**ACT Data Harmonization Work Group**

**ACT SHRINE Query Ontology Specification**

**Version 1.7**

**Modification History**

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Date | Modification | Modified by |
| 1.7 | 06/27/2019 | * Add Source Version (UMLS, RXNav) * Added Adult, Children Age range * Added CPT-4 Retired codes * Added Note LOINC Lab tree Provisional is the Lab Branch of Multiaxial Hierarchy only | Michele Morris for DHWG |
| 1.6 | 03/03/2019 | * Added ICD-10-CM. ICD-10-PCS, CPT-4, HCPCS, Medications Alphabetical, Laboratory Tests (Provisional) * Removed Modifiers | Shyam Visweswaran for DHWG |
| 1.5 | 02/15/2017 | * Added ICD10-ICD9 combined hierarchy for diagnosis | Shyam Visweswaran for DHWG |
| 1.4 | 05/11/2015 | * Added Hepatitis C genotype labs | Shyam Visweswaran for DHWG |
| 1.3 | 05/07/2015 | * Added Hepatitis C RNA labs | Shyam Visweswaran for DHWG |
| 1.2 | 03/23/2015 | * Medications: Order type - ORDER\_TYPE AP=Ambulatory Prescribed, and ID=Inpatient Dispensed refer medication **orders** and not medication administration or medication billing, because data on orders will be available at all sites while administration and billing data may not be. Changed value set to A=Ambulatory Order and I=Inpatient Order. * Visit Details: Visit Type - Added “Emergency Department Admit to Inpatient Hospital Stay” and “Non-Acute Institutional Stay” to value set. * Laboratory Tests: * Added Chemistry \ Electrolytes \ Bicarbonate \ Carbon dioxide in Serum or Plasma 2028-9 mmol/L * Added more lab tests in Hepatitis B virus, Hepatitis C virus, and HIV | Shyam Visweswaran for DHWG |
| 1.1 | 01/13/2015 | First published version | Shyam Visweswaran for DHWG |
| 1.0 | 11/25/2014 | Initial version | Shyam Visweswaran for DHWG |

**Overview**

The ACT SHRINE Query Ontology specifies the ontology that will be used in the SHRINE to query the Phase 1 of the ACT network. A site may choose to use the ACT SHRINE Query Ontology as the local i2b2 Query Ontology too; however, this is not mandated.

**The trees in the ACT ontology include:**

**ACT Demographics**

**ACT Diagnoses ICD-9-CM**

**ACT Diagnoses ICD-10-CM**

**ACT Diagnoses ICD10-ICD9**

**ACT Laboratory Tests**

**ACT Laboratory Tests (Provisional)**

**ACT Medications Alphabetical**

**ACT Medications VA Classes**

**ACT Procedures ICD-9-Proc**

**ACT Procedures ICD-10-PCS**

**ACT Procedures CPT-4**

**ACT Procedures HCPCS**

**ACT Visit Details**

**ACT Demographics**

ACT # Version

**Age**

(adult) >= 18

(children) < 18

0-9 years old

0 years old

01 month old

02 months old

03 months old

04 months old

05 months old

06 months old

07 months old

08 months old

09 months old

10 months old

11 months old

12 months old

1 year old

13 months old

14 months old

15 months old

16 months old

17 months old

18 months old

19 months old

20 months old

21 months old

22 months old

23 months old

24 months old

2 years old

25 months old

26 months old

27 months old

28 months old

29 months old

30 months old

31 months old

32 months old

33 months old

34 months old

35 months old

36 months old

3 years old

4 years old

5 years old

6 years old

7 years old

8 years old

9 years old

10-17 years old

10 years old

11 years old

12 years old

13 years old

14 years old

15 years old

16 years old

17 years old

18-34 years old

18 years old

19 years old

20 years old

21 years old

22 years old

23 years old

24 years old

25 years old

26 years old

27 years old

28 years old

29 years old

30 years old

31 years old

32 years old

33 years old

34 years old

35-44 years old …

45-54 years old …

55-64 years old …

65-74 years old …

75-84 years old …

75-84 years old …

85-89 years old …

>= 65 years old

>= 85 years old

>= 90 years old

Not recorded

**Hispanic**

Yes

No

No information

**Race**

American Indian or Alaska Native

Asian

Black or African American

Native Hawaiian or Other Pacific Islander

White

Multiple race

No Information

**Sex**

Ambiguous

Female

Male

Other

No information

**Vital Status**

Known Deceased

**ACT Diagnoses ICD-9-CM** (\*UMLS2018AA)

ACT # Version

001-999.99 Diseases and injuries

E000-E999.9 Supplementary classification of external causes of injury and poisoning

V01-V91.99 Supplementary classification of factors influencing health status and contact with health services

**ACT Diagnoses ICD10-ICD9** (\*UMLS2015AB)

ACT # Version

A00-B99 Certain infectious and parasitic diseases

C00-D49 Neoplasms

D50-D89 Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism

E00-E89 Endocrine, nutritional and metabolic diseases

F01-F99 Mental and behavioral disorders

G00-G99 Diseases of the nervous system

H00-H59 Diseases of the eye and adnexa

H60-H95 Diseases of the ear and mastoid process

I00-I99 Diseases of the circulatory system

J00-J99 Diseases of the respiratory system

K00-K94 Diseases of the digestive system

L00-L99 Diseases of the skin and subcutaneous tissue

M00-M99 Diseases of the musculoskeletal system and connective tissue

N00-N99 Diseases of the genitourinary system

O00-O99 Pregnancy, childbirth and the puerperium

P00-P96 Certain conditions originating in the perinatal period

Q00-Q99 Congenital malformations, deformations and chromosomal abnormalities

R00-R99 Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified

S00-T88 Injury, poisoning and certain other consequences of external causes

V00-Y99 External causes of morbidity

Z00-Z99 Factors influencing health status and contact with health services

**ACT Diagnoses ICD-10-CM** (\*UMLS2018AA)

ACT # Version

A00-B99 Certain infectious and parasitic diseases

C00-D49 Neoplasms

C00-D49 Neoplasms

D50-D89 Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism

E00-E89 Endocrine, nutritional and metabolic diseases

F01-F99 Mental, behavioral and neurodevelopmental disorders

G00-G99 Diseases of the nervous system

H00-H59 Diseases of the eye and adnexa

H60-H95 Diseases of the ear and mastoid process

I00-I99 Diseases of the circulatory system

J00-J99 Diseases of the respiratory system

K00-K95 Diseases of the digestive system

L00-L99 Diseases of the skin and subcutaneous tissue

M00-M99 Diseases of the musculoskeletal system and connective tissue

N00-N99 Diseases of the genitourinary system

O00-O9A Pregnancy, childbirth and the puerperium

P00-P96 Certain conditions originating in the perinatal period

Q00-Q99 Congenital malformations, deformations and chromosomal abnormalities

R00-R99 Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified

S00-T88 Injury, poisoning and certain other consequences of external causes

V00-Y99 External causes of morbidity

Z00-Z99 Factors influencing health status and contact with health services

**ACT Procedures ICD-9-Proc** (\*UMLS2018AA)

ACT # Version

00-00.99 Procedures and interventions, not elsewhere classified

01-05.99 Operations on the nervous system

06-07.99 Operations on the endocrine system

08-16.99 Operations on the eye

17-17.99 Other miscellaneous diagnostic and therapeutic procedures

18-20.99 Operations on the ear

21-29.99 Operations on the nose, mouth, and pharynx

30-34.99 Operations on the respiratory system

35-39.99 Operations on the cardiovascular system

40-41.99 Operations on the hemic and lymphatic system

42-54.99 Operations on the digestive system

55-59.99 Operations on the urinary system

60-64.99 Operations on the male genital organs

65-71.99 Operations on the female genital organs

72-75.99 Obstetrical procedures

76-84.99 Operations on the musculoskeletal system

85-86.99 Operations on the integumentary system

87-99.99 Miscellaneous diagnostic and therapeutic procedures

**ACT Procedures ICD-10-PCS** (\*UMLS2018AA)

ACT # Version

CS:0 Medical and surgical (procedure)

CS:1 Obstetrics (procedure)

CS:2 Placement (procedure)

CS:3 Administration (procedure)

CS:4 Measurement and monitoring (procedure)

CS:5 Extracorporeal assistance and performance (procedure)

CS:6 Extracorporeal therapies (procedure)

CS:7 Osteopathic (procedure)

CS:8 Other procedures (procedure)

CS:9 Chiropractic (procedure)

CS:B Imaging (procedure)

CS:C Nuclear medicine (procedure)

CS:D Radiation therapy (procedure)

CS:F Physical rehabilitation and diagnostic audiology (procedure)

CS:G Mental health (procedure)

CS:H Substance abuse treatment (therapy)

**ACT Procedures CPT-4** (\*UMLS2018AA)

ACT # Version

\*Retired CPT4 Codes

Anesthesia

Category II Codes

Category III Codes

Evaluation and Management Services

Medicine Services and Procedures

Pathology and Laboratory Procedures

Radiology Procedures

Surgery

**ACT Procedures HCPCS** (\*UMLS2018AA)

ACT # Version

**Visit Details**

ACT # Version

**Age at visit**

Visit at age 9 or less

Visit at age less than 1 year old

Visit at age 01 month old

Visit at age 02 months old

Visit at age 03 months old

Visit at age 04 months old

Visit at age 05 months old

Visit at age 06 months old

Visit at age 07 months old

Visit at age 08 months old

Visit at age 09 months old

Visit at age 10 months old

Visit at age 11 months old

Visit at age 12 months old

Visit at age 1 year old

Visit at age 13 months old

Visit at age 14 months old

Visit at age 15 months old

Visit at age 16 months old

Visit at age 17 months old

Visit at age 18 months old

Visit at age 19 months old

Visit at age 20 months old

Visit at age 21 months old

Visit at age 22 months old

Visit at age 23 months old

Visit at age 24 months old

Visit at age 2 years old

Visit at age 25 months old

Visit at age 26 months old

Visit at age 27 months old

Visit at age 28 months old

Visit at age 29 months old

Visit at age 30 months old

Visit at age 31 months old

Visit at age 32 months old

Visit at age 33 months old

Visit at age 34 months old

Visit at age 35 months old

Visit at age 36 months old

Visit at age 3 years old

Visit at age 4 years old

Visit at age 5 years old

Visit at age 6 years old

Visit at age 7 years old

Visit at age 8 years old

Visit at age 9 years old

Visit at ages 10-17 years old

Visit at age 10 years old

Visit at age 11 years old

Visit at age 12 years old

Visit at age 13 years old

Visit at age 14 years old

Visit at age 15 years old

Visit at age 16 years old

Visit at age 17 years old

Visit at ages 18-34 years old

Visit at age 18 years old

Visit at age 19 years old

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Visit at age 28 years old

Visit at age 29 years old

Visit at age 30 years old

Visit at age 31 years old

Visit at age 32 years old

Visit at age 33 years old

Visit at age 34 years old

Visit at ages 35-44 years old …

Visit at ages 45-54 years old …

Visit at ages 55-64 years old …

Visit at ages 65-74 years old …

Visit at ages 75-84 years old …

Visit at ages 85-89 years old …

Visit at ages >= 65 years old

Visit at ages >= 85 years old

Visit at ages >= 90 years old

**Length of stay**

1 day

2 days

3 days

4 days

5 days

6 days

7 days

8 days

9 days

10 days

> 10 days

**Visit type**

Ambulatory Visit

Emergency Department Visit

Emergency Department Visit To Inpatient

Inpatient Hospital Stay

Non-Acute Hospital Stay

Other Ambulatory Visit

No information

**ACT Medications Alphabetical** (RxNav API 12/2018)

ACT # Version

**ACT Medications VA Classes** (RxNav API 09/2018)

ACT # Version

Antidotes, deterrents and poison control…

Antihistamines…

Antimicrobials…

Antineoplastics…

Antiparasitics…

Antiseptics/disinfectants…

Autonomic medications…

Blood products/modifiers/volume expanders…

Central nervous system medications…

Cardiovascular medications…

Dermatological agents…

Diagnostic agents…

Gastrointestinal medications…

Genitourinary medications…

Herbs/alternative therapies…

Hormones/synthetics/modifiers…

Immunological agents…

Investigational agents…

Intrapleural medications…

Irrigation/dialysis solutions…

Musculoskeletal medications…

Nasal and throat agents, topical…

Ophthalmic agents…

Dental and oral agents, topical…

Otic agents…

Pharmaceutical aids/reagents…

Respiratory tract medications…

Rectal, local…

Therapeutic nutrients/minerals/electrolytes…

Vitamins…

Miscellaneous agents…

**ACT Laboratory Tests**

(selected labs)

ACT # Version

**Chemistry LP40271-6**

**Electrolytes LP19403-2**

**Bicarbonate LP46218-1**

Bicarbonate in Blood 1959-6 mmol/L

Bicarbonate in Plasma 1962-0 mmol/L

Bicarbonate in Serum 1963-8 mmol/L

Carbon dioxide in Serum or Plasma 2028-9 mmol/L

**Calcium LP42656-6**

Calcium in Blood 49765-1 mg/dL

Calcium in Serum or Plasma 17861-6 mg/dL

**Chloride LP46433-6**

Chloride in Blood 2069-3 mmol/L

Chloride in Serum or Plasma 2075-0 mmol/L

**Creatinine LP41281-4**

Creatinine in Blood 38483-4 mg/dL

Creatinine in Serum or Plasma 2160-0 mg/dL

**Glucose LP42107-0**

Glucose in Blood 2339-0 mg/dL

Glucose in Serum or Plasma 2345-7 mg/dL

**Phosphate LP43710-0**

Phosphate in Blood 2774-8 mg/dL

Phosphate in Serum or Plasma 2777-1 mg/dL

**Potassium LP42189-8**

Potassium in Blood 6298-4 mmol/L

Potassium in Serum or Plasma 2823-3 mmol/L

**Sodium LP48861-6**

Sodium in Blood 2947-0 mmol/L

Sodium in Serum or Plasma 2951-2 mmol/L

**Urate LP43752-2**

Urate in Serum or Plasma 3084-1 mg/dL

**Urea nitrogen LP41307-7**

Urea nitrogen in Blood 6299-2 mg/dL

Urea nitrogen in Serum or Plasma 3094-0 mg/dL

**Enzymes LP31392-1**

**ALP LP45609-2**

ALP in Blood 1783-0 U/L

ALP in Serum or Plasma 6768-6 U/L

**ALT LP44699-4**

ALT in Serum or Plasma 1742-6 U/L

ALT in Serum or Plasma With P-5'-P 1743-4 U/L

ALT in Serum or Plasma Without P-5'-P 1744-2 U/L

**AST LP45656-3**

AST in Serum or Plasma 1920-8 U/L

AST in Serum or Plasma With P-5'-P 30239-8 U/L

**GGT LP47479-8**

GGT in Serum or Plasma 2324-2 U/L

**LDH LP43656-5**

LDH in Serum or Plasma 2532-0 U/L

LDH in Serum or Plasma by Lactate to pyruvate reaction 14804-9 U/L

LDH in Serum or Plasma by Pyruvate to lactate reaction 14805-6 U/L

**Lipids LP15705-4**

**Cholesterol in HDL LP99408-4**

Cholesterol in HDL in Serum or Plasma 2085-9 mg/dL

Cholesterol in HDL in Serum or Plasma ultracentrifugate 18263-4 mg/dL

Cholesterol in HDL in Serum or Plasma by Electrophoresis 49130-8 mg/dL

**Cholesterol in LDL LP99407-6**

Cholesterol in LDL in Serum or Plasma 2089-1 mg/dL

Cholesterol in LDL in Serum or Plasma ultracentrifugate 18261-8 mg/dL

Cholesterol in LDL in Serum or Plasma by Electrophoresis 49132-4 mg/dL

Cholesterol in LDL in Serum or Plasma by calculation 13457-7 mg/dL

**Cholesterol non HDL LP52754-6**

Cholesterol non HDL in Serum or Plasma 43396-1 mg/dL

**Cholesterol Total LP43571-6**

Cholesterol total in Serum or Plasma 2093-3 mg/dL

Cholesterol total in Serum or Plasma ultracentrifugate 48620-9 mg/dL

**Cholesterol/HDL Ratio LP44836-2**

Cholesterol/HDL Ratio in Serum or Plasma 9830-1 ratio

**Triglyceride LP42275-5**

Triglyceride in Serum or Plasma 2571-8 mg/dL

Triglyceride in Serum or Plasma by calculation 12951-0 mg/dL

**Liver function LP31397-0**

**Bilirubin LP43561-7**

Bilirubin total 42719-5 mg/dL

Bilirubin total in Serum or Plasma 1975-2 mg/dL

Bilirubin conjugated in Serum or Plasma 15152-2 mg/dL

**Neuromuscular LP31403-6**

**Myelin basic protein LP14685-9**

Myelin basic protein in Serum 56661-2 ng/mL

Myelin basic protein in CSF 2638-5 ng/mL

**Protein LP15838-3**

**Albumin LP43038-6**

Albumin in Serum or Plasma 1751-7 g/dL

Albumin in Serum or Plasma by Electrophoresis 2862-1 g/dL

**C reactive protein LP41279-8**

C reactive protein in Blood by High sensitivity method 71426-1 mg/L

C reactive protein in Serum or Plasma 1988-5 mg/L

C reactive protein in Serum or Plasma by High sensitivity method 30522-7 mg/L

**Protein LP69961-8**

Protein in Serum or Plasma 2885-2 g/dL

**Hematology/Coagulation LP31756-7**

[**Hematology**](http://bioportal.bioontology.org/ontologies/LOINC/?p=classes&conceptid=http%3A%2F%2Fpurl.bioontology.org%2Fontology%2FLNC%2FLP30786-5) **LP30786-5**

**Basophils LP48336-9**

Basophils 26444-0 10^3/uL = k/mm^3

Basophils by Automated count 704-7 10^3/uL = k/mm^3

Basophils by Manual count 705-4 10^3/uL = k/mm^3

Basophils/100 leukocytes 30180-4 %

Basophils/100 leukocytes by Automated count 706-2 %

Basophils/100 leukocytes by Manual count 707-0 %

**Eosinophils LP48337-7**

Eosinophils 26449-9 10^3/uL = k/mm^3

Eosinophils by Automated count 711-2 10^3/uL = k/mm^3

Eosinophils by Manual count 712-0 10^3/uL = k/mm^3

Eosinophils/100 leukocytes 26450-7 %

Eosinophils/100 leukocytes by Automated count 713-8 %

Eosinophils/100 leukocytes by Manual count 714-6 %

**ESR LP45671-2**

ESR 30341-2 mm/h

ESR by 15 minute reading 43402-7 mm/15 min

ESR by Westergren method 4537-7 mm/h

ESR by 2H Westergren method 18184-2 mm/2 h

ESR by Wintrobe method 4538-5 mm/h

**Hematocrit LP45040-0**

Hematocrit 20570-8 %

Hematocrit by Automated count 4544-3 %

**Hemoglobin LP43135-0**

Hemoglobin 718-7 g/dL

**Hemoglobin A1c LP100945-7**

Hemoglobin A1c in Blood 4548-4 %

Hemoglobin A1c in Blood by calculation 17855-8 %

Hemoglobin A1c in Blood by HPLC 17856-6 %

Hemoglobin A1c in Blood by JDS/JSCC protocol 62388-4 %

Hemoglobin A1c in Blood by IFCC protocol 59261-8 %

**Lymphocytes LP48347-6**

Lymphocytes 26474-7 10^3/uL = k/mm^3

Lymphocytes by Automated count 731-0 10^3/uL = k/mm^3

Lymphocytes by Manual count 732-8 10^3/uL = k/mm^3

Lymphocytes/100 leukocytes 26478-8 %

Lymphocytes/100 leukocytes by Automated count 736-9 %

Lymphocytes/100 leukocytes by Manual count 737-7 %

**MCH LP48918-4**

MCH 28539-5 pg

MCH by Automated count 785-6 pg

**MCHC LP48919-2**

MCHC 28540-3 g/dL

MCHC by Automated count 786-4 g/dL

**MCV LP99254-2**

MCV 30428-7 fL

MCV by Automated count 787-2 fL

**Monocytes LP48349-2**

Monocytes 26484-6 10^3/uL = k/mm^3

Monocytes by Automated count 742-7 10^3/uL = k/mm^3

Monocytes by Manual count 743-5 10^3/uL = k/mm^3

Monocytes/100 leukocytes 26485-3 %

Monocytes/100 leukocytes by Automated count 5905-5 %

Monocytes/100 leukocytes by Manual count 744-3 %

**Neutrophils LP47720-5**

Neutrophils 26499-4 10^3/uL = k/mm^3

Neutrophils by Automated count 751-8 10^3/uL = k/mm^3

Neutrophils by Manual count 753-4 10^3/uL = k/mm^3

Neutrophils/100 leukocytes 26511-6 %

Neutrophils/100 leukocytes by Automated count 770-8 %

Neutrophils/100 leukocytes by Manual count 23761-0 %

**Platelet Count LP7631-7**

Platelet by Automated count 777-3 10^9/L = k/mm^3

Platelet by Manual count 778-1 10^9/L = k/mm^3

**RBC Count LP7536-8**

RBC by Automated count 789-8 10^12/L

RBC by Manual count 790-6 10^12/L

**RDW LP46692-7**

RDW 30384-2 fL

RDW by Automated count 21000-5 fL

**WBC Count LP7720-8**

WBC by Automated count 6690-2 10^9/L = k/mm^3

WBC by Manual count 804-5 10^9/L = k/mm^3

**Microbiology LP31755-9**

**Reagin Ab LP39544-9**

**Reagin Ab in CSF LP47110-9**

Reagin Ab [Presence] in CSF 22459-2 present/absent/indeterminate

Reagin Ab [Presence] in CSF by VDRL 5290-2 present/absent/indeterminate

Reagin Ab [Units/Volume] in CSF 22460-0 U/L

Reagin Ab [Units/Volume] in CSF by VDRL 5289-4 U/L

Reagin Ab [Titer] in CSF 46203-6 titer

Reagin Ab [Titer] in CSF by VDRL 31146-4 titer

**Reagin Ab in serum LP41330-9**

Reagin Ab [Presence] in Serum 22461-8 present/absent/indeterminate

Reagin Ab [Presence] in Serum by RPR 20507-0 present/absent/indeterminate

Reagin Ab [Presence] in Serum by VDRL 5292-8 present/absent/indeterminate

Reagin Ab [Units/Volume] in Serum 22462-6 U/L

Reagin Ab [Units/Volume] in Serum by RPR 20508-8 U/L

Reagin Ab [Units/Volume] in Serum by VDRL 5291-0 U/L

Reagin Ab [Titer] in Serum 11084-1 titer

Reagin Ab [Titer] in Serum by RPR 31147-2 titer

Reagin Ab [Titer] in Serum by VDRL 50690-7 titer

**Tuberculosis Interferon LP18171-6**

**Mycobacterium tuberculosis Mitogen stimulated gamma interferon LP71013-4**

Mycobacterium tuberculosis Mitogen stimulated gamma interferon [Units/Volume] in Blood 39017-9 IU/mL

Mycobacterium tuberculosis Mitogen stimulated gamma interferon [Presence] in Blood 45323-3 present/absent/indeterminate

**Mycobacterium tuberculosis stimulated gamma interferon LP149695-1**

Mycobacterium tuberculosis stimulated gamma interferon [Units/Volume] in Blood 46217-6 IU/mL

Mycobacterium tuberculosis stimulated gamma interferon [Presence] in Blood 71773-6 present/absent/indeterminate

**Urinalysis LP32744-2**

Protein in Urine 2888-6 mg/dL

Protein in Urine by Test strip 20454-5 present/absent/indeterminate

Protein [Mass/Time] in 24 hour Urine 2889-4 g/24H

Protein [Mass/Volume] in 24 hour Urine 21482-5 mg/dL

**Virus LP14855-8**

**Hepatitis B virus LP14306-2**

**Hepatitis B virus core LP66853-0**

Hepatitis B virus core [Presence] in Serum 51914-0 present/absent/indeterminate

**Hepatitis B virus core Ab LP43016-2**

Hepatitis B virus core Ab [Presence] in Serum 16933-4 present/absent/indeterminate

Hepatitis B virus core Ab [Units/Volume] in Serum 22316-4 U/L

Hepatitis B virus core Ab [Presence] in Serum by Immunoassay 13952-7 present/absent/indeterminate

Hepatitis B virus core Ab [Units/Volume] in Serum by Immunoassay 5187-0 U/L

Hepatitis B virus core Ab [Units/Volume] in Serum by Radioimmunoassay (RIA) 5188-8 U/L

**Hepatitis B virus core IgM LP47055-6**

Hepatitis B virus core IgM Ab [Presence] in Serum 31204-1 present/absent/indeterminate

Hepatitis B virus core IgM Ab [Units/Volume] in Serum 22319-8 U/L

Hepatitis B virus core IgM Ab [Presence] in Serum or Plasma by Immunoassay 24113-3 present/absent/indeterminate

Hepatitis B virus core IgM Ab [Units/Volume] in Serum by Immunoassay 5185-4 U/L

Hepatitis B virus core IgM Ab [Units/Volume] in Serum by Radioimmunoassay (RIA) 5186-2 U/L

**Hepatitis B virus core IgG LP42994-1**

Hepatitis B virus core IgG Ab [Presence] in Serum 32685-0 present/absent/indeterminate

Hepatitis B virus core IgG Ab [Units/Volume] in Serum 22318-0 U/L

Hepatitis B virus core IgG Ab [Presence] in Serum by Immunoassay 40725-4 present/absent/indeterminate

Hepatitis B virus core IgG Ab [Units/Volume] in Serum by Immunoassay 13919-6 U/L

**Hepatitis B virus surface Ab LP41149-3**

Hepatitis B virus surface Ab [Presence] in Serum 22322-2 present/absent/indeterminate

Hepatitis B virus surface Ab [Units/Volume] in Serum 16935-9 U/L

Hepatitis B virus surface Ab [Presence] in Serum by Immunoassay 10900-9 present/absent/indeterminate

Hepatitis B virus surface Ab [Units/Volume] in Serum by Immunoassay 5193-8 U/L

Hepatitis B virus surface Ab [Presence] in Serum by Radioimmunoassay (RIA) 39535-0 present/absent/indeterminate

Hepatitis B virus surface Ab [Units/Volume] in Serum by Radioimmunoassay (RIA) 5194-6 U/L

**Hepatitis B virus surface Ag LP54058-0**

Hepatitis B virus surface Ag [Presence] in Serum 5195-3 present/absent/indeterminate

Hepatitis B virus surface Ag [Units/Volume] in Serum 58452-4 U/L

Hepatitis B virus surface Ag [Presence] in Serum by Immunoassay 5196-1 present/absent/indeterminate

Hepatitis B virus surface Ag [Units/Volume] in Serum by Immunoassay 63557-3 U/L

Hepatitis B virus surface Ag [Presence] in Serum or Plasma by Neutralization test 7905-3 present/absent/indeterminate

Hepatitis B virus surface Ag [Presence] in Serum by Radioimmunoassay (RIA) 5197-9 present/absent/indeterminate

Hepatitis B virus surface Ag [Presence] in Serum or Plasma by Confirmatory method 65633-0 present/absent/indeterminate

Hepatitis B virus surface Ag [Neutralization] in Serum or Plasma by Confirmatory method 70154-0 %neutralization

**Hepatitis C virus LP14400-3**

**Hepatitis C virus Ag LP90852-2**

Hepatitis C virus Ag [Units/Volume] in Serum by Immunoassay 54914-7 U/L

**Hepatitis C virus Ab LP43019-6**

Hepatitis C virus Ab [Presence] in Serum by Immunoassay 13955-0 present/absent/indeterminate

Hepatitis C virus Ab [Presence] in Serum 16128-1 present/absent/indeterminate

Hepatitis C virus Ab [Presence] in Serum by Immunoblot (IB) 5199-5 present/absent/indeterminate

Hepatitis C virus Ab [Units/Volume] in Serum 22327-1 U/L

Hepatitis C virus Ab [Units/Volume] in Serum by Immunoassay 5198-7 U/L

Hepatitis C virus Ab [Presence] in Serum by Rapid immunoassay 72376-7 present/absent/indeterminate

**Hepatitis C virus IgG LP44597-0**

Hepatitis C virus IgG Ab [Presence] in Serum 16129-9 present/absent/indeterminate

Hepatitis C virus IgG Ab [Presence] in Serum by Immunoassay 40726-2 present/absent/indeterminate

Hepatitis C virus IgG Ab [Presence] in Serum by Immunoblot (IB) 33462-3 present/absent/indeterminate

Hepatitis C virus IgG Ab [Units/Volume] in Serum 16936-7 U/L

Hepatitis C virus IgG Ab [Units/Volume] in Serum by Immunoassay 57006-9 U/L

**Hepatitis C virus IgM LP66758-1**

Hepatitis C virus IgM Ab [Units/Volume] in Serum 53376-0 U/L

Hepatitis C virus IgM Ab [Units/Volume] in Serum by Immunoassay 51824-1 U/L

**Hepatitis C virus genotype LP49991-0**

Hepatitis C virus genotype [Identifier] in Blood 48574-8

Hepatitis C virus genotype [Identifier] in Serum or Plasma 32286-7

**Hepatitis C virus RNA LP40983-6**

Hepatitis C virus RNA [Presence] by Probe and target amplification 11259-9 present/absent/indeterminate

Hepatitis C virus RNA [Units/Volume] by Probe with amplification 10676-5 IU/mL

Hepatitis C virus RNA [Units/volume] by Probe and target amplification 11011-4 Thous IU/mL

Hepatitis C virus RNA [#/Volume] by Probe and target amplification 20416-4 copies/mL

Hepatitis C virus RNA [#/Volume] by Probe and signal amplification 20571-6 10\*6 eq/mL

Hepatitis C virus RNA [Units/Volume] by Probe and signal amplification 29609-5 IU/mL

Hepatitis C virus RNA [Units/Volume] by Probe and target amplification detection limit = 5 IU/mL 49758-6 IU/mL

Hepatitis C virus RNA [Units/Volume] by Probe and target amplification detection limit = 50 IU/mL 34704-7 IU/mL

Hepatitis C virus RNA [Units/Volume] by Probe and target amplification detection limit = 500 IU/mL 34703-9 IU/mL

Hepatitis C virus RNA [Log units/Volume] by Probe and target amplification 38180-6 log IU/mL

Hepatitis C virus RNA [Log #/Volume] by Probe and target amplification 47252-2 log copies/mL

Hepatitis C virus RNA [Log units/Volume] by Probe and signal amplification 42617-1 log IU/mL

Hepatitis C virus RNA [Log #/Volume] by Probe and signal amplification 42003-4 log copies/mL

**HIV LP17126-1**

**HIV 1 Ab LP42700-2**

HIV 1 Ab [Presence] in Serum 7917-8 present/absent/indeterminate

HIV 1 Ab [Presence] in Serum by Immunoassay 29893-5 present/absent/indeterminate

HIV 1 Ab [Presence] in Serum by Immunoblot (IB) 5221-7 present/absent/indeterminate

HIV 1 Ab [Presence] in Serum by Immunofluorescence 14092-1 present/absent/indeterminate

HIV 1 Ab [Presence] in Serum, Plasma or Blood by Rapid immunoassay 68961-2 present/absent/indeterminate

HIV 1 Ab [Units/Volume] in Serum 22356-0 U/L

HIV 1 Ab [Units/Volume] in Serum by Immunoassay 5220-9 U/L

HIV 1 Ab [Units/Volume] in Serum by Immunofluorescence 43599-0 U/L

**HIV 1 Ag LP45066-5**

HIV 1 Ag [Presence] in Serum 24012-7 present/absent/indeterminate

HIV 1 Ag [Presence] in Serum by Immunoassay 5222-5 present/absent/indeterminate

HIV 1 Ag [Units/Volume] in Serum 16976-3 U/L

**HIV 2 Ab LP47065-5**

HIV 2 Ab [Presence] in Serum 7919-4 present/absent/indeterminate

HIV 2 Ab [Presence] in Serum by Immunoassay 30361-0 present/absent/indeterminate

HIV 2 Ab [Presence] in Serum by Immunoblot (IB) 5225-8 present/absent/indeterminate

HIV 2 Ab [Units/Volume] in Serum 22358-6 U/L

HIV 2 Ab [Units/Volume] in Serum by Immunoassay 5224-1 U/L

**HIV DNA LP55190-0**

HIV DNA [Presence] by Probe with amplification 9836-8 present/absent/indeterminate

Note: U/L stands for “units per volume”.

**ACT Laboratory Tests (Provisional)** (\*UMLS2018AA)

(the full LOINC tree)

\*LAB Branch only