

Attachment 1D.

TB Notification Message

Mapping Guide 06052007.xls

Attachment 1D

TB Notification Message Mapping Guide

VERSION: The version of this Message Mapping Guide is Draft 0.6 dated 6/5/2007.

This Message Mapping Guide describes the content and message mapping specifications for the fixed set of data elements used to communicate information to meet the requirements for TB Individual Case reporting to CDC. The intended audience for this document are the state/local and CDC programs and other public health related organizations interested in using the HL7 V2.5 case notification message specification for transmitting their data elements.

References

Version 1.0 of the *Message Specification Guide* is used to inform the mapping methodology for this guide.

Notify CDC Message-All PAMs from NEDSS PAM Platform Team. Last updated 1/26/2007.

NEDSS PAM Platform Help Guide, 11/30/2006.

Understanding the Organization of the Mapping Guide

Revisions

This tab is intended to provide revision control for updates made to the document.

Key

Key to columns in each Tab/Worksheet

Subject-related

This tab provides the mapping methodology for the demographic variables requested by the program.

Generic Obs.

This tab provides the content for the generic investigation questions (observations). The ones that are not used for this particular instance are greyed out.

TB Observations

This tab provides the investigation/case-related content requested by the program for this specific notification.

Notification Structure

This tab provides the structural elements for the Notification. These variables are not negotiable. Default values are provided for HL7 structural elements that are required but not part of the surveillance data requested.

Variables as Observations

Other than the variables that map to the Patient Identifier segment (see Subject-Specific tab), all other variables are passed as a series of OBX-Observation/Result segments that are logically tied to the OBR-Observation Request "section header" segment that immediately precedes it. This content presents the real differences between the messages since all types of Notifications are handled in a standard manner up to this point.

Attachment 1D

TB Notification Message Mapping Guide

Revisions

Date	Version	Description
4/20/2007	Draft v. 0.5	Added "notification subject type" to the Notification Structural Data to bring the message structure in line with the Outbreak Management version of the ORU Case Investigation Report message.
4/20/2007	Draft v. 0.5	Changed all observations that use the CE value type in OBX-2 to CWE - coded with exception - to prepare for versioning of value sets. The additional fields are still optional at this point.
4/24/2007	Draft v. 0.5	Added "patient name type" to the Notification Structural data to account for the default value that must be provided in the message.
4/24/2007	Draft v. 0.5	Remapped NTF139 to NOT108 for use as the PHIN Variable ID used for MSH-10 Message Control ID (UID nor text appears in this context)
5/3/2007	Draft v. 0.5	Removed NOT110 Record Type variable. This observation is no longer necessary as the Notification Type specified in NOT101 contains this information.
6/5/2007	Draft v. 0.6	Created a Generic Observations tab and greyed out any generic surveillance questions that TB does not use. Only the TB-specific observations remain on the TB Observations tab.

Key to columns in each Tab/Worksheet:

Column	Description
Program Variables Section	
PHIN Variable ID	PHIN element UID drawn from the coding system PH_PHINQuestions_CDC
Label	Short name for the data element, which is passed in the message.
Description	Description of the data element as in PHIN Questions.
Data Type	Data type for the variable response expected by the program area
Prog. Req/Opt	Indicator whether the program specifies the field as: R - Required - mandatory for sending the message O - Optional - if the data is available it should be passed
Coded Concepts	Concepts that the program uses in answer to a particular question that required a coded response.
May Repeat	Indicator whether the response to the data element may repeat. "Yes" in the field indicates that it may; otherwise, the field is not populated. Repeats require special processing.
Data Validation	Business rules used for validating data integrity
Value Set Name	Name of the pre-coordinated value set from which the response is drawn. The value sets and coding systems are accessible via the Public Health Information Network Vocabulary Access and Distribution Services at http://www.cdc.gov/PhinVSBrowser/StrutsController.do .
Message Mapping Methodology Section	
Message Context	Specific HL7 segment and field mapping for the element.
HL7 Data Type	HL7 data type used by PHIN to express the variable.
HL7 Usage	Use of the field for PHIN. Indicates if the field is required, optional, or conditional in a segment. The only values that appear in the Message Mapping are: <ul style="list-style-type: none"> • R – Required. Must always be populated • O – Optional. May optionally be populated.
HL7 Cardinality	Indicator of the minimum and maximum number of times the element may appear. <ul style="list-style-type: none"> • [0..0] Element never present. • [0..1] Element may be omitted and it can have at most, one Occurrence. • [1..1] Element must have exactly one Occurrence. • [0..n] Element may be omitted or may repeat up to n times. • [1..n] Element must appear at least once, and may repeat up to n times. • [0..*] Element may be omitted or repeat for an unlimited number of times. • [1..*] Element must appear at least once, and may repeat unlimited number of times. • [m..n] Element must appear at least m, and at most, n times.
Implementation Notes	Related implementation comments.

Subject/Demographic Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
DEM197	Local patient ID	The local ID of the patient/entity.	Text	R					PID-3 Patient Identifier List (does not pass Variable ID or label)	CX	R	[1..1]	Only the sending system's internally assigned patient id used for these de-identified messages
DEM115	Birth Date	Reported date of birth of patient.	Date	O					PID-7 Date/Time of Birth (does not pass Variable ID or label)	TS	O	[0..1]	
DEM113	Patient's sex	Patient's current sex.	Code	O		Male Female Unknown	Sex (MFU)		PID-8 Administrative Sex (does not pass Variable ID or label)	IS	O	[0..1]	
DEM152	Race Category	Field containing one or more codes that broadly refer to the patient's race(s).	Code	O	Y	Native Hawaiian or Other Pacific Islander American Indian or Alaska Native Asian White Black or African American Other Race	Race Category		PID-10 Race (does not pass Variable ID or label)	CE	O	[0..*]	

Subject/Demographic Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
DEM153	Detailed Race	A patient record may have zero, one, or multiple detailed race categories assigned.	Code	O	Y		Detailed Race		Observation/OBX Segment with this UID and label under the Patient Subject section header in OBR-4. To keep the race category in context with detailed races, pass the race category in the first instance of this field and the detailed race codes as repeats. If more than one race category was passed in PID-10 Race, use a second OBX Detailed Race segment instance to keep that grouping in context.	CWE	O	[0..*]	
DEM155	Ethnic Group Code	Ethnic origin or ethnicity is based on the individual's self-identity of the patient as Hispanic or Latino; choose one value from the list.	Code	O		Hispanic Non-hispanic	Ethnicity Group		PID-22 Ethnic Group (does not pass Variable ID or label)	CE	O	[0..1]	
DEM156	Detailed Ethnicity	If the value specified in Ethnicity is Hispanic or Latino, choose detailed ethnicity value(s) that better define the patient's Latino ethnicity; values may include Cuban, Mexican, etc.; choose one or multiple values from this list. This variable is not passed unless specified for the particular condition.	Code	O	Y		Detailed Ethnicity		Observation/OBX Segment with this UID and label under the Patient Subject section header in OBR-4.	CWE		[0..*]	

Subject/Demographic Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
DEM2003	US Citizen	Is the patient a US citizen?	Boolean	O		True False			Observation/OBX Segment with this UID and label under the Patient Subject section header in OBR-4.	IS	O	[0..1]	Used IS datatype to pass only T or F
DEM2004	Nationality	What is the patients country of origin?	Code	O			Country		Observation/OBX Segment with this UID and label under the Patient Subject section header in OBR-4.	CWE	O	[0..1]	
DEM2005	Date of Entry into US	Date arrived in U.S. from another country.	Date	O					Observation/OBX Segment with this UID and label under the Patient Subject section header in OBR-4.	TS	O	[0..1]	

Attachment 1D

The generic surveillance elements that are not used for TB are shaded.

Generic Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Valid Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
NOT109	Reporting State	State reporting the notification.	Code	R		2 char alpha state codes	State		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
NOT113	Reporting County	County reporting the notification.	Code	R			County		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV169	Condition Code	Condition or event that constitutes the reason the notification is being sent.	Coded	R			Nationally Notifiable Infectious Disease (NND)	must be 10220 Tuberculosis	(note that this is a Notification structural element, so it appears twice in this Guide)	CE	O	[0..1]	
INV168	Record ID	System-assigned local ID of the investigation with which the case subject/entity is associated. (NOTE for TB: this is the RVCT ID).	Text	R					OBR-3.1 Filler Order Number (does not pass Variable ID or label)	EI	R	[0..1]	
INV172	Local Case ID	Official local (city/county) identification number for the case	Text	O					Observation/OBX Segment with this UID and label	ST	O	[0..1]	
INV173	State Case ID	Official state identification number for the case; used by the state and the CDC to identify the case in communications.	Text	R					Observation/OBX Segment with this UID and label	ST	O	[0..1]	
INV107	Jurisdiction Code	Identifier for the physical site from which the notification is being submitted.	Code	R		state-assigned jurisdiction codes			Observation/OBX Segment with this variable ID and label	IS	O	[0..1]	

Attachment 1D

The generic surveillance elements that are not used for TB are shaded.

Generic Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Valid Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
INV108	Case Program Area Code	The organizational ownership of the investigation. Program areas (e.g., Immunization, STD) are defined at the state level by the conditions for which they provide primary prevention and control.	Code	O		state-assigned			Observation/OBX Segment with this variable ID and label	IS	O	[0..1]	
INV109	Case Investigation Status Code	Status of the investigation. For example, <i>open</i> or <i>closed</i> .	Code	O		Open Closed			Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV2006	Case Close Date	Date the case investigation status was marked as Closed.	Date	O				If the user enters the Date Closed for a case then the date must be >= Date Opened	Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	
INV110	Investigation Date Assigned	Date the investigator was assigned to this investigation.	Date	O					Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	
INV111	Date of Report	Date the event or illness was first reported by the reporting source.	Date	R				Validate that the Report date is more than 12 months after previous TB year; Validate that the Report date is equal to or after Patient Date of Birth; Validate that the Report date is equal to or after Date Entered US; Validate that the Report Date must be equal to or before Count date;	Observation/OBX Segment with this UID and label	TS	O	[0..1]	

Attachment 1D

The generic surveillance elements that are not used for TB are shaded.

Generic Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Valid Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
INV112	Reporting Source Type Code	Type of facility or provider associated with the source of information sent to Public Health.	Code	O			Reporting Source Type NND		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV114	Reporting Source Name	Name of the provider reporting the case (typically the patient's primary care provider)	Text	O					Observation/OBX Segment with this variable ID and label	ST	O	[0..1]	
INV115a	Reporting Source Address Line 1	Reporting source street address Line 1	Text	O					Observation/OBX Segment with this variable ID and label	ST	O	[0..1]	
INV115b	Reporting Source Address Line 2	Reporting source street address Line 2	Text	O					Observation/OBX Segment with this variable ID and label	ST	O	[0..1]	
INV116	Reporting Source Address City	Reporting source address city	Code	O			City		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV117	Reporting Source Address State	Reporting source address state	Code	O			State		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV118	Reporting Source Zip Code	Zip Code of the reporting source for this case.	Alphanumeric	O					Observation/OBX Segment with this variable ID and label	ST	O	[0..1]	
INV119	Reporting Source Address County	Reporting source address county	Code	O			County		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV120	Earliest Date Reported to County	Earliest date reported to county public health system	Date	O					Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	
INV121	Earliest Date Reported to State	Earliest date reported to state public health system	Date	O					Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	

Attachment 1D

The generic surveillance elements that are not used for TB are shaded.

Generic Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Valid Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
INV128	Hospitalized	Was patient hospitalized because of this event?	Code	O		Yes No Unknown	Yes No Unknown (YNU)	1) If the patient was hospitalized for this illness, then enable entry of admission date 2) If the patient was hospitalized for this illness, then enable entry of discharge date 3) If the patient was hospitalized for this illness, then enable entry of total duration of stay in the hospital in days 4) If the patient was hospitalized for this illness, then enable entry of hospital information	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV129	Hospital Name	Name of the healthcare facility in which the subject was hospitalized.	Text	O					Observation/OBX Segment with this variable ID and label	ST	O	[0..1]	
INV132	Admission Date	Subject's admission date to the hospital for the condition covered by the investigation.	Date	O					Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	
INV133	Discharge Date	Subject's discharge date from the hospital for the condition covered by the investigation.	Date	O				If the user enters the Discharge Date, then the date must be >= Admission Date	Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	

Attachment 1D

The generic surveillance elements that are not used for TB are shaded.

Generic Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Valid Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
INV134	Duration of hospital stay in days	Subject's duration of stay at the hospital for the condition covered by the investigation.	Numeric	O					Observation/OBX Segment with this variable ID and label	SN	O	[0..1]	
INV136	Diagnosis Date	Date of diagnosis of condition being reported to public health system	Date	O				1) If the user enters the Diagnosis Date, then the date must be >= Illness Onset Date 2) If the user enters the Diagnosis Date, then the date must be >= Rash Onset Date	Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	
INV137	Date of Illness Onset	Date of the beginning of the illness. Reported date of the onset of symptoms of the condition being reported to the public health system	Date	O					Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	
INV138	Illness End Date	Time at which the disease or condition ends.	Date	O					Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	
INV139	Illness Duration	Length of time this person had this disease or condition.	Numeric	O					Observation/OBX Segment with this variable ID and label	SN	O	[0..1]	
INV140	Illness Duration Units	Unit of time used to describe the length of the illness or condition.	Code	O			Duration Unit (UCUM)		Observation/OBX Segment with this variable ID and label	CE	O	[0..1]	
INV143	Illness Onset Age	Age at onset of illness	Numeric	O					Observation/OBX Segment with this variable ID and label	SN	O	[0..1]	
INV144	Illness Onset Age Units	Age units at onset of illness	Code	O		Days Months Weeks Years	Age Unit		uses INV143 observation - maps to <i>OBX-6-Units</i> (does not use INV144 ID or label)	CWE	O	[0..1]	

Attachment 1D

The generic surveillance elements that are not used for TB are shaded.

Generic Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Valid Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
INV145	Did the patient die from this illness	Did the patient die from this illness or complications of this illness?	Code	O		Yes No Unknown	Yes No Unknown (YNU)		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV146	Date of death	The date and time the subject's death occurred.	Date	O					Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	
INV147	Investigation Start Date	The date the case investigation was initiated.	Date	O					Observation/OBX Segment with this UID and label	TS	O	[0..1]	
INV150	Case outbreak indicator	Denotes whether the reported case was associated with an identified outbreak.	Code	O		Yes No Unknown	Yes No Unknown (YNU)	If this case is part of an outbreak of 5 or more cases, then enable entry of outbreak name (INV151)	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV151	Case Outbreak Name	A state-assigned name for an identified outbreak.	Code	O		state-assigned code			Observation/OBX Segment with this variable ID and label	IS	O	[0..1]	
INV152	Case Disease Imported Code	Indication of where the disease/condition was likely acquired.	Code			Indigenous;Out of country;Out of jurisdiction;Out of state;Unknown	Disease Acquired Jurisdiction		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV153	Imported Country	If the disease or condition was imported, indicates the country in which the disease was likely acquired.	Code	O			Country		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV154	Imported State	If the disease or condition was imported, indicates the state in which the disease was likely acquired.	Code	O			State		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	

Attachment 1D

The generic surveillance elements that are not used for TB are shaded.

Generic Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Valid Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
INV155	Imported City	If the disease or condition was imported, indicates the city in which the disease was likely acquired.	Code	O			City		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV156	Imported County	If the disease or condition was imported, contains the county of origin of the disease or condition.	Code	O			County		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV157	Transmission Mode	Code for the mechanism by which disease or condition was acquired by the subject of the investigation. Includes sexually transmitted, airborne, bloodborne, vectorborne, foodborne, zoonotic, nosocomial, mechanical, dermal, congenital, environmental exposure, indeterminate.	Code	O			Case Transmission Mode		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	

Attachment 1D

The generic surveillance elements that are not used for TB are shaded.

Generic Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Valid Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
INV159	Detection Method	Code for the method by which the public health department was made aware of the case. Includes provider report, patient self-referral, laboratory report, case or outbreak investigation, contact investigation, active surveillance, routine physical, prenatal testing, perinatal testing, prison entry screening, occupational disease surveillance, medical record review, etc.	Code	O			Case Detection Method		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	Note required by program
INV161	Confirmation Method	Code for the mechanism by which the case was classified, providing information about how the case classification status was derived. More than one confirmation method may be indicated.	Code	O	Y		Case Confirmation Method		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	

Attachment 1D

The generic surveillance elements that are not used for TB are shaded.

Generic Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Valid Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
INV162	Confirmation Date	If an investigation is confirmed as a case, the confirmation date is entered.	Date	O					Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	
INV163	Case Class Status Code	Status of the case/event as suspect, probable, confirmed, or "not a case" per CSTE/CDC/ surveillance case definitions.	Code	R		Confirmed Not a Case Probable Suspect	Case Class Status		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV165	MMWR Week	MMWR Week for which case information is to be counted for MMWR publication.	Numeric	R				IF the MMWR date has already been specified previously THEN Do Not allow the user to specify the MMWR date again.; If MMWRDATE has a date THEN date must not be greater than or equal to reportdate;	Observation/OBX Segment with this UID and label	SN	O	[0..1]	
INV166	MMWR Year	MMWR Year (YYYY) for which case information is to be counted for MMWR publication.	Date	R				IF The MMWR date has already been specified previously THEN Do Not allow the user to specify the MMWR date again.; If MMWRDATE has a date THEN date must not be greater than or equal to reportdate;	Observation/OBX Segment with this UID and label	TS	O	[0..1]	
INV176	Date of First Report to CDC	Date the case was first reported to the CDC.	Date	O					Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	
INV177	Date First Reported PHD	Earliest date the case was reported to a public health department.	Date	O					Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	

Attachment 1D

The generic surveillance elements that are not used for TB are shaded.

Generic Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Valid Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
INV178	Pregnancy status	Indicates whether the patient was pregnant at the time of the event.	Code			YNU	Yes No Unknown (YNU)		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV179	PID	Indicates whether or not the patient has pelvic inflammatory disease (PID).	Code				Only valid for female patients.	Yes No Unknown (YNU)	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV2001	Age at case investigation	Patient age at time of case investigation	Numeric	O				age units required	Observation/OBX Segment with this variable ID and label	SN	O	[0..1]	
INV2002	Age units at case investigation	Patient age units at time of case investigation	Code	O		Days Months Weeks Years	Age Unit		uses the INV2001 observation - maps to OBX-6-Units (does not use INV2002 ID or label)	CWE	O	[0..1]	

TB Case Notification variables.

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB098	Investigation Submitted By	Name of the person who should be contacted if there are questions regarding the data in the report (typically the person submitting the report).	Text	O					Observation/OBX Segment with this UID and label	ST	O	[0..1]	
TB203	RVCT Status	Indicate the current status of the RVCT (such as open, rejected, or closed); possible values: Approved - indicates the RVCT was reviewed by a reviewer and approved; the record appears as an alert in the worklist of a supervisor to be forwarded to the CDC and/or closed; Closed - indicates the RVCT is complete and no longer active; Deleted - deletes the record; users with the delete privilege granted by security template make this status setting to delete the RVCT record; Notified - indicates that the RVCT record was submitted to the CDC; supervisor users with the appropriate security privilege make this setting, which causes the record to be transmitted to the CDC; Opened - initial state of an RVCT record; the RVCT has been created, but not yet completed; Ready for Review - indicates the RVCT is ready for review by a reviewer; changing status to this value causes the record to appear as an alert in the worklist of a reviewer; Rejected - indicates the RVCT was reviewed by a reviewer and found to be incomplete or incorrect; the record appears as an alert in the worklist of the data entry user who owns the RVCT; Suspended - indicates that the	Code	R		Approved Notified Closed Deleted Opened Ready for Review	Case Investigation Status	IF the user changes the status of the RVCT to 'Approved' THEN enable the entry of the 'Do you want to count this patient at the CDC as a verified case of TB?' question value.; IF the user changes the status of the RVCT to 'Approved' THEN enable the entry of the Approval Comments.; IF the user changes the status of the RVCT to 'Rejected' THEN enable the entry of the Rejection Comments; IF the user changes the status of the RVCT to 'Deleted' THEN enable the entry of the Rejection Comments; IF the status of an RVCT is 'Closed' THEN the status cannot be changed to 'Deleted.'; IF the RVCT has a status = 'Closed' or 'Deleted' THEN the status of the RVCT cannot be changed to 'Suspend.'	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB080	Reporting Address City	City name associated with the address, zip code, and state values.	Text	O			City		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB099	Inside City Limits	Indicate whether or not the address is within city limits; choose Unknown if it is not known for sure whether it is.	Code	O		Yes No Unknown	Yes No Unknown (YNU)	Yes No Unknown (YNU)	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB081	Reporting Address County	Reporting address county.	Code	O		county FIPS codes	County		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB082	Reporting Address Zip Code	Reporting address Zip Code.	Text	O					Observation/OBX Segment with this UID and label	ST	O	[0..1]	
TB100	Date Counted	If a value of Yes is specified for Do you want to count this patient at the CDC as a verified case of TB? , then enter the month and year for which the case is to be counted.	Date	R				Validate that the Count date is equal to or after Patient Date of Birth; Validate that the Count date is equal to or after Date Entered US; Validate that the Count date is equal to or after Report date; Validate that the Count date is more than 12 months after previous TB year;	Observation/OBX Segment with this UID and label	TS	O	[0..1]	
TB199	Legacy Client ID	Legacy Client ID. This field may be used to pass a patient identifier from a legacy system being converted to the new TB format.	Text	O					Observation/OBX Segment with this UID and label	ST	O	[0..1]	
TB200	Legacy RVCT ID	Legacy RVCT ID. This field may be used to pass a TB Case identifier from a legacy system being converted to the new TB format.	Text	O					Observation/OBX Segment	ST	O	[0..0]	

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB202	Estimated US Entry Date Indicator	Date the patient entered the US if the patient was not US-born or not born overseas to US parents (e.g., born on a military base); outlying US areas (e.g., Puerto Rico, Guam, Virgin Islands) are not considered part of the United States and they should be listed as separate countries.	Boolean	O					Observation/OBX Segment with this UID and label	IS	O	[0..1]	
TB101	Status at Diagnosis of TB	Status of the patient at the time tuberculosis was diagnosed (alive, dead, or unknown).	Code	O		Alive Dead Unknown	General Condition Status		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB102	Previous Diagnosis of TB	Indicates whether the patient had a previous diagnosis of tuberculosis; choose Yes if the patient had a verified case of the disease in the past, had been discharged (completed therapy), or was lost to supervision for more than 12 consecutive months, and has the disease again.	Code	O		Yes No Unknown	Yes No Unknown (YNU)		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB103	Year of Previous Diagnosis	If a value of Yes was specified for Previous Diagnosis of TB , indicate the year in which the previous episode was diagnosed (use the format YYYY); if there were multiple previous episodes, then this is the year for the last such episode.	Date	O				Validate that the Patient Date of Birth is equal to or before Previous TB diagnosis year	Observation/OBX Segment with this UID and label	TS	O	[0..1]	
TB104	More than One Previous Episode	More than one previous episode.	Boolean	O					Observation/OBX Segment with this UID and label	IS	O	[0..1]	

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB105	Major Site of Disease	Major site of disease; choose one item from the list.	Code	O		Lymphatic Other Lymphatic Unknown Eye and ear appendages Miliary Site not Stated Fetus and embryo Liver structure Bone and joint Epiglottis and larynx Jejunum and ileum Middle ear AND mastoid cells Placenta, umbilical cord and implantation site Paranasal sinus part Meninges structure Brain structure Bone marrow structure Pancreatic structure Extrahepatic duct structure Cardiac valve structure Entire duodenum Entire mouth region Urogenital structure Tongue structure Adrenal structure Nervous system structure Spinal cord structure Intrathoracic lymphatic structure Gallbladder structure Thyroid and/or parathyroid structures Tonsil and adenoid structure Pleural structure Esophageal structure Rectum structure All teeth, gums and supporting structures	Major Site of Disease (TB)	Validate that the Major Site has a value then must not be the same value as additional site; If Major Site/Additional Site not equal Pulmonary, Pleural, Lymphatic Intrathoracic, or Miliary - make sure to remove Positive from valid list of values for Sputum Culture; If Major Site/Additional Site not equal Pulmonary, Pleural, Lymphatic Intrathoracic, or Miliary - make sure to remove Positive from valid list of values for Micro Exam Sites 1 and 2	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB106	Additional Site of Disease	Additional sites affected; do not make choices in this list if Miliary was specified in Major Site of Disease .	Code	O	Y	Lymphatic Other Lymphatic Unknown Eye and ear appendages Miliary Fetus and embryo Liver structure Bone and joint, CS Epiglottis and larynx, CS Jejunum and ileum, CS Middle ear AND mastoid cells Placenta, umbilical cord and implantation site Paranasal sinus part Meninges structure Brain structure Bone marrow structure Pancreatic structure Extrahepatic duct structure Cardiac valve structure Entire duodenum Entire mouth region Urogenital structure Tongue structure Adrenal structure Nervous system structure Spinal cord structure Intrathoracic lymphatic structure Gallbladder structure Thyroid and/or parathyroid structures Tonsil and adenoid structure Pleural structure Esophageal structure Rectum structure All teeth, gums and supporting structures Salivary gland structure Lung structure	Additional Site of Disease (TB)	Validate that the Major Site has a value then must not be the same value as additional site; If Major Site/Additional Site not equal Pulmonary, Pleural, Lymphatic Intrathoracic, or Miliary - make sure to remove Positive from valid list of values for Sputum Culture; If Major Site/Additional Site not equal Pulmonary, Pleural, Lymphatic Intrathoracic, or Miliary - make sure to remove Positive from valid list of values for Micro Exam Sites 1 and 2	Observation/OBX Segment with this UID and label	CWE	O	[0..*]	
TB107	More than One Additional Site	More than one additional site indicator. This is a derived field: If Additional Site of Disease has a value, set = TRUE.	Boolean	O					Observation/OBX Segment with this UID and label	IS	O	[0..1]	

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB108	Sputum Smear	Results of a sputum smear; choose Positive if any one examination is positive for acid-fast organisms; choose Negative if the results of all or the only examination were negative; choose Not Done if a sputum smear is known to have not been done; choose Unknown if it is not known whether a sputum smear was performed (or if the results are not known for reasons other than the results are pending).	Code	O		Positive Negative Not Done Unknown	Positive Negative Unknown Not Done		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB109	Sputum Culture	Results of a sputum culture; choose Positive if any one examination is positive for <i>M. tuberculosis</i> complex (if the culture grows organisms other than <i>M. tuberculosis</i> , <i>M. bovis</i> , or <i>M. africanum</i> , then choose Negative); choose Negative if the results were negative for <i>M. tuberculosis</i> complex; choose Not Done if a sputum culture is known to have not been done; choose Unknown if it is not known whether a sputum culture was performed (or if the results are not known for reasons other than the results are pending).	Code	O		Positive Negative Not Done Unknown	Positive Negative Unknown Not Done	Validate that if Sputum Culture OR CULTURE equals 'Positive' then enable Initial Susceptibility test; IF (Q18) SPUTUM CULTURE equals "Positive" then enable (Q35A) SPUTUM CULTURE CONVERSION.;	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB110	Microscopic Exam of Tissue and Other Body Fluids	Results of a microscopic exam (non-sputum); choose Positive if any tissue or fluid other than sputum was positive for acid-fast organisms; choose Negative if all microscopic exams were negative for acid-fast organisms; choose Not Done if exams were known to have not been performed; choose Unknown if it is not known whether microscopic exams were performed (or if the results are not known for reasons other than the results are pending).	Code	O		Positive Negative Not Done Unknown	Positive Negative Unknown Not Done	If Microscopic Exam equals Positive, THEN enable Microscopic First Site;	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables								Mapping Methodology					
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB111	Microscopic Exam Site 1	If a value of Positive is specified for Microscopic Exam of Tissue and Other Body Fluids , choose the appropriate site; the values that appear in this list may vary from one case to the next as they are determined by values entered earlier for the patient's sex (in the patient record), major site of the disease and additional site(s) of the disease .	Code	O		Eye and ear appendages Skeletal system (bones of head, rib cage, and vertebral column) Meninges, dural sinus, choroid plexus Skeletal system (bones of shoulder, girdle, pelvis, and extremities) Other Soft tissue (muscles of head, neck, mouth and upper extremity) Soft tissue (muscles of trunk, perineum, and lower extremity) Multiple Sites Omentum and peritoneum CSF (cerebrospinal fluid) Fallopian tube, broad ligament, parametrium, and paraovarian region Ovary Female genital fluids Placenta, umbilical cord, and implantation site Pituitary gland Adrenal gland Ear and mastoid cells Thymus Pus Brain Spinal cord Cranial, spinal and peripheral nerve Lung Myometrium Thyroid or parathyroid gland(s) Cardiac valve Liver	Microscopic Exam Culture Site (TB)	Validate that the Microscopic first site has a value then must not be the same value as Microscopic second site; If Microscopic First Site has a value, THEN enable Microscopic Second Site	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB112	Microscopic Exam Site 2	If a value of Positive is specified for Microscopic Exam of Tissue and Other Body Fluids , choose the appropriate site if a second site is applicable; the values that appear in this list may vary from one case to the next as they are determined by values entered earlier for the patient's sex (in the patient record), major site of the disease and additional site(s) of the disease .	Code	O		<see TB111>	Microscopic Exam Culture Site (TB)	Validate that the Microscopic first site has a value then must not be the same value as Microscopic second site;	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB113	Culture of Tissue and Other Body Fluids	Results of a culture of tissue or bodily fluid (non-sputum); choose Positive if any tissue or fluid other than sputum was positive for <i>M. tuberculosis</i> complex; choose Negative if all cultures were negative; choose Not Done if the cultures were known to have not been performed; choose Unknown if it is not known whether the cultures were performed (or if the results are not known for reasons other than the results are pending).	Code	O		Positive Negative Not Done Unknown	Positive Negative Unknown Not Done	Validate that if Other Culture equals 'Positive' then enable Other culture first site;	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables								Mapping Methodology					
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB114	Culture Site 1	If a value of Positive is specified for Culture of Tissue and Other Body Fluids , choose the appropriate site; the values that appear in this list may vary from one case to the next as they are determined by values entered earlier for the patient's sex (in the patient record), major site of the disease , and additional site(s) of the disease .	Code	O		<see TB111>	Microscopic Exam Culture Site (TB)	Validate that the Other Culture first site has a value then must not be the same value as Other culture second site;	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB115	Culture Site 2	If a value of Positive is specified for Culture of Tissue and Other Body Fluids , choose the appropriate site if a second site is applicable. The values that appear in this list may vary from one case to the next as they are determined by values entered earlier for the patient's sex (in the patient record), major site of the disease , and additional site(s) of the disease .	Code	O		<see TB111>	Microscopic Exam Culture Site (TB)	Validate that the Other Culture first site has a value then must not be the same value as Other culture second site	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB116	Chest X-ray Results	Results of a chest x-ray; choose Abnormal if the results indicate; choose Not Done if the x-rays were known to have not been done; choose Unknown if it is not known whether the x-rays were done (or if the results are unknown).	Code	O		Abnormal Normal Unknown Not done	Chest XRay Result	Validate that if X-Ray equals 'Abnormal' then enable X-Ray abnormality, X-Ray status;	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables								Mapping Methodology					
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB117	Abnormal Chest X-ray Cavitory Status	If a value of Abnormal is specified in Chest X-Ray , then indicate whether any of the x-rays done at any time during this episode of tuberculosis showed a cavity or cavities, was noncavitory consistent with tuberculosis, or was noncavitory inconsistent with tuberculosis.	Code	O		Cavity Noncavitory consistent w TB Noncavitory not consistent w TB Unknown	Abnormal Chest XRay Finding (TB)		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB118	Abnormal Chest X-ray Condition Status	If a value of Abnormal is specified in Chest X-Ray , then indicate if a series of x-rays show the disease to be stable, worsening, or improving (do not update this information through the course of the patient's follow-up; use the indication at the time of the report).	Code	O		Improving Stable Unknown Worsening	Abnormal Chest X-ray Condition Status		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB119	Skin Test at Diagnosis	Results of a skin test (Mantoux - tuberculin, PPD, STU); choose Positive if the patient is probably infected with <i>M. tuberculosis</i> ; choose Negative if the skin test did not meet the current criteria for a positive test; choose Not Done if the skin test was known to have not been performed; choose Unknown if it is not known whether the skin test was performed (or if the results are not known).	Code	O		Positive Negative Not Done Unknown	Positive Negative Unknown Not Done		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables								Mapping Methodology					
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB120	Millimeters of Induration	If a value of Positive is specified in Skin Test at Diagnosis , indicate the millimeters of induration (if the result only indicates that the result was positive but does not specify induration, specify 99 here);	Numeric	O					Observation/OBX Segment with this UID and label	SN	O	[0..1]	
TB121	Was Patient Anergic	If a value of Negative is specified in Skin Test at Diagnosis , indicate whether or not the patient was known to be anergic (i.e., the patient shows no immune response due to being immunocompromised)	Code	O		Yes No Unknown	Yes No Unknown (YNU)		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables								Mapping Methodology					
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB122	HIV Status	Indicate the patient's HIV status; choose Indeterminate if the patient has had a documented indeterminate HIV antibody test within the past year before the tuberculosis diagnosis; choose Negative if the patient has had a documented negative HIV antibody test within the past year before the tuberculosis diagnosis; choose Not Offered if the patient was not offered an HIV test at the time of the tuberculosis diagnostic evaluation; choose Positive if the patient was tested for HIV and the laboratory result is interpreted as positive; choose Refused if the patient was offered an HIV test at the time of the tuberculosis diagnostic evaluation, but declined to be tested; choose Test Done/Results Unknown if the patient has been tested and the results are not known; choose Unknown if it is not known if the patient has had an HIV antibody test or was offered a test.	Code	O		Unknown Test Done, Results Unknown Positive Procedure refused Negative Not offered Indeterminate	HIV Status		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB123	HIV Based On	If a value of Positive is specified for HIV Status , indicate the basis for the value entered (patient history, medical documentation, or unknown).	Code	O		Chart evaluation, medical records perspective History taking Unknown	HIV Diagnosis Based On		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB124	CDC AIDS Patient Number	If a value of Positive is specified for HIV Status , enter the CDC AIDS patient number (if AIDS is reported prior to 1993).	Text	O					Observation/OBX Segment with this UID and label	ST	O	[0..1]	
TB125	State AIDS Patient Number	If a value of Positive is specified for HIV Status , enter the state HIV/AIDS patient number (if AIDS is reported in 1993 or later).	Text	O					Observation/OBX Segment with this UID and label	ST	O	[0..1]	
TB126	City County AIDS Patient Number	If a value of Positive is specified for HIV Status , enter the city or county HIV/AIDS patient number (if AIDS is reported in 1993 or later).	Text	O					Observation/OBX Segment with this UID and label	ST	O	[0..1]	
TB127	Homeless Within Past Year	Indicate whether the patient was homeless at any time during the 12 months preceding the tuberculosis diagnostic evaluation.	Code	O		Yes No Unknown	Yes No Unknown (YNU)		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB128	Resident of Correctional Facility at Time of Diagnosis	Indicate whether the patient was a resident of a correctional facility at the time the tuberculosis diagnostic evaluation was performed.	Code	O		Yes No Unknown	Yes No Unknown (YNU)		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB129	Type of Correctional Facility	If a value of Yes is specified for Resident of Correctional Facility at Time of Diagnosis , indicate the type of correctional facility.	Code	O		Unknown State Prison Juvenile Correctional Facility Federal Prison Local Jail Other Correctional Facility	Type of Correctional Facility		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB130	Resident of Long Term Care Facility at Time of Diagnosis	Indicate whether the patient was a resident of a long term care facility at the time the tuberculosis diagnostic evaluation was performed.	Code	O		Yes No Unknown	Yes No Unknown (YNU)		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB131	Type of Long Term Care Facility	If a value of Yes is specified for Resident of Long Term Care Facility at time of Diagnosis , indicate the type of long term care facility	Code	O		Alcohol or Drug Treatment Facility Hospital-Based Facility Residential Facility Long term care hospital Nursing home Psychiatric hospital	Type of Long Term Care Facility		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB132	Isoniazid therapy	Isoniazid therapy: Indicate the drug regimen initially prescribed for the treatment of the current case of the disease and taken for two weeks: choose No if the drug is known to not be part of the initial regimen; choose Unknown if it is not known whether the drug is part of the initial regimen; choose Yes if it is known that the drug is part of the initial regimen.	Code	O		Yes No Unknown	Yes No Unknown (YNU)	IF the user has selected the option to save the RVCT but has not selected an answer for each drug in the question Initial Susceptibility Test (33A) THEN the system will present a warning message to the user indicating that each drug does not have a response.	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB133	Rifampin therapy	Rifampin therapy: Indicate the drug regimen initially prescribed for the treatment of the current case of the disease and taken for two weeks: choose No if the drug is known to not be part of the initial regimen; choose Unknown if it is not known whether the drug is part of the initial regimen; choose Yes if it is known that the drug is part of the initial regimen.	Code	O		Yes No Unknown	Yes No Unknown (YNU)	IF the user has selected the option to save the RVCT but has not selected an answer for each drug in the question Initial Susceptibility Test (33A) THEN the system will present a warning message to the user indicating that each drug does not have a response.	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB134	Pyrazinamide therapy	Pyrazinamide therapy: Indicate the drug regimen initially prescribed for the treatment of the current case of the disease and taken for two weeks: choose No if the drug is known to not be part of the initial regimen; choose Unknown if it is not known whether the drug is part of the initial regimen; choose Yes if it is known that the drug is part of the initial regimen.	Code	O		Yes No Unknown	Yes No Unknown (YNU)	IF the user has selected the option to save the RVCT but has not selected an answer for each drug in the question Initial Susceptibility Test (33A) THEN the system will present a warning message to the user indicating that each drug does not have a response.	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB135	Ethambutol therapy	Ethambutol therapy: Indicate the drug regimen initially prescribed for the treatment of the current case of the disease and taken for two weeks: choose No if the drug is known to not be part of the initial regimen; choose Unknown if it is not known whether the drug is part of the initial regimen; choose Yes if it is known that the drug is part of the initial regimen.	Code	O		Yes No Unknown	Yes No Unknown (YNU)	IF the user has selected the option to save the RVCT but has not selected an answer for each drug in the question Initial Susceptibility Test (33A) THEN the system will present a warning message to the user indicating that each drug does not have a response.	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB136	Streptomycin therapy	Streptomycin therapy: Indicate the drug regimen initially prescribed for the treatment of the current case of the disease and taken for two weeks: choose No if the drug is known to not be part of the initial regimen; choose Unknown if it is not known whether the drug is part of the initial regimen; choose Yes if it is known that the drug is part of the initial regimen.	Code	O		Yes No Unknown	Yes No Unknown (YNU)	IF the user has selected the option to save the RVCT but has not selected an answer for each drug in the question Initial Susceptibility Test (33A) THEN the system will present a warning message to the user indicating that each drug does not have a response.	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB137	Ethionamide therapy	Ethionamide therapy: Indicate the drug regimen initially prescribed for the treatment of the current case of the disease and taken for two weeks: choose No if the drug is known to not be part of the initial regimen; choose Unknown if it is not known whether the drug is part of the initial regimen; choose Yes if it is known that the drug is part of the initial regimen.	Code	O		Yes No Unknown	Yes No Unknown (YNU)	IF the user has selected the option to save the RVCT but has not selected an answer for each drug in the question Initial Susceptibility Test (33A) THEN the system will present a warning message to the user indicating that each drug does not have a response.	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB138	Kanamycin therapy	Kanamycin therapy: Indicate the drug regimen initially prescribed for the treatment of the current case of the disease and taken for two weeks: choose No if the drug is known to not be part of the initial regimen; choose Unknown if it is not known whether the drug is part of the initial regimen; choose Yes if it is known that the drug is part of the initial regimen.	Code	O		Yes No Unknown	Yes No Unknown (YNU)	IF the user has selected the option to save the RVCT but has not selected an answer for each drug in the question Initial Susceptibility Test (33A) THEN the system will present a warning message to the user indicating that each drug does not have a response.	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB139	Cycloserine therapy	Cycloserine therapy: Indicate the drug regimen initially prescribed for the treatment of the current case of the disease and taken for two weeks: choose No if the drug is known to not be part of the initial regimen; choose Unknown if it is not known whether the drug is part of the initial regimen; choose Yes if it is known that the drug is part of the initial regimen.	Code	O		Yes No Unknown	Yes No Unknown (YNU)	IF the user has selected the option to save the RVCT but has not selected an answer for each drug in the question Initial Susceptibility Test (33A) THEN the system will present a warning message to the user indicating that each drug does not have a response.	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB140	Capreomycin therapy	Capreomycin therapy: Indicate the drug regimen initially prescribed for the treatment of the current case of the disease and taken for two weeks: choose No if the drug is known to not be part of the initial regimen; choose Unknown if it is not known whether the drug is part of the initial regimen; choose Yes if it is known that the drug is part of the initial regimen.	Code	O		Yes No Unknown	Yes No Unknown (YNU)	IF the user has selected the option to save the RVCT but has not selected an answer for each drug in the question Initial Susceptibility Test (33A) THEN the system will present a warning message to the user indicating that each drug does not have a response.	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB141	Para-Amino Salicylic Acid therapy	Para-Amino Salicylic Acid therapy: Indicate the drug regimen initially prescribed for the treatment of the current case of the disease and taken for two weeks: choose No if the drug is known to not be part of the initial regimen; choose Unknown if it is not known whether the drug is part of the initial regimen; choose Yes if it is known that the drug is part of the initial regimen.	Code	O		Yes No Unknown	Yes No Unknown (YNU)	IF the user has selected the option to save the RVCT but has not selected an answer for each drug in the question Initial Susceptibility Test (33A) THEN the system will present a warning message to the user indicating that each drug does not have a response.	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB142	Amikacin therapy	Amikacin therapy: Indicate the drug regimen initially prescribed for the treatment of the current case of the disease and taken for two weeks: choose No if the drug is known to not be part of the initial regimen; choose Unknown if it is not known whether the drug is part of the initial regimen; choose Yes if it is known that the drug is part of the initial regimen.	Code	O		Yes No Unknown	Yes No Unknown (YNU)	IF the user has selected the option to save the RVCT but has not selected an answer for each drug in the question Initial Susceptibility Test (33A) THEN the system will present a warning message to the user indicating that each drug does not have a response.	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB143	Rifabutin therapy	Rifabutin therapy: Indicate the drug regimen initially prescribed for the treatment of the current case of the disease and taken for two weeks: choose No if the drug is known to not be part of the initial regimen; choose Unknown if it is not known whether the drug is part of the initial regimen; choose Yes if it is known that the drug is part of the initial regimen.	Code	O		Yes No Unknown	Yes No Unknown (YNU)	IF the user has selected the option to save the RVCT but has not selected an answer for each drug in the question Initial Susceptibility Test (33A) THEN the system will present a warning message to the user indicating that each drug does not have a response.	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB144	Ciprofloxacin therapy	Ciprofloxacin therapy: Indicate the drug regimen initially prescribed for the treatment of the current case of the disease and taken for two weeks: choose No if the drug is known to not be part of the initial regimen; choose Unknown if it is not known whether the drug is part of the initial regimen; choose Yes if it is known that the drug is part of the initial regimen.	Code	O		Yes No Unknown	Yes No Unknown (YNU)	IF the user has selected the option to save the RVCT but has not selected an answer for each drug in the question Initial Susceptibility Test (33A) THEN the system will present a warning message to the user indicating that each drug does not have a response.	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB145	Ofloxacin therapy	Ofloxacin therapy: Indicate the drug regimen initially prescribed for the treatment of the current case of the disease and taken for two weeks: choose No if the drug is known to not be part of the initial regimen; choose Unknown if it is not known whether the drug is part of the initial regimen; choose Yes if it is known that the drug is part of the initial regimen.	Code	O		Yes No Unknown	Yes No Unknown (YNU)	IF the user has selected the option to save the RVCT but has not selected an answer for each drug in the question Initial Susceptibility Test (33A) THEN the system will present a warning message to the user indicating that each drug does not have a response.	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB146	Other initial regimen	Other initial regimen: Indicate the drug regimen initially prescribed for the treatment of the current case of the disease and taken for two weeks: choose No if there is no other drug known to be part of the initial regimen; choose Unknown if it is not known whether another drug is part of the initial regimen; choose Yes if it is known that a drug not already listed is part of the initial regimen.	Code	O		Yes No Unknown	Yes No Unknown (YNU)	IF the user has selected the option to save the RVCT but has not selected an answer for each drug in the question Initial Susceptibility Test (33A) THEN the system will present a warning message to the user indicating that each drug does not have a response.	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB147	Date Therapy Started	Date on which the patient began therapy for tuberculosis (or suspected tuberculosis). This date may be derived from: the date the patient first ingested medication (if documented in a medical record or directly observed therapy record); the date medication was first dispensed to the patient (as documented in a medical or pharmacy record); the date medication was first prescribed to patient by a health care provider (documented in a medical record or prescription given to the patient)	Date	O				Validate that the Date Therapy Started is equal to or before stop therapy date; Validate that if the Date Therapy Started has a value then the value for DOT Weeks must not be greater than the number of weeks between Date Therapy Started and Stop Therapy Date; IF Initial Drug Regimen has at least one drug with a value of "Yes" [drug selected in the initial drug regimen] then enable Date Therapy Started;	Observation/OBX Segment with this UID and label	TS	O	[0..1]	

Program-Specific Surveillance Variables								Mapping Methodology					
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB148	Injecting Drug Use Within Past Year	Indicate whether the patient has injected drugs within the past year (use of a syringe for injecting drugs not prescribed by a physician); No if it is known that the patient has not injected drugs within the past 12 months; Unknown if it is not known whether or not the patient has injected drugs within the past 12 months; Yes if it is known that the patient has injected drugs within the past 12 months.	Code	O		Yes No Unknown	Yes No Unknown (YNU)		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB149	Non-Injecting Drug Use Within Past Year	Indicate whether the patient has used non-injected drugs within the past year (drugs not prescribed by a physician); No if it is known that the patient has not used non-injected drugs within the past 12 months; Unknown if it is not known whether or not the patient has used non-injected drugs within the past 12 months; Yes if it is known that the patient has used non-injected drugs within the past 12 months.	Code	O		Yes No Unknown	Yes No Unknown (YNU)		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB150	Excess Alcohol Use Within Past Year	Indicate whether the patient engaged in excessive use of alcohol within the past year; No if it is known that the patient did not use alcohol to excess within the past 12 months; Unknown if it is not known whether the patient used alcohol to excess within the past 12 months; choose Yes if it is known that the patient used alcohol to excess within the past 12 months	Code	O		Yes No Unknown	Yes No Unknown (YNU)		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB151	Employment Status	Patient's Employment Status: Unknown if the employment history of the patient during the 24 months preceding the tuberculosis diagnostic evaluation is not known; Not Employed if the patient was not employed during the entire 24 months preceding the tuberculosis diagnostic evaluation; Employed if the patient was employed for some part of the 24 months preceding the tuberculosis diagnostic evaluation.	Code	O		Employed Unemployed Unknown	Employment Status		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB152	Occupation Risk Category	Occupation Risk Category. This is a derived field: If OCCUPATION_HEALTH_CARE_INDICATOR (FC783) = TRUE, then set to ' Health Care Worker '. If OCCUPATION_MIGRATORY_AG_INDICATOR (FC785) = TRUE, then set to ' Migratory Agricultural Worker '. If OCCUPATION_CORRECTIONAL_INDICATOR (FC784) = TRUE, then set to ' Correctional Employee '. If OCCUPATION_OTHER_INDICATOR (FC786) = TRUE, then set to ' Other Occupation '.	Code	O	Y	Health Care Worker Migratory Agricultural Worker Correctional Facility Employee Other Occupation	Occupation Risk Category (TB)		Observation/OBX Segment with this UID and label	CWE	O	[0..*]	
TB153	Count at CDC as verified	Yes if the case is to be counted as verified at CDC.	Code	R		True False	Yes No Indicator (HL7)	If Vercount = "Yes", then the Month/Year counted and MMWR Reporting Date are required;	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB154	Case Verification	Initially, the value selected in this list is based on data entered earlier across the course of the case and the default value is the most applicable case verification result based on the data supplied; the default value may be overridden as appropriate; the values that appear in this list can vary from one case to the next as the list is dynamically composed based on the factors: culture results, smear results, major and additional sites of the disease, x-ray results, TST, IDR, reason therapy was stopped. The values for this field include: • 0 - Not a Verified Case: choose if the case is not a verified case of tuberculosis; • 1 - Positive Culture: choose if the case is a verified case, based on a positive sputum culture result; • 2 - Positive Smear/Tissue: choose if the case is a verified case, based on a positive sputum smear result and/or tissue (or fluid) exam; • 3A - Clinical Case Definition - PULM: choose if the case is a verified case, based on pulmonary conditions; • 3B - Clinical Case Definition - Extra-PULM: choose if the case is a verified case, based on extra-pulmonary conditions; • 4 - Verified by Provider Diagnosis: choose if the case is a verified case, based on healthcare	Code	R		0 - Not a Verified Case 1 – Positive Culture 5 – Suspect 3B – Clinical Case Definition – Extra-PULM 3A – Clinical Case Definition – PULM 4 - Verified by Provider Diagnosis 2 – Positive Smear/Tissue	Case Verification (TB)	If VERCRIT is 1, 2, 3, or 4, display the count date question; IF [Sputum Smear (17) = 'Positive' OR Microscopic Exam of Tissue and Other Body Fluids (19) = 'Positive'] AND [Sputum Culture (18) = 'Not Done' or 'Unknown' AND Culture of Tissue and Other Body Fluids (20) = 'Not Done' or Unknown] THEN Case Verification (VERCRIT) = 2 - Positive Smear/Tissue.; IF [Major Site (15) or Additional Site (16) = 'Pulmonary' and/or 'Pleural' and/or 'Lymph: Intrathoracic'] AND [Sputum Culture (18) <> 'Positive' AND Culture of Tissue and Other Body Fluids (20) <> 'Positive'] AND [Tuberculin Skin Test at Diagnosis (22) = 'Positive'] AND [Initial Drug Regimen (27) at least two of the listed medications = 'Yes'] AND [{X-Ray (21A) = 'Abnormal'} AND {X-Ray Condition (21B) = 'Cavitary' or 'Non-Cavitary Like TB'} AND {X-Ray Stability (21C) = 'Worsening' or 'Improving'}] THEN Case Verification (VERCRIT) = 3A - Clinical Case Definition - PULM.; IF [Major Site (15) or Additional Site (16) = 'Lymphatic Cervical', 'Lymphatic Other', 'Lymphatic Unknown', 'Bone and/or Joint', 'Genitourinary', 'Miliary', 'Memingeal',	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables								Mapping Methodology					
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB156	Was Drug Susceptibility Testing Done	Indicate whether a drug susceptibility test was performed; No if no drug susceptibility test was performed; Unknown whether drug susceptibility testing was performed; Yes if the patient has any isolate upon which drug susceptibility testing was performed	Code	O		Yes No Unknown	Yes No Unknown (YNU)		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB157	Date First Isolate Collected	If a value of Yes is specified for Was Drug Susceptibility Testing Done , collection date of the first isolate on which drug susceptibility was performed.	Date	O				Validate that the Initial susceptibility test date is at least 30 days before Final susceptibility test date; Validate that the Patient Date of Birth is equal to or before Initial Susceptibility test date; Validate that the Date Entered U.S. is equal to or before initial susceptibility test date; Validate that the Previous TB Year is greater than 12 months before Initial Susceptibility test date	Observation/OBX Segment with this UID and label	TS	O	[0..1]	

Program-Specific Surveillance Variables								Mapping Methodology					
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB158	Isoniazid initial susceptibility	Indicate the results of susceptibility testing on the first isolate for which drug susceptibility testing was performed for Isoniazid: Not Done if susceptibility testing was not performed for the drug; Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug); Susceptible if (and only if) completely susceptible; Unknown if it is not known whether the test was performed or the results are unavailable.	Code	O		Resistant Susceptible	Susceptibility Result	IF a drug is marked as Resistant in the Initial Susceptibility (34) section then the system should put a visual indicator by that drug in the Final Susceptibility (41) section	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB159	Rifampin initial susceptibility	Indicate the results of susceptibility testing on the first isolate for which drug susceptibility testing was performed for Rifampin: Not Done if susceptibility testing was not performed for the drug; Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug); Susceptible if (and only if) completely susceptible; Unknown if it is not known whether the test was performed or the results are unavailable.	Code	O		Resistant Susceptible	Susceptibility Result	IF a drug is marked as Resistant in the Initial Susceptibility (34) section then the system should put a visual indicator by that drug in the Final Susceptibility (41) section	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables								Mapping Methodology					
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB160	Pyrazinamide initial susceptibility	Indicate the results of susceptibility testing on the first isolate for which drug susceptibility testing was performed for Pyrazinamide: Not Done if susceptibility testing was not performed for the drug; Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug); Susceptible if (and only if) completely susceptible; Unknown if it is not known whether the test was performed or the results are unavailable.	Code	O		Resistant Susceptible	Susceptibility Result	IF a drug is marked as Resistant in the Initial Susceptibility (34) section then the system should put a visual indicator by that drug in the Final Susceptibility (41) section	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB161	Ethambutol initial susceptibility	Indicate the results of susceptibility testing on the first isolate for which drug susceptibility testing was performed for Ethambutol: Not Done if susceptibility testing was not performed for the drug; Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug); Susceptible if (and only if) completely susceptible; Unknown if it is not known whether the test was performed or the results are unavailable.	Code	O		Resistant Susceptible	Susceptibility Result	IF a drug is marked as Resistant in the Initial Susceptibility (34) section then the system should put a visual indicator by that drug in the Final Susceptibility (41) section	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables								Mapping Methodology					
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB162	Streptomycin initial susceptibility	Indicate the results of susceptibility testing on the first isolate for which drug susceptibility testing was performed for Streptomycin: Not Done if susceptibility testing was not performed for the drug; Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug); Susceptible if (and only if) completely susceptible; Unknown if it is not known whether the test was performed or the results are unavailable.	Code	O		Resistant Susceptible	Susceptibility Result	IF a drug is marked as Resistant in the Initial Susceptibility (34) section then the system should put a visual indicator by that drug in the Final Susceptibility (41) section	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB163	Ethionamide initial susceptibility	Indicate the results of susceptibility testing on the first isolate for which drug susceptibility testing was performed forEthionamide: Not Done if susceptibility testing was not performed for the drug; Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug); Susceptible if (and only if) completely susceptible; Unknown if it is not known whether the test was performed or the results are unavailable.	Code	O		Resistant Susceptible	Susceptibility Result	IF a drug is marked as Resistant in the Initial Susceptibility (34) section then the system should put a visual indicator by that drug in the Final Susceptibility (41) section	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables								Mapping Methodology					
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB164	Kanamycin initial susceptibility	Indicate the results of susceptibility testing on the first isolate for which drug susceptibility testing was performed for Kanamycin: Not Done if susceptibility testing was not performed for the drug; Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug); Susceptible if (and only if) completely susceptible; Unknown if it is not known whether the test was performed or the results are unavailable.	Code	O		Resistant Susceptible	Susceptibility Result	IF a drug is marked as Resistant in the Initial Susceptibility (34) section then the system should put a visual indicator by that drug in the Final Susceptibility (41) section	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB165	Cycloserine initial susceptibility	Indicate the results of susceptibility testing on the first isolate for which drug susceptibility testing was performed for Cycloserine: Not Done if susceptibility testing was not performed for the drug; Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug); Susceptible if (and only if) completely susceptible; Unknown if it is not known whether the test was performed or the results are unavailable.	Code	O		Resistant Susceptible	Susceptibility Result	IF a drug is marked as Resistant in the Initial Susceptibility (34) section then the system should put a visual indicator by that drug in the Final Susceptibility (41) section	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables								Mapping Methodology					
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB166	Capreomycin initial susceptibility	Indicate the results of susceptibility testing on the first isolate for which drug susceptibility testing was performed for Capreomycin: Not Done if susceptibility testing was not performed for the drug; Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug); Susceptible if (and only if) completely susceptible; Unknown if it is not known whether the test was performed or the results are unavailable.	Code	O		Resistant Susceptible	Susceptibility Result	IF a drug is marked as Resistant in the Initial Susceptibility (34) section then the system should put a visual indicator by that drug in the Final Susceptibility (41) section	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB167	Para-Amino Salicylic Acid initial susceptibility	Indicate the results of susceptibility testing on the first isolate for which drug susceptibility testing was performed for Para-Amino Salicylic Acid: Not Done if susceptibility testing was not performed for the drug; Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug); Susceptible if (and only if) completely susceptible; Unknown if it is not known whether the test was performed or the results are unavailable.	Code	O		Resistant Susceptible	Susceptibility Result	IF a drug is marked as Resistant in the Initial Susceptibility (34) section then the system should put a visual indicator by that drug in the Final Susceptibility (41) section	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables								Mapping Methodology					
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB168	Amikacin initial susceptibility	Indicate the results of susceptibility testing on the first isolate for which drug susceptibility testing was performed for Amikacin: Not Done if susceptibility testing was not performed for the drug; Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug); Susceptible if (and only if) completely susceptible; Unknown if it is not known whether the test was performed or the results are unavailable.	Code	O		Resistant Susceptible	Susceptibility Result	IF a drug is marked as Resistant in the Initial Susceptibility (34) section then the system should put a visual indicator by that drug in the Final Susceptibility (41) section	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB169	Rifabutin initial susceptibility	Indicate the results of susceptibility testing on the first isolate for which drug susceptibility testing was performed for Rifabutin: Not Done if susceptibility testing was not performed for the drug; Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug); Susceptible if (and only if) completely susceptible; Unknown if it is not known whether the test was performed or the results are unavailable.	Code	O		Resistant Susceptible	Susceptibility Result	IF a drug is marked as Resistant in the Initial Susceptibility (34) section then the system should put a visual indicator by that drug in the Final Susceptibility (41) section	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables								Mapping Methodology					
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB170	Ciprofloxacin initial susceptibility	Indicate the results of susceptibility testing on the first isolate for which drug susceptibility testing was performed for Ciprofloxacin: Not Done if susceptibility testing was not performed for the drug; Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug); Susceptible if (and only if) completely susceptible; Unknown if it is not known whether the test was performed or the results are unavailable.	Code	O		Resistant Susceptible	Susceptibility Result	IF a drug is marked as Resistant in the Initial Susceptibility (34) section then the system should put a visual indicator by that drug in the Final Susceptibility (41) section	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB171	Ofloxacin initial susceptibility	Indicate the results of susceptibility testing on the first isolate for which drug susceptibility testing was performed for Ofloxacin: Not Done if susceptibility testing was not performed for the drug; Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug); Susceptible if (and only if) completely susceptible; Unknown if it is not known whether the test was performed or the results are unavailable.	Code	O		Resistant Susceptible	Susceptibility Result	IF a drug is marked as Resistant in the Initial Susceptibility (34) section then the system should put a visual indicator by that drug in the Final Susceptibility (41) section	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables								Mapping Methodology					
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB172	Other initial susceptibility	Indicate the results of susceptibility testing on the first isolate for which drug susceptibility testing was performed for the other initial therapy drug: Not Done if susceptibility testing was not performed for the drug; Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug); Susceptible if (and only if) completely susceptible; Unknown if it is not known whether the test was performed or the results are unavailable.	Code	O		Resistant Susceptible	Susceptibility Result	IF a drug is marked as Resistant in the Initial Susceptibility (34) section then the system should put a visual indicator by that drug in the Final Susceptibility (41) section	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB173	Culture Conversion Documented	Indicate whether the sputum culture conversion was documented; No if the patient had an initially positive sputum culture and no subsequent consistently negative cultures; Unknown if the results of all follow-up cultures are unknown or if it is not known whether follow-up cultures were obtained; Yes if the patient had an initially positive sputum culture followed by one or more consistently negative cultures	Code	O		Yes No Unknown	Yes No Unknown (YNU)		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables								Mapping Methodology					
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB174	Date of Initial Positive Culture	Date the initially positive sputum culture was collected.	Date	O				Validate that the Patient Date of Birth is equal to or before First positive culture date; Validate that the Date Entered U.S. is equal to or before first positive culture date; Validate that the Previous TB Year. is greater than 12 months before First positive culture date; Validate that the First positive culture date is before First negative culture date;	Observation/OBX Segment with this UID and label	TS	O	[0..1]	
TB175	Date of First Consistently Negative Culture	Date the first consistently negative sputum culture was collected.	Date	O				Validate that the Patient Date of Birth is equal to or before First negative culture date; Validate that the Date Entered U.S. is equal to or before first negative culture date; Validate that if First Negative culture date has a date then first positive culture date has a date; Validate that the First negative culture date is more than 12 months after previous TB year; Validate that the First Negative Culture Date must be after First Positive Culture Date;	Observation/OBX Segment with this UID and label	TS	O	[0..1]	

Program-Specific Surveillance Variables								Mapping Methodology					
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB176	Date Therapy Stopped	Date the patient stopped taking therapy for verified or suspected tuberculosis; this date is one of the following (in order of preference): • Date that the patient last ingested medication; • Date the medication dispensed to the patient would have run out, if the patient had taken all of the medication; • Date the medication prescribed to the patient would have run out, if the patient had taken all of the medication from the date of prescription.	Date	O					Observation/OBX Segment with this UID and label	TS	O	[0..1]	

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB177	Reason Therapy Stopped	Primary reason that therapy was ended; specify this data when the case is closed; Completed therapy if the patient successfully completed the prescribed therapy; Moved if the patient moved to another jurisdiction before the treatment was completed; Lost if the patient cannot be located prior to the completion of treatment; Uncooperative or refused if the patient refused to complete therapy (update if the patient resumes therapy); Not TB if the completed diagnostic therapy determined that the diagnosis of tuberculosis was not substantiated; Died if the patient expired before therapy was completed; Other if therapy was discontinued for some other reason; Unknown if the reason for ending therapy is not known.	Code	O		Lost to Follow-Up/Unable to Locate Moved Uncooperative or refused	Reason Therapy Stopped (TB)	IF Reason Therapy Stopped = "Not TB" THEN Case Verification (VERCRIT) = 0 - Not a Verified Case;	Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB178	Type of Health Care Provider	Type of health care provider involved in the care for the patient; Health Department, Private Practice, Both Health Dept and Private/Other , or Unknown are valid concepts.	Code	O		Both Health Dept and Private/Other Private Practice Health Department	Health Care Practice Type (TB)		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	Note that this was formerly marked as "repeating" but the value set has the multiple built as a single concept, so repeating message format not necessary
TB179	Directly Observed Therapy	Choose the therapy that was directly observed by the health care provider (directly observed therapy, or DOT): No, Totally Self-Administered if no doses of medication were given under supervision; Unknown if it is not known whether any doses of medication were given under supervision; Yes, Both DOT and Self-Administered if one or more doses of medication were given under supervision and one or more were not; Yes, Totally Directly Supervised if all doses of medication were given under supervision.	Code	O		No, Totally Self-Administered Yes, Totally Directly Observed Yes, Both DOT and Self-Administered	Directly Observed Therapy (TB)		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables								Mapping Methodology					
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB180	Sites of Directly Observed Therapy	If any medication was administered under DOT conditions, select the site(s) where this occurred; may select one or multiple sites; use Ctrl+Click to select multiple sites; Both in facility and in the field if both were used (for example, the patient received medicine under DOT at a clinic and outside the clinic when the patient did not show up at the clinic); In clinic or other facility if the patient received medicine DOT at a health department or private provider facility; In the field if the patient received medicine under DOT solely outside any facility (for example, at the patient's home or workplace); Unknown if the DOT sites are not known	Code	O		Both in facility and in the field In clinic or other facility In the field	Sites of Directly Observed Therapy (TB)		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	Note that this was formerly marked as "repeating" but the value set has the multiple built as a single concept, so repeating message format not necessary

Program-Specific Surveillance Variables								Mapping Methodology					
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB181	Number Weeks Directly Observed Therapy	Number of weeks of directly observed therapy (DOT); enter the total number of calendar weeks (Sunday through Saturday) that the patient received the minimum amounts of medication under DOT conditions; the number of weeks entered must be less than the number of weeks between 28. Date Therapy Started and 36. Date Therapy Stopped ; If the patient was on a twice-weekly regimen: count a week only if both of the week's doses were given under DOT; If the patient was on a three-times-weekly regimen: count a week only if all three of the week's doses were given under DOT; If the patient was on a daily regimen: count a week only if five or more of the week's doses were given under DOT; If the patient did not receive the minimum number of doses under DOT, do not count the week.	Numeric	O					Observation/OBX Segment with this UID and label	SN	O	[0..1]	

Program-Specific Surveillance Variables								Mapping Methodology					
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB182	Follow-Up Susceptibility Testing	Indicate whether final drug susceptibility was performed; No if no final drug susceptibility testing was performed; Yes if drug susceptibility testing was performed on an isolate that was collected 30 days after the isolate for which the initial drug susceptibility testing was done; Unknown if it is not known whether follow-up drug susceptibility testing was done	Code	O		Yes No Unknown	Yes No Unknown (YNU)		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB183	Follow-Up Susceptibility Testing Date	If a value of Yes is specified for Was Follow-up Susceptibility Testing Done , indicate the date on which this testing was done	Date	O				Validate that the Patient Date of Birth is equal to or before Final Susceptibility Test date; Validate that the Date Entered U.S. is equal to or before Final Susceptibility test date	Observation/OBX Segment with this UID and label	TS	O	[0..1]	
TB184	Isoniazid final susceptibility	If follow-up susceptibility testing was done, results of the testing for Isoniazid : Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug; Susceptible if completely susceptible; Not Done if susceptibility testing was not performed for the drug; Unknown if it is not known whether drug susceptibility testing was performed for the drug.	Code	O		Resistant Susceptible	Susceptibility Result		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB185	Rifampin final susceptibility	If follow-up susceptibility testing was done, results of the testing for Rifampin : Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug; Susceptible if completely susceptible; Not Done if susceptibility testing was not performed for the drug; Unknown if it is not known whether drug susceptibility testing was performed for the drug.	Code	O		Resistant Susceptible	Susceptibility Result		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB186	Pyrazinamide final susceptibility	If follow-up susceptibility testing was done, results of the testing for Pyrazinamide : Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug; Susceptible if completely susceptible; Not Done if susceptibility testing was not performed for the drug; Unknown if it is not known whether drug susceptibility testing was performed for the drug.	Code	O		Resistant Susceptible	Susceptibility Result		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB187	Ethambutol final susceptibility	If follow-up susceptibility testing was done, results of the testing for Ethambutol : Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug; Susceptible if completely susceptible; Not Done if susceptibility testing was not performed for the drug; Unknown if it is not known whether drug susceptibility testing was performed for the drug.	Code	O		Resistant Susceptible	Susceptibility Result		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB188	Streptomycin final susceptibility	If follow-up susceptibility testing was done, results of the testing for Streptomycin : Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug; Susceptible if completely susceptible; Not Done if susceptibility testing was not performed for the drug; Unknown if it is not known whether drug susceptibility testing was performed for the drug.	Code	O		Resistant Susceptible	Susceptibility Result		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB189	Ethionamide final susceptibility	If follow-up susceptibility testing was done, results of the testing for Ethionamide : Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug; Susceptible if completely susceptible; Not Done if susceptibility testing was not performed for the drug; Unknown if it is not known whether drug susceptibility testing was performed for the drug.	Code	O		Resistant Susceptible	Susceptibility Result		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB190	Kanamycin final susceptibility	If follow-up susceptibility testing was done, results of the testing for Kanamycin : Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug; Susceptible if completely susceptible; Not Done if susceptibility testing was not performed for the drug; Unknown if it is not known whether drug susceptibility testing was performed for the drug.	Code	O		Resistant Susceptible	Susceptibility Result		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB191	Cycloserine final susceptibility	If follow-up susceptibility testing was done, results of the testing for Cycloserine : Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug; Susceptible if completely susceptible; Not Done if susceptibility testing was not performed for the drug; Unknown if it is not known whether drug susceptibility testing was performed for the drug.	Code	O		Resistant Susceptible	Susceptibility Result		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB192	Capreomycin final susceptibility	If follow-up susceptibility testing was done, results of the testing for Capreomycin : Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug; Susceptible if completely susceptible; Not Done if susceptibility testing was not performed for the drug; Unknown if it is not known whether drug susceptibility testing was performed for the drug.	Code	O		Resistant Susceptible	Susceptibility Result		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables								Mapping Methodology					
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB193	Para-Amino Salicylic Acid final susceptibility	If follow-up susceptibility testing was done, results of the testing for Para-Amino Salicylic Acid: Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug; Susceptible if completely susceptible; Not Done if susceptibility testing was not performed for the drug; Unknown if it is not known whether drug susceptibility testing was performed for the drug.	Code	O		Resistant Susceptible	Susceptibility Result		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB194	Amikacin final susceptibility	If follow-up susceptibility testing was done, results of the testing for Amikacin: Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug; Susceptible if completely susceptible; Not Done if susceptibility testing was not performed for the drug; Unknown if it is not known whether drug susceptibility testing was performed for the drug.	Code	O		Resistant Susceptible	Susceptibility Result		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB195	Rifabutin final susceptibility	If follow-up susceptibility testing was done, results of the testing for Rifabutin : Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug; Susceptible if completely susceptible; Not Done if susceptibility testing was not performed for the drug; Unknown if it is not known whether drug susceptibility testing was performed for the drug.	Code	O		Resistant Susceptible	Susceptibility Result		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB196	Ciprofloxacin final susceptibility	If follow-up susceptibility testing was done, results of the testing for Ciprofloxacin : Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug; Susceptible if completely susceptible; Not Done if susceptibility testing was not performed for the drug; Unknown if it is not known whether drug susceptibility testing was performed for the drug.	Code	O		Resistant Susceptible	Susceptibility Result		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

Program-Specific Surveillance Variables								Mapping Methodology					
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
TB197	Ofloxacin final susceptibility	If follow-up susceptibility testing was done, results of the testing for Ofloxacin : Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug; Susceptible if completely susceptible; Not Done if susceptibility testing was not performed for the drug; Unknown if it is not known whether drug susceptibility testing was performed for the drug.	Code	O		Resistant Susceptible	Susceptibility Result		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	
TB198	Other final susceptibility	If follow-up susceptibility testing was done, results of the testing for Other Drugs : Resistant if there was any degree of resistance (even partial or resistance at a low concentration of the drug; Susceptible if completely susceptible; Not Done if susceptibility testing was not performed for the drug; Unknown if it is not known whether drug susceptibility testing was performed for the drug.	Code	O		Resistant Susceptible	Susceptibility Result		Observation/OBX Segment with this UID and label	CWE	O	[0..1]	

These variables are not negotiable. Default values are provided for HL7 structural elements that are required but not part of the surveillance data requested.

Notification Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
NOT108	Notification ID	The unique identifier for the notification record.	String	R					MSH-10-Message Control ID. No UID or label is passed in the message.	ST	R	[1..1]	HL7 recommended size increased to 50
DEM197	Local patient ID	The local ID of the patient/entity.	String	R					PID-3.1 Patient Identifier List – ID Number PID-3.4 Assigning Authority format <localID&OID&ISO> Does not pass Variable ID or label.	CX	R	[1..1]	Only the sending system's internally assigned patient id used for these de-identified messages
DEM100	Patient name type	Name is not requested by the program, but the Patient Name field is required to be populated for the HL7 message to be valid. Have adopted the HL7 convention for processing a field where the name has been removed for de-identification purposes.	Coded	R		Pseudonymized name	Name Type (HL7)		PID-5.7 Patient Name Type - second instance (does not pass Variable ID or label). HL7 reserves the first instance of the name for Legal Name.	XPN	R	[1..2]	Literal value: ~^M^S
INV168	Local record ID	Sending system-assigned local ID of the case investigation with which the subject is associated.(This is the RVCT ID for TB)	Text	R					OBR-3-Filler Order Number where OBR-3.1 is the internally assigned case/investigation ID, OBR-3.3 is the OID for sending application as assigning authority, and OBR-3.4 is the literal value 'ISO'. The UID and label are not passed in the message.	EI	R	[1..1]	<same value in each OBR instance>

Notification Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
NOT099	Subject Type	Type of subject for the notification.	Coded	R			Notification Section Header		OBR[1]: Maps to the HL7 attribute OBR-4-Universal Service ID. No UID or label is passed in the message.	CE	R	[1..1]	Literal Value: 'PERSBJ^Person Subject^2.16.840.1.114222.4.5.274'
NOT101	Notification Type	Type of notification. Main notification types are "Individual Case", "Environmental", "Summary", and "Laboratory Report".	Coded	R			Notification Section Header		OBR[2]: Maps to the HL7 attribute OBR-4-Universal Service ID. No UID or label is passed in the message.	CE	R	[1..1]	Literal Value: 'NOTF^Case Notification^2.16.840.1.114222.4.5.274'
NOT103	Date First Submitted	Date the notification was first sent to CDC. This value does not change after the original notification.	Date/time	R					Maps to the HL7 attribute OBR-7-Observation Date/time. No UID or label is passed in the message.	TS	R	[1..1]	<same value in each OBR instance>
NOT106	Date of Report	Date/time this version of the notification was sent. It will be the same value as NOT103 for the original notification. For updates, this is the update/send date/time.	Date/time	R					Maps to the HL7 attribute OBR-22-Result Report/Status Chg Date/time. No UID or label is passed in the message.	TS	R	[1..1]	<same value in each OBR instance>
INV169	Condition Code	Condition or event that constitutes the reason the notification is being sent.	Coded	R			Nationally Notifiable Infectious Disease (NNID) reportable to the Nationally Notifiable Disease Surveillance System (NNDSS)		Maps to HL7 attribute OBR-31-Reason for Study. The UID and label are not passed in the message.	CE	R	[1..1]	Default value in each OBR instance: '10220^Tuberculosis^2.16.840.1.114222.4.5.78'