**Outbound Patient and Chart Data**

Common Use Case Package

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1. Introduction

This document provides information for an interface with these integrations:

* Outbound patient messages
* Outbound chart messages

Your organization may not have requested each integration; athenahealth specifies the sections you can skip if they’re not applicable.

* 1. Interface Description

This interface supports the secure and automated transfer of information between athenaNet and an external third-party system. Interface data is formatted according to HL7 v2 standards to ensure compatibility across a wide array of platforms and software vendors. Interface data formats may include:

* External patient identifiers (e.g., a medical record number (MRN) assigned by a third-party vendor system)
* Patient demographics (e.g., name, date of birth, address, and so on)
* Patient insurance (e.g., carrier, member ID, and so on)
* Chart data (problems, allergies, meds, immunizations, medical and surgical history, and so on.)
  1. Scope overview

This is a pre-scoped standard interface, which means athenahealth has selected many of the configurations for your convenience. If you require customization to this integration outside of what this document provides, contact your athenahealth Interface Project Engineer and they’ll connect you with the athenahealth Integration Design team for more detailed scoping. Please note that customizing the integration may incur fees.

* 1. Scope process

1. **Review the project** – Read the entire Common Use Case Package
2. **Enter or select required information to configure the interface**–
   1. Double-click the gray fields and boxes that appear in the tables and within the text.  
      The Form Field Options window opens.
   2. For fields, enter the information in the **Default Text** field. For checkboxes, select **Checked** or **Unchecked**. For menus, select the option in the **Items in Drop-Down list** box.
   3. Click **OK**.
3. **Approve the project** – Enter your name and date in the Scope Approval section to approve the scope of the interface on page 11.
4. **Return the completed CUC scope document as a Word doc** – this doesn’t require a wet signature and shouldn’t be returned as a PDF.

REMEMBER: Your athenahealth Interface Project Engineer is available to meet, assist with questions, and help you scope the project to determine the best options for your organization.

1. Project Information

Table 1 - General information

|  |  |
| --- | --- |
|  | Details |
| athenahealth practice context ID |  |
| athenahealth practice name |  |
| Event number (provided by Interface Project Engineer for internal athenahealth tracking) |  |
| Vendor name |  |
| Vendor type (e.g., health information system, electronic health record, and so on.) |  |

1. Common and Specific Use Cases

It’s important to understand the related workflows and how this interface will exchange data between athenaNet and the third-party vendor system in support of those workflows.

Review the common use cases described in the table and think about how your organization will use the interface.

Table 2 – Interface Use Cases

|  |  |  |  |
| --- | --- | --- | --- |
| Use case | Event | | Functionality |
| Patient synchronization | New Patient ADDED in athenaNet  Patient UPDATED in athenaNet | Patient ADDED in other system  Patient UPDATED in other system | |
| New and amended encounter | Encounter SIGNOFF in athenaNet | Chart UPDATED in other system | |
| Chart updates | Chart UPDATED in athenaNet | Chart UPDATED in other system | |

Think about how your organization will use the interface and outline specific use cases below. Use these questions to help guide you:

* What information in athenaNet do you want populated in the third-party vendor system?
* Does any of this information already exist in the third-party vendor system?
* Is there information your organization shouldn’t send to the third-party vendor system?

**Organizations specific use cases and workflow description**

**TIP**: Review common and specific use cases with your athenahealth Interface Project Engineer until you’re comfortable with the intended functionality. This ensures that you can prepare staff for changes to their workflow (e.g., parts of their workflow that are automated versus manual) that often occur with the introduction of a new interface.

1. Interface Enablement

Select the configurations your organization wants to enable for the interface by clicking the appropriate checkboxes in the Enable column of the tables below.

* 1. Patient

Select configurations for patient messages. Messages for patient data contain patient demographics.

Table 3 - Patient message enablement

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Enable | Action | Direction | Message type |  |
|  | Add patient | Outbound | A28 |  |
|  | Update patient | Outbound | A31 |  |

* 1. Encounter

Select configurations for encounter messages. These messages contain the episodic clinical document, which has the textual version of the encounter documented by the provider in athenaNet including vitals, social history, surgical history, and family history.

Table 4 - Encounter message enablement

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Enable | Action | Direction | Message type |  |
|  | Encounter sign-off | Outbound | T02 |  |

Do you want athenaNet to send the encounter summary as plain text or HTML?

* 1. Episodic Clinical Data

Select configurations for episodic clinical data messages. These messages contain patient demographics, vital signs, allergies, diagnoses, OB Episode, social history, past medical history, birth history, surgical history, and family history.

Table 5 - Episodic clinical data message enablement

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Enable | Action | Direction | Message type |  |
|  | Encounter sign-off | Outbound | A08 |  |
|  | OB Episode Encounter sign-off | Outbound | T02 |  |

* 1. Lab and Imaging Orders Notification

Select configurations for lab and imaging orders notification data messages. These messages contain patient clinical orders for labs and imaging.

Table 6 - Lab and imaging orders notification message enablement

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Enable | Action | Direction | Message type |  |
|  | Lab order sign-off | Outbound | O01 |  |
|  | Imaging order sign-off | Outbound | O01 |  |

* 1. Lab and Imaging Results

Select configurations for lab and imaging results data messages. These messages contain lab and imaging results from inbound lab result interfaces and lab and imaging results recorded with discrete data elements associated to an athenaNet patient.

Table 7 - Lab and imaging results message enablement

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Enable | Action | Direction | Message Type |  |
|  | Lab result close | Outbound | R01 |  |
|  | Lab result update | Outbound | R01 |  |
|  | Imaging result close | Outbound | R01 |  |
|  | Imaging result update | Outbound | R01 |  |

If your organization enables lab and imaging results messages, provide a list of the current results interfaces your practice already has live in athenaNet:

Does your practice order Point-of-Care tests?

* 1. Embedded PDF

The interface can send outbound lab and imaging result documents your organization received via interface or manual upload to athenaNet as embedded .pdf files. The interface encodes the .pdf file in Base64 and sends in the OBX-5.5 field.

You can’t configure this functionality to send outbound documents as embedded .pdf files from only one source (i.e., documents your organization received via interface or manual upload).  The interface sends only documents that match the relevant result type (e.g., lab result).

Do you want to enable embedded .pdf for this interface?



1. Interface Configuration
   1. Message Samples and Specifications

See the HL7v2 section of the [Developer Toolkit](http://www.athenahealth.com/developer-portal/developer-toolkit/by-standard) (http://www.athenahealth.com/developer-portal/developer-toolkit/by-standard) to review message samples and specifications.

Can you provide sample data for inbound messages to the athenahealth Interface Project Engineer?  Yes is recommended

* 1. Integration Testing

athenahealth provides a non-live, athenahealth-hosted test environment (“Preview”) to facilitate integration testing before moving the interface to production. You should expect the third-party vendor to provide a similar non-live testing environment.

Will the third-party vendor provide a testing environment for this project?  Yes is recommended

If you answered “No,” explain how you will test the integration on the third-party vendor system:

Please confirm that only non-live, athena-hosted preview environment will be used for testing.  Yes is recommended

* + 1. Testing phases

Interface testing generally occurs in two phases: unit testing and end-user testing.

1. **Unit testing phase**athenahealth works directly with the third-party vendor to ensure that messages are being triggered, sent, received, and processed successfully in the respective system. During this phase your organization may be asked to confirm that the data in either system are accurate.
2. **End-user testing phase**  
   The end-user testing phase begins after the unit testing phase. athenahealth provides general test plans and your organization plans, organizes, and executes interface testing as it relates to practice workflows. athenahealth may provide guidance when appropriate.

**BEST PRACTICE:** athenahealth recommends creating test plans specific to practice workflows, in addition to those athenahealth provides, for a more comprehensive end-user testing phase.

* 1. Connectivity Details

As part of interface implementation, athenahealth needs to establish a secure method of transfer for electronic data to and from a third-party system. The Connectivity Method Overview document contains our current connectivity offering and information regarding functionality and project steps.

<http://www.athenahealth.com/~/media/athenaweb/files/developer-portal/Connectivity_Methods_Overview.docx>

Contact your athenahealth Interface Project Engineer if you have questions.

* 1. Patient ID Management

This interface can be configured to send athenaNet Patient IDs and athenaNet Enterprise IDs for practices with an Enterprise tablespace configuration (multiple Provider Groups). Any external patient IDs stored in athenaNet patient-level custom fields can also be sent.

Please use this table to configure PID-2, PID-3, and PID-4. The receiving system must accept HL7 assigning authority in the 4th component of the field (e.g., PID-2.4) if any of these fields will be used for multiple IDs. The second and third columns (custom field name and ID) are only required for external IDs.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Patient ID | athenaNet Custom Field Name | athenaNet Custom Field ID | HL7 Field | HL7 Assigning Authority |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Are any of the above external IDs formatted with leading zeros?

Additional comments:

* 1. Object Identifier (OID)

An OID is a globally unique ISO Object Identifier assigned and registered by HL7. The value can be used to identify athenahealth as the information source. By default, messages will not include an OID, but athenaNet can include the OID in MSH-3 if necessary.

athenahealth’s OID is 2.16.840.1.113883.3.564. The practice’s athenaNet OID is this value followed by their practice ID (aka context ID). This looks like 2.16.840.1.113883.3.564.ContextID (Provided by athena PM) or for example 2.16.840.1.113883.3.564.432 for practice ID 432. The athenaNet OID will not specify a department or location within the practice.

Should messages include the OID value?

Additional comments:

* 1. Backfills and Imports
     1. Backfills via the Interface

An additional offering is for athenaNet to receive or send a full load of all patients and/or chart data between the other systems just as the interface is first enabled. This type of data load may require a separate project with additional costs, managed outside of the Interface Project for ‘load management planning’ as well as General Council review, for appropriateness of PHI sharing.

Does this project require a backfill?

Additional comments:

**BACKFILL PLANNING:** When planning a backfill, please consider the complexities of integrating data from several different systems. For example, most backfills from external applications include foreign IDs that will be written into athenaNet custom fields. These IDs should be unique and could potentially be bi-directionally accepted between all systems. Additionally, backfills can be done by data import or via the interface.

* + 1. Data Imports and Interfaces

Separate from any interface projects, a one-time file import of data may be required. These data imports are separate projects with different athenahealth Project Managers. Even though these projects are separate, the data they import may interact with the interface, so it is important to be aware of any Data Import projects.

Do you have other active or upcoming data import projects with athenahealth? If so, please describe here:

**DIFFERENCE BETWEEN A DATA IMPORT AND INTERFACE**:

**Timing**: Data imports are generally a one-time event for the purpose of loading existing data to athenaNet, whereas interfaces continue to operate going forward for an undefined period of time.

**Direction**: A data import is for processing data inbound (into athenaNet) only, whereas an interface can handle bi-directional data exchange.

**Format**: Most data imports are executed via flat-file (CSV spec) while most interfaces use industry-standard HL7.

1. Outbound Message Information
   1. Message Filtering

This interface sends all data from your tablespace per the selected event triggers. There are no filter options in this Common Use Case configuration.

**PLEASE NOTE:** data sent over this interface can include Behavioral Health chart data and other sensitive clinical data.

* 1. Patients

This subsection provides information for outbound patient messages. **Please skip to section 6.3 if outbound patient messages are out of scope.**

* + 1. Patient Race, Ethnicity, and Language

For outbound patient messages, the interface sends race and ethnicity in this format:

* CDC identifier (e.g., “1019-9” for the While Mountain Apache race)

The interface sends language in this format:

* ISO6392 code (e.g., “eng” for English)
  1. Charts

This subsection provides information for outbound chart messages.

* + 1. Code Sets

Review table 9 to understand the codes athenaNet sends in outbound chart messages.

Table 9 - Code sets

|  |  |
| --- | --- |
| Clinical data | Code set |
| Vitals | LOINC |
| Family History | SNOMED |
| Diagnoses | ICD-10, SNOMED  **Note:** SNOMED codes are applicable for episodic clinical data messages only. In other messages athenaNet sends ICD-9 |
|  |  |
| Lab | athenaNet global lab order types, LOINC  **Note:** athenaNet sends LOINC only when available. Otherwise, athenaNet sends athenaNet global order types. |
| Imaging | athenaNet global imaging order types, LOINC  **Note:** athenaNet sends LOINC only when available. Otherwise, athenaNet sends athenaNet global order types. |

1. Scope Approval

Please provide an**electronic** signature approving the scope of the interface outlined in this document.

I,       , agree to the interface design as described here in this document.

Date:

* 1. Additional Comments

Enter general interface comments and questions that the document or your athenahealth Interface Project Engineer didn’t address.

1. Appendices and other references
   1. Interface Message Queue Manager

The Interface Message Queue Manager (IMQM) page in athenaNet is an interactive repository for all interface messages that pass through athenaNet. Use the IMQM to view messages or resolve common errors, such as missing providers, invalid procedure codes, or unknown departments. Review table 10 to understand how athenaNet defines each state. Messages in a final state (processed or deleted) remain in the queue for only 90 days.

Table 10 - Interface message processing state

|  |  |
| --- | --- |
| Processing state | Definition |
| SCHEDULED | Scheduled to be sent later |
| NEW | Placeholder for a new message and ready to be sent or received |
| DISTRIBUTED | Delivery or acknowledgement is pending for global interfaces |
| PENDING | Delivery or acknowledgement is pending |
| PROCESSED | Processed normally; remains in queue for only 90 days |
| ERROR | Generic error encountered; routed to client |
| CBOERROR | Billing related error encountered; routed to client |
| ATHENAERROR | Internal error encountered; routed to athenahealth Client Support Center |
| DELETED | Messages that have been deleted; remains in queue for only 90 days |

Table 11 lists each permission required to access and make changes to the IMQM. Your local system administer must grant the user permissions.

Table 11 - Interface Message Queue Manager permissions

|  |  |
| --- | --- |
| Permission | Use case |
| Interface Admin: View Message Queue | You want to view the IMQM. |
| Interface Admin: Map Insurance Messages | You need to map insurance messages. |
| Interface Admin: Map Messages (except Insurances) | You need to map all messages excluding insurance messages (e.g. provider and department mappings). |
| Interface Admin: File Upload Interface | You want to upload files via the interface. |

See the [Interface Message Queue Manager guide](http://www.athenahealth.com/developer-portal/developer-toolkit/support) for more information on the IMQM and your organization’s responsibility for resolving messages in ERROR and CBOERROR status.

* 1. Continuing Service and Support

Your interface is transitioned into our daily service and support structure within two weeks after go-live.

As a standard practice, athenahealth continuously monitors all client connections and notifies the specified contacts if an error occurs. athenaNet monitors all jobs and restarts them automatically if they’re idle. For details, see the [Interface Down Support document](http://www.athenahealth.com/developer-portal/developer-toolkit/support).

You can also access support in athenaNet directly if you have questions about or modifications to the interface: On the Main Menu, click **Support** and then click **Get Help**.