modules within an existing or new IT system, for example SNOMED CT.

**Administration Personnel:** A local implementation strategy may require additional skills and training for administration personnel in using new functions and modules within an existing or new IT system. Additionally, administration personnel may be responsible for transcribing data to a new IT system.

**Informatics and IT Support Services:** From an IT or Information Management Service perspective, skills may be required in

- configuring local systems to capture information using SNOMED CT as required
- developing and maintaining a local data warehouse
- creating a submission file from a spectrum of local IT systems
- creating uni- or bi-directional interfaces between electronic systems.

Please note that some of the above responsibilities and associated skills, in particular relating to data submissions, may be fulfilled by XML middleware suppliers on behalf of care provider organisations.

**Information Governance:** CDS facilitates the flow of patient identifiable data. All organisations involved in the collection and dissemination of data that will ultimately form part of the CDS must ensure that staff involved in data handling in any respect are fully conversant with the organisational information governance responsibilities.

For further information regarding the information governance responsibilities of care provider organisations with respect to patient confidential data, please see section 3.2 Information Governance.

NHS Digital does not offer explicit training in any of these areas; however, we are able to help users through:

- leading regular events/webinars to help familiarise users with the data set
- responding to queries sent to the NHS Digital queries mailbox
- producing written guidance referenced elsewhere in this document and other documents
- holding one to one meetings to discuss specific issues
- other means appropriate to the organisations and issues involved.

Please see Section 8 for details of how to contact us.

## 3.5 Step-by-Step Implementation Guide

### 3.5.1 New Users – Implementing the CDS for the first time

The table below provides a high-level summary of essential steps for implementing the CDS within your organisation.

Activity	Step	Description
Background, Objectives and Scope	Understand the background to the project, and the scope of the Information Standard	Establish whether the CDS implementation applies to your organisation. Review this <i>Implementation Guidance</i> along with the <i>Requirements Specification</i> to fully understand the background, objectives, and scope of this Information Standard.
Communications	Identify and engage with key stakeholders	<p>Identify the key stakeholders for your CDS implementation and ensure they are aware of the requirement. In particular:</p> <p>Read section ‘3.4 Skills Mix Changes and Training’ to fully understand what local support may be required for different stakeholder groups.</p> <p>Inform local commissioners of progress with implementation and discuss plans for utilising the data made available post-submission.</p> <p>Ensure relevant systems suppliers and involved stakeholders (including XML middleware suppliers) are aware of the requirements for CDS systems and submissions as per the <i>Requirements Specification</i>.</p> <p>Maintain ongoing stakeholder engagement.</p>
	Keep up to date with news and updates	<p>Attend any of the regular stakeholder events which may have relevance to your organisation. Contact us (see Section 8) for further details.</p> <p>Consider joining groups such as the <a href="#">SUS+ User Group</a> to receive regular updates regarding development and implementation progress</p>
Information Requirements	Understand how the data is grouped within the data set	Review the <i>Data Model</i> and the <i>Enhanced Technical Output Specification</i> to understand at a higher level how the data items are grouped, and how those groups relate to each other.
	Decide whether and how data items will be collected – Data Mapping.	<p>Look more closely at each individual data item in the <i>Technical Output Specification</i> and check whether local systems record the data in a way that means it can be submitted within the CDS v6.3, either directly or with local transformation. Consider recording progress towards mapping each data item.</p> <p>Read the <i>User Guidance</i> for further guidance on interpretation and data mapping.</p>
	Prioritise approach to meeting information requirements	Prioritise your approach to implementing CDS and achieving full coverage of the information requirements. This should involve agreeing how implementation might

Activity	Step	Description
		<p>be phased, for example by identifying those services that are well placed to collect CDS as 'early adopters'.</p> <p>You may choose to prioritise:</p> <ul style="list-style-type: none"> <li>• by data items (e.g. all mandatory data across all systems in all services first)</li> <li>• by service (e.g. starting with largest services)</li> <li>• by system (e.g. all data from a particular clinical support system first)</li> <li>• by CDS type (e.g. start by implementing outpatient data in Type 020, then move on to the Admitted Patient Care types).</li> </ul>
Information Governance	Ensure the organisation complies with Information Governance requirements.	<p>The <i>Implementation Guidance</i> signposts additional information relating to Information Governance (IG) issues surrounding the use of health service data. Caldicott Guardians and relevant service lead(s) MUST:</p> <ul style="list-style-type: none"> <li>• Review the Information Governance Guidelines signposted within the <i>Implementation Guidance</i> to understand the issues around data submission, storage and reporting processes when handling identifiable and sensitive data items.</li> <li>• Review management of the consent issues and put in place local processes.</li> <li>• Review the Information Governance guidelines outlined on <a href="#">the NHS Digital web pages</a>.</li> <li>• Consider other CDS-specific issues, such as <a href="#">the list of legally restricted codes</a> where records must be anonymised</li> </ul> <p>The <i>User Guidance</i> may also contain data item level guidance in relation to specific local information Governance aspects, where appropriate.</p>
Submission Process	Understand the end-to-end submission process	<p>Message Exchange for Social Care and Health (MESH) is used to transfer batch data securely to SUS. The basic unit of transfer is an interchange.</p> <p>An interchange is a discrete file of data which may contain one or more individual data messages (APC, OP, etc).</p> <p>Sender organisations and their XML suppliers are responsible for:</p> <ul style="list-style-type: none"> <li>• Installing the MESH client</li> <li>• Keeping MESH up to date with new versions</li> <li>• Safeguarding the security of the local MESH host</li> </ul> <p>The MESH mailbox ID must be registered as a secure, 'authenticated endpoint' with SUS+ (whitelisting) via National Service Desk.</p>

Activity	Step	Description
		For more information, including about BULK and NET submission methods, please review the <a href="#">SUS Guidance</a> web page and <a href="#">Submitting CDS data to SUS</a> document to fully understand the data submission process.
	Ensure compliance with technical requirements to enable data submission	<p>Look more closely at the technical requirements needed to get ready for data submission. In particular, ensure sufficient time is allowed to take action where required.</p> <p>These requirements are further described in the <a href="#">SUS Guidance</a> web page.</p> <p>Ensure your organisation has a registered Organisation Data Service (ODS) code and Senior Information Risk Owner (SIRO) and that their details are registered on the SIRO Register. For more information about the SIRO role and to check/add registration details please see the <a href="#">ODS webpages</a>.</p>
	Gain accreditation for making data submissions	<p>Data senders requiring the use of an XML translation service must select a supplier from the list of accredited middleware suppliers before they can submit data to SUS, or alternatively gain accreditation themselves. The terms of any contract are negotiated between the sender organisation and the middleware supplier.</p> <p>Implementation guidance for XML and the list of accredited XML Service Suppliers can be found on the <a href="#">SUS+ Essentials web page</a>, which provides further guidance on the submission process.</p>
	Obtain access to the SUS Application	<p>Undertake the authorisation process to enable members of staff to be authorised to access the data landing platform to upload submission files.</p> <p>Detailed instructions are available on the <a href="#">SUS Guidance web page</a>.</p>
	Obtain a copy of the latest XML Schema	Obtain a copy of the XML Schema pack, which defines the exact structure and content of the submission file, once available from TRUD. Details can be found within the <a href="#">SUS Guidance web page</a> .
	Construct and send data submission file	<p>Use local processes and technologies to generate the XML submission file and submit this via SUS+.</p> <p>The Information Standard does not stipulate any particular local processes that should be used to generate the required output file. It may be that some data providers will construct a temporary local data warehouse to enable them to aggregate data from a number of different sources.</p> <p>Please note that this step may be completed by your accredited XML middleware supplier.</p>
	Fully understand the validations that will be applied to the submission	The <i>Enhanced Technical Output Specification</i> lists all the population/business rules that will be applied during XML file validation process at the point of data submission.

Activity	Step	Description
		Review this specification to ensure a thorough understanding of the errors and messages that may be produced and also how they can be fixed for later submissions.
	Understand the data extracts made available to data providers and commissioners	Data can be accessed by extracting it from the secure portal, using an NHS Smartcard. Extract specifications are available on the <a href="#">SUS guidance web page</a> .  Data providers and commissioners will need to consider how they may use the extract files. Data providers should remain in contact with local commissioners such as to explain any changes to data submitted or with respect to identified data quality issues.
Share your implementation experience	Get in touch with the team	The DSDS welcome any feedback you may have on the submission process and data set design – see Section 8 for contact details. Any requirements raised may be incorporated into CDS v6.3 (in the form of guidance or documentation updates) or future releases of the standard (if major changes such as new data items are needed).

### 3.5.2 Existing Users – Implementing v6.3 changes

The table below provides a high-level summary of essential steps for implementing the changes to the CDS within your organisation.

Activity	Step	Description
Background, Objectives and Scope	Understand the background to the project, and the scope of the Information Standard	Review this <i>Implementation Guidance</i> along with the <i>Requirements Specification</i> to fully understand the background, objectives, and scope to this Information Standard.
Communications	Engage with key stakeholders	Continue to ensure that stakeholders are aware of the requirements. In particular:  Read section '3.4 Skills Mix Changes and Training' to fully understand what local support may be required for different stakeholder groups.  Inform local commissioners of progress with implementation and discuss plans for utilising the data made available post-submission.  Ensure relevant systems suppliers and involved stakeholders (including XML middleware suppliers) are aware of the requirements for CDS systems and submissions as per the <i>Requirements Specification</i> .  Maintain ongoing stakeholder engagement.
	Keep up to date with news and updates	Attend any of the regular stakeholder events which may have relevance to your organisation.  Consider joining groups such as the <a href="#">SUS+ User Group</a> to receive regular updates regarding development and implementation progress.

Activity	Step	Description
Information Requirements	Understand how the data is grouped within the data set	Review the <i>Change Specification</i> , <i>Data Model</i> , and the <i>Enhanced Technical Output Specification</i> to understand how the new or amended data items are grouped and how those groups relate to each other.
	Decide whether and how new or amended data items will be collected – Data Mapping	<p>Look more closely at each individual data item in the Technical Output Specification and check whether local systems record the data in a way that means it can be submitted within the CDS v6.3, either directly or with local transformation. Consider recording progress towards mapping each new data item.</p> <p>Read the <i>User Guidance</i> for further guidance on interpretation and data mapping.</p> <p>The <i>Change Specification</i> can be used to identify the new or amended data items.</p>
	Prioritise approach to meeting information requirements	Prioritise your approach to implementing the CDS changes and achieving full coverage of the new/amended information requirements.
Information Governance	Ensure the organisation continues to comply with Information Governance requirements	<p>The <i>Implementation Guidance</i> signposts additional information relating to Information Governance (IG) issues surrounding the use of health service data. Caldicott Guardians and relevant service lead(s) MUST:</p> <ul style="list-style-type: none"> <li>• Review the Information Governance Guidelines signposted within the <i>Implementation Guidance</i> to understand the issues around data submission, storage and reporting processes when handling identifiable and sensitive data items.</li> <li>• Review management of the consent issues and put in place local processes.</li> <li>• Review the Information Governance guidelines outlined on <a href="#">the NHS Digital web pages</a>.</li> <li>• Consider other CDS-specific issues, such as <a href="#">the list of legally restricted codes</a> where records must be anonymised</li> </ul> <p>The <i>User Guidance</i> may also contain data item level guidance in relation to specific local information Governance aspects, where appropriate.</p>
Submission Process	Review the end-to-end submission process	<p>Message Exchange for Social Care and Health (MESH) will continue to be used to transfer batch data securely to SUS. The basic unit of transfer is an interchange.</p> <p>For more information, including about BULK and NET submission methods, please review the <a href="#">SUS Guidance web page</a> and <a href="#">Submitting CDS data to SUS</a> document.</p>
	Obtain a copy of the latest XML Schema	Obtain a copy of the CDS v6.3 XML Schema pack, which defines the exact structure and content of the submission file, once available from TRUD. Details can be found within the <a href="#">SUS Guidance web page</a> .

Activity	Step	Description
	Construct and send data submission file	<p>Use local processes and technologies to generate the XML submission file and submit this via SUS+.</p> <p>The Information Standard does not stipulate any particular local processes that should be used to generate the required output file. It may be that some data providers will construct a temporary local data warehouse to enable them to aggregate data from a number of different sources.</p> <p>Please note that this step may continue to be completed by your accredited XML middleware supplier.</p>
	Fully understand the validations that will be applied to the submission	<p>The Technical Output Specification lists all the population/business rules that will be applied during XML file validation process at the point of data submission.</p> <p>Review this specification to ensure a thorough understanding of the errors and messages that may be produced and also how they can be fixed for later submissions.</p>
	Understand the data extracts made available to data providers and commissioners	<p>Data can be accessed by extracting it from the secure portal, using an NHS Smartcard. Extract specifications are available on the <a href="#">SUS guidance web page</a>.</p> <p>Data providers and commissioners will need to consider how they may use the extract files. Data providers should remain in contact with local commissioners such as to explain any changes to data submitted or with respect to identified data quality issues.</p>
Share your implementation experience	Get in touch with the team	<p>The DSDS welcome any feedback you may have on the submission process and data set design – see Section 8 for contact details. Any requirements raised may be incorporated into CDS v6.3 (in the form of guidance or documentation updates) or future releases of the standard (if major changes such as new data items are needed).</p>

### 3.5.3 Impact of v6.3 changes on existing users

The impact of the CDS v6.3 changes will vary depending on the relevance of each change to individual data providers.

#### 3.5.3.1 Backward Compatibility

Due to the changes to data groups and items introduced in CDS v6.3, as well as the introduction of an updated XML submission schema (see below), CDS v6.3 will not be 'backward compatible' with previous versions of CDS. Providers will not be able to submit CDS v6.2 data "as is" using the CDS v6.3 XML Schema.

### 3.5.3.2 XML Schema

The changes included in this release require amendments to the CDS XML Schema. This means that all existing data providers will be required to submit CDS v6.3 data using a new CDS v6.3 XML Schema, which will be available in September 2021 (see below).

There will be a transition period of around 12 months (April 2022 to April 2023) to enable users to move between submitting CDS v6.2 and CDS v6.3. During this period of 'dual running', submissions made using either the CDS v6.2 or CDS v6.3 XML Schema will be accepted. This dual running period is expected to end on 1<sup>st</sup> April 2023 when all CDS data must be submitted in conformance with the CDS v6.3 standard, as set out in the *CDS v6.3 Requirements Specification*.

For further details about obtaining and using the CDS v6.3 XML Schema, please see the [SUS Guidance](#) web page, which will be updated to reflect the CDS v6.3 schema once it is published.

### 3.5.4 High-level implementation timescales

The CDS v6.3 ISN was released in June 2021. However, further activity is planned following publication of the ISN that may have an impact on implementation. An overview of these activities and the planned timescales are shown below.

These timescales are indicative, and are correct at the time of ISN publication, but may be subject to change.

- July 2021 – Enhanced Technical Output Specification published
- September 2021 – CDS v6.3 XML schema published, and relevant SUS guidance updated
- September 2021 and February 2022 – CDS v6.3 stakeholder webinars held
- October 2021 – CDS v6.3 User Guidance published
- January-February 2022 – state of readiness questionnaire circulated
- April 2022 – go-live of CDS v6.3 submissions
- April 2023 – end of 12-month transition period to move from CDS v6.2 to v6.3
- April-September 2023 – CDS v6.3 post-implementation review

### 3.5.5 Further Guidance

Detailed submission guidance to support the major changes included in CDS v6.3 can be found in the *User Guidance*, *Enhanced Technical Output Specification* and the [SUS Guidance web page](#).

## 4 Human Behavioural Guidance

The following section describes how the changes to the data set should be used by clinical and operational staff and care providers. Providers should meet the compliance requirements for their IT system or systems to implement the CDS v6.3 changes. This section also explains where data, in relation to the data set, can be found in the care pathway.

- **Clinical and Administrative Staff:** will be responsible for capturing information as part of the on-going care of the patient i.e. for primary use purposes and will be responsible for capturing information such as demographics and details of contacts/activities.
- **Secondary Care Informatics Staff:** will be responsible for the collation of information, which may come from a range of disparate systems, into a single data extract which can be loaded into the CDS XML schema and subsequently submitted to the data landing platform. This will include ensuring completeness and data quality of the information within the data set. This role may also be fulfilled in part by specialist staff at XML middleware supplier organisations.
- **Clinical Care Records, Patient Administration Systems (PAS) and other operational systems:** should be implemented by care providers ensuring that data items can be captured electronically, and an output produced or derived to nationally agreed standards to allow extraction and/or derivation to produce the CDS.

### 4.1 Data Users

#### 4.1.1 Primary Users

CDS is not intended for primary data use. The CDS Technical Output Specification is not a specification for the standardisation of a patient care record, but it is based on clinical and operational information. Care providers have the flexibility to adopt any local data collection process or system as long as the local data collection frameworks can output a suitable data extract as per the data set specification, which can be submitted to the data landing platform.

Providers should therefore look to re-use their clinical and operational systems to extract CDS data.

#### 4.1.2 Secondary Users

As a secondary uses data set the CDS will be made up of existing data extracted from Patient Administration Systems (PAS), Electronic Patient Records (EPR) and clinical systems.

Information generated by this NHS Information Standard through individual record-level data extracts or published aggregate reports (in the form of HES data) is likely to be used by the following organisations:

**At a local level:**

- Providers of Outpatient and Admitted Patient Care services including NHS and Independent Sector healthcare providers
- Commissioners including CCGs and Specialised Commissioners.

**At a national level:**

- NHS England and NHS Improvement
- Department of Health and Social Care (DHSC)
- Care Quality Commission (CQC)
- NHS Digital
- Commercial companies (where approved through the [Data Access Request Service](#))
- Research organisations including Universities
- National Institute for Health and Care Excellence (NICE)
- The media

The following practitioners are likely to analyse information captured through the amended CDS:

- managers
- performance analysts
- statisticians
- finance staff
- commissioners
- researchers

More details on the statistical analysis carried out by NHS Digital on data collected via CDS can be found on the [HES webpage](#).

## 5 Technical Guidance

Technical guidance in support of the CDS can be found in a number of supporting documents described at the beginning of this document, section 2.5 Related Documents.

Users should also review:

- [NHS Data Model and Dictionary](#) – provides full details of data structures, groups and items included in CDS v6.3, including definitions each data item, associated value lists and information about other national data sets where the items are used.
- [SNOMED CT web pages](#) – provides further information about SNOMED CT, which is being introduced as part of the CDS v6.3 release, including resources such as training materials and a SNOMED CT terms browser. See also [the SNOMED International website](#).

## 6 Maintenance

### 6.1 Implementation Strategy

The CDS Information Standard (DAPB0092), including the associated *Requirements Specification* and *Technical Output Specification*, will be formally maintained by NHS Digital in accordance with the DSDS maintenance process. This includes the creation of a CDS v6.3 Maintenance Plan for internal use within NHS Digital.

NHS Digital has an agreement with the CDS Steering Group, which it jointly chairs with NHS England and NHS Improvement, that future versions of CDS will be developed following the release of CDS v6.3. This will avoid the possibility of long delays between releases in the future, as occurred between the release of CDS v6.2 (in 2012) and v6.3.

To determine when a new version will be developed and released, relevant policy, practice, and classifications, including NHS Data Model and Dictionary and Information Standards Notices (ISNs), will be continually monitored by the DSDS. Where changes are identified, the risk and benefits in relation to timescales will be assessed to prioritise the requirement into a planned release, in conjunction with the CDS Steering Group and data set submitters (for example through consultation with the CDS v6.3 Expert Reference Group and SUS+ User Group).

The proposed strategy of regular updates to CDS will aid local planning and development by providing consistent CDS releases, each containing a specific and limited set of changes, making implementation deadlines more achievable.

CDS v6.3 was purposely planned as an interim release. This was in order to introduce changes such as the introduction of SNOMED CT relatively quickly in response to the COVID-19 pandemic. As a result, more major changes were deferred until a future release.

The prioritisation of future changes, and the roadmap for CDS updates, will be determined in consultation with the CDS Steering Group.

### 6.2 Data Set Maintenance

Maintenance of the data set will be required on an ongoing basis to ensure the data set remains fit for purpose. CDS must continue to meet and support wider information standards, reflect clinical practice accurately and support required national analysis with minimum burden for data submitters.

The scope of the DSDS maintenance process covers:

- Management of change requests from users and stakeholders. Changes currently under consideration are recorded on the CDS Requirements Tracker
- Elaboration of data requirements through engagement with senior stakeholders, including provision of support and guidance to external stakeholders in developing the data set changes to meet information/policy requirements
- Development of options papers when required to enable senior stakeholders and the CDS Steering Group to make informed design decisions
- Establishment and maintenance of data set specific Expert Reference Groups (ERGs), which consist of care provider and system supplier representatives

- Liaison with care provider and system supplier organisations to develop appropriate technical solutions, for example through the SUS+ User Group and CDS ERG. This may also involve the NHS Digital Data Liaison Service.
- The process for authorisation and approval of changes to data set items, including obtaining DAPB standard change acceptance
- Undertaking periodic reviews of the data set including data items, definitions, and data values
- Horizon scanning for potential changes to policy that may impact the data sets
- Ongoing updates to associated guidance documents outside the new version development cycle, for example to respond to changes in policy and practice, to clarify or improve pre-existing guidance and amend identified errors. Documents affected include *User Guidance* and the *Enhanced Technical Output Specification* (provided this does not change the *Technical Output Specification* published alongside the standard).

## 6.3 Data Set Requirements

Requirements for future versions of the Data Set can be submitted to NHS Digital by the sponsor, stakeholders, and users.

Requests can be submitted, describing any proposed changes to the CDS, to NHS Digital via [enquiries@nhsdigital.nhs.uk](mailto:enquiries@nhsdigital.nhs.uk) (please include 'FAO DSDS - CDS' in the subject line).

Each request should be supported by a valid business requirement, i.e. what change is needed, justification (why is it needed) and also any associated timescales.

Any requirement requests will be considered and agreed by the CDS Steering Group and subject to wider consultation with users prior to submission to the DAPB for formal assurance and the publication of an ISN. The ISN will inform the NHS and system suppliers of the changes and timescales.

## 6.4 Data Alliance Partnership Board (DAPB) and Data Alliance Partnership Sub Board (DAPSB)

Acting on behalf of the Data Alliance Partnership Board (DAPB) which holds delegated authority from the Secretary of State for Health and Social Care, the Data Alliance Partnership Sub Board (DAPSB) meets on a monthly basis to review and approve the assurance of information standards and data collections (including extractions), known collectively as ISCE. Approval takes place under section 250 of the Health and Social Care Act 2012.

Formal approval of an NHS Information Standard Change submission by the DAPSB will be required prior to publication and implementation of any data set change.

For more information, please visit the [NHS Digital information standards and data collections](#) web page.

## 6.5 Information Standards Notice (ISN)

Any changes to this NHS Information Standard will be communicated to the relevant providers of services affected, and their associated system suppliers, via the publication of an ISN. This will outline any new or changed requirements and associated timescales for implementation.

## 7 Risk/Issues

The DSDS currently hold a list of known risks and issues relating to CDS v6.3, which are also recorded on the NHS Digital Corporate Risk Information System (CRIS) as required. In the event that a technical risk or issue needs to be raised by a supplier or care provider, this should be communicated to NHS Digital by writing to [enquiries@nhsdigital.nhs.uk](mailto:enquiries@nhsdigital.nhs.uk).

To help us redirect your questions to the most appropriate team and to speed up our response times, please include 'FAO DSDS - CDS' in your subject line.

## 8 Implementation Support

### 8.1 Support

For specific enquiries relating to the CDS v6.3 Information Standard please contact NHS Digital via the central customer service centre:

Telephone: 0300 303 5678

Email: [enquiries@nhsdigital.nhs.uk](mailto:enquiries@nhsdigital.nhs.uk) (please include 'FAO DSDS - CDS' in subject line)

### 8.2 SUS+ service updates

The [SUS service announcements and outages](#) web page provides regular timely information to users relating to the details of planned outages and other announcements for the Secondary Uses Service (SUS+).

Any service issues can also be reported to the National Service Desk on 0300 303 5035, by email to [ssd.nationalservicedesk@nhs.net](mailto:ssd.nationalservicedesk@nhs.net), or via the [web reporting tool](#).

### 8.3 Disclaimer

This document is intended to provide guidance for users in relation to the capture and submission of information for the Commissioning Data Sets (CDS). It is not intended to represent official policy or legislative guidance.

If you are concerned that any aspect of this guidance does not accurately reflect the intended purpose and/or official policy, legislative or practice guidance; please send details to NHS Digital at [enquiries@nhsdigital.nhs.uk](mailto:enquiries@nhsdigital.nhs.uk) (including 'FAO DSDS - CDS' within the subject line).