Deloitte.

Kentucky Health Information Exchange (KHIE) Project

BioSense Subscription Specifications Addendum

June 2023

Document Information

Document Name	**Release 4B** **BioSense Subscription Specifications Addendum**
Project Name	Kentucky Health Information Exchange (KHIE)
Client	Kentucky Cabinet for Health and Family Services (CHFS)
Document Author	Deloitte Consulting LLP
Document Version	4B – 0.4 Addendum
Document Status	Third Submission for Review
Date Released	**06/15/2023**

Document Edit History

Version	Date	Additions / Modifications	Prepared / Revised by
0.1	07/26/2019	Initial Draft for Review	Deloitte
0.2	08/22/2019	Added specific values for MSH.5 and MSH.6 within section 1.1.1.	Deloitte
0.3	09/03/2019	Removed the list of LOINC codes from the appendix since these LOINC codes will be maintained on an ongoing basis, outside of the design piece for BioSense.	Deloitte
0.4	06/15/2023	Added section 1.3.3 and updated the BioSense flow in section 1.3	Deloitte

Document Authors

The following people are authors of this document:

Name	Organization / Title	Role
Ravi Koka	Deloitte	Functional Lead
Lax Vardhanapu	Deloitte	Functional Lead

Document Approvers

The following people are reviewers / approvers of the final version of this document:

Name	Organization / Title	Role
Sabrina Lee	KHIE Project Manager	Approver
Scott Spearman	KHIE	Functional Lead
Blair, Charlese	KHIE	Division Director
Arnett, Rebecca	KHIE Syndromic Surveillance PM	Final Approver

Contents

1. Addendum

1.1 Overview

This addendum to the BioSense Subscription specifications covers the release 4B scope for BioSense. Within post August 4B scope is the BioSense pass-thru service. BioSense pass-thru refers to incoming HL7 messages that would be routed to the National Syndromic Surveillance Program (NSSP) BioSense registry, without the need for any transformations or business validations beyond the pass-thru check. This service will complement the existing non-pass-thru BioSense messages that were implemented as part of phase 1 scope (pre August). The link to the phase 1 BioSense requirements can be found in the reference materials section.

1.2 Reference Materials

Release 4B BioSense Subscription Specifications
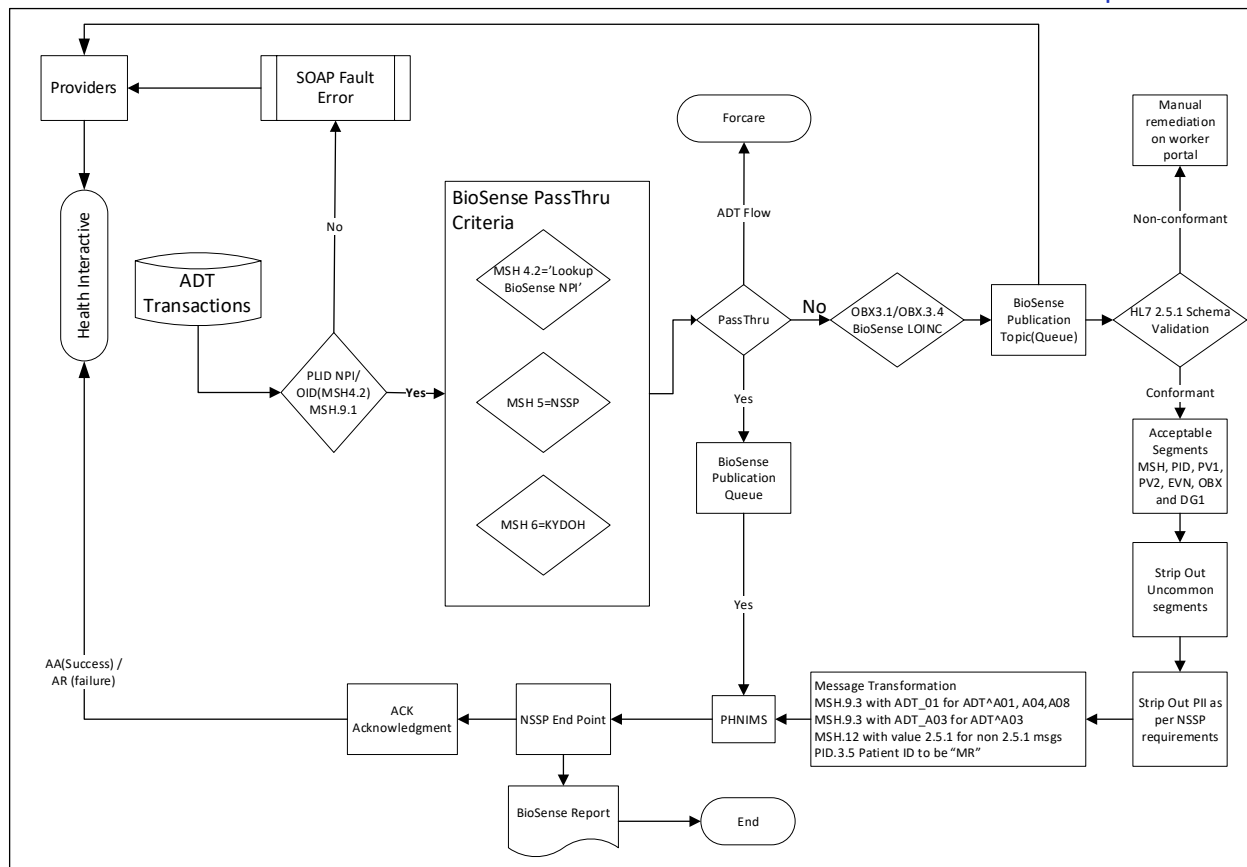
4b-Specifications-Bi
oSense Subscription

Release 4B BioSense Subscription Requirements Addendum.docx

Requirements -
BioSense Subscription

1.3 BioSense Process Flow

An ADT message that is sent by the providers and received by KHIE will either be routed to the NSSP End Point via the BioSense Publication queue or routed for further evaluation. The evaluation criteria that will determine whether a message is "pass-through" or "non pass-through" is described in the following steps.

1.3.1 BioSense Pass-Through Validation

4B-B-FR-30 / 32 - The initial evaluation step will determine if the message is a Biosense/NSSP message,

1. The value of MSH.4.2 must match an NPI for an onboarded BioSense participant. This evaluation is performed by doing a lookup of onboarded participants.
2. The value of MSH.9.1 must be equal to "ADT".

4B-B-FR-31 / 32 - The next evaluation step will determine if the message is a "pass-through" message.

3. The value of MSH.5 must be equal to NSSP.
4. The value of MSH.6 must be equal to KYDOH.

1.3.2 BioSense Non Pass-Through

4B-B-FR-32 - Messages that did not qualify for pass through will be evaluated further by checking the value of OBX.3.1 or OBX.3.4. If these fields contain an approved LOINC code (list is maintained separately as part of ongoing M&O), they will be routed to the BioSense Publication Topic queue for schema validation.

4B-B-FR-33 – Messages that pass schema validation are transformed to include the MSH.5 (NSSP) and MSH.6 (KYDOH) Biosense values.

1.3.3 Enhancements

- NSSP/Biosense have added PID 30 (patient death indicator) to their preferred data elements list. We are currently blanking out PID 30 as part of the Biosense transform. We need to remove that field from the transform, and leave that field populated as per the incoming transaction. - **TFS 510846**
- Currently in biosense end point we have Total 6 segments('MSH', 'PID', 'PV1', 'EVN', 'OBX', 'DG1').The CR-71 includes PV2 segment as well to biosense endpoint in transformed messages - **TFS 426797**
- Based on DOB value present in PID 7, a dynamic OBX segment gets generated while sending the message to BIOSENSE endpoint