HIE / RHIO Workflow and AWARDS

AWARDS Information Sheet

Overview

Health Information Exchanges (HIEs), such as Regional Health Information Organizations (RHIOs) or other statewide systems, allow for the sharing of client data from one provider with any other providers that are part of the same network. AWARDS makes available to our customers an optional set of features that enable them to work directly with the HIEs or RHIOs that they belong to, automatically transmitting client data upon the completion of common data entry tasks such as consent forms, intake/admission, transfers, discharge, demographics updates, and medical data like medications, diagnoses, and allergies. While the bulk of data transmission work to the HIE / RHIO happens behind-the-scenes and without user intervention during the course of line staff's daily workflow, AWARDS also provides access to an **Interoperability Center** - a central point from which administrative users can complete the same actions manually.

Required Permissions

In order to use the AWARDS Interoperability Center, you must have the following permissions:

Program Chart Access *
Interoperability Center

And ONE of the following permissions:

Display Executive Administration Buttons
Permissions Data Entry
Permissions Data Entry for All Staff and Layers

Tip: The **Interoperability Center** permission must be assigned by Foothold Technology. Please contact the Help Desk for assistance if you need access to this functionality after its initial setup.

Note: Members of the "Executive Officer" and "System Administrator" user groups are exempt from all but the Interoperability Center permit.

In addition, if you will be completing clinical reconciliation work in AWARDS the Clinical Documents component of client face sheets must be turned on by Foothold Technology, and you must have these permissions as well:

Incorporate C-CDA *
Display Chart Records Buttons
Display Chart Records Profile Button

Note: * To retrieve a clinical document prior to reconciliation you must have the Interoperability Center permission; however, if you will only be incorporating documents retrieved by other users, the Incorporate C-CDA permission is sufficient and Interoperability Center is not required.

About This Document

This document is intended to guide you through all of the features AWARDS provides for working with HIEs and RHIOs. Keep in mind that some features detailed here may not be supported by your specific HIE or RHIO.

Initiating and Completing an HIE / RHIO Connection

The following steps are necessary to initiate and complete a connection between AWARDS and your HIE / RHIO:

1. **HIE / RHIO Contract and Compliance** - Your agency must work with your contact at the HIE / RHIO in question in order to complete both their contract and compliance processes.

2. **Foothold Interoperability Agreement** - Your agency must complete and sign the Interoperability Center - Information Sheet & Agreement and return it to your Foothold Client Services representative.

3. **Determine Programs to Share Data** - Your agency must decide which of your programs should be configured to send data to the HIE / RHIO and activate the AWARDS Certified Edition in those programs. Once a decision has been made, send the list of program names to your Foothold Client Services representative as soon as possible.

4. **Implement Electronic Signatures** - If your agency has not already done so, it must implement electronic signatures in AWARDS so that they can be used during the consent-signing process. Information on getting started with electronic signatures in AWARDS can be found here, including an overview of the e-signatures functionality, configuration and hardware considerations, and next steps.

5. **Activate Consent in a Training Program** - Once you have completed the steps above, your Foothold Client Services representative will assist you in setting up a training program in your AWARDS database with the appropriate HIE / RHIO consent form. This will enable you to help staff become familiar with the new feature prior to going live.

6. **Start Collecting Consents** - Agencies can start collecting consents ahead of go-live. Replacing paper consents in the period when the connection is being worked on will give you a headstart, and consent values will be transmitted when the connection goes live.

7. **Go-Live** - Once all three parties - the HIE / RHIO, Foothold, and your agency - agree that you have completed the above steps successfully, a go-live date will be scheduled. The technical teams at Foothold and the HIE / RHIO will work on this together, and your Foothold Client Services representative will alert you upon completion. There is iterative testing required throughout this process, which can extend the timeline if challenges are encountered.

8. **User Acceptance Testing with the HIE / RHIO** - To close out the project on the HIE / RHIO side, your agency will work with them to conduct user acceptance training. All ongoing support needs you have from Foothold at this point forward can be directed to the Help Desk.

Transmitting Data to the HIE / RHIO

AWARDS databases that are configured to share data with an HIE / RHIO automatically send data to it throughout the course of each day as line staff complete various data entry tasks. This data is sent via two types of messages, each triggered in different ways and containing different data sets, as detailed in the sections that follow:

C-CDA (Consolidated Clinical Document Architecture) Messages

What is a C-CDA?

A C-CDA (Consolidated Clinical Document Architecture) is a standard XML file that is structured to allow for incorporating a variety of data sets, including client demographics, diagnoses, medications, and allergies. Once sent to the destination, the data can then be consumed by the system and incorporated into the relevant client's electronic health record.

How is transmission of a C-CDA triggered and what data is sent?

C-CDA messages are automatically sent to the HIE / RHIO whenever any of the following data entry tasks are completed in AWARDS. They can also be triggered manually using the AWARDS Interoperability Center's Transmit C-CDA component, as noted here.

Triggering Data Entry Action	Location of Data Entry in AWARDS
Allergies - new data entry or updates	Charts > Medical > Allergies *
Diagnoses - new data entry or updates	Charts > Medical > Diagnoses *
Diagnostic Tests - new data entry or updates	Charts > Medical > Diagnostic Tests *
Discharge - discharge processed	Census > Discharge > Process Discharge
Medications - new data entry or updates	Charts > Medical > Medications *
Procedures - new data entry or updates	Charts > Medical > Procedures *
Vital Signs - new data entry or updates	Charts > Medical > Vital Signs *
Encounters - new data entry or updates	Charts > Medical > Encounters *
Care Plan - new data entry or updates	Charts > Medical > Encounters **

* Your AWARDS database may also be configured to allow for data entry of these types from within client face sheets (accessed via Census > Profile) or FormBuilder forms in various locations.

** Presently Care Plan data entry is completed from within the Encounters feature; however, it will soon be built into the Plans and Services feature (within the Services - Individual module) instead.

What data is sent in a C-CDA?

The following table details the specific data variables included in C-CDA documents (grouped into data sets for easy reference), along with information on where the data originates from within AWARDS. Regardless of the triggering action that results in the transmission of the C-CDA, *all* of the information detailed here is included in that message.

Data Set	Data Variables Sent	Originating Location in AWARDS
Allergies	Substance, Reaction, Onset Date, Inactive Date	Charts > Medical > Allergies *
Demographics	Client ID, Address, Name, Gender, DOB, SSN, Phone	Census > Profile > Face Sheet
Diagnoses	Condition, Onset Date, Resolution Date, Code	Charts > Medical > Diagnoses *

Diagnostic Tests	Test, Test Date, Results / Unit of Measure	Charts > Medical > Diagnostic Tests *
Medications	Medication, Strength, Dosage, Frequency, Start Date, End Date	Charts > Medical > Medications *
Procedures	Procedure, Procedure Date, SNOMED	Charts > Medical > Procedures *
Vital Signs	Date / Time, Height, Weight, Blood Pressure	Charts > Medical > Vital Signs *

* Your AWARDS database may also be configured to allow for data entry of these types from within client face sheets (accessed via Census > Profile) or FormBuilder forms in various locations.

Feed Messages

What are feed messages?

Feed messages may take one of two forms, depending upon how your HIE connection is configured:

- **ADT -** An ADT is a standard HL7 message format that is structured to allow for transmitting data regarding program registrations, admissions, discharges, and client merge records. Each type of data is sent in a separate ADT message: **A01 - Admission**, **A03 - Discharge**, **A04 - Registration**, **A08 - Update**, **A40 - Merge**. As with C-CDAs, information sent via any ADT message can also be incorporated into the relevant client's electronic health record.
- **XACML -** XACML is a web services language intended for interoperability. While it may not send the exact type of messages as with an ADT feed, the triggering events and information transmitted is largely the same.

How is transmission of a feed message triggered?

Feed messages are automatically sent by AWARDS to the HIE / RHIO whenever any of the following data entry actions are completed in AWARDS. They can also be triggered manually using various components of the AWARDS Interoperability Center, as noted here.

Triggering Data Entry Access	Location of Data Entry in AWARDS	ADT Message Type
Client admission (or re-admission) to the program	Census > Intake / Admission	A01 - Admission
Client discharge from the program	Census > Discharge > Process Discharge	A03 - Discharge
Client admission (or re-admission) to the program	Census > Intake / Admission	A04 - Registration
Update or withdrawal of client consent	Census > Profile > Face Sheet > Network Consent Census > Intake / Admission	A08 - Update
Update of client demographic data	Census > Profile > Face Sheet Census > Intake / Admission	A08 - Update
Merge of two or more client records	Client Search > Merge Duplicate Clients	A40 - Merge

What data is sent in a feed message?

The following table details the specific data variables included in the ADT data sets, along with information on where the data originates from within AWARDS. As noted above, each type of data is sent in a separate ADT message.

Exceptions are demographics, admission information (if available), and discharge information (if available), which are included in all transmission messages.

Data Set	Data Variables Sent	Originating Location in AWARDS	ADT Message
Admission / Registration	Program Name, Admission Date, Visit #	Census > Intake / Admission	All
Consent	Consent Value	Census > Profile > Face Sheet > Network Consent Census > Intake / Admission	A08 - Update
Demographics	Client ID, Address, Name, Gender, DOB, SSN, Phone	Census > Profile > Face Sheet Census > Intake / Admission	All
Discharge	Date / Time of Discharge	Census > Discharge > Process Discharge	All
Merge	Demographics for the client record being removed	Client Search > Merge Duplicate Clients	A40 - Merge

Suggested Data Entry Workflows

In order to ensure that all relevant data is in fact being transmitted to the HIE / RHIO, you'll want to make sure staff are completing the following data entry steps throughout the course of a client's program stay.

☀ **Tip:** See AWARDS Online Help for detailed information on using each of the workflow data entry tools, including click-by-click instructions, any required permissions, frequently asked questions, and more. Links to the relevant Help pages are provided below.

Intake / Admission

From the AWARDS *Home* screen, click **Census** from the left-hand menu, and then click **Intake / Admission**. Once there, proceed with creating a new application, and then process the admission. Note that the HIE / RHIO Consent form is incorporated into the admission data entry process.

For detailed information on Intake / Admission, click here for multi-step, or here for single-step.

Face Sheet

From the AWARDS *Home* screen, click **Census** from the left-hand menu, and then click **Profile**. From the menu that is displayed, click **Face Sheet**. Once on the client's face sheet, ensure that data is entered completely and correctly in the top "Demographics Info" portion of the page. Note too that you can update Consent information using the **Network Consent** button at the top of the screen.

For detailed information on working with client face sheets, click here.

Medical

Several areas with the AWARDS Medical module are included in the data sent to the HIE / RHIO. These can either be accessed for data entry purposes from the Medical module, or they can be made available on client face sheets or in FormBuilder forms. (Speak to your Foothold Client Services representative to discuss desired workflow changes.)

Specific features that should be used for data entry if your agency intends for specific data to move to the HIE / RHIO include:

- **Medications** - For detailed information on working with medication records, click here.
- **Diagnoses** - For detailed information on working with diagnoses records, click here.
- **Allergies** - For detailed information on working with allergy records, click here.
- **Procedures** - For detailed information on working with procedure records, click here.
- **Vital Signs** - For detailed information on working with vital sign records, click here.
- **Diagnostic Tests** - For detailed information on working with diagnostic test records, click here.

Clinical Document Retrieval and Incorporation

Clinical document retrieval and incorporation (also referred to as clinical reconciliation is a critical component of care coordination and interoperability workflow. It enables users to retrieve an electronic document from an HIE, HISP, or through manual upload, and to attach it to a client's record in AWARDS. Users can then determine which records should be retained, and which should be discarded. When the process is complete, the client's record is an up-to-date snapshot of his / her health history, complete with metadata reflecting the original source of the information.

Each component of the clinical reconciliation process is described in detail in the pages that follow:

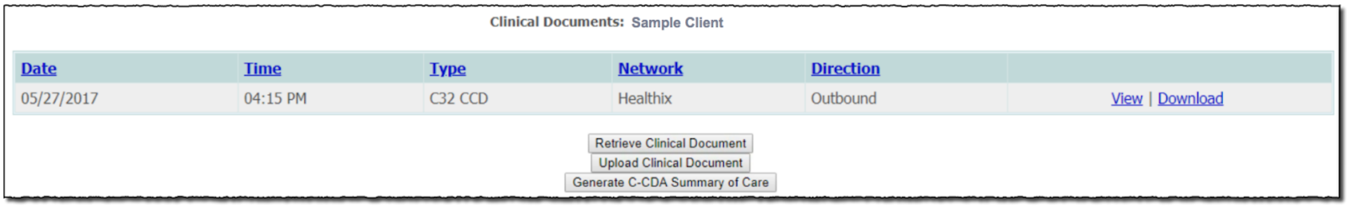
Clinical Document Retrieval
Clinical Document Incorporation
Clinical Reconciliation Reporting

Clinical Document Retrieval

✎ **Note:** Each HIE / RHIO may have a formal registration and testing process that must be completed for users before they are able to retrieve clinical documents. Please reach out to your HIE / RHIO to find out what steps you need to take with them in order to proceed with this type of work.

To retrieve the clinical document for a client, complete the following steps from the AWARDS *Home* screen:

1. Click **Census** from the left-hand menu, and then click **Profile**. The *Client / Program Profile* page is displayed.
2. Click the **Program** drop-down arrow and select the program associated with the client for whom the document is to be retrieved.
3. Click the **Database** drop-down arrow and select "Data Entry."
4. If the document to be retrieved is for a former (discharged) client, click the **Roster Archives** radio button.
5. Click **Face Sheet**. The *Client Profile / Face Sheet Update Selection* page is displayed.
6. Click the **Client** drop-down arrow and select the client for whom the document is to be retrieved.
7. Click **CONTINUE**. The *Client Face Sheet* page is displayed.
8. Scroll down to the "Clinical Documents" portion of the page, and then click **Retrieve Clinical Document**.



Clinical Documents: Sample Client

Date	Time	Type	Network	Direction	
05/27/2017	04:15 PM	C32 CCD	Healthix	Outbound	View | Download

Retrieve Clinical Document
Upload Clinical Document
Generate C-CDA Summary of Care

Retrieve Clinical Document

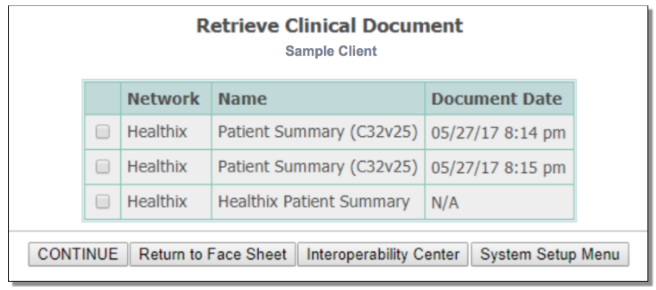
Client	Active Network(s)
Sample Client	Healthix

CONTINUE | Return to Face Sheet | Interoperability Center | System Setup Menu

The *Retrieve Clinical Document* network selection page is displayed.

9. Click the check box next to the HIE / RHIO from which the document is to be retrieved. (If your database only has one connection configured, you'll only see one option.)

10. Click **CONTINUE**. The *Retrieve Clinical Document* document selection page is displayed.



Retrieve Clinical Document
Sample Client

	Network	Name	Document Date
	Healthix	Patient Summary (C32v25)	05/27/17 8:14 pm
	Healthix	Patient Summary (C32v25)	05/27/17 8:15 pm
	Healthix	Healthix Patient Summary	N/A

CONTINUE | Return to Face Sheet | Interoperability Center | System Setup Menu

11. Click the check box next to the document(s) to be retrieved into AWARDS.

12. Click **CONTINUE**. The selected document(s) are added to the clinical documents index for this client.

The retrieval process is now complete. The clinical document can be viewed, downloaded, or incorporated as needed.

Clinical Document Incorporation

To incorporate the clinical document for a client, complete the following steps from the AWARDS *Home* screen:

1. Click **Census** from the left-hand menu, and then click **Profile**. The *Client / Program Profile* page is displayed.

2. Click the **Program** drop-down arrow and select the program associated with the client for whom the document is to be incorporated.

3. Click the **Database** drop-down arrow and select "Data Entry."

4. If the document to be incorporated is for a former (discharged) client, click the **Roster Archives** radio button.

5. Click **Face Sheet**. The *Client Profile / Face Sheet Update Selection* page is displayed.

6. Click the **Client** drop-down arrow and select the client for whom the document is to be incorporated.

7. Click **CONTINUE**. The *Client Face Sheet* page is displayed.

8. Scroll down to the "Clinical Documents" portion of the page, and then click the **Incorporate** link for the document to be incorporated. The *Reconciliation* page is displayed.

   This page displays AWARDS records and C-CDA records for allergies, medications, and diagnoses.

9. Select the C-CDA records to be incorporated into the AWARDS records, and de-select the AWARDS records that should be permanently deleted from AWARDS.

   - **Warning!** De-selected records are **permanently deleted** from AWARDS upon completion of the incorporation action in step **11**. Deleted records cannot be restored.

✎ **Note:** All AWARDS records are selected for retention by default.

10. Click **CONTINUE**. A confirmation page is displayed.

11. Click **OK** to complete the incorporation process. The client's allergies, medications, and diagnoses records in AWARDS will now reflect the additions and removals requested during this process.

The incorporation / reconciliation process is now complete.

Clinical Reconciliation Reporting

Clinical reconciliation reporting consists of:

- **Related ReportBuilders** - The "Created By" data variable on these ReportBuilders can be used to view information on the HIE / RHIO source.
- **Clinical Documents ReportBuilder** - This ReportBuilder, located in the Interoperability Center, provides detailed information about those documents manually or automatically generated by AWARDS.

Manual Interoperability Center Actions

While it is not necessary for the HIE / RHIO connection, there are several manual actions that can be performed in the AWARDS Interoperability Center by an administrator who has the relevant permissions. Manual actions that correspond with the automatic data transfers in place are as follows:

- **Clinical Documents ReportBuilder** - Can be used to report on clinical documents generated, transmitted, and received by the Interoperabiltiy Center.
- **Discharge Client** - Sends a manual ADT message to the HIE / RHIO reflecting the discharge.
- **File Hash Generation** - A way to manually generate the hash verification string for an electronic document.
- **Generate C32 CCD** - Can be used to manually download a copy of the previous version of the CCD for internal purposes. Keep in mind that the CCD contains protected health information (PHI) and should be handled with care once downloaded in accordance with HIPAA standards.
- **Generate Clinical Summary -** Manually generate the longitudinal C-CDA 2.1.
- **Generate Export Support of Care** - Generate the summary of care version of the longitudinal C-CDA 2.1, which typically comes from the Discharge module.
- **Generate Referral Note** - Manually generate a referral note, which is not a widely accepted clinical document type. This is most commonly supplanted by a Direct message.
- **Immunization Registry Export** - Generates the immunization registry export, this was developed in the blind for Meaningful Use. If you have a registry you need to report to please work with your Client Services Team representative.
- **Public Health Registry Export** - Generates the public health registry export, this was developed in the blind for Meaningful Use. If you have a registry you need to report to please work with your Client Services Team representative.
- **Register Client** - Sends a manual ADT message to the HIE / RHIO reflecting the admission.

- **Startup Consent - ImportTool** - Allows agencies to load consent values for paper forms. This may only be performed once when a connection is initiated. We strongly encourage you to work with your Foothold Client Services Team representative when using this tool.

- **Transmit C-CDA -** Manually sends the C-CDA 2.1 to the HIE / RHIO

- **Transmit C32 CCD** - Manually sends the previous version of the CCD to the HIE / RHIO.

- **Transmitted Messages** - A report of those ADT messages and CCDs sent to the HIE / RHIO from your database within a specified date range.

- **Upload Clinical Document** - Manually upload a clinical document, will appear on the client's Clinical Document section of the Face Sheet.

- **View/Download Clinical Documents** - View or download a client's clinical document.

- **View / File Consent Form** - Sends an ADT message to the HIE / RHIO with a new / updated consent value.

For more information on using the AWARDS Interoperability Center, click here.

Alert Messages

Details coming soon!

Data Quality Assurance Tips

You will want to do all you can to ensure that the data you are sending to the HIE / RHIO is accurate. There are a wide variety of reports in AWARDS that you can use for this purpose, including the following:

☀ **Tip:** When reviewing this list, please keep in mind that:

- AWARDS Online Help contains detailed information on using each of the reports listed here, including click-by-click instructions, any required permissions, frequently asked questions, and more. Links to the relevant Help pages are provided below.

- All AWARDS ReportBuilders reports, including those listed here, are highly customizable and can be saved so that they can easily be re-run in the future.

- The "Created By" data variable on the ReportBuilders listed below can be used to view information on the HIE / RHIO source, when applicable.

- **Demographics ReportBuilder** - Can be used to confirm that all demographics, admission, consent, and discharge data entered by staff is correct. For more information, click here.

- **Medications ReportBuilder** - Can be used to confirm that all medications data entered by staff is correct. For more information, click here.

- **Allergies ReportBuilder** - Can be used to confirm that all allergies data entered by staff is correct. For more information, click here.

- **Procedures ReportBuilder** - Can be used to confirm that all procedures data entered by staff is correct. For more information, click here.
- **Diagnostic Tests ReportBuilder** - Can be used to confirm that all diagnostic test data entered by staff is correct. For more information, click here.
- **Diagnoses ReportBuilder** - Can be used to confirm that all diagnoses data entered by staff is correct. For more information, click here.
- **Vital Signs ReportBuilder** - Can be used to confirm that all vital signs data entered by staff is correct. For more information, click here.
- **Interoperability Center** > **Transmitted Messages** - Can be used to see what data has been sent to the HIE / RHIO for a selected program(s) and date range. This is especially useful for troubleshooting if the HIE / RHIO has questions about missing data. For more information, click here.
- **Interoperability Center** > **Clinical Documents ReportBuilder** - Can be used to view detailed information about those documents manually or automatically generated by AWARDS.