



# Outbound Patients and Appointments

Common Use Case Package

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*Formerly EMR Lite and EMR Full*

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# 1 Introduction

This document provides information for an interface that supports the following data exchange:

- Outbound patient messages
- Outbound appointment messages

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

## 1.1 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 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)

## 1.2 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.

## 1.3 Scope Process

1. **Review the project** – Read the entire Common Use Case Package
2. **Enter or select required information to configure the interface** –
  - a. Double-click the gray fields and boxes that appear in the tables and within the text. The Form Field Options window opens.
  - b. 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.
  - c. 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.

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**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.

## 2 Project Information

Table 1 - General information

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.)

### 3 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 ADDED in other system
	Patient UPDATED in athenaNet	Patient UPDATED in other system
	Appt SCHEDULED in athenaNet	Appt SCHEDULED in other system
Schedule synchronization	Appt CANCELLED in athenaNet	Appt CANCELLED in other system
	Appt CHECKIN in athenaNet	Appt status UPDATED in other system
	Appt CHECKOUT in athenaNet	Appt status UPDATED in other system
	Appt UPDATE in athenaNet	Appt UPDATED in other system

Think about your how organization will use the interface. Use these questions to help guide you:

- How does the third-party vendor system fit into our user workflows in athenaNet?
- Does the third-party vendor need athenaNet appointment data?

**Organization's specific use cases and workflow description:**


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**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.

## 4 Interface Enablement

Select the configurations your organization wants to enable for the interface. Check the box in the **Enable** column of table 3 to make a selection.

Table 2 - Interface enablement

Enable	Action	Event	Direction	 Default interface message
<input type="checkbox"/>	Add Patient	New Patient ADDED in athenaNet	Outbound	A28
<input type="checkbox"/>	Update Patient	New Patient UPDATED in athenaNet	Outbound	A31
<input type="checkbox"/>	Schedule Appointment	Appt SCHEDULED in athenaNet	Outbound	S12
<input type="checkbox"/>	Update Appointment	Appt UPDATE in athenaNet	Outbound	S14
<input type="checkbox"/>	Cancel Appointment	Appt CANCELLED in athenaNet	Outbound	S15
<input type="checkbox"/>	Check-In	Appt CHECKIN in athenaNet	Outbound	S14
<input type="checkbox"/>	Check-Out	Appt CHECKOUT in athenaNet	Outbound	S14

## 5 Interface Configuration

### 5.1 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.

### 5.2 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? - blank -  Yes is recommended

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

#### 5.2.1 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.

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**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.

### 5.3 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 options and information regarding functionality and project steps.

[http://www.athenahealth.com/~media/athenaweb/files/developer-portal/Connectivity\\_Methods\\_Overview.docx](http://www.athenahealth.com/~media/athenaweb/files/developer-portal/Connectivity_Methods_Overview.docx)

Contact your athenahealth Interface Project Engineer if you have questions.

### 5.4 Backfills

#### 5.4.1 Backfills via the Interface

Your organization can request a backfill, where athenaNet sends a full load of all patient and future appointment data between your organization and the third-party vendor as the interface is first enabled.

If you require a backfill, it's important to consider the complexities of integrating data from several different systems. For example, when athenaNet backfills information received from a third-party vendor system, the data often includes foreign

IDs that need to be added to your custom fields. The IDs must be unique and might be bi-directionally accepted between all systems.

Does this project require a backfill?

Additional comments:

## 5.5 External Identity Management

To assist with ID management throughout an integrated health system, athenaNet can store multiple external IDs, at both the patient and appointment level. External IDs may be used for matching purposes or external IDs may just be interfaced and stored in athenaNet using custom fields. All external IDs present in athenaNet, such as those supplied by an interface or import process, are available to be sent out over the interface.

If external IDs are included in scope for your integration, please complete tables 4 and 5 with your athenahealth resource. Enter the name and ID of each patient-level and appointment-level custom field. Select the HL7 field and whether athenaNet should use the ID for matching purposes.

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**REMEMBER:** You can match only one external ID per record number category even if you receive multiple IDs. athenaNet assumes the external ID is correct, therefore external IDs must be unique and non-changing.


Table 4 - Patient-level custom fields

athenaNet custom field name	athenaNet custom field ID	HL7 field	Use for matching
		- blank -	- blank -
		- blank -	- blank -
		- blank -	- blank -
		- blank -	- blank -
		- blank -	- blank -

Table 3 – Appointment-level custom fields

athenaNet custom field name	athenaNet custom field ID	HL7 field	Use for matching
		- blank -	- blank -
		- blank -	- blank -
		- blank -	- blank -
		- blank -	- blank -
		- blank -	- blank -

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

 By default, the information in the above tables is applied to all outbound messages when available.

Additional comments:



## 6 Outbound Message Configuration

This section contains outbound message configurations for:

- Patients
- Appointments

### 6.1 Message Filtering

#### 6.1.1 Selective Filtering of Outbound Messages

You can filter outbound messages, so the interface sends them only for particular providers or departments.

Should the interface filter outbound messages? - blank -  No is recommended (i.e., the interface sends all configured messages)

If you answered “Yes,” complete table 6. Select the entity in the **Filter By** column and enter the name or names of the entity you want to filter by in the **Names** column.

Table 4 - Filter outbound messages

Message type	Filter by	Names
Patients	- blank -	
Appointments	- blank -	

### 6.2 Patients

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

#### 6.2.1 Patient Race, Ethnicity, and Language

For outbound patient messages, the interface sends race, ethnicity and language in the below formats:

- Race/Ethnicity: CDC identifier (e.g., “1019-9” for the While Mountain Apache race)
- Language: ISO6392 code (e.g., “eng” for English)

### 6.3 Appointments

This subsection provides configurations for outbound appointment messages. **Please skip to section 7 if outbound appointment messages are out of scope.**

### 6.3.1 Appointment Statuses

For outbound appointment messages, the interface sends the appointment status in field SCH.25. The statuses coincide with the event that triggered the message by default. Review the statuses in table 7.

Table 5 - Default appointment statuses

Event	SCH.25 value
New appointment	BOOKED
Appointment check-in	ARRIVED
Appointment checkout	COMPLETED
Appointment update	UPDATE
Cancel appointment	CANCELLED

**DID YOU KNOW?:** When a user reschedules an appointment through the athenaNet appointment workflow, athenaNet cancels the original appointment record and creates a new appointment record with a new athenaNet appointment ID. The interface generates an appointment cancel message for the original appointment and an appointment create message for the new appointment. Contact your athenahealth Interface Project Engineer if this functionality will be an issue for your downstream system.

## 6.4 Provider ID Management

The interface configures the provider ID in outbound messages as either the provider's National Provider Number (NPI) or the athenaNet provider ID. Select your preferred provider ID configuration in table 8.

Table 6 - Provider ID configuration options

Option
<input type="checkbox"/> NPI
<input type="checkbox"/> athenaNet provider ID

## 7 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:

### 7.1 Additional Comments

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

## 8 Appendices and Other References

### 8.1 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 19 to understand how athenaNet defines each state. Messages in a final state (processed or deleted) remain in the queue for only 90 days.

Table 7 - 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 20 lists each permission required to access and make changes to the IMQM. Your local system administrator must grant the user permissions.

Table 8 - 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](#) for more information on the IMQM and your organization's responsibility for resolving messages in ERROR and CBOERROR status.

### 8.2 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](#).

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**.