MIGateway® Longitudinal Record Viewer

User Guide

Version 1

August 13, 2026

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Introduction

The Longitudinal Record (LR) Viewer is a module within the MIGateway® platform which leverages MiHIN's statewide network to aggregate data from multiple sources and EMRs, presenting users with a consolidated, comprehensive patient record.

Within the LR Viewer, users can access clinical data needed for Treatment, Payment, and Operations (TPO), public health reporting, state and federal mandates, and individual authorizations. Data that can be accessed includes, but is not limited to:

- Lab results
- Medication statements
- Encounters
- Clinical notes

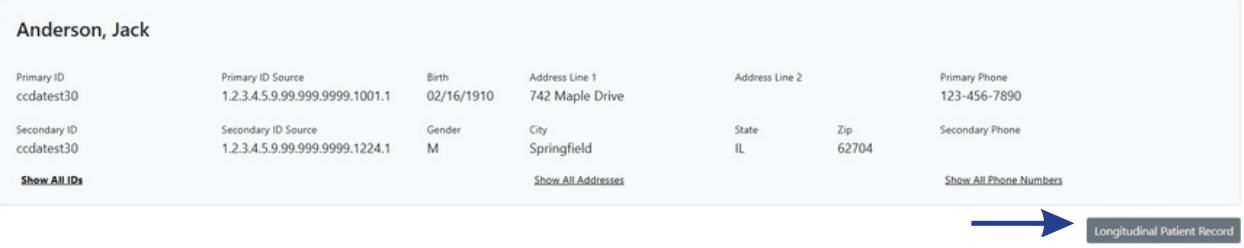
The Viewer also allows users to provide information needed for resolution of:

- Care Coordination
- Population Health Management
- Medication Management
- Clinical Decision Support

Accessing the Longitudinal Record (LR) Viewer

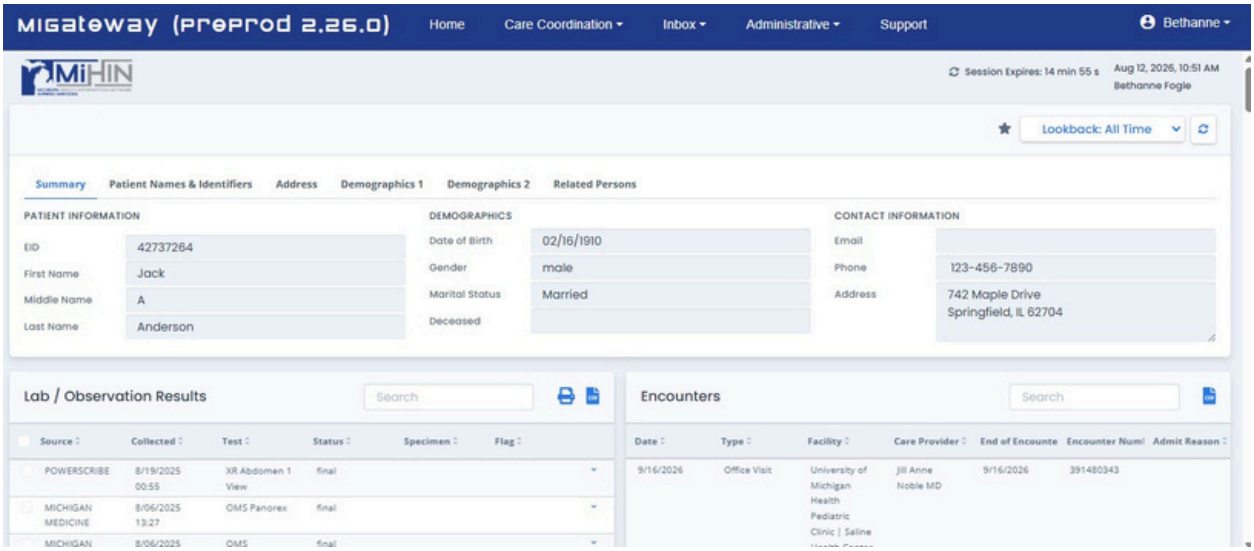
The Longitudinal Record (LR) Viewer is accessed via the Patient Viewer - which is described in more detail within the “MIGateway UserGuide” located on our website at www.mihin.org/resourcehub

While viewing the Patient Viewer Summary, a user can click the gray “**Longitudinal Patient Record**” button located in the lower right corner, as shown in the figure below, to launch the LR Viewer.



Longitudinal Record Viewer Access via Patient Viewer

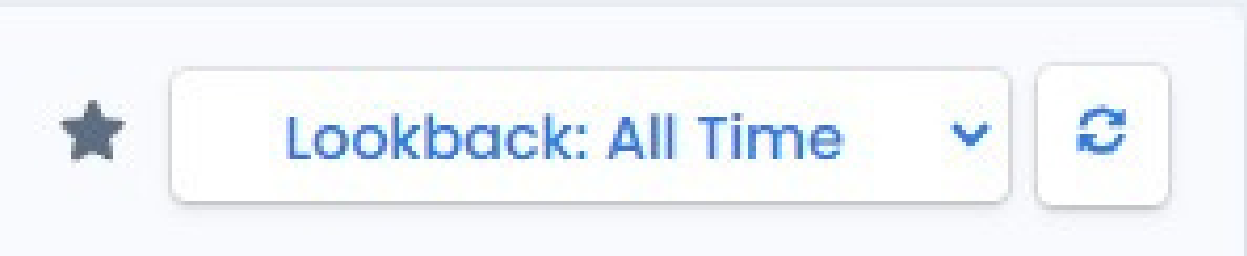
The resulting screen will display the Longitudinal Patient Record for the selected patient (shown below). This view has sections and UI elements that display information about the patient and their summary of care, which are described in more detail in the following pages.



Longitudinal Record Viewer once launched successfully

General Setting UI Elements

The UI elements within the Longitudinal Record (LR) Viewer are designed to help users easily navigate, organize, and interact with information throughout the record based on their specific needs.



General Longitudinal Record Setting UI Elements

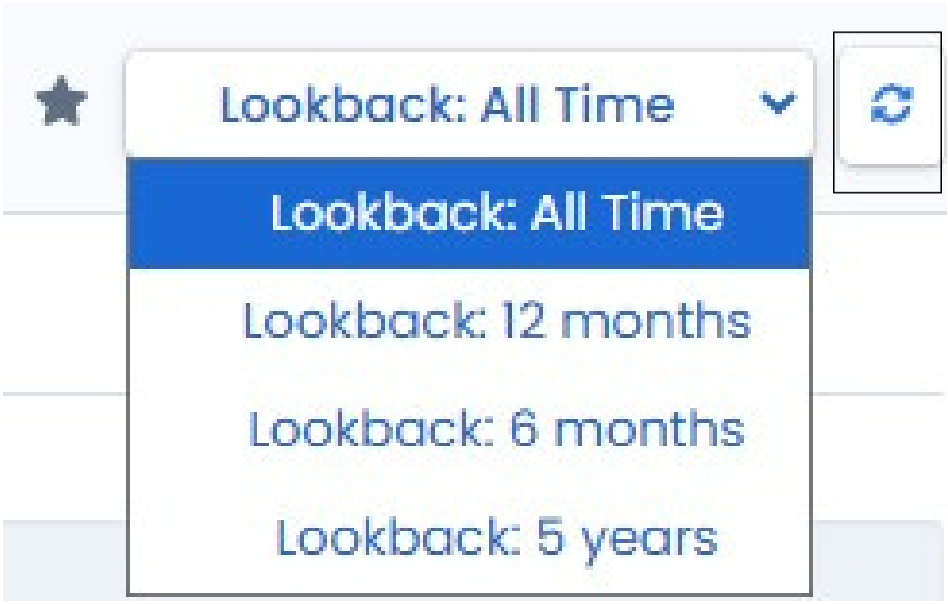
- **“Star”:** Currently, the star toggle does not have an active function. It may be intended to allow users to favorite specific records and create shortcuts for easier access; however, this functionality is not currently available.
- **Lookback:** Click to access a drop-down menu that allows a user to define the period they would like information on the patient for, in the following increments:
  - All Time
  - 12 Months
  - 6 Months
  - 5 Years
- **Refresh:** Clicking the refresh arrows allows the user to refresh the Patient Summary page, considering any changes to the specified period.

Navigation within the Longitudinal Record Viewer

Customizing the Longitudinal Record

By default, the LR Viewer will default to displaying records and information as far back as as possible - “All Time”. Users can change this by clicking the “Lookback” button and selecting a different time range and then clicking the refresh button, as shown below .

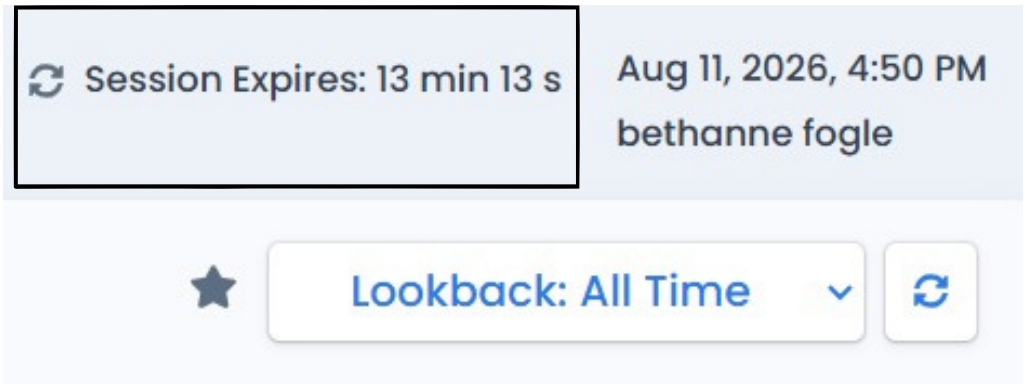
Once the page refreshes, entries for all sections of the patient’s Longitudinal Record will now display data only for the specified range.



Lookback Dropdown Menu Options and Refresh Button

Session Timeout Reminder

To help protect your information and maintain a secure environment, your session in the Longitudinal Record Viewer will automatically time out after 15 minutes. A session timer displays in the upper-right corner of the window that will show how long a user has been active, making it easier to keep track of your session. If you need to extend your time, simply click the refresh button.



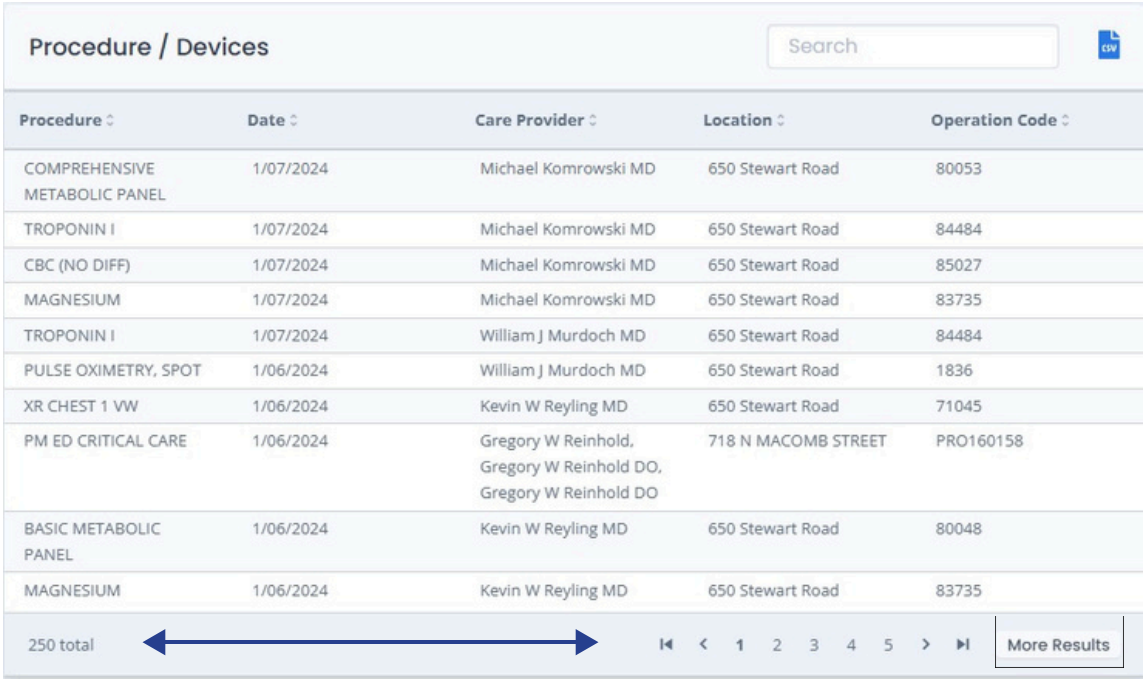
Session Expiration Timer and Refresh Button

“More Results” Returned

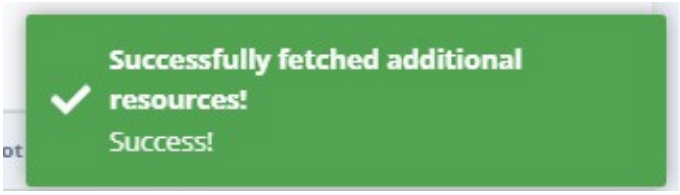
Each section can return up to 250 results at a time. If a section has more than 250 results to be returned, the user will see a box in the lower-right corner that says “More Results.” If that is clicked, the Viewer will fetch the additional results (in increments of 250 at a time, if applicable).

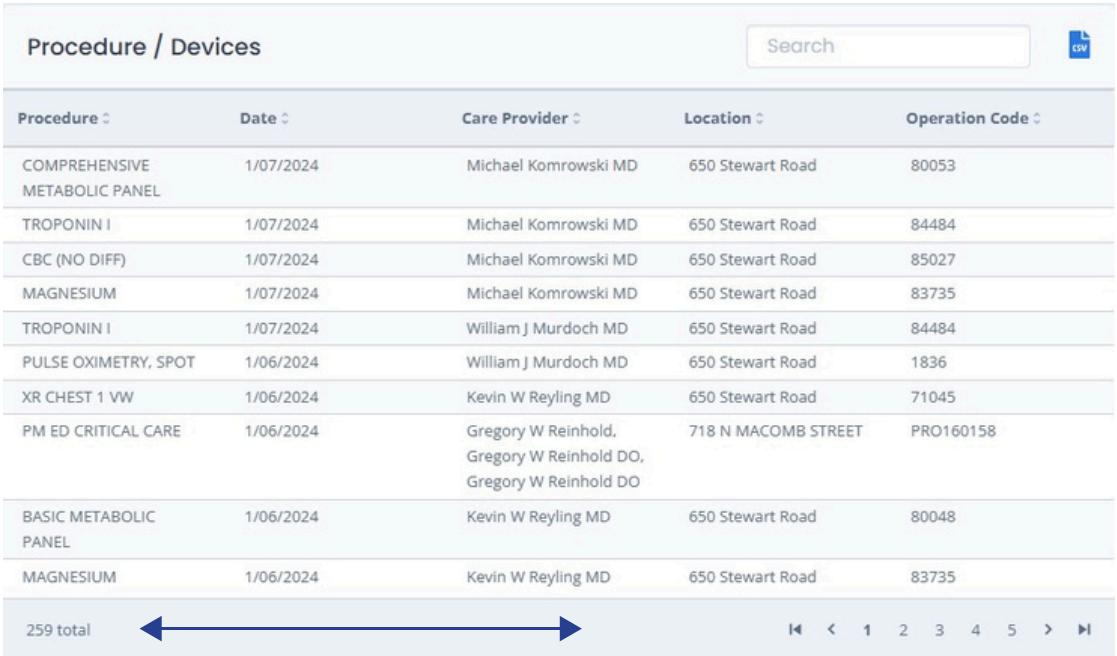
If the user clicks “More Results”, the Viewer will grab the additional results and a success notification will be displayed on the browser indicating the Viewer was able to grab the additional results; and the total number of results in the lower left corner of the section updates to the number of results available.

Screenshots below show this functionality.



Section displaying there are more than 250 results available





Section after clicking "More Results" in previous screenshot - no additional results

Viewing and Downloading Patient Documents and Information

The Longitudinal Record (LR) Viewer module offers several methods for users to view patient summary information and documents associated with the patient's care coordination.

Creating .CSV Files

For any of the sections displayed for a patient, the listed information can be exported to a .csv format if applicable.

In any of the sections, clicking the "CSV" icon will download the displayed information in .csv format to the user's computer. An example of this file is shown below.

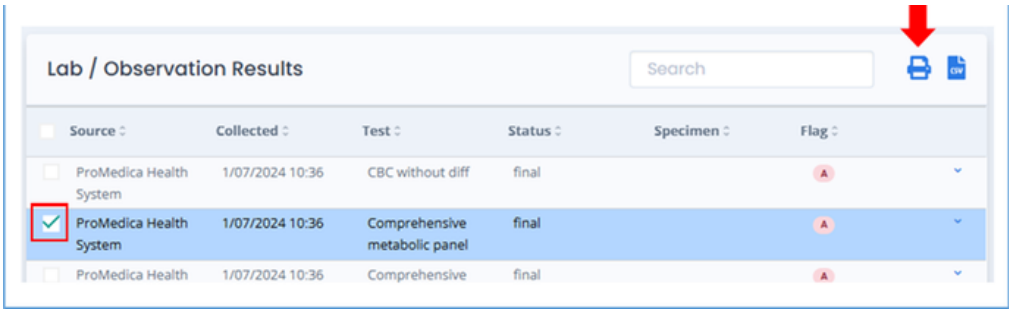
CSV Icon:

Id	Source	Authored C	Medicatio	Dose	Qty	Requester	Status
14790196	#1ok7HUAHXcGmpJv		azithromycin	500 MG	Oral Tablet		active
14788600	#N9lbOpsX6CGfBla3		azithromycin	500 MG	Oral Tablet		active
14790194	#Ae5jC6RHvKCyaH4E		azithromycin	500 MG	Oral Tablet		active
65d95e83l	#YxokzWLaF3fjESfw		azithromycin	500 MG	Oral Tablet		active
14789158	#eGGRaZWaXOZFMV		azithromycin	500 MG	Oral Tablet		active
14788597	#vYGsETxMxWk9Cp4l		azithromycin	500 MG	Oral Tablet		active
65d95e83l	#OoL3jv1YcJKelnLj		azithromycin	500 MG	Oral Tablet		active
14789156	#oTpI3nt9Xr9MgUQg		azithromycin	500 MG	Oral Tablet		active
14788594	#28x80jjf6nI7rWtl		azithromycin	500 MG	Oral Tablet		active
65d95e83l	#gGU4R6sXcRpovl2b		losartan potassium	25 MG	Oral Tablet		active

Exported .CSV File Example

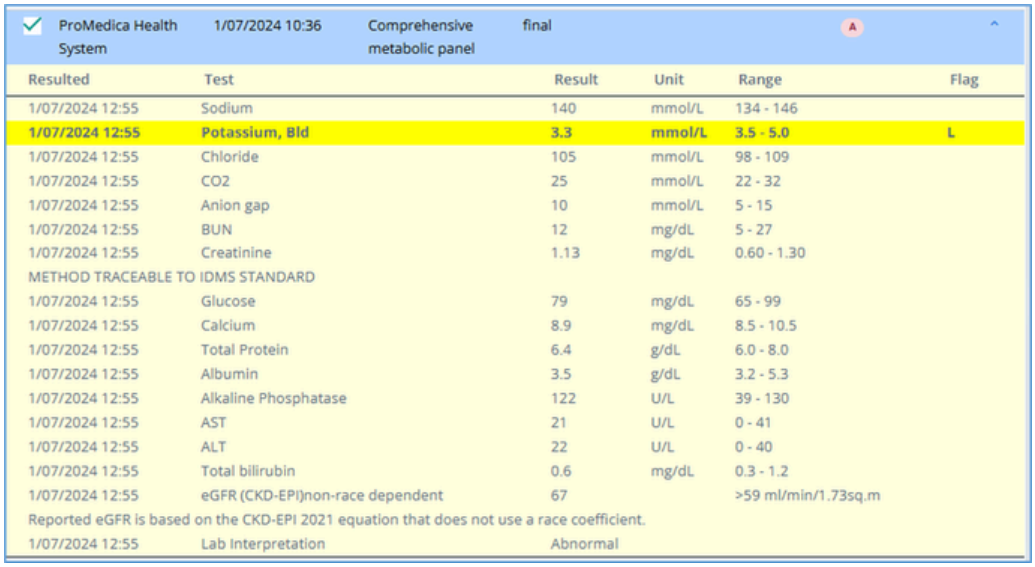
Creating PDFs for Lab and Observation Results and Diagnostic Imaging

In the **Lab/Observation Results** and **Diagnostic Imaging** sections, users may also export and view selected lab results in PDF format. This is accomplished by selecting the desired lab result(s) via the checkbox in the left-most column, and then selecting the “Print” icon, as shown in the screenshot below:

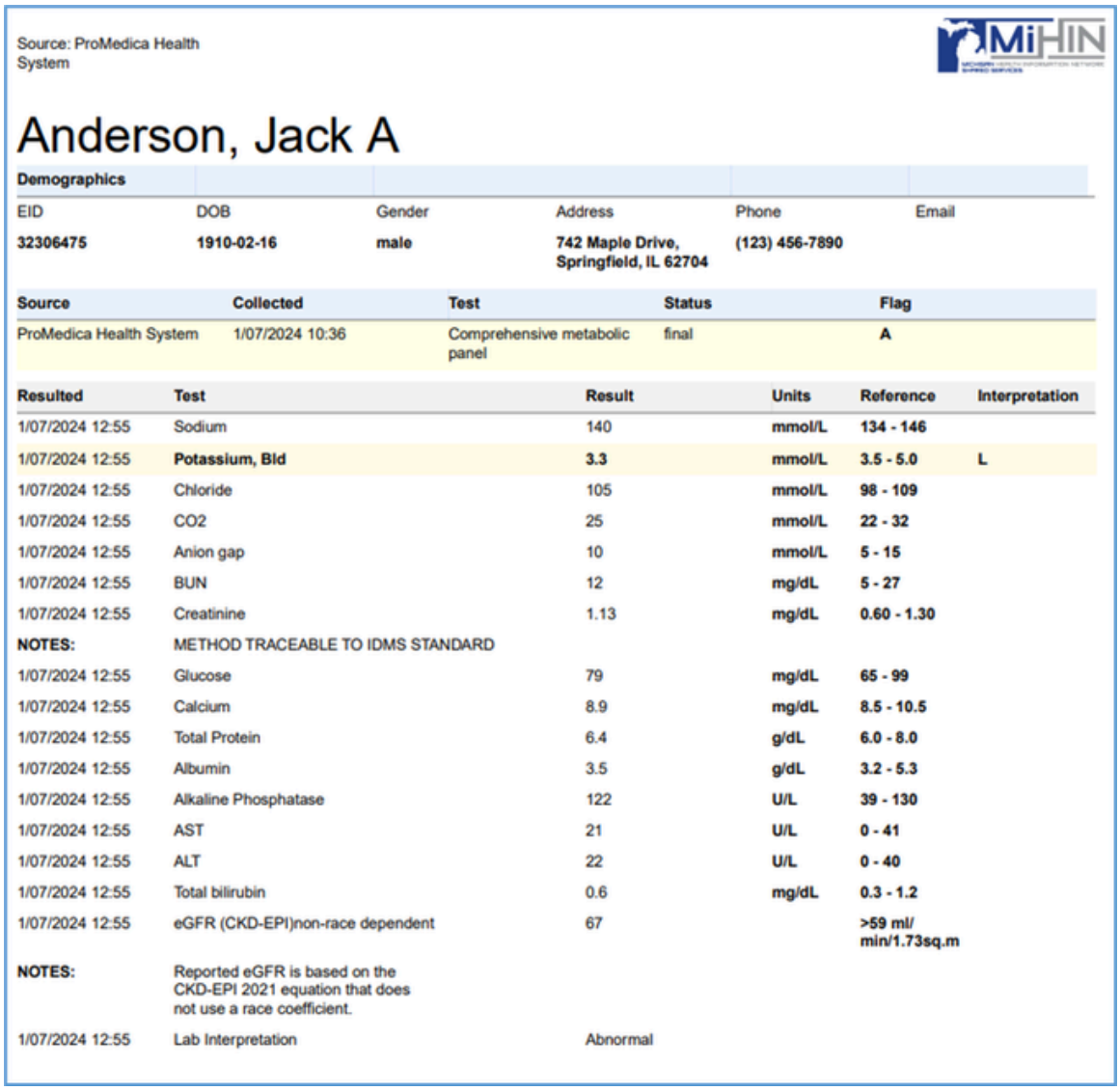


Selection Checkboxes and PDF Export Button Location

Once selected, a PDF will be generated and displayed: How this occurs will vary depending on the user’s browser, available applications, and settings. The information included in the PDF includes all information in the lab result entry, including all information in the drop-down menu as is shown in the following examples:



Lab Result Entry Including Sub-Menu Information



Source: ProMedica Health System

Anderson, Jack A

Demographics

EID	DOB	Gender	Address	Phone	Email
32306475	**1910-02-16**	**male**	**742 Maple Drive, Springfield, IL 62704**	**(123) 456-7890**	

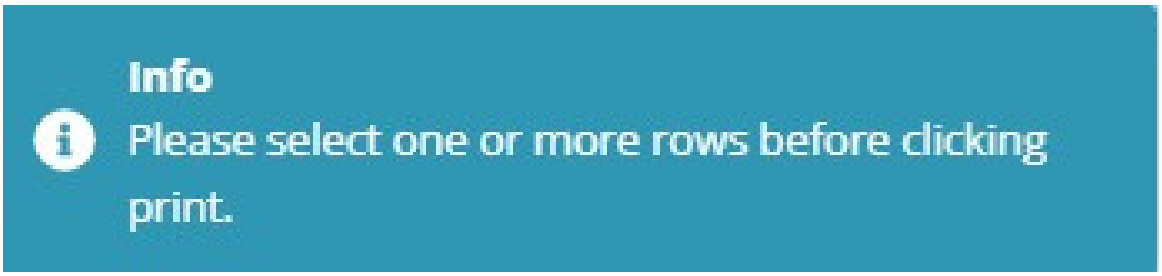
Source	Collected	Test	Status	Flag
ProMedica Health System	1/07/2024 10:36	Comprehensive metabolic panel	final	**A**

Resulted	Test	Result	Units	Reference	Interpretation
1/07/2024 12:55	Sodium	140	**mmol/L**	**134 - 146**	
1/07/2024 12:55	**Potassium, Bld**	**3.3**	**mmol/L**	**3.5 - 5.0**	**L**
1/07/2024 12:55	Chloride	105	**mmol/L**	**98 - 109**	
1/07/2024 12:55	CO2	25	**mmol/L**	**22 - 32**	
1/07/2024 12:55	Anion gap	10	**mmol/L**	**5 - 15**	
1/07/2024 12:55	BUN	12	**mg/dL**	**5 - 27**	
1/07/2024 12:55	Creatinine	1.13	**mg/dL**	**0.60 - 1.30**	
NOTES:	METHOD TRACEABLE TO IDMS STANDARD				
1/07/2024 12:55	Glucose	79	**mg/dL**	**65 - 99**	
1/07/2024 12:55	Calcium	8.9	**mg/dL**	**8.5 - 10.5**	
1/07/2024 12:55	Total Protein	6.4	**g/dL**	**6.0 - 8.0**	
1/07/2024 12:55	Albumin	3.5	**g/dL**	**3.2 - 5.3**	
1/07/2024 12:55	Alkaline Phosphatase	122	**U/L**	**39 - 130**	
1/07/2024 12:55	AST	21	**U/L**	**0 - 41**	
1/07/2024 12:55	ALT	22	**U/L**	**0 - 40**	
1/07/2024 12:55	Total bilirubin	0.6	**mg/dL**	**0.3 - 1.2**	
1/07/2024 12:55	eGFR (CKD-EPI)non-race dependent	67		**>59 ml/ min/1.73sq.m**	
NOTES:	Reported eGFR is based on the CKD-EPI 2021 equation that does not use a race coefficient.				
1/07/2024 12:55	Lab Interpretation	Abnormal			

PDF Produced from the Lab Entry

The PDF presents the result(s) in a human-readable format and includes the patient demographic header from the Longitudinal Patient Record.

One or more results may be selected in the section using the checkbox to the left of the result. If multiple result's checkboxes are selected, they will be combined into a single PDF when the user clicks the "Print" icon, as shown above. If no result is selected, an error message will instruct the user to select one or more rows:



No Lab Results Selected before clicking "Print"

Viewing and Downloading Documents/Clinical Notes and Diagnostic Imaging

In the **Documents/Clinical Notes** and **Diagnostic Imaging** sections of the Longitudinal Record, users click the "View" icon to open the full document in another window in their internet browser.

View Icon: 

In addition to viewing clinical documents and notes, users can download and export the documents by clicking the "Download" icon. This will save the associated document to the user's computer in the file's applicable format.

Download Icon: 

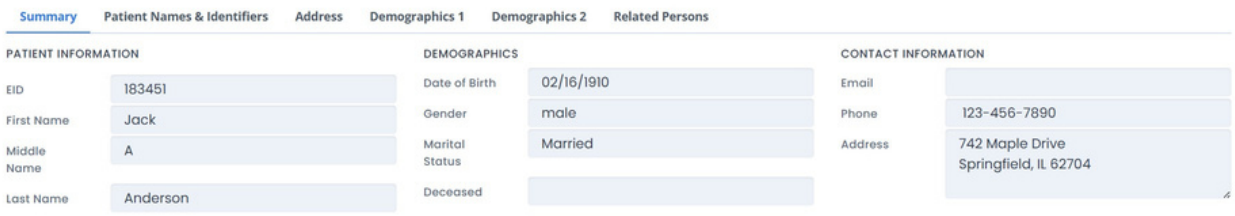
Longitudinal Record (LR) Viewer Sections/Widgets

The LR Viewer includes sections/widgets that organize and display patient information, such as laboratory and observation results, medication statements, encounters, and other clinical data. The sections below describe what information can be found in each widget, when that information may be most helpful to a user, and how it is sourced and exchanged, such as through ADT v2 or CCD v3 messages.

Patient Summary

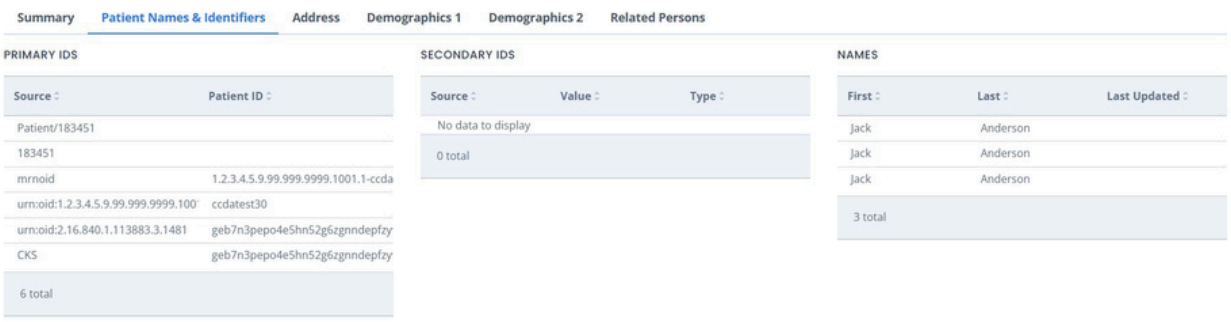
The Patient Summary section **displays individual details about the patient** including name, identifiers, demographics, address information, and related persons.

Summary: Displays basic patient information, demographics, and contact information.



- Patient Information
  - EID - Displays the most recently updated patient resource ID for the record
  - First Name
  - Middle Name
  - Last Name
- Demographics
  - Date of Birth in the format: MM-DD-YYYY
  - Gender
  - Marital Status
  - Deceased
- Contact Information
  - Email
  - Phone
  - Address in the format: Street Number, Street Name, City, State, Zip Code

Patient Names & Identifiers: Displays unique identifiers (both primary and secondary), as well as any names attributed to the patient.



- Primary IDs
  - Source
  - Patient ID
- Secondary IDs
  - Source
  - Value
  - Type
- Names
  - First – All first names attributed to patient
  - Last – All last names attributed to patient
  - Last Updated – The last date that the patient's name was updated in the format of YYYY-MM-DD

Address: Displays address information for the patient

- Source – The source the address information was pulled from
- Address Line 1 – Street number and name
- Address Line 2 – Apt/Unit Number or P.O. Box
- City
- State
- Postal – 5 Digits
- Last Updated – The last date that the patient's address was updated in the format: YYYY-MM-DD

Demographics 1: Displays additional demographic information for the patient

- Language
  - Language
  - Preferred Status: True or False
  - Source
  - Last Updated – The last date that the patient's language was updated in the format: YYYY-MM-DD
- Religion
  - Religion
  - Source
  - Last Updated – The Last date that the patient's religion was updated in the format: YYYY-MM-DD
- Citizenship
  - Citizenship
  - Source
  - Last Updated – The Last date that the patient's citizenship was updated in the format: YYYY-MM-DD

Demographics 2: Displays additional demographic information for the patient

- Birthplace
  - Birthplace
  - Source
  - Last Updated – The Last date that the patient's birthplace was updated in

the format: YYYY-MM-DD

- Race
  - Race
  - Source
  - Last Updated - The last date that the patient's race was updated in the format: YYYY-MM-DD
- Ethnicity
  - Ethnicity
  - Source
  - Last Updated - The last date that the patient's ethnicity was updated in the format: YYYY-MM-DD

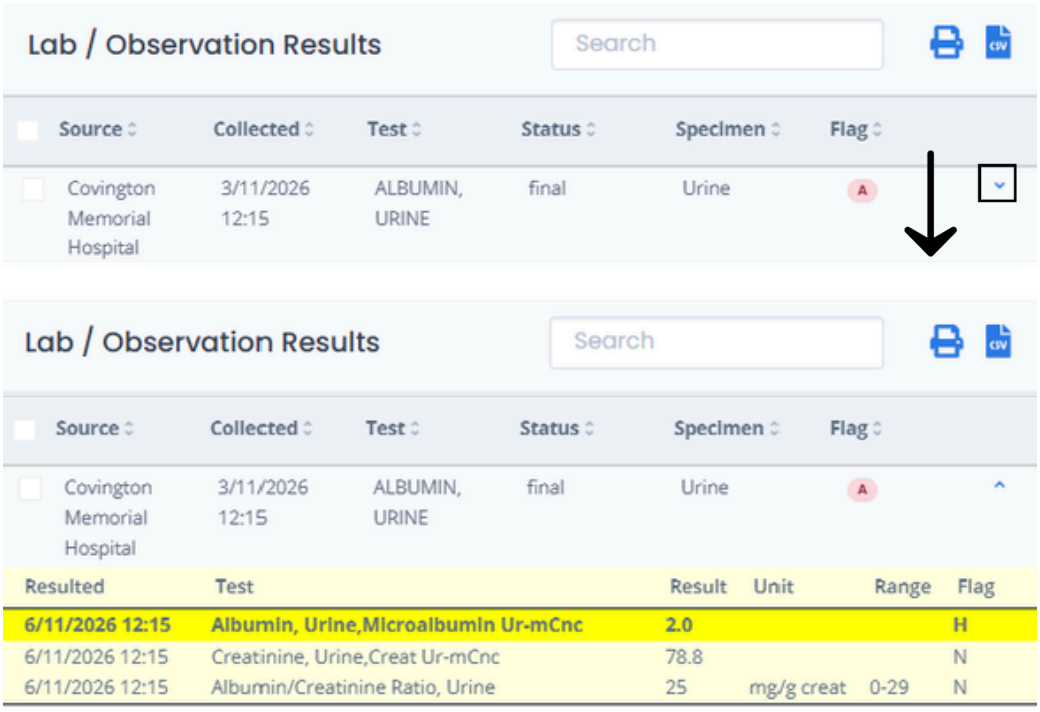
Related Persons: Displays a list of individuals related to the patient.

- Name
- Contact
- Relationship
- Last Updated - The last date that the patient's related persons were updated in the format: YYYY-MM-DD

Lab/Observation Results

TheLab/Observation Results section **shows results from routine lab tests** such as blood work, urine tests, or metabolic panels. This section is used to monitor trends in patient health over time or evaluate recent lab findings. Content in this section includes source, date, test names, and abnormal flags from ADT (ORU)(v2) messages.

***Please Note:** Observation Results from CCD data (Lab, Diagnostic, Other) will also appear on the Lab/Observation Results section at this time. Secondly, each entry in this section includes a down arrow on the right side of the entry - which can be clicked to expand or collapse the row, revealing more information about the individual tests performed in any listed lab and can further describe the reason for any Flagged results.



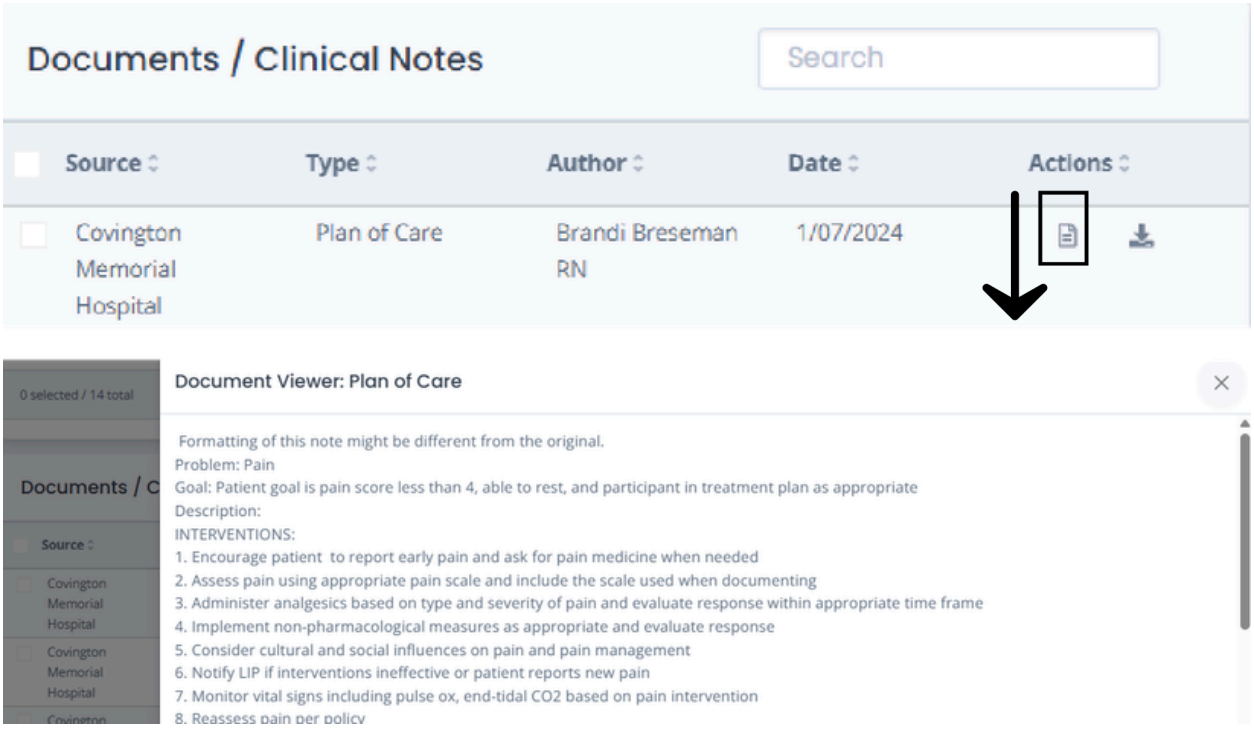
"Lab/Observations" Headers and UI Elements

- **Source:** Displays the name of the facility that the lab or observation was performed and produced from.

- **Collected:** Displays the date the lab or observation was performed in the format: **MM/DD/YYYY HH:MM**
- **Test:** Displays the type of test that was performed. May include the medium of the test and what was being tested for
- **Status:** Displays the status of the performed test. Includes, but is not limited to the following:
    - Final
- **Specimen:** Displays a symbol to flag healthcare providers associated with the listed lab result, indicating that they would benefit from the additional information included in the expanded view. This view is described below.
- **Flag:** Displays a symbol to flag healthcare providers associated with the listed lab result, indicating that they would benefit from the additional information included in the expanded view. This view is described below.
- **CSV Icon:** Exports the selected lab result entries as a .csv file, including all information included in the entries drop down menu.
- **Print Icon:** Exports the selected lab result entry as a .pdf file, including all information included in the entry's drop down menu, for download or print.
- **Search:** Filters list of all Laboratory entries based on the information entered

Documents/Clinical Notes

The Documents/Clinical Notes section includes **clinical summaries, visit notes, discharge summaries, and other provider-written documentation.** Content in this section includes source, type, author, and date from CCD (v3) and ADT (MDM) (v2) messages.



"Documents/Clinical Notes" Headers and UI Elements

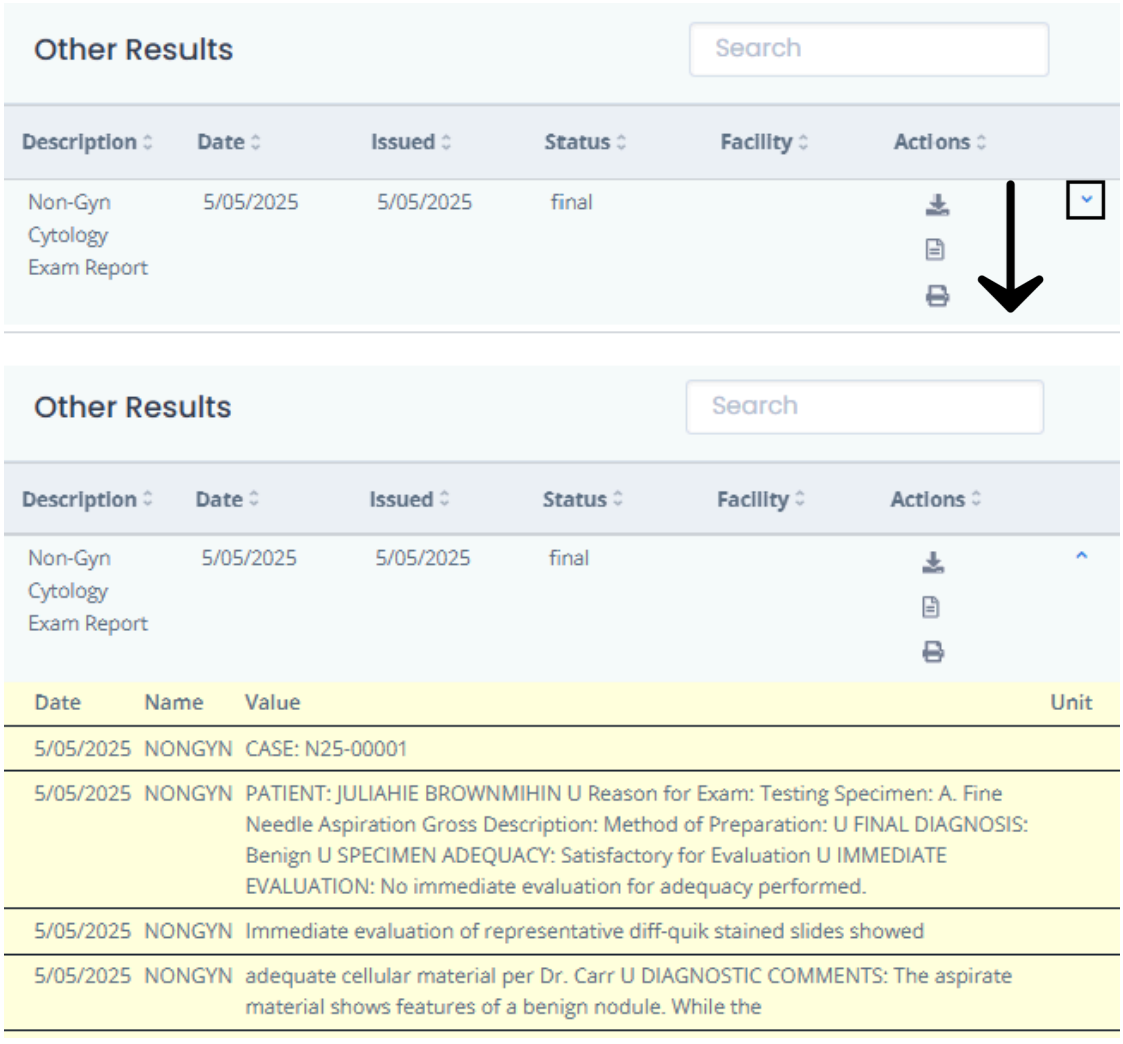
- **Source:** Displays the name of the facility that the document/note was produced from.
- **Type:** Lists the type of document from a comprehensive value set.
- **Author:** Lists the name of the Source Organization that document, or clinical notes were received from.
- **Date:** Displays the date the document or clinical note was created in the format: **M/DD/YYYY.**
- **Actions:** Displays actions that the user can take with this listed document include the following:
    - View – Opens a copy of the listed document for the user to view in the browser.

    - Download – Downloads a copy of the listed document/note into the user's local system.
- **Search:** Filters list of all Documents and Clinical Note entries based on the information entered.

Other Results

The Other Results section **covers specialized tests and reports that do not fall under standard lab results**. Examples include **pathology reports, tissue biopsies, ECGs, and EKGs**. Check this section for advanced diagnostic findings that require clinical interpretation. This does NOT include strips for ECG or EKGs. Content in this section includes description, date, issued, status, and facility information derived from CCD (v3) and ADT (MDM) (v2) messages.

***Please Note:** Each entry in this section includes a down arrow on the right side of the entry - which can be clicked to expand or collapse the row, revealing more information about the individual tests performed in any listed result.

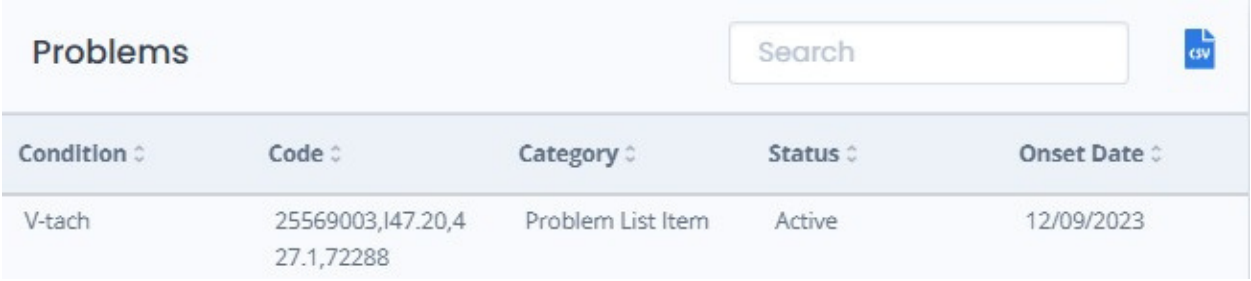


"Other Results" Headers and UI Elements

- **Description:** Displays a description of the test, exam or report conducted for the listed patient.
- **Date:** Displays the date the tests that the results came from was performed in the format: **M/DD/YYYY.**
- **Issued:** Displays the date results were issued to the patient in the format: **M/DD/YYYY.**
- **Status:** Displays the status of the results. Includes, but is not limited to the following:
    - Final
- **Facility:** Displays the name of the facility that the testing and the corresponding results came from.
- **Actions:** Displays actions that the user can take with this listed document include the following:
    - Download – Downloads a PDF of the listed document into the user's local system.
    - View – Opens a copy of the listed document for the user to view in the browser.
    - Print - Opens a page that allows the user to view and print to a connected printer, if applicable.
- **Search:** Filters list of all Laboratory entries based on the information entered.

Problems

The Problems section **lists diagnosed health issues and conditions recorded for the patient.** It may include chronic illnesses, past medical conditions, or newly diagnosed problems. This is used to quickly understand the patient's medical history and current health concerns. Content in this section includes diagnosis name and codes, Status of Condition, and Onset date derived from CCD (v3) and ADT (v2) messages.



"Problems" Section Headers and UI Elements

- **Condition:** Lists the name of a clinical condition, problem, diagnosis, or other event, situation, issue, or clinical concept that has risen to a level of concern
- **Code:** Code associated with the identification of the condition, problem, or diagnosis. This is a comma-delimited list and can include, but is not limited to the following:
  - **SNOMED**
  - **ICD-10**
- **Category:** Displays the category assigned to the condition. It is contextual based on a provider's list of category types.
  - Problem List Item – An item on a problem list that can be managed over time and can be expressed by a practitioner (e.g., physician, nurse), patient, or related person
  - Encounter Diagnosis – A point in time diagnosis (e.g., from a physician or nurse) in context of an encounter
- **Status:** Displays the status of the listed problem from the following:
  - Active
  - Inactive
- **Onset Date:** Estimated date, actual date, or date-time the condition, situation,

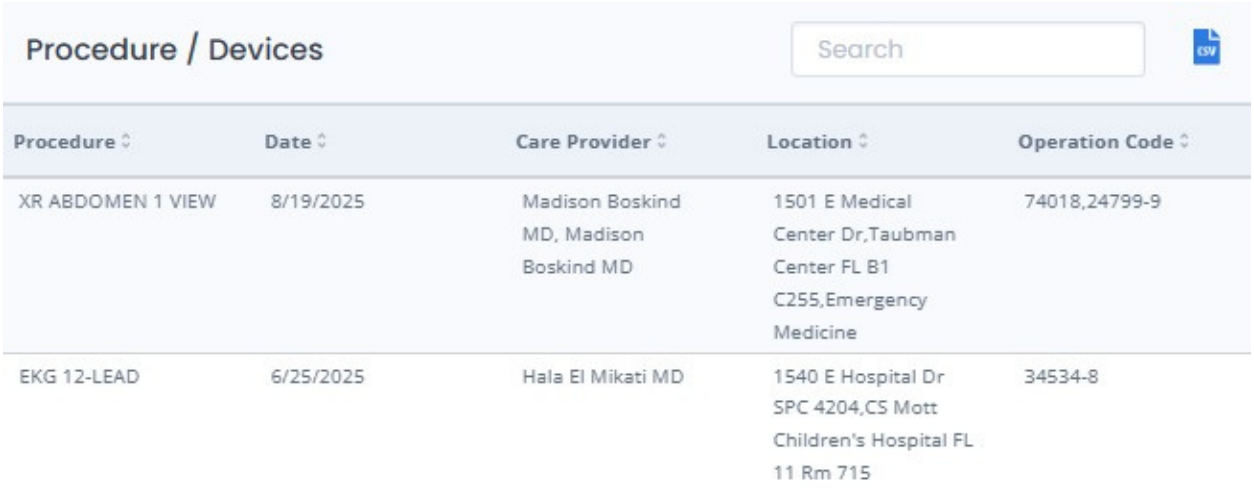
or concern began in the opinion of the clinician: **M/DD/YYYY**

- **CSV Icon:** Creates and downloads a .csv file with information listed in this section for the patient.
- **Search:** Filters list of all problems and devices on the entered terms

Procedure/Devices

The Procedure/Devices section **displays surgeries, treatments, and medical devices** the patient has received or is using. This includes procedures like a knee replacement or the insertion of a pacemaker. This section is helpful for reviewing a patient's surgical history or device use across different visits. Content from this section includes all orders requested to be performed during an encounter (draw procedure, implanting devices, etc.) - derived from CCD (v3) and ADT (v2) messages.

*Noting results will be found within a separate "Lab / Observation Results" section.



Procedure	Date	Care Provider	Location	Operation Code
XR ABDOMEN 1 VIEW	8/19/2025	Madison Boskind MD, Madison Boskind MD	1501 E Medical Center Dr,Taubman Center FL B1 C255,Emergency Medicine	74018,24799-9
EKG 12-LEAD	6/25/2025	Hala El Mikati MD	1540 E Hospital Dr SPC 4204,CS Mott Children's Hospital FL 11 Rm 715	34534-8

"Procedure/Devices" Headers and UI Elements

- **Procedure:** Displays the action that is being or was performed on an individual
- **Date**: Displays the date of the given procedure in the format: **M/DD/YYYY**
- **Care Provider:** Displays the name of the provider that performed the listed procedure in the format: **First Name [M.I] Last Name.**
- **Location:** Displays the location where the procedure was performed
- **Operation Code**: Displays the procedure's number identification, as defined by the associated code set in the format: **00000**
- **CSV Icon:** Creates and downloads a .csv file with information listed in this section for the patient.
- **Search:** Filters list of all listed procedures based on the information entered

Medication Statements

The Medication Statements section displays **medications that the patient has taken or is currently taking**, based on clinical documentation. It's a way to track actual usage, even if the medication wasn't officially ordered through a prescription. This view is especially helpful when confirming medication adherence, identifying discrepancies, or reviewing a patient's full medication history during transitions of care. Content in this section includes detail of the actual items administered to the patient during an encounter - derived from information from the CCD (v3) message(s).

Effective	Medication	Dose	Unit	Route
1/07/2024	traZODone (DESYREL) tablet 50 mg	50	mg	oral
1/06/2024	dextrose 5 % (D5W) infusion	100	mL/h	intravenous

"Medication Statements" Headers and UI Elements

- **Effective:** Displays the date upon which the listed mediation was first effective in the format: **MM/DD/YYYY**
- **Medication:** Displays the name and the measurement per dosage of the listed medication
- **Dose:** Displays the number of dosages to be administered for the listed medication. The unit of measurement within a singular dose is listed in the next section.
- **Unit:** Displays the unit of measurement used to measure a dosage of the listed medications listed in formats including but not limited to the following:
    - Mg
    - Ug
    - {tbl}
    - mL/h

- **Route:** Displays the method of intake for the listed medication from the following:
  - Oral
  - Topical
  - Inhalation
  - Intravenous
- **CSV Icon:** Creates and downloads a .csv file with information listed in this section for the patient.
- **Search:** Filters list of all medication orders and requests on the entered terms

Encounters

The Encounters section **lists past visits to healthcare facilities, including office visits, hospital stays, and emergency room visits.** This can be useful for tracking where and when a patient received care, along with the reason for the visit. Content from this section is not displayed the same from organization to another because only information that is received in the ADT (v2) message can be displayed; and if information is improperly sent or not sent at all, it will not be displayed.

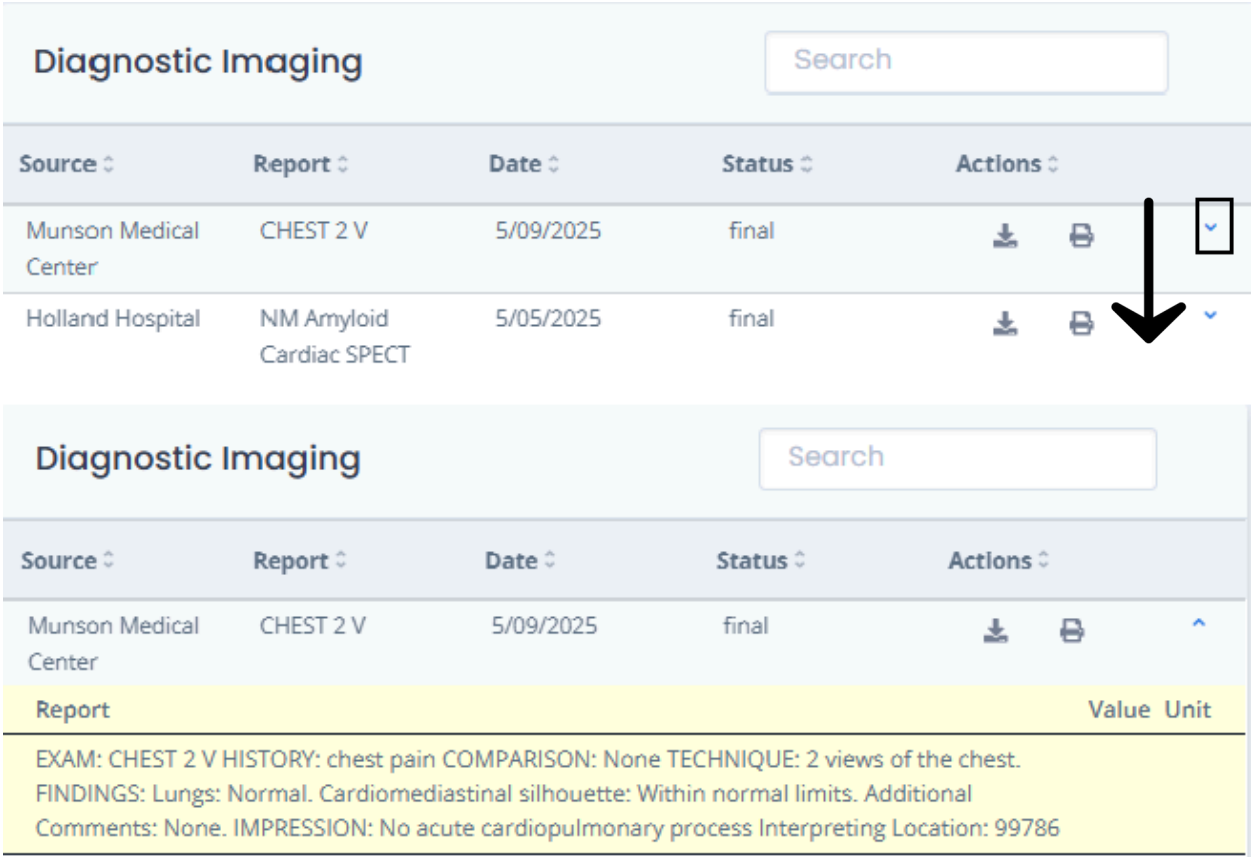
"Encounters" Headers and UI Elements

- **Date:** Displays the start date of the encounter in the format: **M/DD/YYYY**
- **Type:** Displays the specific type of encounter. Due to the substantial number of encounters, it is not possible to have a list of values.
- **Facility:** Displays the name of the facility where the encounter occurred
- **Care Provider:** Displays the service provider that managed the encounter in the following format: **First Name [M.I] Last Name.**
- **End of Encounter:** Displays the concluding date of the encounter in the format: **M/DD/YYYY**
- **Encounter Number:** Displays the number assigned to the encounter by the care provider in the format: **00000 (May include more digits)**
- **Admit Reason:** Displays the reason the patient was admitted. This is a free text field and will reflect what reasons were entered.
- **CSV Icon:** Creates and downloads a .csv file with information listed in this section for the patient.
- **Search:** Filters list of all listed encounter entries based on the information entered

Diagnostic Imaging

The Diagnostic Imaging section **shows radiology reports from imaging studies** like X-rays, CT scans, MRIs, or ultrasounds. The focus here is on **written findings**, not the images themselves. This section is used to review how radiologists interpreted the imaging. Content in this section includes the source, report, date, status derived from CCD (v3) and ADT (v2) messages.

***Please Note:** Each entry in this section includes a down arrow on the right side of the entry - which can be clicked to expand or collapse the row, revealing more information about the individual tests performed in any listed result.



"Diagnostic Imaging" Headers and UI Elements

- **Source:** Displays the facility from which the listed imaging report came from.
- **Report:** Displays the name and type of report performed on the listed patient
- **Date:** Displays the clinically relevant date for the report in the format:

M/DD/YYYY.

- **Status:** Displays the diagnostic status of the listed diagnostic report. Values can include, but are not limited to the following:
  - Unknown
  - Final
- **Actions:** Displays actions that the user can take with this listed document include the following:
  - Download – Downloads a PDF of the listed document into the user's local system
  - Print - Opens a page that allows the user to view and print to a connected printer, if applicable.
- **Search:** Filters list of all Diagnostic Report entries based on the information entered.

Allergies

The Allergies section **displays any known allergies or intolerances, such as reactions to medications, foods, or environmental triggers**. This is critical for ensuring safe treatment and avoiding allergic reactions. Content in this section is derived from substance, reaction, severity, criticality, onset date, recorded date, and status from CCD (v3) and ADT (v2) messages.

Substance	Reaction	Severity	Criticality	Onset Date	Recorded Date	Status
Shrimp	Itching		low	3/28/2023	3/28/2023	Active
Shellfish Containing Products	Itching		low	8/02/2017	10/09/2018	Active
Metoprolol Tartrate	Other (See Comments) ,Hypotensi on		high	8/02/2017	8/02/2017	Active

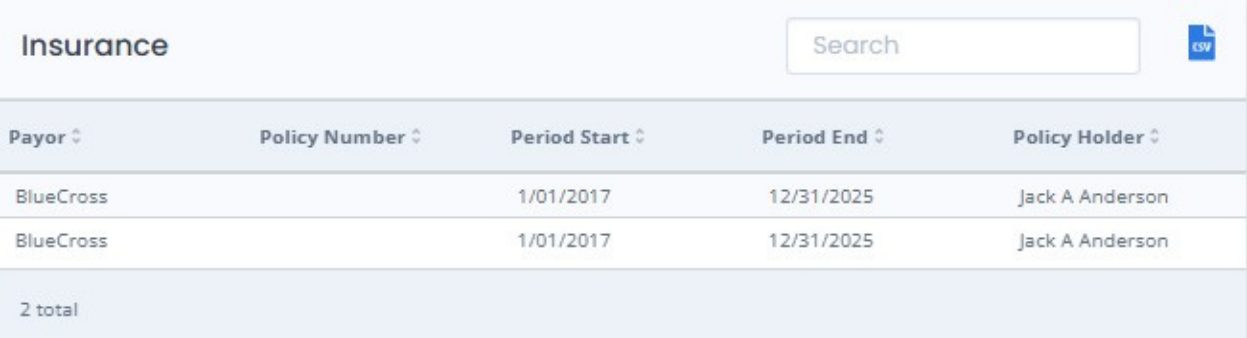
"Allergies" Headers and UI Elements

- **Substance:** Lists the substance the patient has an allergy to taken from a value set of substances
- **Reaction:** Describes the clinical symptoms/signs associated with the substance exposure event
- **Severity:** Lists the severity of the reaction associated with the substance exposure event from the following options:
  - Mild
  - Moderate
  - Severe
- **Criticality:** Describes the impact of the allergic reaction regarding the need to treat the reaction of the associated exposure event from the following:
  - Low
  - High

    - Unable-to-Assess
- **Onset Date:** Lists the date of the last known occurrence of a reaction in the format: **M/DD/YYYY**
- **Recorded Date:** Lists the date the occurrence of a reaction was recorded by provider in the format: **M/DD/YYYY**
- **Status:** Lists the status of the patient in relation to the substance exposure event from the following:
    - Active
    - Recurrence
    - Relapse
    - Inactive
    - Remission
    - Resolved
    - Unknown
- **CSV Icon:** Creates and downloads a .csv file with information listed in this section for the patient.
- **Search:** Filters list of all allergy entries based on the information entered.

Insurance

The Insurance section **provides details about the patient's health insurance coverage**: Including plan names and policy information when available. This section is used to confirm eligibility and understand potential coverage for care or medications. Content in this section includes payor, policy number, policy holder, and period start/end dates from the ADT (v2) messages.



"Insurance" Headers and UI Elements

- **Payor:** Displays the name of the organization providing coverage for the listed patient.
- **Policy Number:** Displays the policy number provided for the patient.
- **Period Start:** Displays the insurance plan's start date in the format: **M/DD/YYYY**
- **Period End:** Displays the insurance plan's end date in the format: **M/DD/YYYY**
- **Policy Holder:** Displays the primary insurance holder's **First and Last Name.**
- **CSV Icon:** Creates and downloads a .csv file with information listed in this section for the patient.
- **Search:** Filters list of all Coverage entries based on the information entered

Vital Signs

The Vital Signs section **displays basic health measurements** like blood pressure, heart rate, temperature, weight, and oxygen levels. This information is essential for monitoring current health status and tracking changes over time. Content in this section includes description, result, unit, date, and status derived from CCD (v3) messages.

Description	Result	Unit	Date	Status
Systolic blood pressure	124	mm[Hg]	1/07/2024 14:08	final
Diastolic blood pressure	64	mm[Hg]	1/07/2024 14:08	final
Respiratory rate	20	/min	1/07/2024 14:00	final
Heart rate	64	/min	1/07/2024 14:00	final
Oxygen saturation in Arterial blood by Pulse oximetry	92	%	1/07/2024 12:37	final
Body temperature	36.39	Cel	1/07/2024 12:37	final
BMI	27.52	kg/m2	1/07/2024 07:56	final
Body weight	82.1	kg	1/07/2024 07:56	final
Body height	172.7	cm	1/06/2024 23:06	final

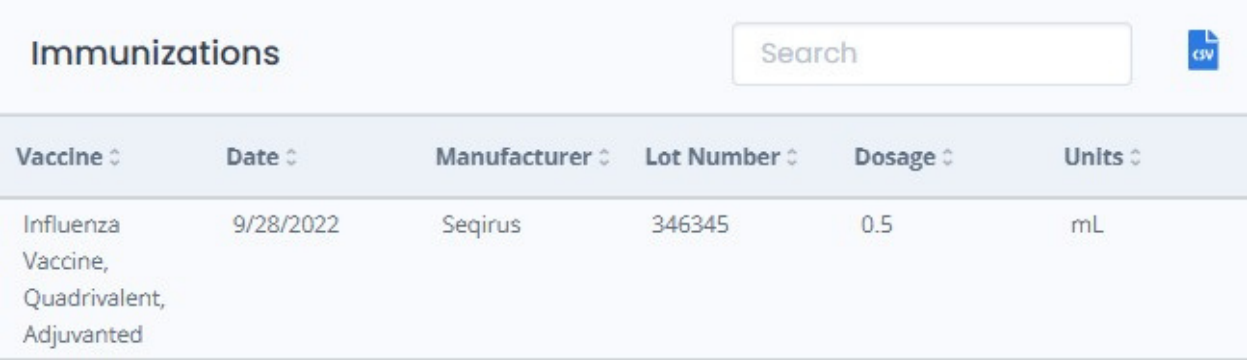
"Vital Signs" Headers and UI Elements

- **Description:** Displays the description of the vital sign measured such as:
  - Heart Rate
  - Respiratory Rate
  - Height
  - Weight
  - Temperature
- **Result:** Displays the numeric value of the measured vital sign.
- **Unit:** Displays the represented unit that applies to the listed vital sign.

- **Date:** Displays the date the listed vital signs were taken in the format: **M/DD/YYYY.**
- **Status:** Displays the status of the listed vital sign values from the following:
  - Registered
  - Preliminary
  - Final
  - Amended
  - Corrected
  - Cancelled
  - Entered-in-Error
  - Unknown
- **CSV Icon:** Creates and downloads a .csv file with information listed in this section for the patient.
- **Search:** Filters list of all Laboratory entries based on the information entered.

Immunizations

The Immunizations section shows a record of**vaccines administered to the patient.** This may include childhood immunizations, flu shots, COVID-19 vaccines, and others. This section is used to verify a patient's vaccination status or identify any gaps in immunization history. Content from this section is accumulated data submitted from all organizations - derived from CCD (v3) messages.



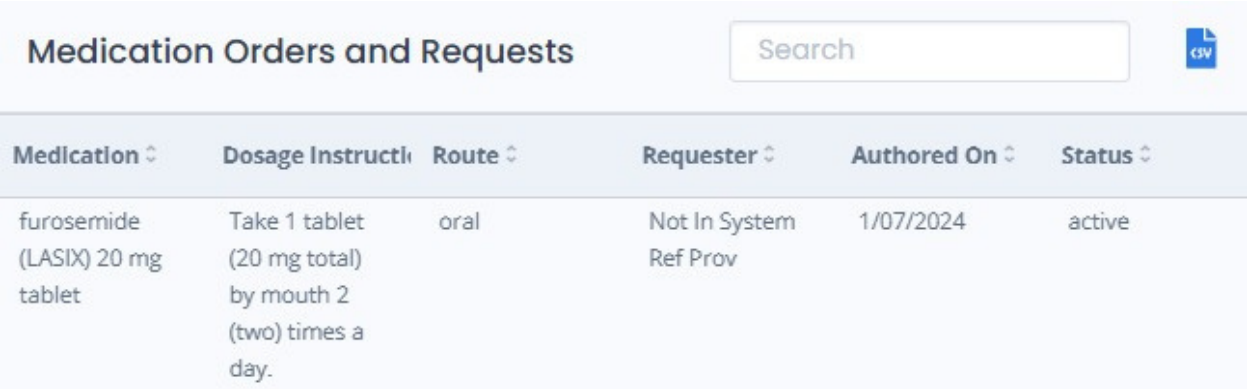
"Immunizations" Headers and UI Elements

- **Vaccine:** Displays the vaccine product administered
- **Date:** Displays the date on which the listed vaccination was administered in the format: **M/DD/YYYY**
- **Manufacturer:** Displays the name of the organization that administered the listed vaccine
- **Lot Number:** Displays the identifying code representing the lot number for the listed vaccine in the format: **0123L45A**
- **Dosage:** Displays the amount of the vaccine administered. Value is a number value. The unit of measurement that applies to this is listed in the following section
- **Units:** Displays the units of measurement of the vaccine administered including, but not limited to the following:
    - mL
- **CSV Icon:** Creates and downloads a .csv file with information listed in this section for the patient.
- **Search:** Filters list of all listed immunizations based on the information entered

Medication Orders and Requests

The Medication Orders and Requests section **shows medications that have been prescribed or recommended for a patient by a healthcare provider**. These may include active prescriptions, past orders, or instructions shared between providers and care teams. This section should be used when you need to review what a provider intended the patient to take—whether it's a current prescription, something planned, or even a discontinued medication order. Content in this section is derived from medication name, dose, frequency of administration, route of administration, and other data as provided in the CCD message(s).

Note: this does **NOT** include administration information.



"Medication Orders and Requests" Headers and UI Elements

- **Medication:** Displays the name and type of the medication ordered/requested
- **Dosage Instructions:** Displays instructions for the listed medications, including method and frequency of administration
- **Route:** Displays the method of intake for the listed medication. May include, but is not limited to the following:
  - Oral
  - Topical
  - Inhalation
- **Requester:** Displays the name of the care provider requesting the medication order
- **Authored On:** Displays the date that the medication order and/or request was

written in the format: **M/DD/YYYY**

- **Status:** Displays the status of the ordered medication with the listed patient. Field may include, but is not limited to the following examples:
  - Active
  - Stopped
- **CSV Icon:** Creates and downloads a .csv file with information listed in this section for the patient.
- **Search:** Filters list of all medication orders and requests on the entered terms

Production Support

	Severity 1	Severity 2	Severity 3	Severity 4
Description	A critical production system is down or does not function at all, and there is no circumvention or workaround for the problem; a significant number of users are affected, and a production business system is inoperable.	More than 90% of messages received and delivered successfully, but some messages are not delivered/received with required accuracy. Service component severely restricted in one of the following ways: • High impact risk or actual occurrence of patient care affected or operational impairment • Business critical service has a partial failure for multiple TDSOs • A critical service is online however, is operating in a degregated state and having a significant impact on multiple TDSOs	Service component restricted in one of the following ways: • A component is not performing as documented or there are unexpected results • Business critical service has failed for a two or more TDSOs • A critical service is usable however, a workaround is available, or less significant features are unavailable	No operational impact to MiHIN. A non-critical service component is malfunctioning, causing minimal impact, or a test system is down.
Initiation Method	**Call** (844) 454-2443 and **submit** a ticket online at www.mihin.org/requesthelp	**Call** (844) 454-2443 and **submit** a ticket online at www.mihin.org/requesthelp	**Submit** a ticket online at www.mihin.org/requesthelp	**Submit** a ticket online at www.mihin.org/requesthelp
Acknowledgement Communication	Within **30 minutes**	Within **30 minutes**	Within **3 business hours**	Within **6 business hours**
Resolution Goal	**<2** hours Restore Time from 8 am – 5 pm ET Monday-Friday and **<4** hours nights, weekends and holidays	**<4** hours Restore Time from 8 am - 5 pm ET Monday-Friday and **<8** hours nights, weekends and holidays	**<12** hours Restore Time from 8 am - 5 pm ET Monday–Friday and **<24** hours nights, weekends and holidays	Within **5 business days**

If you have questions, please contact the MiHIN Help Desk:

- www.mihin.org/requesthelp (preferred)
- Phone: 844-454-2443
- Monday – Friday 8:00 AM – 5:00 PM (Eastern Time)

Legal Advisory Language

This reminder applies to all use cases covering the exchange of electronic health information:

The Data Sharing Agreement (DSA) establishes the legal framework under which participating organizations can exchange messages through the MiHIN Platform, and sets forth the following approved reasons for which messages may be exchanged:

1. By health care providers for Treatment, Payment and/or Health Care Operations consistent with the requirements set forth in HIPAA
2. Public health activities and reporting as permitted by HIPAA and other Applicable Laws and Standards
3. To facilitate the implementation of "Meaningful Use" criteria as specified in the American Recovery and Reinvestment Act of 2009 and as permitted by HIPAA
4. Uses and disclosures pursuant to an Authorization provided by the individual who is the subject of the Message or such individual's personal representative in accordance with HIPAA
5. By Data Sharing Organizations for any and all purposes, including but not limited to pilot programs and testing, provided that such purposes are consistent with Applicable Laws and Standards
6. or any additional purposes as specified in any use case, provided that such purposes are consistent with Applicable Laws and Standards

Under the DSA, "***Applicable Laws and Standards***" means all applicable federal, state, and local laws, statutes, acts, ordinances, rules, codes, standards, regulations and judicial or administrative decisions promulgated by any governmental or self-regulatory agency, including the State of Michigan, the Michigan Health Information Technology Commission, or the Michigan Health and Hospital Association, as any of the foregoing may be amended, modified, codified, reenacted, promulgated or published, in whole or in part, and in effect from time to time. "Applicable Laws and Standards" includes but is not limited to HIPAA; the federal Confidentiality of Alcohol and Drug Abuse Patient Records statute, section 543 of the Public Health Service Act, 42 U.S.C. 290dd-2, and its implementing regulation, 42 CFR Part 2; the Michigan Mental Health Code, at MCLA §§ 333.1748 and 333.1748a; and the Michigan Public Health Code, at MCL § 333.5131, 5114a.

It is each participating organization's obligation and responsibility to ensure that it is aware of Applicable Laws and Standards as they pertain to the content of each message sent, and that its delivery of each message complies with the Applicable Laws and Standards. This means, for example, that if a use case is directed to the exchange of physical health information that may be exchanged without patient authorization under HIPAA, the participating organization must not deliver any message containing health information for which an express patient authorization or consent is required (e.g., mental or behavioral health information).

Disclaimer: The information contained in this implementation guide was current as of the date of the latest revision in the Document History in this guide. However, Medicare and Medicaid policies are subject to change and do so frequently. HL7 versions and formatting are also subject to updates. Therefore, links to any source documents have been provided within this guide for reference. MiHIN applies its best efforts to keep all information in this guide up-to-date. It is ultimately the responsibility of the participating organization and sending facilities to be knowledgeable of changes outside of MiHIN's control.