Column Name	Data Element:	Required:	HL7 2.5.1 Segment	HL7 Field	Comments
l_name	Last Name of Patient	REQUIRED	PID	5.1.1	
f_name	First Name of Patient	REQUIRED	PID	5.2	
addr_1	Street Address1 of Patient	REQUIRED	PID	11.1.1	
city	City Address of Patient	REQUIRED	PID	11.3	
county	County Address of Patient	REQUIRED	PID	11.9	
state	State Address of Patient	REQUIRED	PID	11.4	
zip_code	Zip Code Address of Patient	REQUIRED	PID	11.5	
race1	Race of Patient	REQUIRED	PID	10.2	
birth_dt	Patient's Date of Birth	REQUIRED	PID	7.1	
birth_sex	Patient's Sex	REQUIRED	PID	8	
provider_name	Name of provider who ordered the test	REQUIRED	PV1	7.2.1, 7.2.2	
lab_test_code	Type of test	REQUIRED	OBR	4.4	
lab_test_name	Name of test	REQUIRED	OBR	4.5	
lab_result	Result	REQUIRED	OBX	5	
lab_units	Result Units (where applicable)	REQUIRED	OBX	6	
lab_clia_no	The lab that performed the test (Clia Code)	REQUIRED	MSH	4	
lab_clia_name	The lab that performed the test (Lab name)	REQUIRED	MSH	4	
LOINC code	LOINC result code	REQUIRED	OBX	3.1	
patient_identifier	Medical Record Number	PREFERRED	PID	3.1	
patient_identifier_type	Record Number Type	PREFERRED	PID	3.5	
m_name	Middle Name of Patient	PREFERRED	PID	5.3	
name_type	Name Type (if collected)	PREFERRED	need to further investigate		Composite XCN 10
ssn	Social Security Number	PREFERRED	PID	19.1	
addr_2	Street Address2 of Patient	PREFERRED	PID	11.1.2	
country	Country Address of Patient	PREFERRED	PID	11.6	
phone_no	Phone Number of Patient	PREFERRED	PID	13	
race2	Race of Patient (if more than one race)	PREFERRED	PID	10.5	
ethnicity	Ethnicity of Patient	PREFERRED	PID	22.1	
facility_name	Name of facility ordering the test	PREFERRED	ORC	21.1	
facility_type	Type of facility ordering the test	PREFERRED	ORC	21.2	
facility_addr1	Facility's complete address: Street1	PREFERRED	ORC	21.1	
facility_addr2	Facility's complete address: Street2	PREFERRED	ORC	21.2	
facility_city	Facility's complete address: City	PREFERRED	ORC	22.3	
facility_county	Facility's complete address: County	PREFERRED	ORC	22.9	
facility_state	Facility's complete address: State	PREFERRED	ORC	22.4	
facility_country	Facility's complete address: Country	PREFERRED	ORC	22.6	
facility_zip	Facility's complete address: Zip Code	PREFERRED	ORC	22.5	
facility_phone	Facility's complete address: Phone Number	PREFERRED	ORC	23.6, 23.7	
provider_addr1	Provider's complete address: Street1	PREFERRED	ORC	24.1.1	
provider_addr2	Provider's complete address: Street2	PREFERRED	ORC	24.1.2	
provider_city	Provider's complete address: City	PREFERRED	ORC	24.3	
provider_county	Provider's complete address: County	PREFERRED	ORC		
provider_state	Provider's complete address: State	PREFERRED	ORC	24.4	
provider_country	Provider's complete address: Country	PREFERRED	ORC	24.6	
provider_zip	Provider's complete address: Zip Code	PREFERRED	ORC	24.5	
provider_phone	Provider's complete address: Phone Number	PREFERRED	OBR, ORC	17, 23	Need to double-check
collection_dt	Date the specimen was collected	PREFERRED	OBR	7.1.1, 7.1.2, 7.1.3	
specimen_type	Type of specimen	PREFERRED	SPM	4	
specimen_additives	EDTA, Heparin, Formalin, etc.	PREFERRED	SPM	6	
specimen_collection_method	Method used to collect the specimen	PREFERRED	SPM	7	
specimen_source_site	Source from which the specimen was obtained.	PREFERRED	OBR	15.1	
specimen_source_site	Source from which the specimen was obtained.	PREFERRED	SPM	23	
specimen_collection_site		PREFERRED	SPM	10	
interpretation	Result Interpretation (where applicable)	PREFERRED	OBX	5	
result_range	Result Range (where applicable)	PREFERRED	OBX	7	
specimen_id	Specimen ID	PREFERRED	SPM	2	
accession_no	Accession Number	PREFERRED	SPM	2	
specimen_receive_dt	Date specimen was received at lab	PREFERRED	OBR, SPM	14, 18	
result_dt	Date result was sent to provider	PREFERRED	OBX	14	
ICD9 code	Diagnosis code associated with laboratory test	PREFERRED	OBR	31	Need to double-check
CPT code	Procedure code associated with laboratory test	PREFERRED	OBR, FT1	44, 25	Need to double-check
Risk Factors	Risk factors associated with testing (where applicable)	PREFERRED	OBX	5	MSDH only
Medicaid Number	Medicaid Number	PREFERRED	PID	3.4.2	Need for Lead
Medicaid Number	Medicaid Identifer	PREFERRED	PID	3.4.3	Type of Identifier
Guardian First Name	Guardian First Name	PREFERRED	NK1	2.2	
Guardian Last Name	Guardian Last Name	PREFERRED	NK1	2.1	
LOINC code	LOINC test code	PREFERRED	OBR	4.1 or 4.4 depending on interpretation	depends on the result code, (may be different, same, or empty)
SNOMED code	SNOMED code	PREFERRED	SPM	8	need to look at more
Country of Birth	Country of Birth	PREFERRED	PID	23	TB wants
Date of arrival	Date of arrival in the U.S.	PREFERRED	PID	26	TB wants,Need to double-check
Medicare Number	Medicare Number	PREFERRED	PID	3.4.2	Need for TB