

EXHIBIT A

Data Sharing Schedule

Data Elements to be shared by Data Sources to HMSA are based on the Hawai'i HIE Data Sharing Schedule. The approved schedule is posted on the Hawai'i HIE website at www.hawaiihie.org. The schedule is being updated to conform to "Minimum Necessary" HIPAA and the Affordable Care Act requirements referenced below with corresponding section and page information:

1. Demographics information for Community Master Patient Identifier matching (Section 1, pages 1 & 2)
2. Patient's identified secondary contact information/contact person, if available in the facility's ADT data. (Section 2, page 2)
3. Payor data to confirm the Group/Plan membership (Section 3, page 2)
4. Encounter information, including Admission and Discharge info of encounter (date, time, diagnosis), Care Team, and discharge disposition (Section 15 and 16, page 6)
5. "Total Charges" may be transmitted separately after the encounter. (Section 17, page 7)

Hawai'i HIE Data Sharing Schedule

(Accepted Revision as of 12/2013, updated 1/9/2020)

The Data Sharing Schedule is an Attachment referenced in the Hawai'i HIE Data Sharing Agreement. Parameters in this Data Sharing Schedule have been accepted by the Hawai'i HIE domain committees as the appropriate "Minimum Data Set" ("MDS") to be exchanged by participants in the Hawai'i HIE user community, consistent with the use of "Minimum Necessary" HIPAA standard for uses and disclosures of protected health information (45 CFR 164.502(b)), and are subject to modification over time by the domain committees to address changing business and technical requirements. While not all participants have the current capability to capture and share all data elements contained in this Schedule, it is understood that all participants will expand their capabilities in order to maximize the data elements they capture and share with other participants through Hawai'i HIE.

Use of the clinical data shared through Hawai'i HIE for Health Care Operations and Payment must be supported by contractual agreements between participants engaging in those activities.

Health Plans:

[Refer to HAWAII HIE Website: <https://hawaiihie.org>]

A health plan shall provide the following demographic data when providing its membership file. The membership file shall be updated no less frequently than monthly.

1> Demographic Data:

- a) Last name, first name, middle initial
- b) Patient Name Suffix
- c) Gender at birth
- d) Gender identified
- e) DOB
- f) Mailing Address 1-
- g) Mailing Address - City
- h) Mailing Address - State
- i) Mailing Address - Zip
- j) Patient Phone #
- k) Social Security Number (last 4 digits)

Data Sharing Affiliate(s):

[Refer to HAWAII HIE Website: <https://hawaiihie.org>]

1> Demographic Data:

- a) Unique patient identifier (as assigned by Hawai'i HIE)

- b) Opt Out Flag
 - c) Opt out description
 - d) Last name, first name, middle Initial
 - e) Patient Name Suffix
 - f) Alias
 - g) DOB
 - h) Social Security Number (last 4 digits)
 - i) Hawai'i State Driver License or ID #
 - j) Account (Register) #
 - k) Medical Record #/ Record Type
 - l) Gender at birth
 - m) Gender Identified
 - n) Race
 - o) Ethnicity
 - p) Religion
 - q) Marital Status
 - r) Preferred Language
 - s) Zip Code of Residence
 - t) Mailing Address 1-
 - u) Mailing Address - City
 - v) Mailing Address - State
 - w) Mailing Address - Zip
 - x) Patient Phone #
 - y) Primary Care Physician/National Provider Identifier (NPI)/ DEA #
 - i. Specialty No. 1
 - ii. Specialty No. 2
 - iii. Specialty No. 3
 - z) Death Date and Time
- 2> Secondary Contact Information
- a) Secondary Contact
 - i. Name
 - ii. Relationship
 - iii. Phone Number
 - iv. Address
 - b) Resuscitation Status:
 - a) Advance Directives: availability
 - b) POLST (Physician Orders for Life Sustaining Treatment)
- 3> Payer Data
- a) Medicare Provider #
 - b) Primary Payer Name

- i. Plan/Group
 - ii. Member ID/Subscriber ID
- c) Secondary payer Name
 - i. Plan/Group
 - ii. Member ID/Subscriber ID
- d) Tertiary payer Name
 - i. Plan/Group
 - ii. Member ID/Subscriber ID

*** Unclear if possible to separate out active from historical medical problems. Ideally would have current problem list separate for easy access since the “current and resolved” list could be very lengthy.

4> Current Problems

- a) Condition
 - i. Date of Diagnosis
 - ii. Provider on Record
 - iii. Treatment

- b) Substance Use*
 - a) Smoking
 - b) ETOH
 - c) Other Substances

*Does not include substance abuse treatment records i.e., restricted information

5> Medical History

- a) ICD-10 Code/Description:
 - i. Date of Diagnosis
 - ii. Date of Resolution
 - iii. Provider on Record
- b) Immunization History
 - i. Immunization
 - i. Date Received
 - ii. Initial vaccination/booster

6> Surgical History

- a) Procedure:
 - i. Date of Procedure:
 - ii. Surgeon
 - iii. Diagnosis

7> Family History

- a) Significant Family History: Not yet supported

8> Medications

- a) Medication
 - i. Strength/Volume
 - ii. Dosage
 - iii. Route
 - iv. Prescriber
 - v. Start Date
 - vi. End Date
 - vii. Condition being treated
- b) Over-The-Counter Medications
- c) Supplements/Herbs

9> Allergies, Adverse Reactions, Alerts

- a) Substance
 - i. Reaction
 - ii. Severity
 - iii. Date of ID

10> Vitals Signs

- a) Height/date-time
- b) Weight/date-time
- c) BMI/date-time
- d) BP Systolic/date-time
- e) BP Diastolic/date-time
- f) Temp/date-time
- g) Pulse rate/date-time
- h) Pulse rhythm/date-time
- i) Resp rate/date-time

11> Labs

All test results for Clinical Pathology, Anatomic Pathology, Cytology, Microbiology and other specialized Laboratory Specialties allowed by applicable laws and regulations. List below contain the common tests and results that are routinely transmitted by data sources and sharing does not require special agreements between parties for activities covered under HIPAA:

Anti-Streptolysin O

BNP- Brain Natriuretic Peptide
Blood Urea Nitrogen (BUN)
CEA- Carcinoembryonic Antigen
Chlamydia trachomatis PCR
Chlamydia PCR
CK- Creatinine Kinase
Creatinine Serum
Creatinine Clearance (24 hour urine)
CRP- C- Reactive Protein
Digoxin
Lactate
Lactic Acid
Lipid Profile
Total Cholesterol
ESR- Erythrocyte Sedimentation Rate
Fasting or Random Glucose
GFR calc., if non-African American
GFR calc, if African Am.
Glucose 1hr/ 50 gram
Glucose Postpartum Fasting
Glucose Tolerance Test (Prenatal)
Glucose Tolerance Test (Postpartum)
Group A Strep Culture
HDL Cholesterol
INR
Hematocrit
Hemoglobin
Hemoglobin A1C
HbsAb (surfact antibody)
LDL Cholesterol
LDL-Direct
Microalbumin Urine
MRSA screen
Pap Smear
Phosphate (Serum)
Potassium (Serum)
PSA- Prostate Specific Antigen
Rapid Dir Grp-A strep screen
Specimen
Streptozyne
Throat culture
Transferase Alanine (ALT)/SGPT
Transferase Aspartate (AST)/SGOT
Triglyceride
Troponin
Urine Protein Dipstick
Varicella-Zoster Ab IgG

12> Microbiology

- 1) Culture/Screen
 - a) Date
 - b) Site/Source – (blood, urine, sputum, stool, CSF, wound, throat)
 - c) Method of Collection
 - d) Prelim Growth
 - e) Final Growth
 - f) Sensitivities

13> Pathology

1) Specimen

- a) Date
- b) Diagnosis
- c) Stage, Grade
- d) Markers/ Mutations- KRAS, HER-2/NEU, ER,PR

14> Imaging Studies and Reports

a) EKG

- a. Date/time
- b. Findings
- c. Ordering Provider
- d. Location

b) X-Ray

- a. Date/time
- b. Findings
- c. Ordering Provider
- d. Location

c) Other Imaging Studies

- a. Date/time
- b. Findings
- c. Ordering Provider
- d. Location

15> Patient Encounters Other than In-patient admissions

a) Date

- a) Location
- b) Diagnosis
- c) Provider

16> Admissions and Discharges

a) Date of admission/hour (PV1-44)

- i. Admission Diagnosis (PV2-3)
- ii. Location of Admission- Hospital (MSH:4)
- iii. Source of Admission- Specific Facility (PV1-14)
- iv. Admitting Attending (PV1-17)
- v. Treating Attending (PV1-7)
- vi. Consulting Attending (PV1-9)
- vii. Admitting Service (PV1-10)
- viii. Date of Discharge/hour (PV1-45)
- ix. Discharge Diagnosis ICD-10
- x. Disposition (PV1-36)

b) Discharge Summary report including follow up Instructions

17> Total Charges

- a) Hospital based physician charges
- b) Facility charges

18> Child

- a) Newborn Mother's Account #
- b) Birth Weight

19> Coding

- a) Principal Procedure Date/other procedure date 1-9/other procedure date 10-19
- b) Principal Diagnosis codes ICD-10
- c) POA Principal Diagnosis Code
- d) POA Other Diagnosis 1-9
- e) POA Other Diagnosis 10-19
- f) POA E-Code
- g) HCPCS Code 1-20 w/modifiers
- h) E-Code (External cause of injury, poisoning, or adverse effect)

20> Principal Procedure

- a) Other procedures 1-9/10-19

21> Principal Surgeon

- a) Other Surgeon 1-9/10-19

22> **Clinical and Laboratory findings associated with the following conditions are allowed for Public Health Reporting without special agreement**

Amebiasis
Amnesic shellfish poisoning
Anisakiasis
Anthrax
Botulism, foodborne
Botulism, infant
Botulism, other (unspecified)
Campylobacteriosis
Cholera
Ciguatera fish poisoning
Clostridium infection/toxin poisoning
Cryptococcosis
Cryptosporidiosis
Cyclosporiasis
Diarrheal disease, not otherwise specified
Diphyllobothrium latum
E. coli infection, shiga toxin-producing

Enterohem. E.coli O157:H7
Enterohem. E.coli, shigatox+, ?serogrp
Enterohem. E.coli, shigatox+, non-O157
Enterovirus infections
Food poisoning
Foodborne disease
Giardiasis
Listeriosis
Noroviruses
Paralytic shellfish poisoning
Parasitic GI illness, unspecified
Rotavirus
Salmonellosis
Scombroid fish poisoning
Shigellosis
Staphylococcal enterotoxin
Trichinosis (Trichinellosis)
Typhoid carrier
Typhoid fever (Salmonella typhi)
Vibrio infection, other
Vibrio parahaemolyticus
Vibrio vulnificus infection
Vibriosis, non-cholera
Waterborne disease
Yersiniosis
Bacterial meningitis, other
Birth defects and congenital anomalies
Botulism, other (non-infant/non-foodborne)
Coccidioidomycosis
Creutzfeldt Jakob Disease (CJD) and vCJD
Cytomegalovirus infection
Disease caused by agent used as weapon
Fifth Disease
Hansen disease (Leprosy)
Hemolytic uremic syndrome
Histoplasmosis
HTLV-I infection
HTLV-II infection
Kawasaki disease
Legionellosis
Meningitis, aseptic
Norovirus-like illness
Parasitic infection
Reye syndrome
Rheumatic fever
SARS-CoV disease
Scarlet fever
Staph aureus, methicillin resistant (MRSA)
Staph aureus, vancomycin intermediate sus (VISA)

Staph aureus, vancomycin resistant (VRSA)
Streptococcal disease, invasive, other
Streptococcus, Group A, invasive
Streptococcus, Group B, invasive
Toxic-shock syndrome, staphylococcal
Toxic-shock syndrome, streptococcal
Trachoma
Vancomycin-Resistant Enterococcus (VRE)
Encephalitis, other
Hepatitis A, acute
Hepatitis B, acute
Hepatitis B, chronic
Hepatitis B, perinatal
Hepatitis C, acute
Hepatitis C, chronic
Hepatitis Delta, co- or super-infection
Hepatitis E, acute
Hepatitis, other acute
AIDS
HIV Infection, adult
HIV Infection, pediatric
Flu activity code (Influenza)
Influenza
Influenza A
Influenza B
Influenza novel H1N1
Influenza Outbreak
Influenza, novel A virus infection
Influenza-associated mortality (less than age 18)
Arsenic
Asbestosis
Cadmium, elevated levels
Carbon monoxide, elevated levels
Chemical pneumonitis
Lead, elevated levels
Mercury, elevated levels
Mesothelioma
Methemoglobin
Pesticide poisoning
Pneumoconiosis
Pneumoconiosis, coal workers
Ricin poisoning
Silicosis
Toxic effects of chemicals not specified elsewhere
Bacterial vaginosis
Candidiasis
Chancroid
Chlamydia trachomatis infection
Condyloma acuminatum

Genital warts
Gonorrhea
Granuloma inguinale (GI)
Herpes
Human papiloma virus infection (HPV)
Lymphogranuloma venereum (LGV)
Mucopurulent cervicitis (MPC)
Nongonococcal urethritis (NGU)
Ophthalmia neonatorum
Pelvic inflammatory dis.,? etiology
Syphilis, congenital
Syphilis, early latent
Syphilis, late latent
Syphilis, late, not neurosyphilis
Syphilis, neurological
Syphilis, primary
Syphilis, secondary
Syphilis, unknown latent
Syphilitic stillbirth
Trichomonas vaginalis infection
Mycobacteria, atypical
Tuberculosis
Tuberculosis infection in children
Diphtheria
Haemophilus influenzae infection
Measles (Rubeola)
Meningococcal disease (Neisseria meningitidis)
Mumps
Pertussis
Poliomyelitis, paralytic
Poliovirus infection nonparalytic
Rubella
Rubella, Congenital Syndrome (CRS)
Smallpox
Streptococcus pneumoniae infection
Tetanus
Vaccinia adverse event following vaccination
Vaccinia disease
Varicella (Chickenpox)
African Tick Bite Fever
Anaplasmosis
Angiostonyliasis
Anthrax
Babesiosis
Blastomycosis
Brucellosis
Cat scratch fever (Bartonellosis)
Chagas disease
Chikungunya

Colorado tick fever
Denge Shock Syndrome
Dengue fever
Dengue hemorrhagic fever
Ehrlichia chaffeensis infection
Ehrlichia ewingii infection
Ehrlichiosis, human granulocytic (HGE)
Ehrlichiosis, human monocytic (HME)
Ehrlichiosis, human, other or unspec. agent
Ehrlichiosis/Anaplasmosis, undetermined, infection
Encephalitis, CA serogroup virus, neuroinvasive
Encephalitis, CA serogrp virus, non-neuroinvasive
Encephalitis, Cache Valley, neuroinvasive
Encephalitis, Cache Valley, non-neuroinvasive
Encephalitis, Eastern equine (EEE), neuroinvasive
Encephalitis, Estrn equine(EEE), non-neuroinvasive
Encephalitis, Japanese encephalitis virus disease
Encephalitis, Powassan, neuroinvasive
Encephalitis, Powassan, non-neuroinvasive
Encephalitis, St. Louis, neuroinvasive
Encephalitis, St. Louis, non-neuroinvasive
Encephalitis, Vnzla equine(VEE), neuroinvasive
Encephalitis, Vnzla equine(VEE), non-neuroinvasive
Encephalitis, Western equine (WEE), neuroinvasive
Encephalitis, Wstrn equine(WEE), non-neuroinvasive
Filariasis
Glanders
Hantavirus infection
Hantavirus pulmonary syndrome
Leishmaniasis
Leptospirosis
Lyme disease
Malaria
Meliodosis
Nipah virus infection
Orthopox
Plague
Psittacosis (Ornithosis)
Q fever
Q fever, acute
Q fever, chronic
Rabies
Rabies, animal
Relapsing fever, tick or louse borne
Spotted Fever Rickettsiosis (including RMSF)
Taeniasis
Toxoplasmosis
Tularemia
Typhus fever-fleaborne, murine

Typhus fever-louseborne, R. prowazekii
Vesicular stomatitis
Viral hemorrhagic fever
West Nile infection, neuroinvasive
West Nile infection, non-neuroinvasive
Yellow fever

VIROLOGY

Hepatitis B Surface Antigen
Hepatitis B Surface Antibody
Hepatitis B Core Antibody
Hepatitis A IgM
Varicella IgG (EIA)
Measles IgG (EIA)
Measles IgM (EIA)
Mumps IgG (EIA)
Herpes IgG
Cytomegalovirus IgG (EIA)
West Nile IgG (EIA)
West Nile IgM (EIA)
Herpes Shell Vial Testing
Herpes DFA slide testing
Norovirus PCR
Toxoplasmosis
VDRL Syphilis Screen
Rubella IgG (EIA)
Rubella IgM (EIA)
Rabies Panel
RCC – Rabies Cell Culture
Prenatal Profile
Viral Isolation Fluid- Non Influenza
Viral Isolation Swab- Non Influenza
Influenza PCR

BACTERIOLOGY

Salmonella grouping and typing
Shigella
Campylobacter
E. Coli
Miscellaneous Enteric Pathogens
VIB – Vibrio
Miscellaneous Bacteria Identification
Pinworm
Ova and Parasites
Neisseria meningitidis
H. Pylori

MYCOBACTERIOLOGY

Tuberculosis (raw specimen)
Tuberculosis (culture isolate)

MOLECULAR

Chlamydia and Gonorrhoea

ENVIRONMENTAL

Water Bacteriology
Fluoride
Fluoride (Public Water System)
Fluoride (Supplement Program)

NEWBORN SCREENING

Division of Laboratory Services (DLS) screens infant blood spot specimens for over 40 different disorders.

Data Formats:

LOINC

HL7

Medications List

CPT

ICD 9

ICD10

23> TUMOR/CANCER REGISTRY REPORTING

See Tumor Registry-specific requirements

24> PUBLIC HEALTH REGISTRIES REPORTING

See Public Health-Registry-specific requirements

Service Levels for Delivery: to be agreed to with data contributor and recipient(s).