ICU Data Capture System
User Guide

ICU Summary Dashboard

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Using the ICU Summary Dashboard

Introduction

There are up to two report dashboards available to users depending on their permissions and access to the system. The dashboards provide an overview of data on the system to direct user's workflow and highlight outstanding actions. The available dashboards are:

- ICU Summary (summary of cases entered onto the system, data completeness and sign-off);
- ICU Benchmarking (allows users to assess their organisation compared to other organisations in terms of rates and counts of reported cases) - please see the ICU Benchmarking Dashboard User Guide for further information.

ICU Summary Dashboard

The ICU Summary Dashboard has up to three elements, access to which is determined by user permissions. When first landing on the ICU Summary Dashboard, a report based on pre-set default parameters, similar to Figure 1 will appear. To view and modify the parameters (Figure 1) click on the small down arrow towards the top of the screen. The parameters can be hidden by clicking this arrow again (Figure 1). Each of the ICU Summary Dashboard elements will now be described in turn. An overview of the different report parameters on the Summary Dashboard can be found in Table 1.

Figure 1: The ICU Summary Dashboard

> Click on the arrow to view and/or amend report parameters

There are up to four elements available on the ICU Summary Dashboard; the 'Summary' chart, the 'Trends' chart, 'Data Collection Completeness' element and Sign-Off History. Each of these are discussed in turn below Table 1.

ICU Summary Dashboard Report Navigation

Several of the Summary Dashboard Elements have hyperlinks allowing users to navigate to other sub-reports. In order to return to the previous report, click on the small back arrow located at the top of sub-reports (Figure 2) and NOT your browser's 'Back' button.

Figure 2: Sub-Report to Main Report Navigation
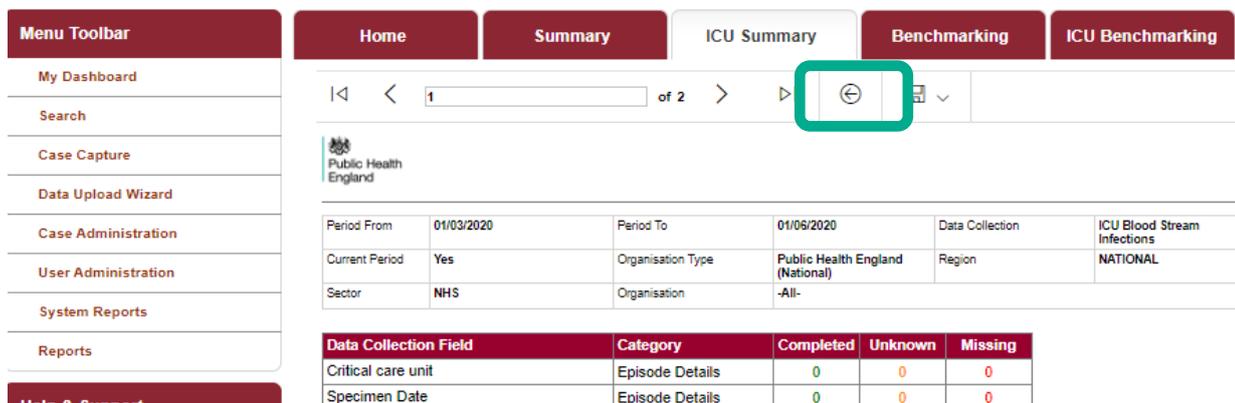
ICU Summary Dashboard Parameters

Table 1: Overview of the report parameters on the ICU Summary Dashboard

Parameter	Reports affected	Comment
Period From and Period To	By default: • Summary graph • Trends graph Only if Current Period is set to 'No': • Data Completeness • Sign-Off History	Changes the time period the data is shown for. The time periods selected will always modify the data returned in the 'Summary' and 'Trends' elements of the Summary dashboard. However, these dates will **only** modify the other elements of the ICU Summary Dashboard if 'Current Period' is set to 'No'. See below.
Summarisation Type	• Summary graph • Trends graph	Changes the chart output to 'Count' or 'Rate'. This parameter only affects ICU Summary Dashboard elements/data collections where a rate can be returned.
ICU Classification	• Summary graph • Trends graph	Changes the type of units for which the data will be displayed. Options include 'All', 'Adult', 'Neonatal' and 'Paediatric'. Default value is 'All'.
Rolling Average	• Trends graph	Changes the duration of the rolling average calculation. For example, a 3 month rolling average is calculated as the average of the 'Count' or 'Rate' of the current month and the previous two months. For a 6 month period the calculation would use the current month and the previous 5 months of data, etc. Note the rolling average calculation in the 'Trends' chart will use data prior to the selected 'Period

Parameter	Reports affected	Comment
		From' in order to calculate the rolling average for the initial data points. The amount of data used prior to the 'Period From' is determined by the 'Rolling Average' selected.
Data Collection	• Summary graph • Trends graph	Changes which 'Data Collection' the charts present data for. Users can opt for 'ICU Blood Stream Infections', 'ICU Monthly Census' or 'ICU Daily Census'. **NB.** Only 'ICU Blood Stream Infection' 'Data Collection' can be selected to look at 'Summarisation Type' = 'Rate'
Limit Report To	• Summary graph • Trends graph	Allows the chart data to present: 'All cases', or cases by possible ICU association ('ICU-associated' or 'Pre-ICU').
Source	• Summary graph • Trends graph	Enables data to be presented according to the primary source of infection (for example, CVC-related, CVC-associated, Skin/soft tissue etc).
Current Period	• Data Collection Completeness • Sign-off History	The 'Current Period' works differently for the 'Data Completeness' and 'Sign off History' elements. Please refer to the specific sections below for more detail. For 'Data Collection Completeness' the 'Current Period' parameter set to 'Yes' allows inclusion of data from the start of the earliest unsigned off period to the end of the current reporting period regardless of 'Period From' and 'Period To'. If the parameter is set to 'No', only data between 'Period From' and "Period To" will be displayed. For 'Sign-off History' the 'Current Period' paramenter set to 'Yes' allows to view only latest unsigned-off periods that are due to be signed- off (e.g. April-June 2020 in July 2020) regardless of 'Period From' and 'Period To'. If the parameter is set to 'No',the sign-off status of periods between 'Period From' and 'Period To' is displayed.
Denominator	• Summary graph • Trends graph	This option is only available if 'Summarisation Type' is set to 'Rate'. Allows you to select from the different denominators available based on the other parameters already selected for.

| Parameter	Reports affected	Comment
		For example, for 'ICU Blood Stream Infection' 'Data Collection' with 'Source' = 'All' and 'Limit Report To' = 'All' and 'Organisation Type' = 'Intensive Care Unit' you will have multiple options of denominator to calculate your rate for, the default of which is 'Occupied bed days, (per 1000)'. Please refer to the '*Denominator User Guide'* for more information on the appropriate denominator to choose.
Denominator Period	• Summary graph • Trends graph	This will default to 'Most applicable' which means the system will automatically select the time period of the denominator to cover the 'Period From' and 'Period To' dates entered. A specific denominator period can be selected if required. Note this option is only available if 'Summarisation Type' is set to 'Rate'. Please see the Denominator User Guide for more information.
Organism	• Summary graph • Trends graph	Allows data to be presented according to a specific organism(s) detected in positive blood culture sets. This is a multi-select drop-down filter, defaulted to 'All' organisms, but these can be restricted to one or multiple organisms of interest.
Bacteraemia Category	• Summary graph • Trends graph	Allows data to be presented according to different BSI definitions, the default is 'All' which is unrestricted and refers to all reported postive blood cultures.
Frequency	• Summary graph	The 'Frequency' filter changes whether the Summary chart is presented weekly, monthly etc. Note this filter only modifies the output of the Summary element.
Sector	• Summary graph • Trends graph • Data Collection Completeness • Sign-off History	This determines whether data reported by the NHS or Independent Sector is shown. Note if viewing data by 'Independent Sector Healthcare Provider' then the 'Sector' filter must be set to 'Independent'.
Region	• Summary graph • Trends graph • Data Collection Completeness	This will filter the list of organisations to those within the selected region. This will be limited to the regions the user has permissions to view data for.

Parameter	Reports affected	Comment
	• Sign-off History	
Organisation Type	• Summary graph • Trends graph • Data Collection Completeness • Sign-off History	Allows the report to be presented based on the selected 'Organisation Type'. This will be limited to the organisation types the user has permissions to view data for.
Organisation	• Summary graph • Trends graph • Data Collection Completeness • Sign-off History	Allows the report to be presented based on the selected 'Organisation/s'. This will be limited to the 'Organisation Type' the user has permissions to view data for. Selecting a non-reporting organisation type will map cases to the selected type, based on the organisational hierarchy.

Summary and Trends Elements

These elements show two graphs at the top of the report screen. The Summary chart, on the left (Figure 3), shows the number or rate of cases entered as per report parameters. Signed-off data appears as a blue line and unsigned-off data as a red dashed line. If any reporting organisation within the selected report parameters has unsigned-off data this will be reflected as a red line, for example if the report is run for Public Health England (PHE) and any of the ICUs in the country have unsigned off data, then the line for PHE will be red.

The Trends chart, on the right (Figure 3), shows a monthly rolling average of the number or rate of cases over time.

Figure 3: Summary and Trends elements of the ICU Summary Dashboard
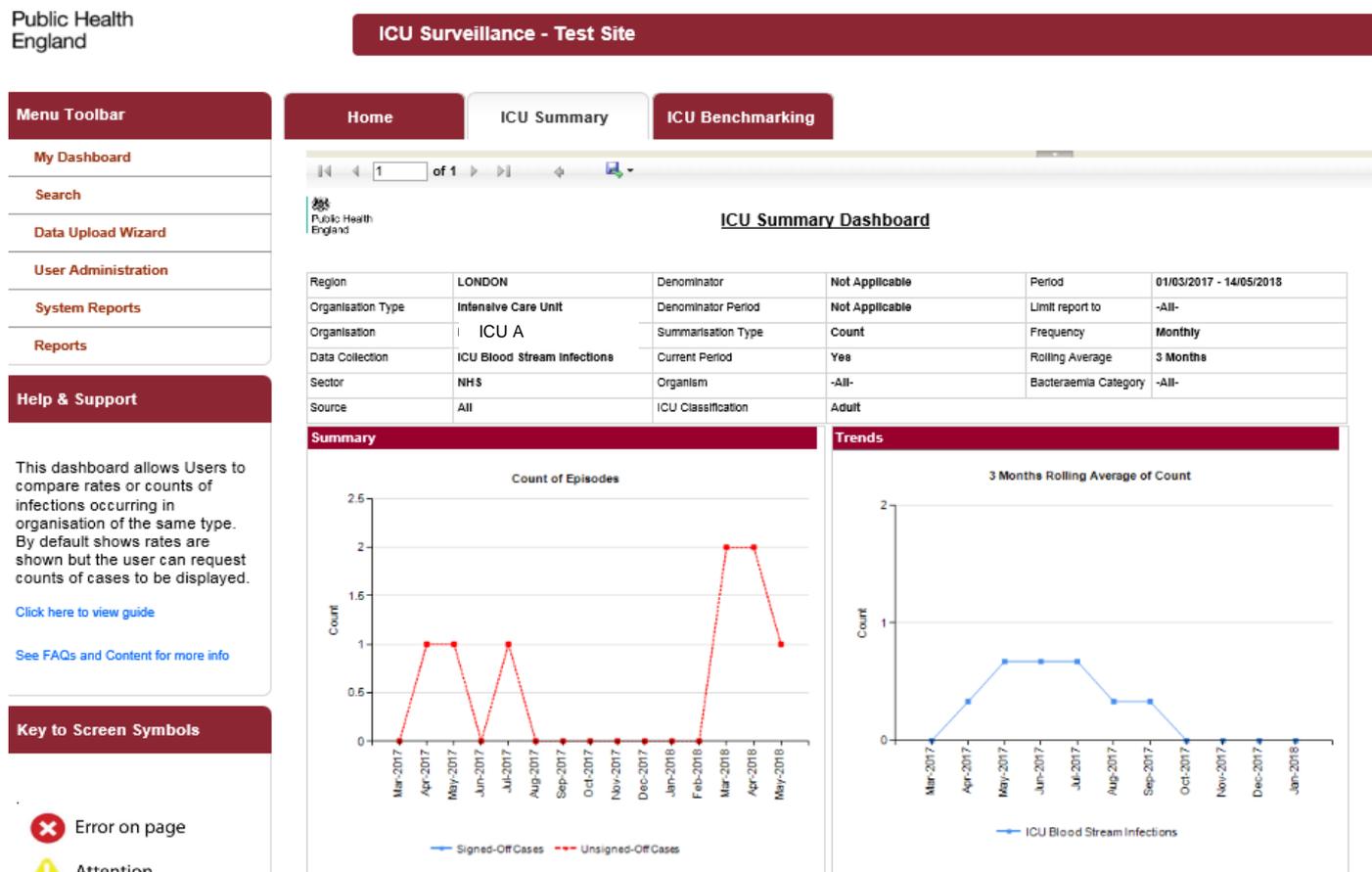
Data Collection Completeness Element

This element (Figure 4) shows the completeness of mandatory and optional questions for each of the 'Data Collections' and allows users to drill down to view the record/s which require further data entry (Figure 5). Users who have patient-level access but do not have permission to view Personal Identifiable Information (PII) will be able to drill down to these records; however, the PII will be pseudoymised.

Setting the 'Current Period' control to 'Yes' will return data from the earliest unsigned-off period onwards. If there are no unsigned-off data, data from the start of the previous second month onwards will be returned (i.e. data from 01/09/2020 will be displayed in October 2020).

An overview of the report output can be found in Table 2.

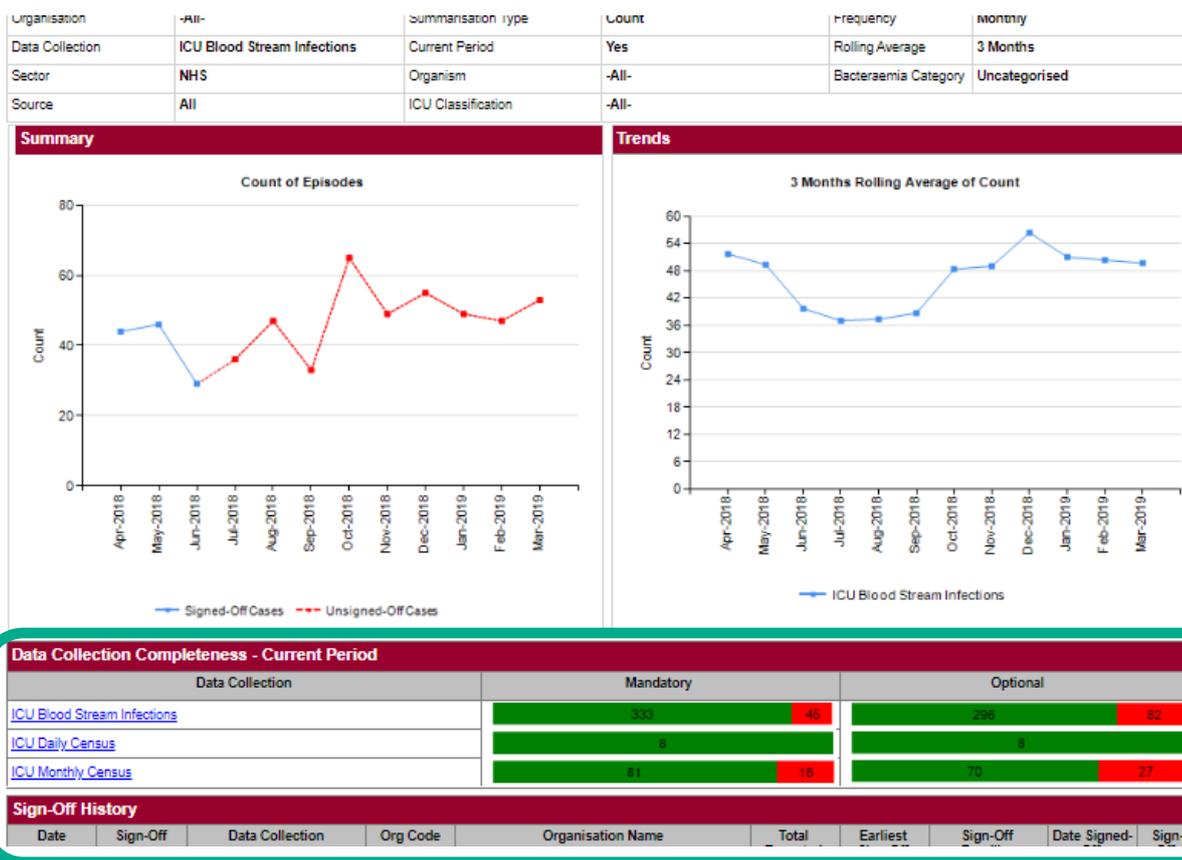**Figure 4: Data Collection Completeness element of the ICU Summary Dashboard**

Organisation	-All-	Summarisation Type	Count	Frequency	Monthly
Data Collection	ICU Blood Stream Infections	Current Period	Yes	Rolling Average	3 Months
Sector	NHS	Organism	-All-	Bacteraemia Category	Uncategorised
Source	All	ICU Classification	-All-		

Summary — Count of Episodes

Trends — 3 Months Rolling Average of Count

Data Collection Completeness - Current Period			
Data Collection	Mandatory		Optional
ICU Blood Stream Infections	333	46	296	82
ICU Daily Census	8		8	
ICU Monthly Census	81	16	70	27

Sign-Off History								
Date	Sign-Off	Data Collection	Org Code	Organisation Name	Total	Earliest	Sign-Off	Date Signed-	Sign-

Table 2: Data Collection Completeness – Interpreting the Report Output

Parameter	Comment
Data Collection	List of the relevant 'Data Collections'. Clicking on the 'Data Collection' hyperlink navigates to the drill down report shown in Figure 5. This report shows the number of cases with 'Completed', 'Unknown', or 'Missing' responses for each 'Data Collection Field'. Clicking on the number in each of the 'Completed', 'Unknown' or 'Missing' cells further drills down to a list of the case/s (Figure 6). The ID is a hyperlink which will navigate to the case capture screen allowing any missing data to be completed. If the data are within a period which has already been signed-off, then an unlock request will need to be made to the ICCQIP surveillance team to modify the data (see '*Unlock Requests User Guide'* for more information).
Mandatory	Summary of completeness of 'Mandatory' questions for each 'Data Collection'. The green portion of the bar indicates the number of cases with complete mandatory questions and the red portion the number of cases with incomplete mandatory questions (Figure 4).

Parameter	Comment
	Clicking on the red or green bar drills down to a list of the case/s (Figure 6). The ID is a hyperlink which will navigate to the case capture screen allowing any missing data to be completed.
Optional	Summary of completeness of 'Optional' questions for each 'Data Collection'. The green portion of the bar indicates the number of cases with complete optional questions and the red portion the number of cases with incomplete optional questions (Figure 4).
	Clicking on the red or green bar drills down to a list of the case/s (as shown in Figure 6). The ID is a hyperlink which will navigate to the case capture screen allowing any missing data to be completed. If the optional data you wish to complete belong to a record which is over a year old, the the record will be locked, then an unlock request will need to be made to the ICCQIP surveillance team to modify the data (see *'Unlock Requests User Guide'* for more information).

Figure 5: Drill down from the 'Data Collection' hyperlink

Figure 6: Drill down showing list of case/s

Click on the ID number to be taken into a record
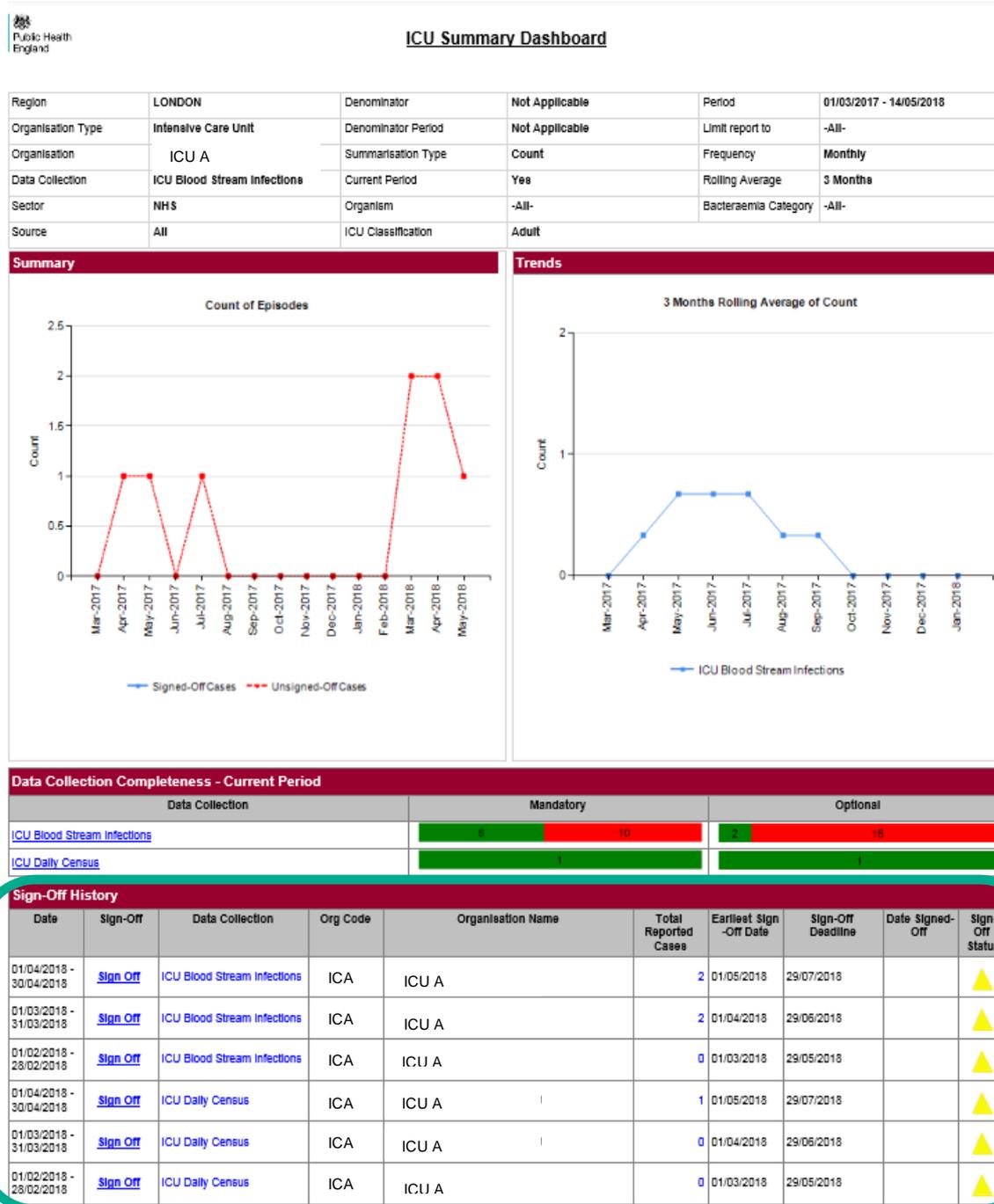
Sign-off History Element

Only 'ICU Sign-off Authority' users are able to view this element of the dashboard (Figure 7). This dashboard report allows users to view the sign-off status of the time periods and 'Data Collections' for 'Organisations' that they are responsible for. This dashboard element also allows 'Data Collections' to be signed off (please see the *'Sign-off User Guide'*).

Once a data period has been signed-off, the mandatory fields are then locked. This means that ICUs are unable to add a new case to the signed-off time period, nor can they delete any of the cases or modify any of the mandatory fields on cases that have been previously entered for this time period. ICUs may request the unlocking of a period in order to amend the mandatory data entered for their organisation.

Optional data remain editable for 12 months after the case has been entered, regardless of whether the case is in a locked period or not. However, after the 12 months has elapsed, the optional data fields will also be locked and amendments to these fields would require an unlock.

All data should be signed off within 1.5 months after the specified quarter comes to an end. For example, for data entered for October 2018, this period could be signed off between 1st November 2018 (day after the relevant period has ended) and up to 15th February 2019 (up to 1.5 months after the end of the October-December 2018 quarter). Data can still be signed off after this time but it will be flagged as being late.

Figure 7: Sign-off History element of the ICU Summary Dashboard

An overview of the report output are in Table 3.

Table 3: Sign-off History Element: Interpreting the Report Output

Parameter	Comment
Date	Shows the sign-off period(s) within the time period selected based on either the 'Current Period' or the 'Period From' and 'Period To' parameters.
	The default option includes current sign-off period (i.e. 01/04/2020- 30/06/2020 is shown in July 2020). If you select

Parameter	Comment
	'Current Period' 'No', the latest 3 months submission period will be excluded.
Sign-Off	Contains 'Sign-Off' hyperlink if the sign-off period is eligible for sign-off. Clicking on the 'Sign-Off' hyperlink navigates to the 'Sign-Off Episodes' screen (see '*Sign-off User Guide*').
Data Collection	The 'Data Collection' relating to the sign-off period. Clicking on the 'Data Collection' hyperlink navigates to a list of the case/s (similar to Figure 6). The ID is a hyperlink which will navigate to the case capture screen.
Org Code	The code relating to the organisation in the 'Organisation Name' field.
Organisation Name	The name of the organisation/s that the logged in user has permissions to sign-off data for.
Total Reported Cases	The total number of cases reported for the 'Data Collection' and time period. The number is a hyperlink. Clicking on the hyperlink navigates to a list of the case/s (similar to Figure 6). The ID is a hyperlink which will navigate to the case capture screen.
Earliest Sign-Off Date	The earliest date at which the period and 'Data Collection' can be signed-off.
Sign-off deadline	The latest date at which the 'Data Collection' and time period can be signed-off without being flagged as a late sign-off. Any data signed-off after this date will be flagged as a late sign-off.
Date signed-off	The actual date the 'Data Collection' was signed-off
Sign-off Status	A visual indication providing the status of sign-off for the data period. There are five different statuses: (🟢) - indicates that the sign-off for the data period has been completed and has been signed-off by the sign-off deadline. (🔴) - indicates that the sign-off for the data period has been completed but that sign-off occurred after the sign-off deadline. (⚠️) - indicates that the data period is eligible for sign-off and that the sign-off deadline has not yet been passed. (🔺) - indicates that the data period is eligible for sign-off but that the sign-off deadline has been passed and so sign-off will be considered late. ( ) - a missing symbol/blank indicates that the data period is not yet eligible for sign-off.