Submission of Self-Administered FluMist Vaccine to IIS

Executive Summary

FluMist will be available for self- or caregiver-administration for the 2025-2026 influenza season. This document details expected specifications for the reporting of these doses from the Asembia Specialty Pharmacy Network (ASPN) to IIS, as facilitated by STChealth. Specifications are provided to support onboarding and ongoing interface monitoring. A summary of key specifications follows with additional detail provided below.

- The vaccine ship-to-address will inform routing for data submission to the appropriate IIS.
- IIS will provide identifier values, as needed, including:
    o MSH-4, MSH-5, MSH-6, and MSH-22
    o ORC-17, RXA-11
- Patient-related information
    o PID-3, Patient identifier to represent an identifier from the ASPN system, with identifier type 'MR' for medical record number
    o PD1-12, Patient protection indicator to be populated as per jurisdictional requirements
- Vaccine-related information
    o ORC-10, Entered by, will not be populated
    o RXA-5, Administered code expected to be populated as per jurisdictional preferences for CVX and/or NDC
    o RXA-9, Immunization Information Source will be coded as administered ('00')
    o RXA-10, Administering provider expected to represent the patient, if self-administered, and the caregiver, if caregiver-administered, with identifier type 'MR'
    o RXA-20, Completion status: only complete ('CP') administrations are expected
    o RXA-21, Action code expected to be add ('A'), update ('U'), or delete ('D') as needed
    o VIS information is expected to be submitted using three OBX segments
    o Vaccine funding source and vaccine funding program eligibility are expected to be submitted as 'PHC70' and 'V01'
    o Contraindications and adverse reactions to FluMist are not expected

Background

On September 20, 2024, the Food and Drug Administration approved AstraZeneca's FluMist intranasal vaccine for self- or caregiver-administration, providing an in-home option for influenza vaccination among individuals age 2 through 49 years.[1] Self- or caregiver administered FluMist vaccine is expected to be available in the contiguous United States for the 2025-2026 influenza season.

Asembia Specialty Pharmacy Network (ASPN), an online national pharmacy headquartered in New Jersey, will facilitate patient vaccine requests, eligibility screening, dispensing, delivery, and follow-up for eligible patients. Text messaging between ASPN and the patient helps facilitate confirmation of vaccine administration.[2]

ASPN will work with a contracted reporting service provider, STChealth, to facilitate immunization reporting for data submission between the ASPN system and IIS. ASPN and STChealth will work with individual IIS on onboarding to support this data exchange.

This document outlines expected key HL7 specifications for the submission of self- or caregiver-administered FluMist vaccinations to IIS via STChealth for the 2025-2026 influenza season, in preparation for expected vaccine shipments in fall 2025. This information is intended to inform onboarding and ongoing monitoring of the interfaces used to submit these data to IIS.

---

[1] https://www.fda.gov/news-events/press-announcements/fda-approves-nasal-spray-influenza-vaccine-self-or-caregiver-administration

[2] See the April 15, 2025, presentation to the Advisory Committee on Immunization Practices on *FluMist for Self or Caregiver Administration* for additional information on expected workflows, at https://www.cdc.gov/acip/meetings/presentation-slides-april-15-16-2025.html.

Scope

In scope

HL7 v2.5.1 messaging specifications to support sharing of information about self-administered FluMist between health IT systems and IIS. This includes use of existing code sets and VXU submission conventions and information about the expected population of key fields to facilitate interoperability of this information between systems.

Out of scope

- Detail on the expected workflows related to self-administered FluMist, including vaccine requests, eligibility screening, dispensing, delivery, and follow-up for eligible patients.
- Extension of the HL7 v2.5.1 specifications for immunization submission to include new code values or messaging constructs. Community experience may inform future consensus-based guidelines for using HL7 v2.5.1 to report self- or caregiver-administered vaccines to IIS, including potential for new requirements specific to reporting these immunizations.

Expected Interface Specifications

The following outlines key expected HL7 v2.5.1 interface specifications to be used for submission of self- and caregiver-administered FluMist from ASPN to IIS, via STChealth. HL7 fields not included below will be populated per the HL7 v2.5.1 National Implementation Guide for Immunization Messaging, Release 1.5 and Addendum.

MSH Segment

MSH-4, MSH-5, MSH-6, and MSH-22 identifier values are expected to be discussed with IIS as part of the onboarding process. Note, these MSH specifications will also be used for QBP messaging.

MSH-3, Sending Application: `IMMSLINK`
- Represents the STChealth sending application

MSH-4, Sending Facility: Identifier as assigned by IIS

MSH-5, Receiving Application: Identifier as assigned by IIS

MSH-6, Receiving Facility: Identifier as assigned by IIS

MSH-22, Sending Responsible Organization: Identifier as assigned by IIS
- Expected to be representative of ASPN

PID Segment

Represents self/caregiver-provided data.

PID-3, Patient identifier: `id^^^authority^MR`

- Expected to represent a patient identifier from the ASPN system

PID-10, Race: `value^text^CDCREC`

- Populated with 1 of 5 race values or 'UNK' for unknown

PID-11, Address: `street^^city^state^zip^country^P`

- Represents vaccine ship-to address, which will inform routing to IIS

PID-13, Phone/Email: `^PRN^PH^^^areacode^localnumber`

- Phone number is expected to be sent

PID-22, Ethnicity: `value^text^CDCREC`

- Populated with 1 of 2 ethnic group values or 'UNK' for unknown

PD1 Segment
PD1-12, Protection indicator

- Expected to be populated as per jurisdictional requirements

NK1 Segment
Expected to be submitted for patients who are minors (i.e., patients < 19 years).

ORC Segment
ORC-3, Filler order number: `entityidentifier^namespaceid`

- Expected to be populated with an identifier unique to the ASPN system

ORC-10, Entered by, person

- Not expected to be populated

ORC-12, Ordering provider, person:
`id^lastname^firstname^middlename^^^^^assigningauthority^L^^^NPI`

- Expected to be the pharmacist that confirms patient eligibility, submitted with an NPI identifier

ORC-17, Entering organization: Identifier as assigned by IIS

RXA Segment
RXA-3, Date/Time: `yyyymmdd`

- The date of the self/caregiver-administered dose was administered, as reported by the patient or caregiver

RXA-5, Administered Code:

> CVX: `333^Influenza, live, trivalent, intranasal, self/caregiver admin, PF^CVX`
> NDC: `66019-0112-51^FLUMIST^NDC`

- Expected to be populated as per jurisdictional preferences for CVX and/or NDC

- NDC is expected to represent the unit of sale
- For CVX and NDC codes, refer to CDC's Vaccine Data Codes

RXA-6, Administered Amount: `0.2`
- Note, a single dose of FluMist is 0.2 mL

RXA-7, Units: `mL^mL^UCUM`

RXA-9, Immunization information source: `00^New Record^NIP001`
- Expected to be sent as '00', to represent a new administration

RXA-10, Administering provider:
`id^lastname^firstname^middlename^^^^^assigningauthority^L^^^MR`
- Expected to represent the patient, if self-administered, and expected to represent the caregiver, if caregiver-administered, with identifier type 'MR'
- If the vaccine is self-administered, this is expected to echo information provided in PID-3

RXA-11, Administered-at-location: Identifier as assigned by IIS

RXA-15, Lot number
- Expected to be sent

RXA-16, Expiration date: `yyyymmdd`
- Expected to be sent

RXA-17, Manufacturer: `MED^MedImmune, Inc. (AstraZeneca)^MVX`

RXA-20, Completion status: `CP`
- Only complete administrations are expected to be submitted

RXA-21, Action code
- 'A' for new administrations; 'U' or 'D' for updates or deletes as needed.

RXR Segment
Note, FluMist is administered as a spray into each nostril, with approximately one half of the contents of the single-dose intranasal sprayer into each nostril.

RXR-1, Route: `C38284^Nasal^NCIT`
- Expected to be sent

RXR-2, Site
- Not expected to be populated

OBX Segments
OBXs for VIS Information
- Expected to be conveyed via three OBX segments:

- ο An OBX to convey the vaccine type identifier, as indicated by LOINC '30956-7' in OBX-3 and CVX 88 (Influenza, unspecified) in OBX-5
- ο An OBX to convey the VIS presentation/delivery date, as indicated by LOINC '29769-7' in OBX-3 and the date in OBX-5
- ο An OBX to convey the VIS publication date, as indicated by LOINC '29768-9' and the date in OBX-5

OBXs for Vaccine Funding Source and Vaccine Funding Program Eligibility
- Expected values: 'PHC70' for vaccine funding source and 'V01' for vaccine funding program eligibility
- Expected to be conveyed via two OBX segments:
  - ο An OBX to convey the vaccine funding source, as indicated with the LOINC '30963-3' in OBX-3 and 'PHC70' in OBX-5
  - ο An OBX to convey the vaccine funding program eligibility, as indicated with LOINC '64994-7' in OBX-3 and 'V01' in OBX-5

Other
- Contraindications and adverse reactions to FluMist are not expected to be submitted.