



UK Health  
Security  
Agency

# **Cover of Vaccination Evaluated Rapidly (COVER)**

## **Implementation Guidance v2.3**

DAPB0089 Amd 80/2021

# 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 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
- Implementation Guidance
- Change Specification

An Information Standards Notice (DAPB0089 Amd 80/2021) has been issued as a notification of use and implementation timescales. Please read this alongside the documents for the standard.

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

Date of publication: 6 January 2022

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# 1. Purpose

This document outlines how to implement the COVER standard. The COVER (Cover of Vaccination Evaluated Rapidly) surveillance system measures vaccine coverage for each vaccine of the routine childhood immunisation programme in England up to the age of 5 years old. In addition, United Kingdom Health Security Agency (UKHSA) in collaboration with the National Public Health Service for Wales, Public Health Agency, Northern Ireland and Health Protection Scotland, reports UK immunisation coverage data for children aged one, 2 and 5 years of age.

Vaccine coverage data is extracted quarterly (official statistics) and annually (national statistics) from local Child Health Information Systems (CHISs) and submitted to NHS Digital via the Strategic Data Collection Service (SDCS) portal. UKHSA uses the data collected in SDCS to produce quarterly and annual (in collaboration with NHS Digital) reports and associated coverage data. CHISs are commissioned by NHS England and NHS Improvement.

The ability to reliably measure vaccine coverage plays an essential role in evaluating the success of a vaccination programme, identifying susceptible populations for further interventions and informing future vaccine policy decisions. This is dependent on having an accurate eligible population (denominator) and a robust method of ascertaining the number of those eligible individuals who have received a particular vaccine dose (numerator).

Local coverage data is used for performance management, local risk assessment and response to community outbreaks of vaccine-preventable diseases. The COVER return monitors whether age dependent vaccinations have been given in a timely manner and promotes equal access to care services by providing coverage data for all local authorities (LA) and general practices (GP).

A glossary of terms is available in the Requirements Specification.

## 1.1 Overview

This information standard is sponsored by UKHSA and fully supported by the Department of Health and Social Care. It is being led by the Immunisation and Vaccine-Preventable Diseases Division of UKHSA. Child health information system providers have been facilitating the reporting of vaccine coverage data under the COVER programme since 1987.

PHE has worked with NHS Digital to maximise opportunities to link data collections and gain optimal value from them and now use the NHS Digital SDCS portal to collect vaccine coverage. SDCS has been used since 2018 to collect GP-level vaccine coverage management information. From April 2019, SDCS has become the data source for the COVER programme

with both local authority level and GP level coverage data being submitted using a single submission template.

## 1.2 Related documents

Reference	Title
1	<a href="#">DAPB0089 COVER – Specification</a>
2	<a href="#">DAPB0089 COVER – Change Specification</a>
3	<a href="#">DAPB0089 COVER – NHS Data Model and Dictionary Change Request</a>
4	<a href="#">DAPB0089 COVER – Implementation Guidance (this document)</a>
5	<a href="#">DAPB0089 COVER - User Guide</a>
6	<a href="#">CHIS Output and Information Requirements</a>

## 2. Human behavioural guidance

The specification for the submission process for the COVER local authority and GP level vaccine coverage data must be implemented using the Information Standard [DAPB0089](#). Local authority and GP level data must be submitted by CHISs to SDCS using a single submission template uploaded via an online portal. UKHSA use SDCS data to analyse and report coverage data quarterly and annually. Four quarterly and one annual submission of each data set is required.

A user guide has been published on the UKHSA [website](#) and distributed via existing contact lists to data providers. UKHSA has also distributed guidance documents to relevant stakeholders in UKHSA, NHE England and local authorities.

### 2.1 CHISs IT systems

The CHISs IT systems are not expected to need more than one reporting quarter to implement the Information Standards Notice (ISN). NHS Digital will provide [guidance](#) to facilitate the implementation and will offer support to IT systems as appropriate. IT systems are expected to provide an IT end user experience that allows its users to provide UKHSA with the data it requires for its reports, as per COVER Information Standard. IT systems teams should also ensure that their users are provided with adequate technical guidance and support.

### 2.2 Child health record departments

Following the publication of the Standard, child health record departments will submit local authority and GP level data via the SDCS portal, referring to the COVER programme user guide. For each local authority, Child Health record departments should list all GPs whose practice forms part of that local authority. UKHSA and NHS Digital will provide guidance to facilitate the submission of quarterly and annual data. Child health record departments may choose to train their staff on extracting and submitting COVER data and may use the user guide and other relevant Standard documentation for training.

## 3. Organisation guidance

### 3.1 Information governance

COVER data outputs from CHISs do not contain patient identifiable information. Submissions are only required to include the eligible population size and the number vaccinated according to the relevant field definitions. Data is required to be submitted at aggregated local authority (LA) and GP levels. Data submissions for the selective Hepatitis B (at risk babies born to mothers who are hepatitis B surface antigen positive), and BCG programme will contain small numbers at the local authority level and figures are therefore suppressed in the published data due to potential disclosure as required by the code of practice for official statistics.

Data are collected by NHS Digital and transferred to UKHSA. Access and storage of COVER data is governed by the UKHSA Information Governance Policy. All information is used in accordance with the Data Protection Act 2018, the Public Health (Control of Disease) Act 1984, the Public Health (Infectious Diseases) Regulations 1988, and the NHS Act 2006 (section 251), the Health and Social Care Act 2012, and the Care Act 2014. All records are kept securely in compliance with the Caldicott guidelines. Access and storage of COVER data was assessed for GDPR compliance as part of a UKHSA-wide compliance exercise for all information assets, and was found to be compliant

The legal basis for NHS Digital to collect COVER data will be provided by a [Direction](#) from or on behalf of the Secretary of State for Health and Social Care (that is, via UKHSA).

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

### 3.2 Data quality

Data quality is ensured by following [NHS Data Model and Dictionary](#) formatting and definitions. COVER data must be submitted in the format of the approved request parameters. NHS Digital and the COVER team have data validation procedures, both automated and manual sense checking, that ensure data compliance and quality. Draft local data tables are also subject to data quality assurance from NHS England and NHS Improvements local teams prior to publication.

### 3.3 Conformance

The conformance to the implementation of the standard will be measured against the quality of the COVER data outputs, measured against the following criteria:

- data is complete and submitted in an appropriate format
- data is accurate and in line with vaccine coverage field definitions
- data is timely (in line with data submission deadlines)
- data output relates to correct data collection period
- data contains denominators for 3 month (BCG only), 12 month, 24 month and 5 year cohorts
- data is not missing numerators (excludes BCG and neonatal Hepatitis B)
- data relates to correct geographical area and code
- full conformance should be achieved by 6 July 2022

## 4. Technical guidance

### 4.1 User (CHRDs)

The user should conform to the checklist below to ensure that they:

- have contacted their IT system supplier if there are uncertainties about how the IT system output needs to be configured to ensure compliance with the Information Standard and agreed a solution
- have trained all relevant staff members to ensure local authority and GP data can routinely be submitted as per COVER Information Standard
- have established a quality assurance process including external validation. It is recommended that COVER data (local authority level at least) should be checked for major data quality issues by the relevant NHS England and NHS Improvements local team prior to submission - see process flow in section 5 of this document

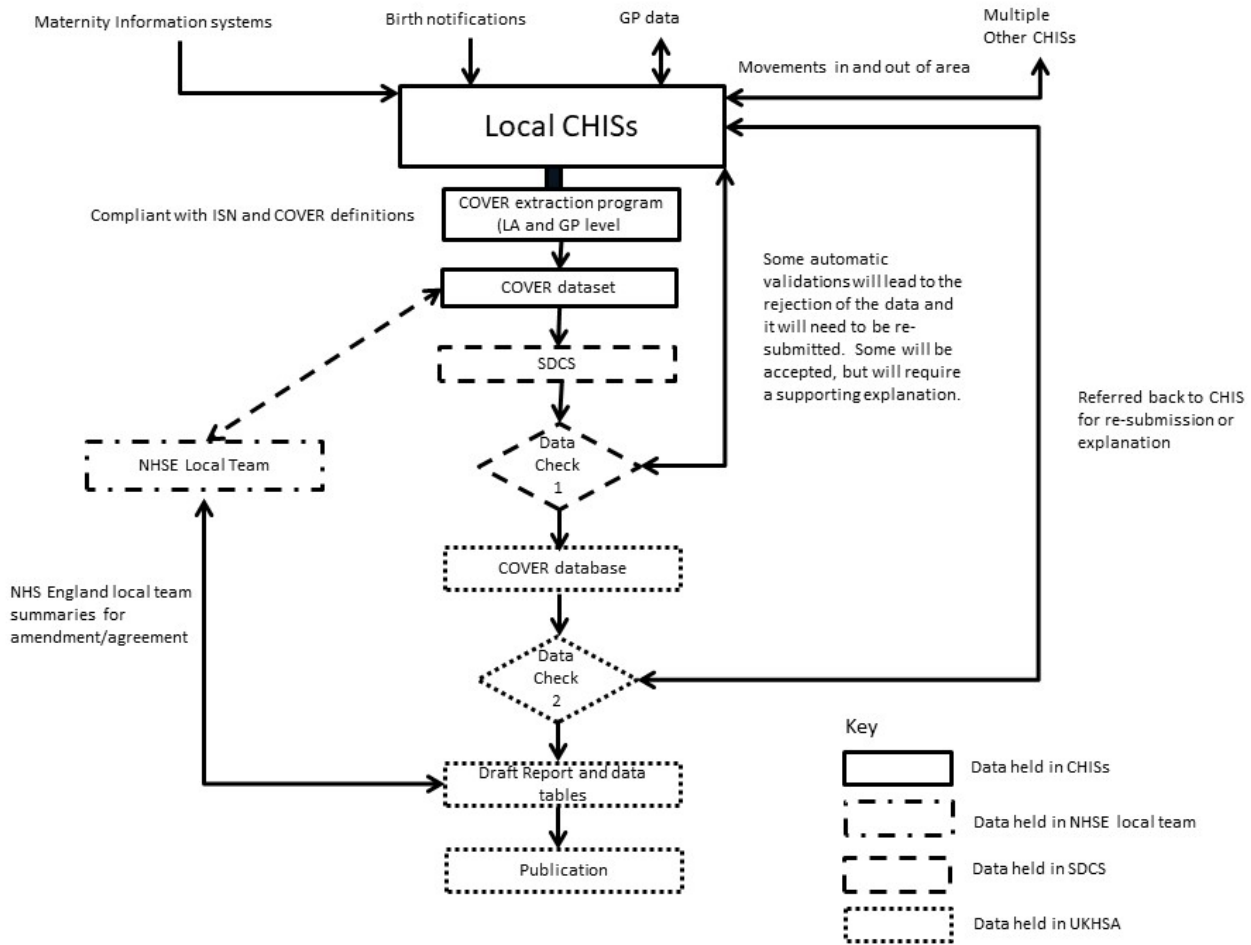
### 4.2 IT systems

Each IT system team should conform to the checklist below to ensure that it:

- is aware of and conforming to CHIS service specification - refer to CHIS service specification
- is compliant with the COVER Information Standard and has assured itself that it enables its users to extract data in compliance with the COVER Information Standard
- provides its users with adequate guidance, in the form of documentation and/or training, to enable them to extract data in compliance with the COVER Information Standard
- ensures the COVER data output satisfies the IT system conformance criteria
- has implemented an error reporting mechanism and has assured itself that system issues can be reported and logged

## 5. Process flows

COVER data flows can be found below. Users and suppliers should refer to the technical guidance checklist, COVER specification and user guide for testing extracts against the vaccine definitions and conformance criteria.



## 6. Technical specification

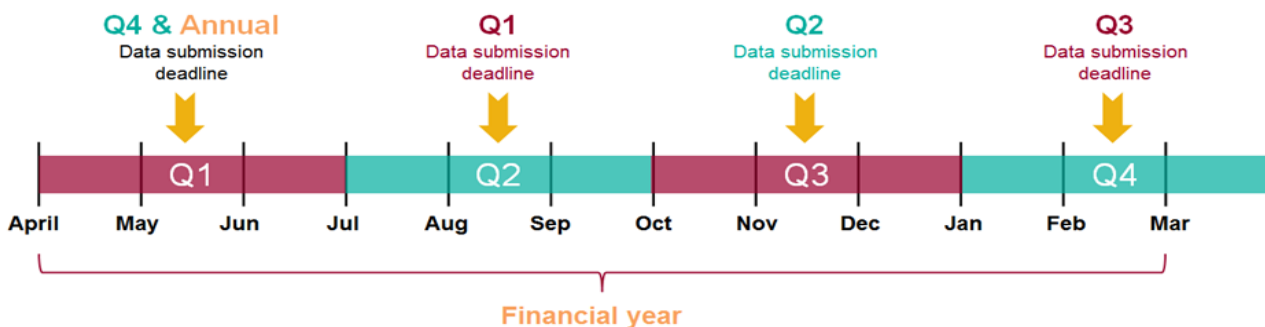
### 6.1 Time period

COVER data extracts (GP and LA) are required on a quarterly and annual cycle (financial year):

- Quarter 1: 1 April to 30 June
- Quarter 2: 1 July to 30 September
- Quarter 3: 1 October to 31 December
- Quarter 4: 1 January to 31 March

### 6.2 Frequency

Data submission deadlines can be found on this UKHSA COVER [webpage](#). Data extracts should be run within one month of the end of the quarter. The basic cycle of COVER submissions throughout a financial year can be found below:



### 6.3 Format

Local authority and GP level data is to be submitted using the data collection template via the SDCS.

### 6.4 Transmission

All data for the COVER programme must be submitted via the SDCS portal.

### 6.5 Definitions

Refer to vaccine field definitions and codes in COVER User Guide and requirements specification.

# About the UK Health Security Agency

UKHSA is responsible for protecting every member of every community from the impact of infectious diseases, chemical, biological, radiological and nuclear incidents and other health threats. We provide intellectual, scientific and operational leadership at national and local level, as well as on the global stage, to make the nation health secure.

[UKHSA](#) is an executive agency, sponsored by the [Department of Health and Social Care](#).

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