Syndromic Surveillance (SS) Messaging On-Boarding Packet for Eligible Hospitals (EHs) and Eligible Clinicians (ECs)

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.
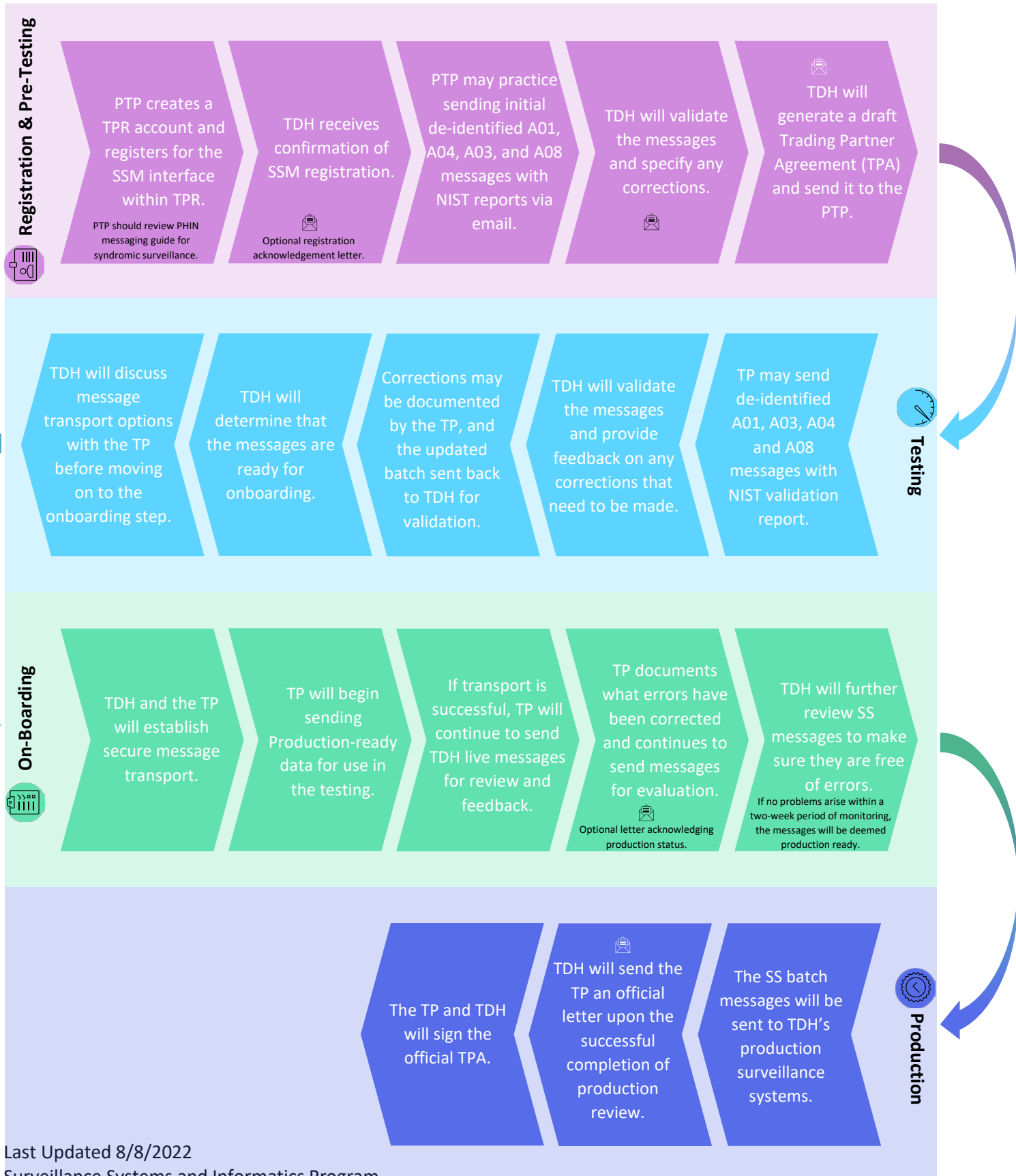
➢ The SS Frequently Asked Questions (FAQ's) document provides answers to the most commonly asked questions around implementing SS messaging with the Tennessee Department of Health. It is recommended that you look to this document first before contacting the Tennessee Department of Health with your questions, 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

Registration & Pre-Testing

- PTP creates a TPR account and registers for the SSM interface within TPR.
  PTP should review PHIN messaging guide for syndromic surveillance.

- TDH receives confirmation of SSM registration.
  Optional registration acknowledgement letter.

- PTP may practice sending initial de-identified A01, A04, A03, and A08 messages with NIST reports via email.

- TDH will validate the messages and specify any corrections.

- TDH will generate a draft Trading Partner Agreement (TPA) and send it to the PTP.

Testing

- TDH will discuss message transport options with the TP before moving on to the onboarding step.

- TDH will determine that the messages are ready for onboarding.

- Corrections may be documented by the TP, and the updated batch sent back to TDH for validation.

- TDH will validate the messages and provide feedback on any corrections that need to be made.

- TP may send de-identified A01, A03, A04 and A08 messages with NIST validation report.

On-Boarding

- TDH and the TP will establish secure message transport.

- TP will begin sending Production-ready data for use in the testing.

- If transport is successful, TP will continue to send TDH live messages for review and feedback.

- TP documents what errors have been corrected and continues to send messages for evaluation.
  Optional letter acknowledging production status.

- TDH will further review SS messages to make sure they are free of errors.
  If no problems arise within a two-week period of monitoring, the messages will be deemed production ready.

Production

- The TP and TDH will sign the official TPA.

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

- The SS batch messages will be sent to TDH's production surveillance systems.

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

REGISTRATION AND PRE-TESTING

- A PTP must first have a Portal Admin Account Management System (PAAMS) account before registering for the TDH Trading Partner Registration (TPR) service. From the PAAMS account, the entity can then register for a TPR account. Once the TPR account has been created, the entity can complete registration for the Syndromic Surveillance Messaging (SSM) interface within TPR. For more detailed instructions regarding PAAMS, TPR, and SSM registration, refer to the TPR_Users_Guide.pdf (tn.gov).
- TDH will receive notification that the PTP has competed SSM registration in TPR. If needed, TDH can generate a registration acknowledgement letter that includes onboarding instructions to send to the PTP.
- The PTP should obtain a copy of the PHIN Messaging Guide for Syndromic Surveillance: Emergency Department, Urgent Care, Inpatient and Ambulatory Care Settings: ADT Messages A01, A03, A04, and A08 HL7 Version 2.5.1 Release 2.0 (April 2015). A copy can be found at https://www.cdc.gov/nssp/documents/guides/syndrsurvmessagguide2_messagingguide_phn.pdf
- The PTP may obtain a validation report from the National Institute of Standards and Technology (NIST) HL7 v2 Syndromic Surveillance Reporting Validation Tool on an initial A01 Admit message. More information on the validation tool can be found at: Syndromic Surveillance Tool @ NIST
- The PTP may send initial A04 Registration, A03 Discharge, and A08 update test messages to the SS staff at TDH through email. The initial message should not contain identifiable Protected Health Information (PHI). PTP should include the validation report in this initial email as well.
- The SS staff at TDH will validate the messages and provide feedback to the PTP. The SS staff will specify any corrections that need to be made to the initial messages.
- TDH will generate a draft Trading Partner Agreement (TPA) with Tennessee-specific requirements and send it to the PTP.

TESTING (Optional)

- The TP may send de-identified A01, A03, A04 and A08 messages with the validation report from the NIST HL7 v2 SS Validation Tool.
- The SS staff at TDH will validate the messages and provide feedback to TP regarding errors. The TP will correct errors and resend messages with log of errors corrected.
- Corrections must be documented by TP, and the updated batch sent back to TDH for validation.
- The SS staff at TDH will determine that the messages are ready for onboarding.
- TDH will discuss message transport options with the TP before moving on to the onboarding step.

ON-BOARDING

- After discussing the transport options upon the conclusion of the testing phase, TDH and the TP will establish secure message transport.
- The TP will begin sending data for use in the testing. Production ready data is preferred during the onboarding process.
- If transport is successful, TP will continue to send TDH live messages for validation, TDH SS staff will review and provide the TP with feedback and a list of errors that should be corrected.
- The TP documents what errors have been corrected and continues to send messages for evaluation.
- TDH will further review SS messages received from the TP and make sure they are free of errors. If 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.
- The TP and TDH will sign the official 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 Disease Services 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, URGENT CARE, INPATIENT AND AMBULATORY CARE SETTINGS ADT Messages A01, A03, A04, and A08 HL7 v2.5.1: Release 2.0 (April 2015):
https://www.cdc.gov/nssp/documents/guides/syndrsurvmessagguide2_messagingguide_phn.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 (PHA)

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, URGENT CARE, INPATIENT AND AMBULATORY CARE SETTINGS ADT Messages A01, A03, A04, and A08 HL7 v2.5.1: Release 2.0 (April 2015)	☐	
Test SS messages using the NIST HL7 v2 SS Validation Tool	☐	
Resolve message issues found using the NIST HL7 v2 SS Validation Tool	☐	

*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 completes online registration through the Trading Partner Registration system	☐		Send PTP registration acknowledgement	
Email 1 test de-identified ADT A01 SS message following HL7, Version 2.5.1 SS PHIN Messaging Guide with the NIST output	☐		Send PTP message corrections, validation, and draft Trading Partner Agreement (TPA)	

Phase 2: Testing (Optional)

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	☐		TDH provides feedback to TP	
TP correct all errors and re-send messages	☐		TDH acknowledge messages are ready for onboarding and invite TP to on-board	
Discussion of transport option with TDH	☐		Send transport mechanism	

Phase 3: On-Boarding

Trading Partner (TP) Activity	Complete	Date	TDH Response	Official Letter
Establish secure transport and test with TDH	☐		Acknowledge that transport connectivity test	
Start sending SS batch transmissions to TDH	☐		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)	☐		Verify all errors corrected	

Phase 4: Production

Trading Partner (TP) Activity	Complete	Date	TDH Response	Official Letter
Send batch messages to SS production systems	☐		Send TP any issues that need to be corrected	
TP correct any other pending issues	☐		TDH send an official letter to TP for successful completion of production review	Production Review Completed
TP signs TPA	☐		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 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 and eligible urgent care clinics?**
   a. *Yes, TDH will be accepting HL7 syndromic surveillance messaging data submissions from eligible hospitals in Stage 2 of Meaningful Use starting October 2015. Hospitals with emergency departments first became eligible in October 2015 and urgent care clinics will be eligible beginning January 2022.*

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 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.*

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 or eligible clinicians 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, Urgent Care, Inpatient and Ambulatory Care Settings: ADT Messages A01, A03, A04, and A08 HL7 Version 2.5.1 Release 2.0 (April 2015),*
   https://www.cdc.gov/nssp/documents/guides/syndrsurvmessagguide2_messagingguide_phn.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 *of Meaningful Use. 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, Urgent Care, Inpatient and Ambulatory Care Settings: ADT Messages A01, A03, A04, and A08 HL7 Version 2.5.1 Release 2.0 (April 2015)*, please visit* https://www.cdc.gov/nssp/documents/guides/syndrsurvmessagguide2_messagingguide_phn.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. These will be handled on a case-by-case basis.*

11. **What methods of transport are available to send SS to TDH?**
   a. *Secure file transport protocol (SFTP) or the TDH Web Services API (SOAP or REST) are the preferred method of transport for SS with TDH. 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 or eligible clinicians send syndromic surveillance data to TDH?**
   a. *Syndromic surveillance data are expected to be sent at as frequent of an interval as possible (at minimum every 6 hours daily) and be reflective of the current patient encounters.*

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. TDH requires facility level identifiers (e.g. name, physical address, NPI) be provided for all hospitals and clinics that are 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, Urgent Care, Inpatient and Ambulatory Care Settings: ADT Messages A01, A03, A04, and A08 HL7 Version 2.5.1 Release 2.0 (April 2015)*
    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 and real-time messaging can be utilized. Batches will be sent daily (minimum every 6 hours) 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 2.0 (April 2015). 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 nearing 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 near 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.*

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 can provide official letters documenting completed steps and phases throughout the SS messaging on-boarding process. 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 **'Syndromic Surveillance'** 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 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, Inpatient, and Ambulatory Settings: ADT Messages A01, A03, A04, and A08 HL7 Version 2.5.1 Release 2.0 (April 2015). Constraints on the reference implementation guide can be found in Attachment 3.

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

3. Batch processing will be utilized. Table 2.4.2 in the implementation guide list the Interactions-Individual Transaction without Acknowledgements/Batch. Section 2.2.3 shows an UML activity diagram for sending SS data batch. Section 3.7 gives the implementation guide for HL7 batch messages.

4. Syndromic surveillance data are expected to be sent at least every six hours containing the previous six hours of emergency department data.

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 2-1 of the PHIN Messaging Guide under Business Rules).

6. Data provided under this agreement are intended for the use of public health authorities to support public health business practices. 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. However, if any of these segments are sent, the segments should be properly formed as described by the Supporting Standards and Specifications.

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, Inpatient, and Ambulatory Settings: ADT Messages A01, A03, A04, and A08 HL7 Version 2.5.1 Release 2.0 (April 2015), are specified in this document. The below ADT trigger events included in this 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 **SHALL** 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 **SHALL** 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. Message Header
   a. [MSH-3] Sending Application
   b. [MSH-4] Sending Facility - For the Universal ID, we will accept a Party ID using an NPI or OID, however the basic structure of the HD data type **SHALL** be followed, i.e. Name Space ID, Universal ID (NPI or OID identifiers), Universal ID Type ('NPI' or 'ISO')
   c. [MSH-5] Receiving Application – Either the literal value 'TDH-SS' or 'TDH-SS^2.16.840.1.113883.3.773.1.1.4^ISO'
   d. [MSH-6] Receiving Facility – Either the literal value 'TDH' or 'TDH^2.16.840.1.113883.3.773.1.1.4^ISO'
   e. [MSH-9] Message Type = Listed in table 2.4.2 in the PHIN 2.0 guide in the message type column.
   f. [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.
   g. [MSH-12] Version ID = '2.5.1'

        h.   [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]'
   b. [EVN -7] Event Facility

5. PID – Patient Identifier
   a. [PID-3] Patient Identifier – May include the medical record number, **SHALL NOT** include Social Security Numbers.
   b. [PID-5] – Patient Name –**SHALL NOT** include patient name. When the name of the patient is known, but not desired the following: |~^^^^^^S| should be sent. When the name of the patient is not known, the following: |~^^^^^^U| should be sent.
   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-3] Observation Identifier – Condition Predicate: If OBX -3.1 (the identifier) is provided then OBX-3.3 is valued.
   c. [OBX-5] Observation Values – Values received in the observation value are defined by the value type (OBX.2) and the observation identifier (OBX.3).
   d. [OBX-6] Age Units – If numeric data is sent, the units fields must define the units of the value used in the observation value (OBX.5).

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 – should be the total number of messages contained in the batch.