Division of Consolidated Laboratory Services

Newborn Dried Blood Spot (NDBS) Screening

Electronic Data Exchange – HL7 Order Message

TEST CASE 2

Title: Maximally Populated Message	
ID	**2**
Version	**1.0**
Date	**4/7/2017**

Objective

This Test Case provides mock-up data to test the transmission of an HL7 2.5.1 order message as specified in the PHII Newborn Dried Blood Spot (NDBS) Screening Implementation Guide for Laboratory Orders (U.S. Realm).

The data provided in this test case tests the sender's ability to support the following scenario:

- Demonstrate ability to send a maximally populated message.

Example Collection Card

The following collection card has been populated with test data as listed in the test case specification.

X X X X X X X X

XXXXXXXX

FOR LAB USE — UNSAT CODE _____ DATE /INT _____

DGS-DCLS COPY

BABY'S NAME: LAST	FIRST	MEDICAL RECORD NUMBER	BIRTH DATE	BIRTH TIME (MILITARY)	SEX
TWO	TESTCASE	569832	03-10-2017	0645	(X) MALE ( ) FEMALE ( ) AMBIGUOUS

BIRTH WEIGHT	CURRENT WEIGHT	ETHNICITY	RACE	FEEDING TYPE
2756 GRAMS	2813 GRAMS	1(X) HISPANIC 2( ) NON-HISPANIC 3( ) UNKNOWN	1( ) BLK 4( ) AMER. INDIAN 2( ) WHT 5( ) MIXED/OTHER 3(X) ASIAN	1(X) BREAST 4( ) SOY FORMULA 2( ) COW'S FORMULA 3( ) TPN 5(X) OTHER Experimental formula ABC

MULTIBIRTH	DATE OF COLLECTION	TIME OF COLLECTION (MILITARY)	GESTATIONAL AGE	TRANSFUSED	BABY'S TELEPHONE NUMBER
(X) YES BIRTH ORDER (#) 2	03-11-2017	0717	39 WEEKS	( ) N (X) Y DATE: 03-10-2017 1☒RBCs 2☐PLASMA 3☐PLATELETS	804-888-6666

BABY'S ADDRESS	CITY	STATE	ZIP CODE	COUNTY OF RESIDENCE
751 Home Sweet Home	Richmond	VA	23219	Henrico

MOTHER'S NAME: LAST	FIRST	MAIDEN	BIRTH DATE	SSN (LAST 4 DIG.)	MASTER PATIENT INDEX
TWO	MOMFIRST	MOMMAIDENTWO	07-22-1981	7896	

NATIONAL PROVIDER IDENTIFIER	TELEPHONE NUMBER	BIRTH HOSPITAL CODE (☐ HOME BIRTH)	TELEPHONE NUMBER	SUBMITTER SAME AS: ( )BIRTH HOSP. ( )PROVIDER	
				SUBMITTER CODE	TELEPHONE NUMBER
321	804-266-9616	10614	804-285-2011	10614	804-285-2011

BABY'S HEALTH CARE PROVIDER	BIRTH HOSPITAL NAME	SUBMITTER NAME
RAHAL MD FREDERICK	BON SECOURS ST MARY'S HOSPITAL	BON SECOURS ST MARY'S HOSPITAL
HEALTH CARE PROVIDER'S ADDRESS	**BIRTH HOSPITAL ADDRESS**	**SUBMITTER'S ADDRESS**
5901 Lakeside Avenue	5801 BREMO RD	5801 BREMO RD
CITY / STATE / ZIP CODE	**CITY / STATE / ZIP CODE**	**CITY / STATE / ZIP CODE**
Richmond / VA / 23228	Richmond / VA / 23226	Richmond / VA / 23226

Commonwealth of Virginia Department of General Services
Newborn Screening Laboratory
600 N. 5th St. Richmond, VA 23219
Telephone: (866) 378-7730 Doc. #8615 (Rev. 05/11/15)

SPECIMEN COLLECTED BY (**PRINT NAME**): COLLECTOR
LAST, FIRST

FORM COMPLETED BY (**PRINT NAME**): _____
LAST, FIRST

Use by XXXX-XX

Test Case Specification

The following data will be entered into the system for validation of data capture and messaging functionality:

Field	Mapped HL7 Element	Test Case Value	Sender's Value	Message Example
N\A	MSH-3: Sending Application			SendingApplicationName^2.16.840.1.114222.XXX^ISO
N\A	MSH-4: Sending Facility			SendingFacilityName^2.16.840.1.114222.XXX^ISO
N\A	MSH-5: Receiving Application			VA StarLIMSv10 Prod^2.16.840.1.114222.4.3.3.2.2.4^ISO
N\A	MSH-6: Receiving Facility			VA PHL Richmond^2.16.840.1.114222.4.1.9977^ISO
Barcoded Device Identifier	OBX Segment with OBX-3 = 57723-9	22820172		OBX|2|ST|57723-9^Unique bar code number of Current sample^LN||22820172||||||O
Baby's Name				
Last	PID-5.1: Family Name	TWO		TWO^TESTCASE
First	PID-5.2: Given Name	TESTCASE		TWO^TESTCASE
Baby's Information				
Medical Record Number	PID-3.1: Patient Identifier List	569832		569832^^^HospitalSystem&2.16.840.1.114222.XXX&ISO
Birth Date	PID-7: Date of Birth	3/10/2017		201703100645-0500
Birth Time (Military)	PID-7: Date of Birth	06:45		201703100645-0500
Sex	PID-8: Sex	Male		M

Field	Mapped HL7 Element	Test Case Value	Sender's Value	Message Example
Birth Weight	OBX Segment with OBX-3 = 8339-4	2756 grams		OBX|11|NM|8339-4^Birthweight^LN|1|2756|g^gram||||O
Current Weight	OBX Segment with OBX-3 = 58229-6	2813 grams		OBX|13|NM|58229-6^Body weight Measured --when specimen taken^LN|1|2813|g^gram||||O
Ethnicity	PID-22: Ethnic Group	Hispanic		H^Hispanic^HL70189
Race	PID-10: Race	Asian		2028-9^Asian^HL70005
Feeding Type	OBX Segment with OBX-3 = 67704-7	Breast Milk Other		OBX|14|CE|67704-7^Feeding types^LN|1|LA16914-6^Breast milk^LN||||||O OBX|15|CE|67704-7^Feeding types^LN|2|LA46-8^Other^LN||||||O
Other Feeding Type	OBX Segment with OBX-3 = 67705-4	Experimental Formula ABC		OBX|16|ST|67705-4^Other feeding types^LN|1|Experimental formula ABC||||||O
MultiBirth	PID-24: Multiple Birth Indicator	Yes		Y
Birth Order (#)	PID-25: Birth Order	2		2
Date of Collection	OBR-7: Observation Date/Time	3/11/2017		2017031100717-0500
Time of Collection	OBR-7: Observation Date/Time	07:17		2017031100717-0500
Gestational Age	OBX Segment with OBX-3 = 57714-8	39 weeks		OBX|12|NM|57714-8^Obstetric estimation of gestational age^LN|1|39|wk^weeks||||O
Baby's Telephone Number	PID-13: Phone Number - Home	804-888-6666		^^^^^804^8886666
Transfusion Information				

Field	Mapped HL7 Element	Test Case Value	Sender's Value	Message Example
Transfused	OBX Segment with OBX-3 = TBD1	Yes		OBX|17|CE|57713-0^Infant NICU factors that affect newborn screening interpretation^LN|1|LA12417-4^Any blood product transfusion (including ECMO)^LN||||||O
Transfusion Date	OBX Segment with OBX-3 = 62317-3	3/10/2017		OBX|19|DTM|62317-3^Date of Last Blood Product Transfusion^LN||20170310||||||O
Type (RBCs, Plasma, Platelets)	OBX Segment with OBX-3 = TBD2	RBCs		OBX|18|CE|57713-0^Infant NICU factors that affect newborn screening interpretation^LN|2|116863004^Transfusion of red blood cells^SCT||||||O
Baby's Address				
Street	PID-11.1	751 HOME SWEET HOME		751 HOME SWEET HOME^^Richmond^VA^23219^^^^51760
City	PID-11.3	Richmond		751 HOME SWEET HOME^^Richmond^VA^23219^^^^51760
State	PID-11.4	VA		751 HOME SWEET HOME^^Richmond^VA^23219^^^^51760
Zip Code	PID-11.5	23219		751 HOME SWEET HOME^^Richmond^VA^23219^^^^51760
County of Residence	PID-11.9	51760		751 HOME SWEET HOME^^Richmond^VA^23219^^^^51760
Mother's Name				
Last	NK1-2.1: Family Name	TWO		TWO^MOMFIRST
First	NK1-2.2: Given Name	MOMFIRST		TWO^MOMFIRST
Maiden	PID-6: Mother's Maiden Name	MOMMAIDENTWO		MOMMAIDENTWO
Mother's				

Field	Mapped HL7 Element	Test Case Value	Sender's Value	Message Example
Information				
Birth Date	NK1-16: Next of Kin Date/Time of Birth	7/22/1981		19810722-0400
SSN (Last 4 DIG.)	NK1-33.1: ID Number	7896		7896^^^SSA&2.16.840.1.113883.4.1&ISO^SS
Provider Information				
National Provider Identifier	OBX Segment with OBX-3 = 62323-1	321		OBX|3|TX|62323-1^Post-discharge Provider Identifier^LN||321||||||O
Telephone Number	OBX Segment with OBX-3 = 62328-0	804-266-9616		OBX|6|XTN|62328-0^Post-discharge Practice Phone Number^LN||^^^^^804^2669616||||||O
Baby's Health Care Provider	OBX Segment with OBX-3 = 62324-9	RAHAL MD FREDERICK		OBX|4|TX|62324-9^Post-discharge Provider Name^LN||RAHAL MD FREDERICK||||||O
Heath Care Provider's Address	OBX Segment with OBX-3 = 62327-2	5901 Lakeside Avenue, Richmond, VA 23228		OBX|5|XAD|62327-2^Post-discharge provider practice address^LN||5901 Lakeside Avenue^^Richmond^VA^23228||||||O
Birth Hospital Information				
Birth Hospital Code	OBX Segment with OBX-3 = 62329-8	10614		OBX|7|TX|62329-8^Birth hospital facility ID [Identifier] in Facility^LN||10614||||||O
Telephone Number	OBX Segment with OBX-3 = 62332-2	804-285-2011		OBX|10|XTN|62332-2^Birth hospital facility phone number in Facility^LN||^^^^^804^2852011||||||O
Birth Hospital Name	OBX Segment with OBX-3 = 62330-6	BON SECOURS ST MARY'S HOSPITAL		OBX|8|TX|62330-6^Birth hospital facility name^LN||BON SECOURS ST MARY'S HOSPITAL||||||O
Birth Hospital Address	OBX Segment with OBX-3 = 62331-4	5801 Bremo Road, Richmond, VA 23226		OBX|9|XAD|62331-4^Birth hospital facility address^LN||5801 BREMO RD^^RICHMOND^VA^23226||||||O

Field	Mapped HL7 Element	Test Case Value	Sender's Value	Message Example
Submitter Information				
Submitter Code	ORC-21.10: Ordering Facility Name	10614		BON SECOURS ST MARY'S HOSPITAL^^^^^VA PHL Richmond&2.16.840.1.114222.4.1.9977&ISO^XX^^^10614
Telephone Number	ORC-23: Ordering Facility Phone Number	804-285-2011		^^^^^804^2852011
Submitter Name	ORC-21.1: Ordering Facility Name	BON SECOURS ST MARY'S HOSPITAL		BON SECOURS ST MARY'S HOSPITAL^^^^^VA PHL Richmond&2.16.840.1.114222.4.1.9977&ISO^XX^^^10614
Submitter's Address	ORC-22: Ordering Facility Address	5801 Bremo Rd, Richmond, VA 23226		5801 BREMO RD^^RICHMOND^VA^23226^USA^^^51760
Specimen Collected by	OBR-10: Collector Identifier	COLLECTOR		COLLECTOR

Example Message

MSH|^~\&|SendingApplicationName^2.16.840.1.114222.XXX^ISO|SendingFacilityName^2.16.840.1.114222.XXX^ISO|VA StarLIMSv10 Prod^2.16.840.1.114222.4.3.3.2.2.4^ISO|VA PHL Richmond^2.16.840.1.114222.4.1.9977^ISO|20170222185438-0500||OML^O21^OML_O21|MessageControlID|P|2.5.1

PID|1||569832^^^HospitalSystem&2.16.840.1.114222.XXX&ISO||TWO^TESTCASE|MOMMAIDENTWO|201703100645-0500|M||2028-9^Asian^HL70005|751 HOME SWEET HOME^^Richmond^VA^23219^^^^51760||^^^^^804^8886666||||||||H^Hispanic^HL70189||Y|2|

NK1|1|TWO^MOMFIRST|MTH^Mother^HL70063||||||||||||19810722-0400||||||||||||||||7896^^^SSA&2.16.840.1.113883.4.1&ISO^SS

ORC|NW|XXXXX^HospitalSystem^2.16.840.1.114222.XXX^ISO||||||||||10614^^^^^^^^VA PHL Richmond&2.16.840.1.114222.4.1.9977&ISO^^^^XX||||||||BON SECOURS ST MARY'S HOSPITAL^^^^^VA PHL Richmond&2.16.840.1.114222.4.1.9977&ISO^XX^^^10614|5801 BREMO RD^^RICHMOND^VA^23226^USA^^^51760|^^^^^804^2852011||||||

OBR|1|XXXXX^HospitalSystem^2.16.840.1.114222.XXX^ISO||54089-8^Newborn screening panel AHIC^LN|||201703110717-0500|||COLLECTOR||||||10614^^^^^^^^VA PHL Richmond&2.16.840.1.114222.4.1.9977&ISO^^^^XX

OBX|1|ST|57716-3^State printed on filter paper card [Identifier] in NBS card^LN|1|VA||||||O

OBX|2|ST|57723-9^Unique bar code number of Current sample^LN||22820172||||||O

OBX|3|TX|62323-1^Post-discharge Provider Identifier^LN||321||||||O

OBX|4|TX|62324-9^Post-discharge Provider Name^LN||RAHAL MD FREDERICK||||||O

OBX|5|XAD|62327-2^Post-discharge provider practice address^LN||5901 Lakeside Avenue^^Richmond^VA^23228||||||O

OBX|6|XTN|62328-0^Post-discharge Practice Phone Number^LN||^^^^^804^2669616||||||O

OBX|7|TX|62329-8^Birth hospital facility ID [Identifier] in Facility^LN||10614|||||O

OBX|8|TX|62330-6^Birth hospital facility name^LN||BON SECOURS ST MARY'S HOSPITAL|||||O

OBX|9|XAD|62331-4^Birth hospital facility address^LN||5801 BREMO RD^^RICHMOND^VA^23226|||||O

OBX|10|XTN|62332-2^Birth hospital facility phone number in Facility^LN||^^^^^804^2852011|||||O

OBX|11|NM|8339-4^Birthweight^LN|1|2756|g^gram||||O

OBX|12|NM|57714-8^Obstetric estimation of gestational age^LN|1|39|wk^weeks||||O

OBX|13|NM|58229-6^Body weight Measured --when specimen taken^LN|1|2813|g^gram||||O

OBX|14|CE|67704-7^Feeding types^LN|1|LA16914-6^Breast milk^LN|||||O

OBX|15|CE|67704-7^Feeding types^LN|2|LA46-8^Other^LN|||||O

OBX|16|ST|67705-4^Other feeding types^LN|1|Experimental formula ABC|||||O

OBX|17|CE|57713-0^Infant NICU factors that affect newborn screening interpretation^LN|1|LA12417-4^Any blood product transfusion (including ECMO)^LN|||||O

OBX|18|CE|57713-0^Infant NICU factors that affect newborn screening interpretation^LN|2|116863004^Transfusion of red blood cells^SCT|||||O

OBX|19|DTM|62317-3^Date of Last Blood Product Transfusion^LN||20170310|||||O