



PICANet Web Quick User Guide

The PICANet database is hosted in the University of Leeds’ Leeds Analytics Secure Environment for Research (LASER). LASER is a cloud-based Trusted Research Environment (TRE) that provides a secure environment for researchers to store, handle, process and analyse sensitive and confidential data.

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Logging-In

When first navigating to PICANet Web you will get a dialog box to log in.

Enter your University of Leeds **User name** (e.g.medtjf) and **Password**. If you do not have a user name for PICANet, please contact PICANet on PICANetWebAccess@leeds.ac.uk

Permission to access the PICANet Web record for a named organisation must be authorised by the lead clinician or PICANet Lead. They must send an email to <mailto:PICANetWebAccess@leeds.ac.uk> detailing your name, email address, job title and requirement for PICANet Web Writer or Reader only access.

PICANet Web Writer:	Members of this group have full read/write access to own organisation's data
PICANet Web Reader:	Members of this group have read-only access to own organisation's data (i.e. user can open event pages and export data, but is prohibited from modifying and saving.)

Please note that the sharing of user names and passwords for PICANet Web is strictly prohibited and contravenes the [Leeds University Password Usage and Management Policy](#).

Disclosure and sharing of passwords and accounts may result in your access being withdrawn.

Home

The first screen you will see after logging-in is the home dashboard. **Your username** will be displayed on the top-right and **your organisation** on the top-left of the screen.

News

Tasks

Quick open

Events by month

Recently modified events

CS	ET	Event date	Family name	First name	Date of birth	Sex	NHS/CHI/H&C number	Case note number	Postcode	Modified on	Event ID
		09-Nov-2022	SMITH	John	01-Oct-2009	Male	999 999 9999	Unknown	Unknown	03-Jul-2024 09:13	878669
		14-Dec-2020	SMITH	John	01-Oct-2009	Male	Unknown	Unknown	Unknown	03-Jul-2024 09:13	920765
		05-Jul-2018	BBB	Infant	05-Jul-2016	Male	485 777 3456	555	LE1 6TP	03-Jul-2024 09:12	910084
		26-Jul-2022	JONES	Jane	25-May-2020	Female	Ineligible	76yzz30	LE678TH	03-Jul-2024 08:49	870151
		26-Feb-2024	AAA	Baby	01-Mar-2024	Female	485 777 3456	Unknown	Unknown	03-Jul-2024 08:48	934161

The home page is divided into 5 areas:

News	Important news about the system including any maintenance work currently being undertaken or due to take place. Updates from PICANet.
Tasks	The number of events with incomplete data and/or errors. A list of these events can be accessed by clicking either incomplete events or errors .
Quick open	You can quickly view an individual event by entering the PICANet Event ID and clicking Open . This will take you straight to the event screen.
Featured Report	The featured report displayed gives an instant view of the number of events recorded when you log-in. You can click Reports to see more detailed reports.
Recently modified events	Recently edited events will be displayed so you can quickly get to the events you are currently working on.

The database enables recording of PICU Admission, Level 2 Admission, ECMO, ECMO Referral, Transport and Referral event data as applicable, allowing real-time validation and reporting of your data. If your unit opts in, it will also enable completion of specified Customised Data Collections.

Points to note:

- The term **event** is used to describe a single episode of PIC activity, such as a referral, transport or admission event.
- The term **organisation** is used to represent any unit or transport service involved in the provision of paediatric intensive care (PIC). The key organisation types are Paediatric Intensive Care Unit (PICU), High Dependency Unit (HDU), Centralised Transport Service (CTS), District General Hospital (DGH) and Airport. The term DGH also includes other locations from or to which PIC patients are retrieved or transferred, such as other wards in centres that provide critical care and hospices.

Searching for a patient

In order to enter data on a new or existing patient you will need to conduct a patient search. Click on the Search option on the menu bar. To help reduce the risk of recording duplicate events your search must include **at least 3** different search terms to be able to add a new event; searching by **NHS number only** or **Case note number** and one of **Family name, Postcode or Date of birth** will allow you to browse matching records if there are any but not add a new event.

All terms contributing towards the criteria must contain at least 3 characters. This is a security feature since the search screen allows you to view patients who have been admitted to other PICUs or transported by a CTS. You cannot see any clinical information but you can see that a patient has had an event with another organisation. This allows the database to track patients who have events with several organisations

The screenshot shows the PICANet Web Search interface. At the top is a navigation bar with links: PICANet Web, PICANet Team, Home, Search, Events, Import, Export, Reports, News, Contact us, Help, Admin. On the right of the bar are 'DS/medevy' and 'Log out'. Below the navigation bar is a 'Search' section. A light blue box contains instructions: 'You must search for a patient before you may add a new event. Matching patients are listed according to the strength of the match.' followed by three bullet points: 'To create a new event for a new patient not in the list, click New <event type>', 'To add an event for a patient in the list, click Add <event type> this will pre-fill the form with the patient's demographic details', and 'To view or edit an event, click Open, to delete an event, first open the event and then click Delete'. Below this is a search form with fields for Family name, NHS/CHI/H&C number, Event date, First name, Case note number, Postcode, and Date of birth. A 'Search' button and a 'Clear' button are to the right of the Event date field. Below the form, a yellow box displays an error message: 'Search conditions not met! Your search must meet one or more of the following criteria: Include NHS/CHI/H&C number and/or include case note number and also one of family name, postcode or date of birth and/or include at least 3 different search terms (excluding event date). Additionally, all terms contributing towards the criteria must contain at least 3 characters.'

If your search doesn't meet these criteria you will get an error message.

When you have entered a valid search, your results will be displayed.

The search will either generate a list of possible patients or will indicate that there are no matches.

The screenshot shows the PICANet Web Search interface with search results. The search form is filled with: Family name: SMITH, First name: JOHN, Date of birth: 01/10/2009. Below the form, a red box highlights the search results: '2 patients matched SMITH, JOHN, 01/10/2009 (2.5 seconds)'. Below this are four buttons: 'New Referral', 'New ECMO Referral', 'New Transport', and 'New Admission'. Below these are four stars and the text 'SMITH, John', 'Born 01-Oct-2009', 'Sex Male', and 'NHS/CHI/H&C no. 999 999 9999'. Below this are four buttons: 'Add Referral', 'Add ECMO Referral', 'Add Transport', and 'Add Admission'. Below these is a table with columns: CS, ET, Event date, Family name, First name, Date of birth, Sex, NHS/CHI/H&C number, Case note number, Postcode, Modified on, Event ID, and an 'Open' button. The table contains one row: CS: 01-Oct-2009, ET: Male, Event date: 01-Oct-2009, Family name: SMITH, First name: JOHN, Date of birth: 01-Oct-2009, Sex: Male, NHS/CHI/H&C number: 999 999 9999, Case note number: Unknown, Postcode: Unknown, Modified on: 03-Jul-2024 09:13, Event ID: 878669, and an 'Open' button. A red box highlights the 'Open' button. A blue box at the bottom left says: 'The number of stars indicates how strongly your search criteria match a patient in the database. Five stars being the strongest.' A blue box at the bottom right says: 'Clicking Open will expand the event and show you those details'. A blue box on the right side says: 'If the event is associated with your organisation you will be able to see the Case note number and the Postcode. Events the patient had at other organisations are listed but not accessible'.

Events

The term *event* is used to describe a single instance of PIC activity, such as a **Referral**, **ECMO Referral**, **Transport**, **Admission** or **Admission (Level 2)**.

The Event type (ET) describes a single instance of Critical Care activity.

Creating an Event

Using the search results, either add an event for an existing patient or enter an event for a new patient.

2 patients matched SMITH, JOHN, 01/10/2009 (2.5 seconds)

Buttons: New Referral, New ECMO Referral, New Transport, New Admission

Star rating: ★★★★★ SMITH, John Born 01-Oct-2009 Sex Male NHS/CHI/H&C no. 999 999 9999 1 event

Buttons: Add Referral, Add ECMO Referral, Add Transport, Add Admission

CS	ET	Event date	Family name	First name	Date of birth	Sex	NHS/CHI/H&C number	Case note number	Postcode	Modified on	Event ID
1	Referral	09-Nov-2022	SMITH	John	01-Oct-2009	Male	999 999 9999	Unknown	Unknown	03-Jul-2024 09:13	878669 Recent Open

If the patient you want to enter an event for is displayed, click the **Add Referral**, **Add ECMO Referral**, **Add Transport** or **Add Admission** link displayed (you will need to click the **Open** link for the named patient to see these).

If the patient you are searching for is not in the database, click **New Referral**, **New ECMO Referral**, **New Transport** or **New Admission** links.

Entering an Event

A blank event screen will open with the form organised the same way. Use the **tab** to navigate between sections.

Click on the relevant section heading to go to that section.

The patient banner displays the details of the patient. Record the **Event ID** to permit easy recall of the event record.

BBB, Infant Born on 05-Jul-2016 Sex Male NHS/CHI/H&C no. 485 777 3456 Admitted on 05-Jul-2018 Discharged on 07-Sep-2023

Buttons: Save & Close, Save, Close, Delete, < Back, Next >

Tabs: Patient details, Admission details, PIM, Diagnoses and procedures, Daily interventions, Additional information, ECMO 1, ECMO 2, Discharge + Follow-up

Sub-tabs: Comments, Legacy data

Fields:

- Family name: BBB, Second family name: [empty]
- First name: INFANT
- Address: [empty]
- Postcode: [empty]
- NHS/CHI/H&C number: 4857773456, Patient not eligible for number: [empty]
- Case note number: 555
- Date of birth: 05/07/2016, Indicate if DOB is: [dropdown]
- Sex: Male, [dropdown]
- Gestational age at delivery: [empty] weeks
- If patient is under 2 years old: [empty]
- Birth order: [empty]
- Multiplicity: [empty]

Footer: If the patient is a sequestrum, please record in Comments

You do not need to click **Save** as you go between sections, click the **Back** and **Next** buttons. When you have finished entering data click **Save**. The record will then be saved to the database. If you want to abandon your changes click **Cancel**.

When a new event is created the error list generated includes all missing data. As you enter data the list will update automatically, diminishing as 'missing' data is recorded. You can click on the **Tick if unobtainable/correct** box on any error that should be ignored (for example if you do not have the ethnic category).

Admission Event ID 910084

The screenshot shows the PICSNet Admission form for Event ID 910084. The form is for a patient named BBB, Infant, born on 05-Jul-2016, Sex Male, NHS/CHI/H&C no. 485 777 3456, Admitted on 05-Jul-2018, Discharged on 07-Sep-2023. The form includes fields for Family name, First name, Address, Postcode, NHS/CHI/H&C number, Case note number, Date of birth, Sex, Gestational age at delivery, Birth order, and Multiplicity. On the right, there is a list of errors, warnings, and missing values. The list includes: Address line 1 expected, Address line 1 should not be missing, Postcode expected, Postcode should not be missing, Invalid NHS/CHI/H&C number, NHS/CHI/H&C number must be 10 digits long and meet the checksum test, Date of birth indicator expected, Birth order expected, Multiplicity expected, GP practice code expected (legacy rule), Time of admission to unit expected, Admission number expected, and Source of admission expected. Each item has a checkbox to 'Tick if unobtainable/correct'.

Event completion status

Each event has a *completion status*, which indicates whether it has any missing, questionable or erroneous data. Throughout the system, we use coloured icons to indicate an event's completion status based on data validation severity

- ✓ Event is **complete**; no further data is required and all existing data is validated and verified
- 🛡 Event has **missing data**
- ⚠ Event contains **warnings** (questionable data); it may also have missing data
- 🚫 Event contains **errors** (erroneous data); it may also contain warnings and/or have missing data

Data Entry

Use the tab key to move between fields. The following date and time formats are acceptable.

DATES

Format	Example
dd-MMM-yyyy	3-Oct-2011
dd/mm/yyyy	3/10/2011
ddmmyyyy*	03102011

TIMES

Format	Example
hh:mm	9:00
hhmm*	0900

These formats are shortcuts and require leading zeros i.e. 3102011 will not be accepted an error message will be listed in the Event validation list. 03102011 will be accepted. The system will automatically insert the appropriate separator

Diagnoses and procedures

In order to enter a diagnosis or procedure you need to find the relevant READ code.

The screenshot shows the 'Diagnoses and procedures' tab in the PIM system. The form includes sections for 'Primary diagnosis for this admission' (with 'H06. Acute bronchitis and bronchiolitis' and 'Bronch' entered), 'Other reasons for this admission', 'Operations and procedures performed during this admission', and 'Co-morbidity'. Each section has an 'Add' button. A callout box with an arrow pointing to the 'Add Primary Diagnosis' button contains the text: 'Click on add diagnosis or procedure to activate the coding search tool.' The form also has a dropdown for 'Was a tracheostomy performed during this admission?' and navigation buttons at the top and bottom.

Select the type of code required.

Diagnosis or procedure Primary diagnosis

Description (as recorded in the patient's notes)

Code [✕ Remove](#)

Concept domain ☐ Cause ☒ Disorder ☐ Procedure ☐ History and observation ☐ Unspecified

Match ☒ any of the words ☐ all of the words ☐ the exact phrase ☐ similar words (fuzzy match)

Search

[Save](#)

Record a description of the diagnosis or procedure. Click 'Copy' to paste the text in the Search box.

The search engine has the option to search for: 'Any of the words', 'All of the words', 'The exact phrase' or 'Similar words'.

Diagnosis or procedure Primary diagnosis

Description (as recorded in the patient's notes)

Code [✕ Remove](#)

Concept domain ☐ Cause ☒ Disorder ☐ Procedure ☐ History and observation ☐ Unspecified

Match ☒ any of the words ☐ all of the words ☐ the exact phrase ☐ similar words (fuzzy match)

Search

26 items (0.3 seconds)

Rating	Matching term	Code and preferred term
★★★★★	Acute bronchitis and bronchiolitis	H06.. Acute bronchitis and bronchiolitis
★★★★★	Acute bronchitis or bronchiolitis NOS	H06z. Acute bronchitis or bronchiolitis NOS
★★★★★	Acute bronchiolitis	H061. Acute bronchiolitis
★★★★★	Acute capillary bronchiolitis	H0610 Acute capillary bronchiolitis
★★★★★	Acute obliterating bronchiolitis	H0611 Acute obliterating bronchiolitis

1 2 3 4 5 6

Frequently used
[H061. Acute bronchiolitis](#) [Xa0IW Acute laryngotracheobronchitis](#)

Recently used
[H06.. Acute bronchitis and bronchiolitis](#)

[Save](#) [Cancel](#)

As with the patient search; the number of stars indicates how strongly your search criteria match a code in the database. Five stars being the strongest.

Click to **Select** and then **Save** to record the code.

Organisation

The term **organisation** is used to describe a PICU, CTS or DGH.

The screenshot shows the 'Admission details' tab in the PICANet Web interface. The 'Collection unit (or location)' dropdown is open, displaying a list of organisations and a 'Frequently used' section. The 'Organisation type' is set to 'DGH'. The 'Frequently used' section lists 'Heartlands Hospital' and 'Royal United Hospital'. The 'Collection unit (or location)' dropdown shows 'DGH Malton Community Hospital' selected, with 'Edit...' and 'Clear' buttons next to it. The 'Clear' button is highlighted with a callout box.

Click on the **organisation type** and a list will be generated. Click on the name to select or enter the name in the search box and click **search** (useful for finding a DGH).

You can also pick from the **Frequently used** list.

In order to enter an organisation you will need to click on the **Pick** or **Edit** button.

To delete an organisation, click on the **Clear** button.

For all non-PICU units and wards within a PICU organisation record the DGH coded name e.g. DGH Sheffield Children's Hospital. If you can't find the organisation then select **Other organisation** and type in the name.

Events

The events page lists all your organisation's events and provides you with tools to sort your data into a number of useful lists in particular incomplete and complete events.

PICANet Web PICANet team Home Search Events Import Export Reports News Contact us Help Admin

Events

Use the filter to narrow down the list of your organisation's events. For example, you can show only **incomplete events** or only events that contain **erroneous data**.
To view the contents, click a column header to sort the list in ascending order based on that column. Click the same column header again to sort in descending order.

Select on the relevant filters and click apply.

Event type ☐ Referral ☐ ECMO Referral ☐ Transport ☐ Admission

Event date ☒ All ☐ Between and

Section

Completion status ☐ Complete ☐ Incomplete with missing values ☐ Incomplete with warnings ☐ Incomplete with errors

Admission status ☐ Current (on unit) ☐ Discharged ☐ 30 day follow-up overdue

1228 events

CS	ET	Event date	Family name	First name	Date of birth	Sex	NHS/CHI/H&C number	Case note number	Postcode	Modified on	Event ID	
		09-Nov-2022	SMITH	John	01-Oct-2009	Male	999 999 9999	Unknown	Unknown	03-Jul-2024 09:13	876669	Open
		14-Dec-2020	SMITH	John	01-Oct-2009	Male	Unknown	Unknown	Unknown	03-Jul-2024 09:13	920765	Open
		05-Jul-2018	BBB	Infant	05-Jul-2016	Male	485 777 3456	555	LE1 6TP	03-Jul-2024 09:12	910084	Open
		26-Jul-2022	JONES	Jane	25-May-2020	Female	Ineligible	76yz230	LE676TH	03-Jul-2024 06:49	870151	Open
		26-Feb-2024	AAA	Baby	01-Mar-2024	Female	485 777 3456	Unknown	Unknown	03-Jul-2024 06:48	934161	Open

By clicking on the column heading the list will sort by that field i.e. click on **modified on and the list will appear in date order.**

Multiple Referrals

To enable transport organisations to record **multiple** referral outcomes for one patient, the PICANet Web referral record includes a **Save & New Outcome** button.

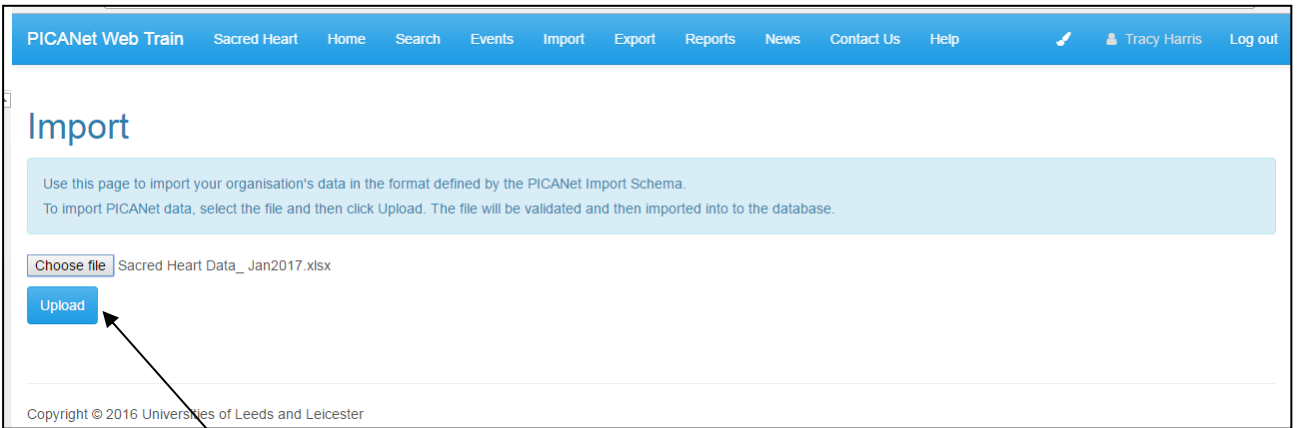
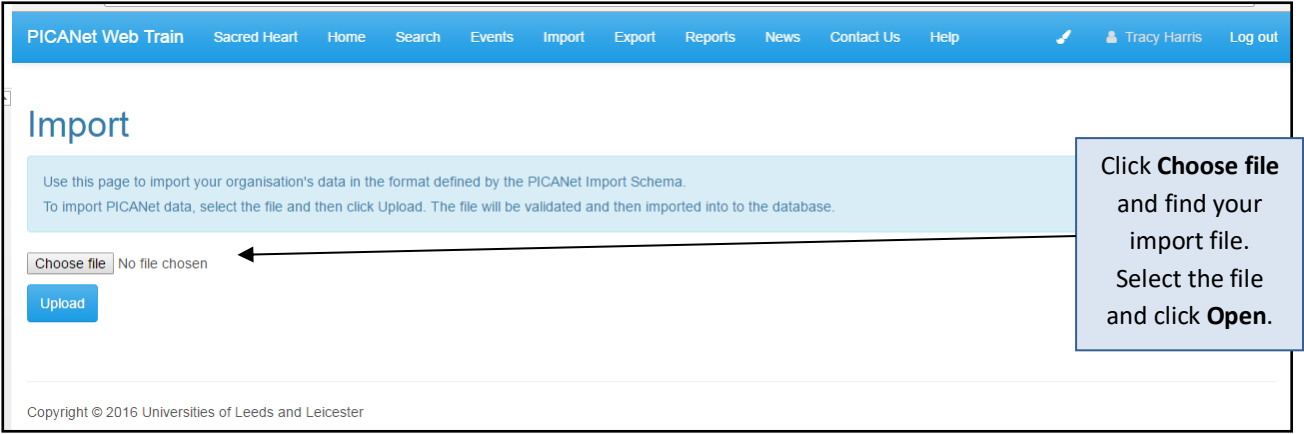
Complete the first referral event, click **Save & New Outcome** to add a further referral event. Complete the new **Outcome of this referral event**. Field.

Save & Close Save & New Outcome Save Close Delete

Select Save & New Outcome

Importing Events

If you use your own clinical system to collect data, you can export data in a format specified by PICANet to be imported into the PICANet LASER system. Click the **Import** menu item.



Click **Upload** when you have picked the correct file. A summary of the data imported will be displayed.

The screenshot shows the 'Import' summary page. At the top, it says 'PICANet Web successfully imported the file into the database.' and provides links to 'View an up-to-the-minute Validation Report' and 'Return to the Dashboard'. Below this is a table with the following data:

Summary	
File name:	163303_DSmwtdg_PICANetReferralExtract_2016.xml
File size (bytes):	957503
Import time (seconds):	39.10
Referral events	
Total:	1815
Earliest:	02/01/2016
Latest:	31/12/2016
Transport events	
Total:	0
Earliest:	N/A
Latest:	N/A
Admission events	
Total:	0
Earliest:	N/A
Latest:	N/A
Total admission days:	N/A
Average admission days:	N/A

Exporting Data

To download your organisation's data for local use and analysis click the **Export** menu item and select your event types and dates. PICUs can also download PCCMDS data.

Export

Use this page to export your organisation's data for local use and analysis. Files can take a while to generate depending on the amount of data you request and the current load on our server. When your file has been generated, it will appear in the list of files available to download, below.

Event data PCCMDS Other

Event types ☒ Referrals ☒ ECMO Referrals ☒ Transports ☒ Admissions ☒ + Diagnoses and procedures ☒ + Daily interventions

Event dates ☐ All ☒ Between and

Include ☐ Personally identifiable information ☐ Value labels ☐ Additional derived items
This option is not available because your role does not allow you to export personal data.

[Generate Export File](#)

Files available to download

The list below shows the data files that are currently available for you to download. Files are removed from our server after 24 hours. To copy a file to your computer, click Download on the row that you require.
Please save the file in a secure network location. You **MUST NOT** open the file directly from your browser because it may lead to personally identifiable information being stored on your computer's local drive.

☐ Tick to acknowledge that you are solely responsible for any data you download from PICANet Web

There are no data files available to download.

You can access PCCMDS data by clicking on the **PCCMDS** tab.

You will need to tick the box to acknowledge that you are solely responsible for any data you download from PICANet Web and then click **Generate Export File** to generate the file. Once downloaded, you can open the data will then open in Microsoft Excel

Reports

Click the **Reports** menu item to access live reports for your organisation. If there are additional data/tables you would like to be added to this resource please ask the PICANet team by emailing picanet@leeds.ac.uk.

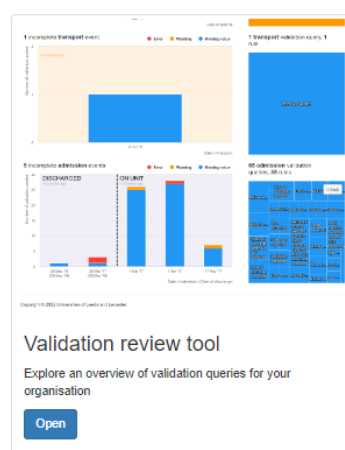
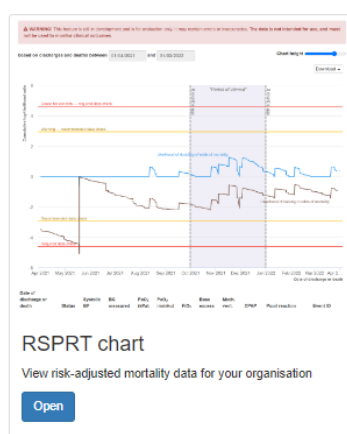
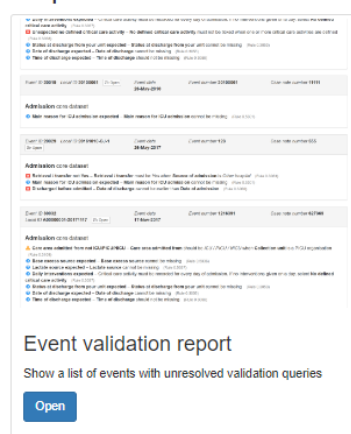
There are a few reports available on PICANet Web, including;

The **Event validation report** – Shows a complete list of all unsolved validation queries. Can be filtered by Event type and customised data collection.

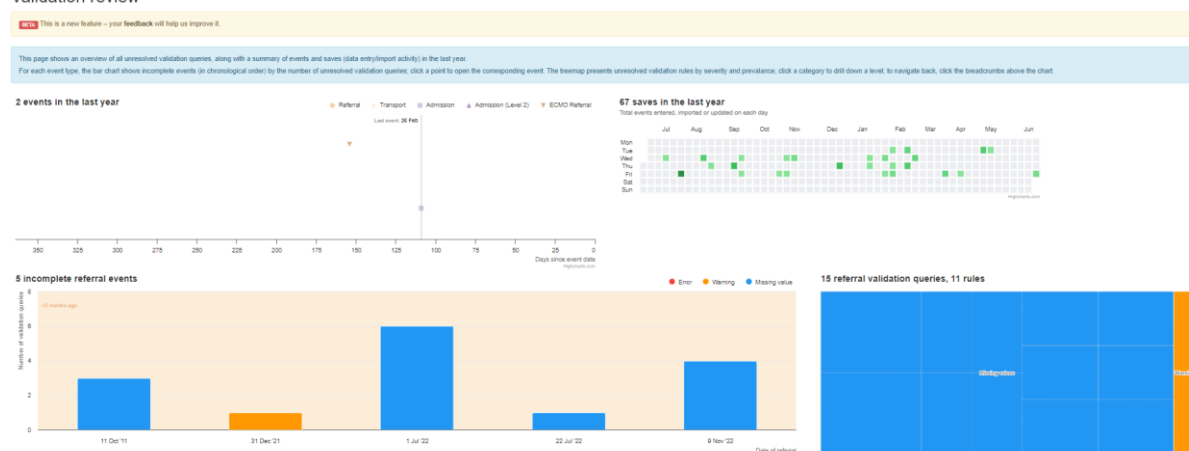
RSPRT Chart – Interactive display of risk-adjusted mortality data. We send updates of these to you quarterly by email.

Validation review tool – This is an interactive overview of outstanding validation. Organised into event type, validation query and whether or not the queries meet the PCCS Standard of completion within 2 months of discharge from your unit.

Reports



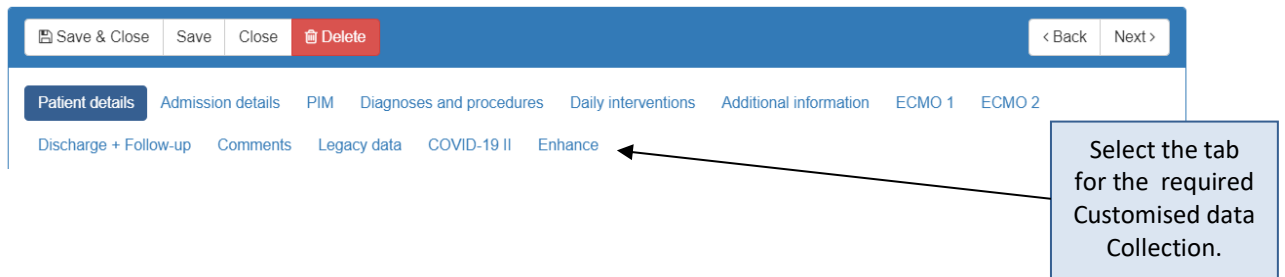
Validation review



Customised data collection

For units who agree to participate in a Customised Data Collection PICANet will enable access to the specific custom data collection tab on the event data entry page E.g. Enhance.

The ECMO Admission data set will appear in a similar way for participatin ECMO centres.



If you have any additional queries please view the HELP page or contact us

General enquiries – picanet@leeds.ac.uk

Web Access enquiries – PICANetWebAccess@leeds.ac.uk

Clinical/Diagnosis coding queries – please direct these to the PICANet Inbox where our Research Nurse will pick these up - picanet@leeds.ac.uk