

Genetic Disease Screening Program Electronic Newborn Screening (NBS) Results NBS Results Onboarding Program

Contents



Item	#
Introductions	3
GDSP Program Overview	4
Electronic Results Onboarding Project Overview Onboarding Process Overview & Phases Implementation Schedule & Key Meetings Success Factors 	5
Key Next Steps	11
Appendix	12



California Department of Public Health (CDPH) Genetic Disease Screening Program (GDSP)

Stan Sciortino	Chief of Program Development and Evaluation (PDE)
Tracey Bishop	Chief of Newborn Screening
Jorge Palacios	Health Program Specialist
	rmation System (SIS) Technology Team a Exchange (HIE) Project
Rahul Ahlawat	Data Exchange Team Lead
Sumitha Sambathkumar	Technical Integration Specialist
Nithya Gubbala	Project Onboarding Coordinator



of Births(2018)

Mission

"To serve the people of California by reducing the emotional and financial burden of disability and death caused by genetic and congenital disorders."

Program Overview

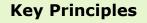
 The objective of the Newborn Screening Electronic Results Program is to extend the functionality of the State of California's Screening Information System application to provide Newborn Screening Test Results electronically in HL7 format for healthcare providers. 10 Hospital Organizations Partnering

Cedar-Sinai Medical Center 6350 Contra Costa Regional Medical 1909 Center 804 Dignity Health Family Health Centers of San Diego Kern Medical Center 2711 **34 Primary Conditions Screened** Loma Linda University Health 3433 9 Organic Acid Disorders North Bay Medical Center 1206 ٠ 5 Fatty Acid Oxidation Disorders Rady Children's Hospital (San Diego) 483 6 Amino Acid Disorders Santa Clara Valley Medical Center 2913 2 Endocrine Disorders 3 Hemoglobin Disorders Stanford Medical Center 4756 9 Other Disorders 450,000 Newborns Screened per vear

For over 80 genetic and congenital disorders, and over 350,000 pregnant women for down syndrome, trisomy 18 and neural tube defects

Hospital Name

Electronic Results: Project Overview





Offer a more efficient and timely option for obtaining Newborn Screening results Reduce dependencies associated with delivery via paper mailers



Adhere to new national standards for the secure transmission of health information

Potential Benefits

- Expedited receipt of Newborn Screening results
- Reduction of manual processes of scanning of paper results
- · Increased traceability of result received
- Direct integration with provider organization's EHR or LIS
- Enhanced data quality through discrete data transmission
- Improved security through direct electronic integration
- Ability to send HL7 with PDF attachment





The *Electronic Results Onboarding* process will follow the phases outlined below. GDSP will support onboarding provider organizations throughout the implementation process.

	Project Phase	Key Activities	Activity Owner
1	Initiate Project	 Obtain necessary project approvals Conduct Kick-Off discussions & outline the Onboarding Process. Share necessary documentation 	Partner OrganizationGDSP
2	Finalize Design	 Create interface design and process for consuming HL7 results Provide Online/Offline Technical and Functional guidance via Meeting Cadence/E-mail 	Partner OrganizationGDSP
3	Perform Development & Internal Testing	 Utilize onboarding documents, tools for internal testing Provide Online/Offline Technical and Functional guidance via Meeting Cadence/E-mail 	Partner OrganizationGDSP
4	Perform Interface Testing	 Build and transmit HL7 results messages for test (sample) cases over a test interface Read and process sample HL7 messages, return ACK/NACK files 	Partner OrganizationGDSP
5	Go-Live	 Begin transmitting HL7 results and monitor interface performance Begin receiving electronic results and monitor interface performance 	Partner OrganizationGDSP
6	Post Go-Live Support	 Continue monitoring and report any issues observed Provide support as needed to resolve issues 	Partner OrganizationGDSP



The *Electronic Results Onboarding* (Wave 4) is planned to follow the schedule outlined below. The durations specified are reflective of a typical onboarding schedule

06- Nov	13- Nov	20- Nov	27- Nov	04- Dec	11- Dec	18- Dec	25- Dec	01- Jan	08- Jan	15- Jan	22- Jan	29- Jan	05- Feb	12- Feb	19- Feb	26- Feb	04- Mar	11- Mar	18- Mar	25- Mar	01- Apr	08- Apr	15- Apr
Initia	ation						Desi	gn, C	evel	op & ⁻	Test						Test	Inte	rface	Emb	argo	Go-	Live
2 we	eeks	s 12 weeks 3 weeks 2 weeks 2											2 w	eeks									
Kick- Meet		Dis	chnic scussi th GD	on		Supp	educed ort Pe Biwee eckpc	riod kly ⁴	2		0		0		Interfa Readi		_		Go-Li Readir Chee	ness	-	o-Live 4/9) ¹	
	I	nitia	ation	1		Des	sign,	Dev	velop	0 & T	est		1	[est]	Inter	face				G	o-Liv	/e	
•	ey A Proje Revi Desi Sube form	ect P ew F gn mit (lann 1L7	ing		 Fi Do in pr Bi Pa ac fo 	terfa oces week artne ccess Iders	e De op an ce fo sing cly cl r Org to in s (SF erfac		7 res point: ation ace - nee	s get ded		GD sar me orc Par pro and	SP to mple ssag lers o tner ocess d ser	vitie: ransr HL7 es u: data Orga s HL7 nd A0 jes to	nits resu sing aniza resu CK/N	test ition ilts ACK		 Po mo iss Or 	Actional Sector Action Action Action Sector Action	e o-Live ring by Pa	e for artne	

Event Milestone \checkmark Go-Live O Meeting Cadence

1 Go-Live is done a day prior (4/8). However, GDSP will begin publishing HL7 results messages the following day (4/9).

Key Meetings during the Onboarding Process (1 of 2)



Meeting Name	Project Phase	Project Timeframe	Description	Frequency	Mandatory?	Duration
Onboarding Kick-Off Discussion	Initiate Project	Week 1	This meeting is intended to level set on the overall process for onboarding with CDPH for receiving NBS results electronically	Once	Yes	1 Hour
Technical Consultation	Finalize Design	Week 3 - 4	This meeting is organized on the request of the partner orgranization. The partner team drives the agenda, and it is aimed at helping the partner team implementing the interface with guidance on any techical aspects of the implementation. Conversation topics are focused on the interface and HL7 design	Once	No (scheduled upon Partner's request)	0.5 - 1 Hour
Biweekly Checkpoints	Finalize Design, Develop and Test, Interface Testing	Week 3 - 15	This standing meeting occurs during the core of implementation and testing. It is aimed at GDSP and Partner onboarding teams to discuss - 1. Any issues, concerns or challenges with the implementation 2. Overall progress against timelines, and risks if any 3. Any opportunities for improvement identified during the implementation (or planning)	Every two weeks	Yes (unless both teams agree to cancel)	0.5 Hours

Apart from the above, for any general questions, issues or feedback during the onboarding process, partner organizations should email <u>nbshie@cdph.ca.gov</u>.



Key Meetings during the Onboarding Process (2 of 2)

Meeting Name	Project Phase	Project Timeframe	Description	Frequency	Mandatory?	Duration
Interface Testing Readiness Checkpoint	Develop and Test	Week 13 - 14	This meeting is planned to discuss the readiness from a partner perspective for initiating interface testing. Key agenda items include - 1. Status of development and (system) testing completion 2. Access to test interface folders, required for sending/accessing test HL7s between GDSP and the partner system 3. Test data requirements from partner for building and transmitting sample HL7 messages	Once	Yes (can be done as part of a biweekly checkpoint meeting, or email if needed)	0.5 Hours
Go-Live Readiness Checkpoint	Interface Testing	Week 16 - 17	This meeting is planned to discuss the overall readiness from a GDSP and partner perspective for the go-live. Key agenda items include - 1. Status of interface testing completion 2. Access to production interface folders, required for sending/accessing test HL7s between GDSP and the partner system 3. Any pending form(s) or administrative actions from either side 4. Discuss the process of go-live and any post go-live monitoring activities	Once	Yes (can be done as part of a biweekly checkpoint meeting, or email if needed)	0.5 Hours

Apart from the above, for any general questions, issues or feedback during the onboarding process, partner organizations should email <u>nbshie@cdph.ca.gov</u>.



Based on past experience gained from provider partner onboarding, the program recommends the following key items, in order to prevent major issues or challenges and successfully complete the integration effort

- 1. Defining a plan upfront that aligns with the high-level project timeline shown earlier with clear milestones established for each phase. This will help drive the work more effectively and gauge risks as the project progresses.
 - The GDSP team will request this plan/information as part of starting the onboarding process.
- Having an engaged Project sponsorship & leadership during the course of the onboarding implementation. This will help manage risks and/or competing priorities, and help keep the partner team focused as they design, develop and test the new interface.
 - This should also be shared with GDSP at the beginning of the onboarding process.
- 3. Utilize the biweekly recurring & other meetings during the onboarding process. This will help get any questions answered on time, or technical conversations needed to progress the interface work & keep progress on track against the plan. In addition, these will serve as checkpoints where we collectively assess the project health and any key risks to the timeline.



GDSP team to send the following documents via email: (ETA within 1-2 days of Kick-off meeting)

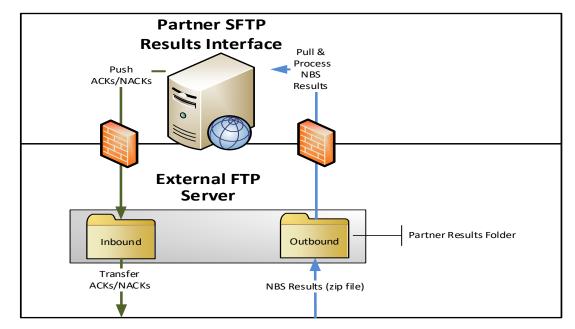
- Onboarding (Kickoff meeting) overview deck
- CDPH Website for onboarding support documents
- Newborn screening Results HL7 Interface Design Documents
- Sample Timeline for the onboarding project to be completed by partner organization
- Hospitals/Health Practice Management (HPM) Firm Consent Form (A form for hospitals/HPM to enroll into GDSP Electronic Results project and receive NBS test results electronically) - to be completed by partner organization
- **Electronic Partner Organization to take the following actions**: (*ETA Within 2 weeks of Kick-off meeting to prevent onboarding delays*)
 - Complete and return the Hospitals/Health Practice Management (HPM) Firm Consent Form with authorizing signatures. The form can be emailed back to the Onboarding Coordinator at <u>nbshie@gdsp.ca.gov</u>.
 - Complete the high-level timeline view and email back to the Onboarding Coordinator at <u>nbshie@gdsp.ca.gov</u>. This should include preferred dates/times for ETA – Within 2 weeks of Kick-off meeting
 - > Technical Consultation/Discussion (as needed).
 - > Ongoing Biweekly Checkpoint meetings
- 3 Once received, GDSP will review the documents sent by the Partner Organization and provide approval. In addition, GDSP onboarding team will setup the meetings (technical consultation and biweekly checkpoints) and publish the meeting invites.



APPENDIX

Updated: 10/21/2019





Sending Newborn Screening Results to Electronic Results Partner:

- 1. SIS GDSP will place NBS results in HL7 v.2.5.1 messages in a **zip file**, in a specified folder, on the Outbound directory of the secure FTP server
- 2. Electronic Results Partner will **pull** the zipped HL7 messages from the secure FTP server and unzip them for HL7 message translation
- 3. Electronic Results Partner will **translate** the HL7 messages and process into their EHR

Receiving Acknowledgments (ACK) and Error (NACK) messages at SIS GDSP:

- 1. Electronic Results Partner will **create ACK/NACK HL7 messages** for each NBS result message it processed
- 2. Electronic Results Partner will **zip the ACK/NACK messages** and **push** the zipped file to a specified folder in the Inbound directory of the secure FTP server

3. SIS GDSP will **translate** the ACK/NACK messages from the secure FTP server for processing Updated: 10/21/2019

HL7 Message Format



Below are key details regarding the HL7 message format:

- **HL7 Version:** HL7 v2.5.1
- Standard: Public Health Informatics Institute (PHII) and U.S. National Library of Medicine (NLM)
 - o PHII website: <u>http://www.phii.org/</u>
 - NLM website: <u>http://newbornscreeningcodes.nlm.nih.gov/nb/sc/constructingNBSHL7messages</u>
- **Medium:** Secure File Transfer Protocol through an external server Note: Each HIE Receiver will have a dedicated folder, for both the Inbound and the Outbound Directory
- Frequency: Sent daily, excluding Saturdays and State Holidays
- File Format: HL7 messages to be zipped and place on both Inbound and Outbound Directory of secure FTP server

Below are details for each message type (Newborn Screening results & Acknowledgement/Error message):

- Newborn Screening Results:
 - Message Type: ORU^R01 (Results)
 - Timing: Electronic Test Results will be placed in respective Outbound directories at 9:00 PM PST
- Acknowledgments / Error Messages:
 - **Message Type**: ACK^R01^ACK (Acknowledgments)
 - Timing: ACK messages should be placed in respective Inbound directories by 4:00 AM PST



HL7 with PDF `attachments':

- This is an opt-in functionality in addition to the traditional HL7 results message that allows Partner organizations to receive results in PDF format (encoded) within the HL7 message
- This is activated upon request from the Partner organization to CDPH, and effective the next day once the configurations are made on the CDPH side

HIE Online Tool

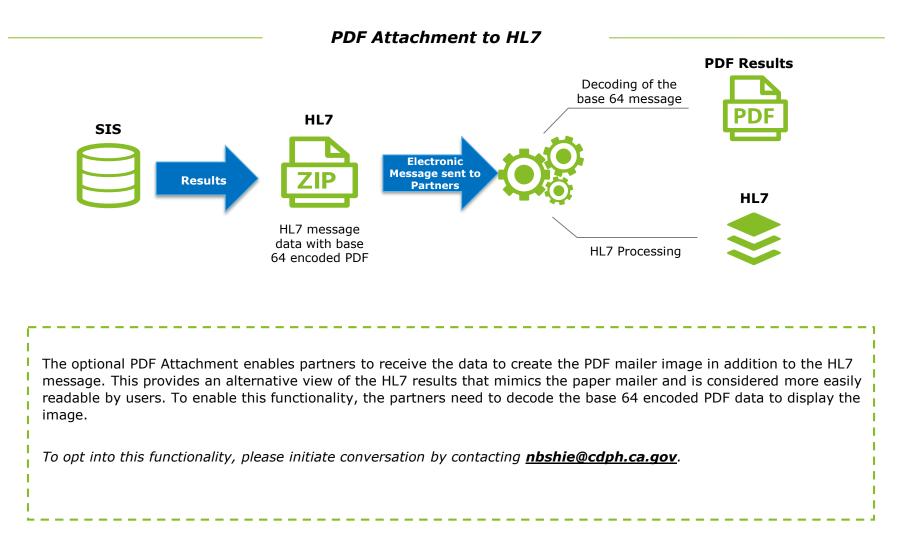
The HIE online tool allows partner organizations to generate various 'test' HL7 results messages for different newborn screening test combinations. In addition, it has a feature for validation of ACK/NACK files generated by the partner's system. There are two versions

- Version 1 This is based on the HL7 design currently in production. <u>https://hiegateway.cdph.ca.gov/GDSPHL7Tools/</u>
- Version 2 This contains upcoming HL7 design changes that are in flight. This allows partner organizations to generate and test sample HL7s prior to production release. <u>https://hiegateway.cdph.ca.gov/GDSPHL7Tools_RC/</u>

PDI



An enhancement was developed to attach the PDF version of the results mailer to the HL7. This is functionality in addition to the HL7 electronic message that the results partners can opt in to receive in addition to the electronic message.



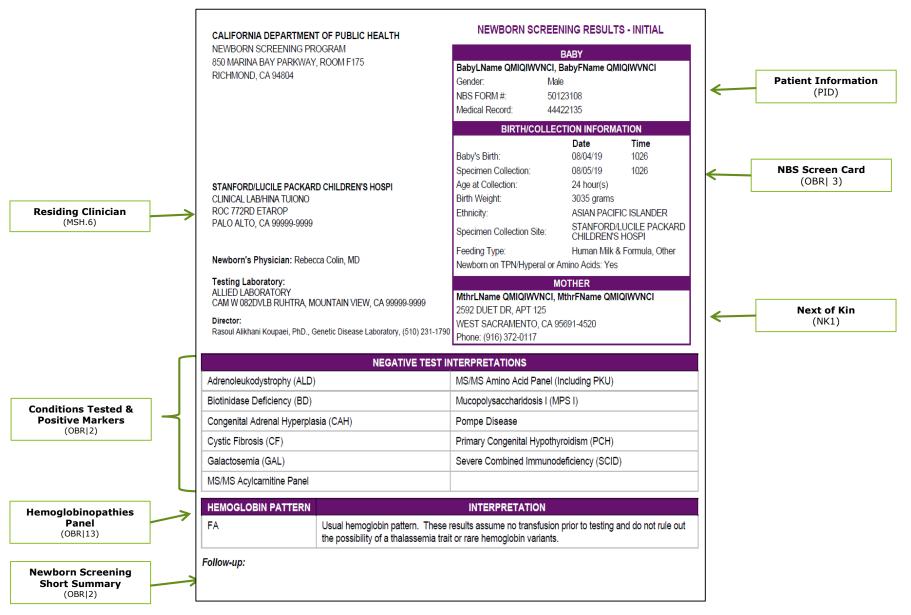


- SIS: State of CA's Screening Information System application
- **HL7:** Health Level 7 messaging standard that enables clinical applications to exchange data; "book of rules" detailing interfacing information that sets forth a framework for negotiation in interfacing
- Coding Systems

٠

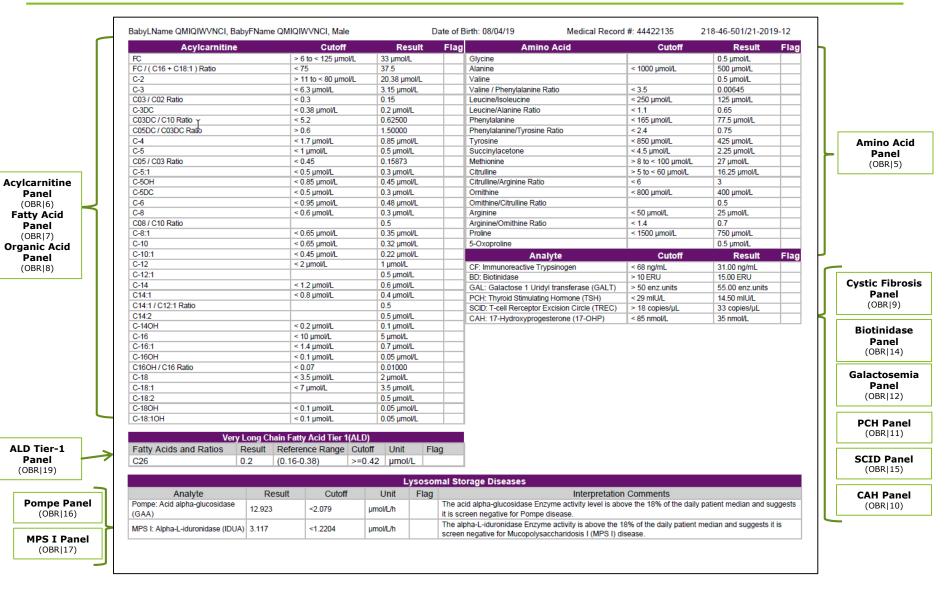
- LOINC Logical Observation Identifiers Names and Codes (LOINC®): provides standardized codes for the questions in lab results messages; used for ordering and resulting of lab tests; preferred code set for HL7 messages
- **SNOMED** Standardized terminology for clinical data for diseases, clinical findings and procedures
- **Health Information Technology Standards Panel (HITSP)** Newborn Screening Interoperability Specification: messaging standards specific to NBS





HL7 Message Structure: PDF Mailer to HL7 Sample Mapping (2 of 2)







Below is a sample HL7 message for SIS GDSP newborn screening initial negative test results

<pre>pml = histocry h</pre>	
<pre>Mill Jeruchaes GoldBUXCO ThereFace Coll DUCK of a prior 1:00 multiple of the Coll DUCK of the Coll DUCK</pre>	NSH ~~\& SISGDSP SISGDSP SISGDSP SISHIERECEIVER^9414049^L,M,N ^^L,M,N 20190802053800 ORU^R01^ORU_R01 235805324 T 2.5.1
Dot: Display D	PID 1 44422135^^^&NPI^MR BabyLName GSWERUXY00^BabyFName GSWERUXY00^^^^^B 201907221026 M 2131-1^Other Race 2186-5^Not Hispanic or Latino N 1
Ont:1402124721*0remNamed:15202-0*100 15200-0*101 111111111111111111111111111111111111	NK1 1 MthrLName GSWERUXY00^MthrFName GSWERUXY00 MTh^Mother 2592 DUET DR, APT 125^WEST SACRAMENTO^CA^95691-4520^USA ^^^916^3720117 920724
Ont:1402124721*0remNamed:15202-0*100 15200-0*101 111111111111111111111111111111111111	ORC RE 4012149713^FormNumber 1111111/ColineReperce 1111111STANFORD/LUCTLE_PACKARD_CHTLDREN'S_HOSPT^^^^^^^R771ROC_772RD_ETAROP^^PA10_ALTO^CA^99999-9999
Out1 2 House of the start in black black processing speet summary panel DiPETERSING Dit [1 [1 [1 [1] Diversion of the black black processing speet summary panel DiPETERSING Dit [2 [1 [1 [1] Diversion of the black black processing speet summary panel DiPETERSING Dit [2 [1 [1 [1] Diversion of the black black processing speet summary panel DiPETERSING Dit [2 [1 [1 Diversion of the black black processing speet summary panel Diversion of the black processing speet summary panel Diversion of the black processing speet speet summary panel Diversion of the black processing speet	
<pre>GNI1[01772]-Massen for lab test in helps blocd "petrill[14]/222]-(sylhists] creenedS(14] [H1][14]/2223-(sylhists] creenedS(14] [H1][14]/2233-(sylhists] creenedS(14] [H1][14]/2233-(sylhists] creenedS(14) [H1][14]/2233-(sylhist) creenedS(14) [H1][14]/2333-(</pre>	
<pre>pxxl [ci [J737.8-Smaph equity of heid block spc: init [LiAb23-J734].ceptableSUB10 [III [iII] [iIII] [iII] [iIII] [iII] [iIII] [iIII] [iIII] [iIII] [iIII] [iII] [iI</pre>	
<pre>GXX [] [17]JB-7Nedoers creating report - overall interpretation'UH_[LA124B-15X4I] creasing is in range for the control total total stream(1)[HI][7][12]9980205380 GXX [] [17]JB-7Nedoers creating short carrying stamp?/UH_[HID5] Failing Lab - ALLED LA00XADV WIX (M H 02204 EARTHA, NORTADW LSG, CA 9999-9999, bm/), bm/(bm/) brighted bases caleboratory - GDL BW 9042TS VADOR, RCC400D, GXX [] [17]JB-7Nedoers creating short carrying stamp?/UH_[HID5] Failing Lab - ALLED LA00XADV WIX (M H 02204 EARTHA, NORTADW LSG, CA 9999-9999, bm/), bm/(bm/) brighted bases caleboratory - GDL BW 9042TS VADOR, RCC400D, GXX [] [17]JB-7Nedoers creating short carrying stamp?/UH_[HID5] Failing Lab - ALLED LA00XADV WIX (M H 02204 EARTHA, NORTADW LSG, CA 9999-9999, bm/), bm/(bm/) brighted bases caleboratory - GDL BW 9042TS VADOR, RCC400D, GXX [] [17]JB-7, bm/(bm/) brighted bases caleboratory - GDL BW 100 Failing Lab 100 Fa</pre>	
<pre>OX14[c1]ST31-5*NeeberG continue with positive markers [LeftHir] in Dried blocd sportUll[Ll37-3-XVMMONXULL[HII]F][200880053880 SU[C1]ST32-5*NeeberG continue with equivaluations and the start is an example of the start is an example</pre>	OBX 2 CE 57718-9^Sample quality of Dried blood spot^LN 1 LA12432-3\S\Acceptable\S\LN N F 20190802053800
<pre>DXX = [157728-5*Needown conditions with equival markers [Institute] in Diels blood spot'uli[11217-25500ex[510][117][11210900053800 DXX = [157728-5*Needown conditions with equival markers [Institute] is a ALIB DARGOWN (XXXV HV Day Dave dustIons regarding these results, please context the Madom Screening Listef at Summod University DXX = [157728-5*Needown Context] Director - Ranol Alibhest Koppet, [170, [astric Director Direc</pre>	OBX/3/CE/57130-7^Newborn screening report - overall interpretation^LN/1/LA12428-1/S/All screening is in range for the conditions tested/S/LN///N//F//20190802053800
<pre>DXX = [157728-5*Needown conditions with equival markers [LaterLife] in Dreds blood spet'uli] [Laty-AxyNeex(SL) [Price [Laty Laty Laty Laty Laty Laty Laty Laty</pre>	08X/4/CE/57131-5^Newborn conditions with positive markers [Identifier] in Dried blood spot^LN/1/LA137-2/S/None/S/LN/1/P/1/20190802053800
<pre>DXX = [1] S772-7-Membern screening short mirrative summary-[11] HIDS Testing La - ALLED LADGATION VICAN W 40202 SINTA, NOUTANI VIEW, CA 9999-9999. Low-Low-Lement Disease Laboratory - OL B 4942TS YADAODE, ELEVANDADE, ELEVANDADE,</pre>	
Cd 99999999990 https://brites.results.plasse contact the Medora Screening staff at Steefed Microsoftee results, plasse contact the Medora Screening staff at Steefed Microsoftee Resolution of experiment Application Screening Staff at Steefed Microsoftee Resolution of experiment Application Screening Staff at Steefed Microsoftee Resolution of experiment Application Screening Staff at Steefed Microsoftee Resolution Resolutio	
<pre>MetLaG Lotter, (310, 42-1521, Lahr)LarblickLimer;Lervike/Labritario Total Time-1, 400 Time-2, Pompe Time-1 aus developed and Tits performance characteristic determined by the Genetic Disease Laboratory. It has not been cleared on approved by the U.S. food and Digg Additistration (DA). The Toh has determined that such Clearned er approval to not necessary. This laboratory is certified under the Clinical Laboratory percomment Amendment of 1980 (CLLA 80) as qualified to perform high complexity testing. The AD Time-1, AD Time-1, Pampe Time-1 as Interstigational or foor research. This Laboratory is certified under the Clinical Laboratory percomment Amendment of 1980 (CLLA 80) as qualified to perform high complexity testing. The AD Time-1, Pampe Time-1 testing result does not rule out the possibility of a disporter. Neith care provides: should result nu atchuld need to any sign or symptoms of these disorders in their patients. A needown screening result to a volt-result result is and the rule of the VIII and Pampe of the VIII and VIII and Pampe of the VIIII and Pampe of VIIII and Pampe of VIIII and Pampe of VIIII and Pampe of VIIII and VIIII and Pampe of VIIII and VIIII and Pampe of VIIII and VIIII and Pampe of VIIII and Pa</pre>	
It has been claard on approved by the U.S. Food and Drug Administration (TBA). The ToAh has determined that such claarance on approval is not necessary. This test is used for clinical purposes. It should not be regarded as investigational of for research. This laboratory is certified under the Clinical Laboratory Improvement Adendments of 1980 (Cline8) as qualified to perform high complexity testing. The AD ITE-7, ADD ITE ADD ITE 7, ADD ITE ADD ADD ADD ITE-7, ADD ITE ADD ADD ADD ADD ADD ADD ADD ADD ADD AD	
<pre>si investigational or for research. This laboratory is certified under the Clinical Laboratory Improvement Amendments of 1988 (CLI-88) as qualified to perform high complexity testing. The ALD Tier-1, ALD Tier-2, Ponge Tier-1 and MPS Tier-1 testing user un the fails in a protocol Department of Hose Conditions. While the solid variability of medions and interfails and and and and and and and and and and</pre>	
<pre>and HS 1 Ter-1 testing was run at the California Department of Public Health Genetic Disease Screening Laborations. While a positive screening result deatting medicates in Stepic programs and differences in detection rates for the various disorders in the membrane start in the screening result deatting medicates in Stepic programs and start for the various disorders in the considered deatting result deat for an other set of the schedule start in the schedule screening result deatting medicates in Stepic programs and start provides whold remain watchill for any sign or synthes of these disorders in their particules. A network was an agentive schedule schedu</pre>	It has not been cleared or approved by the U.S. Food and Drug Administration (FDA). The FDA has determined that such clearance or approval is not necessary. This test is used for clinical purposes. It should not be regarded
<pre>in the madeorn period, the Numbern Screening Program will not identify al memberns with these conditions. While a positive screening result identifies in memberns in the introvation of the source in their particle screening result should not be considered diagonality. and cannot replace the individualized evaluation and diagonalis of an infant by a well-trained, business of these disorders in their particle. An edoorn screening result should not be considered diagonality. To setting in the provider to http://filescore.org/doi://filesco</pre>	as investigational or for research. This laboratory is certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA-88) as qualified to perform high complexity testing. The ALD Tier-1, ALD Tier-2, Pompe Tier-1
<pre>in the madeorn period, the Numbern Screening Program will not identify al memberns with these conditions. While a positive screening result identifies in memberns in the introvation of the source in their particle screening result should not be considered diagonality. and cannot replace the individualized evaluation and diagonalis of an infant by a well-trained, business of these disorders in their particle. An edoorn screening result should not be considered diagonality. To setting in the provider to http://filescore.org/doi://filesco</pre>	and MPS I Tier-1 testing was run at the California Department of Public Health Genetic Disease Screening Laboratory. \.br\Due to biological variability of newborns and differences in detection rates for the various disorders
<pre>screening result desi not rule out the posizility of a disorder. Nealth care providers should remain watchhill for any sign or symptoms of these disorders in their patients. A meadom screening result should not be considered disprovide. Nealthows in the individuality of the individual optic individual optic individual optic individuality of the individuality</pre>	
<pre>slapostic, and canot replace the individualized evaluation and diagnosis of a infant by a well-trained, wendedgeable Realth Care provider. \.br\.br\.[20198802053880 GKX 8[517715.7Codditions treated for in this medorm screening study [Identifier] in Dried blood spot"lul[LL43796-65XX-ALDUS(LH] 20198802053880 GKX 8[517775.7Codditions treated for in this medorm screening study [Identifier] in Dried blood spot"lul[LL43796-65XX-ALDUS(LH] 20198802053880 GKX 8[517757.7Codditions treated for in this medorm screening study [Identifier] in Dried blood spot"lul[LL43796-65XX-ALDUS(LH] 1000 GKX 8[517757.7Codditions treated for in this medorm screening study [Identifier] in Dried blood spot"lul[LL43796-65XX-ALDUS(LH] </pre>	
<pre>boxX /TIX sizes ->Full meakorm screening summary report for display of printing"UII [[219980225380 00X 91(215773-*Conditions tested for in this meakorm screening study [Identifier] in Dried blood sport"UII [LAI375%-65(SALAUS(UII) [219880225380 00X 91(215773-*Conditions tested for in this meakorm screening study [Identifier] in Dried blood sport"UII [LAI375%-65(SALAUS(UII) [219880225380 00X 91(215773-*Conditions tested for in this meakorm screening study [Identifier] in Dried blood sport"UII [LAI375%-65(SALAUS(UII) </pre>	
<pre>DEX B[C: J7719-7Conditions texted for in this medoom screening study [Identifier] in Dried blood spot'll][Ll2379-6/SVAALUS(IN][N][F][[2]09882853800 DEX 10[C: J7719-7Conditions texted for in this medoom screening study [Identifier] in Dried blood spot'll3[Ll24377-7.5VSAAUS(IN][N][F][[2]09882853800 DEX 10[C: J7719-7Conditions texted for in this medoom screening study [Identifier] in Dried blood spot'll3[Ll24377-7.5VSAAUS(IN][N][F][[2]09882853800 DEX 10[C: J7719-7Conditions texted for in this medoom screening study [Identifier] in Dried blood spot'll3[Ll24377-7.5VSAAUS(IN][N][F][[2]09882853800 DEX 10[C: J7719-7Conditions texted for in this medoom screening study [Identifier] in Dried blood spot'll3[Ll24379-7.5VSAAUS(IN][N][F][[2]09882853800 DEX 10[C: J7719-7Conditions texted for in this medoom screening study [Identifier] in Dried blood spot'll3[Ll24379-7.5VSAAUS(IN][N][N][F][[2]09882853800 DEX 10[C: J7719-7Conditions texted for in this medoom screening study [Identifier] in Dried blood spot'll3[Ll2438-5VSCIT.1VS.NI][N][N][F][[2]09882853800 DEX 10[C: J7719-7Conditions tested for in this medoom screening study [Identifier] in Dried blood spot'll3[Ll2438-5VSCIT.1VS.NI][N][N][F][[2]09882853800 DEX 10[C: J7719-7Conditions tested for in this medoom screening study [Identifier] in Dried blood spot'll3[Ll2438-5VSCIT.1VS.NI][N][N][F][[2]09882853800 DEX 10[C: J7719-7Conditions tested for in this medoom screening study [Identifier] in Dried blood spot'll3[Ll2439-5VSAAUS(NI]][N][F][[2]09882853800 DEX 20[C: J7719-7Conditions tested for in this medoom screening study [Identifier] in Dried blood spot'll3[Ll2439-5VSAAUS(NI]][N][F][[2]09882853800 DEX 20[C: J7719-7Conditions tested for in this medoom screening study [Identifier] in Dried blood spot'll3[Ll2439-5VSAAUS(NI][N][[F][[2]09882853800 DEX 20[C: J7719-7Conditions tested for in this medoom screening study [Identifier] in Dried blood spot'll3[Ll2439-5VSAAUS(NI][N][[F][[2]09882853800 DEX 20[C: J7719-7Conditions tested for in this medoom screening study [Identifier] in Dri</pre>	
<pre>DEX j0[c][5773-7Conditions tested for in this medoom screening study [Identifier] in Dried blood spot"LN][2L14097-8(S)(GALS)(LN][NN][F][12][030980253800 OBX 110[c][5773-7Conditions tested for in this medoom screening study [Identifier] in Dried blood spot"LN][2L12468-7(S)(SALS)(LN][NN][F][12][030980253800 OBX 110[c][5773-7Conditions tested for in this medoom screening study [Identifier] in Dried blood spot"LN][2L12468-7(S)(SALS)(LN][NN][F][12][030980253800 OBX 110[c][5773-7Conditions tested for in this medoom screening study [Identifier] in Dried blood spot"LN][2L12468-7(S)(SALS)(LN][NN][F][12][030980253800 OBX 110[c][5773-7Conditions tested for in this medoom screening study [Identifier] in Dried blood spot"LN][2L12468-7(S)(SALS)(LN][NN][F][12][030980253800 OBX 110[c][5773-7Conditions tested for in this medoom screening study [Identifier] in Dried blood spot"LN][2L12468-7(S)(SALS)(LN][NN][F][12][030980253800 OBX 110[c][5773-7Conditions tested for in this medoom screening study [Identifier] in Dried blood spot"LN][2L12468-1/S(CFT-LISS)(LN][NN][F][12][030980253800 OBX 110[c][5773-7Conditions tested for in this medoom screening study [Identifier] in Dried blood spot"LN][2L12488-1/S(CFT-LISS)(LN][NN][F][12][030980253800 OBX 110[c][5773-7Conditions tested for in this medoom screening study [Identifier] in Dried blood spot"LN][2L1248-5/S(CFT-LISS)(LN][NN][F][12][030980253800 OBX 110[c][5773-7Conditions tested for in this medoom screening study [Identifier] in Dried blood spot"LN][2L1248-5/S(CFT-LISS)(LN][NN][F][1][12][030980253800 OBX 110[c][5773-7Conditions tested for in this medoom screening study [Identifier] in Dried blood spot"LN][2L1248-5/S(CFLISS)(LN][NN][F][1][12][030980253800 OBX 12[c][5773-7Conditions tested for in this medoom screening study [Identifier] in Dried blood spot"LN][2L1248-5/S(CFLISS)(LN][NN][F][1][1][12][030980253800 OBX 12[c][5773-7Conditions tested for in this medoom screening study [Identifier] in Dried blood spot"LN][2L1248-5/S(CFLISS)(LN][NN][F][1][1][12][030980253800 OBX 12[c][5773</pre>	
<pre>DBX 11D[C \$773-7-Conditions texted for in this membors screening study [Identifier] in Dried blood sprt/li][L123797-4/SVMB-S/LSVLII][N][F][12019080285380 DBX[11D[C \$773-7-Conditions texted for in this membors screening study [Identifier] in Dried blood sprt/li][L12466-TS/ST-4SVS-KSVLII][N][F][12019080285380 DBX[12][C \$773-7-Conditions texted for in this membors screening study [Identifier] in Dried blood sprt/li][L12466-TS/ST-4SVS-KSVLII][N][F][12019080285380 DBX[12][C \$773-7-Conditions texted for in this membors screening study [Identifier] in Dried blood sprt/li][L12466-TS/ST-4SVS-KSVLII][N][F][12019080285380 DBX[12][C \$773-7-Conditions texted for in this membors screening study [Identifier] in Dried blood sprt/li][L12468-TS/ST-4SVS-KSVLII][N][F][12019080285380 DBX[12][C \$773-7-Conditions texted for in this membors screening study [Identifier] in Dried blood sprt/li][L12468-TS/ST-4SVLII][N][F][12019080285380 DBX[12][C \$773-7-Conditions texted for in this membors screening study [Identifier] in Dried blood sprt/li][L12468-TS/ST-4SVLII][N][F][12019080285380 DBX[12][C \$773-7-Conditions texted for in this membors screening study [Identifier] in Dried blood sprt/li][L12468-TS/ST-4SVLII][N][F][12019080285380 DBX[22][C \$773-7-Conditions texted for in this membors screening study [Identifier] in Dried blood sprt/li][L12428-TS/ST-4SVLII][N][F][12019080285380 DBX[22][C \$773-7-Conditions texted for in this membors screening study [Identifier] in Dried blood sprt/li][L12429-TS/SVLII][N][[F][12019080285380 DBX[22][C \$773-7-Conditions texted for in this membors screening study [Identifier] in Dried blood sprt/li][L12429-TS/SVLII][N][[F][12019080285380 DBX[22][C \$773-7-Conditions texted for in this membors screening study [Identifier] in Dried blood sprt/li][L12429-TS/SVLII][N][[F][12019080285380 DBX[22][C \$773-7-Conditions texted for in this membors screening study [Identifier] in Dried blood sprt/li][L12429-TS/SVLII][N][[F][12019080285380 DBX[22][C \$773-7-Conditions texted for in this membors screening study [Identif</pre>	OBX/8/CE[57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN/1/LA25796-6\S\X-ALD\S\LN N F 20190802053800
<pre>OBX 11 [ct 5773 - 7C-onditions tested for in this memborn screening study [dentifier] in Dried blood spot"un [] [L12478-51X546X5(Jul] [] [] [] [] [12190802053800 0BX 11 [ct 5773 - 7C-onditions tested for in this memborn screening study [dentifier] in Dried blood spot"un [] [L12478-51X546X5(Jul] [] [] [] [] [12190802053800 0BX 15 [ct 5773 - 7C-onditions tested for in this memborn screening study [dentifier] in Dried blood spot"un [] [L12478-51X546X5(Jul] [] [] [] [] [12190802053800 0BX 15 [ct 5773 - 7C-onditions tested for in this memborn screening study [dentifier] in Dried blood spot"un [] [L12478-51X546X5(Jul] [] [] [] [] [] [2190802053800 0BX 15 [ct 5773 - 7C-onditions tested for in this memborn screening study [dentifier] in Dried blood spot"un [] [L12485-11X5(Jul] [] [] [] [] [] [] [] [] [] [] [] [] []</pre>	0BX/9/CE/57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN/2/LA14037-8\S\GAA\S\LN /N /F /20190802053800
<pre>OBX 11 [ct 5773 - 7C-onditions tested for in this memborn screening study [dentifier] in Dried blood spot"un [] [L12478-51X546X5(Jul] [] [] [] [] [12190802053800 0BX 11 [ct 5773 - 7C-onditions tested for in this memborn screening study [dentifier] in Dried blood spot"un [] [L12478-51X546X5(Jul] [] [] [] [] [12190802053800 0BX 15 [ct 5773 - 7C-onditions tested for in this memborn screening study [dentifier] in Dried blood spot"un [] [L12478-51X546X5(Jul] [] [] [] [] [12190802053800 0BX 15 [ct 5773 - 7C-onditions tested for in this memborn screening study [dentifier] in Dried blood spot"un [] [L12478-51X546X5(Jul] [] [] [] [] [] [2190802053800 0BX 15 [ct 5773 - 7C-onditions tested for in this memborn screening study [dentifier] in Dried blood spot"un [] [L12485-11X5(Jul] [] [] [] [] [] [] [] [] [] [] [] [] []</pre>	08X10/CE/57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN/3/LA25797-4/S/LN/1/N/1/F/1/20190802053800
<pre>logK j2[c] 5773-7/Conditions tested for in this newborn screening study [Identifier] in Dried blocd spot*[Is][c] 124248-7/S, 398(A,S,LUH [IN] [F] [2199802053800 (BK j12[c] 5773-7/Conditions tested for in this newborn screening study [Identifier] in Dried blocd spot*[IN][c] L12424-7,S/S, AMG(S,LUH [IN] [F] [2199802053800 (BK j15[c] 5773-7/Conditions tested for in this newborn screening study [Identifier] in Dried blocd spot*[IN][c] L12424-7,S/S, AMG(S,LUH [IN] [F] [2199802053800 (BK j15[c] 5773-7/Conditions tested for in this newborn screening study [Identifier] in Dried blocd spot*[IN][L12424-7,S/S, AMG(S,LUT T,S/LH [IN] [F] [2199802053800 (BK j16[c] 5773-7/Conditions tested for in this newborn screening study [Identifier] in Dried blocd spot*[IN][L124243-7,S/S, AL (S,LUH [IN] [F] [2199802053800 (BK j10[c] 5773-7/Conditions tested for in this newborn screening study [Identifier] in Dried blocd spot*[IN][L124243-7,S/S, AL (S,LUH [IN] [F] [2199802053800 (BK j21[c] 5773-7/Conditions tested for in this newborn screening study [Identifier] in Dried blocd spot*[IN][L124243-7,S/S, AL (S,LUH [IN] [F] [2199802053800 (BK j21[c] 5773-7/Conditions tested for in this newborn screening study [Identifier] in Dried blocd spot*[IN][L124243-7,S/S, AL (S,LUH [IN] [F] [2199802053800 (BK j21[c] 5773-7/Conditions tested for in this newborn screening study [Identifier] in Dried blocd spot*[IN][L12429-7,S/KM-(S,LUH [IN] [F] [2199802053800 (BK j21[c] 5773-7/Conditions tested for in this newborn screening study [Identifier] in Dried blocd spot*[IN][L124297-7,S/KM-(S,LUH [IN] [F] [2199802053800 (BK j21[c] 5773-7/Conditions tested for in this newborn screening study [Identifier] in Dried blocd spot*[IN][L12497-7,S/KM-(S,LUH [IN] [F] [2199802053800 (BK j21[c] 5773-7/Conditions tested for in this newborn screening study [Identifier] in Dried blocd spot*[IN][L12497-7,S/KM-(S,LUH [IN] [F] [2199802053800 (BK j21[c] 5773-7/Conditions tested for in this newborn screening study [Identifier] in Dried blocd spot*[IN][L12497-7,S/KM-(S,LUH [IN]</pre>	
<pre>deX lic E 57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*!N[6][L12469-5(\$\5-SU05\SUN[]][N][1][F][1][20190802653800 06K lis (E 57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*!N[8][L12482-8(\$\CTT-11\SUN[]][N][1][F][1][20190802653800 06K lis (E 57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*!N[8][L12482-8(\$\CTT-11\SUN[]][N][1][F][1][20190802653800 06K lis (E 57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*!N[8][L12482-8(\$\SUT-11\SUN[]][N][1][F][1][20190802653800 06K lis (E 57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*!N[8][L124285-1\S\CPT-11\SUN[]][N][1][F][1][20190802653800 06K lis (E 57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*!N[8][L124283-3(\$\SUR41\SUN[]][N][1][F][1][20190802653800 06K lis (E 57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*!N[8][L124283-4(\$\SUR41\SUN[]][N][1][F][1][20190802653800 06K lis (E 57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*!N[18][L124287-4(\$\SUR41\SUN[]][N][1][F][1][20190802653800 06K lis (E 57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*!N[18][L12487-4(\$\SUR41\SUN[]][N][1][F][1][20190802653800 06K lis (E 57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*!N[18][L12487-4(\$\SUR41\SUN[]][N][1][F][1][20190802653800 06K lis (E 57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*!N[18][L12487-4(\$\SUK40\SUN[]][N][1][F][1][20190802653800 06K lis (E 57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*!N[18][L12487-4(\$\SUK40\SUN[]][N][1][F][1][20190802653800 06K lis (E 57719-7*Conditions tested for in this newborn screening study</pre>	
<pre>logK jaic [5779-7/Conditions tested for in this newborn screening study [Identifier] in Dreba blood spot(!N 2 Lal2470-5\S\ARG(S\LN N F 20190802053800 GWK jaic [5779-7/Conditions tested for in this newborn screening study [Identifier] in Dreba blood spot(!N 8 Lal2483-6\S\CTT_I\S\LN N F 20190802053800 GWK jaic [5779-7/Conditions tested for in this newborn screening study [Identifier] in Dreba blood spot(!N 8 Lal2483-6\S\CTT_I\S\LN N F 20190802053800 GWK jaic [5779-7/Conditions tested for in this newborn screening study [Identifier] in Dreba blood spot(!N 8 Lal2483-6\S\CTT_I\S\LN N F 20190802053800 GWK jaic [5779-7/Conditions tested for in this newborn screening study [Identifier] in Dreba blood spot(!N 8 Lal2485-6\S\CHT_S\S\LN N 20190802053800 GWK jaic [5779-7/Conditions tested for in this newborn screening study [Identifier] in Dreba blood spot(!N 8 Lal2485-6\S\CHT_S\S\LN N 20190802053800 GWK jaic [5779-7/Conditions tested for in this newborn screening study [Identifier] in Dreba blood spot(!N 8 Lal2495-6\S\CHT_S\S\LN N 20190802053800 GWK jaic [5779-7/Conditions tested for in this newborn screening study [Identifier] in Dreba blood spot(!N 8 Lal2495-6\S\CHT_S\S\LN N 20190802053800 GWK jaic [5779-7/Conditions tested for in this newborn screening study [Identifier] in Dreba blood spot(!N 8 Lal2495-7\S\CHCAVS\S\LN N 20190802053800 GWK jaic [5779-7/Conditions tested for in this newborn screening study [Identifier] in Dreba blood spot(!N 8 Lal2485-6\S\CHCA\S\LN N 20190802053800 GWK jaic [5779-7/Conditions tested for in this newborn screening study [Identifier] in Dreba blood spot(!N 8 Lal2485-6\S\CHCA\S\LN N 20190802053800 GWK jaic [5779-7/Conditions tested for in this newborn screening study [Identifier] in Dreba blood spot(!N 8 Lal2485-6\S\CHCA\S\LN N </pre>	
<pre>lext lpic(E j7719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*UN [B Lul2482-HS/LTT-TLS/LN 21]090802053080 (BKI lpic(E j7719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*UN [B Lul2485-HS/LTT-TLS/LN 21]090802053080 (BKI lpic(E j7719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*UN [B Lul2485-HS/LTT-TLS/LN 21]090802053080 (BKI lpic(E j7719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*UN [I Lul2485-HS/LTT-LS/LN 21]090802053080 (BKI lpic(E j7719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*UN [I Lu12476-S/S/HH*/S/LN 21]090802053080 (BKI lpic(E j7719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*UN [I Lu12497-6/S/HH*/S/LN 21]090802053080 (BKI lpic(E j7719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*UN [I Lu12497-6/S/HH*/S/LN 21090802053080 (BKI lpic(E j7719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*UN [I Lu12497-6/S/HH*/S/LN 21090802053080 (BKI lpic(E j7719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*UN [I Lu12497-6/S/HH*/S/LN 21090802053080 (BKI lpic(E j7719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*UN [I Lu12498-8/S/KAD/LS/LN 21090802053080 (BKI lpic(E j7719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*UN [I Lu12498-8/S/KAD/LS/LN 21090802053080 (BKI lpic(E j7719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*UN [I Lu12498-8/S/KAD/LS/LN </pre>	
<pre>lext lc(E)7719-7/conditions tested for in this newborn screening study [Identifier] in Dried blood sport/N 9 L42483-fS(S(T-TI-S(N)N N F 20190802053800 (DKX 13(E)7719-7/conditions tested for in this newborn screening study [Identifier] in Dried blood sport/N 10 L42485-1S(S(T-TI-S(N)N N F 20190802053800 (DKX 13(E)7719-7/conditions tested for in this newborn screening study [Identifier] in Dried blood sport/N 10 L42485-1S(S(T-TI-S(N)N N F 20190802053800 (DKX 12(E)7719-7/conditions tested for in this newborn screening study [Identifier] in Dried blood sport/N 11]L412495-S(S(X-T-S(N)N N F 20190802053800 (DKX 12(E)7719-7/conditions tested for in this newborn screening study [Identifier] in Dried blood sport/N 10 L4249-S(S(N+M)N(N) N F 20190802053800 (DKX 12(E)7719-7/conditions tested for in this newborn screening study [Identifier] in Dried blood sport/N 11]L41249-S(S(N+M)N(N) N F 20190802053800 (DKX 12(E)7719-7/conditions tested for in this newborn screening study [Identifier] in Dried blood sport/N 10 L4289-S(S(N+N)N(N) N F 20190802053800 (DKX 12(E)7719-7/conditions tested for in this newborn screening study [Identifier] in Dried blood sport/N 10 L4289-S(S(N+N)N(N) N F 20190802053800 (DKX 12(E)7719-7/conditions tested for in this newborn screening study [Identifier] in Dried blood sport/N 10 L4258-S(S(N+N)S(N)N N F 20190802053800 (DKX 12(E)7719-7/conditions tested for in this newborn screening study [Identifier] in Dried blood sport/N 12 L42513-6(S(NKO)S(N N)] (DKX 13(E)57719-7/conditions tested for in this newborn screening study [Identifier] in Dried blood sport/N 12 L42513-S(S(NKO)S(N N)] (DKX 13(E)57719-7/conditions tested for in this newborn screening study [Identifier] in Dried blood sport/N 12 L42513-S(S(NKO)S(N)] (DKX 13(E)57719-7/conditions tested for in this newborn screening study [Identifier] in Dried blood sport/N 12 L42513-S(S(NKO)S(N)] (DKX 13(E)57719-7/conditions tested for in this newborn screening study [</pre>	
IOEX 12712-7:Conditions tested for in this newbom screening study Identifier In Dried blood sport/ll [1](L12485-1)S(CFT-14)S(LN][N][F][1] 20190802053800 IOEX 181C [57713-7:Conditions tested for in this newbom screening study Identifier_1 in Dried blood sport/ll [1](L12486-3)S(ScA-LS(LN][N][N][F][1] 20190802053800 IOEX 201C [57713-7:Conditions tested for in this newbom screening study Identifier_1 in Dried blood sport/ll [1](L1248-3-S)S(ScA-LS(LN][N][N][F][1] 20190802053800 IOEX 211C [57713-7:Conditions tested for in this newbom screening study Identifier_1 in Dried blood sport/ll [1](L1248-3-S)S(ScA-LS(LN][N][N][F][1] 20190802053800 IOEX 221C [57713-7:Conditions tested for in this newbom screening study Identifier_1 in Dried blood sport/ll [1](L1248-3-S)S(MA(S)NI[N][N][F][1] 20190802053800 IOEX 221C [57713-7:Conditions tested for in this newbom screening study Identifier_1 in Dried blood sport/ll [1](L12458-7-S)S(LANOS)NI[N][N][F][1] 20190802053800 IOEX 25C [57713-7:Conditions tested for in this newbom screening study Identifier_1 in Dried blood sport/ll [1](L1258-8-S)S(NLOS)NI[N][N][N][F][1] 20190802053800 IOEX 25C [57713-7:Conditions tested for in this newbom screening study Identifier_1 in Dried blood sport/ll [2](L1252-5-S)S(NLOS)NI[N][N][N][F][1] 20190802053800 IOEX 28C [57713-7:Conditions tested for in this newbom screening study Identifier_1 in Dried blood sport/ll [2](L1252-5-S)S(NLOS)NI[N][N][N][F][1] 20190802053800 IOEX 28C [57713-7:Conditions tested for in this newbom screening study Identifier_1 in Dried bl	OBX 15 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 8 LA12482-8\S\CIT-I\S\LN N F 20190802053800
<pre>lox laik [ci 5719-7/conditions tested for in this newborn screening study [Identifier] in Dried blood sprt'lli] [LA12946-915X(PT-ITIX)LII] [II] [20190802053800 00X19[Ci 57719-7/conditions tested for in this newborn screening study [Identifier] in Dried blood sprt'lli] [LA12947-5XX5(A-1XXLII] [III] [II] 20190802053800 00X12[Ci 57719-7/conditions tested for in this newborn screening study [Identifier] in Dried blood sprt'lli] [LA12947-5XX5(A-1XXLII] [III] [II] 20190802053800 00X12[Ci 57719-7/conditions tested for in this newborn screening study [Identifier] in Dried blood sprt'lli] [LA12947-5XX5(XAIX)[III] [III] [II] 20190802053800 00X12[Ci 57719-7/conditions tested for in this newborn screening study [Identifier] in Dried blood sprt'lli] [LA12947-XXX4X[XII] [III] [II] 20190802053800 00X12[Ci 57719-7/conditions tested for in this newborn screening study [Identifier] in Dried blood sprt'lli] [LA12958-XXX4X[XII] [III] [II] 20190802053800 00X12[Ci 57719-7/conditions tested for in this newborn screening study [Identifier] in Dried blood sprt'lli] [LA12958-XXX4X[XII] [III] [II] 20190802053800 00X12[Ci 57719-7/conditions tested for in this newborn screening study [Identifier] in Dried blood sprt'lli] [LA12958-XXX4X[XIII] [III] [II] 20190802053800 00X12[Ci 57719-7/conditions tested for in this newborn screening study [Identifier] in Dried blood sprt'lli] [LA12580-XXX40X[XXIII] [III] [II] [20190802053800 00X12[Ci 57719-7/conditions tested for in this newborn screening study [Identifier] in Dried blood sprt'lli] [LA12580-XXX40X[XXIII] [III] [II] [II] 20190802053800 00X13[Ci 57719-7/conditions tested for in this newborn screening study [Identifier] in Dried blood sprt'lli] [LA12580-XXX40X[XXIII] [III] [II] [II] 20190802053800 00X13[Ci 57719-7/conditions tested for in this newborn screening study [Identifier] in Dried blood sprt'lli] [LA12580-XXX40X[XXIII] [III] [II] [II] 20190802053800 00X13[Ci 57719-7/conditions tested for in this newborn screening study [Identifier] in Dried blood sprt'lli] [LA12580-XXX40X[XXIII] [I</pre>	OBX/16/CE/57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN/9/LA12483-6\S\CIT-II\S\LN/ /N/ /F/ /20190802053800
<pre>l08k1p1[E]57719-7*Conditions tested for in this newborm screening study [Identifier] in Dried blood sport/lN112/L42493-S/S(GA-1S(L) </pre>	08X[17]CE[57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 10 LA12485-1\S\CPT-Ia\S\LN 20190802053800
<pre>l08k1p1[E]57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood sport/lN112/L42493-S/S(Ad-1S(L) </pre>	
DBX 21 (21 57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blod spot*\N 13 L12495-0%S(A-2%S\U N F 20190802053800 DBX 21 (21 57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blod spot*\N 15 L12499-2\S\HMG\S\LN N F 20190802053800 DBX 22 (21 57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blod spot*\N 15 L124299-2\S\HMG\S\LN N F 20190802053800 DBX 24 (21 57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blod spot*\N 15 L124295-2\S\HMG\S\LN N F 20190802053800 DBX 26 (21 57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blod spot*\N 15 L12298-0\S\MAL\S\LN N F 20190802053800 DBX 26 (21 57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blod spot*\N 15 L12298-0\S\MAL\S\LN N F 20190802053800 DBX 28 (21 57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blod spot*\N 22 L12513-0\S\MSUNS\S\LN N 2190802053800 DBX 28 (21 57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blod spot*\N 22 L12513-0\S\MSUNS\S\LN N 21 208082053800 DBX 30 (21 57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blod spot*\N 22 L12513-0\S\MSUNS\S\LN N 21 208082053800 DBX 31 (21 57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blod spot*\N 22 L12513-0\S\MSUNS\S\LN N 21 208082053800 DBX 32 (21 57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blod sp	
DBX 12 [c] 57719-7^Conditions tested for in this newborn screening study [Identifier] In Dried blood spot*\N 15 L412497-C5\S\HMFNS\LN N [F1] [20190802053800 DBX 12 [c] 57719-7^Conditions tested for in this newborn screening study [Identifier] In Dried blood spot*\N 15 L412585-C5\S\TVAS\LN N [F1] [20190802053800 DBX 12 [c] 57719-7^Conditions tested for in this newborn screening study [Identifier] In Dried blood spot*\N 15 L412586-C5\S\TVAS\LN N [F1] [20190802053800 DBX 12 [c] 57719-7^Conditions tested for in this newborn screening study [Identifier] In Dried blood spot*\N 15 L412586-C5\S\TVAS\LS\LN N [F1] [20190802053800 DBX 12 [c] 57719-7^Conditions tested for in this newborn screening study [Identifier] In Dried blood spot*\N 12 L412586-C5\S\TVAS\LS\LN N [F1] [20190802053800 DBX 12 [c] 57719-7^Conditions tested for in this newborn screening study [Identifier] In Dried blood spot*\N 22 L412512-C5\S\WFICS\LN N [F1] [20190802053800 DBX 29 [c] 57719-7^Conditions tested for in this newborn screening study [Identifier] In Dried blood spot*\N 22 L412512-C5\S\WFICS\LN N [F1] [20190802053800 DBX 31 [c] 57719-7^Conditions tested for in this newborn screening study [Identifier] In Dried blood spot*\N 22 L41251-C5\S\WFICS\LN N [F1] [20190802053800 DBX 31 [c] 57719-7^Conditions tested for in this newborn screening study [Identifier] In Dried blood spot*\N 22 L41251-S\S\WFICS\LN N [F1] [20190802053800 DBX 31 [c] 57719-7^Conditions testest for in this newborn screening study [
DBX 121 [c157719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*\\ 141259-2\S\HKG\S\L\ [21]20190802053800 DBX 123 [c157719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*\\ 141259-2\S\LCHAD\S\L\ \ 21]20190802053800 DBX 124 [c157719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*\\ 1412598-2\S\HKG\S\L\ \ 21]20190802053800 DBX 126 [c157719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*\\ 1412598-8\S\HKG\S\L\ \ 21]20190802053800 DBX 126 [c157719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*\\ 1412598-8\S\HKG\S\L\ \ 21]20190802053800 DBX 126 [c157719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*\\ 1412512-3\S\HKG\S\L\ \ 21]20190802053800 DBX 126 [c157719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*\\ 21 La12513-3\S\HKG\S\L\ \ 21]20190802053800 DBX 126 [c157719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*\ 21 La12513-3\S\HKG\S\L\ \ 21]20190802053800 DBX 126 [c157719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*\ 21 La1252-3\S\HKG\S\L\ 21]20190802053800 DBX 126 [c157719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*\ 21 La1252-4.S\S\HKG\S\L\ 21]20190802053800 DBX 126 [c157719-7^Conditions tested for in this newborn s	
DBX [2] [C[57719-7^Conditions tested for in this newborn screening study Identifier in Dried blood spot*[N] [2] [Al2596-6(S)[NA(S)[N]] [N] [F] [20190802053800 DBX [24 [CE 57719-7^Conditions tested for in this newborn screening study Identifier in Dried blood spot*[N] [2] [Al2596-8(S)[NA(S)[N]] [N] [F] [20190802053800 DBX [25 [CE 57719-7^Conditions tested for in this newborn screening study Identifier in Dried blood spot*[N] [2] [Al2596-8(S)[NA(S)[N]] [N] [F] [20190802053800 DBX [27 [CE 57719-7^Conditions tested for in this newborn screening study Identifier in Dried blood spot*[N] [2] [Al2596-8(S)[NC(S)[N]] [N] [F] [20190802053800 DBX [27 [CE 57719-7^Conditions tested for in this newborn screening study Identifier] in Dried blood spot*[N] [2] [Al2516-6(S)[NC(S)[N]] [N] [F] [20190802053800 DBX [29 [CE 57719-7^Conditions tested for in this newborn screening study Identifier] in Dried blood spot*[N] [2] [Al2526-5(S)[N(K](S)[N]] [N] [F] [20190802053800 DBX [29 [CE 57719-7^Conditions tested for in this newborn screening study Identifier] in Dried blood spot*[N] [2] [Al2526-5(S)[N(K](S)[N]] [N] [F] [20190802053800 DBX [32 [CE 57719-7^Conditions tested for in this newborn screening study Identifier] in Dried blood spot*[N] [2] [Al2526-5(S)[N(K](S)[N] [N] [F] [20190802053800 DBX [32 [CE 57719-7^Conditions tested for in this newborn screening study Identifier] in Dried blood spot*[N] [2] [Al2526-5(S)[N(K](S)[N] [N] [F] [20190802053800 DBX [33 [CE 57719-7^Conditions tested for in this newborn scree	
0BX [24] (E[57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*\N[17] [A12507-2\S\L(CHAD\S\N] N F 20190802053800 0BX [25] (E[57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*\N[19] [A12508-8\S\MCAD\S\N] N F 20190802053800 0BX [26] (E[57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*\N[20] [A12510-6\S\WCD\S\N] N F 20190802053800 0BX [26] (E[57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*\N[20] [A12510-6\S\WCD\S\N] N F 20190802053800 0BX [26] (E[57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*\N[22] [A12516-3\S\WKH6\S\N] N F [20190802053800 0BX [26] (E[57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*\N[22] [A12516-3\S\WKH6\S\N N N F [20190802053800 0BX [31] (E[57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*\N[22] [A12521-3\S\PRO T\S\N N N F [20190802053800 0BX [31] (E[57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*\N[25] [A12521-3\S\PRO T\S\N N N F [20190802053800 0BX [32] (E[57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*\N[25] [A12528-6\S\TYNF.7*CN\N] N F [20190802053800 0BX [32] (E[57719-7*Conditions tested for in this newborn screening study [Identifier] in Dried blood spot*\N[25] [A12528-6\S\TYNF.7*(SNC1\S\N] N F [20190802053800 0BX [35] (E[57719-7*Conditions tested for in this newb	
08x125[CE[57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN119[LA12508-05\SWAL\S\LN N F 2198882053800 08x126[CE[57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN126[LA12510-6\S\WACD\S\LN N F 2198882053800 08x127[CE[57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN126[LA12510-6\S\WACD\S\LN N F 2198882053800 08x128[CE[57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN126[LA12510-4\S\WACD\S\LN N F 2198882053800 08x130[CE[57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN126[LA12510-4\S\WACD\S\LN N F 2198882053800 08x131[CE[57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN126[LA1251-3\S\WACD\S\LN N F 2198882053800 08x131[CE[57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN126[LA12521-3\S\S\PK01\S\LN N F 2199882053800 08x131[CE[57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN125[LA12521-3\S\PK01\S\LN N F 2199882053800 08x133[CE[57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN125[LA12521-3\S\PK01\S\LN N 219882053800 08x133[CE[57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN125[LA12521-3\S\PK01\S\LN N 219882053800 08x130[CE[57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN125[LA12521-3\S\PK	OBX/23/CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN/16/LA12505-6/S/IVA/S/LN/ /N/ /F/ /20190802053800
OBX [25] (E5] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^\ll [2] Ld12509-8\S\MCAD\S\Ll\ N F 20190802053800 OBX [27] (E5] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^\ll [2] Ld12512-2\S\MET\S\Ll\ N F 20190802053800 OBX [28] (E5] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^\ll [2] Ld12513-9\S\MSUD\S\LN N F 20190802053800 OBX [30] (E5] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^\ll [2] Ld12513-9\S\MSUD\S\LN N F 20190802053800 OBX [31] (E5] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^\ll [2] Ld12513-3\S\MKHG\S\LN N F 20190802053800 OBX [31] (E5] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^\ll [2] Ld12521-3\S\FKV\S\LN N F 20190802053800 OBX [31] (E5] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^\ll [2] Ld12521-3\S\FKV\S\LN N F 20190802053800 OBX [33] (E5] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^\ll [2] Ld12528-4\S\FYR-1\S\LL N F 20190802053800 OBX [33] (E5] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^\ll [2] Ld12529-6\S\TYR-1\S\LL N N F 20190802053800 OBX [33] (E5] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^\ll [2] Ld1253-4\S\LLA12530-4\S\LLN N F 20190802053800 OBX [33] (E5] 57719-7^Condition	08X/24/CE/57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN/17/LA12507-2\S\LCHAD\S\LN N F 20190802053800
OBX [25] (E5] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^\ll [2] Ld12509-8\S\MCAD\S\Ll\ N F 20190802053800 OBX [27] (E5] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^\ll [2] Ld12512-2\S\MET\S\Ll\ N F 20190802053800 OBX [28] (E5] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^\ll [2] Ld12513-9\S\MSUD\S\LN N F 20190802053800 OBX [30] (E5] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^\ll [2] Ld12513-9\S\MSUD\S\LN N F 20190802053800 OBX [31] (E5] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^\ll [2] Ld12513-3\S\MKHG\S\LN N F 20190802053800 OBX [31] (E5] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^\ll [2] Ld12521-3\S\FKV\S\LN N F 20190802053800 OBX [31] (E5] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^\ll [2] Ld12521-3\S\FKV\S\LN N F 20190802053800 OBX [33] (E5] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^\ll [2] Ld12528-4\S\FYR-1\S\LL N F 20190802053800 OBX [33] (E5] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^\ll [2] Ld12529-6\S\TYR-1\S\LL N N F 20190802053800 OBX [33] (E5] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^\ll [2] Ld1253-4\S\LLA12530-4\S\LLN N F 20190802053800 OBX [33] (E5] 57719-7^Condition	08X1251CE157719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN181L412508-0/S\MAL\S\LN1181L415508-0/S\MAL\S\LN1181L412508-0/S\MAL\S\LN1181L412508-0/S\MAL\S\LN1181L412508-0/S\MAL\S\LN1181L412508-0/S\MAL\S\LN1181L412508-0/S\MAL\S\LN1181L412508-0/S\MAL\S\LN1181L412508-0/S\MAL\S\LN1181L412508-0/S\MAL\S\LN1181L412508-0/S\MAL\S\LN1181L415508-0/S\MAL\S\LN1181L412508-0/S\MAL\S\LN1181L412508-0/S\MAL\S\LN1181L412508-0/S\MAL\S\LN1181L412508-0/S\MAL\S\LN1181L412508-0/S\MAL\S\LN1181L412508-0/S\MAL\S\LN1181L412508-0/S\MAL\S\LN1181L412508-0/S\MAL\S\LN1181L412508-0/S\MAL\S\LN1181L41508-0/S\MAL\S\LN1181L41508-0/S\MAL\S\LN1181L41508-0/S\MAL\S\LN1181L41508-0/S\MAL\S\LN1181L41508-0/S\MAL\S\LN1181L41508-0/S\MAL\S\LN1181L41508-0/S\MAL\S\LN1181L41508-0/S\LN1181L41508-0/S\LN1181L41508-0/S\LN1181L41508-0/S\LN1181L41508-0/S\LN1181L41508-0/S\LN1181L41508-0/S\LN1181L41508-0/S\LN1181L41508-0/S\LN1181L41508-0/S\LN1181L
OBX [27] (EE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lll [21 [L12513-05]KND(5]KLN] [N] [F] [120190802053800 OBX [28] (EE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lll [21 [L12513-05]KND(5]KLN] [N] [F] [120190802053800 OBX [29] (EE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lll [21 [L12513-05]KND(5]KLN] [N] [F] [120190802053800 OBX [30] (EE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lll [21 [L12523-15]KNB(5]KLN] [N] [F] [120190802053800 OBX [32] (EE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lll [21 [L12526-3]KNB(5]KN] [N] [N] [F] [120190802053800 OBX [32] (EE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lll [21 [L12526-3]KNB(5]KN] [N] [N] [F] [120190802053800 OBX [33] (EE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lll [21 [L12526-3]KNB(5]KN] [N] [N] [F] [120190802053800 OBX [33] (EE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lll [21 [L12526-3]KNB(5]KN] [N] [N] [F] [120190802053800 OBX [32] (EE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lll [21 [L12527-0]KNCIN] [N] [N] [F] [120190802053800 OBX [36] (EE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lll [21 [L12537-0]KCIN] [N] [N] [F] [120190802053800 OBX [33] (EE [57719-7^Conditio	
OBX [28] CE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^NN [21] LA12513-0\S\VMSUD\S\LN N F [20190802053800 OBX [30] CE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^NN [21] LA12513-0\S\VMSUD\S\LN N F [20190802053800 OBX [30] CE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^NN [21] LA12516-3\S\VMSUD\S\LN N F [20190802053800 OBX [31] CE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^NN [21] LA12516-3\S\VMSUD\S\LN N F [20190802053800 OBX [32] CE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^NN [25] LA12521-3\S\VPRO I\S\LN N F [20190802053800 OBX [32] CE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^NN [25] LA12528-13\S\VPRO I\S\LN N F [20190802053800 OBX [33] CE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^NN [25] LA12528-12\S\VVLCAD\S\LN N F [20190802053800 OBX [35] CE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^NN [28] LA12533-2\S\VLCAD\S\LN N F [20190802053800 OBX [36] CE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^NN [28] LA1253-2\S\VLCAD\S\LN N F [20190802053800 OBX [36] CE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^NN [38] LA12563-8\S\CAN\S\LN N F [20190802053800 OBX [36]	
08X [29] (E] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN [22] (L12513-0\S/VKHG\S/LN] N F [20190802053800 08X [30] (E] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN [24] (L12526-15/S/KH(S\LN) N F [20190802053800 08X [31] (E] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN [24] (L12526-15/S/KH(S\LN) N F [20190802053800 08X [31] (E] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN [25] (L12521-3\S/PR0 IS\LN) N F [20190802053800 08X [31] (E] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN [25] (L12523-6\S\TYR-1IS\LN N F [20190802053800 08X [32] (E] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN [27] (L12529-6\S\TYR-1IS\LN N F [20190802053800 08X [33] (E] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN [21] (L1253-4\S\SUNS\SUNS\SUNS\SUNS\SUNS N F [20190802053800 08X [33] (E] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN [21] (L1253-4\S\SUNS\SUNS\SUNS\SUNS\SUNS N [20190802053800 08X [33] (E] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN [21] (L1253-7-5\S\SUNS\SUNS\SUNS N [20190802053800 08X [33] (E] 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN [31] (L12537-5\S\SUNS(SUN) N [20190802053800 <td></td>	
OBX 30 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 2] LA12516-3\S\NKHG\S\LN N F 20190802053800 OBX 30 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 2] LA12521-3\S\PRO LS\LN N F 20190802053800 OBX 31 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 2] LA12521-3\S\PRO LS\LN N F 20190802053800 OBX 32 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 2] LA12521-3\S\PRO LS\LN N F 20190802053800 OBX 34 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 2] LA12523-3\S\PKU\S\LN N F 20190802053800 OBX 36 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 2] LA12531-2\S\PKU\LCAD\S\LN N F 20190802053800 OBX 36 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 2] LA12531-2\S\PKU\LCAD\S\LN N F 20190802053800 OBX 36 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 3 LA12533-8\S\CAH\S\LN N F 20190802053800 OBX 36 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 3 LA1253-8\S\CAH\S\LN N F 20190802053800 OBX 36 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 3 LA12543-7\S\CAH\S\LN N F 20190802053800 OBX 36 CE 57719-7^Conditions tested	
OBX 31 (CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN 24 [LA12520-5\5\5\PKU\\$\LN M F 20190802053800 OBX 33 (CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN 26 [LA12528 - 1\5\5\PKU\\$\LN M F 20190802053800 OBX 33 (CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN 26 [LA12528 - 1\5\5\PKU\\$\5\7\FR-1\5\LN M F 20190802053800 OBX 33 (CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN 26 [LA12528 - 5\5\7\FR-1\5\LN M F 20190802053800 OBX 33 (CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN 26 [LA12528 - 5\5\7\FR-1\5\LN M F 20190802053800 OBX 33 (CE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN 26 [LA12528 - 5\5\F\S\LN M F 20190802053800 OBX 33 (CE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN 26 [LA12528 - 5\5\F\S\LN M F 20190802053800 OBX 38 (CE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN 30 [LA12533-8\5\CAH\5\LN M F 20190802053800 OBX 38 (CE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN 31 [LA12537-9\5\CAH\5\LN M F 20190802053800 OBX 38 (CE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN 31 [LA12537-9\5\CAH\5\5\LN M F 20190802053800 OBX 43 (CE [57719-7^Conditions tested for in this newborn scr	
OBX [32] (EE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN [25] LA12521-3\S\PR0 I\S\Lil M F [20190802053800 OBX [33] (EE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN [27] LA12528-8\S\TYR-1I\S\LN M F [20190802053800 OBX [34] (EE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN [27] LA12529-6\S\TYR-1I\S\LN M F [20190802053800 OBX [34] (EE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN [28] LA12531-2\S\ULCAUS\LN M F [20190802053800 OBX [35] (EE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN [28] LA12531-2\S\ULCAUS\LN M F [20190802053800 OBX [37] (EE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN [28] LA12533-8\S\LN M F [20190802053800 OBX [37] (EE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN [30] LA12533-8\S\LN M N F [20190802053800 OBX [38] (EE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN [31] LA125437-9\S\CF(S\LN M F [20190802053800 OBX [38] (EE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN [31] LA125437-9\S\CF(S\LN M F [20190802053800 OBX [38] (EE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN [31] LA125437-9\S\CF(S\LN M F [20190802053800 OBX [41] (EE [57719-7^Conditions tested	OBX 30 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 23 LA12516-3\S\NKHG\S\LN N F 20190802053800
OBX 33]CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 26 LA12528-8\S\TYR-1\S\LN N F 20190802053800 OBX 33]CE[57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 26 LA12531-2\S\LNN LN N F 20190802053800 OBX 35]CE[57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 26 LA12531-2\S\LNL0511-2\S\LNN N F 20190802053800 OBX 36[CE[57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 26 LA12531-2\S\LNL051-2\S\S\LNL051-2\S\S\LNL0511-2\S\LNL0511-2\S\LNL0511-2\S	0BX/31/CE/57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN/24/LA12520-5/S/PKU/S/LN/ /N/ /F/ /20190802053800
OBX 33]CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 26 LA12528-8\S\TYR-1\S\LN N F 20190802053800 OBX 33]CE[57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 26 LA12531-2\S\LNN LN N F 20190802053800 OBX 35]CE[57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 26 LA12531-2\S\LNL0511-2\S\LNN N F 20190802053800 OBX 36[CE[57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 26 LA12531-2\S\LNL051-2\S\S\LNL051-2\S\S\LNL0511-2\S\LNL0511-2\S\LNL0511-2\S	08X/32/CE157719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN/25/LA12521-3/S/PRO I/S/LN//////////////////////////////////
OBX 34 (CE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^NN 28 [L12742529-6\\$\TYR-II\\$\LNN N F 20190802053800 OBX 33 (CE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^NN 28 [L12523-0\\$\S\TVR-II\\$\LNN N F 20190802053800 OBX 33 (CE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^NN 28 [L12532-0\\$\S\UNCAD\\$\S\UN N F 20190802053800 OBX 36 (CE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^NN 39 [L12532-0\\$\S\UNCAD\\$\S\UN N F 20190802053800 OBX 38 (CE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^NN 39 [L12537-9\\$\S\CFN\$\LNN N F 20190802053800 OBX 38 (CE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^NN 31 [L12537-9\\$\S\CFN\$\LNN N F 20190802053800 OBX 38 (CE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^NN 31 [L12547-7\\$\S\LNN N F 20190802053800 OBX [40 (CE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^NN 31 [L1256-8\\$\S\SCID\\$\NN N F 20190802053800 OBX [41 (CE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^NN 31 [L12576-7\\$\SCAD or EMA or IBG or GA-2 (MADD) \S\LN N F 20190802053800 OBX [41 (CE [57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^NN 31 [L12576-7\\$\SCAD or EMA or IBG or GA-2 (MADD) \S\LN N F 20190802053800 OBX [41 (CE [5	
OBX 35 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 28 LA12531-2\5\VLCAD\5\LN N F 20190802053800 OBX 35 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 29 LA12532-0\5\LN N F 20190802053800 OBX 37 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 30 LA12533-8\5\CAH\5\LN N F 20190802053800 OBX 35 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 30 LA12533-8\5\CAH\5\LN N F 20190802053800 OBX 38 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 30 LA12537-9\5\CF\5\LN N F 20190802053800 OBX 39 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 32 LA12543-7\5\GALT\5\LN N F 20190802053800 OBX 40 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 32 LA12566-8\5\CID\5\LN N F 20190802053800 OBX 40 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 32 LA12567-7\5\5CAD or ENA or IBG or GA-2 (MADO)\5\LN N F 20190802053800 OBX 42 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 33 LA12566-8\5CID\5\LN N N F 20190802053800 OBX 42 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 34 LA12576-7\5\5CAD or ENA or IBG or GA-2 (MADO)\5\LN N F 20190802053800 OBX 42 CE 57719-7^Conditions tested for in this newborn screening study	
OBX 36 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 29 LA12532-0\5\BIO\\$\LN N F 20190802053800 OBX 36 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 30 LA12533-8\5\CAN\5\LN N F 120190802053800 OBX 38 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 30 LA12533-8\5\CAN\5\CF\5\LN N F 120190802053800 OBX 38 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 32 LA12537-0\5\CAN\5\CF\5\LN N F 120190802053800 OBX 39 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 32 LA12543-7\5\GALT\5\LN N F 20190802053800 OBX 40 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 33 LA12566-8\5\SCID\5\LN N F 20190802053800 OBX 41 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 33 LA12566-8\5\SCID\5\LN N F 20190802053800 OBX 41 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 34 LA12576-7\5\SCAD or EMA or IBG or GA-2 (MADD)\5\LN N F 20190802053800 OBX 42 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 34 LA12576-7\5\5\LAN or EMA or IBG or GA-2 (MADD)\5\LN N F 20190802053800	
OBX 37 CE[57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN 39 L412533-8\S\CAH\S\LN N F 20190802053800 OBX 38 CE[57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN 31 L412537-9\S\CF\S\LN N F 20190802053800 OBX 39 CE[57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN 32 L412543-7\S\GALT\S\LN N F 20190802053800 OBX 39 CE[57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN 33 L412566-8\S\SCID\S\LN N F 20190802053800 OBX 49 CE[57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN 33 L412567-7\S\SCAD or EMA or IBG or GA-2 (MADD)\S\LN N F 20190802053800 OBX 42 CE[57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN 34 L412576-7\S\SCAD or EMA or IBG or GA-2 (MADD)\S\LN N F 20190802053800 OBX 42 CE[57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN 34 L412576-7\S\SCAD or EMA or IBG or GA-2 (MADD)\S\LN N F 20190802053800	
08X 38 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 31 LA12537-9\S\CF\S\LN N F 20190802053800 08X 39 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 32 LA12543-7\S\LN N F 20190802053800 08X 40 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 34 LA12567-S\S\LN N F 20190802053800 08X 40 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 34 LA12576-Y\S\LN N F 20190802053800 08X 42 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 34 LA12576-S\S\LPM or IBG or GA-2 (MADO)\S\LN N F 20190802053800 08X 42 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 34 LA12576-S\S\Lemoglobinopathies\S\LN N F 20190802053800	
08X 39 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 32 LA12543-7\S\GALT\S\LN N F 20190802053800 (08X 49 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 33 LA12566-8\S\SCID\S\LN N F 20190802053800 (08X 41 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 34 LA12576-7\S\SCAD or EMA or IBG or GA-2 (MAD)\S\LN N F 20190802053800 (08X 42 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 34 LA12576-7\S\StemogIbbinopathies\S\LN N F 20190802053800	
OBX 49[CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN 33 LA12566-8\5\5CTD\5\LN N F 20190802053800 OBX 41 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN 34 LA12576-7\5\5CAD or EMA or IBG or GA-2 (MADD)\5\LN N F 20190802053800 OBX 42 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN 35 LA16207-5\5\Hemoglabbinopathies\5\LN N F 20190802053800	0BX 38 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 31 LA12537-9\S\CF\S\LN N F 20190802053800
OBX 49[CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN 33 LA12566-8\5\5CTD\5\LN N F 20190802053800 OBX 41 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN 34 LA12576-7\5\5CAD or EMA or IBG or GA-2 (MADD)\5\LN N F 20190802053800 OBX 42 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^lN 35 LA16207-5\5\Hemoglabbinopathies\5\LN N F 20190802053800	08X/39/CE/57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN/32/LA12543-7\S\GALT\S\LN N F 20190802053800
08X 41 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 34 LA12576-7\S\SCAD or EMA or IBG or GA-2 (MADD)\S\LN N F 20190802053800 08X 42 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 35 LA16207-5\S\Hemoglobinopathies\S\LN N F 20190802053800	
08X 42 CE 57719-7^Conditions tested for in this newborn screening study [Identifier] in Dried blood spot^LN 35 LA16207-5\S\Hemoglobinopathies\S\LN N F 20190802053800	
NDV143/LT13//13-// CONDITIONS TESTED TOF IN THIS NEWDORN SCREENING STUDY [Identifier] IN Unled Diood spot"LN[36]39/1/-3/5/Hypothyrolalsm/5/L N F /2019080203800	
	Upp/43/Lt/5//19-/"Conditions tested for in this newborn screening study [identifier] in Uried blood spot"LN/36/99/1/-3/5/Hypothyroidism/5/L N + 20390802053800



Below is a sample HL7 message for SIS GDSP newborn screening initial negative test results

0BR|3|4012149713^FormNumber||57717-1^Newborn screen card data panel|||201907231026|||||||||||||||||||20190802053800|||F OBX|1|ST|57716-3^State printed on filter paper card [Identifier] in NBS card^LN|1|CA|||N|||F||20190802053800 OBX 2 NM 8339-4^Birthweight^LN 1 3035 grams N | | | F | 20190802053800 OBX|3|TM|57715-5^Time of birth^LN|1|1026|||N|||F|||20190802053800 0BX|4|CE|57722-1^Birth plurality of Pregnancy^LN|1|LA12411-7\S\Singleton\S\LN|||N|||F|||20190802053800 OBX[5]NM[73806-2^Newborn age in hours^LN]1]24|hour(s)||N|||F|||20190802053800 OBX|6|CE|57713-0^Infant NICU factors that affect newborn screening interpretation^LN|1|LA137-2\S\None\S\LN|||N|||F|||20190802053800 0BX|7|CE|67704-7^Feeding types^LN|1|LA16914-6\S\Breast milk\S\LN||N||F|||20190802053800 OBX 8 CE 67704-7^Feeding types^LN 2 LA16915-3\S\Lactose formula\S\LN||N||F||20190802053800 OBX|9|CE|67704-7^Feeding types^LN|3|LA46-8\S\Other\S\LN|||N|||F|||20190802053800 0BX|10|CE|67704-7^Feeding types^LN|4|LA12418-2\S\TPN\S\LN|||N|||F|||20190802053800 0BX|11|TX|^^^99717-5^Accession Number^L|1|205-63-401/21-2019-12|||N|||F|||20190802053800 0BX/12/TX/62324-9^Post-discharge provider name^LN/1/Rebecca Colin///N//F//20190802053800 0BX|13|TX|62327-2^Post-discharge provider practice address^LN|1|ROC 772RD ETAROP PALO ALTO CA 99999-9999 USA|||N|||F|||20190802053800 OBR|4|4012149713^FormNumber||57794-0^Newborn screening test results panel in Dried blood spot|||201907231026||||||||||||||||20190802053800|||F OBR|5|4012149713^FormNumber||53261-4^Amino acid newborn screen panel|||201907231026|||||||||||||||||20190802053800|||F OBX|1|NM|47633-3^Glycine [Moles/volume] in Dried blood spot^LN|1|0.5|µmol/L||N|||F|||20190802053800 OBX|2|NM|53150-9^Alanine+Beta Alanine+Sarcosine [Moles/volume] in Dried blood spot^LN|1|500|µmol/L|<1000|N||F|||20190802053800 OBX|3|NM|47799-2^Valine [Moles/volume] in Dried blood spot^LN|1|0.5|µmol/L||N|||F|||20190802053800 OBX|4|NM|53151-7^Valine/Phenylalanine [Molar ratio] in Dried blood spot^LN|1|0.00645|{Ratio}|<3.5|N||F|||20190802053800 OBX|5|NM|53152-5^Alloisoleucine+Isoleucine+Leucine+Hydroxyproline^LN|1|125|µmol/L|<250|N|||F|||20190802053800 OBX|6|NM|53154-1^Alloisoleucine+Isoleucine+Hudroxyproline/Alanine [Molar ratio] in Dried blood spot^LN|1|0.65|{Ratio}|<1.1|N|||F|||20190802053800 OBX|7|NM|29573-3^Phenylalanine [Moles/volume] in Dried blood spot^LN|1|77.5|µmol/L|<165|N|||F|||20190802053800 OBX|8|NM|35572-7^Phenylalanine/Tyrosine [Molar ratio] in Dried blood spot^LN|1|0.75|{Ratio}|<2.4|N||F|||20190802053800 OBX|9|NM|35571-9^Tyrosine [Moles/volume] in Dried blood spot^LN|1|425|µmol/L|<850|N|||F|||20190802053800 OBX|10|NM|53231-7^Succinylacetone [Moles/volume] in Dried blood spot^LN|1|2.25|µmol/L|<4.5|N|||F|||20190802053800 OBX 11 NM 47700-0^Methionine [Moles/volume] in Dried blood spot^LN 1 27 µmol/L 8-100 N || F || 20190802053800 OBX|12|NM|42892-0^Citrulline [Moles/volume] in Dried blood spot^LN|1|16.25|umol/L|5-60|N|||F|||20190802053800 OBX|13|NM|54092-2^Citrulline/Arginine [Molar ratio] in Dried blood spot^LN|1|3|{Ratio}|<6|N|||F|||20190802053800 0BX|14|NM|53155-8^Asparagine+Ornithine [Moles/volume] in Dried blood spot^LN|1|400|µmol/L|<800|N|||F|||20190802053800 0BX|15|NM|75215-4^Ornithine/Citrulline [Molar ratio] in Dried blood spot^LN|1|0.5|{Ratio}||N|||F|||20190802053800 0BX|16|NM|47562-4^Arginine [Moles/volume] in Dried blood spot^LN|1|25|µmol/L|<50|N|||F|||20190802053800 OBX|17|NM|75214-7^Arginine/Ornithine [Molar ratio] in Dried blood spot^LN|1|0.7|{Ratio}|<1.4|N|||F|||20190802053800 OBX[18]NM[47732-3^Proline [Moles/volume] in Dried blood spot^LN[1]750[umol/L]<1500[N][]F][]20190802053800 OBX|19|NM|53232-5^5-0xoproline+Pipecolate [Moles/volume] in Dried blood spot^LN|1|0.5|µmol/L||N|||F|||20190802053800 0BX|20|TX|57710-6^Amino acidemias newborn screening comment/discussion^LN|1|Negative|||N|||F|||20190802053800 0BR|6|4012149713^FormNumber||58092-8^Acylcarnitine newborn screen panel|||201907231026||||||||||||||||20190802053800|||F 0BX|1|CE|58088-6^Acylcarnitine newborn screen interpretation^LN|1|LA18592-8\S\In range\S\LN|||N|||F|||20190802053800 0BX|2|TX|58093-6^Acylcarnitine newborn screening comment/discussion^LN|1|Negative|||N|||F|||20190802053800 OBR/7/4012149713^FormNumber||57084-6^Fatty acid oxidation newborn screen panel|||201907231026|||||||||||||20190802053800|||F 0BX|1|NM|38481-8^Carnitine.free (C0)^LN|1|33|µmol/L|6-125|N|||F|||20190802053800 OBX|2|NM|53235-8^Carnitine.free (C0)/Palmitoylcarnitine (C16)+Stearoylcarnitine (C18)^LN|1|37.5|{Ratio}|<75|N|||F|||20190802053800 OBX|3|NM|50157-7^Acetylcarnitine (C2)^LN|1|20.38|µmol/L|11-80|N|||F||20190802053800 OBX|4|NM|75212-1^Malonylcarnitine (C3-DC)/Decanoylcarnitine (C10) [Molar ratio] in Dried blood spot^LN|1|0.62500|{Ratio}|<5.2|N|||F|||20190802053800 0BX|5|NM|45211-0^Hexanoylcarnitine`(C6)^LN|1|0.48|µmol/L|<0.95|N|||F|||20190802053800 OBX 6 NM 53175-6^Octanoylcarnitine (C8)^LN 1 0.3 μmol/L <0.6 N ||F||20190802053800 OBX|7|NM|53177-2^Octanoylcarnitine (C8)/Decanoylcarnitine (C10)^LN|1|0.5|{Ratio}||N|||F|||20190802053800 OBX|8|NM|53174-9^Octenoylcarnitine (C8:1)^LN|1|0.35|µmol/L|<0.65|N|||F|||20190802053800 OBX|9|NM|45197-1^Decanoylcarnitine (C10)^LN|1|0.32|µmol/L|<0.65|N|||F|||20190802053800 OBX|10|NM|45198-9^Decenoylcarnitine (C10:1)^LN|1|0.22|µmol/L|<0.45|N|||F|||20190802053800 OBX|11|NM|45199-7^Dodecanoylcarnitine (C12)^LN|1|1|µmol/L|<2|N|||F|||20190802053800 0BX|12|NM|45200-3^Dodecenoylcarnitine (C12:1)^LN|1|0.5|µmol/L||N|||F|||20190802053800 0BX|13|NM|53192-1^Tetradecanoylcarnitine (C14)^LN|1|0.6|µmol/L|<1.2|N|||F|||20190802053800 OBX|14|NM|53191-3^Tetradecenoylcarnitine (C14:1)^LN|1|0.4|µmol/L|<0.8|N|||F|||20190802053800 OBX|15|NM|53194-7^Tetradecenoylcarnitine (C14:1)/Dodecenoylcarnitine (C12:1)^LN|1|0.5|{Ratio}||N|||F|||20190802053800 OBX|16|NM|53190-5^Tetradecadienoylcarnitine (C14:2)^LN|1|0.5|µmol/L||N|||F|||20190802053800 0BX|17|NM|50281-5^3-Hydroxytetradecanoylcarnitine (C14-0H)^LN|1|0.1|µmol/L|<0.2|N|||F|||20190802053800 OBX|18|NM|53199-6^Palmitoylcarnitine (C16)^LN|1|5|µmol/L|<10|N|||F|||20190802053800 0BX|19|NM|53198-8^Palmitoleylcarnitine (C16:1)^LN|1|0.7|µmol/L|<1.4|N|||F|||20190802053800 0BX|20|NM|50125-4^3-Hydroxypalmitoylcarnitine (C16-OH)^LN|1|0.05|µmol/L|<0.1|N|||F|||20190802053800 OBX|21|NM|53201-0^3-Hydroxypalmitoylcarnitine (C16-OH)/Palmitoylcarnitine (C16)^LN|1|0.01000|{Ratio}|<0.07|N|||F|||20190802053800 OBX 22 NM 53241-6^Stearoylcarnitine (C18)^LN 1 2 µmol/L 3.5 N ||F || 20190802053800 OBX|23|NM|53202-8^Oleoylcarnitine (C18:1)^LN|1|3.5|µmol/L|<7|N|||F|||20190802053800 OBX 24 NM 45217-7^Linoleoylcarnitine (C18:2)^LN 1 0.5 µmol/L N 1 F 20190802053800 0BX|25|NM|50132-0^3-Hydroxystearoylcarnitine (C18-OH)^LN|1|0.05|µmol/L|<0.1|N|||F|||20190802053800 OBX|26|NM|50113-0^3-Hydroxyoleoylcarnitine (C18:1-OH)^LN|1|0.05|µmol/L|<0.1|N|||F|||20190802053800

HL7 Results Sample Message (3 of 3)



Below is a sample HL7 message for SIS GDSP newborn screening initial negative test results

DBR 8 4012149713^FormNumber 157085-3^Organic acid newborn screen pane1 201907231026 20190802053800 F DBX 1 NM 53160-8^Propionylcarnitine (C3)^LN 1 3.15 µmol/L <6.3 N F 20190802053800
08X/2/NM/53163-2^Propionylcarnitine (C3)/Acetylcarnitine (C2)^LN 1 0.15 {Ratio}<0.3 N F 20190802053800
08X 3 NM 67708-8^Malonylcarnitine (C3-DC)+3-Hydroxybutyrylcarnitine (C4-OH)^LN 1 0.2 µmol/L <0.38 N F 20190802053800
08X 4 NM 53166-5^Butyrylcarnitine+Isobutyrylcarnitine (C4)^LN 1 0.85 µmol/L <1.7 N F 20190802053800
08X/5/NM/45216-9/Isovalerylcarnitine+Methylbutyrylcarnitine (C5)^LN/1 0.5/µmol/L <1 N F 20190802053800
08X/6/NM/53240-8^Isovalerylcarnitine+Methylbutyrylcarnitine (C5)/Propionylcarnitine (C3)^LN/1/0.15873 {Ratio} <0.45/N F /20190802053800
08X/7/NM/53170-7^Tiglylcarnitine (C5:1)^LN 1 0.3 µmol/L <0.5 N F 20190802053800
08X 8 NM 50106-4^3-Hydroxyisovalerylcarnitine (C5-0H)^LN 1 0.45 µmol/L <0.85 N F 20190802053800
08X 9 MM 67710-4^Glutarylcarnitine (C5-DC)+3-Hydroxyhexanoylcarnitine (C6-OH)^LN 1 0.3 µmol/L <0.5 N F 20190802053800
08X/10/NW/75216-2^Glutarylcarnitine (C5-DC)/Malonylcarnitine (C3-DC) [Molar ratio] in Dried blood spot/LW/1/1.50000/{Ratio}>>0.6/N///F///20190802053800
0BR 9 4012149713^FormNumber 54078-1^Cystic fibrosis newborn screening panel 201907231026 20190802053800 F
0BX 1 W1 48633-2^Trypsinogen I.free^LN 1 31.00 ng/mL <68 N F 120190802053800
0BX/2/CE/46769-6^Cystic fibrosis newborn screen interpretation^LN/1/LA18592-8/S/LN range/S/LN/1/N/1/F/1/20190802053800
08X]3]TX[57787-2^Cystic fibrosis newborn screening comment/discussion^LN 1 Negative N F]20190802053800
088[10]4812419713^FormNumber [57086-1^Congenital adrenal hyperplasia newborn screening panel 201907231026 20190802053800 F
08X[1][MN]38473-5^17-Hydroxyprogesterone^LN][1]5][mm0]/L[45][N][F][120196802053800 08X[2][CE][46758-9^+Compenial hyperplasia newborn screen interpretation^LN1][LA18592-8\5\LN range\5\LN]]N][F][120196802053800
DoX][1C][40739*CONGENILa] adrenal hyperplasia newborn screening comment-discussion/N1][Vec1092-0521n][10][10][10][10][10][10][10][10][10][10
0x3)[X]57/00-4*Congenztal adrenal hyperplasia newoorn screening comment-calscussion*(i)[N][H][H][H][L/20190002053000] D8R[11]481249713*F0490-6*Thyperplasia newoorn screening panel][]201907231026[][H][H][][10]190802053000] DREI14249713*F0490-6*Thyperplasia newoorn screening panel][]201907231026[][H][H][][10]190802053000][F
UBK1114912149713**Communder]54996-0**INFCDID netwoorn screening panel][/2019/02/12201000/2053800][F DBX11149129575-8*Thytotropin*LN114.50]HIT[1][201980253800
08X]2[47672-1*Compential hypothyroiding methors are interpretation*UN11[A18592-8\S\In range\S\LN N F 20190802053800
0X 3TX795-6*Compental hypothyroidism memborn screening comment-discussion*Lul Negative 0 1 1 1019002253000
DRR 1214912149713*FormNumber 54079-9*Galactosenia newtorn screening panel] [201903100 http://pii/20190822053800 F
08X[1]W14296-8*Galactose 1 phosphate urid/1 transferase*UN[155:00]enzyme units[>50[N][F1][2219082053800
08X/2/EE/46737-3*Galactosemias newborn screen interpretation*LN11/LAI8592-8\S\In range\S\N\ N F 121196802053800
08X 3 TX 57704-9-Galactosemias newborn screening comment-discussion^LN 1 Negative 0 1 1 20190802053800
08R 13 4012149713^FormNumber 54081-5^Hemoglobinopathies newborn screening panel 201907231026 20190802053800 F
08X11TX54104-5^Hemoglobin pattern^LN1 FA N F 20190802053800
08X/2/TX/57703-1^Hemoglobin disorders newborn screening comment/discussion^LN/1/Usual hemoglobin pattern. These results assume no transfusion prior to testing and do not rule out the possibility of a thalassemia trait or rare hemoglobin
variants. N F 20190802053800
08R 14 4012149713^FormNumber 57087-9^Biotinidase newborn screening panel 201907231026 20190802053800 F
0BX 1 NM 75217-0^Biotinidase [Enzymatic activity/volume] in Dried blood spot^LN 1 15.00 ERU >10 N F 20190802053800
OBX/2/CE/46761-3^Biotinidase deficiency newborn screen interpretation^LN/1/LA18592-8\S\LN N F /20190802053800
DBX 3 TX 57699-1^Biotinidase deficiency newborn screening comment-discussion^LN 1 Negative N F 20190802053800
DBR 15 4012149713^FormNumber 62333-0^Severe combined immunodeficiency (SCID) newborn screening panel 201907231026 20190802053800 F
DBX 1 WM 62320-7/T-cell receptor excision circle [#/volume] in Dried blood spot by Probe and target amplification method/LN 1 33 copies/µL >18 N F 20190802053800
DBX/2/CE/62321-5^Severe combined immunodeficiency newborn screen interpretation^LN/1/LA18592-8\S\In range\S\LN///N///F///20190802053800
DBX 3 TX 62322-3^Severe combined immunodeficiency newborn screening comment-discussion^LN 1 Negative N F 20190802053800
0BR 16 4012149713^FormNumber 63414-7^Pompe Disease newborn screening panel 201907231026 20190802053800 F
0BX/1/WN155827-09^Acid alpha glucosidase [Enzymatic activity/volume] in DBS^LN/1/12.923/µmol/L/h/11.55/N/1/F/12090802053800
NTE[1][Cutoff: 18%
08X/2/CE(634L5-4^Pompe Disease deficiency newborn screen interpretation^LU11/LAI8592-8\5/Ln range\5/LN N F 1/20190602053800
08X 3 TX[63416-2^Pompe Disease deficiency newborn screening comments-discussion^LN 1 Negative N F 20190802053800
08X/4/TX[63416-2*Pompe Disease deficiency newborn screening comments-discussion^LN 2 Interpretation Comments: The acid alpha-glucosidase Enzyme activity level is above the 18% of the daily patient median and suggests it is screen negative for Pompe disease. N 1 10190802053000
rumpe disease / 20130002053000 DRR Z14B2149713*FORMumber 79563-3*Mucopolysaccharidosis type I newborn screening panel /201907231026 20190802053800 F
Dex[] M [5599-6-1] for memory incorports activity of the memory is certify parts [] [2019002253000]] [] [] [] [] [] [] [] [] [] [] [] []
Dow 1 mm 1222000 with a critical outrandes [Eucliment a critical by contracts in the critical mode c
NF[1][CUIOT: 100 08X[2][CE]79564-1^Mucopolysaccharidosis type I newborn screen interpretation^LN 1 LA18592-8\S\In range\S\LN N F 20190802053800
DAX]TY7955-8"Mucoplysactaridosis type I newborn screening comment-discussion^LN1[Negets(ci[]][1][1][20190802633800
OK/41X/9565-8*Mucooplysaccharidosis type I memborn screening comment-discussion^LN2[Interpretation Comments: The alpha-L-iduronidase Enzyme activity is above the 18% of the daily patient median and suggests it is screen negative for
Mucopolysicharidosis [MPS 1) disease. [Mulf H] [20190802053800
0BR 18 4012149713^FormNumber ^^^9717-28^Adrenoleukodystrophy newborn screening panel^L 201907231026 20190802053800 F
08X 1 CE ^^^99717-32^Adrenoleukodystrophy deficiency newborn screening interpretation^L 1 LA18592-8\S\In range\S\LN N F 20190802053800
08X/2/TX ^^^99717-33^Adrenoleukodystrophy deficiency newborn screening comments-discussion^L 1 Negative N F /20190802053800
0BR [19]4012149713^FormNumber ^^^99717-29^Adrenoleukodystrophy Tier-1 newborn screening panel^L 201907231026 20190802053800 F
08X 1 MM 79321-6^Lysophosphatidylcholine(26:0) [Moles/volume] in Dried blood spot^LN 1 0.6 µmol/L 0.16-0.38 H F 20190802053800
NTE 11 Cutoff: >=0.42
08R 20 4012149713^FormNumber ^^^99717-30^Adrenoleukodystrophy Tier-2 newborn screening panel^L 201907231026 20190802053800 F
08X 1 WM 79567-4^Lysophosphatidylcholine(26:0) [Moles/volume] in Dried blood spot by LČ/MS/MS/LW 1 0.1 µmol/L 0.04-0.09 N F 20190802053800



Below is a sample HL7 message for SIS GDSP newborn screening initial negative test results with PDF attachment. The segments below are added to the typical HL7 message for electronic results

OBR 20 / Form Number | Clinical PDF Report Clinical PDF Report 226-95-827/21-2018-21^^Clinical PDF Report Clinical PDF Report 226-95-827/21-2018-21^|||20190119000000|||||||||^ORDGLSTNAME^ORDGFRSTNAME^^^^^|||||20190117154532|||F OBX111ED1ClinicalPDFReport^Clinical PDF Report 226-95-827/21-2018-21^ClinicalPDFReport^Clinical PDF Report 226-95-827/21-2018-21^||SIS^Image^PDF^Base64^JVBERi0xLjQNCiWys7S1DQoIR2VuZXJhdGVkIGJ5IEV4cGVydFBkZiB2OS40LjANCjegMCBvYmoNCjw8DQovUGFnZXMgMiAwIFINCi9QYWdITW9kZSAvVXNITm9uZQ0KL1Bh Z2VMYXlvdXQgL09uZUNvbHVtbg0KL1R5cGUgL0NhdGFsb2cNCj4+DQoNCmVuZG9iag0KMiAwlG9iag0KPDwNCi9Db3VudCAyDQovS2lkcyBbMyAwlFlgNCAwlFJdDQovVHlwZSAvUGFnZXMNCj4+DQoNC mVuZG9iag0KMyAwIG9iag0KPDwNCi9SZXNvdXJiZXMgPDwNCi9YT2JqZWN0IDw8DQovRXhwZXJ0UGRmX2IiZW1IZmhnY2dsaGtvZGVwamIsbWhmYnBuZmhuZXBiIDUgMCBSDQo+Pg0KDQovUHJvY1NI dCBbL1BERiAvVGV4dCAvSW1hZ2VDXQ0KPj4NCg0KL1BhcmVudCAyIDAgUg0KL01IZGIhQm94IFswLjAwMDAwIDAuMDAwMDAgNjEyLjAwMDAwIDc5Mi4wMDAwMF0NCi9UeXBIIC9QYWdIDQovQ29ud GVudHMgWzYgMCBSIDcgMCBSXQ0KPi4NCg0KZW5kb2JaDQo2IDAgb2JaDQo8PA0KL0ZpbHRlciAvRmxhdGVEZWNvZGUNCi9MZW5ndGggMTM5DQo+Pg0Kc3RvZWFtDQp4nF2MMQ7CMAxF90i5gv9A cENTww47TlxITZ2m0KShYuD4NIJIFV785P+fUWEeKLup9I/oUGhmuEKUAp5SIJ5GtdPa0FggSjVEdRak+BgozB6b2pT/uIb/aEPagHxbGGxYdNie3onn17Izt8FyYOd724/+MXWc7sMYvGtTdD5yauE4SXGR4g NvjzCODQplbmRzdHJIYW0NCg0KZW5kb2JqDQo3lDAgb2JqDQo8PA0KL0xlbmd0aCAwDQo+Pg0Kc3RyZWFtDQoNCmVuZHN0cmVhbQ0KDQplbmRvYmoNCjQgMCBvYmoNCjw8DQovUmVzb3VyY2VzID w8DQovWE9iamVjdCA8PA0KL0V4cGVydFBkZl9pY2VtZWZoZ2NnbGhrb2RlcGppbG1oZmJwbmZobmVwYiA1IDAgUg0KPj4NCg0KL1Byb2NTZXQgWy9QREYgL1RleHQgL0ltYWdlQ10NCj4+DQoNCi9QYXJ bnQgMiAwlFINCi9NZWRpYUJveCBbMC4wMDAwMCAwLjAwMDAwIDYxMi4wMDAwMCA3OTluMDAwMDBdDQovVHIwZSAvUGFnZQ0KL0NvbnRlbnRzIFs4IDAgUiA5IDAgUI0NCi4+DQoNCmVuZG9iag0 KOCAwlG9iag0KPDwNCi9GaWx0ZXlgL0ZsYXRIRGVjb2RIDQovTGVuZ3RoIDEzNw0KPj4NCnN0cmVhbQ0KeJxdjDsOwjAQRHtLvsOewKwjf+leeqgokeKs40DsmliC4wMBSxHb7JNm3qDAz0H9RjY/sq7SQnC Gz8ncOas9pUVr0dmtolyQjVsFzr4GCt2iUbru4xb+o3VTokMAn94y7A7PQsvj2lfL6ClRilMfpnibeyrXcUoxdCWHmKl0sJ85O3H2AifWMDwNCmVuZHN0cmVhbQ0KDQplbmRvYmoNCjkgMCBvYmoNCjw8D QovTGVuZ3RoIDANCj4+DQpzdHJIYW0NCg0KZW5kc3RyZWFtDQoNCmVuZG9iag0KMTAgMCBvYmoNCjw8DQovRGIzcGxheURvY1RpdGxlIGZhbHNIDQovTm9uRnVsbFNjcmVlbkJlaGF2aW9yIC9Vc2VOb 25IDQovRmI0V2IuZG93IGZhbHNIDQovQ2VudGVvV2IuZG93IGZhbHNIDQovSGIkZVRvb2xiYXIgZmFsc2UNCi9IaWRIV2IuZG93VUkgZmFsc2UNCi9IaWRITWVudWJhciBmYWxzZQ0KPi4NCg0KZW5kb2JgD Qo1IDAgb2JqDQo8PA0KL0ZpbHRlciAvRmxhdGVEZWNvZGUNCi9SZXNvdXJjZXMgPDwNCi9Gb250IDw8DQovRXhwZXJ0UGRmX2NmbW5mZmhwYmZoY2tvbmlwbm9sa2tpbmNobGNrbnBpIDExIDAgUg 0KL0V4cGVydF8kZl9pamFsYW9rbWdua2JrZm1ib2NrYmNvbWRmaW9lbG5ibSAxMiAwlFINCi9QRUIUVEwrQXJpYWxNVCAxMyAwlFINCi9FeHBlcnRQZGZfZGVjZ3BwZmltYWxha2Vsb3BwZmtvaGJvaGNs Y3Bta2lgMTQgMCBSDQovRXhwZXJ0UGRmX2dqaWlubWNuZHBnb2tramlhZmVnaGNibGhmY2hyY25ilDE1lDAgUg0KPi4NCg0KL1Bvb2NTZXQgWv9QREYgL1RleHQgL0ltYWdlQ10NCi4+DQoNCi9CQm94 FswLiAwMDAwIDAuMDAwMDAgMTA1NC4wMDAwMCAyNjE0LjAwMDAwXQ0KL1N1YnR5cGUgL0Zvcm0NCi9MZW5ndGggMjE0NDkNCi9UeXBIIC9YT2JqZWN0DQovTmFtZSAvRXhwZXJ0UGRmX2IjZW 1lZmhnY2dsaGtvZGVwamlsbWhmYnBuZmhuZXBiDQo+Pg0Kc3RyZWFtDQp4nN29a28cSZllKux8K6A+zM70+y42FoO7U31Xj/C3e2HuACxKKnFbr5VYU2hAwEWKTInZSmZyMpNVzfkj+3dvZJlZYU6a0R8R0 RsV09NdwmHJefvEmR3zCPel8nG5/b9i/09WKnnzR67Z/o+rafFisfi6q+Lfq/+Wd39+/vVX+F+cez8oG7S8C519/dWPX39181vYns+tf64+N3+3awll+tc//T8Vo+J/ff3Vv9/9SvVgpdT+r5f1HvtaiiH4/BYOfp0Kw6 oVOS5xclzi5LhAWVBwh8ppXDidSS1LtzoS0q+qRwOMQ+F5/HDtnMH5ebiMiEamOuMHAw/ygCHj4SJG15ahx6isJYKP6Wx+Ofo5I7OvL+QBx6HwtnVFNPSMY+iv83COJy8P5nQyOWaFxsgBfH4LVwgLGtadK UdVN51FLU8348rMq+rTaMah8Fx+DOVHBz8eXIQ0UvNM5+cHXsPDDxkPVzG6sIahR+InHCeuL8/kI6cfWqyirq/PoxmHwtvXFd7Q41Lcxee3clYnLwHzVuRKhpMrGU6uLFEWFMw6Uw5WN44WvTRqObpxy b0vKqQBx6HwPH4C5ecFPyeSgoWikZpnDi8YeJAHDBkPL2N0Fa1Cj9KPS0IcX5nNL0c/r1glXI/IA45D4W3rSglW3cagvw7gxjksSwnYGyWdnFEMJdfgt8gptISQMOtMOaq66TxqWboxo7OvqvJwHclz+RmUX0 QSeuFFRSM1zwx+XuBBHgovsrd0MmGcdacfM5a4vjaXX5Z+qFIGXI+FmyuFZ/ITKD+6+OLljYpLap4Z/Lz4gzwUbrq3dBJhnHWnH22uMpdfIn6oWUZeX4WbK4Xfw0/ueWmtTfVPyY1U19ZRI0/BYU+g5V18fgt nmKeQMG9FjjmcHHM4OaZRFhTsEHI3Blu6l2GcgxtkXOu7+NzHSzAuGAbC3jOJ8rHR0rDi9j+3YtStdPXrNEFDR9BglZjre8Tg2qBqCCdQNSAOfx8cJ0sOdN63iegYljql36ulcBJVRDqGKgJx7wqAcflCBJv5bSl6hog I4vcalh2eMYpzVBGIw18Ix8ISBJ35bSI6hggL4vfHSNn8ewbykHfxOcS1BnA9iofeUoO2ooattvAJXX2DqoHnPiywKZNwxkMSgIoTAN6oANYW5UDAOdSaqE+kBuWBgxBwd9SaQuKNCmAoDxiEgEd2QZvCngg avHJwEALujIrjId6oAlbygEEIeGSxJlieaF4msgA6rqsJUsg51Aq8W2cAxvOQg11nlWNgLgVVA9XLuaAVhKnIqAZSKI2aw/OQgt1YDRSqBqqXc0ErCFNrmQZDizVQ.e9JUc3gBo2A3Vm+HqoGy71zQpsLUOiweQ0g DwfJE8+oXC6BuID3H0KKsqTqGocZuGGrshqGli4TH2g55qjUF35swYexBalmqNamdRs27cnAQApYjbYc81Zqq6k2YcM8gtZZpMLhYa2pPmmpeUMFBCFiOtB3yVGvKvjdhwj6D1LosHkNIA8GyRPPrFwugcjy9 0lCjDFQdjhp7A/s9B8dLFwWPtR3yVAM+wF3Q2MPUeDv3TKPG8fpAwW6k7ZCnGii23AXdM0ytZRoMLdZA7UITjeMFjlLdSNshTzXgBtwF7TNMrcPiMYQ0ECxPNI65OIW68fRCA44yUHUkbuwSN3aJly4KHm 07JHH3IDJo7GFqsp17pIGTeH2gYDnWdkjiFiVI0D3D1FqmwdBiDdSeNNUkXsAoWI61HZK4TUkZtM8wtQ6LxxDSQLA80STq4gQqx9MLDTjKQNVRuLEr3NgVXrooeLTtkiNtR2yuEVZF3TPMLWWaTC0WAO1J 001ixcwCnZjbYcsbIPWBe0zTK3D4jGENBAsTzSLujiBuvH0QgOOsqbq2BI19gae+zBaukh4rO2Qp1pT8L0JE8YepJalWpPaadS8KwcHIWA50nbIU62pA2OCAwMDAwMCBuDQp0cmFpbGVyDQo8PA0KL1Jvb3 QgMSAwlFINCi9TaXpIIDI0DQo+Pg0KDQpzdGFydHhyZWYNCjUyMDg1DQoIJUVPRg0K|||||F||20190117154532



Below are the key segments that will be included in HL7 NBS electronic test result messages published by GDSP :

- Message Header (MSH) Specifies details about the message (Message Type Newborn Screening Results, Sender, HIE Receiver, etc.)
 e.g. MSH|^~\&|SISGDSP|SISGDSP|SISHIERECEIVER^11223344^L,M,N|^NPI123456^L,M,N|20140324140740||
 ORU^R01^ORU_R01|220220550|T|2.5.1
- Patient Identifier (PID) Patient demographic information (Name, MRN, DOB, Sex, Ethnicity, etc.)
 e.g. PID|1||3242112234^^^NPI123456&NPI^MR||Johnson^^^^B||201312020000|M||2106-3^White|||||||||2186-5^Not Hispanic or Latino^^^^||N|1
- Next of Kin (NK1) Next of Kin, providing information details of the mother (Name, Address, Number, etc.)
 e.g. NK1|1|Johnson^Mitchell|MTH^Mother|2592 DUET DR, # APT125&^^W SACRAMENTO^CA^95691-4520^USA|^^^^916^3720117||||||||198011020000
- Common Order (ORC) Transmits details common to all test results (Clinician, Hospital information on TRF Form Number, Hospital Order ID etc.)
 e.g.ORC|RE|25989006^FormNumber||W12312312^HospOrderNum||||||11356370^CUNNINGHAM^REBECCA^ ^^^^NPI|||
- Observation Request (OBR) Transmits information about an exam, diagnostic study/observation, or assessment that is specific to an order or result (like Cystic Fibrosis, Galactosemia)
 e.g. OBR|9|24680^FormNumber||54078-1^Cystic fibrosis newborn screening panel|||20131204000000||||||||NPI123456^KIM^ JULEANN^^^^^NPI||||||20140529110321|||F
- Observation Result (OBX) Carries the value of measured and computed results of the diagnostic observation (Birth weight and time, Acylcarnitine newborn screen interpretation, Fatty acid oxidation defects, etc.)
 e.g. OBX|1|NM|8339-4^Birthweight ^LN|1|3543|g |>2500|N|||F|||25052011|
- **Note (NTE)** Provides additional testing related comments, as needed. *e.g.* NTE|1||Cutoff: >=0.42

HL7 ACK Message Sample



Below is a sample ACK Message

MSH|^~\&|SISHIERECEIVER|^1801088422^L,M,N|SISGDSP|SISGDSP|20130614210011||ACK^R01^ACK|220270737|T|2.5.1|MSA|AA|220270737|



Below are some of the important segments that need to be included in HL7 ACK/ NACK messages from the partner system to GDSP:

• **Message Header (MSH)** – Specifies details about the message (Message Type - Newborn Screening Results, Sender, HIE Receiver, etc.)

e.g. MSH|^~\&|SISHIERECEIVER|^1538484316^L,M,N|SISGDSP|SISGDSP|20130912210027||ACK^R01^ACK| 220949844|P|2.5.1|

- Message Acknowledgement (MSA) Includes HL7 message reference identifier and acknowledgement code, such as:
 - Application Accept(AA) A positive code that indicates message that was accepted correctly
 - Application Error (AE) A negative code that indicates that were either a problem with the message structure, or the message itself
 - Application Reject (AR) A negative code that indicates that message was rejected

e.g. MSA|AA|1234567890

Error (ERR)* – Provides detailed text on the exact error of the message
 e.g. ERR||OBR^1|100^Segment sequence error^HL70357|E|||Missing required OBR segment|Email help desk for further information on this error||||^NET^Internet^helpdesk@hl7.org

*Note: Error Segment is only required if acknowledgement code is AE or AR