

Syndromic Surveillance

Data Elements of Interest

Excerpt from the *Onboarding Guide to the BioSense Platform*
(Version 1.5, June 2016), Chapter 4: Data Integration

The BioSense Platform must receive all “R” and “RE” data elements defined for syndromic surveillance in the *PHIN Messaging Guide for Syndromic Surveillance*. This table summarizes those data elements.

Legend: R = required element; RE = required but may be empty; X = not supported; O = optional
For a complete description of these terms, see “Usage Rules for a Sending Application” in the [PHIN Messaging Guide for Syndromic Surveillance: ED/UC, Inpatient and Ambulatory Care Settings](#).

Syndromic Surveillance Data Elements of Interest			
Stage_1 Column Name	Stage_1 Processing	BioSense Platform Usage	HL7 Segment
Row_Number	BioSense Platform system generated unique row ID.	N/A	N/A
Create_Date_Time	BioSense Platform system generated row create date.	N/A	N/A
Update_Date_Time	BioSense Platform system generated row update date.	N/A	N/A
Earliest_Date_Time	BioSense Platform uses the earliest date among: <ul style="list-style-type: none"> - OBX-14 - Date/Time of Observation - PV1-45 - Discharge Date/Time - PV1-44 - Admit Date/Time - PR1-5 - Procedure Date/Time - PID-29 - Patient Death Date and Time - EVN-2 - Recorded Date/Time - MSH-7 - Message Date/Time 	R	Multiple
Feed_Name	BioSense Platform system generated SFTP feed name.	N/A	N/A
Channel_Name	BioSense Platform system generated MIRTH channel name.	N/A	N/A
PV1_44_1_Admit_Date_Time	Direct input from HL7 message.	R	PV1.44.1
DG1_5_1_Diagnosis_Date_Time	Direct input from HL7 message.	O	DG1.5.1
OBX_5_1_Onset_Date_Time	Direct input from HL7 message. BioSense Platform finds the OBX-3 segment with the ID '11368-8' and returns the OBX-5 value.	O	OBX.5.1
MSH_7_1_Message_Date_Time	Direct input from HL7 message.	R	MSH.7.1
PV1_45_1_Discharge_Date_Time	Direct input from HL7 message.	R	PV1.45.1
PID_29_1_Patient_Death_Date_Time	Direct input from HL7 message.	O	PID.29.1
PID_30_1_Patient_Death_Indicator	Direct input from HL7 message. (Deprecated)	X	PID.30.1
DG1_3_1_Diagnosis_Code	Direct input from HL7 message.	R	DG1.3.1
PV1_36_Discharge_Disposition	BioSense Platform uses both PV1-36.1 and PV1-36.2 and concatenates them with ':' as a separator.	R	PV1.36.1
DG1_6_1_Diagnosis_Type	Direct input from HL7 message.	RE	DG1.6.1
DG1_3_2_Diagnosis_Text	Direct input from HL7 message.	R	DG1.3.2

Syndromic Surveillance Data Elements of Interest			
Stage_1 Column Name	Stage_1 Processing	BioSense Platform Usage	HL7 Segment
MSH_4_Sending_Facility	BioSense Platform will try to return MSH-4.2. If MSH-4.2 is null, it will return MSH-4.1.	R	Multiple
OBX_5_1_Hospital_Discharge_Instructions	Direct input from HL7 message. BioSense Platform finds the OBX-3 segment with the ID '8653-8' and returns the OBX-5 value. (Deprecated)	X	OBX.5.1
MSH_10_1_Message_Control_ID	Direct input from HL7 message.	R	MSH.10.1
MSH_9_2_Trigger_Event	Direct input from HL7 message.	R	MSH.9.2
MSH_9_1_Message_Code	Direct input from HL7 message.	R	MSH.9.1
OBX_5_1_Body_Temperature	BioSense Platform treats this as a repeating segment. It returns all OBX-5 values that have the OBX-3 value of '8310-5' or '11289-6' and concatenates them with ':' as a separator.	O	OBX.5.1
OBX_6_2_Body_Temperature_Units	BioSense Platform treats this as a repeating segment. It returns all OBX-6.2 values that have the OBX-3 value of '8310-5' or '11289-6' and concatenates them with ':' as a separator.	O	OBX.6.2
OBX_5_1_Initial_Pulse	Direct input from HL7 message. BioSense Platform finds the OBX-3 segment with the ID '59408-5' and returns the OBX-5 value.	O	OBX.5.1
OBX_6_2_Initial_Pulse_Units	Direct input from HL7 message. BioSense Platform finds the OBX-3 segment with the ID '59408-5' and then returns the OBX-6.2 value.	O	OBX.6.2
OBX_5_1_Chief_Complaint	BioSense Platform treats this as a repeating segment. It returns OBX-5.1, OBX-5.8, and OBX-5.9 values that have the OBX-3 value of '11292-0' or '8661-1' and concatenates them with ':SEP:' as a separator.	R	Multiple
PV2_3_1_Admit_Reason_ID	Direct input from HL7 message.	RE	PV2.3.1
PV2_3_2_Admit_Reason_Text	BioSense Platform searches PV2 segments in listed order and returns the first non-null value.	RE	PV2.3.2
PV2_3_5_Admit_Reason_Alt_Text	Direct input from HL7 message.	RE	PV2.3.5
OBX_5_1_Diagnosis_Impression	BioSense Platform treats this as a repeating segment. BioSense Platform returns OBX-5.1 and OBX-5.2 values that have the OBX-3 value of '44833-2' or '11300-1' and concatenates them with ':SEP:' as a separator.	O	Multiple
OBX_5_1_Triage_Notes	BioSense Platform treats this as a repeating segment. It finds the OBX-3 segment with the ID '54094-8' and returns the OBX-5 value, then concatenates multiple values with ':SEP:' as a separator.	O	OBX.5.1

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Stage_1 Column Name	Stage_1 Processing	BioSense Platform Usage	HL7 Segment
OBX_5_2_Blood_Pressure	BioSense Platform treats this as a repeating segment. It returns OBX-5.1, OBX-5.2, OBX-5.3, and OBX-5.4 values that have the OBX-3 value of '35094-2' and concatenates them with ':' as a separator.	O	Multiple
OBX_6_2_Blood_Pressure_Units	Direct input from HL7 message.	O	OBX.6.2
PID_22_Patient_Ethnic_Group	BioSense Platform treats this as a repeating segment. It returns PID-22.1 and PID-22.2 values and concatenates them with ':' as a separator.	RE	Multiple
PID_10_Patient_Race	BioSense Platform treats this as a repeating segment. It returns PID-10.1 and PID-10.2 values and concatenates them with ':' as a separator.	RE	Multiple
PID_8_1_Patient_Gender	Direct input from HL7 message.	RE	PID.8.1
OBX_5_1_Patient_Age_Reported	BioSense Platform treats this as a repeating segment. It returns OBX-5.1 and OBX-5.2 values that have the OBX-3 value of '21612-7' and concatenates them with ':' as a separator.	RE	OBX.5.1
OBX_6_2_Patient_Age_Reported_Units	Direct input from HL7 message. BioSense Platform finds the OBX-3 segment with the ID '21612-7' and returns the OBX-5 value.	RE	OBX.6.2
PID_7_1_Date_Time_of_Birth	Direct input from HL7 message.	O	PID.7.1
PID_11_5_Patient_Zip	Direct input from HL7 message.	RE	PID.11.5
PID_11_6_Patient_Country	Direct input from HL7 message.	RE	PID.11.6
PID_11_4_Patient_State	Direct input from HL7 message.	RE	PID.11.4
PID_First_Patient_ID	BioSense Platform returns the first non-null value: - PID-2.1 - PID-3.1 - PID-4.1 - PID-18.1 - PV1-19.1	R	Multiple
PV1_2_1_Patient_Class	Direct input from HL7 message.	R	PV1.2.1
PR1_3_1_Procedure_Code_ID	Direct input from HL7 message.	O	PR1.3.1
PR1_3_2_Procedure_Code_Text	Direct input from HL7 message.	O	PR1.3.2
PV1_19_1_Patient_Visit_ID	Direct input from HL7 message.	R	PV1.19.1
PID_3_1_Patient_ID_Internal	Direct input from HL7 message.	R	PID.3.1
Source_Filename	BioSense Platform pulls this directly from the original source file.	N/A	N/A
Data_Overflow	BioSense Platform system generated value.	N/A	N/A
DG1_15_1_Diagnosis_Priority	Direct input from HL7 message. (Deprecated)	X	DG1.15

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Stage_1 Column Name	Stage_1 Processing	BioSense Platform Usage	HL7 Segment
DG1_3_5_Diagnosis_Alt_Text	Direct input from HL7 message. (Deprecated)	X	DG1.3.5
EVN_1_1_Event_Type_Code	Direct input from HL7 message.	RE	EVN.1.1
EVN_2_1_Recorded_Date_Time	Direct input from HL7 message.	R	EVN.2.1
EVN_7_2_Event_Facility	Direct input from HL7 message.	R	EVN.7.2
MSH_11_1_Processing_ID	Direct input from HL7 message.	R	MSH.11.1
MSH_12_1_Version_ID	Direct input from HL7 message.	R	MSH.12.1
MSH_21_1_Message_Profile_ID	Direct input from HL7 message.	R	MSH.21.1
MSH_3_1_Sending_Application	Direct input from HL7 message.	O	MSH.3.1
MSH_5_1_Receiving_Application	Direct input from HL7 message.	O	MSH.5.1
MSH_6_1_Receiving_Facility	Direct input from HL7 message.	O	MSH.6.1
MSH_9_3_Message_Structure	Direct input from HL7 message.	R	MSH.9.3
OBX_14_1_Observation_Date_Time	Direct input from HL7 message.	O	OBX.14.1
OBX_5_1_Acuity_Assessment	Direct input from HL7 message. BioSense Platform finds the OBX-3 segment with the ID '11283-9' and then returns the OBX-5 value.	O	OBX.5.1
OBX_5_1_Initial_Evaluation_Note	Direct input from HL7 message. BioSense Platform finds the OBX-3 segment with the ID '34120-6' and then returns the OBX-5 value. (Deprecated)	X	OBX.5.1
OBX_5_1_Medication_History	Direct input from HL7 message. BioSense Platform finds the OBX-3 segment with the ID '10160-0' and then returns the OBX-5 value.	O	OBX.5.1
OBX_5_1_Patient_Age_Calculated	Direct input from HL7 message. BioSense Platform finds the OBX-3 segment with the ID '29553-5' Then returns the OBX-5 value.	RE	OBX.5.1
OBX_5_1_Pregnancy_Status	Direct input from HL7 message. BioSense Platform finds the OBX-3 segment with the ID '11449-6' and then returns the OBX-5 value.	O	OBX.5.1
OBX_5_1_Problem_or_Finding	BioSense Platform treats this as a repeating segment. BioSense Platform returns OBX-5.1 values that have the OBX-3 value of '18624-7' and concatenates them using a ':' as a separator.	O	OBX.5.1
OBX_6_2_Patient_Age_Calculated_Units	Direct input from HL7 message. BioSense Platform finds the OBX-3 segment with the ID '29553-5' and then returns the OBX-6 value.	RE	OBX.6.2
PID_11_3_Patient_City	Direct input from HL7 message.	RE	PID.11.3
PID_18_1_Patient_Account_ID	Direct input from HL7 message.	O	PID.18.1
PID_2_1_Patient_ID_External	Direct input from HL7 message.	O	PID.2.1
PID_4_1_Alternate_Patient_ID	Direct input from HL7 message.	O	PID.4.1

Syndromic Surveillance Data Elements of Interest			
Stage_1 Column Name	Stage_1 Processing	BioSense Platform Usage	HL7 Segment
PID_First_Patient_County	BioSense Platform will advance through the following segments until it returns the first non-null value: PID-12.1 PID-11.9	R	Multiple
PR1_3_3_Procedure_Code_NS	Direct input from HL7 message.	O	PR1.3.3
PR1_5_1_Procedure_Date_Time	Direct input from HL7 message.	O	PR1.5
PV1_10_1_Hospital_Service	Direct input from HL7 message.	O	PV1.10
PV1_14_1_Admit_Source	Direct input from HL7 message.	O	PV1.14
PV1_15_1_Ambulatory_Status	Direct input from HL7 message.	O	PV1.15
PV1_18_1_Patient_Type	Direct input from HL7 message.	O	PV1.18
PV1_19_4_Assigning_Authority	Direct input from HL7 message.	R	PV1.19.4
PV1_19_6_Assigning_Facility	Direct input from HL7 message.	O	PV1.19.6
PV1_39_1_Servicing_Facility	Direct input from HL7 message. (Deprecated)	X	PV1.39.1
PV1_4_1_Admission_Type	Direct input from HL7 message.	O	PV1.4
PV1_50_1_Alternate_Visit_ID	Direct input from HL7 message. (Deprecated)	X	PV1.50
Facility_Name (MFT table)	BioSense Platform mapped value using MFT.	RE	N/A
Facility_Street (MFT table)	BioSense Platform mapped value using MFT.	RE	N/A
Facility_City (MFT table)	BioSense Platform mapped value using MFT.	RE	N/A
Facility_Zip (MFT table)	BioSense Platform mapped value using MFT.	RE	N/A
Facility_County (MFT table)	BioSense Platform mapped value using MFT.	RE	N/A
Facility_State (MFT table)	BioSense Platform mapped value using MFT.	RE	N/A
Facility_Country (MFT table)	BioSense Platform mapped value using MFT.	RE	N/A
Facility_Visit_Type (MFT table)	BioSense Platform mapped value using MFT.	R	N/A
Travel History	Available in new BioSense Platform only.	O	OBX.5.1
Previous Hospital Unit	Available in new BioSense Platform only.	O	PV1.6.1
Hospital Unit	Available in new BioSense Platform only.	RE	OBX.5
Unique Physician Identifier	Available in new BioSense Platform only.	O	PV1.7.1
Height	Available in new BioSense Platform only.	O	OBX.5
Weight	Available in new BioSense Platform only.	O	OBX.5
BMI	Available in new BioSense Platform only.	O	OBX.5
Smoking Status	Available in new BioSense Platform only.	O	OBX.5
Insurance Coverage	Available in new BioSense Platform only.	O	IN1.15