



Zika Virus Disease Update for EHR Vendors, other Health Information Technology Developers, Public Health, and Clinical Healthcare Partners

Public Health - EHR Vendors Collaboration Initiative

March 23, 2016

CDC EHR Meaningful Use webpage-Public Health – EHR Vendors Collaboration Initiative

URL: <http://www.cdc.gov/ehrmeaningfuluse/public-health-ehr-vendors-collaboration-initiative.html>

The screenshot shows a web browser window with the URL <http://www.cdc.gov/ehrmeaningfuluse/public-health-ehr-vendors-collat>. The page features the CDC logo and the text "Centers for Disease Control and Prevention" and "CDC 24/7: Saving Lives, Protecting People™". A search bar is located in the top right corner. Below the header, there is a "Meaningful Use" section with a sidebar menu on the left. The sidebar menu includes links to "Meaningful Use", "Introduction", "Calendar", "Joint PH Forum & CDC Nationwide", "Connect with Others", "CDC Meaningful Use ListServ", "Meaningful Use Community", "Public Health – EHR Vendors Collaboration Initiative", "Joint Public Health Forum & CDC Nationwide", "Meaningful Use (MU) Public Health (PH) Reporting Requirements Task Force", "ELR Task Force", and "Jurisdiction Meaningful Use Websites". The main content area features a large banner image with the text "Meaningful Use" and a word cloud containing terms like "EHR", "incentive", "payment", "hospitals", "Medicaid", "eligibility", "measures", "clinical", "period", "rule", "section", "year", "EP's", "cost", "quality", "reporting", "information", "quality", "patient", "hospital", "states", "Medicaid", "payments", "proposed", "objective", "final", "use", "percent", "data", "commenters", "CAH", "MA", "program", "rule", "section", "year", "EP's", "cost", "quality", "reporting", "information", "quality", "patient", "hospital", "states", "Medicaid", "payments", "proposed", "objective", "final", "use", "percent", "data", "commenters", "CAH", "MA", "program". Below the banner, there is a breadcrumb trail: "CDC > Meaningful Use > Connect with Others > Meaningful Use Community". The main heading is "Public Health – EHR Vendors Collaboration Initiative", followed by social media icons for Facebook, Twitter, and a plus sign. The section is titled "Community Profile" and contains the following text: "The Centers for Disease Control & Prevention in collaboration with the Office of the National Coordinator for Health IT (ONC) lead the Public Health (PH) - Electronic Health Records (EHR) Vendors Collaboration Initiative. The initial focus of this initiative is on meeting Stage 1 and 2 Meaningful Use public health objectives. Public Health Practitioners and EHR Vendors from across the nation are participating in this initiative. If you are interested in joining this initiative, please follow the instructions provided below to register for these monthly webinars. If you want to submit an issue/question, please send an email to meaningfuluse@cdc.gov and include "Public Health - EHR Vendor Collaboration Initiative" in the subject line". Below this text is the heading "Meeting Materials and Schedule" and a sub-heading "Meeting Schedule".

Meaningful Use

Meaningful Use

Introduction

Calendar

Joint PH Forum & CDC Nationwide

Connect with Others

CDC Meaningful Use ListServ

Meaningful Use Community

Public Health – EHR Vendors Collaboration Initiative

Joint Public Health Forum & CDC Nationwide

Meaningful Use (MU) Public Health (PH) Reporting Requirements Task Force

ELR Task Force

Jurisdiction Meaningful Use Websites

Meaningful Use

Public Health – EHR Vendors Collaboration Initiative

Community Profile

The Centers for Disease Control & Prevention in collaboration with the Office of the National Coordinator for Health IT (ONC) lead the Public Health (PH) - Electronic Health Records (EHR) Vendors Collaboration Initiative. The initial focus of this initiative is on meeting Stage 1 and 2 Meaningful Use public health objectives. Public Health Practitioners and EHR Vendors from across the nation are participating in this initiative.

If you are interested in joining this initiative, please follow the instructions provided below to register for these monthly webinars. If you want to submit an issue/question, please send an email to meaningfuluse@cdc.gov and include "Public Health - EHR Vendor Collaboration Initiative" in the subject line

Meeting Materials and Schedule

Meeting Schedule

Question and Answer Session

How to submit or ask questions for the panel members?

Submit or Ask Questions

- Submit your text question and comments using the Question Panel
- Please raise your hand to be unmuted for verbal questions.

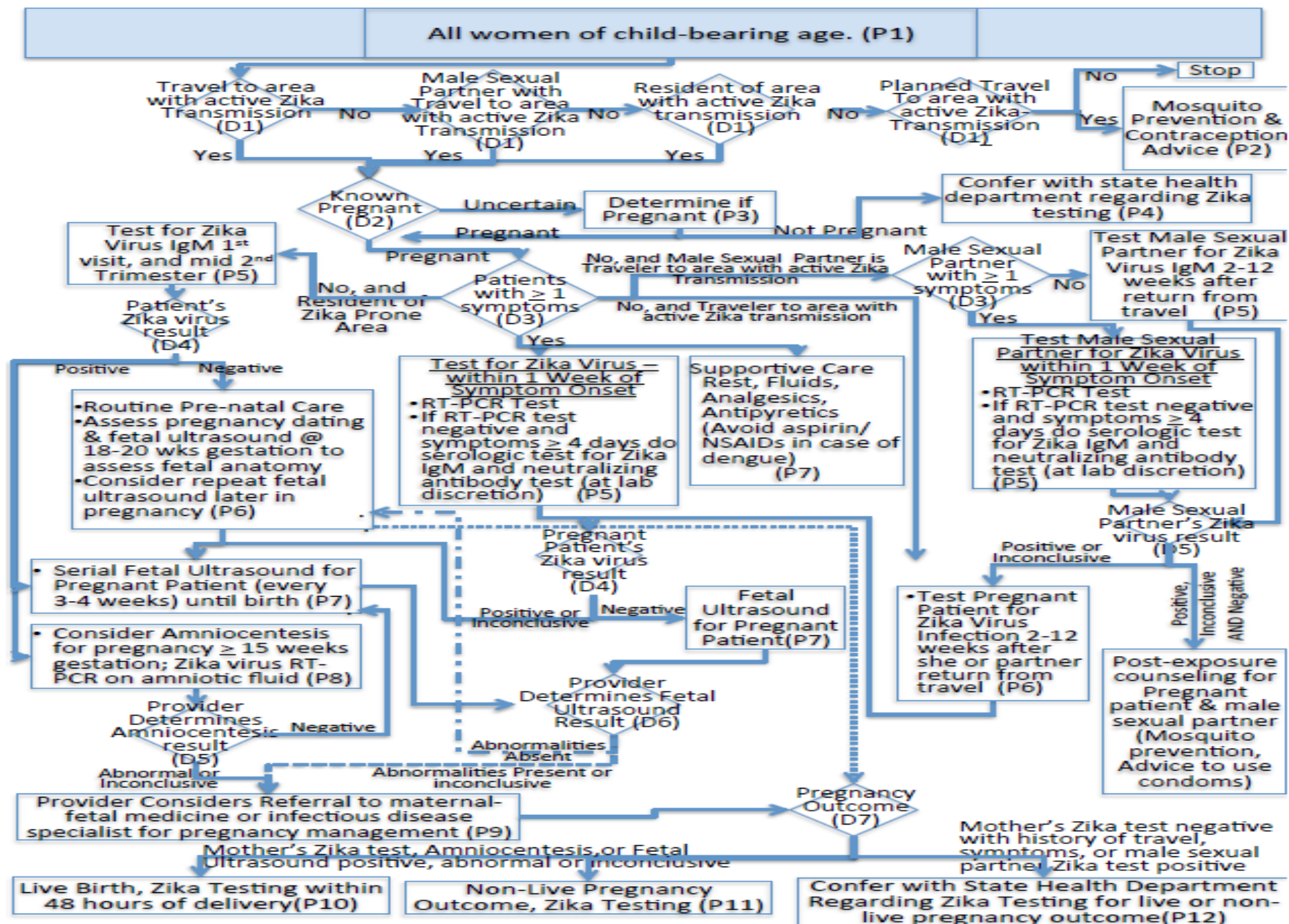
Agenda

- **Announcements**
- **Introduction of Presenters- Jim Daniel**
- **Audience Questions and Discussion – Jim Daniel**

- Jim Daniel, MPH, Public Health Coordinator at the Office of the National Coordinator for Health IT

March 23, 2016

Update Zika Virus Algorithm:
Draft.



Value Sets and Informational Links for Providers for Zika Virus Evaluation Algorithm

Algorithm Step	Description of Information Requirements	Type of Information	Links
P1	All Women of Child-Bearing Age and Male Sexual Partners of Women of Childbearing Age		
D1	Areas with active <u>Zika</u> transmission	Value Set: <u>PHVS ZikaAffectedAreas CDC</u> [2.16.840.1.114222.4.11.7457] Value set is updated based on the most current travel notice from CDC <u>Zika</u> virus disease website	https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7457
		Informational: Areas with <u>Zika</u> Risk - <u>Zika</u> -affected areas.	http://www.cdc.gov/mmwr/zika_reports.html
P2	Travel and Mosquito Prevention Advice	Value Set: Insect Repellent – No Value set currently available for pregnancy-safe mosquito repellent products.	
		Informational: Avoid Mosquito bites - CDC	http://www.cdc.gov/mmwr/zika_reports.html
		Informational: Find the EPA registered insect repellent. CDC vocabulary team is collaborating with EPA to identify pregnancy safe insect repellent search in EPA site. (DEET, IR3535 and <u>Picaridin</u> are safe during pregnancy as referenced in the CDC interim guideline)	https://www.epa.gov/insect-repellents/using-repellent-products-protect-against-mosquito-borne-illnesses
D2	Known pregnant	Pregnancy determination is at the discretion of the patient and the provider	
		Informational: Interim Guidelines for Prevention of Sexual Transmission of <u>Zika</u> Virus — United States,	http://www.cdc.gov/mmwr/zika_reports.html

Value Sets and Informational Links for Providers for Zika Virus Evaluation Algorithm

Algorithm Step	Description of Information Requirements	Type of Information	Links
		2016	
P3	Determine if Pregnant	Pregnancy determination is at the discretion of the patient and the provider	
P4	Confer with State Health Department Regarding <u>Zika</u> Virus Testing	Contact State Health Department	
P5	Test(s) for <u>Zika</u> Virus – 1 st visit for resident of area with active <u>Zika</u> transmission	Value Set: <u>Zika</u> Virus tests (RT-PCR, Neutralizing Antibodies, IgM) <u>PHVS_LabTestName_ZikaVirus</u> [2.16.840.1.114222.4.11.7480] <i>[Need to subset only <u>Zika</u> Virus IgM studies]</i>	https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7480
D3	Symptoms of <u>Zika</u> Virus Infection	Value Set: <u>PHVS_SignsSymptoms_Zika</u> [2.16.840.1.114222.4.11.7459]	https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7459
		Informational: Signs and Symptoms of <u>Zika</u> virus disease.	http://www.cdc.gov/mmwr/zika_reports.html
		For comparison --- Value Set: <u>PHVS_SignsSymptoms_Arbovirus</u> [2.16.840.1.114222.4.11.7460] Signs and Symptoms of <u>Arboviral</u> diseases. This value set would be used for public health case notification and includes signs and symptoms of Dengue, Chikungunya and <u>Zika</u> .	https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7460
P6	<ul style="list-style-type: none"> Pregnancy dating & fetal ultrasound @ 18-20 <u>wks</u> gestation to assess fetal anatomy. 	Value Set: Fetal Ultrasound LOINC Code = <u>12129-3</u> LOINC Concept Name = Fetal [Interpretation] Study observation general US LOINC Code System OID: <u>Fetal [Interpretation] Study observation general US</u> Code System OID =	LOINC Code Hyperlink - http://s.details.loinc.org/LOINC/12129-3.html?sections=Simple

Value Sets and Informational Links for Providers for Zika Virus Evaluation Algorithm

Algorithm Step	Description of Information Requirements	Type of Information	Links
		2.16.840.1.113883.6.1 [Value Set for Fetal Ultrasound CPT Codes Pending]	
		Fetal Ultrasound Result – Value: Microcephaly SNOMED Code = 431265009 SNOMED Concept Name = Fetal microcephaly (disorder) SNOMED-CT Code System OID: 2.16.840.1.11.3883.6.96	SNOMED Code System Concept link in PHIN VADS - https://phinvads.cdc.gov/vads/ViewCodeSystemConcept.action?oid=2.16.840.1.113883.6.96&code=431265009
		Fetal Ultrasound Result – Value: Intracranial calcifications CDC PHINVS Local Code =PHC1444 CDC PHIN VS Concept Name = Fetal Intracranial Calcification PHIN-VADS Code System OID = 2.16.840.1.114222.4.5.274	CDC PHIN VS local code = https://phinvads.cdc.gov/vads/ViewCodeSystemConcept.action?oid=2.16.840.1.114222.4.5.274&code=PHC1444 [Pending new SNOMED Code]
		Informational: Microcephaly	http://www.cdc.gov/mmwr/zika_reports.html
		Informational: Possible association between <u>Zika</u> virus infection and microcephaly	http://www.cdc.gov/mmwr/zika_reports.html
		Informational: Fetal Ultrasound (patient-level)	https://www.nlm.nih.gov/medlineplus/ency/article/003778.htm
	• Repeat <u>Zika</u> IgM mid-2nd or early 3 rd trimester if still in <u>Zika</u> -prone area.	Value Set: <u>Zika</u> Virus tests (RT-PCR, Neutralizing Antibodies, IgM) <u>PHVS_LabTestName_ZikaVirus</u> [2.16.840.1.114222.4.11.7480] [Need to subset only <u>Zika</u> Virus IgM studies]	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7480
	• Consider repeat fetal	Value Set: Fetal Ultrasound	LOINC Code Hyperlink -

Value Sets and Informational Links for Providers for Zika Virus Evaluation Algorithm

Algorithm Step	Description of Information Requirements	Type of Information	Links
	ultrasound later in pregnancy -- fetal microcephaly is most easily detected in late 2 nd and early 3 rd trimester	LOINC Code = 12129-3 LOINC Concept Name = Fetal [Interpretation] Study observation general US LOINC Code System OID: Fetal [Interpretation] Study observation general US ¶Code System OID = 2.16.840.1.113883.6.1 <i>[Value Set for Fetal Ultrasound CPT Codes Pending]</i>	http://s.details.loinc.org/LOINC/12129-3.html?sections=Simple
P6	Test for <u>Zika</u> Virus 1 st week of illness – • Onset prior week: RT-PCR • Symptoms ≥ 4 days IgM and neutralizing antibody test Test for <u>Zika</u> Virus Infection 2-12 weeks after return from travel – • RT-PCR Test	Value Set: <u>Zika</u> Virus tests (RT-PCR, Neutralizing Antibodies, IgM) PHVS_LabTestName_ZikaVirus [2.16.840.1.114222.4.11.7480] <i>[Need to subset only <u>Zika</u> Virus IgM studies]</i>	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7480
		Value Set: PHVS_LabTestName_Arbovirus [2.16.840.1.114222.4.11.4120]	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.4120
		Value Set: PHVS_LabTestName_Chikungunya [2.16.840.1.114222.4.11.7339]	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7339
		Value Set: PHVS_LabTestName_Dengue [2.16.840.1.114222.4.11.4141]	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.4141
		Informational: <u>Zika</u> Virus Diagnostic Testing	http://www.cdc.gov/mmwr/zika_reports.html
		Informational: <u>Zika</u> virus diagnostic guidance for State	http://www.cdc.gov/mmwr/zika_reports.html

Value Sets and Informational Links for Providers for Zika Virus Evaluation Algorithm

Algorithm Step	Description of Information Requirements	Type of Information	Links
		Public Health Labs	ml
P7	Supportive Care: Rest, Fluids, Analgesics, Antipyretics (Avoid aspirin/NSAIDs in case of dengue)	Value Set: <u>PHVS_DrugDiseaseInteraction_Dengue</u> [2.16.840.1.114222.4.11.7467] { Drugs to avoid due to risk of dengue fever – Aspirin and NSAID} The value set is currently based on SNOMED-CT. A new value set will be created based on RxNorm.	https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7467
		Informational: Symptoms, Diagnosis and Treatment	http://www.cdc.gov/mmwr/zika_reports.html
D5	<u>Zika Virus Result</u>	Value Set: <u>Zika Virus IgM ELISA Results</u> <u>PHVS_PosNegEquivNotDone_CDC</u> [2.16.840.1.114222.4.11.7476] This value set is intended for use in electronic laboratory reporting based on the results received from the laboratory. The laboratory may also report a quantitative titer if applicable.	https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7476
		Value Set: <u>Zika Virus Neutralizing Antibody Results</u> <u>PHVS_PosNeg4FoldRiseNotDone_CDC</u> [2.16.840.1.114222.4.11.7477] This value set is intended for use in electronic laboratory reporting based on the results received from the laboratory. The laboratory may also report a quantitative titer if applicable.	https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7477
		Value Set: <u>PHVS_LabResult_Arbovirus</u> [2.16.840.1.114222.4.11.4003]	https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.4003
		Value Set: <u>PHVS_LabResult_Chikungunya</u> [2.16.840.1.114222.4.11.7343] This value set is intended for use in electronic	https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7343

Value Sets and Informational Links for Providers for Zika Virus Evaluation Algorithm

Algorithm Step	Description of Information Requirements	Type of Information	Links
		laboratory reporting based on the results received from the laboratory. The laboratory may also report a quantitative titer if applicable.	
		Value Set: <u>PHVS_LabResult_Dengue</u> [2.16.840.1.114222.4.11.4025] This value set is intended for use in electronic laboratory reporting based on the results received from the laboratory. The laboratory may also report a quantitative titer if applicable.	https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.4025
		Informational: <u>Zika</u> Virus Diagnostic Testing	http://www.cdc.gov/mmwr/zika_reports.html
		Informational: <u>Zika</u> virus diagnostic guidance for State Public Health Labs	http://www.cdc.gov/mmwr/zika_reports.html
D6	Fetal Ultrasound Positive Result: Microcephaly or Intracranial Calcifications	Fetal Ultrasound Result – Value: Microcephaly SNOMED Code = 431265009 SNOMED Concept Name = Fetal microcephaly (disorder) SNOMED-CT Code System OID: 2.16.840.1.11.3883.6.96	SNOMED Code System Concept link in PHIN VADS - https://phinivads.cdc.gov/vads/ViewCodeSystemConcept.action?oid=2.16.840.1.113883.6.96&code=431265009
		Fetal Ultrasound Result – Value: Intracranial calcifications CDC PHINVS Local Code =PHC1444 CDC PHIN VS Concept Name = Fetal Intracranial Calcification PHIN-VADS Code System OID = 2.16.840.1.114222.4.5.274	CDC PHIN VS local code = https://phinivads.cdc.gov/vads/ViewCodeSystemConcept.action?oid=2.16.840.1.114222.4.5.274&code=PHC1444 [Pending new SNOMED Code]
		Informational: Microcephaly	http://www.cdc.gov/ncbddd/birthdefects/m

Value Sets and Informational Links for Providers for Zika Virus Evaluation Algorithm

Algorithm Step	Description of Information Requirements	Type of Information	Links
			icrocephaly.html
		Informational: Possible association between <u>Zika</u> virus infection and microcephaly	http://www.cdc.gov/mmwr/volumes/65/wr/mm6503e2.htm?s_cid=mm6503e2.htm_w
		Informational: Fetal Ultrasound (patient-level)	https://www.nlm.nih.gov/medlineplus/ency/article/003778.htm
P8	Amniocentesis for pregnancy \geq 15 weeks gestation	Value Set: Amniocentesis SNOMED code = 34536000 SNOMED Concept name = Amniocentesis (procedure) SNOMED-CT Code System OID: 2.16.840.1.11.3883.6.96 [CPT Value Set Pending]	SNOMED code system concept link in PHIN VADS. https://phinvads.cdc.gov/vads/ViewCodeSystemConcept.action?oid=2.16.840.1.113883.6.96&code=34536000
		Value Set: <u>PHVS SpecimenType Zika</u> List of specimens associated with <u>Zika</u> laboratory tests. This includes specimen from mother as well as fetus, infant as well as acute, convalescent specimens. It is not inclusive of histopathologic examination. [2.16.840.1.114222.4.11.7463]	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7463
P9	Refer to Maternal-Fetal Specialist or Infectious Disease Specialist	Maternal-Fetal Medicine NUCC Provider Code = 207VM0101X NUCC Provider Concept Name = Maternal & Fetal Medicine [Allopathic & Osteopathic Physicians\Obstetrics & Gynecology]	NUCC Provider Codes (part of provider taxonomy) link in PHIN VADS - https://phinvads.cdc.gov/vads/ViewCodeSystemConcept.action?oid=2.16.840.1.113883.6.101&code=207VM0101X For latest version of NUCC provider codes, please browse provider taxonomy at NUCC site - http://www.nucc.org/index.php?option=com_wrapper&view=wrapper&Itemid=126

Value Sets and Informational Links for Providers for Zika Virus Evaluation Algorithm

Algorithm Step	Description of Information Requirements	Type of Information	Links
		Infectious Disease Specialist NUCC Provider Code = 207RI0200X NUCC Provider Concept Name = Infectious Disease [Allopathic & Osteopathic Physicians\Internal Medicine]	NUCC Provider Codes (part of provider taxonomy) link in PHIN VADS - https://phinvads.cdc.gov/vads/ViewCodeSystemConcept.action?oid=2.16.840.1.113883.6.101&code=207RI0200X For latest version of NUCC provider codes, please browse provider taxonomy at NUCC site - http://www.nucc.org/index.php?option=com_wrapper&view=wrapper&Itemid=126
D7	Pregnancy Outcome	Value Set: Pregnancy Outcome [<i>Value Set Pending</i>]	
P10	<u>Zika</u> Virus Testing for Live Birth	Value Set: <u>PHVS SpecimenType Zika</u> List of specimens associated with <u>Zika</u> laboratory tests. This includes specimen from mother as well as fetus, infant as well as acute, convalescent specimens. It is not inclusive of histopathologic examination. [2.16.840.1.114222.4.11.7463]	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7463
		Informational: Interim Guidelines for the Evaluation and Testing of Infants with Possible Congenital <u>Zika</u> Virus Infection — United States, 2016	http://www.cdc.gov/mmwr/zika_reports.html
P11	<u>Zika</u> Virus Testing for Products of Non-Live Pregnancy Product	Confer with State Health Department	
P12	Live Birth, Appears Healthy, Unknown if infected	Confer with State Health Department	