

# Sandwell and West Birmingham NHS Trust Cerner Health Information Exchange (HIE) User Guide

## Overview:

The technology used to create the Sandwell and West Birmingham NHS Trust Shared Care Record is called the Health Information Exchange (HIE), provided by Cerner.

The HIE creates an up-to-date summary view of an individual's health and care record from multiple record systems. As the system is read-only, you cannot change or record information while using the HIE.

## Accessing HIE:

The HIE is opened from within the patient/service user record in your local system. The name displayed on the link/button to open the HIE will differ depending on your local system.

Examples include:

- Cerner HIE Portal
- HIE (Cerner Millennium)
- Portal Cerner new HI (EMIS)
- hweuk.cernerhie.org... (SystemOne)

In Unity, access HIE via the  in the left hand menu in Unity

## 1. DEMOGRAPHICS AND TOOLBAR




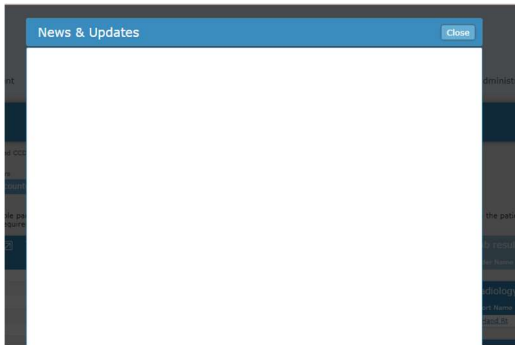
Basic demographic information is viewable at the top of the screen. Note: This guide uses a test Patient

Click **Loading partners** to see the status of each external data feed providing data to the HIE. Please note this will not include local partner organisations who are directly connected to the HIE.

- **OK** means the available data has loaded.
- **N/D** means patient found but no data available.
- **N/F** means patient not found.
- **F** stands for failed – data has not loaded

Click **Source MRNs** to launch a list of source records and their respective patient identifiers (for example hospital number), that have been matched to form the HIE record.

**News Feed:** The loudspeaker icon  will show local messages which can be marked as read/unread by the user. Please look here for important messages about updates and events such as planned downtime or the availability of information.

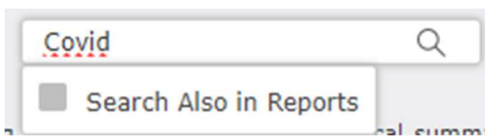


**Disclaimer:** A reminder that the HIE is not the full patient record and will not contain all information about a patient/service user. It should therefore be used appropriately as an additional tool to support decision making.

Disclaimer This is an aggregate summary of medical information obtained from multiple participating healthcare providers. This clinical summary is intended to support optimal patient care. It is not intended to replace the patient's medical record nor is it guaranteed to encompass all historical information on this patient. It is provided to you in conformance with patient privacy requirements.

**Page Search:** Use this field to search the HIE record for specific words or items. If the search term is found, it will be highlighted in yellow in the sections below once filtering is complete.

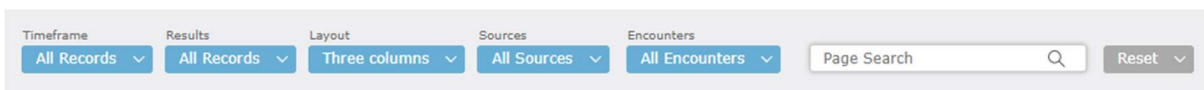
Note the option to include reports (documents) in the search. To clear the search, click 'X'.



**PLEASE NOTE:** Using the search function will filter the data in the HIE to just the search results, therefore remember to clear the search afterwards to restore all other data.

**Filters:** You can adjust the view of the data available by timeframe, partners ('Results'), source, or encounter. Filtering by **source** is an effective way to find information from one provider. For example, from a specific hospital.

**PLEASE NOTE:** Filters are stored for the next time you access the HIE so make sure to reset them using the Reset button.



The layout drop-down allows you to change the number of columns used to present the information.

## User preferences

It is possible to personalise your view by using drag and drop to re-arrange the layout of the sections and choose whether they are collapsed or expanded upon loading.

ate summary of medical information obtained from multiple participating healthcare providers. This clinical summary is intended to support optimal patient care. It is not intended to replace the patient's medical information. It is provided to you in conformance with patient privacy requirements.

The screenshot displays a clinical summary interface with several sections. On the left, there is a table with columns 'Date Completed' and 'Source', showing multiple rows of data from 'KMC'. Below this is a 'Next' button. In the center, there are sections for 'Allergies & Adverse Reactions' and 'Medications (1) Summary'. On the right, there is a 'Lab results (0)' section and a 'Miscellaneous Reports (7) Summary' section. The 'Miscellaneous Reports' section contains a table with columns 'Report Name', 'Performed by', 'Date Completed', and 'Source', listing several 'ECG' reports from 'SWBH' with dates ranging from 20/04/2023 to 09/04/2020. The 'Medications' section shows a table with columns 'Medication', 'Status', 'Ordered Date', and 'Source', listing 'Aspirin' as 'Ordered' on 29/01/2020 from 'SWBH'. Navigation buttons like '1 2 Next' are visible at the bottom of the sections.

The HIE will retain these preferences each time it is opened.

## 2. SECTIONS

Information is displayed in sections (also known as widgets or pods). Darker blue sections contain information and can be expanded or collapsed by using the up/down arrow in the top right-hand corner.

The screenshot shows a 'GP Records (11) Details' section. It features a table with columns: 'Report Name', 'Performed by', 'Date Completed', 'Status', and 'Source'. The table lists various medical records such as 'Diagnosis', 'Events', 'Examinations', 'Investigations', 'Medications', 'PatientDetails', 'Problems', 'Procedures', 'RisksWarnings', and 'Summary', all dated 18/10/2023 and sourced from 'DCS&DDS'. A 'Next' button is located at the bottom right of the table.

Report Name	Performed by	Date Completed	Status	Source
Diagnosis		18/10/2023		DCS&DDS
Events		18/10/2023		DCS&DDS
Examinations		18/10/2023		DCS&DDS
Investigations		18/10/2023		DCS&DDS
Medications		18/10/2023		DCS&DDS
PatientDetails		18/10/2023		DCS&DDS
Problems		18/10/2023		DCS&DDS
Procedures		18/10/2023		DCS&DDS
RisksWarnings		18/10/2023		DCS&DDS
Summary		18/10/2023		DCS&DDS

Sections can be maximised by clicking the diagonal expand button in the top right corner. The view can be changed using the drop-down box at the top of the section. For example, from **Summary** view to **Detail** view.

The source of the information eg SWBH for us, WMidsSCR for the West Midlands SCR, is listed for each report eg medications, with a date that it was last updated.

Press the page numbers at the bottom of the section for more results.

All sections are ordered chronologically by default with the most recent data item first and always display the source of the information. However, clicking on column headers can alter the display. Clicking on a line of information will open more detail or hovering over items will trigger a tooltip with the additional information.

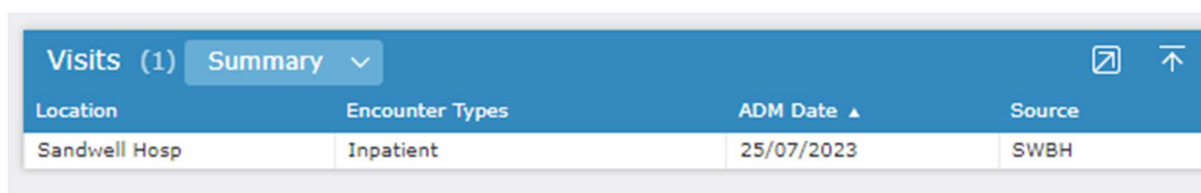
## Types of section and information provided.

The HIE creates a read-only view of information from multiple host record systems that send different information to the HIE in different ways.

**PLEASE NOTE:** The same type of information sent by different organisations may be presented in different ways and appear in different sections. Information from some organisations will only be available from the date that their record system connected to the HIE. There will be no information about care provided before this point.

### Section type 1 – Structured data

Some sections contain structured data which shows directly as a list of items mapped to a relevant section. Examples include **Visits, Appointments, Problems, Allergies** and **Procedures**. Most structured data come from acute providers.



Location	Encounter Types	ADM Date ▲	Source
Sandwell Hosp	Inpatient	25/07/2023	SWBH

**PLEASE NOTE:** Individual sections are not a complete list of information from all providers. Additional data may be found within reports or documents (particularly within **GP Records**), that is not displayed within these sections.

For example, the **Medications** section may contain the medication data provided by one or more acute provider. However, the most current medications for an individual are likely to be found within the **GP Records** section. Additional medications may also be found in other documents such as hospital discharge summaries found in the **Clinical Correspondence** section.

Eg **Medications** view below

Current Medication	Past Medication	Medication Issues
<b>Acute Medication</b>		
Last Issue	Drug / Dose / Quantity	
There are no current acute medications in the patient's record.		
<b>Repeat Medication</b>		
07-Sep-2023	Prednisolone 2.5mg tablets, One To Be Taken Daily,112 tablet	
07-Sep-2023	Loperamide 2mg capsules, Two To Be Taken Four Times A Day,224 capsule	
07-Sep-2023	Folic acid 5mg tablets, One To Be Taken Each Day,112 tablet	
07-Sep-2023	Ferrous sulfate 200mg tablets, One To Be Taken Twice A Day,112 tablet	
07-Sep-2023	Codeine 60mg tablets, as dir,112 tablet	

Prescribed vaccinations and allergies are other examples of important information that is likely to be found within **GP Records** as well as within structured data sections.

## Section type 2 - HTML format/unstructured:

The data is presented as it is sent by the source system as a single report, with sections. Click the document and navigate through the content which may be stored in tabs and on more than one page. Commonly **GP Records**, **Community Health and Mental Health** sections exist in this way.

GP Records (11) Summary	
Report Name	Performed by
<a href="#">Medications</a>	
<b>Summary</b>	
<a href="#">Investigations</a>	
<a href="#">Prescriptions</a>	

XXTESTPATIENT-TBDR, Donotuse	
NHS No 999 050 8488 Gender F Born 16/03/1987 (36y)	
<b>Please note the patient data being viewed may not be the complete patient record. For a detailed list of the clinical codes included please <a href="#">click here</a>.</b>	
<b>Current Problems</b>	
05-Aug-2022	Allergy to penicillin
02-Dec-2020	Asthma
01-Nov-2019	Paranoid schizophrenia
22-Feb-2018	On end of life care register
22-Jan-2018	Not for attempted CPR (cardiopulmonary resuscitation)
22-Apr-2016	Family is cause for concern
22-Apr-2014	Cancer of ovary
22-Feb-2010	Adverse reaction to penicillins
<b>Current Medication</b>	
Acute Medication	
There is no Acute Medication in the patient's record	
Repeat Medication	
Lansoprazole 30mg gastro-resistant capsules   Metformin 500mg tablets   Thiamine 100mg tablets   Vitamin B compound strong tablets   Citalopram 20mg tablets	
<b>Allergies and Adverse Reactions</b>	
05-Aug-2022	Allergy to penicillin
22-Feb-2010	Adverse reaction to penicillins : dose amoxicillin 500mg tds, rash within 24hrs
<b>Recent Tests</b>	
26-Jun-2020	Tested for 2019-nCoV (novel coronavirus) infection
26-Jun-2020	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) IgM detection result positive
26-Jun-2020	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) IgG detection result positive
26-Jun-2020	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) detection result positive
22-Feb-2018	Erythrocyte sedimentation rate

Virtual ward entries appear in this list:

GP Records (20) Details				
Report Name	Performed by	Date Completed	Status	Source
<a href="#">All Views</a>		18/10/2023	final	SC-VW

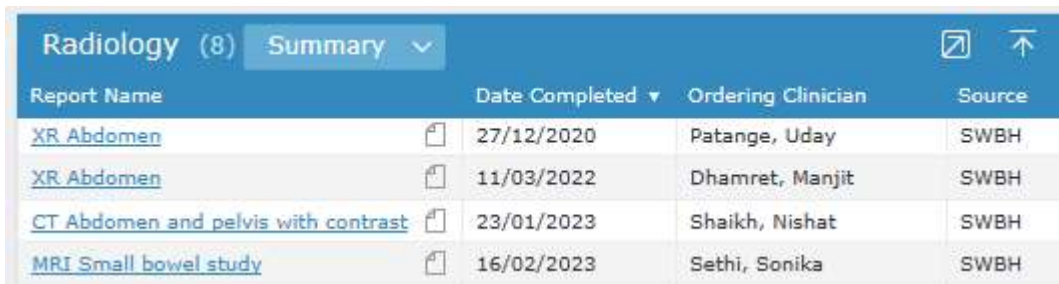
Click on the All views link to view the recent Virtual ward entries

### Last 3 Encounters

Date	Title	Details
18 Oct 2023	Anna McCall (Physiotherapist) - Sandwell Community - Virtual Ward	White British - ethnic category 2001 census (XaQEa)
		Activity: Assessment ( minutes) Professional Meeting with Consultant Discussion about options (Ua04u)
		Referral Source:Ward Lyndon 5
		Patient Postcode:West Bromwich B
		CFS_ Frailty Syndrome:
		Diagnoses: 1) Leg ulcers - SB vasc team - could be for compression dressings if not settling with conservative measures ?infected (On Linezolid) 2) Delirium - ?underlying cognitive impairment - GP to kindly refer to memory clinic on d/c 3) Urine - E.Coli treated

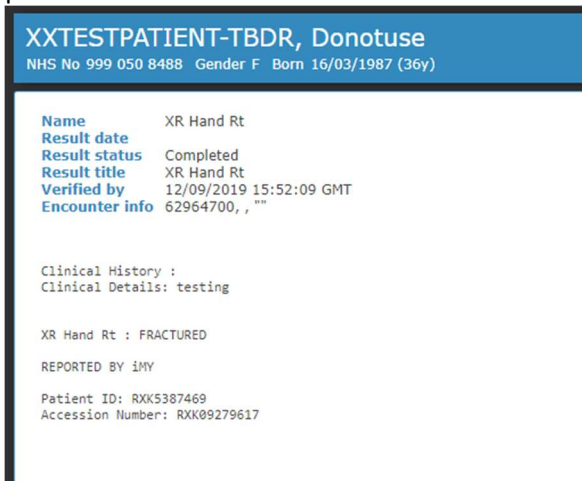
### Section type 3 - Documents:

These sections contain documents which must be clicked to open. Once opened, navigate to the next document in the list by clicking the right arrow. Typical sections that function this way are Clinical Correspondence and Radiology.



Report Name	Date Completed	Ordering Clinician	Source
<a href="#">XR Abdomen</a>	27/12/2020	Patange, Uday	SWBH
<a href="#">XR Abdomen</a>	11/03/2022	Dhamret, Manjit	SWBH
<a href="#">CT Abdomen and pelvis with contrast</a>	23/01/2023	Shaikh, Nishat	SWBH
<a href="#">MRI Small bowel study</a>	16/02/2023	Sethi, Sonika	SWBH

Click on the radiology order (blue hyperlink) to open the result which will include where it was performed.



**XXTESTPATIENT-TBDR, Donotuse**  
NHS No 999 050 8488 Gender F Born 16/03/1987 (36y)

Name XR Hand Rt  
Result date  
Result status Completed  
Result title XR Hand Rt  
Verified by 12/09/2019 15:52:09 GMT  
Encounter info 62964700, , ""

Clinical History :  
Clinical Details: testing

XR Hand Rt : FRACTURED

REPORTED BY imy

Patient ID: RXK5387469  
Accession Number: RXK09279617

**PLEASE NOTE:** Some reports or documents that can't be mapped to an appropriate section/widget may be found in the Miscellaneous Reports section.

### 3. RESULTS DATA

Some sections which contain results data have additional options to display the results in different ways:

**Result Sets/Orders** displays results grouped by the tests that were ordered as a set.



Order Name	Date	Standard Views
<a href="#">Full blood count</a>	18/0 10:0	Summary Details Graph view Result Sets/Orders
<a href="#">FBC</a>	18/0 10:0	

Within 'Graph view', click on an item to create a graph of the results over time.



Results information may be shown with the following colour-coding:

- **Blue** = lower than the normal range
- **Red** = higher than the normal range
- **Green** = within the normal range

**PLEASE NOTE:** The units of measurement and normal ranges will be set by the organisation providing the data.

#### **4. TIMELINE SECTION**

This provides a visual overview of the patient/service user's interactions with those healthcare partners that have loaded. Clicking one of the bars in the timeline zooms in and filters the data according to the timeline. Click 'Reset filters' to reload all data for the patient/service user.

#### **5. PRINTING AND RECORDING INFORMATION**

**PLEASE NOTE:** There is no print facility within the Shared Care Record. Users should not print or take screen shots of the information within the Shared Care Record as this creates risks around data security, record duplication and out-of-date information being used. When recording information in your own record system, please consider other users. For example, by not using abbreviations that would not be understood by colleagues in other services.

#### **6. HOW HIE MATCHES RECORDS**

The HIE works by searching multiple record systems (from each connected partner organisation) for matching records and presenting the available data to the user. Name, date of birth, address, NHS number and other pieces of demographic information are used to match records.

**PLEASE NOTE:** When a record in a partner organisation's system has incomplete or incorrect demographic data, for example no NHS number, there is a very small risk of an incorrect match being made. This would result in incorrect data being displayed within the Shared Care Record. Users should be aware of this risk and check information with the patient/service user where possible.