Syndromic Surveillance (SS) Messaging

On-Boarding Packet for Eligible Hospitals

This packet is intended to be used by potential SS trading partners of the TN Department of Health (TDH). The documents provided here are for trading partner use only, and nothing in this document needs to be returned to TDH unless specifically requested.

SS Messaging On-Boarding Packet Table of Contents

➢ The SS Messaging On-Boarding Process displays the step-by-step process that a trading partner will need to follow in order to successfully implement SS messaging with the Tennessee Department of Health.   This was designed as a roadmap for trading partner use in navigating the process and expecting next steps.

➢ The SS Messaging On-Boarding Checklist is a companion document to the SS Messaging On-Boarding Process.   The checklist is for trading partner use only, and it does not need to be completed and returned to the Tennessee Department of Health.   This document was designed to assist with on-boarding, help trading partners document their progress, and better explain what trading partners can expect from the Tennessee Department of Health.
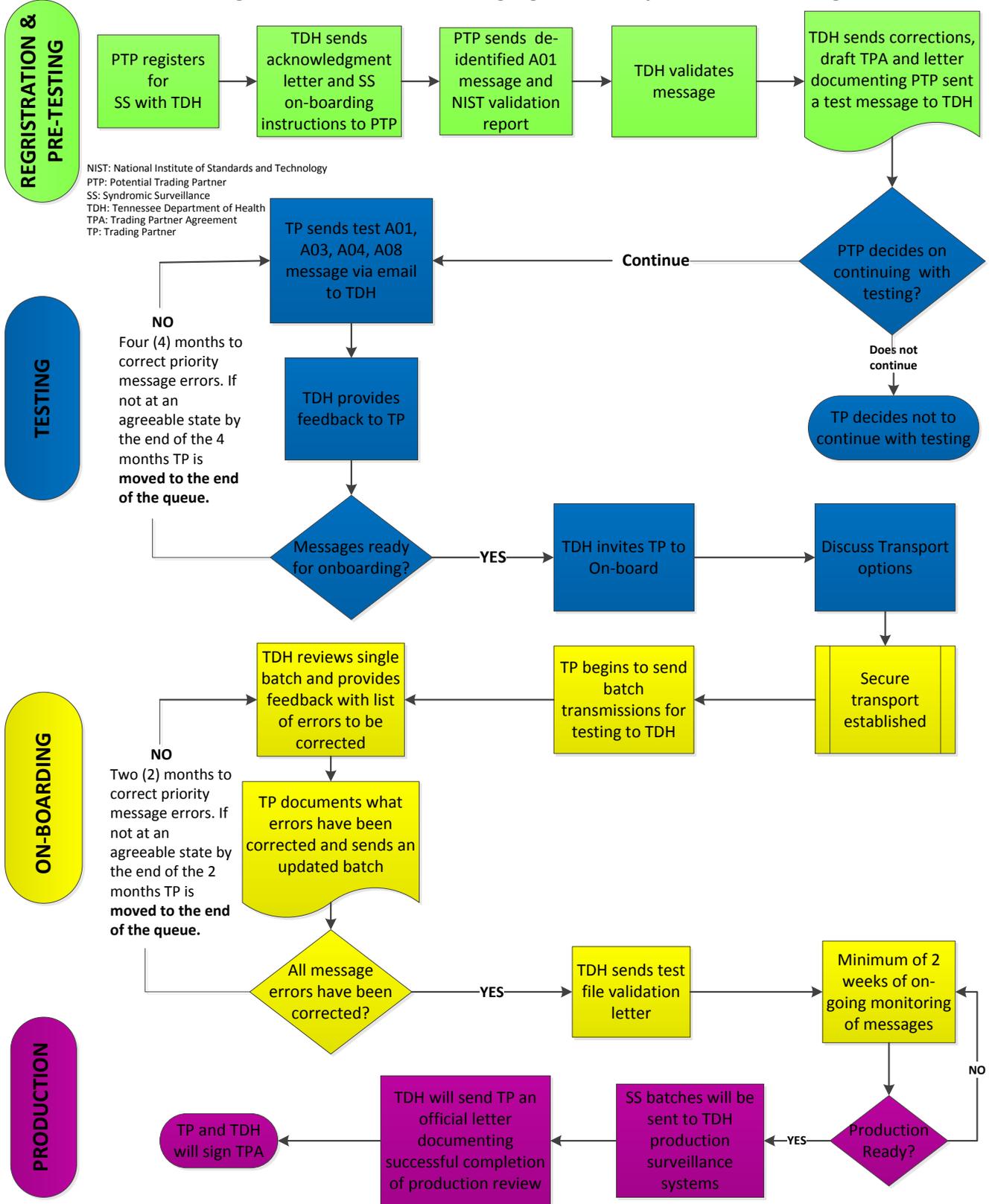
➢ The SS Frequently Asked Questions (FAQ's) document provides answers to the most commonly asked questions around implementing SS messaging with the Tennessee Department of Health.   It is recommended that you look to this document first before contacting the Tennessee Department of Health with your questions, but further clarification can always be provided.

➢ This document represents an excerpt from the larger SS Messaging Trading Partner Agreement (TPA). The draft TPA will be shared with a trading partner during the early steps in the on-boarding process. The TPA remains in draft form and is not signed until SS messaging is in production.   Information contained in this document will be useful during syndromic surveillance (EHR) configuration and implementation.   The information contained in this document accompanies the PHIN Messaging Guide, it does not replace it, and the 2 should always be used together.

For questions about any of the documents in this packet, or to get started with SS messaging, please contact CEDS.Informatics@tn.gov.

On-Boarding for HL7 2.5.1 SS Messaging from Hospitals for Meaningful Use

REGRISTRATION & PRE-TESTING

PTP registers for SS with TDH → TDH sends acknowledgment letter and SS on-boarding instructions to PTP → PTP sends de-identified A01 message and NIST validation report → TDH validates message → TDH sends corrections, draft TPA and letter documenting PTP sent a test message to TDH

NIST: National Institute of Standards and Technology
PTP: Potential Trading Partner
SS: Syndromic Surveillance
TDH: Tennessee Department of Health
TPA: Trading Partner Agreement
TP: Trading Partner

TESTING

PTP decides on continuing with testing?

Continue → TP sends test A01, A03, A04, A08 message via email to TDH

Does not continue → TP decides not to continue with testing

NO
Four (4) months to correct priority message errors. If not at an agreeable state by the end of the 4 months TP is **moved to the end of the queue.**

TP sends test A01, A03, A04, A08 message via email to TDH → TDH provides feedback to TP → **Messages ready for onboarding?**

YES → TDH invites TP to On-board → Discuss Transport options

ON-BOARDING

Discuss Transport options → Secure transport established → TP begins to send batch transmissions for testing to TDH → TDH reviews single batch and provides feedback with list of errors to be corrected

NO
Two (2) months to correct priority message errors. If not at an agreeable state by the end of the 2 months TP is **moved to the end of the queue.**

TDH reviews single batch and provides feedback with list of errors to be corrected → TP documents what errors have been corrected and sends an updated batch → **All message errors have been corrected?**

YES → TDH sends test file validation letter → Minimum of 2 weeks of on-going monitoring of messages

PRODUCTION

Minimum of 2 weeks of on-going monitoring of messages → **Production Ready?**

NO (loops back to monitoring)

YES → SS batches will be sent to TDH production surveillance systems → TDH will send TP an official letter documenting successful completion of production review → TP and TDH will sign TPA

Tennessee Department of Health On-Boarding for HL7 2.5.1 SS Messaging from Hospitals for Meaningful Use Process Summary:

REGISTRATION AND PRE-TESTING

- In Tennessee, the Syndromic Surveillance (SS) messaging on-boarding process begins when a potential trading partner (PTP) expresses their intent to submit SS data electronically to TDH using HL7 vs 2.5.1. The PTP will register with the Tennessee Department of Health (TDH) trading partner registration system.

- TDH will receive notification that the registration has been completed and an acknowledgement letter including onboarding instructions is sent to the PTP.

- The PTP should obtain a copy of the PHIN messaging guide for syndromic surveillance: Emergency Department, Urgent Care Data ADT Messages A01, A03, A04, and A08 HL7 v2.5.1: Release 1.1 (August 2012). Eligible hospitals testing with TDH for Meaningful Use must use HL7 version 2.5.1.

- The PTP sends the SS staff at TDH an initial, A01 Admit test message that contains no identifiable Protected Health Information (PHI) through email with the validation report from the National Institute of Standards and Technology (NIST) HL7 v2 Syndromic Surveillance Reporting Validation Tool. The SS staff at TDH will validate the message and provide feedback to the PTP.

- SS staff at TDH sends the PTP the corrections that need to be made to the initial message, an official letter documenting that they did send an initial pre-test message to TDH, and a draft Trading Partner Agreement (TPA) with Tennessee-specific requirements.

- A call maybe held between the SS staff at TDH and the PTP to discuss whether they want to continue with on-boarding SS, and what the next steps of that process entail. If a call is held, the timeline and business rules will be discussed.

TESTING

- If the TP decides to continue with the on-boarding process, TP will send a de-identified A01, A03, A04 and A08 message with the validation report from the NIST HL7 v2 SS Validation Tool.

- The SS staff at TDH will validate the message and provide feedback to TP regarding errors.

- TP will correct errors and resend messages with log of errors corrected.

- If messages aren't ready for on-boarding, SS staff at TDH will only look at additional batches when the TP has documented what errors have been corrected and sends an updated batch for validation. **The TP will have 4 months to correct all message errors.** If the batches are not at a state that TDH can accept within 4 months, the TP will be moved back to the end of the queue in order to free up TDH resources to work with other partners engaged in SS messaging on-boarding.

- When the messages are ready for on-boarding, TDH will send the TP an official letter inviting TP to begin on-boarding.

- TDH will discuss transport options with the TP.

ON-BOARDING

- Secure transport will be setup.

- TP will send TDH a single batch transmission for testing transport mechanism.

- TDH will provide feedback to TP regarding the success or failure of the transport mechanism test.

- If the transport mechanism fails, the TP will correct the error and retest.

- If transport is successful, TP will send TDH more batches of test messages for validation, TDH SS staff will review and provide the TP with feedback and a list of errors that should be corrected.

- TP documents what errors have been corrected and sends an updated batch.

- The SS staff at TDH will only look at additional batches when the TP has documented what errors have been corrected and sends an updated batch for validation. **The TP will have 2 months to correct all message errors.** If the batches are not at a state that TDH can accept within 2 months, the TP will be moved back to the end of the queue in order to free up TDH resources to work with other partners engaged in SS on-boarding.

- When all message errors have been corrected, TDH will send the TP an official letter documenting the completion of the file validation.

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- TDH will further review SS messages received from the TP and make sure they are free of errors. As long as no problems arise within a two week period of monitoring, the messages will be deemed production ready.

PRODUCTION

- Once production ready, the SS batch messages will be sent to TDH's production surveillance systems.

- TDH will send the TP an official letter documenting the successful completion of the production review.

- TP and TDH will sign TPA.

For more information, please contact the Communicable and Environmental Diseases and Emergency Preparedness Surveillance Systems and Informatics Program team at CEDS.Informatics@tn.gov and please include **'SS'** in the subject line.

Syndromic Surveillance (SS) Messaging On-Boarding Checklist

Please note that the information in this document only applies to SS messaging in TN. The information below does not pertain to Electronic Laboratory Reporting (ELR), Immunization Registry updates, or Cancer Case Reporting.

Introduction

The Tennessee Communicable and Environmental Diseases and Emergency Preparedness (CEDEP) Division within the Tennessee Department of Health (TDH) has programmatic oversight of Syndromic Surveillance activities across the state. Currently, all 13 Tennessee Public Health regions receive data from select emergency departments and perform Syndromic Surveillance activities.

Syndromic surveillance is defined as public health surveillance emphasizing the use of timely pre-diagnostic data and statistical tools to detect and characterize unusual activity for further public health investigation. Syndromic surveillance uses individual and population health indicators which are available before confirmed diagnoses or laboratory confirmation to identify outbreaks or health events and monitor the health status of a community.

The main objectives of syndromic surveillance are to: 1) detect an unknown, unexpected or emerging human health threat; 2) demonstrate the lack of public health impact of a known threat; 3) quantify and monitor the impact of an identified potential public health threat; and 4) detect the start of an expected event.

For more information on the SS messaging on-boarding process in Tennessee, helpful resources, and additional documentation, please visit: https://tn.gov/health/topic/meaningful-use-summary.

Purpose

The purpose of this document is to provide the reader with the information necessary for successful syndromic surveillance messaging activities to TDH. The on-boarding checklist is for health systems, hospitals and their vendors or business associates.

Useful Links

TDH Meaningful Use: https://tn.gov/health/topic/meaningful-use-summary

PHIN MESSAGING GUIDE FOR SYNDROMIC SURVEILLANCE: EMERGENCY DEPARTMENT AND URGENT CARE DATA; ADT Messages A01, A03, A04, and A08 HL7 v2.5.1: Release 1.1 (August 2012): http://www.cdc.gov/nssp/documents/guides/PHIN_MSG_Guide_for_SS_ED_and_UC_Data_v1_1.pdf

PHIN Vocabulary Access and Distribution System (VADS): http://phinvads.cdc.gov/vads/ViewView.action?name=Syndromic%20Surveillance

NIST HL7 V2 Validation Tool for Syndromic Surveillance: http://hl7v2-ss-testing.nist.gov/mu-syndromic/

Pre-Registration with Public Health Agency

Before registering with TDH, these items are suggested to accelerate the on-boarding process.

Trading Partner (TP) Activity	Complete	Date
Develop an HL7 message conformant to PHIN MESSAGING GUIDE FOR SYNDROMIC SURVEILLANCE: EMERGENCY DEPARTMENT AND URGENT CARE DATA; ADT Messages A01, A03, A04, and A08 HL7 v2.5.1: Release 1.1 (August 2012)	☐ Yes	
Test SS messages using the NIST HL7 v2 SS Validation Tool	☐ Yes	
Resolve message issues found using the NIST HL7 v2 SS Validation Tool	☐ Yes	

Note: In addition to the Official Letters listed below, TDH will supply an Official Letter each time the Trading Partner transitions to a new phase in the on-boarding process.

Phase 1: Registration & Pre-Testing with Public Health Agency (PHA)

Trading Partner (TP) Activity	Complete	Date	TDH Response	Official Letter
PTP Complete online registration through the Trading Partner Registration system	☐ Yes		Send PTP registration acknowledgement	Registration Completed
Email 1 test de-identified ADT A01 SS message following HL7, Version 2.5.1 SS PHIN Messaging Guide with the NIST output	☐ Yes		Send PTP message corrections ,validation and draft Trading Partner Agreement (TPA)	Pre-Testing Completed

Phase 2: Testing

Trading Partner (TP) Activity	Complete	Date	TDH Response	Official Letter
TP sends test A01, A03, A04, A08 message via email to TDH with the NIST output	☐ Yes		TDH provide feedback to TP	
TP correct all errors and re-send messages	☐ Yes		TDH acknowledge messages are ready for onboarding and invite TP to on-board	
Discussion of transport option with TDH	☐ Yes		Send transport mechanism	N/A

Phase 3: On-Boarding

Trading Partner (TP) Activity	Complete	Date	TDH Response	Official Letter
Establish secure transport and test with TDH	☐ Yes		Acknowledge that transport connectivity test completed	Testing Completed
Start sending SS batch transmissions to TDH	☐ Yes		Send TP message corrections to be corrected	
Document what errors have been corrected and send updated batch to TDH (iterative process - continue correcting until at an agreeable state)	☐ Yes		Verify all errors corrected and send test file validation letter	Test File Validation Completed

Phase 4: Production

Trading Partner (TP) Activity	Complete	Date	TDH Response	Official Letter
Send batch messages to SS production systems	☐Yes		Send TP any issues that need to be corrected	
TP correct any other pending issues	☐Yes		TDH send an official letter to TP for successful completion of production review	Production Review Completed
TP signs TPA	☐Yes		TDH signs TPA and provides TP a copy.	

Syndromic Surveillance (SS) Messaging Frequently Asked Questions (FAQ's)

Please note that the information in this document only applies to SS messaging in TN.   The information below does not pertain to Electronic Laboratory Reporting (ELR), Immunization Registry updates, or Cancer Case Reporting.

1. **What constitutes SS in TN?**
   a. *Syndromic surveillance is defined as public health surveillance emphasizing the use of timely pre-diagnostic data and statistical tools to detect and characterize unusual activity for further public health investigation. Syndromic surveillance uses individual and population health indicators which are available before confirmed diagnoses or laboratory confirmation to identify outbreaks or health events and monitor the health status of a community.*

2. **What constitutes SS messaging in TN?**
   a. *Syndromic surveillance messaging is provides an electronically automated secure and standardized mechanism for communicating SS data to TDH to support SS.*

3. **Is TDH accepting syndromic surveillance messaging data submissions from eligible hospitals?**
   a. *Yes, TDH will be accepting HL7 syndromic surveillance messaging data submission from eligible hospitals in Stage 2 of Meaningful Use starting October 2015.*

4. **What message types does TDH accept for syndromic surveillance?**
   a. *TDH accepts HL7 Admission and Discharge Transfer (ADT) messages.*
      Message types:
   - *ADT^A01 Admit / Visit Notification*
   - *ADT^A03 Discharge / End Visit*
   - *ADT^A04 Register a Patient*
   - *ADT^A08 Update Patient Information*

5. **How will TDH use the data I send in SS messages?**
   a. *The ultimate goal of SS messaging is to provide an electronically automated secure and standardized mechanism for communicating SS data to TDH to support SS so it can be used for public health action. TDH must ensure adequate and reliable information.   Because of this, TDH will not use the data during testing in production surveillance systems. Once the SS message content and structure is at an agreeable state, TDH will discuss moving the trading partner into production.*

6. **What events or conditions should be included in syndromic surveillance messaging data submissions to TDH?**
   a. *TDH monitors the reason for visit for all encounters seen at the hospital emergency department through syndromic surveillance; therefore, no filtering of data by event or condition should be done prior to its submission to TDH.*

7. **Where can I find guidance on the required data elements that should be submitted to TDH by eligible hospitals for syndromic surveillance?**
   a. *Guidance documentation that outlines what data elements should be sent by eligible hospitals can be found in the PHIN MESSAGING GUIDE FOR SYNDROMIC SURVEILLANCE: EMERGENCY DEPARTMENT AND URGENT CARE DATA; ADT Messages A01, A03, A04, and A08 HL7 v2.5.1: Release 1.1 August 2012,*
      http://www.cdc.gov/nssp/documents/guides/PHIN_MSG_Guide_for_SS_ED_and_UC_Data_v1_1.pdf

8. **What HL7 version is required by TDH for syndromic surveillance messaging data submissions?**
   a. HL7 version 2.5.1 is required for Stage 2. *TDH is currently able to receive HL7 2.5.1 for SS following the respective standards and implementation guides. For more information on the HL7 standards and the HL7 Version 2.5.1 Implementation Guide:* PHIN MESSAGING GUIDE FOR SYNDROMIC SURVEILLANCE: EMERGENCY DEPARTMENT AND URGENT CARE DATA ADT; Messages A01, A03, A04, and A08 HL7 v2.5.1: Release 1.1 August 2012*, please visit http://www.cdc.gov/nssp/documents/guides/PHIN_MSG_Guide_for_SS_ED_and_UC_Data_v1_1.pdf*

9. **Currently our hospital is sending syndromic data to TDH, does this meet the Meaningful Use criteria?**
   a. *In order to satisfy this objective, data must be sent using HL7 2.5.1. TDH will work with hospitals that are currently sending data during their conversion to the HL7 format.*

10. **What web based tools are available to assist me in validating my message structure?**
    a. *TDH uses free, online SS messaging tools to assist in validation. Examples include the NIST HL7 v2 Syndromic Surveillance Reporting Validation Suite for certifying 2014 Edition Meaningful Use EHR technology. TN requires potential trading partners to first validate their messages using the NIST tool and make any necessary corrections, prior to submitting to TDH for testing. TDH recognizes that not all errors received from the NIST validation are of equal importance; some may be accepted by TN.*

11. **What methods of transport are available to send SS to TDH?**
    a. *Secure file transport protocol (SFTP) is the preferred method of transport for SS with TDH. This can be set up either by creating a username and password for the PTP account or by exchanging public keys, but utilizing the exchange of public keys is ideal as passwords are required to be updated often. Additional mechanisms might be available and can be discussed upon establishment. TDH does not establish secure transport with trading partners until most structural message errors have been resolved. Please see the SS messaging on-boarding process (https://admincms.tn.gov/assets/entities/health/attachments/MU_SS_ONBOARDING.pdf) for more information.*

12. **How often should eligible hospitals send syndromic surveillance data to TDH?**
    a. *Syndromic surveillance data are expected to be sent on a daily basis at a consistent time as a batch file by 6:00 am reflecting emergency department admissions within a 24 hour period (12:00 am -11:59 pm) of the previous calendar day.*

13. **Our healthcare organization consists of multiple hospitals. Does each of our hospitals need to complete the on-boarding process (e.g. register and send test message) for Meaningful Use?**
    a. *If all data for your organization is centralized and syndromic surveillance messages will be generated centrally for all entities in your organization, you only need to complete the on-boarding process once.*

    In this situation, TDH will require supplemental information (e.g. name, physical address, NPI) be provided for each hospital that will be included in your organization's data feed.

14. Is there an SS messaging on-boarding timeline?

a. *The on-boarding timeline really depends on the readiness of the potential trading partner. There is not a specified timeline for how long it will take a trading partner to move into production. This depends on how engaged the trading partner is in the testing process and how many other trading partners TDH is currently on-boarding. For trading partners associated with Meaningful Use, please see the SS on-boarding process (https://admincms.tn.gov/assets/entities/health/attachments/MU_SS_ONBOARDING.pdf) for more information.*

15. How do I get started?

a. *The first step in the SS messaging on-boarding process is registering intent with TDH using Tennessee's Trading Partner Registration System. To assist trading partners with tracking their progress through the SS messaging on-boarding process, TDH developed the SS messaging on- boarding checklist (https://admincms.tn.gov/assets/entities/health/attachments/TDH_SS_Checklist.pdf). This list is recommended for trading partner use, and will not be required to be completed. Before starting the on-boarding process, TDH recommends:*

    i. *Obtaining a copy of the PHIN MESSAGING GUIDE FOR SYNDROMIC SURVEILLANCE: EMERGENCY DEPARTMENT AND URGENT CARE DATA; ADT Messages A01, A03, A04, and A08 HL7 v2.5.1: Release 1.1 (August 2012)*

    ii. *Working to develop a conformant message*

    iii. *Testing those messages using the NIST HL7 SS 2.5.1 Validation Suite*

16. What information should I include in the message subject header (MSH)?

a. *TDH accepts either NPI or OIDS in MSH-4 (Sending Facility). For MSH-5 and MSH-6, TDH will expect the OIDs below.*

    i. *[MSH-5] Receiving Application* – literal value 'TDH-SS^2.16.840.1.113883.3.773.1.1.4^ISO'

    ii. *[MSH-6] Receiving Facility* – literal value 'TDH^2.16.840.1.113883.3.773^ISO'

17. Does TDH accept batch or real-time message transmission for SS messaging?

a. *Batch transactions will be utilized. Batches will be sent daily by the Trading Partner. Please prefer to the PHIN MESSAGING GUIDE FOR SYNDROMIC SURVEILLANCE: EMERGENCY DEPARTMENT AND URGENT CARE DATA; ADT Messages A01, A03, A04, and A08 HL7 v2.5.1: Release 1.1 (August 2012). TDH does not currently accept real-time message transmission for SS. TDH does not send message or batch acknowledgements for SS.*

18. When do we sign the Trading Partner Agreement (TPA)?

a. *The TPA will remain in draft form and will not be signed by TDH or the trading partner until SS is in production. TDH will share information on business rules and message constraints with you early in the on-boarding process. The TPA is a template that will be tailored for each trading partner and signed at the end of the on-boarding process.*

19. If something is listed as "RE," do I have to send it to TDH?

a. *"RE" stands for "Required, but can be empty." For values listed as RE, if the value is known, it is required to be sent. However, if the value is unknown, please leave the field empty. Conformant systems are required to be able to send this information, and the ability to send RE fields will be evaluated during on-boarding.*

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20. **Can I send more than one message type in the same file to TDH?**
    a. *Although TDH encourages utilizing the same transport method for multiple business areas (e.g., SS and ELR), mixed message types in one file will not be accepted. Separate files need to be sent to TDH for each type of message. For SS, TDH expects only Admission and Discharge Transfer (ADT) messages be sent in a batch that is then sent in a file to TDH.*

21. **Does TDH expect to receive updates on each individual encounter to the hospital emergency department?**
    a. *TDH expects to receive information from the time an encounter is initiated at the emergency department (i.e. registration) to when that encounter ends at the emergency department (i.e. discharge or transfer). Additionally, when final diagnosis information on an encounter has been coded and is available in the patient's electronic health record, it should be sent to TDH as an update.*

22. **What kind of documentation will TDH provide to me that I can use for Meaningful Use attestation?**
    a. *TDH will provide official letters documenting completed steps and phases throughout the SS messaging on-boarding process, as noted in the SS messaging on-boarding checklist (https://admincms.tn.gov/assets/entities/health/attachments/TDH_SS_Checklist.pdf). These letters can be used as documentation for your records. Neither TDH nor the Surveillance Systems and Informatics Program are the Meaningful Use regulators or the body which measures compliance. If you have specific questions about your attestation process, please contact representatives within those governing bodies.*

For more information, please contact the Communicable and Environmental Diseases & Emergency Preparedness (CEDEP) Surveillance Systems and Informatics Program (SSIP) team at CEDS.Informatics@tn.gov and please include **'SS'** in the subject line

Tennessee Department of Health
Tennessee Syndromic Surveillance Messaging
Business Rules

The following Business Rules will apply to this Trading Partner Agreement (TPA) between the Trading Partner (TP) and the Tennessee Department of Health (TDH):

1. Specifications for this Agreement are contained in the PHIN Messaging Guide for Syndromic Surveillance: Emergency Department, Urgent Care and Inpatient Settings: ADT Messages A01, A03, A04, and A08 HL7 Version 2.5.1 Release 1.1 (August 2012). Constraints on the referenced PHIN Messaging Guide can be found in Message Type/Trigger Event and Segments of the TPA.

2. The message events required for this trading partner agreement are ADT^A01^ADT_01, ADT^A04^ADT_04, ADT^A08^ADT_08 and ADT^A03^ADT_03 as in the PHIN Messaging Guide see business rule 1.

3. Batch processing will be utilized. Please refer to Table 3-4B in the PHIN Messaging Guide on Interactions - Individual Transaction without Acknowledgements/Batch.

4. Syndromic surveillance data are expected to be sent on a daily basis at a consistent time as a batch file by 6:00 am reflecting emergency department admissions within a 24 hour period (12:00 am -11:59 pm) of the previous calendar day.

5. When data elements are updated in the sender's system, the entire record (i.e., all specified elements) shall be resent. Message receivers will use unique identifiers to match and reconcile records. (Please refer to Table 3-4 of the PHIN Messaging Guide).

6. Syndromic surveillance records will contain limited data that can be securely used to lookup additional information about a patient visit of public health concern.

7. Acknowledgement messages will not be sent from TDH.

8. Jurisdictions will be determined by: Patient zip code and county in [PID-11.5] (Zip Code) and [PID-11.9] (County/Parish Code).

9. Messages are constrained to include only one patient per message. A message containing more than one PID segment will be rejected.

10. If original text in OBX-5.9 is used to convey chief complaint, care must be taken by the Syndromic Surveillance sender in order to not truncate information due to the field length restriction of 199 characters. If chief complaint exceeds 199 characters, the message sender must use text (TX) data type for OBX-5 rather than coded with exceptions (CWE) data type in syndromic surveillance messages sent to TDH.

11. "RE" stands for "Required, but can be empty," this is not the same as "Optional." For values listed as RE, if the value is known, it is required to be sent. However, if the value is unknown, please leave the field empty. Conformant systems are required to be able to send this information, and the ability to send RE fields will be evaluated during on-boarding.

12. [PR1] and [IN1] are not required segments by the State of Tennessee and will be ignored if sent by trading partner. If any of these segments are sent, the segments should be properly formed as described by the normative content.

13. [MSH-11] (Processing ID) can have the values "P" (Production), "T" (Training), or "D" (Debugging), but note that "T" and "D" will be handled in the same way.

Constraints placed on the PHIN Messaging Guide for Syndromic Surveillance: Emergency Department, Urgent Care and Inpatient Settings: ADT Messages A01, A03, A04, and A08 HL7 Version 2.5.1 Release 1.1 (August 2012), are specified in this document. The below ADT trigger events included in the TPA may be different in sequence and cardinality:

  • ADT^A01 Admit / Visit Notification

  • ADT^A04 Register a Patient

  • ADT^A08 Update Patient Information

  • ADT^A03 Discharge / End Visit

1. FHS – File Header Segment
    a. [FHS-4] File Sending Facility – For the Universal ID we will accept a Party ID using NPI or OID, however the basic structure of the HD data type should be followed, i.e. Name Space ID, Universal ID (NPI or OID identifiers), Universal ID Type ('NPI' or 'ISO').
    b. [FHS-5] File Receiving Application – literal value 'tdh-SS^2.16.840.1.113883.3.773.1.1.4^ISO'
    c. [FHS-6] File Receiving Facility – literal value 'TDH^2.16.840.1.113883.3.773^ISO'

2. BHS – Batch Header Segment
    a. [BHS-4] Batch Sending Facility – For the Universal ID, we will accept a Party ID using NPI or OID, however the basic structure of the HD data type should be followed, i.e. Name Space ID, Universal ID (NPI or OID identifiers), Universal ID Type ('NPI', or 'ISO').
    b. [BHS-5] Batch Receiving Application – literal value 'tdh-SS^2.16.840.1.113883.3.773.1.1.4^ISO'
    c. [BHS-6] Batch Receiving Facility – literal value 'TDH^2.16.840.1.113883.3.773^ISO'

3. MSH – Message Header
    a. [MSH-4] Sending Facility - For the Universal ID, we will accept a Party ID using an OID, however the basic structure of the HD data type **SHALL** be followed, i.e. Name Space ID, Universal ID (OID identifiers), Universal ID Type ('NPI')
    b. [MSH-5] Receiving Application – literal value 'tdh-SS^2.16.840.1.113883.3.773.1.1.4^ISO'
    c. [MSH-6] Receiving Facility – literal value 'TDH^2.16.840.1.113883.3.773^ISO'
    d. [MSH-11] Processing ID - can have the values "P" (Production), "T" (Training), or "D" (Debugging), but note that "T" and "D" will be handled in the same way.
    e. [MSH-12] Version ID = '2.5.1'
    f. [MSH-21] Message Profile Identifier = 'PH_SS-Batch^SSReceiver^2.16.840.1.114222.4.10.3^ISO'

4. EVN – Event Type
    a. [EVN -2] Recorded Date/Time – Shall be expressed with a minimum precision of the nearest minute, and be represented in the following format: 'YYYYMMDDHHMM [SS[.S[S[S[S]]]]]=+/- ZZZZ]'

5. PID – Patient Identifier
    a. [PID-3] Patient Identifier – Shall include medical record number, **SHALL NOT** include Social Security Numbers.
    b. [PID-5] Patient Name – This segment **SHALL NOT** include patient name. (Please refer to Table 3-6C in the PHIN Messaging Guide)
    c. [PID-10] Race – Race values indicating "Hispanic" **SHALL NOT** be included in this field, but should be reflected in the ethnicity field ([PID-22] Ethnic Group).
    d. [PID-11] Patient Address – Send only current state, county and zip code of residence.

6. PV1 - Patient Visit
    a. [PV1-44] Admit Date/Time – Shall be expressed with a minimum precision of the nearest minute, and be represented in the following format: 'YYYYMMDDHHMM [SS[.S[S[S[S]]]]]=+/-ZZZZ]'

7. OBX – Observation/Result Segment
    a. [OBX-2] Value Type – will be required and should appropriately correspond to the observation being made in [OBX-5]. TS, TX, NM, CWE and XAD data types will be expected.
    b. [OBX-5] Observation Values – Values received in observation value are defined by value type (OBX.2) and observation identifier (OBX.3).

8. DG1 - Diagnosis
    a. [DG1-3] Diagnosis Code – If the DG1 segment is provided, DG1-3 (Diagnosis) is required to be valued.
    b. [DG1-6] Diagnosis Type – If the DG1 segment is provided, DG1-6 (Diagnosis Type) is required to be valued.

9. FTS – File Trailer
    a. [FTS-1] File Batch Count = '1'

10. BTS – Batch Trailer
    a. [BTS-1] Batch Message Count – shall be the total number of messages contained in the batch.