HHIC

Data Specifications

2016

Hawaii Health Information Corporation
733 Bishop Street, Suite 1870
Honolulu, Hawaii 96813
808-534-0288

Table of Contents

TABLE OF CONTENTS **1**

BACKGROUND **2**

Our Mission *2*

OVERVIEW **3**

DATA CLEANSING **5**

New in 2016 ..... *8*

GENERAL SPECIFICATIONS **9**

DATA SUBMISSION SCHEDULE 9
DATA FILE DESCRIPTION 10
TRANSMISSION OPTIONS AND SPECIFICATIONS 10

BACKGROUND

The Hawaii Health Information Corporation (HHIC) is a not for profit organization incorporated in February, 1994.

HHIC maintains one of Hawai‘i’s largest healthcare databases, which contains over 2,000,000 inpatient discharge records collected from Hawai‘i’s 22 acute care hospitals for each year since 1993. HHIC has also collected over 4,000,000 emergency room records since 2000. HHIC's unique strength is the ability to generate comparative information using the extensive records in this database. In addition, we analyze relevant state and national databases to create population-based reports, performance measures, norms and benchmarks. As an independent organization, HHIC brings both objectivity and the required expertise to enable health care facilities, health plans, public and private organizations and communities to make the most of the data available, both locally and nationally.

Our Mission

The mission of HHIC is to collect, analyze and disseminate statewide health information in support of efforts to continuously improve the health of the people of Hawai'i and the quality and cost efficiency of healthcare services.

Overview

Since the first publication of *Technical Specifications: Hospital Discharge Data* in 1995, the Hawaii Health Information Corporation (HHIC) has issued several updated versions that incorporate new data elements and data sets to support HHIC member services and report requirements. The original Technical Specifications, Hospital Discharge Data, Version 1 included the core HHIC inpatient data elements and was applied to the submittal of hospital discharge data covering 1993 – 1995.

In December, 1995, *Technical Specifications, Hospital Discharge Data, Version 2* was released covering inpatient discharges for 1996. This version expanded the original inpatient data set to include additional detailed discharge data elements: Type of Admission, Source of Admission, Total Acute Care Days, Total Acute Care Charges, Total SNF Days, Total SNF Charges, Total ICF Days, Total ICF Charges, Total Other Days, Total Other Charges and Wait Listed Flag.

In October, 1996, the first Technical Specifications for outpatient data was issued. It covered ambulatory surgery and emergency room events beginning with 1997.

Health Care Data Sets: Technical Specifications and Transmittal Instructions, Version 3 was released in 1998 and included the specifications for both Inpatient and Outpatient data sets. It was applicable for events beginning with January, 1998 and included specifications for a new Patient Satisfaction Survey data set that was applicable to hospitals participating in the HHIC statewide Patient Satisfaction Survey project This Patient Satisfaction Survey data set was an exact duplicate of the inpatient data set with the addition of eight new data elements that were added on at the end of the inpatient data set.

Health Care Data Sets, Technical Specifications and Transmission Instructions, Version 4 was released in 2003 and was applicable for events beginning in January 2003. It included new field values for are Principal Source of Payment and Disposition of Patient. The *inpatient data set* was expanded to include an additional 10 Other Diagnoses as well as 10 more Other Procedures, Other Surgeons and Other Procedure Dates. Also new for 2003 inpatient data is the mother's medical record number on all newborn records. Current Procedural Terminology (CPT) codes were added to the *outpatient data set.*

Health Care Data Sets, Technical Specifications and Transmission Instructions, Version 5 was released in 2006 and was applicable for events beginning in January 2006. It included a newly created Physician data set. The new field values for are Principal Source of Payment. New data elements for both the *inpatient and outpatient data set* were Account number, Social Security Number, Patient Source of Admission—Specific Facility and Opt-Out Mailing Flag. Admitting and Discharge Nursing Unit were added to the *inpatient data set.* The Disposition of Patient—Hospital Defined field was modified for both the *inpatient and outpatient data set.* Total Charges and Mother's Medical Record Number fields were modified for the *inpatient data set* only. All of the waitlisted data elements were deleted from the *inpatient data set.*

Health Care Data Sets, Technical Specifications and Transmission Instructions, Version 6 was released in 2008 and was applicable for events beginning in January 2008. New data elements for both the *inpatient and outpatient data set* were Patent Middle Initial and Patient Name Suffix. For the *inpatient data set* only was the Present on Admission Indicator.

Health Care Data Sets, Technical Specifications and Transmission Instructions, Version 7 was released in 2009 and was applicable for events beginning in January 2010. New field values for both the *inpatient and outpatient data set* were added to Principal Source of Payment (Summerlin Insurance) and the Race/Ethnicity values were standardized for all the hospitals to report.

Health Care Data Sets, Technical Specifications and Transmission Instructions, Version 8 was released in 2010 and was applicable for events beginning in January 2011. It included the collection of data for Observation patients as well as a new file type for Revenue Data. Observation data is collected using the same specifications as are used for ambulatory and emergency data. *HCPCS Code (1-20) and HCPCS Code Modifier (1-3)* data elements have been deleted from the outpatient data file and now part of the new Revenue Data Set which includes revenue code, unit and charge information for all discharges/visits.

Health Care Data Sets, Technical Specifications and Transmission Instructions, Version 9 was released in 2011. Five additional fields were added to the following existing variables to bring the total for each variable to 25: Diagnoses, Present on Admission (POA) Indicators, Procedures, Surgeons, Procedure Dates. Revenue data was collected in separate files for all of the different record types. In July 2012 the following new field values for Principal Source of Payment were added for both the *inpatient and outpatient data sets:*

29 – Ohana Health Plan QUEST
30 – United Healthcare Community Plan QUEST
31 – Other Medicare Advantage Plan

Health Care Data Sets, Technical Specifications and Transmission Instructions, Version 10 was released in 2013. The patient's preferred spoken language is collected as part of Meaningful Use requirements.

Health Care Data Sets, Technical Specifications and Transmission Instructions, Version 11 was released in 2015. It includes the collection of patient's residential address for all record types. Patient height, weight and body mass index (BMI) were added for inpatients only. The diagnosis and procedure code fields are expanded to 7 characters each to accommodate ICD-10 codes. The diagnosis code, procedure code, procedure date and surgeon fields were increased from 25 to a total of 35 for inpatients and from 10 to 25 for outpatients. The External Cause of Injury (E-Code) field was increased to a total of 3. The Opt Out Flag was deleted as this is no longer utilized.

Data Cleansing

Coding Edits—HHIC has over 700 coding edits that check for illogical/erroneous combinations of ICD-9 codes. These edits are based on coding principles and guidelines and other coding references such as AHA's Coding Clinic for ICD-9-CM.

Other Edits—HHIC also ensures that all dates and values are valid based on current state and national standards.

A full listing of our current edits is below.

Edit Number and Description	
1	Invalid Language
2	Admit Date Before Date Of Birth
4	Invalid Discharge Date
5	Patient Discharged Before Admission
6	Disposition Hosp Must Be Blank For Non-Acute-Care Transfers.
7	Invalid Disposition
8	Invalid Pay Source.
9	Invalid Sex - Must Be 1 - 4
10	Invalid Race
11	Invalid Date Of Birth
12	Transfer-To Hospital Must Be A Valid Medicare Provider No For Acute-Care Transfers
13	Duplicate Record
14	Invalid Principal Diagnosis Code
15	Principal Diagnosis Is Missing.
16	Pregnancy Related Diagnosis Not Compatible With Age
17	Invalid Secondary Diagnosis Code
18	Invalid Sex For Diagnosis
20	Procedure Requires Procedure Date
21	Procedure Date Is Not Within Stay
22	Invalid Procedure Code
23	Invalid Sex For Procedure
24	Hospital Code Must Be Medicare Provider Number
25	Medical Record Number must be Present
26	In-Hospital Newborn - Admit Date Must Equal Birth Date
27	Invalid Zip Code
28	Mom Acct Number Must Be Present
29	Total Charges Must Be Greater Than Zero
30	Mom Discharge Record Not Found
31	Specified Mom Acct Number Links To A Non-Delivery Discharge
32	Newborn Residential Zip Code Does Not Match Moms

Edit Number and Description	
33	Multiple Mom Discharges Found For This Newborn Discharge
34	Newborn Acct Number And Mom Acct Number Are The Same
35	Mom Acct # Must Not Be Specified For A Non-Newborn Discharge
36	Mom Discharge Does Not Have A Related Newborn Discharge, Please Provide:
37	Name, SSN, Or Birth Date Does Not Match To Existing Patient.
38	Mom Residential Zip Code Does Not Match Newborns.
40	Invalid Admission Date
41	Admission Type Must Be 1 - 5 Or 9
42	Admission Type 4 (Nb) Requires Age Equal 0
43	Newborn Dx Requires Admit Type 4 (Nb) And Admsource 5 Or 6
44	Admission Source Must Be 1, 2, 4-9, B-F
45	Newborn Dx Requires Admit Type 4 (Nb) And Admsource 5 Or 6
46	Adm Hosp Must Be Blank For Non-Acute-Care Transfers
48	Adm Hosp Must Be A Valid Medicare Provider Number For Acute-Care Transfers.
50	Attending Physician Is Required
51	Attending Physician Id Not In Physician File.
52	Principal Procedure Requires Surgeon Code
53	Surgeon Id For Principal Procedure Not In Physician File.
54	Procedure Requires Surgeon Code
55	Surgeon Id Not In Physician File.
57	Acct Number is Blank or Invalid
58	Acct Number Already Exists.
59	Acct Number Is Not Unique In Load Batch.
60	SSN Is Invalid.
61	SSN Already Belongs To Another MRN. Please Confirm.
62	SSN Is Not Unique In Load Batch.
65	Birth Weight In Grams Must Be 150 – 9000
66	Birth Weight Does Not Agree With Diagnosis
67	Invalid E-Code
68	Newborn Diagnosis must be Principal Diagnosis
69	Birth Weight Reported As Unknown, Please Confirm
77	Zero Charge Discharge without Non-Service Diagnosis
78	Adm or Discharge Hour must be Between 00 and 23
83	Invalid HCPCS Code
84	Invalid Modifier For HCPCS Code
85	ED Visit, But No ED Revenue Code
86	Revenue Charges and Revenue Units must be >0.
87	First Name Is Blank Or Invalid.
88	Last Name Is Blank Or Invalid.

Edit Number and Description	
90	Professional Charges, Please verify.
91	Account Number and Medical Record Number do not match data file. Please verify.
92	Revenue Units of Service High. Please confirm.
93	Invalid Revenue Code.
94	Invalid Revenue Charges.
95	Revenue Charges do not equal Total Charges.
96	No Room and Board Revenue Code for Inpatient Record. Please confirm.
97	Room and Board Units of Service Does not Equal Calculated Length of Stay.
98	Patient Data Present, No Revenue Data
99	Inpatient Data has Revenue Errors
100	Revenue Units and/or Charges Must be Numeric
102	Uncommon Payer For Newborn - Please Confirm
103	Uncommon Disposition, Please Confirm
105	Patient Admitted as Inpatient
106	POA Indicator Must Be Present
107	Invalid POA Indicator On Non-Exempt Icd-9 Code
108	Invalid POA Indicator On Exempt Icd-9 Code
116	Unknown Admission Type, Please Confirm
117	Unknown Admission Source, Please Confirm
122	Principal Diagnosis Invalid As Discharge Diagnosis
123	Reported Diagnoses And Procedures Could Not Be Grouped To A DRG
124	DRG Grouper Program Return An Error
125	APR Grouper Program Return An Error
126	Invalid CMS DRG Code - Code Must Exist In Reference File
127	Invalid CMS MDC Code - Code Must Exist In Reference File
128	Invalid APR DRG Code - Code Must Exist In Reference File
129	Invalid APR MDC Code - Code Must Exist In Reference File
130	V Edit - Invalid Principal Diagnosis
131	V Edit - Invalid Other Diagnosis
132	V Edit - Diagnosis Vs Diagnosis
133	V Edit - Procedure Vs Diagnosis
134	V Edit - Procedure Vs Procedure
135	V Edit - E-Code Vs Diagnosis

New in 2016

This current publication, Health Care Data Sets, Technical Specifications and Transmission Instructions, Version12 makes changes to the Physician Data Set only.

Explanation on the new data element added in 2016 is provided below:

New Data Elements in the Physician Data Set:

- Sex
- Discharge Month
- Record Type

All changes are effective with discharges of January 1, 2016.

GENERAL SPECIFICATIONS

The instructions and specifications contained *in Health Care Data Sets: Technical Specifications and Transmittal Instructions, Version 12* are applicable to participating HHIC institutions submitting data to HHIC, effective with discharges of January 2016.

Data Submission Schedule

Files will be submitted to HHIC **40 days** after the end of each month.

A schedule for the submittal of the data sets to HHIC is provided in the table below.

Data Submission Schedule 2016

DATA DUE AT HHIC	INPATIENT/OUTPATIENT/LAB/ PHYSICIAN/REVENUE DATA SETS
1/10/2016	November 2015 Discharges
2/10/2016	December 2015 Discharges
3/10/2016	January 2016 Discharges
4/8/2016	February 2016 Discharges
5/10/2016	March 2016 Discharges
6/10/2016	April 2016 Discharges
7/8/2016	May 2016 Discharges
8/10/2016	June 2016 Discharges
9/9/2016	July 2016 Discharges
10/10/2016	August 2016 Discharges
11/10/2016	September 2016 Discharges
12/9/2016	October 2016 Discharges
1/10/2017	November 2016 Discharges
2/10/2017	December 2016 Discharges

Data File Description

Data files submitted to HHIC should include the following:

Email Attachment via HHIC's Secure File Transfer:

- Attach data files to an email message (see transmission specifications below for details)
- Email message should contain the following information:
  - Hospital Name(s)
  - Time Period Covered
  - Record Count (in message or at the end of the data file)

Data is in a fixed length format as specified in each data spec. All data records have a carriage return line feed at the end of each record.

Hospitals should submit the following files on a monthly basis:

- Inpatient data
- Inpatient revenue
- Ambulatory Surgery data
- Ambulatory Surgery revenue
- Emergency Room data
- Emergency Room revenue
- Observation data
- Observation revenue
- Physician data set

Transmission Options and Specifications

Data can be transmitted to HHIC in one of the following ways:

1. Direct upload to HHIC's Secure File Transfer site with these requirements:
   - Send email to HHIC Data Manager (Jean Kailiawa at jkailiawa@hhic.org) that the file has been sent.

2. VPN (i.e. HyperSend, PGP) data files to HHIC Data Manager (Jean Kailiawa).

TABLE OF CONTENTS

INPATIENT DATA SET 3

TECHNICAL NOTES 3
DATA FIELD LAYOUT 4
MEDICARE PROVIDER NUMBER 9
ACCOUNT (REGISTER) NUMBER 10
MEDICAL RECORD NUMBER 11
DATE OF BIRTH 12
SEX 13
RACE/ETHNICITY 14
PATIENT'S PRIMARY LANGUAGE 24
DATE OF ADMISSION 25
DATE OF DISCHARGE 26
PRINCIPAL SOURCE OF PAYMENT 27
DISPOSITION OF PATIENT 28
DISPOSITION OF PATIENT—SPECIFIC FACILITY 30
TOTAL CHARGES 31
HOSPITAL BASED PHYSICIAN CHARGES 32
BIRTH WEIGHT 33
ATTENDING PHYSICIAN 34
PRINCIPAL DIAGNOSIS CODE 35
OTHER DIAGNOSES (1-34) 36
EXTERNAL CAUSE OF INJURY (E- CODE)1, 2, 3 37
PRESENT ON ADMISSION (POA) INDICATORS (1-35) 38
PRINCIPAL PROCEDURE 39
OTHER PROCEDURES (1-34) 40
PRINCIPAL SURGEON 41
OTHER SURGEONS (1-34) 41
PRINCIPAL PROCEDURE DATE 42
OTHER PROCEDURE DATES (1-34) 43
TYPE OF ADMISSION 44
POINT OF ORIGIN (SOURCE) OF ADMISSION 45
SOURCE OF ADMISSION—SPECIFIC FACILITY 46
MOTHER'S ACCOUNT (REGISTER) NUMBER 47
SOCIAL SECURITY NUMBER 48
PATIENT FIRST NAME 48
PATIENT LAST NAME 49
PATIENT MIDDLE INITIAL 49
PATIENT NAME SUFFIX 50
MAILING ADDRESS 1 50
MAILING ADDRESS 2 51
MAILING ADDRESS - CITY 51
MAILING ADDRESS - STATE 52
MAILING ADDRESS - ZIP CODE 52
PATIENT PHONE NUMBER 53
RESIDENTIAL ADDRESS 1 53
RESIDENTIAL ADDRESS 2 54
RESIDENTIAL ADDRESS - CITY 54
RESIDENTIAL ADDRESS - STATE 55
RESIDENTIAL ADDRESS - ZIP CODE 55
ADMITTING NURSING UNIT 56
DISCHARGE NURSING UNIT 56

TABLE OF CONTENTS (CONTINUED)

PATIENT HEIGHT 57
PATIENT WEIGHT 57
PATIENT BODY MASS INDEX (BMI) 58
RECORD TYPE 58

INPATIENT DATA SET

The Inpatient Data Set includes all inpatient discharges for the specified month period. Generally, data elements specified in the HHIC Inpatient Data Set follow UB-04 standard formats and values.

Technical Notes

Explanation on the new data element added in 2015 is provided below:

- The order of some of the data elements has been changed, e.g. all diagnosis and procedure codes are now sequential.

New Data Elements:

- Residential Address
- Residential City
- Residential State
- Patient Height
- Patient Weight
- Patient Body Mass Index (BMI)

Modified Data Elements:

- The diagnosis and procedure code fields are expanded to 7 characters each to accommodate ICD-10 codes.
- The diagnosis code, procedure code, procedure date and surgeon fields were increased from 25 to a total of 35.
- The External Cause of Injury (E-Code) field was increased to a total of 3.

Deleted Data Elements:

- Opt out flag

This element is no longer utilized.

Data Field Layout

DATA ELEMENT	DATA TYPE	DATA LENGTH	COLUMN
Medicare Provider Number	A	6	1 – 6
Account (Register) Number	A	15	7 – 21
Medical Record Number	A	15	22 – 36
Date of Birth	D	8	37 – 44
Sex	N	1	45 – 45
Race	A	2	46 – 47
Patient's Primary Language	A	3	48 – 50
Date of Admission	D	6	51 – 56
Date of Discharge	D	6	57 – 62
Principal Source of Payment	N	2	63 – 64
Disposition of Patient	N	2	65 – 66
Disposition of Patient - Specific Facility	A	6	67 – 72
Total Charges	N	8	73 – 80
Hospital Based Physician Charges	N	6	81 – 86
Birth Weight	N	4	87 – 90
Attending Physician	A	9	91 – 99
Principal Diagnosis Code	A	7	100 – 106
Other Diagnosis - 1	A	7	107 – 113
Other Diagnosis - 2	A	7	114 – 120
Other Diagnosis - 3	A	7	121 – 127
Other Diagnosis - 4	A	7	128 – 134
Other Diagnosis - 5	A	7	135 – 141
Other Diagnosis - 6	A	7	142 – 148
Other Diagnosis - 7	A	7	149 – 155
Other Diagnosis - 8	A	7	156 – 162
Other Diagnosis - 9	A	7	163 – 169
Other Diagnosis - 10	A	7	170 - 176
Other Diagnosis - 11	A	7	177 – 183
Other Diagnosis - 12	A	7	184 – 190
Other Diagnosis - 13	A	7	191 – 197
Other Diagnosis - 14	A	7	198 – 204
Other Diagnosis - 15	A	7	205 – 211
Other Diagnosis - 16	A	7	212 – 218
Other Diagnosis - 17	A	7	219 – 225
Other Diagnosis - 18	A	7	226 – 232
Other Diagnosis - 19	A	7	233 – 239
Other Diagnosis – 20	A	7	240 – 246
Other Diagnosis – 21	A	7	247 – 253
Other Diagnosis – 22	A	7	254 – 260
Other Diagnosis – 23	A	7	261 – 267
Other Diagnosis – 24	A	7	268 – 274
Other Diagnosis – 25	A	7	275 – 281
Other Diagnosis – 26	A	7	282 – 288
Other Diagnosis – 27	A	7	289 – 295
Other Diagnosis – 28	A	7	296 – 302
Other Diagnosis – 29	A	7	303 – 309
Other Diagnosis – 30	A	7	310 – 316
Other Diagnosis – 31	A	7	317 – 323

DATA ELEMENT	DATA TYPE	DATA LENGTH	COLUMN
Other Diagnosis – 32	A	7	324 – 330
Other Diagnosis – 33	A	7	331 – 337
Other Diagnosis – 34	A	7	338 – 344
External Cause of Injury (E-Code) – 1	A	7	345 – 351
External Cause of Injury (E-Code) – 2	A	7	352 – 358
External Cause of Injury (E-Code) – 3	A	7	359 – 365
POA Principal Diagnosis Code	A	1	366 – 366
POA Other Diagnosis - 1	A	1	367 – 367
POA Other Diagnosis - 2	A	1	368 – 368
POA Other Diagnosis - 3	A	1	369 – 369
POA Other Diagnosis - 4	A	1	370 – 370
POA Other Diagnosis - 5	A	1	371 – 371
POA Other Diagnosis - 6	A	1	372 – 372
POA Other Diagnosis - 7	A	1	373 – 373
POA Other Diagnosis - 8	A	1	374 – 374
POA Other Diagnosis - 9	A	1	375 – 375
POA Other Diagnosis - 10	A	1	376 – 376
POA Other Diagnosis - 11	A	1	377 – 377
POA Other Diagnosis - 12	A	1	378 – 378
POA Other Diagnosis - 13	A	1	379 – 379
POA Other Diagnosis - 14	A	1	380 – 380
POA Other Diagnosis - 15	A	1	381 – 381
POA Other Diagnosis - 16	A	1	382 – 382
POA Other Diagnosis - 17	A	1	383 – 383
POA Other Diagnosis - 18	A	1	384 – 384
POA Other Diagnosis - 19	A	1	385 – 385
POA Other Diagnosis – 20	A	1	386 – 386
POA Other Diagnosis – 21	A	1	387 – 387
POA Other Diagnosis – 22	A	1	388 – 388
POA Other Diagnosis – 23	A	1	389 – 389
POA Other Diagnosis – 24	A	1	390 – 390
POA Other Diagnosis – 25	A	1	391 – 391
POA Other Diagnosis – 26	A	1	392 – 392
POA Other Diagnosis – 27	A	1	393 – 393
POA Other Diagnosis – 28	A	1	394 – 394
POA Other Diagnosis – 29	A	1	395 – 395
POA Other Diagnosis – 30	A	1	396 – 396
POA Other Diagnosis – 31	A	1	397 – 397
POA Other Diagnosis – 32	A	1	398 – 398
POA Other Diagnosis – 33	A	1	399 – 399
POA Other Diagnosis – 34	A	1	400 – 400
POA External Cause of Injury (E-Code) – 1	A	1	401 – 401
POA External Cause of Injury (E-Code) – 2	A	1	402 – 402
POA External Cause of Injury (E-Code) – 3	A	1	403 – 403
Principal Procedure	A	7	404 – 410
Other Procedures - 1	A	7	411 – 417
Other Procedures - 2	A	7	418 – 424
Other Procedures - 3	A	7	425 – 431
Other Procedures - 4	A	7	432 – 438
Other Procedures - 5	A	7	439 – 445
Other Procedures - 6	A	7	446 – 452
Other Procedures - 7	A	7	453 – 459
Other Procedures - 8	A	7	460 – 466

DATA ELEMENT	DATA TYPE	DATA LENGTH	COLUMN
Other Procedures - 9	A	7	467 – 473
Other Procedures - 10	A	7	474 – 480
Other Procedures - 11	A	7	481 – 487
Other Procedures - 12	A	7	488 – 494
Other Procedures - 13	A	7	495 – 501
Other Procedures - 14	A	7	502 – 508
Other Procedures - 15	A	7	509 – 515
Other Procedures - 16	A	7	516 – 522
Other Procedures - 17	A	7	523 – 529
Other Procedures - 18	A	7	530 – 536
Other Procedures - 19	A	7	537 – 543
Other Procedures - 20	A	7	544 – 550
Other Procedures - 21	A	7	551 – 557
Other Procedures - 22	A	7	556 – 564
Other Procedures - 23	A	7	565 – 571
Other Procedures - 24	A	7	572 – 578
Other Procedures - 25	A	7	579 – 585
Other Procedures - 26	A	7	586 – 592
Other Procedures - 27	A	7	593 – 599
Other Procedures - 28	A	7	600 – 606
Other Procedures - 29	A	7	607 – 613
Other Procedures - 30	A	7	614 – 620
Other Procedures - 31	A	7	621 – 627
Other Procedures - 32	A	7	628 – 634
Other Procedures - 33	A	7	635 – 641
Other Procedures - 34	A	7	642 – 648
Principal Surgeon	A	9	649 – 657
Other Surgeon - 1	A	9	658 – 666
Other Surgeon - 2	A	9	667 – 675
Other Surgeon - 3	A	9	676 – 684
Other Surgeon - 4	A	9	685 – 693
Other Surgeon - 5	A	9	694 – 702
Other Surgeon - 6	A	9	703 – 711
Other Surgeon - 7	A	9	712 – 720
Other Surgeon - 8	A	9	721 – 729
Other Surgeon - 9	A	9	730 – 738
Other Surgeon - 10	A	9	739 – 747
Other Surgeon - 11	A	9	748 – 756
Other Surgeon - 12	A	9	757 – 765
Other Surgeon - 13	A	9	766 – 774
Other Surgeon - 14	A	9	775 – 783
Other Surgeon - 15	A	9	784 – 792
Other Surgeon - 16	A	9	793 – 801
Other Surgeon - 17	A	9	802 – 810
Other Surgeon - 18	A	9	811 – 819
Other Surgeon - 19	A	9	820 – 828
Other Surgeon – 20	A	9	829 – 837
Other Surgeon – 21	A	9	838 – 846
Other Surgeon – 22	A	9	847 – 855
Other Surgeon – 23	A	9	856 – 864
Other Surgeon – 24	A	9	865 – 873
Other Surgeon – 25	A	9	874 – 882
Other Surgeon – 26	A	9	883 – 891

DATA ELEMENT	DATA TYPE	DATA LENGTH	COLUMN
Other Surgeon – 27	A	9	892 – 900
Other Surgeon – 28	A	9	901 – 909
Other Surgeon – 29	A	9	910 – 918
Other Surgeon – 30	A	9	919 - 927
Other Surgeon – 31	A	9	928 – 936
Other Surgeon – 32	A	9	937 – 945
Other Surgeon – 33	A	9	946 – 954
Other Surgeon – 34	A	9	955 – 963
Principal Procedure Date	D	6	964 – 969
Other Procedure Date - 1	D	6	970 – 975
Other Procedure Date - 2	D	6	976 – 981
Other Procedure Date - 3	D	6	982 – 987
Other Procedure Date - 4	D	6	988 – 993
Other Procedure Date - 5	D	6	994 – 999
Other Procedure Date - 6	D	6	1000 – 1005
Other Procedure Date - 7	D	6	1006 – 1011
Other Procedure Date - 8	D	6	1012 – 1017
Other Procedure Date - 9	D	6	1018 – 1023
Other Procedure Date - 10	D	6	1024 – 1029
Other Procedure Date - 11	D	6	1030 – 1035
Other Procedure Date - 12	D	6	1036 – 1041
Other Procedure Date - 13	D	6	1042 – 1047
Other Procedure Date - 14	D	6	1048 – 1053
Other Procedure Date - 15	D	6	1054 – 1059
Other Procedure Date - 16	D	6	1060 – 1065
Other Procedure Date - 17	D	6	1066 – 1071
Other Procedure Date - 18	D	6	1072 – 1077
Other Procedure Date - 19	D	6	1078 – 1083
Other Procedure Date - 20	D	6	1084 – 1089
Other Procedure Date - 21	D	6	1090 – 1095
Other Procedure Date - 22	D	6	1096 – 1101
Other Procedure Date - 23	D	6	1102 – 1107
Other Procedure Date - 24	D	6	1108 – 1113
Other Procedure Date - 25	D	6	1114 – 1119
Other Procedure Date - 26	D	6	1120 – 1125
Other Procedure Date - 27	D	6	1126 – 1131
Other Procedure Date - 28	D	6	1132 – 1137
Other Procedure Date - 29	D	6	1138 – 1143
Other Procedure Date - 30	D	6	1142 – 1149
Other Procedure Date - 31	D	6	1150 – 1155
Other Procedure Date - 32	D	6	1156 – 1161
Other Procedure Date - 33	D	6	1162 – 1167
Other Procedure Date - 34	D	6	1168 – 1173
Type of Admission	A	1	1174 – 1174
Source of Admission	A	1	1175 – 1175
Source of Admission – Specific Facility	A	6	1176 – 1181
Mother's Account Number	A	15	1182 – 1196
Social Security Number	N	9	1197 – 1205
Patient First Name	A	30	1206 – 1235
Patient Last Name	A	30	1236 – 1265
Patient Middle Initial	A	1	1266 – 1266
Patient Name Suffix	A	3	1267 – 1269

DATA ELEMENT	DATA TYPE	DATA LENGTH	COLUMN
Mailing Address 1	A	30	1270 – 1299
Mailing Address 2	A	30	1300 – 1329
Mailing Address - City	A	30	1330 – 1359
Mailing Address - State	A	2	1360 – 1361
Mailing Address - Zip Code	A	5	1362 – 1366
Patient Phone Number	N	10	1367 – 1376
Residential Address 1	A	30	1377 – 1406
Residential Address 2	A	30	1407 – 1436
Residential Address - City	A	30	1437 – 1466
Residential Address - State	A	2	1467 – 1468
Residential Address - Zip Code	A	5	1469 – 1473
Admitting Nursing Unit	A	20	1474 – 1493
Discharge Nursing Unit	A	20	1494 – 1513
Patient Height	N	3	1514 – 1516
Patient Weight	N	3	1517 – 1519
Patient Body Mass Index (BMI)	N	3	1520 – 1522
Record Type	A	1	1523 – 1523

Medicare Provider Number

Data Element: Medicare Provider Number

Length: 6

Position: 1 - 6

Data Type: Integer

Definition: Hospital's Medicare provider number as assigned by CMS.

Instructions: Right justify.
Do not leave this field blank.

Edits: HOSPITAL CODE MUST BE MEDICARE PROVIDER NUMBER
Provider number must be valid code in reference file.

Account (Register) Number

Data Element: Account (Register) Number

Length: 15

Position: 7 - 21

Data Type: Alpha-Numeric

Definition: The number assigned to the patient's visit by the hospital. The account number is typically used for charge and/or billing purposes.

Instructions: Left justify the account number.
Valid characters: A through Z, 0 through 9, . (period), and - (hyphen).
Leave unused right most positions blank. Do not zero fill them.
Do not leave this field blank.
For Hospitals with no account number, a unique number can be created by combining the medical record number and the discharge date.

Edits: DUPLICATE ACCOUNT
Multiple records have been submitted with the same Medicare provider number and account number.

ACCOUNT NUMBER MUST BE PRESENT
Account number must be non-blank.

Medical Record Number

Data Element: Medical Record Number

Length: 15

Position: 22 - 36

Data Type: Alpha-Numeric

Definition: The number assigned to the patient's medical/health record by the hospital. The medical record number is typically used to do an audit of the history of treatment.

Instructions: Left justify the medical record number.
Valid characters: A through Z, 0 through 9, . (period), and - (hyphen).
Leave unused right most positions blank. Do not zero fill them.
Do not leave this field blank.

Edits: DUPLICATE RECORD
Multiple records have been submitted with the same Medicare provider number, medical record number, date of birth, and discharge date.

MEDICAL RECORD NUMBER MUST BE PRESENT
Medical record number must be non-blank.

Date of Birth

Data Element: Date of Birth

Length: 8

Position: 37 - 44

Data Type: Date

Definition: Month, day, and year (including century) of birth of the patient

Instructions: YYYYMMDD
If the month, day or year of birth is a single digit, use a preceding zero. There should be no blanks in this field.
If the date of birth is unknown, the month and day should be recorded as 0701 and the approximate year should be calculated based upon the patient's age.
Do not leave this field blank.

Edits: ADMIT DATE BEFORE DATE OF BIRTH
Admit date must be greater than or equal to date of birth.

INVALID DATE OF BIRTH
Date of birth must be present, YYYYMMDD format, month between 1 and 12, day appropriate for month, DOB greater than 18900101.

DUPLICATE RECORD
Multiple records have been submitted with the same Medicare provider number, medical record number, date of birth, and discharge date.

IN-HOSPITAL NEWBORN - ADMIT DATE MUST EQUAL DATE OF BIRTH
If principal diagnosis begins V300 V310 V320 V330 V340 V350 V360 V370 V380 V390 (in-hospital newborn), date of birth must equal admit date.

Sex

Data Element: Sex

Length: 1

Position: 45 - 45

Data Type: Integer

Definition: Sex of patient

1 = Male
2 = Female
3 = Other (Congenital anomaly when the sex cannot be determined)
4 = Unknown (Transsexual surgery or when the sex of the patient is unknown)

Instructions: Do not leave this field blank.

Edits: INVALID SEX - MUST BE 1 - 4
Sex must be 1, 2, 3 or 4

INVALID SEX FOR DIAGNOSIS
If reference file indicates male only diagnosis, sex must be 1.
If reference file indicates female only diagnosis, sex must be 2.

INVALID SEX FOR PROCEDURE
If reference file indicates male only procedure, sex must be 1.
If reference file indicates female only procedure, sex must be 2.

Race/Ethnicity

Data Element: Race/Ethnicity

Length: 2

Position: 46 - 47

Data Type: Alpha-Numeric

Definition: The race or ethnicity with which the patient most closely identifies (i.e. race/ethnicity is self reported).

Alaska Native	A	Native Hawaiian	H
American Indian	I	Other Asian	Q
Arab/Arabian	Z	Other Hispanic or Latino	E
Asian Indian	D	Other Micronesian	M
Black or African American	B	Other Pacific Islander	Y
Chinese	C	Other Race	O
Fijian	1	Part Native Hawaiian	P
Filipino	F	Portuguese	5
Guamanian or Chamorro	G	Puerto Rican	R
Japanese	J	Samoan	S
Korean	K	Tahitian	6
Laotian	L	Thai	7
Malaysian	2	Tokelauan	8
Maori	N	Tongan	T
Marshallese	3	Unknown/Refused	U
Melanesian	X	Vietnamese	V
Mexican	4	White/Caucasian	W

Instructions: Do not leave this field blank.

If Hawaiian is one of multiple races/ethnicities given, then Part-Hawaiian is coded.
If a non-Caucasian race/ethnicity is given with a Caucasian race/ethnicity, then the non-Caucasian race/ethnicity is coded.
If more than one non-Caucasian race/ethnicity is given, then the first one is coded.
If more than one Caucasian ethnicity is given, then the first one is coded.

Edits: INVALID RACE
Race code must be in the list of valid codes.

Race/Ethnicity (continued)

The following is a chart showing which sub categories make up each of the HHIC Race/Ethnicity codes. Race/Ethnicity is self reported.

HHIC Race/ Ethnicity Codes		Subcategories
A	**Alaska Native**	
I	**American Indian**	
Z	**Arab/Arabian**	
D	**Asian Indian**	
B	**Black or African American**	African Bahamian Barbadian Botswanan Dominica Islander Ethiopian Haitian Jamaican Liberian Namibian Nigerian Tobagoan Trinidadian West Indian Zairean
C	**Chinese**	Taiwanese
1	**Fijian**	
F	**Filipino**	
G	**Guamanian or Chamorro**	
J	**Japanese**	Iwo Jiman Okinawan
K	**Korean**	
L	**Laotian**	
2	**Malaysian**	
N	**Maori**	
3	**Marshallese**	
X	**Melanesian**	New Hebrides Papua New Guinean Solomon Islander
4	**Mexican**	Chicano La Raza Mexican American Mexican American Indian Mexicano
H	**Native Hawaiian**	

Race/Ethnicity (continued)

HHIC Race/ Ethnicity Codes		Subcategories
Q	**Other Asian**	Bangladeshi Bhutanese Burmese Cambodian East Indian Hmong Indonesian Madagascar Maldivian Nepalese Pakistani Singaporean Sri Lankan

Race/Ethnicity (continued)

HHIC Race/ Ethnicity Codes		Subcategories
E	Other Hispanic or Latino	Andalusian Argentinean Asturian Belearic Islander Bolivian Canal Zone Canarian Castillian Catalonian Central American Central American Indian Chicano Chilean Colombian Costa Rican Criollo Cuban Dominican Ecuadorian Gallego Guatemalan Honduran La Raza Latin American Nicaraguan Panamanian Paraguayan Peruvian Salvadoran South American South American Indian Spaniard Spanish Basque Uruguayan Valencian Venezuelan
M	Other Micronesian	Carolinian Chuukese Kiribati Kosraean Mariana Islander Palauan Pohnpeian Saipanese Yapese

Race/Ethnicity (continued)

HHIC Race/ Ethnicity Codes	Subcategories
O	Other Race
P	Part Native Hawaiian
5	Portuguese
R	Puerto Rican
S	Samoan
6	Tahitian
7	Thai
8	Tokelauan
T	Tongan
U	Unknown/Refused
V	Vietnamese

Race/Ethnicity (continued)

HHIC Race/ Ethnicity Codes		Subcategories
W	White/Caucasian	Afghanistani Algerian Armenian Assyrian Bosnian Croatian Egyptian English European French German Iranian Iraqi Irish Israeli Italian Jordanian Kuwaiti Lebanese Libyan Middle Eastern or North African Other European Palestinian Polish Russian Saudi Arabian Scottish Serbian Syrian Tunisian Turkish Yemen

Race/Ethnicity (continued)

HHIC encourages hospitals to collect other races/ethnicities in addition to our 34 categories. Please use the following list of sub categories to assign the HHIC race code. If you collect others that are not included in this list, please consult HHIC regarding the mapping. The entries in bold are the 34 HHIC race/ethnicities. Race/Ethnicity is self reported.

Race/ Ethnicity	Map to HHIC Code	
Afghanistani	W	White/Caucasian
African	B	Black or African American
Alaska Native	**A**	
Algerian	W	White/Caucasian
American Indian	**I**	
Andalusian	E	Other Hispanic or Latino
Arab/Arabian	**Z**	
Argentinean	E	Other Hispanic or Latino
Armenian	W	White/Caucasian
Asian Indian	**D**	
Assyrian	W	White/Caucasian
Asturian	E	Other Hispanic or Latino
Bahamian	B	Black or African American
Bangladeshi	Q	Other Asian
Barbadian	B	Black or African American
Belearic Islander	E	Other Hispanic or Latino
Bhutanese	Q	Other Asian
Black or African American	**B**	
Bolivian	E	Other Hispanic or Latino
Bosnian	W	White/Caucasian
Botswanan	B	Black or African American
Burmese	Q	Other Asian
Cambodian	Q	Other Asian
Canal Zone	E	Other Hispanic or Latino
Canarian	E	Other Hispanic or Latino
Carolinian	M	Other Micronesian
Castillian	E	Other Hispanic or Latino
Catalonian	E	Other Hispanic or Latino
Central American	E	Other Hispanic or Latino
Central American Indian	E	Other Hispanic or Latino
Chicano	E	Other Hispanic or Latino
Chilean	E	Other Hispanic or Latino
Chinese	**C**	
Chuukese	M	Other Micronesian
Colombian	E	Other Hispanic or Latino
Costa Rican	E	Other Hispanic or Latino
Criollo	E	Other Hispanic or Latino
Croatian	W	White/Caucasian
Cuban	E	Other Hispanic or Latino
Dominica Islander	B	Black or African American
Dominican	E	Other Hispanic or Latino
East Indian	Q	Other Asian

Race/Ethnicity (continued)

Race/ Ethnicity	Map to HHIC Code	
Ecuadorian	E	Other Hispanic or Latino
Egyptian	W	White/Caucasian
English	W	White/Caucasian
Ethiopian	B	Black or African American
European	W	White/Caucasian
Fijian	**1**	
Filipino	**F**	
French	W	White/Caucasian
Gallego	E	Other Hispanic or Latino
German	W	White/Caucasian
Guamanian or Chamorro	**G**	
Guatemalan	E	Other Hispanic or Latino
Haitian	B	Black or African American
Hmong	Q	Other Asian
Honduran	E	Other Hispanic or Latino
Indonesian	Q	Other Asian
Iranian	W	White/Caucasian
Iraqi	W	White/Caucasian
Irish	W	White/Caucasian
Israeli	W	White/Caucasian
Italian	W	White/Caucasian
Iwo Jiman	J	Japanese
Jamaican	B	Black or African American
Japanese	**J**	
Jordanian	W	White/Caucasian
Kiribati	M	Other Micronesian
Korean	**K**	
Kosraean	M	Other Micronesian
Kuwaiti	W	White/Caucasian
La Raza	E	Other Hispanic or Latino
Laotian	**L**	
Latin American	E	Other Hispanic or Latino
Lebanese	W	White/Caucasian
Liberian	B	Black or African American
Libyan	W	White/Caucasian
Madagascar	Q	Other Asian
Malaysian	**2**	
Maldivian	Q	Other Asian
Maori	**N**	
Mariana Islander	M	Other Micronesian
Marshallese	**3**	
Melanesian	**X**	
Mexican	**4**	
Mexican American	4	Mexican
Mexican American Indian	4	Mexican
Mexicano	4	Mexican

Race/Ethnicity (continued)

Race/ Ethnicity	Map to HHIC Code	
Middle Eastern or North African	W	White/Caucasian
Namibian	B	Black or African American
Native Hawaiian	**H**	
Nepalese	Q	Other Asian
New Hebrides	X	Melanesian
Nicaraguan	E	Other Hispanic or Latino
Nigerian	B	Black or African American
Okinawan	J	Japanese
Other Asian	**Q**	
Other European	W	White/Caucasian
Other Hispanic or Latino	**E**	
Other Micronesian	**M**	
Other Pacific Islander	**Y**	
Other Race	**O**	
Pakistani	Q	Other Asian
Palauan	M	Other Micronesian
Palestinian	W	White/Caucasian
Panamanian	E	Other Hispanic or Latino
Papua New Guinean	X	Melanesian
Paraguayan	E	Other Hispanic or Latino
Part Native Hawaiian	**P**	
Peruvian	E	Other Hispanic or Latino
Pohnpeian	M	Other Micronesian
Polish	W	White/Caucasian
Portuguese	**5**	
Puerto Rican	**R**	
Russian	W	White/Caucasian
Saipanese	M	Other Micronesian
Salvadoran	E	Other Hispanic or Latino
Samoan	**S**	
Saudi Arabian	W	White/Caucasian
Scottish	W	White/Caucasian
Serbian	W	White/Caucasian
Singaporean	Q	Other Asian
Solomon Islander	X	Melanesian
South American	E	Other Hispanic or Latino
South American Indian	E	Other Hispanic or Latino
Spaniard	E	Other Hispanic or Latino
Spanish Basque	E	Other Hispanic or Latino
Sri Lankan	Q	Other Asian
Syrian	W	White/Caucasian
Tahitian	**6**	
Taiwanese	C	Chinese
Thai	**7**	
Tobagoan	B	Black or African American

Race/Ethnicity (continued)

Race/ Ethnicity	Map to HHIC Code	
Tokelauan	**8**	
Tongan	**T**	
Trinidadian	B	Black or African American
Tunisian	W	White/Caucasian
Turkish	W	White/Caucasian
Unknown/Refused	**U**	
Uruguayan	E	Other Hispanic or Latino
Valencian	E	Other Hispanic or Latino
Venezuelan	E	Other Hispanic or Latino
Vietnamese	**V**	
West Indian	B	Black or African American
White/Caucasian	**W**	
Yapese	M	Other Micronesian
Yemen	W	White/Caucasian
Zairean	B	Black or African American

Patient's Primary Language

Data Element: Patient's Primary Language

Length: 3

Position: 48 – 50

Data Type: Alpha-Numeric

Definition: The patient's preferred spoken language.

ASL	American Sign Language
ARA	Arabic
ARM	Armenian
CAM	Cambodian
CAN	Cantonese
CHA	Chamorro
CHI	Chinese
CHU	Chuukese
DAN	Danish
DUT	Dutch
ENG	English
FAR	Farsi (Persian)
FIL	Filipino (Other)
FLE	Flemish
FRE	French
GER	German
GRE	Greek
HAW	Hawaiian
HEB	Hebrew
HIN	Hindi
HMO	Hmong
HUN	Hungarian
ILO	Ilocano
IND	Indonesian
ITA	Italian
JAP	Japanese
KOR	Korean
LAO	Laotian
MAL	Malaysian
MAN	Mandarin
MAR	Marshallese
MIC	Micronesian
NOR	Norwegian
OTH	Other
OTP	Other Pacific Islander Languages
PAL	Palauan (Belauan)
POH	Pohnpeian
POL	Polish
POR	Portuguese
POB	Portuguese-Brazilian
RUS	Russian
SAM	Samoan
SPA	Spanish
SWE	Swedish
TAH	Tahitian
TAG	Tagalog
TAI	Taiwanese
THA	Thai
TON	Tongan
TUR	Turkish
UNK	Unknown/Undetermined/Refused
VIE	Vietnamese
VIS	Visayan
YAP	Yapese
NA	Not Applicable (USE FOR NEWBORNS ONLY)

Instructions: Do not leave this field blank.

Edits: INVALID LANGUAGE
Language code must be in the list of valid codes.

Date of Admission

Data Element: Date of Admission

Length: 6

Position: 51 - 56

Data Type: Date

Definition: Month, day and year of admission to hospital as an acute care patient.
This field along with discharge date is used to calculate length of stay. The day of admission is counted but not the day of discharge when the length of stay is generated.

Instructions: YYMMDD
If the month, day or year of admission is a single digit, use a preceding zero. There should be no blanks in this field.
Do not leave this field blank.

Edits: ADMIT DATE BEFORE DATE OF BIRTH
Admit date must be greater than or equal to date of birth.

PATIENT DISCHARGED BEFORE ADMISSION
Admit date must be less than or equal to discharge date.

PROCEDURE DATE IS NOT WITHIN STAY
If valid procedure date, admit date and discharge date, the procedure date must be greater than or equal to admit date and less than or equal to discharge date.

IN-HOSPITAL NEWBORN - ADMIT DATE MUST EQUAL DATE OF BIRTH
If principal diagnosis begins V300 V310 V320 V330 V340 V350 V360 V370 V380 V390 (in-hospital newborn) date of birth must equal admit date.

INVALID ADMISSION DATE
Admit date must be present, YYMMDD format, month between 1 and 12, day appropriate for month, date not in the future.

LOS FOR DRG IS GREATER THAN EXPECTED, PLEASE CONFIRM
Lengths of stay greater than expected for the DRG must be confirmed.

Date of Discharge

Data Element: Date of Discharge

Length: 6

Position: 57 - 62

Data Type: Date

Definition: Month, day and year the patient left the facility as an acute care patient.
This field along with the admission date is used to calculate length of stay. The day of admission is counted but not the day of discharge when length of stay is calculated.

Instructions: YYMMDD
If the month, day or year of discharge is a single digit, use a preceding zero. There should be no blanks in this field.
Do not leave this field blank.

Edits: INVALID DISCHARGE DATE
Discharge date must be present, YYMMDD format, month between 1 and 12, day appropriate for month, date not in the future.

PATIENT DISCHARGED BEFORE ADMISSION
Admit date must be less than or equal to discharge date.

DUPLICATE RECORD
Multiple records have been submitted with the same Medicare provider number, medical record number, date of birth, and discharge date.

PROCEDURE DATE IS NOT WITHIN STAY
If valid procedure date, admit date and discharge date, the procedure date must be greater than or equal to admit date and less than or equal to discharge date.

Principal Source of Payment

Data Element: Principal Source of Payment

Length: 2

Position: 63 - 64

Data Type: Integer

Definition: Expected principal source of payment for this hospital admission.

01 = Medicare (Fee For Service Plans Only)
02 = Medicaid/QUEST Expanded Access (QExA)
04 = HMSA (any other HMSA plan)
05 = Kaiser
06 = Other Insurance
07 = Self Pay/Charity Care
08 = No Fault
09 = Workers' Compensation
11 = Unknown
12 = DOD (Department of Defense) (Tripler Use Only)
14 = HMSA Health Plan Hawaii
15 = AlohaCare (QUEST)
16 = Hawaii Management Alliance Association (HMAA)
17 = University Health Alliance (UHA)
19 = Kaiser Senior Advantage
20 = Veterans Administration (VA)/CHAMPVA
21 = TRICARE/CHAMPUS/Other Government
22 = HMSA QUEST
23 = Kaiser QUEST
24 = QUEST (any QUEST plan except AlohaCare, HMSA QUEST, Kaiser QUEST, Ohana Health Plan QUEST and United Healthcare Community Plan QUEST)
25 = Secure Horizons Medicare Advantage
26 = AlohaCare Advantage/Advantage Plus
27 = Summerlin Insurance
28 = HMSA Akamai Advantage
29 = Ohana Health Plan QUEST
30 = United Healthcare Community Plan QUEST
31 = Other Medicare Advantage Plan
32 = AARP Medicare Complete
33 = Humana (Choice/Gold Choice/Gold Plus) Medicare Advantage Plans
34 = United Healthcare Dual Complete Advantage Special Needs Plans (SNPs)

Instructions: Enter leading zero for single digit codes.
Do not leave this field blank.

Edits: INVALID PAY SOURCE - MUST BE 1 - 34
Pay source must be between 1 and 34

HHIC Note: Out-of-state Medicaid plans are also included in payer 02. (3/05)

Disposition of Patient

Data Element: Disposition of Patient

Length: 2

Position: 65 - 66

Data Type: Integer

Definition: Patient disposition or discharge status. Same as UB-04 (form locator 17) patient status field.

01 = Discharged to home or self care (routine discharge)

02 = Transferred/discharged to another short-term general hospital for inpatient care

03 = Discharged/transferred to a skilled nursing facility (SNF) with Medicare certification

04 = Discharged/transferred to a Facility that Provides Custodial or Supportive Care (including ICF) (name change 10/09)

05 = Discharged/transferred to Designated Cancer Center OR Children's Hospital (4/1/08 discharges).

06 = Discharged/transferred to home under care of organized home health service Organization in anticipation of covered skilled care.

07 = Left against medical advice or discontinued care

09 = Admitted as an inpatient to this hospital

20 = Expired

21 = Discharged/transferred to Court/Law Enforcement (effective 10/09)

30 = Still patient

40 = Expired at home (hospice only)

41 = Expired in medical facility; e.g. hospital, SNF, ICF, or free standing hospice (hospice only)

42 = Expired - place unknown (hospice only)

43 = Discharged/transferred to a Federal Health Care facility (10/1/03 discharges)

50 = Hospice – home

51 = Hospice – medical facility

61 = Discharged/transferred within this institution to a hospital-based Medicare approved swing bed.

62 = Discharged/transferred to an Inpatient Rehabilitation Facility (IRF) including rehabilitation distinct part units of a hospital.

63 = Discharged/transferred to a Medicare Certified Long Term Care Hospital (LTCH)

64 = Discharged/transferred to a nursing facility certified by Medicaid, but not certified by Medicare.

65 = Discharged/transferred to a psychiatric hospital or psychiatric distinct part unit of a hospital (4/1/04 discharges).

66 = Discharged/transferred to a Critical Access Hospital (CAH) (1/1/06 discharges)

70 = Discharged/Transferred to Another Type of Health Care Institution Not Defined Elsewhere in this code list (4/1/08 discharges).

Disposition of Patient (continued)

81 = Discharged to home or self care with a planned acute care hospital inpatient readmission (effective 10/1/13)

82 = Transferred/discharged to another short-term general hospital for inpatient care with a planned acute care hospital inpatient readmission (effective 10/1/13)

83 = Discharged/transferred to a skilled nursing facility (SNF) with Medicare certification with a planned acute care hospital inpatient readmission (effective 10/1/13)

84 = Discharged/transferred to a Facility that Provides Custodial or Supportive Care (including ICF) with a planned acute care hospital inpatient readmission (effective 10/1/13)

85 = Discharged/transferred to Designated Cancer Center OR Children's Hospital with a planned acute care hospital inpatient readmission (effective 10/1/13)

86 = Discharged/transferred to home under care of organized home health service organization with a planned acute care hospital inpatient readmission (effective 10/1/13)

87 = Discharged/transferred to Court/Law Enforcement with a planned acute care hospital inpatient readmission (effective 10/1/13)

88 = Discharged/transferred to a Federal Health Care facility with a planned acute care hospital inpatient readmission (effective 10/1/13)

89 = Discharged/transferred to a hospital-based Medicare approved swing bed with a planned acute care hospital inpatient readmission (effective 10/1/13)

90 = Discharged/transferred to an Inpatient Rehabilitation Facility (IRF) including rehabilitation distinct part units of a hospital with a planned acute care hospital inpatient readmission (effective 10/1/13)

91 = Discharged/transferred to a Medicare Certified Long Term Care Hospital (LTCH) with a planned acute care hospital inpatient readmission (effective 10/1/13)

92 = Discharged/transferred to a nursing facility certified by Medicaid, but not certified by Medicare with a planned acute care hospital inpatient readmission (effective 10/1/13)

93 = Discharged/transferred to a psychiatric hospital or psychiatric distinct part unit of a hospital with a planned acute care hospital inpatient readmission (effective 10/1/13)

94 = Discharged/transferred to a Critical Access Hospital (CAH) with a planned acute care hospital inpatient readmission (effective 10/1/13)

95 = Discharged/Transferred to Another Type of Health Care Institution Not Defined Elsewhere in this code list with a planned acute care hospital inpatient readmission (effective 10/1/13)

Instructions: Do not leave this field blank.

Edits: INVALID DISPOSITION - MUST BE 01-07, 09, 20, 30, 40-43, 50-51, 61-66, 70

Disposition of Patient—Specific Facility

Data Element: Disposition of Patient—Specific Facility

Length: 6

Position: 67 - 72

Data Type: Integer

Definition: Hospital's Medicare provider number as assigned by CMS for the facility that patient is transferred to by your facility. When discharge disposition (position 65 - 66) has a value of 02 (transfer to acute hospital), this data element must be filled in.

120006	Castle Medical Center
121307	Hale Ho'ola Hamakua
120005	Hilo Medical Center
124001	Kahi Mohala
121304	Kahuku Hospital
120011	Kaiser Permanente Medical Center
123300	Kapiolani Medical Center for Women and Children
121301	Ka'u Hospital
121300	Kauai Veterans Memorial Hospital
121302	Kohala Hospital
120019	Kona Community Hospital
120007	Kuakini Medical Center
121308	Kula Hospital
121305	Lanai Community Hospital
120002	Maui Memorial Medical Center
121303	Molokai General Hospital
120028	North Hawaii Community Hospital
120026	Kapiolani Medical Center at Pali Momi
120001	Queen's Medical Center
12001W	Queen's Medical Center, West
123025	Rehabilitation Hospital of the Pacific
121306	Samuel Mahelona Memorial Hospital
120022	Straub Clinic and Hospital
12001F	Tripler Army Medical Center
120004	Wahiawa General Hospital
120014	Wilcox Memorial Hospital
999997	Other Acute Facility in U.S. (includes US Military facilities on foreign soil)
999998	Other Acute Facility outside of U.S.
999999	Unable to Provide Specific Facility

Instructions: Right justify.
Leave blank for patients not transferred to another facility.

Edits: HOSPITAL CODE MUST BE MEDICARE PROVIDER NUMBER
Provider number must be valid code in reference file.

FACILITY MUST BE SPECIFIED IF DISPOSITION IS "02".

Total Charges

Data Element: Total Charges

Length: 8

Position: 73 - 80

Data Type: Integer

Definition: Total charges for this stay, including room and board, pharmacy, laboratory, X-ray and hospital based physician charges.

Instructions: Enter total dollars charged and right justify. Zero fill any empty positions.
Truncate any cents.
If the amount is over $99,999,999, enter all 9's.
Do not leave this field blank.

Edits: TOTAL CHARGES MUST BE GREATER THAN ZERO
Total charges must be non-blank and greater than zero.

HOSPITAL BASED PHYSICIAN CHARGES EXCEED TOTAL CHARGES
Hospital based physician charges must be less than total charges.

Hospital Based Physician Charges

Data Element: Hospital Based Physician Charges

Length: 6

Position: 81 - 86

Data Type: Integer

Definition: Total hospital based physician charges.

Instructions: Enter total hospital based physician dollars charged and right justify. Zero fill any empty positions.
Truncate any cents.
If the amount is over $999,999, enter all 9's.
Zero fill if not applicable. Do not leave this field blank.

Edits: INVALID HOSPITAL BASED PHYSICIAN CHARGES
Hospital based physician charges must be numeric and not less than zero.

HOSPITAL BASED PHYSICIAN CHARGES EXCEED TOTAL CHARGES
Hospital based physician charges must be less than total charges.

Birth Weight

Data Element: Birth Weight

Length: 4

Position: 87 - 90

Data Type: Integer

Definition: Birth weight in grams for admissions less than 30 days in age

Instructions: Enter the birth weight in grams. Right justify the weight and zero fill the left most positions.
If this is a neonatal admission, report the weight at birth, not the weight at the time of admission.
If the birth weight is completely unknown, enter 9999.
If the patient is more than 30 days in age, this field is not applicable - zero fill it.
The appropriate DRG may not be assigned if the birth weight is omitted.

Edits: BIRTH WEIGHT IN GRAMS MUST BE 455 - 9505

If age = 0 and the patient is less than 31 days old, the weight must be between 455 and 9505 grams.

BIRTH WEIGHT DOES NOT AGREE WITH DIAGNOSIS (DX#)

If birth weight is greater than zero and diagnosis is 764-765.1 then the birth weight must fall within the range identified by the fifth digit of the diagnosis.

1 = < 500 grams
2 = 500 - 749 grams
3 = 750 - 999 grams
4 = 1000 - 1249 grams
5 = 1250 - 1499 grams
6 = 1500 - 1749 grams
7 = 1750 - 1999 grams
8 = 2000 - 2499 grams
9 - 2500+ grams

Attending Physician

Data Element: Attending Physician

Length: 9

Position: 91 - 99

Data Type: Alpha-Numeric

Definition: The number of the licensed physician who would normally be expected to certify and re-certify the medical necessity of the services rendered and/or who has primary responsibility for the patient's medical care and treatment.

Instructions: Enter the appropriate hospital defined code.
Left justify the code.
Do not leave blank.

Edits: ATTENDING PHYSICIAN IS REQUIRED
Attending physician must be non-blank.

Principal Diagnosis Code

Data Element: Principal Diagnosis Code

Length: 7

Position: 100 - 106

Data Type: Alpha-Numeric

Definition: The ICD-9/10-CM code describing the condition established after study to be chiefly responsible for causing the admission of the patient to the hospital for care.

Instructions:
External Cause of Injury codes for externally caused injuries are not allowed as principal diagnoses and are intended for use in addition to the principal diagnosis.
Manifestation and morphology codes are not allowed as a principal diagnosis.
Enter the appropriate ICD-9/10-CM code.
Left justify the code and if any positions are unused, leave them blank.
Do not code the decimal point. It is implied.
Do not leave this field blank.

Edits:

INVALID PRINCIPAL DIAGNOSIS
Must be valid principal diagnosis code in reference file.

INVALID SEX FOR DIAGNOSIS
If reference file indicates male only diagnosis, sex must be 1.
If reference file indicates female only diagnosis, sex must be 2.

PREGNANCY RELATED DIAGNOSIS NOT COMPATIBLE WITH AGE
If diagnosis is pregnancy related (630 - 676.99), age must be between 10 and 54.

IN-HOSPITAL NEWBORN - ADMIT DATE MUST EQUAL DATE OF BIRTH
If principal diagnosis begins V300 V310 V320 V330 V340 V350 V360 V370 V380 V390 (in-hospital newborn), date of birth must equal admit date.

BIRTH WEIGHT DOES NOT AGREE WITH DIAGNOSIS (DX#)
If birth weight is greater than zero and diagnosis is 764-765.1 then the birth weight must fall within the range identified by the fifth digit of the diagnosis.

1 = < 500 grams
2 = 500 - 749 grams
3 = 750 - 999 grams
4 = 1000 - 1249 grams
5 = 1250 - 1499 grams
6 = 1500 - 1749 grams
7 = 1750 - 1999 grams
8 = 2000 - 2499 grams
9 - 2500+ grams

Other Diagnoses (1-34)

Data Element: Other Diagnoses (1-34)

Length: 7 each (34 occurrences)

Position: 107 – 344

Data Type: Alpha-Numeric

Definition: ICD-9/10-CM diagnosis code(s) corresponding to additional conditions that co-exist at the time of admission or develop subsequently which affect the treatment received and/or the length of stay. Diagnoses that relate to an earlier episode which have no bearing on this hospital stay are to be excluded.

Instructions: Enter the appropriate ICD-9/10-CM code(s).
Left justify the code(s) and if any positions are unused, leave them blank.
Do not code the decimal point. It is implied.
The first three diagnoses reflecting the external cause of injury (E-code) should be reported in positions 345-365 of the record, not in this series of diagnosis codes. Any additional External Cause of Injury codes should be reported here.
If there are other diagnoses, do not leave this field(s) blank.
Do not leave a blank field between two diagnosis codes.
Do not zero fill. Leave unused fields blank.

Edits: INVALID SECONDARY DIAGNOSIS

Diagnosis (1-34) must be valid code in reference file.

INVALID SEX FOR DIAGNOSIS

If reference file indicates male only diagnosis, sex must be 1.
If reference file indicates female only diagnosis, sex must be 2.

PREGNANCY RELATED DIAGNOSIS NOT COMPATIBLE WITH AGE

If diagnosis is pregnancy related (630 - 676.99), age must be between 10 and 54.

BIRTH WEIGHT DOES NOT AGREE WITH DIAGNOSIS

If birth weight is greater than zero and diagnosis is 764-765.1 then the weight must fall within the range identified by the fifth digit of the diagnosis.

1 = < 500 grams
2 = 500 - 749 grams
3 = 750 - 999 grams
4 = 1000 - 1249 grams
5 = 1250 - 1499 grams
6 = 1500 - 1749 grams
7 = 1750 - 1999 grams
8 = 2000 - 2499 grams
9 - 2500+ grams

External Cause of Injury (E- Code)1, 2, 3

Data Element: External Cause of Injury (E-Code) 1, 2, 3

Length: 7 each (3 occurrences)

Position: 345 - 365

Data Type: Alpha-Numeric

Definition: The ICD-9/10-CM diagnosis code for the external cause of an injury, poisoning, or adverse effect.

Instructions: Enter the appropriate ICD-9-CM/ICD-10-CM External Cause of Injury-code.
Left justify the code and, if any positions are unused, leave them blank.
Do not code the decimal point. It is implied.
The External Cause of Injury code that appears in this field should not be included among the other diagnoses reported in Other Diagnosis fields of this record. Only the first three External Cause of Injury codes for a record should be reported here. If the record has additional External Cause of Injury codes, they should be reported in the Other Diagnosis fields for this record.
If there is no External Cause of Injury code associated with this hospitalization, leave this field blank. Do not zero fill.

The priorities for recording an External Cause of Injury code are the same as those for UB-04 forms:

1) Principal diagnosis of an injury or poisoning
2) Other diagnosis of an injury, poisoning, or adverse effect directly related to the principal diagnosis.
3) Other diagnosis with an external cause.

Edits: INVALID EXTERNAL CAUSE OF INJURY CODE
External Cause of Injury code must be a valid code in reference file.

Present on Admission (POA) Indicators (1-38)

Data Element: Present on Admission (POA) Indicators (1-38)

Length: 1 (for each diagnosis and External Cause of Injury codes – 38 occurrences total)

Position: 366 – 403 (1 byte each for each diagnosis and External Cause of Injury code.)

Data Type: Alpha-Numeric

Definition:
Y = Yes (present at the time of inpatient admission)
N = No (not present at the time of inpatient admission)
U = Unknown (documentation is insufficient to determine if condition was present on admission)
W = Clinically Undetermined (provider is unable to determine whether condition was present on admission)
1 = Unreported/Not used – Exempt from POA reporting

Instructions:
If corresponding diagnosis code or External Cause of Injury code is present, do not leave this field blank.
Each POA Indicator must have a corresponding diagnosis or External Cause of Injury code.
For exempt ICD-9-CM/ICD-10-CM code, POA must be 1.

Edits:

POA INDICATOR MUST BE PRESENT
POA Indicator must be present if corresponding diagnosis code is present.

INVALID POA INDICATOR ON NON-EXEMPT CODE
POA must be Y, N, U, or W.

INVALID POA INDICATOR ON EXEMPT CODE
POA must be 1.

Principal Procedure

Data Element: Principal Procedure

Length: 7

Position: 404 - 410

Data Type: Alpha-Numeric

Definition: The principal procedure is the one performed for definitive treatment, rather than the one performed for diagnostic or exploratory purposes or was necessary to take care of a complication. The principal procedure is most closely related to the principal diagnosis.

Instructions: Enter the appropriate ICD-9-PCS/ICD-10-PCS code for the principal procedure.
Left justify the code and, if any positions are unused, leave them blank.
Do not code the decimal point. It is implied.
Do not leave this field blank if a principal procedure has been performed.
Do not zero fill. Leave this field blank if no procedure was performed.

Edits:

PROCEDURE REQUIRES PROCEDURE DATE
If principal procedure is present, corresponding principal procedure date must be present, YYMMDD format, month between 1 and 12, day appropriate for month.

INVALID PROCEDURE CODE
Procedure code must be valid code in reference file.

INVALID SEX FOR PROCEDURE
If reference file indicates male only procedure, sex must be 1.
If reference file indicates female only procedure, sex must be 2.

PRINCIPAL PROCEDURE REQUIRES PRIMARY SURGEON CODE (SURG1)
If principal procedure is present, primary surgeon must be present.

Other Procedures (1-34)

Data Element: Other Procedures (1-34)

Length: 7 each (34 occurrences)

Position: 411 - 648

Data Type: Alpha-Numeric

Definition: The ICD-9-PCS/ICD-10-PCS codes identifying all significant procedures other than the principal procedure. Report all procedures including any therapeutic procedures. Include procedures which carry an operative or anesthetic risk and/or require highly trained personnel as well as special procedures which require technologically advanced facilities and/or equipment.

Instructions:
Enter the appropriate ICD-9-PCS/ICD-10-PCS code for the procedure(s).
Left justify the code(s) and, if any positions are unused, leave them blank.
Do not code the decimal point. It is implied.
Do not leave this field blank if a procedure(s) has been performed.
Do not leave a blank field between two procedure fields.
Do not zero fill unused fields. Leave them blank.

Edits:

PROCEDURE REQUIRES PROCEDURE DATE
If procedure is present, corresponding procedure date must be present, YYMMDD format, month between 1 and 12, day appropriate for month.

INVALID PROCEDURE CODE
Procedure code must be valid code in reference file.

INVALID SEX FOR PROCEDURE
If reference file indicates male only procedure, sex must be 1.
If reference file indicates female only procedure, sex must be 2.

PROCEDURE REQUIRES SECONDARY SURGEON CODE (SURGx)
If procedure #x is present, surgeon #x must be non-blank, non-zero.

Principal Surgeon

Data Element: Principal Surgeon

Length: 9

Position: 649 - 657

Data Type: Alpha-Numeric

Definition: Physician who performed the principal procedure.

Instructions: Enter the appropriate hospital defined code.
Left justify the code leaving unused right most positions blank.
If a surgical procedure was performed, do not leave this field blank.
Do not zero fill. Leave blank if not applicable.

Edits: PRINCIPAL PROCEDURE REQUIRES PRINCIPAL SURGEON CODE (SURG1)
If principal procedure is present, principal surgeon must be non-blank, non-zero.

Other Surgeons (1-34)

Data Element: Other Surgeons (1-34)

Length: 9 each (34 occurrences)

Position: 658 - 963

Data Type: Alpha-Numeric

Definition: Physician(s) who performed the corresponding procedure(s).

Instructions: Enter the appropriate hospital defined code(s).
Left justify the code(s), leaving unused right most positions blank.
If a surgical procedure was performed, do not leave this field blank.
Do not zero fill. Leave blank if not applicable.

Edits: SECONDARY PROCEDURE REQUIRES SECONDARY SURGEON CODE (SURGx)
If procedure #x is present, surgeon #x must be non-blank, non-zero.

Principal Procedure Date

Data Element: Principal Procedure Date

Length: 6

Position: 964 - 969

Data Type: Date

Definition: Month, day and year when the principal procedure was performed.

Instructions: YYMMDD
If the month, day or year of the procedure date is a single digit, use a preceding zero. There should be no imbedded blanks.
If a surgical procedure was performed, do not leave this field blank.
Do not zero fill. Leave blank if not applicable.

Edits: PROCEDURE REQUIRES PROCEDURE DATE

If procedure is present, corresponding procedure date must be present, YYMMDD format, month between 1 and 12, day appropriate for month.

PROCEDURE DATE IS NOT WITHIN STAY

If valid procedure date, admit date and discharge date, the procedure date must be greater than or equal to the admit date and less than or equal to the discharge date.

Other Procedure Dates (1-34)

Data Element: Other Procedure Dates (1-34)

Length: 6 each (34 occurrences)

Position: 970 – 1173

Data Type: Date

Definition: The date on which the corresponding procedure occurred.

Instructions: YYMMDD
If the month, day or year of the procedure is a single digit, use a preceding zero. There should be no imbedded blanks.
If a surgical procedure was performed, do not leave this field blank.
Do not zero fill. Leave blank if not applicable.

Edits: PROCEDURE REQUIRES PROCEDURE DATE

If procedure is present, corresponding procedure date must be present, YYMMDD format, month between 1 and 12, day appropriate for month.

PROCEDURE DATE IS NOT WITHIN STAY

If valid procedure date, admit date, and discharge date, the procedure date must be greater than or equal to the admit date and less than or equal to the discharge date.

Type of Admission

Data Element: Type of Admission

Length: 1

Position: 1174 - 1174

Data Type: Alphanumeric

Definition: A code indicating the priority of this admission.

1	=	Emergency	The patient requires medical intervention as a result of severe, life threatening or potentially disabling conditions. Generally, the patient is admitted through the emergency room.
2	=	Urgent	The patient requires immediate attention for the care and treatment of a physical or mental disorder. Generally the patient is admitted to the first available and suitable accommodation.
3	=	Elective	The patient's condition permits adequate time to schedule the availability of a suitable accommodation.
4	=	Newborn	Use of this code necessitates the use of special Source of Admission codes - see page 45 .
5	=	Trauma Center	Visits to a trauma center/hospital as licensed or designated by the state or local government authority authorized to do so, or as verified by the American College of Surgeons and involving a trauma activation.
6-8			Reserved for national assignment
9	=		Information not available

Instructions: Same as the UB-04 (form locator 14) Type of Admission field.
Do not leave this field blank.

Edits: INVALID CODE - MUST BE 1, 2, 3, 4, 5 or 9
Type of Admission must be 1, 2, 3, 4, 5 or 9

Point of Origin (Source) of Admission

Data Element: Point of Origin (Source) of Admission

Length: 1

Position: 1175 - 1175

Data Type: Alphanumeric

Definition: A code indicating the source of this admission.

For Emergency, Elective or Other Type of Admission

1 = Non-Health Care Facility Point of Origin
2 = Clinic or Physician's Office
4 = Transfer from a hospital (Different Facility)
5 = Transfer from a Skilled Nursing Facility (SNF) or Intermediate Care Facility (ICF)
6 = Transfer from another health care facility
8 = Court/Law Enforcement
9 = Information Not Available
B = Transfer from Another Home Health Agency
D = Transfer from One Distinct Unit of the Hospital to another Distinct Unit of the Same Hospital Resulting in a Separate Claim to the Payer
E = Transfer from Ambulatory Surgery Center
F = Transfer from Hospice and is Under a Hospice Plan of Care or Enrolled in a Hospice Program

3, 7, A - C, G - Z Reserved for national assignment

For Newborn

1 – 4 Reserved for national assignment
5 = Born Inside this Hospital
6 = Born Outside this Hospital
7-9 Reserved for national assignment

Instructions: Same as the UB-04 (form locator 15) Source of Admission field.
Do not leave this field blank

Edits: INVALID CODE - MUST BE 1, 2, 4-9 or B-F
Source of Admission must be 1, 2, 4-9 or B-F

IF AGE = 0 INVALID CODE - MUST BE 5, 6
Source of Admission must be 5 or 6

Source of Admission—Specific Facility

Data Element: Source of Admission—Specific Facility

Length: 6

Position: 1176 - 1181

Data Type: Integer

Definition: Hospital's Medicare provider number as assigned by CMS for the facility that transferred the patient to your facility. When source of admission (position 1175) has a value of 4 (transfer from a hospital), this data element must be filled in.

120006	Castle Medical Center
121307	Hale Ho'ola Hamakua
120005	Hilo Medical Center
124001	Kahi Mohala
121304	Kahuku Hospital
120011	Kaiser Permanente Medical Center
123300	Kapiolani Medical Center for Women and Children
121301	Ka'u Hospital
121300	Kauai Veterans Memorial Hospital
121302	Kohala Hospital
120019	Kona Community Hospital
120007	Kuakini Medical Center
121308	Kula Hospital
121305	Lanai Community Hospital
120002	Maui Memorial Medical Center
121303	Molokai General Hospital
120028	North Hawaii Community Hospital
120026	Kapiolani Medical Center at Pali Momi
120001	Queen's Medical Center
12001W	Queen's Medical Center West
123025	Rehabilitation Hospital of the Pacific
121306	Samuel Mahelona Memorial Hospital
120022	Straub Clinic and Hospital
12001F	Tripler Army Medical Center
120004	Wahiawa General Hospital
120014	Wilcox Memorial Hospital
999997	Other Acute Facility in U.S. (includes US Military facilities on foreign soil)
999998	Other Acute Facility outside of U.S.
999999	Unable to Provide Specific Facility

Instructions: Right justify.
Leave blank for patients not received in transfer from another facility.

Edits: HOSPITAL CODE MUST BE MEDICARE PROVIDER NUMBER
Provider number must be valid code in reference file.

FACILITY MUST BE SPECIFIED IF ADMIT SOURCE IS "4".

Mother's Account (Register) Number

Data Element: Mother's Account (Register) Number

Length: 15

Position: 1182 - 1196

Data Type: Alpha-Numeric

Definition: The number assigned to a newborn patient's **MOTHER's** visit by the hospital. The mother's account number will allow HHIC to correctly match each newborn record with the mother's record.

Instructions: Left justify the account number.
Valid characters: A through Z, 0 through 9 and - (hyphen).
Leave unused right most positions blank. Do not zero fill them.
Leave blank for all non-newborn records.

Edits: MOTHER'S ACCOUNT NUMBER MUST BE PRESENT FOR ALL NEWBORN RECORDS

Mother's account number must be non-blank for **ALL Newborn** Records

MOM DISCHARGE RECORD NOT FOUND

SPECIFIED MOM ACCOUNT NUMBER LINKS TO A NON-DELIVERY DISCHARGE

MULTIPLE MOM DISCHARGES FOUND FOR THIS NEWBORN DISCHARGE

MOM ACCOUNT NUMBER MUST NOT BE SPECIFIED FOR A NON-NEWBORN DISCHARGE

NEWBORN ACCT NUMBER AND MOM ACCT NUMBER ARE THE SAME

MOM DISCHARGE DOES NOT HAVE A RELATED NEWBORN DISCHARGE

NEWBORN RESIDENTIAL ZIP CODE DOES NOT MATCH MOMS

Social Security Number

Data Element: Social Security Number

Length: 9

Position: 1197 – 1205

Data Type: Numeric

Definition: The number assigned by the Social Security Administration.

Instructions: Valid characters: 0 through 9, no hyphens or spaces.
If SSN is unknown leave blank.

Edits: None

Patient First Name

Data Element: Patient First Name

Length: 30

Position: 1206 - 1235

Data Type: Alpha-Numeric

Definition: The patient's first name.

Instructions: Exclude middle names and middle initials
Uppercase only
Numbers are only accepted on newborn records and only when in the last position. For example: Baby Boy 2, Baby Girl 1, BB1, BG1

Edits: PATIENT FIRST NAME MUST BE PRESENT
Patient First Name must be non-blank.

Patient Last Name

Data Element: Patient Last Name

Length: 30

Position: 1236 - 1265

Data Type: Alpha-Numeric

Definition: The patient's last name.

Instructions: Uppercase Only

Edits: PATIENT LAST NAME MUST BE PRESENT
Patient Last Name must be non-blank.

Patient Middle Initial

Data Element: Patient Middle Initial

Length: 1

Position: 1266 – 1266

Data Type: Alpha-Numeric

Definition: The patient's middle initial.

Instructions: Include only the first middle initial.
Uppercase only.

Patient Name Suffix

Data Element: Patient Name Suffix

Length: 3

Position: 1267 - 1269

Data Type: Alpha-Numeric

Definition: The patient's name suffix, e.g. JR, SR, III, IV.

Instructions: Uppercase only

Mailing Address 1

Data Element: Mailing Address 1

Length: 30

Position: 1270 -1299

Data Type: Alpha-Numeric

Definition: Patient's mailing address. First line.

Instructions: Select the patient's mailing address and NOT the guarantor address.

Edits: None

Mailing Address 2

Data Element: Mailing Address 2

Length: 30

Position: 1300 - 1329

Data Type: Alpha-Numeric

Definition: Second line for apartment complex names or other long mailing addresses.

Instructions: Leave blank if not needed. Mailing Address 2 will be printed as a separate line below Mailing Address 1.

Edits: None

Mailing Address - City

Data Element: Mailing Address - City

Length: 30

Position: 1330 - 1359

Data Type: Alpha-Numeric

Definition: City associated with patient's mailing address.

Instructions:

Edits: None

Mailing Address - State

Data Element: Mailing Address - State

Length: 2

Position: 1360- 1361

Data Type: Alpha-Numeric

Definition: State associated with patient's mailing address.

Instructions: None

Edits: None

Mailing Address - Zip Code

Data Element: Mailing Address - Zip Code

Length: 5

Position: 1362 - 1366

Data Type: Alpha-Numeric

Definition: Zip Code associated with patient's mailing address.

Instructions: Standard US Postal Zip Code. Use leading zero as appropriate.

***Edits*:** ZIP CODE MUST BE NON-ZERO
Zip code must be valid zip code, 88888 or 99999.

Patient Phone Number

Data Element: Patient Phone Number

Length: 10

Position: 1367 - 1376

Data Type: Numeric

Definition: Patient telephone number.

Instructions: Enter patient phone number including area code and phone number with no punctuation (e.g. 2125551212).
Leave blank if unknown.

Edits: None

Residential Address 1

Data Element: Residential Address 1

Length: 30

Position: 1377 - 1406

Data Type: Alpha-Numeric

Definition: Patient's residential address. First line.

Instructions: Select the patient's residential address and NOT the guarantor address.

Edits: None

Residential Address 2

Data Element: Residential Address 2

Length: 30

Position: 1407 - 1436

Data Type: Alpha-Numeric

Definition: Second line for apartment complex names or other long residential addresses.

Instructions: Leave blank if not needed. Residential Address 2 will be printed as a separate line below Residential Address 1.

Edits: None

Residential Address - City

Data Element: Residential Address - City

Length: 30

Position: 1437 - 1466

Data Type: Alpha-Numeric

Definition: City associated with patient's residential address.

Instructions:

Edits: None

Residential Address - State

Data Element: Residential Address - State

Length: 2

Position: 1467 - 1468

Data Type: Alpha-Numeric

Definition: State associated with patient's residential address.

Instructions: None

Edits: None

Residential Address - Zip Code

Data Element: Residential Address - Zip Code

Length: 5

Position: 1469 - 1473

Data Type: Alpha-Numeric

Definition: U.S. postal zip code for the address of the patient's current residence. Use country codes for non-US residents.
The quality of the information in this field is critical to the medical assessment activity.

Instructions: Right justify, filling any leading blanks with zeros.
Provide the five digit postal zip code for US residents.
For **out of country patients, enter 88888**.
If the zip code is **unknown, enter 99999**.
Do not leave this field blank.

***Edits*:** ZIP CODE MUST BE NON-ZERO
Zip code must be valid zip code, 88888 or 99999.

Admitting Nursing Unit

Data Element: Admitting Nursing Unit

Length: 20

Position: 1474 - 1493

Data Type: Alpha-Numeric

Definition: The name of nursing unit to which the patient was admitted.

Instructions: Left justify the nursing unit.
Valid characters: A through Z, 0 through 9 and - (hyphen).
Leave unused right most positions blank. Do not zero fill them.
Leave blank if unknown or not available.

Edits: None

Discharge Nursing Unit

Data Element: Discharge Nursing Unit

Length: 20

Position: 1494 – 1513

Data Type: Alpha-Numeric

Definition: The name of nursing unit from which the patient was discharged.

Instructions: Left justify the nursing unit.
Valid characters: A through Z, 0 through 9 and - (hyphen).
Leave unused right most positions blank. Do not zero fill them.
Leave blank if unknown or not available.

Edits: None

Patient Height

Data Element: Patient Height (in inches)

Length: 3

Position: 1514 - 1516

Data Type: Numeric

Definition: The patient height in inches taken during this stay.

Instructions: Right justify the height and zero fill the left most positions.
Leave blank if unknown or not available.

Edits: None

Patient Weight

Data Element: Patient Weight

Length: 3

Position: 1517 - 1519

Data Type: Numeric

Definition: The first patient weight taken during this stay.

Instructions: Right justify the weight and zero fill the left most positions.
Leave blank if unknown or not available.
If the patient is less than 30 days in age, weight should be reported in grams in the Birth Weight field.

Edits: None

Patient Body Mass Index (BMI)

Data Element: Patient Body Mass Index (BMI)

Length: 3

Position: 1520 – 1522

Data Type: Numeric

Definition: The first patient BMI taken during this stay.

Instructions: Left justify the BMI and zero fill any unused positions.
Leave blank if unknown or not available.

Edits: None

Record Type

Data Element: Record Type

Length: 1

Position: 1523 - 1523

Data Type: Alpha-Numeric

Definition: 1 = Inpatient
6 = Acute Rehab (Rehab of the Pacific use only)

Instructions: All inpatient records must contain the number 1 and Rehab of the Pacific records must contain the number 6 in the last position of the record. This will force all records to be the same length whether procedures were performed or not.

Edits: None

TABLE OF CONTENTS – TAB 3

OUTPATIENT DATA SET 2

TECHNICAL NOTES 2
DATA FIELD LAYOUT 3
MEDICARE PROVIDER NUMBER 6
ACCOUNT (REGISTER) NUMBER 7
MEDICAL RECORD NUMBER 8
DATE OF BIRTH 9
SEX 10
RACE/ETHNICITY 11
PATIENT'S PRIMARY LANGUAGE 21
DATE OF ADMISSION 22
DATE OF DISCHARGE 23
PRINCIPAL SOURCE OF PAYMENT 24
DISPOSITION OF PATIENT 25
DISPOSITION OF PATIENT—SPECIFIC FACILITY 27
TOTAL CHARGES 28
BIRTH WEIGHT 29
ATTENDING PHYSICIAN 30
PRINCIPAL DIAGNOSIS CODE 31
OTHER DIAGNOSES (1-24) 32
EXTERNAL CAUSE OF INJURY (E CODE) 1, 2, 3 33
PRINCIPAL PROCEDURE 34
OTHER PROCEDURES (1-24) 35
PRINCIPAL SURGEON 36
OTHER SURGEONS (1-24) 36
PRINCIPAL PROCEDURE DATE 37
OTHER PROCEDURE DATES (1-24) 38
TYPE OF ADMISSION 39
POINT OF ORIGIN (SOURCE) OF ADMISSION 40
SOURCE OF ADMISSION—SPECIFIC FACILITY 41
ADMISSION HOUR 42
DISCHARGE HOUR 42
SOCIAL SECURITY NUMBER 43
PATIENT FIRST NAME 43
PATIENT LAST NAME 44
PATIENT MIDDLE INITIAL 44
PATIENT NAME SUFFIX 45
MAILING ADDRESS 1 45
MAILING ADDRESS 2 46
MAILING ADDRESS - CITY 46
MAILING ADDRESS - STATE 47
MAILING ADDRESS - ZIP CODE 47
PATIENT PHONE NUMBER 48
RESIDENTIAL ADDRESS 1 48
RESIDENTIAL ADDRESS 2 49
RESIDENTIAL ADDRESS - CITY 49
RESIDENTIAL ADDRESS - STATE 50
RESIDENTIAL ADDRESS - ZIP CODE 50
RECORD TYPE 51

OUTPATIENT DATA SET

The Outpatient Data Set includes all outpatient discharges for the specified month period. The specified outpatient data elements should be reported for all of the following case categories:

- ***Ambulatory Surgery.*** Same day hospital surgery events performed on an outpatient basis.

- ***Emergency Room.*** All acuity range cases performed in the Emergency Room. Cases already reported by the hospital in the Inpatient Data extracts should NOT be included. (e.g. those patients admitted through the emergency room)

- ***Observation***. Observation care is a well-defined set of specific, clinically appropriate services, which include ongoing short term treatment, assessment, and reassessment before a decision can be made regarding whether patients will require further treatment as hospital inpatients or if they are able to be discharged from the hospital. Cases already reported by the hospital in the Inpatient Data extracts should NOT be included. (e.g. those patients admitted from observation service).

Generally, data elements specified in the HHIC Outpatient Data Set follow UB-04 standard formats and values.

Technical Notes

Explanation on the new data element added in 2015 is provided below:

- The order of some of the data elements has been changed, e.g. Patient Middle Initial and Patient Names Suffix are now after the first and last name.

New Data Elements:

- *Residential Address*
- *Residential City*
- *Residential State*

Modified Data Elements:

- The diagnosis and procedure code fields are expanded to 7 characters each to accommodate ICD-10 codes.
- The diagnosis code, procedure code, procedure date and surgeon fields were increased from 10 to 25 for outpatients.
- The External Cause of Injury (E-Code) field was increased to a total of 3.

Deleted Data Elements:

- Opt out flag

This element is no longer utilized.

Data Field Layout

DATA ELEMENT	DATA TYPE	DATA LENGTH	COLUMN
Medicare Provider Number	A	6	1 – 6
Account (Register) Number	A	15	7 – 21
Medical Record Number	A	15	22 – 36
Date of Birth	D	8	37 – 44
Sex	N	1	45 – 45
Race	A	2	46 – 47
Patient's Primary Language	A	3	48 – 50
Date of Admission	D	6	51 – 56
Date of Discharge	D	6	57 – 62
Principal Source of Payment	N	2	63 – 64
Disposition of Patient	N	2	65 – 66
Disposition of Patient - Specific Facility	A	6	67 – 72
Total Charges	N	8	73 – 80
Birth Weight	N	4	81 – 84
Attending Physician	A	9	85 – 93
Principal Diagnosis Code	A	7	94 – 100
Other Diagnosis - 1	A	7	101 – 107
Other Diagnosis - 2	A	7	108 – 114
Other Diagnosis - 3	A	7	115 – 121
Other Diagnosis - 4	A	7	122 – 128
Other Diagnosis - 5	A	7	129 – 135
Other Diagnosis - 6	A	7	136 – 142
Other Diagnosis - 7	A	7	143 – 149
Other Diagnosis - 8	A	7	150 – 156
Other Diagnosis - 9	A	7	157 – 163
Other Diagnosis - 10	A	7	164 – 170
Other Diagnosis - 11	A	7	171 – 177
Other Diagnosis - 12	A	7	178 – 184
Other Diagnosis - 13	A	7	183 – 191
Other Diagnosis - 14	A	7	192 – 198
Other Diagnosis - 15	A	7	199 – 205
Other Diagnosis - 16	A	7	206 – 212
Other Diagnosis - 17	A	7	213 – 219
Other Diagnosis - 18	A	7	220 – 226
Other Diagnosis - 19	A	7	227 – 233
Other Diagnosis – 20	A	7	234 – 240
Other Diagnosis – 21	A	7	241 – 247
Other Diagnosis – 22	A	7	248 – 254
Other Diagnosis – 23	A	7	255 – 261
Other Diagnosis – 24	A	7	262 – 268
External Cause of Injury (E-Code) – 1	A	7	269 – 275
External Cause of Injury (E-Code) – 2	A	7	276 – 282
External Cause of Injury (E-Code) – 3	A	7	283 – 289
Principal Procedure	A	7	290 – 296
Other Procedures - 1	A	7	297 – 303
Other Procedures - 2	A	7	304 – 310
Other Procedures - 3	A	7	311 – 317
Other Procedures - 4	A	7	318 – 324

DATA ELEMENT	DATA TYPE	DATA LENGTH	COLUMN
Other Procedures - 5	A	7	325 – 331
Other Procedures - 6	A	7	332 – 338
Other Procedures - 7	A	7	339 – 345
Other Procedures - 8	A	7	346 – 352
Other Procedures - 9	A	7	353 – 359
Other Procedures - 10	A	7	360 – 366
Other Procedures - 11	A	7	367 – 373
Other Procedures - 12	A	7	374 – 380
Other Procedures - 13	A	7	381 – 387
Other Procedures - 14	A	7	388 – 394
Other Procedures - 15	A	7	395 – 401
Other Procedures - 16	A	7	402 – 408
Other Procedures - 17	A	7	409 – 415
Other Procedures - 18	A	7	416 – 422
Other Procedures - 19	A	7	423 – 429
Other Procedures - 20	A	7	430 – 436
Other Procedures - 21	A	7	437 – 443
Other Procedures - 22	A	7	444 – 450
Other Procedures - 23	A	7	451 – 457
Other Procedures - 24	A	7	458 – 464
Principal Surgeon	A	9	465 – 473
Other Surgeon - 1	A	9	474 – 482
Other Surgeon - 2	A	9	483 – 491
Other Surgeon - 3	A	9	492 – 500
Other Surgeon - 4	A	9	501 – 509
Other Surgeon - 5	A	9	510 – 518
Other Surgeon - 6	A	9	519 – 527
Other Surgeon - 7	A	9	528 – 536
Other Surgeon - 8	A	9	537 – 545
Other Surgeon - 9	A	9	546 – 554
Other Surgeon - 10	A	9	555 – 563
Other Surgeon - 11	A	9	564 – 572
Other Surgeon - 12	A	9	573 – 581
Other Surgeon - 13	A	9	582 – 590
Other Surgeon - 14	A	9	591 – 599
Other Surgeon - 15	A	9	600 – 608
Other Surgeon - 16	A	9	609 – 617
Other Surgeon - 17	A	9	618 – 626
Other Surgeon - 18	A	9	627 – 635
Other Surgeon - 19	A	9	636 – 644
Other Surgeon – 20	A	9	645 – 653
Other Surgeon – 21	A	9	654 – 662
Other Surgeon – 22	A	9	663 – 671
Other Surgeon – 23	A	9	672 – 680
Other Surgeon – 24	A	9	681 – 689
Principal Procedure Date	D	6	690 – 695
Other Procedure Date - 1	D	6	696 – 701
Other Procedure Date - 2	D	6	702 – 707
Other Procedure Date - 3	D	6	708 – 713
Other Procedure Date - 4	D	6	714 – 719
Other Procedure Date - 5	D	6	720 – 725
Other Procedure Date - 6	D	6	726 – 731
Other Procedure Date - 7	D	6	732 – 737

DATA ELEMENT	DATA TYPE	DATA LENGTH	COLUMN
Other Procedure Date - 8	D	6	738 – 743
Other Procedure Date - 9	D	6	744 – 749
Other Procedure Date - 10	D	6	750 – 755
Other Procedure Date - 11	D	6	756 – 761
Other Procedure Date - 12	D	6	762 – 767
Other Procedure Date - 13	D	6	768 – 773
Other Procedure Date - 14	D	6	774 – 779
Other Procedure Date - 15	D	6	780 – 785
Other Procedure Date - 16	D	6	786 – 791
Other Procedure Date - 17	D	6	792 – 797
Other Procedure Date - 18	D	6	798 – 803
Other Procedure Date - 19	D	6	804 – 809
Other Procedure Date - 20	D	6	810 – 815
Other Procedure Date - 21	D	6	816 – 821
Other Procedure Date - 22	D	6	822 – 827
Other Procedure Date - 23	D	6	828 – 833
Other Procedure Date - 24	D	6	834 – 839
Type of Admission	A	1	840 – 840
Source of Admission	A	1	841 – 841
Source of Admission – Specific Facility	A	6	842 – 847
Admission Hour	A	2	848 – 849
Discharge Hour	A	2	850 – 851
Social Security Number	N	9	852 – 860
Patient First Name	A	30	861 – 890
Patient Last Name	A	30	891 – 920
Patient Middle Initial	A	1	921 – 921
Patient Name Suffix	A	3	922 – 924
Mailing Address 1	A	30	925 – 954
Mailing Address 2	A	30	955 – 984
Mailing Address - City	A	30	985 – 1014
Mailing Address - State	A	2	1015 – 1016
Mailing Address - Zip Code	A	5	1017 – 1021
Patient Phone Number	N	10	1022 – 1031
Residential Address 1	A	30	1032 – 1061
Residential Address 2	A	30	1062 – 1091
Residential Address - City	A	30	1092 – 1121
Residential Address - State	A	2	1122 – 1123
Residential Address - Zip Code	A	5	1124 – 1128
Record Type	A	1	1129 – 1129

Medicare Provider Number

Data Element: Medicare Provider Number

Length: 6

Position: 1 - 6

Data Type: Integer

Definition: Hospital's Medicare provider number as assigned by CMS.

Instructions: Right justify.
Do not leave this field blank.

Edits: HOSPITAL CODE MUST BE MEDICARE PROVIDER NUMBER
Provider number must be valid code in reference file.

Account (Register) Number

Data Element: Account (Register) Number

Length: 15

Position: 7 - 21

Data Type: Alpha-Numeric

Definition: The number assigned to the patient's visit by the hospital. The account number is typically used for charge and/or billing purposes.

Instructions: Left justify the account number.
Valid characters: A through Z, 0 through 9, . (period), and - (hyphen).
Leave unused right most positions blank. Do not zero fill them.
Do not leave this field blank.
For Hospitals with no account number, a unique number can be created by combining the medical record number and the discharge date.

Edits: DUPLICATE ACCOUNT
Multiple records have been submitted with the same Medicare provider number and account number.

ACCOUNT NUMBER MUST BE PRESENT
Account number must be non-blank.

Medical Record Number

Data Element: Medical Record Number

Length: 15

Position: 22 - 36

Data Type: Alpha-Numeric

Definition: The number assigned to the patient's medical/health record by the hospital. The medical record number is typically used to do an audit of the history of treatment.

Instructions: Left justify the medical record number.
Valid characters: A through Z, 0 through 9, . (period), and - (hyphen).
Leave unused right most positions blank. Do not zero fill them.
Do not leave this field blank.

Edits: DUPLICATE RECORD

Multiple records have been submitted with the same Medicare provider number, medical record number, date of birth, and discharge date.

MEDICAL RECORD NUMBER MUST BE PRESENT

Medical record number must be non-blank.

Date of Birth

Data Element: Date of Birth

Length: 8

Position: 37 - 44

Data Type: Date

Definition: Month, day, and year (including century) of birth of the patient

Instructions: YYYYMMDD
If the month, day or year of birth is a single digit, use a preceding zero. There should be no blanks in this field.
If the date of birth is unknown, the month and day should be recorded as 0701 and the approximate year should be calculated based upon the patient's age.
Do not leave this field blank.

Edits: ADMIT DATE BEFORE DATE OF BIRTH
Admit date must be greater than or equal to date of birth.

INVALID DATE OF BIRTH
Date of birth must be present, YYYYMMDD format, month between 1 and 12, day appropriate for month, DOB greater than 18900101.

DUPLICATE RECORD
Multiple records have been submitted with the same Medicare provider number, medical record number, date of birth, and discharge date.

IN-HOSPITAL NEWBORN - ADMIT DATE MUST EQUAL DATE OF BIRTH
If principal diagnosis begins V300 V310 V320 V330 V340 V350 V360 V370 V380 V390 (in-hospital newborn), date of birth must equal admit date.

Sex

Data Element: Sex

Length: 1

Position: 45 - 45

Data Type: Integer

Definition: Sex of patient

1 = Male
2 = Female
3 = Other (Congenital anomaly when the sex cannot be determined)
4 = Unknown (Transsexual surgery or when the sex of the patient is unknown)

Instructions: Do not leave this field blank.

Edits: INVALID SEX - MUST BE 1 - 4
Sex must be 1, 2, 3 or 4

INVALID SEX FOR DIAGNOSIS
If reference file indicates male only diagnosis, sex must be 1.
If reference file indicates female only diagnosis, sex must be 2.

INVALID SEX FOR PROCEDURE
If reference file indicates male only procedure, sex must be 1.
If reference file indicates female only procedure, sex must be 2.

Race/Ethnicity

Data Element: Race/Ethnicity

Length: 2

Position: 46 - 47

Data Type: Alpha-Numeric

Definition: The race or ethnicity with which the patient most closely identifies (i.e. race/ethnicity is self reported).

Alaska Native	A	Native Hawaiian	H
American Indian	I	Other Asian	Q
Arab/Arabian	Z	Other Hispanic or Latino	E
Asian Indian	D	Other Micronesian	M
Black or African American	B	Other Pacific Islander	Y
Chinese	C	Other Race	O
Fijian	1	Part Native Hawaiian	P
Filipino	F	Portuguese	5
Guamanian or Chamorro	G	Puerto Rican	R
Japanese	J	Samoan	S
Korean	K	Tahitian	6
Laotian	L	Thai	7
Malaysian	2	Tokelauan	8
Maori	N	Tongan	T
Marshallese	3	Unknown\Refused	U
Melanesian	X	Vietnamese	V
Mexican	4	White/Caucasian	W

Instructions: Do not leave this field blank.

If Hawaiian is one of multiple races/ethnicities given, then Part-Hawaiian is coded.
If a non-Caucasian race/ethnicity is given with a Caucasian race/ethnicity, then the non-Caucasian race/ethnicity is coded.
If more than one non-Caucasian race/ethnicity is given, then the first one is coded.
If more than one Caucasian ethnicity is given, then the first one is coded.

Edits: INVALID RACE
Race code must be in the list of valid codes.

Race/Ethnicity (continued)

The following is a chart showing which sub categories make up each of the HHIC Race/Ethnicity codes. Race/Ethnicity is self reported.

HHIC Race/ Ethnicity Codes		Subcategories
A	**Alaska Native**	
I	**American Indian**	
Z	**Arab/Arabian**	
D	**Asian Indian**	
B	**Black or African American**	African Bahamian Barbadian Botswanan Dominica Islander Ethiopian Haitian Jamaican Liberian Namibian Nigerian Tobagoan Trinidadian West Indian Zairean
C	**Chinese**	Taiwanese
1	**Fijian**	
F	**Filipino**	
G	**Guamanian or Chamorro**	
J	**Japanese**	Iwo Jiman Okinawan
K	**Korean**	
L	**Laotian**	
2	**Malaysian**	
N	**Maori**	
3	**Marshallese**	
X	**Melanesian**	New Hebrides Papua New Guinean Solomon Islander
4	**Mexican**	Chicano La Raza Mexican American Mexican American Indian Mexicano
H	**Native Hawaiian**	

Race/Ethnicity (continued)

HHIC Race/ Ethnicity Codes		Subcategories
Q	**Other Asian**	Bangladeshi Bhutanese Burmese Cambodian East Indian Hmong Indonesian Madagascar Maldivian Nepalese Pakistani Singaporean Sri Lankan

Race/Ethnicity (continued)

HHIC Race/ Ethnicity Codes		Subcategories
E	**Other Hispanic or Latino**	Andalusian Argentinean Asturian Belearic Islander Bolivian Canal Zone Canarian Castillian Catalonian Central American Central American Indian Chicano Chilean Colombian Costa Rican Criollo Cuban Dominican Ecuadorian Gallego Guatemalan Honduran La Raza Latin American Nicaraguan Panamanian Paraguayan Peruvian Salvadoran South American South American Indian Spaniard Spanish Basque Uruguayan Valencian Venezuelan
M	**Other Micronesian**	Carolinian Chuukese Kiribati Kosraean Mariana Islander Palauan Pohnpeian Saipanese Yapese

Race/Ethnicity (continued)

HHIC Race/ Ethnicity Codes	Subcategories
O	**Other Race**
P	**Part Native Hawaiian**
5	**Portuguese**
R	**Puerto Rican**
S	**Samoan**
6	**Tahitian**
7	**Thai**
8	**Tokelauan**
T	**Tongan**
U	**Unknown\Refused**
V	**Vietnamese**

Race/Ethnicity (continued)

HHIC Race/ Ethnicity Codes		Subcategories
W	White/Caucasian	Afghanistani Algerian Armenian Assyrian Bosnian Croatian Egyptian English European French German Iranian Iraqi Irish Israeli Italian Jordanian Kuwaiti Lebanese Libyan Middle Eastern or North African Other European Palestinian Polish Russian Saudi Arabian Scottish Serbian Syrian Tunisian Turkish Yemen

Race/Ethnicity (continued)

HHIC encourages hospitals to collect other races/ethnicities in addition to our 34 categories. Please use the following list of sub categories to assign the HHIC race code. If you collect others that are not included in this list, please consult HHIC regarding the mapping. The entries in bold are the 34 HHIC race/ethnicities. Race/Ethnicity is self reported.

Race/ Ethnicity	Map to HHIC Code	
Afghanistani	W	White/Caucasian
African	B	Black or African American
Alaska Native	**A**	
Algerian	W	White/Caucasian
American Indian	**I**	
Andalusian	E	Other Hispanic or Latino
Arab/Arabian	**Z**	
Argentinean	E	Other Hispanic or Latino
Armenian	W	White/Caucasian
Asian Indian	**D**	
Assyrian	W	White/Caucasian
Asturian	E	Other Hispanic or Latino
Bahamian	B	Black or African American
Bangladeshi	Q	Other Asian
Barbadian	B	Black or African American
Belearic Islander	E	Other Hispanic or Latino
Bhutanese	Q	Other Asian
Black or African American	**B**	
Bolivian	E	Other Hispanic or Latino
Bosnian	W	White/Caucasian
Botswanan	B	Black or African American
Burmese	Q	Other Asian
Cambodian	Q	Other Asian
Canal Zone	E	Other Hispanic or Latino
Canarian	E	Other Hispanic or Latino
Carolinian	M	Other Micronesian
Castillian	E	Other Hispanic or Latino
Catalonian	E	Other Hispanic or Latino
Central American	E	Other Hispanic or Latino
Central American Indian	E	Other Hispanic or Latino
Chicano	E	Other Hispanic or Latino
Chilean	E	Other Hispanic or Latino
Chinese	**C**	
Chuukese	M	Other Micronesian
Colombian	E	Other Hispanic or Latino
Costa Rican	E	Other Hispanic or Latino
Criollo	E	Other Hispanic or Latino
Croatian	W	White/Caucasian
Cuban	E	Other Hispanic or Latino
Dominica Islander	B	Black or African American
Dominican	E	Other Hispanic or Latino
East Indian	Q	Other Asian

Race/Ethnicity (continued)

Race/ Ethnicity	Map to HHIC Code	
Ecuadorian	E	Other Hispanic or Latino
Egyptian	W	White/Caucasian
English	W	White/Caucasian
Ethiopian	B	Black or African American
European	W	White/Caucasian
Fijian	**1**	
Filipino	**F**	
French	W	White/Caucasian
Gallego	E	Other Hispanic or Latino
German	W	White/Caucasian
Guamanian or Chamorro	**G**	
Guatemalan	E	Other Hispanic or Latino
Haitian	B	Black or African American
Hmong	Q	Other Asian
Honduran	E	Other Hispanic or Latino
Indonesian	Q	Other Asian
Iranian	W	White/Caucasian
Iraqi	W	White/Caucasian
Irish	W	White/Caucasian
Israeli	W	White/Caucasian
Italian	W	White/Caucasian
Iwo Jiman	J	Japanese
Jamaican	B	Black or African American
Japanese	**J**	
Jordanian	W	White/Caucasian
Kiribati	M	Other Micronesian
Korean	**K**	
Kosraean	M	Other Micronesian
Kuwaiti	W	White/Caucasian
La Raza	E	Other Hispanic or Latino
Laotian	**L**	
Latin American	E	Other Hispanic or Latino
Lebanese	W	White/Caucasian
Liberian	B	Black or African American
Libyan	W	White/Caucasian
Madagascar	Q	Other Asian
Malaysian	**2**	
Maldivian	Q	Other Asian
Maori	**N**	
Mariana Islander	M	Other Micronesian
Marshallese	**3**	
Melanesian	**X**	
Mexican	**4**	
Mexican American	4	Mexican
Mexican American Indian	4	Mexican
Mexicano	4	Mexican

Race/Ethnicity (continued)

Race/ Ethnicity	Map to HHIC Code	
Middle Eastern or North African	W	White/Caucasian
Namibian	B	Black or African American
Native Hawaiian	**H**	
Nepalese	Q	Other Asian
New Hebrides	X	Melanesian
Nicaraguan	E	Other Hispanic or Latino
Nigerian	B	Black or African American
Okinawan	J	Japanese
Other Asian	**Q**	
Other European	W	White/Caucasian
Other Hispanic or Latino	**E**	
Other Micronesian	**M**	
Other Pacific Islander	**Y**	
Other Race	**O**	
Pakistani	Q	Other Asian
Palauan	M	Other Micronesian
Palestinian	W	White/Caucasian
Panamanian	E	Other Hispanic or Latino
Papua New Guinean	X	Melanesian
Paraguayan	E	Other Hispanic or Latino
Part Native Hawaiian	**P**	
Peruvian	E	Other Hispanic or Latino
Pohnpeian	M	Other Micronesian
Polish	W	White/Caucasian
Portuguese	**5**	
Puerto Rican	**R**	
Russian	W	White/Caucasian
Saipanese	M	Other Micronesian
Salvadoran	E	Other Hispanic or Latino
Samoan	**S**	
Saudi Arabian	W	White/Caucasian
Scottish	W	White/Caucasian
Serbian	W	White/Caucasian
Singaporean	Q	Other Asian
Solomon Islander	X	Melanesian
South American	E	Other Hispanic or Latino
South American Indian	E	Other Hispanic or Latino
Spaniard	E	Other Hispanic or Latino
Spanish Basque	E	Other Hispanic or Latino
Sri Lankan	Q	Other Asian
Syrian	W	White/Caucasian
Tahitian	**6**	
Taiwanese	C	Chinese
Thai	**7**	
Tobagoan	B	Black or African American

Race/Ethnicity (continued)

Race/ Ethnicity	Map to HHIC Code	
Tokelauan	**8**	
Tongan	**T**	
Trinidadian	B	Black or African American
Tunisian	W	White/Caucasian
Turkish	W	White/Caucasian
Unknown\Refused	**U**	
Uruguayan	E	Other Hispanic or Latino
Valencian	E	Other Hispanic or Latino
Venezuelan	E	Other Hispanic or Latino
Vietnamese	**V**	
West Indian	B	Black or African American
White/Caucasian	**W**	
Yapese	M	Other Micronesian
Yemen	W	White/Caucasian
Zairean	B	Black or African American

Patient's Primary Language

Data Element: Patient's Primary Language

Length: 3

Position: 48 – 50

Data Type: Alpha-Numeric

Definition: The patient's preferred spoken language.

ASL	American Sign Language	MAL	Malaysian
ARA	Arabic	MAN	Mandarin
ARM	Armenian	MAR	Marshallese
CAM	Cambodian	MIC	Micronesian
CAN	Cantonese	NOR	Norwegian
CHA	Chamorro	OTH	Other
CHI	Chinese	OTP	Other Pacific Islander Languages
CHU	Chuukese	PAL	Palauan (Belauan)
DAN	Danish	POH	Pohnpeian
DUT	Dutch	POL	Polish
ENG	English	POR	Portuguese
FAR	Farsi (Persian)	POB	Portuguese-Brazilian
FIL	Filipino (Other)	RUS	Russian
FLE	Flemish	SAM	Samoan
FRE	French	SPA	Spanish
GER	German	SWE	Swedish
GRE	Greek	TAH	Tahitian
HAW	Hawaiian	TAG	Tagalog
HEB	Hebrew	TAI	Taiwanese
HIN	Hindi	THA	Thai
HMO	Hmong	TON	Tongan
HUN	Hungarian	TUR	Turkish
ILO	Ilocano	UNK	Unknown\Undetermined\Refused
IND	Indonesian	VIE	Vietnamese
ITA	Italian	VIS	Visayan
JAP	Japanese	YAP	Yapese
KOR	Korean	NA	Not Applicable (USE FOR NEWBORNS ONLY)
LAO	Laotian		

Instructions: Do not leave this field blank.

Edits: INVALID LANGUAGE
Language code must be in the list of valid codes.

Date of Admission

Data Element: Date of Admission

Length: 6

Position: 51 - 56

Data Type: Date

Definition: Month, day and year of admission to hospital as an acute care patient.
This field along with discharge date is used to calculate length of stay. The day of admission is counted but not the day of discharge when the length of stay is generated.

Instructions: YYMMDD
If the month, day or year of admission is a single digit, use a preceding zero. There should be no blanks in this field.
Do not leave this field blank.

Edits: ADMIT DATE BEFORE DATE OF BIRTH
Admit date must be greater than or equal to date of birth.

PATIENT DISCHARGED BEFORE ADMISSION
Admit date must be less than or equal to discharge date.

PROCEDURE DATE IS NOT WITHIN STAY
If valid procedure date, admit date and discharge date, the procedure date must be greater than or equal to admit date and less than or equal to discharge date.

IN-HOSPITAL NEWBORN - ADMIT DATE MUST EQUAL DATE OF BIRTH
If principal diagnosis begins V300 V310 V320 V330 V340 V350 V360 V370 V380 V390 (in-hospital newborn) date of birth must equal admit date.

INVALID ADMISSION DATE
Admit date must be present, YYMMDD format, month between 1 and 12, day appropriate for month, date not in the future.

Date of Discharge

Data Element: Date of Discharge

Length: 6

Position: 57 - 62

Data Type: Date

Definition: Month, day and year the patient left the facility as an acute care patient.
This field along with the admission date is used to calculate length of stay. The day of admission is counted but not the day of discharge when length of stay is calculated.

Instructions: YYMMDD
If the month, day or year of discharge is a single digit, use a preceding zero. There should be no blanks in this field.
Do not leave this field blank.

Edits: INVALID DISCHARGE DATE
Discharge date must be present, YYMMDD format, month between 1 and 12, day appropriate for month, date not in the future.

PATIENT DISCHARGED BEFORE ADMISSION
Admit date must be less than or equal to discharge date.

DUPLICATE RECORD
Multiple records have been submitted with the same Medicare provider number, medical record number, date of birth, and discharge date.

PROCEDURE DATE IS NOT WITHIN STAY
If valid procedure date, admit date and discharge date, the procedure date must be greater than or equal to admit date and less than or equal to discharge date.

Principal Source of Payment

Data Element: Principal Source of Payment

Length: 2

Position: 63 - 64

Data Type: Integer

Definition: Expected principal source of payment for this hospital admission.

01 = Medicare (Fee For Service Plans Only)
02 = Medicaid/QUEST Expanded Access QExA)
04 = HMSA (any other HMSA plan)
05 = Kaiser
06 = Other Insurance
07 = Self Pay/Charity Care
08 = No Fault
09 = Workers' Compensation
11 = Unknown
12 = DOD (Department of Defense) (Tripler Use Only)
14 = HMSA Health Plan Hawaii
15 = AlohaCare (QUEST)
16 = Hawaii Management Alliance Association (HMAA)
17 = University Health Alliance (UHA)
19 = Kaiser Senior Advantage
20 = Veterans Administration (VA)/CHAMPVA
21 = TRICARE/CHAMPUS/Other Government
22 = HMSA QUEST
23 = Kaiser QUEST
24 = QUEST (any QUEST plan except AlohaCare, HMSA QUEST, Kaiser QUEST)
25 = Secure Horizons Medicare Advantage
26 = AlohaCare Advantage/Advantage Plus
27 = Summerlin Insurance
28 = HMSA Akamai Advantage
29 = Ohana Health Plan QUEST
30 = United Healthcare Community Plan QUEST
31 = Other Medicare Advantage Plan
32 = AARP Medicare Complete
33 = Humana (Choice/Gold Choice/Gold Plus) Medicare Advantage Plans
34 = United Healthcare Dual Complete Advantage Special Needs Plans (SNPs)

Instructions: Enter leading zero for single digit codes.
Do not leave this field blank.

Edits: INVALID PAY SOURCE - MUST BE 1 - 34
Pay source must be between 1 and 34

HHIC Note: Out-of-state Medicaid plans are also included in payer 02. (3/05)

Disposition of Patient

Data Element: Disposition of Patient

Length: 2

Position: 65 - 66

Data Type: Integer

Definition: Patient disposition or discharge status. Same as UB-04 (form locator 17) patient status field.

01 = Discharged to home or self care (routine discharge)

02 = Transferred/discharged to another short-term general hospital for inpatient care

03 = Discharged/transferred to a skilled nursing facility (SNF) with Medicare certification

04 = Discharged/transferred to a Facility that Provides Custodial or Supportive Care (including ICF) (name change 10/09)

05 = Discharged/transferred to Designated Cancer Center OR Children's Hospital (4/1/08 discharges).

06 = Discharged/transferred to home under care of organized home health service Organization in anticipation of covered skilled care.

07 = Left against medical advice or discontinued care

09 = Admitted as an inpatient to this hospital

20 = Expired

21 = Discharged/transferred to Court/Law Enforcement (effective 10/09)

30 = Still patient

40 = Expired at home (hospice only)

41 = Expired in medical facility; e.g. hospital, SNF, ICF, or free standing hospice (hospice only)

42 = Expired - place unknown (hospice only)

43 = Discharged/transferred to a Federal Health Care facility (10/1/03 discharges)

50 = Hospice – home

51 = Hospice – medical facility

61 = Discharged/transferred within this institution to a hospital-based Medicare approved swing bed.

62 = Discharged/transferred to an Inpatient Rehabilitation Facility (IRF) including rehabilitation distinct part units of a hospital.

63 = Discharged/transferred to a Medicare Certified Long Term Care Hospital (LTCH)

64 = Discharged/transferred to a nursing facility certified by Medicaid, but not certified by Medicare.

65 = Discharged/transferred to a psychiatric hospital or psychiatric distinct part unit of a hospital (4/1/04 discharges).

66 = Discharged/transferred to a Critical Access Hospital (CAH) (1/1/06 discharges)

70 = Discharged/Transferred to Another Type of Health Care Institution Not Defined Elsewhere in this code list (4/1/08 discharges).

Disposition of Patient (continued)

81 = Discharged to home or self care with a planned acute care hospital inpatient readmission (effective 10/1/13)

82 = Transferred/discharged to another short-term general hospital for inpatient care with a planned acute care hospital inpatient readmission (effective 10/1/13)

83 = Discharged/transferred to a skilled nursing facility (SNF) with Medicare certification with a planned acute care hospital inpatient readmission (effective 10/1/13)

84 = Discharged/transferred to a Facility that Provides Custodial or Supportive Care (including ICF) with a planned acute care hospital inpatient readmission (effective 10/1/13)

85 = Discharged/transferred to Designated Cancer Center OR Children's Hospital with a planned acute care hospital inpatient readmission (effective 10/1/13)

86 = Discharged/transferred to home under care of organized home health service organization with a planned acute care hospital inpatient readmission (effective 10/1/13)

87 = Discharged/transferred to Court/Law Enforcement with a planned acute care hospital inpatient readmission (effective 10/1/13)

88 = Discharged/transferred to a Federal Health Care facility with a planned acute care hospital inpatient readmission (effective 10/1/13)

89 = Discharged/transferred to a hospital-based Medicare approved swing bed with a planned acute care hospital inpatient readmission (effective 10/1/13)

90 = Discharged/transferred to an Inpatient Rehabilitation Facility (IRF) including rehabilitation distinct part units of a hospital with a planned acute care hospital inpatient readmission (effective 10/1/13)

91 = Discharged/transferred to a Medicare Certified Long Term Care Hospital (LTCH) with a planned acute care hospital inpatient readmission (effective 10/1/13)

92 = Discharged/transferred to a nursing facility certified by Medicaid, but not certified by Medicare with a planned acute care hospital inpatient readmission (effective 10/1/13)

93 = Discharged/transferred to a psychiatric hospital or psychiatric distinct part unit of a hospital with a planned acute care hospital inpatient readmission (effective 10/1/13)

94 = Discharged/transferred to a Critical Access Hospital (CAH) with a planned acute care hospital inpatient readmission (effective 10/1/13)

95 = Discharged/Transferred to Another Type of Health Care Institution Not Defined Elsewhere in this code list with a planned acute care hospital inpatient readmission (effective 10/1/13)

Instructions: Do not leave this field blank.

Edits: INVALID DISPOSITION

Disposition of Patient—Specific Facility

Data Element: Disposition of Patient—Specific Facility

Length: 6

Position: 67 - 72

Data Type: Integer

Definition: Hospital's Medicare provider number as assigned by CMS for the facility that patient is transferred to by your facility. When discharge disposition (position 65 - 66) has a value of 02 (transfer to acute hospital), this data element must be filled in.

120006	Castle Medical Center
121307	Hale Ho'ola Hamakua
120005	Hilo Medical Center
124001	Kahi Mohala
121304	Kahuku Hospital
120011	Kaiser Permanente Medical Center
123300	Kapiolani Medical Center for Women and Children
121301	Ka'u Hospital
121300	Kauai Veterans Memorial Hospital
121302	Kohala Hospital
120019	Kona Community Hospital
120007	Kuakini Medical Center
121308	Kula Hospital
121305	Lanai Community Hospital
120002	Maui Memorial Medical Center
121303	Molokai General Hospital
120028	North Hawaii Community Hospital
120026	Kapiolani Medical Center at Pali Momi
120001	Queen's Medical Center
12001W	Queen's Medical Center, West
123025	Rehabilitation Hospital of the Pacific
121306	Samuel Mahelona Memorial Hospital
120022	Straub Clinic and Hospital
12001F	Tripler Army Medical Center
120004	Wahiawa General Hospital
120014	Wilcox Memorial Hospital
999997	Other Acute Facility in U.S. (includes US Military facilities on foreign soil)
999998	Other Acute Facility outside of U.S.
999999	Unable to Provide Specific Facility

Instructions: Right justify.
Leave blank for patients not transferred to another facility.

Edits: HOSPITAL CODE MUST BE MEDICARE PROVIDER NUMBER
Provider number must be valid code in reference file.

FACILITY MUST BE SPECIFIED IF DISPOSITION IS "02".

Total Charges

Data Element: Total Charges

Length: 8

Position: 73 - 80

Data Type: Integer

Definition: Total charges for this stay, including room and board, pharmacy, laboratory, X-ray and hospital based physician charges.

Instructions: Enter total dollars charged and right justify. Zero fill any empty positions.
Truncate any cents.
If the amount is over $99,999,999, enter all 9's.
Do not leave this field blank.

Edits: TOTAL CHARGES MUST BE GREATER THAN ZERO
Total charges must be non-blank and greater than zero.

HOSPITAL BASED PHYSICIAN CHARGES EXCEED TOTAL CHARGES
Hospital based physician charges must be less than total charges.

Birth Weight

Data Element: Birth Weight

Length: 4

Position: 81 - 84

Data Type: Integer

Definition: Birth weight in grams for admissions less than 30 days in age

Instructions: Enter the birth weight in grams. Right justify the weight and zero fill the left most positions.
If this is a neonatal admission, report the weight at birth, not the weight at the time of admission.
If the birth weight is completely unknown, enter 9999.
If the patient is more than 30 days in age, this field is not applicable - zero fill it.
The appropriate DRG may not be assigned if the birth weight is omitted.

Edits: BIRTH WEIGHT IN GRAMS MUST BE 455 - 9505

If age = 0 and the patient is less than 31 days old, the weight must be between 455 and 9505 grams.

BIRTH WEIGHT DOES NOT AGREE WITH DIAGNOSIS (DX#)

If birth weight is greater than zero and diagnosis is 764-765.1 then the birth weight must fall within the range identified by the fifth digit of the diagnosis.

1 = < 500 grams	6 = 1500 - 1749 grams
2 = 500 - 749 grams	7 = 1750 - 1999 grams
3 = 750 - 999 grams	8 = 2000 - 2499 grams
4 = 1000 - 1249 grams	9 - 2500+ grams
5 = 1250 - 1499 grams	

Attending Physician

Data Element: Attending Physician

Length: 9

Position: 85 - 93

Data Type: Alpha-Numeric

Definition: The number of the licensed physician who would normally be expected to certify and re-certify the medical necessity of the services rendered and/or who has primary responsibility for the patient's medical care and treatment.

Instructions: Enter the appropriate hospital defined code.
Left justify the code.
Do not leave blank.

Edits: ATTENDING PHYSICIAN IS REQUIRED
Attending physician must be non-blank.

Principal Diagnosis Code

Data Element: Principal Diagnosis Code

Length: 7

Position: 94 - 100

Data Type: Alpha-Numeric

Definition: The ICD-9-CM/ICD-10-CM code describing the condition established after study to be chiefly responsible for causing the admission of the patient to the hospital for care.

Instructions:
E codes for externally caused injuries are not allowed as principal diagnoses and are intended for use in addition to the principal diagnosis.
Manifestation and morphology codes are not allowed as a principal diagnosis.
Enter the appropriate ICD-9-CM/ICD-10-CM code.
Left justify the code and if any positions are unused, leave them blank.
Do not code the decimal point. It is implied.
Do not leave this field blank.

Edits:

INVALID PRINCIPAL DIAGNOSIS
Must be valid principal diagnosis code in reference file.

INVALID SEX FOR DIAGNOSIS
If reference file indicates male only diagnosis, sex must be 1.
If reference file indicates female only diagnosis, sex must be 2.

PREGNANCY RELATED DIAGNOSIS NOT COMPATIBLE WITH AGE
If diagnosis is pregnancy related (630 - 676.99), age must be between 10 and 54.

IN-HOSPITAL NEW BORN - ADMIT DATE MUST EQUAL DATE OF BIRTH
If principal diagnosis begins V300 V310 V320 V330 V340 V350 V360 V370 V380 V390 (in-hospital newborn), date of birth must equal admit date.

BIRTH WEIGHT DOES NOT AGREE WITH DIAGNOSIS (DX#)
If birth weight is greater than zero and diagnosis is 764-765.1 then the birth weight must fall within the range identified by the fifth digit of the diagnosis.

1 = < 500 grams
2 = 500 - 749 grams
3 = 750 - 999 grams
4 = 1000 - 1249 grams
5 = 1250 - 1499 grams
6 = 1500 - 1749 grams
7 = 1750 - 1999 grams
8 = 2000 - 2499 grams
9 - 2500+ grams

Other Diagnoses (1-24)

Data Element: Other Diagnoses (1-24)

Length: 7 each (24 occurrences)

Position: 101 – 268

Data Type: Alpha-Numeric

Definition: ICD-9/10-CM diagnosis code(s) corresponding to additional conditions that co-exist at the time of admission or develop subsequently which affect the treatment received and/or the length of stay. Diagnoses that relate to an earlier episode which have no bearing on this hospital stay are to be excluded.

Instructions: Enter the appropriate ICD-9/10-CM code(s).
Left justify the code(s) and if any positions are unused, leave them blank.
Do not code the decimal point. It is implied.
The first three diagnoses reflecting the external cause of injury (E-code) should be reported in positions 269-289 of the record, not in this series of diagnosis codes. Any additional External Cause of Injury codes should be reported here.
If there are other diagnoses, do not leave this field(s) blank.
Do not leave a blank field between two diagnosis codes.
Do not zero fill. Leave unused fields blank.

Edits: INVALID SECONDARY DIAGNOSIS

Diagnosis (1-24) must be valid code in reference file.

INVALID SEX FOR DIAGNOSIS

If reference file indicates male only diagnosis, sex must be 1.
If reference file indicates female only diagnosis, sex must be 2.

PREGNANCY RELATED DIAGNOSIS NOT COMPATIBLE WITH AGE

If diagnosis is pregnancy related (630 - 676.99), age must be between 10 and 54.

BIRTH WEIGHT DOES NOT AGREE WITH DIAGNOSIS (DX#)

If birth weight is greater than zero and diagnosis is 764-765.1 then the weight must fall within the range identified by the fifth digit of the diagnosis.

1 = < 500 grams
2 = 500 - 749 grams
3 = 750 - 999 grams
4 = 1000 - 1249 grams
5 = 1250 - 1499 grams
6 = 1500 - 1749 grams
7 = 1750 - 1999 grams
8 = 2000 - 2499 grams
9 - 2500+ grams

External Cause of Injury (E Code) 1, 2, 3

Data Element: External Cause of Injury 1, 2, 3

Length: 7 each (3 occurrences)

Position: 269 - 289

Data Type: Alpha-Numeric

Definition: The ICD-9-CM/ICD-10-CM diagnosis code for the external cause of an injury, poisoning, or adverse effect.

Instructions: Enter the appropriate ICD-9-CM/ICD-10-CM External Cause of Injury code.
Left justify the code and, if any positions are unused, leave them blank.
Do not code the decimal point. It is implied.
The External Cause of Injury codes that appear in these fields should not be included among the other diagnoses reported in the Other Diagnosis fields of this record. Only the first External Cause of Injury code for a record should be reported here. If the record has additional External Cause of Injury codes, they should be reported in the Other Diagnosis fields for this record.
If there is no External Cause of Injury code associated with this hospitalization, leave this field blank. Do not zero fill.

The priorities for recording an External Cause of Injury code are the same as those for UB-04 forms:

1) Principal diagnosis of an injury or poisoning
2) Other diagnosis of an injury, poisoning, or adverse effect directly related to the principal diagnosis.
3) Other diagnosis with an external cause.

Edits: INVALID EXTERNAL CAUSE OF INJURY CODE

External Cause of Injury code must be a valid code in reference file.

Principal Procedure

Data Element: Principal Procedure

Length: 7

Position: 290 - 296

Data Type: Alpha-Numeric

Definition: The principal procedure is the one performed for definitive treatment, rather than the one performed for diagnostic or exploratory purposes or was necessary to take care of a complication. The principal procedure is most closely related to the principal diagnosis.

Instructions: Enter the appropriate ICD-9-PCS/ICD-10-PCS code for the principal procedure.
Left justify the code and, if any positions are unused, leave them blank.
Do not code the decimal point. It is implied.
Do not leave this field blank if a principal procedure has been performed.
Do not zero fill. Leave this field blank if no procedure was performed.

Edits:

PROCEDURE REQUIRES PROCEDURE DATE
If principal procedure is present, corresponding principal procedure date must be present, YYMMDD format, month between 1 and 12, day appropriate for month.

INVALID PROCEDURE CODE
Procedure code must be valid code in reference file.

INVALID SEX FOR PROCEDURE
If reference file indicates male only procedure, sex must be 1.
If reference file indicates female only procedure, sex must be 2.

PRINCIPAL PROCEDURE REQUIRES PRIMARY SURGEON CODE (SURG1)
If principal procedure is present, primary surgeon must be present.

Other Procedures (1-24)

Data Element: Other Procedures (1-24)

Length: 7 each (24 occurrences)

Position: 297 - 464

Data Type: Alpha-Numeric

Definition: The ICD-9-PCS/ICD-10-PCS codes identifying all significant procedures other than the principal procedure. Report all procedures including any therapeutic procedures. Include procedures which carry an operative or anesthetic risk and/or require highly trained personnel as well as special procedures which require technologically advanced facilities and/or equipment.

Instructions:
Enter the appropriate ICD-9-PCS/ICD-10-PCS code for the procedure(s).
Left justify the code(s) and, if any positions are unused, leave them blank.
Do not code the decimal point. It is implied.
Do not leave this field blank if a procedure(s) has been performed.
Do not leave a blank field between two procedure fields.
Do not zero fill unused fields. Leave them blank.

Edits:

PROCEDURE REQUIRES PROCEDURE DATE
If procedure is present, corresponding procedure date must be present, YYMMDD format, month between 1 and 12, day appropriate for month.

INVALID PROCEDURE CODE
Procedure code must be valid code in reference file.

INVALID SEX FOR PROCEDURE
If reference file indicates male only procedure, sex must be 1.
If reference file indicates female only procedure, sex must be 2.

PROCEDURE REQUIRES SECONDARY SURGEON CODE (SURGx)
If procedure #x is present, surgeon #x must be non-blank, non-zero.

Principal Surgeon

Data Element: Principal Surgeon

Length: 9

Position: 465 - 473

Data Type: Alpha-Numeric

Definition: Physician who performed the principal procedure.

Instructions: Enter the appropriate hospital defined code.
Left justify the code leaving unused right most positions blank.
If a surgical procedure was performed, do not leave this field blank.
Do not zero fill. Leave blank if not applicable.

Edits: PRINCIPAL PROCEDURE REQUIRES PRINCIPAL SURGEON CODE (SURG1)
If principal procedure is present, principal surgeon must be non-blank, non-zero.

Other Surgeons (1-24)

Data Element: Other Surgeons (1-24)

Length: 9 each (24 occurrences)

Position: 474 - 689

Data Type: Alpha-Numeric

Definition: Physician(s) who performed the corresponding procedure(s).

Instructions: Enter the appropriate hospital defined code(s).
Left justify the code(s), leaving unused right most positions blank.
If a surgical procedure was performed, do not leave this field blank.
Do not zero fill. Leave blank if not applicable.

Edits: SECONDARY PROCEDURE REQUIRES SECONDARY SURGEON CODE (SURGx)
If procedure #x is present, surgeon #x must be non-blank, non-zero.

Principal Procedure Date

Data Element: Principal Procedure Date

Length: 6

Position: 690 - 695

Data Type: Date

Definition: Month, day and year when the principal procedure was performed.

Instructions: YYMMDD
If the month, day or year of the procedure date is a single digit, use a preceding zero. There should be no imbedded blanks.
If a surgical procedure was performed, do not leave this field blank.
Do not zero fill. Leave blank if not applicable.

Edits: PROCEDURE REQUIRES PROCEDURE DATE

If procedure is present, corresponding procedure date must be present, YYMMDD format, month between 1 and 12, day appropriate for month.

PROCEDURE DATE IS NOT WITHIN STAY

If valid procedure date, admit date and discharge date, the procedure date must be greater than or equal to the admit date and less than or equal to the discharge date.

Other Procedure Dates (1-24)

Data Element: Other Procedure Dates (1-24)

Length: 6 each (24 occurrences)

Position: 696 – 839

Data Type: Date

Definition: The date on which the corresponding procedure occurred.

Instructions: YYMMDD
If the month, day or year of the procedure is a single digit, use a preceding zero. There should be no imbedded blanks.
If a surgical procedure was performed, do not leave this field blank.
Do not zero fill. Leave blank if not applicable.

Edits: PROCEDURE REQUIRES PROCEDURE DATE

If procedure is present, corresponding procedure date must be present, YYMMDD format, month between 1 and 12, day appropriate for month.

PROCEDURE DATE IS NOT WITHIN STAY

If valid procedure date, admit date, and discharge date, the procedure date must be greater than or equal to the admit date and less than or equal to the discharge date.

Type of Admission

Data Element: Type of Admission

Length: 1

Position: 840 - 840

Data Type: Alphanumeric

Definition: A code indicating the priority of this admission.

1	=	Emergency	The patient requires medical intervention as a result of severe, life threatening or potentially disabling conditions. Generally, the patient is admitted through the emergency room.
2	=	Urgent	The patient requires immediate attention for the care and treatment of a physical or mental disorder. Generally the patient is admitted to the first available and suitable accommodation.
3	=	Elective	The patient's condition permits adequate time to schedule the availability of a suitable accommodation.
4	=	Newborn	Use of this code necessitates the use of special Source of Admission codes - see page 32 .
5	=	Trauma Center	Visits to a trauma center/hospital as licensed or designated by the state or local government authority authorized to do so, or as verified by the American College of Surgeons and involving a trauma activation.
6-8			Reserved for national assignment
9	=		Information not available

Instructions: Same as the UB-04 (form locator 14) Type of Admission field.
Do not leave this field blank.

Edits: INVALID CODE - MUST BE 1, 2, 3, 4, 5 or 9
Type of Admission must be 1, 2, 3, 4, 5 or 9

Point of Origin (Source) of Admission

Data Element: Point of Origin (Source) of Admission

Length: 1

Position: 841 - 841

Data Type: Alphanumeric

Definition: A code indicating the source of this admission.

For Emergency, Elective or Other Type of Admission

1 = Non-Health Care Facility Point of Origin
2 = Clinic or Physician's Office
4 = Transfer from a hospital (Different Facility)
5 = Transfer from a Skilled Nursing Facility (SNF) or Intermediate Care Facility (ICF)
6 = Transfer from another health care facility
8 = Court/Law Enforcement
9 = Information Not Available
B = Transfer from Another Home Health Agency
D = Transfer from One Distinct Unit of the Hospital to another Distinct Unit of the Same Hospital Resulting in a Separate Claim to the Payer
E = Transfer from Ambulatory Surgery Center
F = Transfer from Hospice and is Under a Hospice Plan of Care or Enrolled in a Hospice Program

3, 7, A - C, G - Z Reserved for national assignment

For Newborn

1 – 4 Reserved for national assignment
5 = Born Inside this Hospital
6 = Born Outside this Hospital
7-9 Reserved for national assignment

Instructions: Same as the UB-04 (form locator 15) Source of Admission field.
Do not leave this field blank

Edits: INVALID CODE - MUST BE 1, 2, 4-9 or B-F
Source of Admission must be 1, 2, 4-9 or B-F

IF AGE = 0 INVALID CODE - MUST BE 5, 6
Source of Admission must be 5 or 6

Source of Admission—Specific Facility

Data Element: Source of Admission—Specific Facility

Length: 6

Position: 842 - 847

Data Type: Integer

Definition: Hospital's Medicare provider number as assigned by CMS for the facility that transferred the patient to your facility. When source of admission (position 835) has a value of 4 (transfer from a hospital), this data element must be filled in.

120006	Castle Medical Center
121307	Hale Ho'ola Hamakua
120005	Hilo Medical Center
124001	Kahi Mohala
121304	Kahuku Hospital
120011	Kaiser Permanente Medical Center
123300	Kapiolani Medical Center for Women and Children
121301	Ka'u Hospital
121300	Kauai Veterans Memorial Hospital
121302	Kohala Hospital
120019	Kona Community Hospital
120007	Kuakini Medical Center
121308	Kula Hospital
121305	Lanai Community Hospital
120002	Maui Memorial Medical Center
121303	Molokai General Hospital
120028	North Hawaii Community Hospital
120026	Kapiolani Medical Center at Pali Momi
120001	Queen's Medical Center
12001W	Queen's Medical Center West
123025	Rehabilitation Hospital of the Pacific
121306	Samuel Mahelona Memorial Hospital
120022	Straub Clinic and Hospital
12001F	Tripler Army Medical Center
120004	Wahiawa General Hospital
120014	Wilcox Memorial Hospital
999997	Other Acute Facility in U.S. (includes US Military facilities on foreign soil)
999998	Other Acute Facility outside of U.S.
999999	Unable to Provide Specific Facility

Instructions: Right justify.
Leave blank for patients not received in transfer from another facility.

Edits: HOSPITAL CODE MUST BE MEDICARE PROVIDER NUMBER
Provider number must be valid code in reference file.
FACILITY MUST BE SPECIFIED IF ADMIT SOURCE IS "4".

Admission Hour

Data Element: Admission Hour

Length: 2

Position: 848 - 849

Data Type: Alpha-Numeric

Definition: The hour of patient admission.

Instructions: Use twenty four hour, military time format, e.g. 4:00 am is 04 and 1:00 pm is 13.
Allowable values range from 01 to 24
Use leading zeros as applicable.
T This is an optional field

Edits:

Discharge Hour

Data Element: Discharge Hour

Length: 2

Position: 850 - 851

Data Type: Alpha-Numeric

Definition: The hour of patient discharge.

Instructions: Use twenty four hour, military time format, e.g. 4:00 am is 04 and 1:00 pm is 13.
Allowable values range from 01 to 24
Use leading zeros as applicable.
T This is an optional field

Edits:

Social Security Number

Data Element: Social Security Number

Length: 9

Position: 852 – 860

Data Type: Numeric

Definition: The number assigned by the Social Security Administration.

Instructions: Valid characters: 0 through 9, no hyphens or spaces.
If SSN is unknown leave blank.

Edits: None

Patient First Name

Data Element: Patient First Name

Length: 30

Position: 861 - 890

Data Type: Alpha-Numeric

Definition: The patient's first name.

Instructions: Exclude middle names and middle initials
Uppercase only
Numbers are only accepted on newborn records and only when in the last position. For example: Baby Boy 2, Baby Girl 1, BB1, BG1

Edits: PATIENT FIRST NAME MUST BE PRESENT
Patient First Name must be non-blank.

Patient Last Name

Data Element: Patient Last Name

Length: 30

Position: 891 - 920

Data Type: Alpha-Numeric

Definition: The patient's last name.

Instructions: Uppercase Only

Edits: PATIENT LAST NAME MUST BE PRESENT
Patient Last Name must be non-blank.

Patient Middle Initial

Data Element: Patient Middle Initial

Length: 1

Position: 921 - 921

Data Type: Alpha-Numeric

Definition: The patient's middle initial.

Instructions: Include only the first middle initial.
Uppercase only.

Patient Name Suffix

Data Element: Patient Name Suffix

Length: 3

Position: 922 - 924

Data Type: Alpha-Numeric

Definition: The patient's name suffix, e.g. JR, SR, III, IV.

Instructions: Uppercase only

Mailing Address 1

Data Element: Mailing Address 1

Length: 30

Position: 925 – 954

Data Type: Alpha-Numeric

Definition: Patient's mailing address. First line.

Instructions: Select the patient's mailing address and NOT the guarantor address.

Edits: None

Mailing Address 2

Data Element: Mailing Address 2

Length: 30

Position: 955 - 984

Data Type: Alpha-Numeric

Definition: Second line for apartment complex names or other long mailing addresses.

Instructions: Leave blank if not needed. Mailing Address 2 will be printed as a separate line below Mailing Address 1.

Edits: None

Mailing Address - City

Data Element: Mailing Address - City

Length: 30

Position: 985 - 1014

Data Type: Alpha-Numeric

Definition: City associated with patient's mailing address.

Instructions:

Edits: None

Mailing Address - State

Data Element: Mailing Address - State

Length: 2

Position: 1015 - 1016

Data Type: Alpha-Numeric

Definition: State associated with patient's mailing address.

Instructions: None

Edits: None

Mailing Address - Zip Code

Data Element: Mailing Address - Zip Code

Length: 5

Position: 1017 - 1021

Data Type: Alpha-Numeric

Definition: Zip Code associated with patient's mailing address.

Instructions: Standard US Postal Zip Code. Use leading zero as appropriate.

***Edits*:** ZIP CODE MUST BE NON-ZERO
Zip code must be valid zip code, 88888 or 99999.

Patient Phone Number

Data Element: Patient Phone Number

Length: 10

Position: 1022 - 1031

Data Type: Numeric

Definition: Patient telephone number.

Instructions: Enter patient phone number including area code and phone number with no punctuation (e.g. 2125551212).
Leave blank if unknown.

Edits: None

Residential Address 1

Data Element: Residential Address 1

Length: 30

Position: 1032 - 1061

Data Type: Alpha-Numeric

Definition: Patient's residential address. First line.

Instructions: Select the patient's residential address and NOT the guarantor address.

Edits: None

Residential Address 2

Data Element: Residential Address 2

Length: 30

Position: 1062 - 1091

Data Type: Alpha-Numeric

Definition: Second line for apartment complex names or other long residential addresses.

Instructions: Leave blank if not needed. Residential Address 2 will be printed as a separate line below Residential Address 1.

Edits: None

Residential Address - City

Data Element: Residential Address - City

Length: 30

Position: 1092 - 1121

Data Type: Alpha-Numeric

Definition: City associated with patient's residential address.

Instructions:

Edits: None

Residential Address - State

Data Element: Residential Address - State

Length: 2

Position: 1122 -1123

Data Type: Alpha-Numeric

Definition: State associated with patient's residential address.

Instructions: None

Edits: None

Residential Address - Zip Code

Data Element: Residential Address - Zip Code

Length: 5

Position: 1124 - 1128

Data Type: Alpha-Numeric

Definition: U.S. postal zip code for the address of the patient's current residence. Use country codes for non-US residents.
The quality of the information in this field is critical to the medical assessment activity.

Instructions: Right justify, filling any leading blanks with zeros.
Provide the five digit postal zip code for US residents.
For **out of country patients, enter 88888**.
If the zip code is **unknown, enter 99999**.
Do not leave this field blank.

***Edits*:** ZIP CODE MUST BE NON-ZERO
Zip code must be valid zip code, 88888 or 99999.

Record Type

Data Element: Record Type

Length: 1

Position: 1129 - 1129

Data Type: Alpha-Numeric

Definition: 2 = Ambulatory surgery patient
3 = Emergency room
5 = Observation Service

Instruction: All outpatient records must contain a "2", a "3" or a "5" in the last position of the record. This will force all records to be the same length whether procedures were performed or not.

Edits: None

Table of Contents – Tab 4

TABLE OF CONTENTS – TAB 4 1

PHYSICIAN DATA SET 2

TECHNICAL NOTES 2
DATA FIELD LAYOUT 3
MEDICARE PROVIDER NUMBER 4
PHYSICIAN ID 4
LAST NAME 5
FIRST NAME 5
MIDDLE INITIAL 6
SUFFIX 6
DATE OF BIRTH 7
SPECIALTY NO. 1 8
SPECIALTY NO. 2 AND NO. 3 12
HAWAII STATE LICENSE NUMBER 12
DEA NUMBER (FEDERAL) 13
UPIN 13
NATIONAL PROVIDER IDENTIFIER (NPI) 14
SEX 14
DISCHARGE MONTH 15
RECORD TYPE 15

PHYSICIAN DATA SET

The Physician Data Set includes all physicians that are credentialed (with privileges) at a specific hospital.

Technical Notes

This data set includes all physicians that are currently credentialed at our member facilities. **After the initial submission of this data set, we request only physician records that have been changed since the last submittal.** If a facility is unable to provide only changes, then the entire data set needs to be sent on a monthly basis. Data sets are to be transmitted to HHIC on a monthly basis at the same time as the data and revenue files are sent according to the Data Submission Schedule.

Data elements contained in the Physician Data Set are not included in the Patient Data Sets except for the *Physician ID* which would correspond to the *Attending Physician* and the *Surgeon* fields in those Data Sets.

The physician specific information will be used to create a database of physicians practicing at the HHIC member hospitals. In all instances, storage and use of physician specific data will strictly adhere to security and confidentiality procedures approved and overseen by the HHIC Privacy Board.

New Data Elements:

- Sex
- Discharge Month

Data Field Layout

DATA ELEMENT	DATA TYPE	DATA LENGTH	COLUMN
Medicare Provider Number	N	6	1 – 6
Physician ID	A	9	7 – 15
Last Name	A	30	16 – 45
First Name	A	30	46 – 75
Middle Initial	A	1	76 – 76
Suffix	A	3	77 – 79
Date of Birth	D	8	80 – 87
Specialty No. 1	A	3	88 – 90
Specialty No. 2	A	3	91 – 93
Specialty No. 3	A	3	94 – 96
Hawaii State License Number	A	8	97 – 104
DEA Number	A	9	105 – 113
UPIN	A	6	114 – 119
National Provider Identifier (NPI)	N	10	120 – 129
Sex	A	1	130 – 130
Discharge Month	D	6	131 – 136
Record Type	A	1	137 – 137

Medicare Provider Number

Data Element: Medicare Provider Number

Length: 6

Position: 1 - 6

Data Type: Integer

Definition: Hospital's Medicare provider number as assigned by CMS.

Instructions: Right justify.
Do not leave this field blank.

Edits: HOSPITAL CODE MUST BE MEDICARE PROVIDER NUMBER
Provider number must be valid code in reference file.

Physician ID

Data Element: Physician ID

Length: 9

Position: 7 - 15

Data Type: Alpha-Numeric

Definition: The number assigned by the hospital to the individual physician. This number is typically used only within the facility. This number is the same ID that you provide in our inpatient and outpatient data sets.

Instructions: Enter the appropriate hospital defined code.
Valid characters: A through Z, 0 through 9 and - (hyphen).
Left justify the code.
Do not leave blank.

Edits: PHYSICIAN IS REQUIRED
Physician must be non-blank.

PHYSICIAN ALREADY EXISTS
Multiple physician records have been submitted with the same Medicare provider number and physician ID, but dates of birth and/or state license number are different.

Last Name

Data Element: Last Name

Length: 30

Position: 16 - 45

Data Type: Alpha-Numeric

Definition: The physician's last name.

Instructions: Provide name in upper case.

Edits: PHYSICIAN LAST NAME MUST BE PRESENT
Physician last name must be non-blank.

First Name

Data Element: First Name

Length: 30

Position: 46 – 75

Data Type: Alpha-Numeric

Definition: The physician's first name.

Instructions: Provide name in upper case.
Exclude middle names and middle initials

Edits: PHYSICIAN FIRST NAME MUST BE PRESENT
Physician first name must be non-blank.

Middle Initial

Data Element: Middle Initial

Length: 1

Position: 76 - 76

Data Type: Alpha-Numeric

Definition: The physician's middle initial.

Instructions: Provide name in upper case.

Edits: None

Suffix

Data Element: Suffix

Length: 3

Position: 77 - 79

Data Type: Alpha-Numeric

Definition: Suffix

JR	Junior
SR	Senior
II	Second
III	Third
IV	Fourth

Instructions: Provide name in upper case.
Include any suffix to physician's name.

Edits: None

Date of Birth

Data Element: Date of Birth

Length: 8

Position: 80 - 87

Data Type: Date

Definition: Month, day, and year (including century) of birth of the physician

Instructions: YYYYMMDD
If the date of birth is unknown, leave it blank.

Edits: INVALID DATE OF BIRTH
Date of birth must be present, YYYYMMDD format, month between 1 and 12, day appropriate for month, DOB greater than 18900101.

Specialty No. 1

Data Element: Specialty No. 1

Length: 3

Position: 88 - 90

Data Type: Alpha

Definition: For the physician's specialty, use only the data values from the table below.

Data Value	Description
A	Allergy
ADL	Adolescent Medicine (Pediatrics)
ADM	Addiction Medicine
ADP	Addiction Psychiatry
AI	Allergy Immunology
ALI	Clinical Laboratory Immunology (Allergy & Immunology)
AM	Aerospace Medicine
AN	Anesthesiology
APM	Pain Management
AS	Abdominal Surgery
ATP	Anatomic Pathology
CCM	Critical Care Medicine (Internal Medicine)
CCP	Pediatric Critical Care Medicine
CCS	Surgical Critical Care (Surgery)
CD	Cardiovascular Disease
CHN	Child Neurology
CHP	Child and Adolescent Psychiatry
CLP	Clinical Pathology
CNM	Certified Nurse Midwife
CPP	Pediatrics/Psychiatry/Child and Adolescent Psychiatry
CRS	Colon & Rectal Surgery
CS	Cosmetic Surgery
D	Dermatology
DDS	Dentistry
DMP	Dermatopathology
DR	Diagnostic Radiology
DS	Dermatologic Surgery
EM	Emergency Medicine
END	Endocrinology, Diabetes and Metabolism
ENO	Endodontics
FOP	Forensic Pathology
FP	Family Practice
FPG	Geriatric Medicine (Family Practice)
FPP	Psychiatry/Family Practice
FPS	Facial Plastic Surgery
FSM	Sports Medicine (Family Practice)

Specialty No. 1 (continued)

Data Value	Description
GE	Gastroenterology
GO	Gynecological Oncology
GP	General Practice
GPM	General Preventive Medicine
GS	General Surgery
GYN	Gynecology
HEM	Hematology
HNS	Head and Neck Surgery
HO	Hematology/Oncology
HOS	Hospitalist
HS	Hand Surgery
ICE	Cardiac Electrophysiology
ID	Infectious Disease
IG	Immunology
IM	Internal Medicine
IMG	Geriatric Medicine (Internal Medicine)
INT	Intensivist
MDM	Medical Management
MFM	Maternal/Fetal Medicine
MP	Internal Medicine (Psychiatry)
MPD	Internal Medicine/Pediatrics
N	Neurology
NEP	Nephrology
NM	Nuclear Medicine
NO	Otology/Neurotology
NP	Neuropathology
NPM	Neonatal-Perinatal Medicine
NR	Nuclear Radiology
NS	Neurological Surgery
OBG	Obstetrics & Gynecology
OBS	Obstetrics
OCC	Critical Care Medicine (OBG)
OM	Occupational Medicine
OMS	Oral and Maxillofacial Surgery
ON	Medical Oncology
OP	Pediatric Orthopedics
OPH	Ophthalmology
ORS	Orthopedic Surgery
OSM	Sports Medicine (Orthopedic Surgery)
OSS	Orthopedic Surgery of the Spine
OTO	Otolalryngology
P	Psychiatry
PA	Clinical Pharmacology
PAN	Pediatric Anesthesiology (Pediatrics)

Specialty No. 1 (continued)

Data Value	Description
PCC	Pulmonary Critical Care Medicine
PCP	Cytopathology
PD	Pediatrics
PDC	Pediatric Cardiology
PDE	Pediatric Endocrinology
PDI	Pediatric Infectious Diseases
PDO	Pediatric Otolaryngology
PDP	Pediatric Pulmonary
PDR	Pediatric Radiology
PDS	Pediatric Surgery (Surgery)
PEM	Pediatric Emergency Medicine (Pediatrics)
PFP	Forensic Psychiatry
PG	Pediatric Gastroenterology
PHO	Pediatric Hematology/Oncology
PHP	Public Health & Gen Preventive Medicine
PM	Physical Medicine & Rehabilitation
PN	Pediatric Nephrology
POD	Podiatry
PP	Pediatric Pathology
PRO	Prosthodontics
PSO	Psychologist
PS	Plastic Surgery
PSM	Sports Medicine (Pediatrics)
PTH	Anatomic/Clinical Pathology
PUD	Pulmonary Diseases
PYG	Geriatric Psychiatry
R	Radiology
REN	Reproductive Endocrinology
RHU	Rheumatology
RNR	Neuroradiology
RO	Radiation Oncology
SM	Sleep Medicine
SO	Surgical Oncology
TRS	Trauma Surgery
TS	Thoracic Surgery
U	Urology
UCM	Urgent Care Medicine
UM	Undersea and Hyperbaric Medicine (Preventive Medicine)
UP	Pediatric Urology
VIR	Vascular and Interventional Radiology
VS	Vascular Surgery
OS	Other Specialty
OTH	Other Non-Physician
US	Unspecified

Instructions and Edits continued on the next page.

Specialty No. 1 (continued)

Instructions: Specialty No. 1 is the physician's stated primary specialty.
Specialty No. 1 is required.
Do not leave this field blank.
Left justify.
Specialty No. 2 and 3 are for physician secondary specialties.

Edits: INVALID SPECIALTY – MUST BE IN LIST

Specialty No. 2 and No. 3

Data Element: Specialty No. 2 and No. 3

Length: 3 each (two occurrences)

Position: 91 – 93, 94 - 96

Data Type: Alpha

Definition: For the physician's specialty, use only the data values as listed on for Specialty No. 1 on page 13.

Instructions: Specialty No. 2 and 3 are for physician secondary specialties.
Specialty No. 2 and 3 are not required. Do not zero fill.
Left justify.

Edits: INVALID SPECIALTY – MUST BE IN LIST

Hawaii State License Number

Data Element: Hawaii State License Number

Length: 8

Position: 97 - 104

Data Type: Alpha-Numeric

Definition: The license number issued by the State of Hawaii to the physician.

Instructions: Do not leave this field blank.
Left justify, no preceding zero(s); no dash. Example: MD234
For physicians practicing at a federal hospital that do not have a Hawaii State License Number, enter 99999999.

Edits: STATE LICENSE NUMBER MUST BE PRESENT (for all non-federal hospitals)
State license number must be non-blank.

DEA Number (Federal)

Data Element: DEA Number (Federal)

Length: 9

Position: 105 - 113

Data Type: Alpha-Numeric

Definition: The license number issued by the Drug Enforcement Administration to the physician.

Instructions: Left justify.
Enter 999999999 if the DEA is unknown or non-existent.

Edits: If present, must be unique.

UPIN

Data Element: UPIN

Length: 6

Position: 114 - 119

Data Type: Alpha-Numeric

Definition: Unique physician identification number as assigned by CMS.

Instructions: Left justify.
Enter 999999 if physician does not have a UPIN.
Do not leave this field blank.

Edits: If present, must be unique.

National Provider Identifier (NPI)

Data Element: National Provider Identifier (NPI)—effective 5/23/07

Length: 10

Position: 120 – 129

Data Type: Numeric

Definition: A standard unique health identifier issued to the individual physician by CMS.

Instructions: Right justify, zero fill any blanks in left most positions.
Leave blank if unknown.

Edits: NATIONAL PROVIDER IDENTIFIER (NPI) MUST BE PRESENT (for all non-federal hospitals)
NPI must be non-blank.

Sex

Data Element: Sex

Length: 1

Position: 130 - 130

Data Type: Integer

Definition: Sex of physician

1 = Male
2 = Female
4 = Unknown

Instruction: Do not leave this field blank.

Edits: INVALID SEX - MUST BE 1, 2, 4
Sex must be 1, 2, or 4

Discharge Month

Data Element: Discharge Month

Length: 6

Position: 131 – 136

Data Type: Numeric

Definition: Month and year (including century) of the discharge records being sent to HHIC.
.

Instructions: YYYYMM

Edits: INVALID DATE
Date of discharges must be present, YYYYMM format, month between 1 and 12.

Record Type

Data Element: Record Type

Length: 1

Position: 137 - 137

Data Type: Alpha-Numeric

Definition: P = Physician

Instructions: The physician records will contain the letter P in the last position of the record. This will force all records to be the same length.

Edits: None

TABLE OF CONTENTS

REVENUE DATA SET 2

TECHNICAL NOTES 2
DATA FIELD LAYOUT 3
MEDICARE PROVIDER NUMBER 4
ACCOUNT (REGISTER) NUMBER 5
MEDICAL RECORD NUMBER 6
REVENUE CODE 7
REVENUE UNIT OF SERVICE 8
REVENUE CHARGES 9
HCPCS CODE 10
HCPCS CODE MODIFIER (A – C) 11
RECORD TYPE 12

REVENUE DATA SET

The Revenue Data Set includes all discharges/visits for the specified month period. Generally, data elements specified in the HHIC Revenue Data Set follow UB-04 standard formats and values.

Technical Notes

Purpose: This data will help hospitals identify ways to reduce hospital stays and costs. For example, this data will enable us to identify the number of observation hours for a patient, the number of ICU/CCU days and also which patients were admitted through the emergency room.

Instructions:

1. This data file has fixed length lines, but is not a fixed file length. The file length will depend on the number of revenue codes for each account.
2. Send a separate Revenue Data file for each data types and use the appropriate Record Type at the end of each line to designate the data type. (Inpatient = 1, Ambulatory Surgery = 2, Emergency = 3, Observation = 5.
3. HCPCS Code and HCPCS Modifiers are only valid for outpatient (Ambulatory, ED and Observation) record types. Leave these fields blank in any inpatient revenue files.

Data Field Layout

DATA ELEMENT	DATA TYPE	DATA LENGTH	COLUMN
Medicare Provider Number	A	6	1 - 6
Account (Register) Number	A	15	7 – 21
Medical Record Number	A	15	22 – 36
Revenue Code	N	4	37 - 40
Revenue Unit of Service	N	7	41 – 47
Revenue Charges	N	8	48 – 55
HCPCS Code (Outpatient Only)	A	5	56 – 60
HCPCS Modifier a (Outpatient Only)	A	2	61 – 62
HCPCS Modifier b (Outpatient Only)	A	2	63 – 64
HCPCS Modifier c (Outpatient Only)	A	2	65 – 66
Record Type	A	1	67 – 67
Repeat these data elements for each revenue code for the account number.			

Medicare Provider Number

Data Element: Medicare Provider Number

Length: 6

Position: 1 - 6

Data Type: Alphanumeric

Definition: Hospital's Medicare provider number as assigned by CMS.

Instructions: Right justify.
Do not leave this field blank.

Edits: (24) HOSPITAL CODE MUST BE MEDICARE PROVIDER NUMBER
Provider number must be valid code in reference file.

Account (Register) Number

Data Element: Account (Register) Number

Length: 15

Position: 7 - 21

Data Type: Alpha-Numeric

Definition: The number assigned to the patient's visit by the hospital. The account number is typically used for charge and/or billing purposes.

Instructions: Left justify the account number.
Valid characters: A through Z, 0 through 9, . (period), and - (hyphen).
Leave unused right most positions blank. Do not zero fill them.
Do not leave this field blank.

This number will be used to link the revenue charges to the inpatient and outpatient data.

Edits:

Medical Record Number

Data Element: Medical Record Number

Length: 15

Position: 22 - 36

Data Type: Alpha-Numeric

Definition: The number assigned to the patient's medical/health record by the hospital. The medical record number is typically used to do an audit of the history of treatment.

Instructions: Left justify the medical record number.
Valid characters: A through Z, 0 through 9, . (period), and - (hyphen).
Leave unused right most positions blank. Do not zero fill them.
Do not leave this field blank.

Edits:

Revenue Code

Data Element: Revenue Code

Length: 4

Position: 37 - 40

Data Type: Integer

Definition: A code which identifies a specific accommodation, ancillary service or billing calculation. As reported in field locator #42 on the UB-04.

Instructions: Enter revenue code and right justify.
Zero fill any empty positions.

Edits: INVALID REVENUE CODE
Revenue code must be numeric and not less than zero.

Revenue Unit of Service

Data Element: Revenue Unit of Service

Length: 7

Position: 41 - 47

Data Type: Integer

Definition: Total units of service reported in UB-04 field locator #46 for Revenue Code.

Instructions: Enter total units charged and right justify.
Zero fill any empty positions.
Zero and negative values are not allowed.

Edits:

Revenue Charges

Data Element: Revenue Charges

Length: 8

Position: 48 - 55

Data Type: Integer

Definition: Charges for Revenue code. Field locator 47 in the UB-04.

Instructions: Enter total dollars charged and right justify. Zero fill any empty positions.
Truncate any cents.
If the amount is over $99,999,999, enter all 9's.

Edits: INVALID REVENUE CHARGES
Revenue charges must be numeric and not less than zero.

REVENUE CHARGES EXCEED TOTAL CHARGES
Revenue charges must be less than total charges.

HCPCS Code

Data Element: HCPCS Code

Length: 5

Position: 56 - 60

Data Type: Alphanumeric

Definition: HCPCS codes level I, II, and III as reported in field locator #44 on the UB-04.

Instructions: Enter the appropriate HCPCS code(s)
Left justify the code(s) and if any positions are unused, leave them blank.
Do not zero fill.

For inpatient records: Leave fields blank.

Edits: INVALID HCPCS CODE
HCPCS code must be valid in reference file.

HCPCS Code Modifier (a – c)

Data Element: HCPCS Code Modifier (a – c)

Length: 2 (3 occurrences for each HCPCS code)

Position: 61 – 62, 63 – 64, 65 - 66

Data Type: Alphanumeric

Definition: Up to three HCPCS modifiers can be reported for each HCPCS level I, II or III code in field locator 44 of the UB-04.

Instructions: When applicable, enter the appropriate HCPCS modifier(s) for each HCPCS Code(s).
Left justify the code modifier(s) and if any positions are unused, leave them blank.
Do not code the dash. It is implied.
Do not zero fill. Leave unused fields blank.

For inpatient records: Leave fields blank.

Edits: INVALID MODIFIER
Invalid HCPCS modifier.

Record Type

Data Element: Record Type

Length: 1

Position: 67 - 67

Data Type: Alpha-Numeric

Definition:
1 = Inpatient
2 = Ambulatory Surgery
3 = Emergency
5 = Observation
6 = Rehab of the Pacific

Instructions: All revenue records must contain a valid record type in the last position of the record.

Edits: None

Table of Contents

TABLE OF CONTENTS **1**

WAITLISTED PATIENT DATA SET **2**

GENERAL ASSUMPTIONS **2**

DATA FIELD LAYOUT 4
MEDICARE PROVIDER NUMBER 5
ACCOUNT NUMBER 6
MEDICAL RECORD NUMBER 7
DATE OF BIRTH 8
DATE OF ADMISSION 9
DATE OF DISCHARGE 10
PRINCIPAL SOURCE OF PAYMENT #1 FOR WAITLISTED PERIOD 11
PRINCIPAL SOURCE OF PAYMENT #2 FOR WAITLISTED PERIOD 12
DISPOSITION OF PATIENT 13
DISPOSITION OF PATIENT—SPECIFIC FACILITY 14
DISPOSITION OF PATIENT—SPECIFIC FACILITY (CONTINUED) 15
TOTAL ACUTE CARE DAYS 16
TOTAL ACUTE CARE CHARGES 17
TOTAL SNF DAYS 18
TOTAL SNF CHARGES 19
EXPECTED SNF REIMBURSEMENT 20
TOTAL ICF DAYS 21
TOTAL ICF CHARGES 22
EXPECTED ICF REIMBURSEMENT 23
TOTAL OTHER DAYS 24
TOTAL OTHER CHARGES 25
EXPECTED OTHER REIMBURSEMENT 26
TOTAL ACUTE CARE COST (OPTIONAL) 27
TOTAL SNF COST 28
TOTAL ICF COST 29
TOTAL OTHER COST 30
RECORD TYPE 31

WAITLISTED PATIENT DATA SET

The Waitlisted Patient Data Set includes all waitlisted patient discharges for the specified month period. Generally, data elements specified in the HHIC Waitlisted Patient Data Set follow UB-04 standard formats and values.

This Data Set will enable analysis of the impact of waitlisted patients on Hawaii's acute care hospitals. It is expected that the availability of quantitative information about the impact will support development and implementation of solutions for the patients and the hospitals.

GENERAL ASSUMPTIONS/DEFINITIONS

1. Calculation to be based on current fiscal year waitlist days, revenue and costs on a discharge basis if possible. Please indicate if costs not based on the same year as waitlist days and revenue.

2. Last day of stay to be included in last level of care.

3. DRG payments applied to acute portion of stay (i.e. SNF waitlist patients = $-0- reimbursement for sub-acute portion of the stay).

4. Per diem payments which are based on contracted or published rates should be included in net revenue.

5. Self-pay patients, including patient portion, is assumed to be $0 reimbursement.

6. In general, net revenue should be based on primary payer only.

7. For dual eligible patients, include per diem Medicaid reimbursement on ICF level of stay since this may be significant for patients with longer lengths of stay.

8. Three approaches to estimate cost for waitlist patients:

    a. Use Decision Support System cost allocation if available.

    b. Based on most recent Cost Report, apply cost to charge ratio <u>by cost center</u> to waitlist patient charges

    c. Based on most recent Cost Report, apply <u>overall</u> cost to charge ratio to waitlist patient charges, using one of the following methods.

        ⇒ Step 1. Rerun the latest cost report as filed without the A-8 adjustments related to revenue and cost offset. *Do not adjust for CPA AJE or related organization adjustment.*

        <u>Option A (Preferred Method)</u> - If the facilities are able to separate out the routine and ancillary charges:

        1. Routine Cost = (WS C, Pt I, Column 1, line 25 divided by WS C, Pt I, Column 8, Line 25) x Waitlisted Routine Charges
        2. Ancillary Cost = (WS C, Pt I, Column 1, line 101 minus sum of Line 25 through 36 divided by WS C, Pt I, Column 8, Line 101 minus sum of line 25 through 36) x Waitlisted Ancillary Charges
        3. Add the waitlisted routine and waitlisted ancillary costs to report the total waitlisted cost.

Option B (Use only if necessary) - If the facilities are not able to separate out the routine and ancillary charges:

1. Divide WS C, Part I, Column 1, line 101 by WS C, Part I, Column 8, Line 101
2. Multiply the overall cost to charge ratio calculated in step 1 times the waitlisted charges to get the waitlisted costs

Please note that facilities which use their cost systems to provide the waitlist costs should perform these calculations and compare it to the results from their cost systems to check for reasonableness.

Data Field Layout

DATA ELEMENT	DATA TYPE	DATA LENGTH	COLUMN
Medicare Provider Number	A	6	1 - 6
Account Number	A	15	7 – 21
Medical Record Number	A	15	22 – 36
Date of Birth	D	8	37 – 44
Date of Admission	D	6	45 – 50
Date of Discharge	D	6	51 – 56
Principal Source of Payment #1	N	2	57 – 58
Principal Source of Payment #2	N	2	59 – 60
Disposition of Patient	N	2	61 – 62
Disposition of Patient - Specific Facility	A	6	63 – 68
Total Acute Care Days	N	4	69 – 72
Total Acute Care Charges	N	8	73 – 80
Total SNF Days	N	4	81 – 84
Total SNF Charges	N	8	85 – 92
Expected SNF Reimbursement	N	8	93 – 100
Total ICF Days	N	4	101 – 104
Total ICF Charges	N	8	105 – 112
Expected ICF Reimbursement	N	8	113 – 120
Total Other Days	N	4	121 – 124
Total Other Charges	N	8	125 – 132
Expected Other Reimbursement	N	8	133 – 140
Total Acute Care Cost	N	8	141 – 148
Total SNF Cost	N	8	149 – 156
Total ICF Cost	N	8	157 – 164
Total Other Cost	N	8	165 – 172
Record Type	A	1	173 – 173

Medicare Provider Number

Data Element: Medicare Provider Number

Length: 6

Position: 1 - 6

Data Type: Integer

Definition: Hospital's Medicare provider number as assigned by CMS.

Instructions: Right justify.
Do not leave this field blank.

Account Number

Data Element: Account Number

Length: 15

Position: 7 - 21

Data Type: Alpha-Numeric

Definition: The number assigned to the patient's visit by the hospital. The account number is typically used for charge and/or billing purposes.

Instructions: Left justify the account number.
Valid characters: A through Z, 0 through 9 and - (hyphen).
Leave unused right most positions blank. Do not zero fill them.
Do not leave this field blank.
For Hospitals with no account number, a unique number can be created by combining the medical record number and the discharge date.

Medical Record Number

Data Element: Medical Record Number

Length: 15

Position: 22 - 36

Data Type: Alpha-Numeric

Definition: The number assigned to the patient's medical/health record by the hospital. The medical record number is typically used to do an audit of the history of treatment.

Instructions: Left justify the medical record number.
Valid characters: A through Z, 0 through 9 and - (hyphen).
Leave unused right most positions blank. Do not zero fill them.
Do not leave this field blank.

Date of Birth

Data Element:	Date of Birth
Length:	8
Position:	37 - 44
Data Type:	Date
Definition:	Month, day, and year (including century) of birth of the patient
Instructions:	YYYYMMDD If the month, day or year of birth is a single digit, use a preceding zero. There should be no blanks in this field. Do not leave this field blank.

Date of Admission

Data Element: Date of Admission

Length: 6

Position: 45 - 50

Data Type: Date

Definition: Month, day and year of admission to hospital as an acute care patient.
This field along with discharge date is used to calculate length of stay. The day of admission is counted but not the day of discharge when the length of stay is generated.

Instructions: YYMMDD
If the month, day or year of admission is a single digit, use a preceding zero. There should be no blanks in this field.
Do not leave this field blank.

Date of Discharge

Data Element: Date of Discharge

Length: 6

Position: 51 - 56

Data Type: Date

Definition: Month, day and year the patient left the acute care bed.
This field along with the admission date is used to calculate length of stay. The day of admission is counted but not the day of discharge when length of stay is calculated.

Instructions: YYMMDD
If the month, day or year of discharge is a single digit, use a preceding zero. There should be no blanks in this field.
Do not leave this field blank.

Principal Source of Payment #1 for Waitlisted Period

Data Element: Principal Source of Payment #1 for Waitlisted Period

Length: 2

Position: 57 - 58

Data Type: Integer

Definition: Use this field to record the expected principal source of payment for the waitlisted portion of this hospital admission. If the patient had more than one principal source of payment, e.g. for another level of care, use the Principal Source of Payment #2 for Waitlisted Period to record the additional payer. .

01 = Medicare
02 = Medicaid
04 = HMSA (any other HMSA plan)
05 = Kaiser
06 = Other Insurance
07 = Self Pay/Charity Care
08 = No Fault
09 = Workers' Compensation
11 = Unknown
12 = DOD (Department of Defense) (Tripler Use Only)
14 = HMSA Health Plan Hawaii
15 = AlohaCare
16 = Hawaii Management Alliance Association (HMAA)
17 = University Health Alliance (UHA)
18 = HMSA 65C+
19 = Kaiser Senior Advantage
20 = Veterans Administration (VA)
21 = TRICARE/CHAMPUS/Other Government
22 = HMSA QUEST
23 = Kaiser QUEST
24 = QUEST (any QUEST plan except AlohaCare, HMSA QUEST, Kaiser QUEST)
25 = Secure Horizons Medicare Advantage
26 = AlohaCare Advantage/Advantage Plus
27 = Summerlin Insurance

Instructions: Enter leading zero for single digit codes.
Do not leave this field blank.

HHIC Note: Out-of-state Medicaid plans are also included in payer 02. (3/05)
Medicare Advantage Plans that are not specified are also included in payer 01.

Principal Source of Payment #2 for Waitlisted Period

Data Element: Principal Source of Payment #2 for Waitlisted Period

Length: 2

Position: 59 - 60

Data Type: Integer

Definition: If necessary, use this field to record the expected second principal source of payment of the waitlisted portion of this hospital admission. .

01 = Medicare
02 = Medicaid
04 = HMSA (any other HMSA plan)
05 = Kaiser
06 = Other Insurance
07 = Self Pay/Charity Care
08 = No Fault
09 = Workers' Compensation
11 = Unknown
12 = DOD (Department of Defense) (Tripler Use Only)
14 = HMSA Health Plan Hawaii
15 = AlohaCare
16 = Hawaii Management Alliance Association (HMAA)
17 = University Health Alliance (UHA)
18 = HMSA 65C+
19 = Kaiser Senior Advantage
20 = Veterans Administration (VA)
21 = TRICARE/CHAMPUS/Other Government
22 = HMSA QUEST
23 = Kaiser QUEST
24 = QUEST (any QUEST plan except AlohaCare, HMSA QUEST, Kaiser QUEST)

Instructions: Enter leading zero for single digit codes.
Do not leave this field blank. Zero fill, if not applicable.

HHIC Note: Out-of-state Medicaid plans are also included in payer 02. (3/05)
Medicare Advantage Plans that are not specified are also included in payer 01.

Disposition of Patient

Data Element: Disposition of Patient

Length: 2

Position: 61 - 62

Data Type: Integer

Definition: Patient disposition or discharge status. Same as UB-04 (form locator 17) patient status field.

01	=	Discharged to home or self care (routine discharge)
02	=	Transferred/discharged to another short-term general hospital for inpatient care
03	=	Discharged/transferred to a skilled nursing facility (SNF)
04	=	Discharged/transferred to an intermediate care facility (ICF)
05	=	Discharged/transferred to another type of institution
06	=	Discharged/transferred to home under care of organized home health service organization.
07	=	Left against medical advice or discontinued care
09	=	Admitted as an inpatient to this hospital
20	=	Expired
30	=	Still patient
40	=	Expired at home (hospice only)
41	=	Expired in medical facility; e.g. hospital, SNF, ICF, or free standing hospice (hospice only)
42	=	Expired - place unknown (hospice only)
43	=	Discharged/transferred to a Federal Hospital (10/1/03 discharges)
50	=	Hospice – home
51	=	Hospice – medical facility
61	=	Discharged/transferred within this institution to a hospital-based Medicare approved swing bed.
62	=	Discharged/transferred to another rehabilitation facility including rehabilitation distinct part units of a hospital.
63	=	Discharged/transferred to a long term care hospital
64	=	Discharged/transferred to a nursing facility certified by Medicaid, but not certified by Medicare.
65	=	Discharged/transferred to a psychiatric hospital or psychiatric distinct part unit of a hospital (4/1/04 discharges).
66	=	Discharged/transferred to a Critical Access Hospital (CAH) (1/1/06 discharges)

Instructions: Do not leave this field blank.

Disposition of Patient—Specific Facility

Data Element: Disposition of Patient—Specific Facility

Length: 6

Position: 63 - 68

Data Type: Integer

Definition: Hospital's Medicare provider number as assigned by CMS for the facility that patient is transferred to by your facility. When discharge disposition (position 59 - 60) has a value of 03, 04, 05, 61, 62, 63, 64, 65, this data element must be filled in.

999989	Ador Harada's Foster Home
999993	Aloha Health Care Center
125038	Aloha Nursing & Rehab Centre
125048	Ann Pearl Nursing Facility
125014	Arcadia Retirement Residence
125020	Avalon Care Center - Honolulu
999988	Carmelita Makula Foster Home
999987	Castora Acnam's Expanded Care Home
125019	Convalescent Center of Honolulu
12E007	Crawford's Convalescent Home
125004	Garden Isle Healthcare
125045	Hale Anuenue Restorative Care Center
999994	Hale Ho Aloha
125032	Hale Ho'ola Hamakua
12E030	Hale Kupuna Heritage Home, LLC
125007	Hale Makua (Kahului)
125056	Hale Makua (Wailuku)
125050	Hale Malamalama
125011	Hale Nani Rehabilitation and Nursing Center
125047	Hale Ola Kino
125033	Harry and Jeanette Weinberg Care Center
125025	Hawaii Medical Center-East
125002	Hilo Medical Center
125055	Hi'Olani Care Center at Kahala Nui
999986	Home Away from Home (EMMA)
999995	Hospice Hawaii, Inc.
125005	Island Nursing Home
125051	Ka Punawai Ola
125028	Ka`u Hospital
999985	Kahala Nui
124001	Kahi Mohala
125030	Kahuku Hospital

Facilities continued on next page.

Disposition of Patient—Specific Facility (Continued)

12E034	Kauai Care Center
125021	Kauai Veterans Memorial Hospital
125031	Kohala Hospital
125027	Kona Community Hospital
125026	Kuakini Geriatric Care
125003	Kula Hospital
125057	Kulana Malama
125023	Lanai Community Hospital
125010	Leahi Hospital
125046	Leeward Integrated Health Services
125040	Life Care Center of Hilo
125052	Life Care Center of Kona
125041	Liliha Healthcare Center
999992	Malama Ohana
999992	Malama Ohana
125009	Maluhia
999984	Marietta Domingo Foster Home
999983	Mary Lo Farinas' Foster Home
125013	Maunalani Nursing and Rehabilitation Center
999982	Merlynne Lim Expanded Care Home
125034	Molokai General Hospital
999981	Nester Calucag's Expanded Care Home
999980	Norma Tenorio Expanded Care Home
125024	Nuuanu Hale
125042	Oahu Care Facility
999996	Palolo Chinese Home
125043	Pearl City Nursing Home
999991	Pohai Nani Care Center
999991	Pohai Nani Care Center
999990	Ponds of Punalu`u
999990	Ponds Of Punalu'u
125037	Queen’s Medical Center - PCU
123025	Rehabilitation Hospital of the Pacific
125029	Samuel Mahelona Memorial Hospital
125015	Wahiawa General Hospital
999978	Wahiawa Nursing and Rehab Center
999979	Zeniada Agsalda Foster Place
999997	Other Long Term Care Facility in U.S. (includes US Military facilities on foreign soil)
999998	Other Long Term Care Facility outside of U.S.
999999	Unable to Provide Specific Facility

Instructions: Right justify.
Leave blank for patients not transferred to another facility.

Total Acute Care Days

Data Element: Total Acute Care Days

Length: 4

Position: 69 - 72

Data Type: Integer

Definition: Total number of acute care days for this admission.

Instructions: Use this field to record the total number of days the patient spent at the acute care level. In counting acute care days, do not count the day of discharge.

Total Acute Care Charges

Data Element: Total Acute Care Charges

Length: 8

Position: 73- 80

Data Type: Integer

Definition: Total acute care charges for this stay, including room and board, pharmacy, laboratory, X-ray and hospital based physician charges.

Instructions: Use this field to record the total charges incurred at the acute care level.

Enter total dollars charged and right justify.
Truncate any cents.

If the amount is over $99,999,999, enter all 9's.

Total SNF Days

Data Element: Total SNF Days

Length: 4

Position: 81 - 84

Data Type: Integer

Definition: Total number of SNF days for this admission.

Instructions: Use this field to record the total number of days the patient spent at the SNF level of care.
If the patient had more than one episode at the SNF level care, the total of all episodes should be recorded.

In counting SNF days, do not count the day of discharge.
Do not leave blank. Zero fill if not applicable.

Total SNF Charges

Data Element: Total SNF Charges

Length: 8

Position: 85 - 92

Data Type: Integer

Definition: Total SNF charges for this stay, including room and board, pharmacy, laboratory, X-ray charges.

Instructions: Use this field to record the total charges incurred at the SNF level of care. If the patient had more than one episode at the SNF level care, the total of all episodes should be recorded.

Enter total dollars charged and right justify.
Truncate any cents.

If the amount is over $99,999,999, enter all 9's.

Do not leave blank. Zero fill if not applicable.

Expected SNF Reimbursement

Data Element: Expected Skilled Nursing Facility Reimbursement

Length: 8

Position: 93 - 100

Data Type: Integer

Definition: Expected SNF reimbursement for this stay.

Instructions: Use this field to record the expected reimbursement for the SNF level of care. If the patient had more than one episode at the SNF level care, the total of all episodes should be recorded.

Enter total dollars charged and right justify.
Truncate any cents.

If the amount is over $99,999,999, enter all 9's.

Do not leave blank. Zero fill if not applicable.

Total ICF Days

Data Element: Total ICF Days

Length: 4

Position: 101 - 104

Data Type: Integer

Definition: Total number of ICF days for this admission.

Instructions: Use this field to record the total number of days the patient spent at the ICF level of care. If the patient had more than one episode at the ICF level care, the total of all episodes should be recorded.

In counting ICF days, do not count the day of discharge.

Do not leave blank. Zero fill if not applicable.

Total ICF Charges

Data Element: Total ICF Charges

Length: 8

Position: 105 - 112

Data Type: Integer

Definition: Total ICF charges for this stay, including room and board, pharmacy, laboratory, X-ray charges.

Instructions: Use this field to record the total charges incurred at the ICF level of care. If the patient had more than one episode at the ICF level care, the total of all episodes should be recorded.

Enter total dollars charged and right justify. Zero fill any empty positions.
Truncate any cents.

If the amount is over $99,999,999, enter all 9's.

Expected ICF Reimbursement

Data Element: Expected ICF Reimbursement

Length: 8

Position: 113 - 120

Data Type: Integer

Definition: Expected ICF reimbursement for this stay.

Instructions: Use this field to record the expected reimbursement for the ICF level of care. If the patient had more than one episode at the ICF level care, the total of all episodes should be recorded.

Enter total dollars charged and right justify.
Truncate any cents.

If the amount is over $99,999,999, enter all 9's.

Do not leave blank. Zero fill if not applicable.

Total Other Days

Data Element: Total Other Days

Length: 4

Position: 121 - 124

Data Type: Integer

Definition: Total number of other days for this admission.

Instructions: This should be used for levels of care other than SNF or ICF, e.g. Rehab. Use this field to record the total number of days the patient spent at the non-acute care level of care. If the patient had more than one episode at the non-acute level of care, the total of all episodes should be recorded.

In counting other days, do not count the day of discharge.

Total Other Charges

Data Element: Total Other Charges

Length: 8

Position: 125 - 132

Data Type: Integer

Definition: Total other charges for this admission.

Instructions: This should be used for levels of care other than SNF or ICF, e.g. Rehab. Use this field to record the total charges incurred while the patient received non-acute care level of care. If the patient had more than one episode at the non-acute level of care, the total of all episodes should be recorded.

Enter total dollars charged and right justify.
Truncate any cents.

If the amount is over $99,999,999, enter all 9's.

Do not leave blank. Zero fill if not applicable.

Expected Other Reimbursement

Data Element: Expected Other Reimbursement

Length: 8

Position: 133 - 140

Data Type: Integer

Definition: Expected Other reimbursement for this stay.

Instructions: Use this field to record the expected reimbursement for the SNF level of care. If the patient had more than one episode at the SNF level care, the total of all episodes should be recorded.

Enter total dollars charged and right justify.
Truncate any cents.

If the amount is over $99,999,999, enter all 9's.

Do not leave blank. Zero fill if not applicable.

Total Acute Care Cost

Data Element: Total Acute Care Cost

Length: 8

Position: 141- 148

Data Type: Integer

Definition: Total acute care cost for this stay, including room and board, pharmacy, laboratory, and X-ray.

Instructions: Use this field to record the total cost incurred at the acute care level.

Enter total dollars and right justify.
Truncate any cents.

If the amount is over $99,999,999, enter all 9's.

Refer to General Assumptions, page 2 for specific guidelines for populating cost.

THIS FIELD IS OPTIONAL (NOT REQUIRED).
Do not leave blank. Zero fill if cost data not included.

Total SNF Cost

Data Element: Total SNF Cost

Length: 8

Position: 149- 156

Data Type: Integer

Definition: Total SNF cost for this stay, including room and board, pharmacy, laboratory, and X-ray.

Instructions: Use this field to record the total cost incurred at the SNF level.

Enter total dollars and right justify.
Truncate any cents.

If the amount is over $99,999,999, enter all 9's.

Refer to General Assumptions, page 2 for specific guidelines for populating cost.

Total ICF Cost

Data Element: Total ICF Cost

Length: 8

Position: 157- 164

Data Type: Integer

Definition: Total ICF cost for this stay, including room and board, pharmacy, laboratory, and X-ray.

Instructions: Use this field to record the total cost incurred at the ICF level.

Enter total dollars and right justify.
Truncate any cents.

If the amount is over $99,999,999, enter all 9's.

Refer to General Assumptions, page 2 for specific guidelines for populating cost.

Total Other Cost

Data Element: Total Other Cost

Length: 8

Position: 165- 172

Data Type: Integer

Definition: Total Other cost for this stay, including room and board, pharmacy, laboratory, and X-ray.

Instructions: Use this field to record the total cost incurred at the Other level.

Enter total dollars and right justify.
Truncate any cents.

If the amount is over $99,999,999, enter all 9's.

Refer to General Assumptions, page 2 for specific guidelines for populating cost.

Record Type

Data Element: Record Type

Length: 1

Position: 173 – 173

Data Type: Alpha-Numeric

Definition: 4 = Waitlisted Patient

Instructions: All records must contain the number 4 in the last position of the record. This will force all records to be the same length whether procedures were performed or not.

Edits: None

Table of Contents

HL7 HHIC LABORATORY INFORMATION 3

Introduction 3
General Specifications 3
Lab Data Set 4
TABLE 1. Summary of Laboratory Tests and LOINC 8
The Health Level Seven (HL7) Standard 9
Message Segments: Field Specifications And Usage 10
MSH Segment 11
PID Segment 13
PV1 Segment 14
Common Order (ORC) Segment 15
OBR Segment 15
OBX Segment 17
NTE Segment 21
References 22
Selected HL7 Data Types And Segment Sequencing 23
Optionality Of Segments: Designation And Meaning 24
Sample ORU Messages 25
Appendix A: HHIC USE ONLY – Edits Applied After Receipt 28

ASCII FILE LAYOUT 29

Introduction 29
General Specifications 29
TABLE 1. Summary of Required Laboratory Tests and LOINC 31
Data Field Layout 32
Sending Facility 33
Account Number 33
Medical Record Number 34
Date of Birth 34
Gender 35
Social Security Number 35
Patient First Name 36
Patient Last Name 36
Patient Middle Initial 37
Admission Date/Time 37
Discharge Date/Time 38
Ordering Physician First Name 38
Ordering Physician Last Name 39
Ordering Physician Middle Initial 39
Physician Identifier 40
Hospital or Lab Reporting Results 40
Create Date/Time 41
Patient Class 41
Hospital Test (Order) 42
Hospital Test (result – LOINC) 42
Observation Date/Time 43
Results Rpt/Status Chng Date/Time 43
Results Status 44

Table of Contents (continued)

Observation Value 44
Units 45
Reference Ranges 45
Abnormal Flags 46
Observation Results Status 46
Comments 47
Appendix A: HHIC Use Only – Edits Applied After Receipt 48

HL7 HHIC LABORATORY INFORMATION

Introduction

This document serves as a functional specification and technical requirements for integrating key lab results with Hawaii Health Information Corporation's (HHIC) inpatient database via Health Level 7 (HL7).We request a library of 32 laboratory tests and their respective LOINC codes be transmitted from each of our prospective ELR (Electronic Laboratory Reporting) providers.

HHIC uses these results of the key lab tests to enhance the content of their existing statewide, all-payer hospital discharge database by adding key hospitalization-related laboratory results. The enhanced data set will be used to improve the predicative methodology used to measure key patient outcomes, such as inpatient mortality.[1]

General Specifications

The instructions and specification contained in the *Implementation Guide- HL7 Specifications for Laboratory Observation Reporting (ORU Messages)* are applicable to participating HHIC institutions submitting data to HHIC, effective with discharges of January, 2008. Hospitalization-related **(Inpatient)** laboratory results should be obtained from laboratory hospital's clinical laboratory system/laboratory information system. Observed test results (e.g., finger stick) and other test results from glucometers, chemsticks, etc. should not be submitted. Submit test results specific to that laboratory test only. As an example, for the test of hemoglobin, do not submit a hemoglobin value that was reported as part of an arterial blood gas test result.

Units of Measure

Each laboratory test has a unique test code that represents both the laboratory test and the unit of measure. For example, the laboratory test lists Glucose with mg/dL as the unit of measurement. The laboratory test codes were designed to accept the submission of the units of measure used specified in the LOINC system. Please consult with the clinical laboratory system/laboratory information system personnel at your facility if you have questions regarding the laboratory units of measures outlined on page 10, Table 1.

[1]This effort is supported by CER funding received from The Agency for Healthcare Research and Quality (AHRQ). Todd Seto, MD, from The Queen's Medical Center is the Primary Investigator and will direct the comparative effectiveness research component of the research. Jill Miyamura, PhD, HHIC, is Co-Principal Investigator. HHIC's role is to demonstrate the feasibility of enhancing inpatient all-payer data with clinical (laboratory) data to support the purpose of comparative effectiveness research. More information on the grant, its aims and methodology can be found at http://www.hcup-us.ahrq.gov/datainnovations.jsp.[1]

Corrected Values

When two results are available for the same date and time the laboratory specimen was collected and one is labeled "corrected," submit the final corrected test result.

Data Submission Schedule

The lab file will be submitted at the same time as the inpatient, outpatient, physician and revenue files.

Data File Description

The file will be submitted in batch on a quarterly basis (at the beginning—and will move to a more frequent schedule as defined at a later time).

Each submission should include a summary document with the following information: hospital name/ID, time frame of messages submitted, number of messages sent in the batch. Separate batch files should be submitted for each hospital.

Transmission Options

Data will be transmitted to HHIC in one of the following ways:

1. Secure File Transfer Protocol (SFTP)
2. VPN

HHIC will collaborate with each provider to determine.

Lab Data Set

The lab data set includes the specified laboratory data of all inpatient admissions for the specified time period. Generally, data elements specified in the Implementation Manual follow HL7 standards.

The ORU message segments that HHIC requires follows: MSH, PID, PV1, OBR, OBX, NTE. The required message segments, associated fields, and key demographic data are listed on the following pages.

List of All Data Elements

The demographic fields to be sent in specific segments are listed in the table below. The specific ORU required segments (and fields) follow.

NAME	Message location	HL7 DT	Length
*Account number	PID-18	CX	250
*Admission Date	PV1-44	TS	26
*Discharge Date	PV1 -45	TS	26
*Date of birth	PID-7	TS	26
*Facility Name	MSH-4	HD	227
Gender	PID-8	IS	1
Hospital ID	TBD	HD	6
Hospital Test (order)	OBR-4	CE	250
Hospital Test (result - LOINC)	OBX-3	CE	250
Medical Record Number	PID-3	CX	250
Ordering Physician (Last, First, MI)	OBR-16	XCN	250
*Patient Name (Last, First, MI)	PID-5	XPN	250
Physician NPI	OBR-16	XCN	250
*Social Security Number	PID-19	ST	19

*for linking lab file to HHIC patient files

MSH Segment

Seq	NAME	HHIC Use	Type	R/O	LEN
1	Field Separator	"|"	ST	R	1
2	Encoding Characters	^~\&	ST	R	4
3	Sending Application	LIS e.g. "SENDER_GenericLABSYSTEM-LIS"	HD	R	227
4	Sending Facility	The sender of the message information, hospital name. hospital name^ CLIA code^CLIA YourHospital-Honolulu^45D3456781^CLIA	HD	R	227
5	Receiving Application	CLH, DLS or Hospital name	HD	R	227
6	Receiving Facility	The brief provider organization name assigned when the provider first registers with the lab	HD	R	227
7	Date/Time Of Message	20110602161633 YYYYMMDDHHMM[SS]	TS	R	26
9	Message Type	ORU^R01	MSG	R	7
10	Message Control Id	The sending system must assign an identifier for the message that is unique within the namespace of the sending facility	ST	R	50
11	Processing ID	P	PT	R	3
12	Version ID	2.3	VID	R	60

PID Segment

Seq	NAME	HHIC Use	Type	R/O	LEN
3	Patient ID	Medical Record Number	ST	R	250
5	Patient Name	Last^First^Middle	XPN	R	250
7	Date/Time Of Birth	YYYYMMDD	TS	RE	26
8	Sex	F, M, or U	IS	R	1
18	Patient Account Number	Patient Account Number	ST	R	250
19	SSN – Patient	Sent if available	ST	RE	16

PV1 Segment

SEQ	NAME	HHIC Use	TYPE	R/O	LEN
2	Patient Class	E (Emergency Department visits), I (Inpatient Admission), O (Outpatient)	IS	R	1
44	Admission Date/Time	Date and time of the patient presentation.	TS	RE	26
45	Discharge Date/Time	Date and time of the patient discharge.	TS	RE	26

Common Order (ORC) Segment

Used to transmit fields that are common to all orders. The ORC is NOT a required segment for HHIC.

OBR Segment

Seq	NAME	HHIC Use	Type	R/O	LEN
3	Filler Order Number	LIS order number = internal access number	EI	R	50
4	Universal Service Identifier	Ordered test code ^^^[lab order code]^[description]	CE	R	250
7	Observation Date/Time	YYYYMMDDHHMMSS	TS	R	26
16	Ordering Provider	1434567516^LASTNAME^PHYSICIANFIRST [PhysicianIDNPI]^[PhysicianLast]^[PhysicianFirst]	XCN	R	250
22	Results Rpt/Status Chng - Date/Time	“activity end date/time”	TS	R	26
25	Result status	Only “F”	ID	R	1

OBX Segment (See next page for "Summary of Required Lab Tests and LOINC")

Seq	NAME	HHIC Use	TYPE	R/O	LEN
3	Observation Identifier	Local RESULT code^LOINC 4544-3^Hematocrit^LN^HCT^Hematocrit^LAB Result code^test description LOINC Code^LOINC description^LN^local code^local description^L	CE	R	250
4	Observation sub-ID	0	ST	R	20
5	Observation value	Result Example 1 - Hepatitis A IgM test was positive OBX|1|CE|5182-1^Hepatitis A Virus IgM Serum Antibody EIA^LN||G-A200^Positive^SNM| Example 2 - antimicrobial susceptibility testing OBX|1|SN|7059-9^Vancomycin Susceptibility, Gradient Strip^LN||<^1	*	C	9999
6	Units	Unit of measure	CE	RE	250
7	Reference ranges	Upper and lower limit	ST	RE	60
8	Abnormal flags	Result value - S, I, or R, and should be provided in addition to the numeric value in OBX-5 When findings other than susceptibility results are sent, the abnormal flag should be valued (e.g., "H", "N", or "A")	IS	RE	5
11	Observation Result Status	F= completed. Correct and final results	ID	R	1

NTE Segment

Seq	NAME	HHIC Use	TYPE	R/O	LEN
1	Set ID	NTE	SI	O	4
2	Source of Comment	Used when source of comment must be identified	ID	X	8
3	Comment	Comment	FT	RE	65536
4	Comment Type		CE	O	250

TABLE 1. Summary of Laboratory Tests and LOINC

	Lab Test	Lab Test Name	LOINC	Units	LOINC SHORTNAME
Chemistry	Albumin	Albumin	1751-7	g/dL	Albumin SerPl-mCnc
	Alkaline phosphatase	Alkaline phosphatase	6768-6	U/L;units/L	ALP SerPl-cCnc
	Blood urea nitrogen (BUN)	Urea nitrogen	3094-0	mg/dL	BUN SerPl-mCnc
	Bilirubin (total)	Bilirubin	1975-2	mg/dL	Bilirub SerPl-mCnc
	Calcium	Calcium	17861-6	mg/dL	Calcium SerPl-mCnc
	Chloride	Chloride	2075-0	mmol/L	Chloride SerPl-sCnc
	Creatine kinase-MB	Creatine kinase.MB	13969-1	ng/mL; ug/L	CK MB SerPl-mCnc
	Creatinine	Creatinine	2160-0	mg/dL	Creat SerPl-mCnc
	Glucose	Glucose	2345-7	mg/dL	Glucose SerPl-mCnc
	Gamma glutamyl transferase	Gamma glutamyl transferase	2324-2	U/L;units/L	GGT SerPl-cCnc
	Potassium	Potassium	2823-3	mmol/L	Potassium SerPl-sCnc
	Phosphate	Phosphate	2777-1	mg/dL	Phosphate SerPl-mCnc
	BNP	Natriuretic peptide.B	30934-4	pg/mL	BNP SerPl-mCnc
	Sodium	Sodium	2951-2	mmol/L	Sodium SerPl-sCnc
	Troponin I	Troponin I.cardiac	10839-9	ug/L;ng/mL	Troponin I SerPl-mCnc
	SGOT	Aspartate aminotransferase	1920-8	U/L;units/L	AST SerPl-cCnc
	SGPT	Alanine aminotransferase	1742-6	U/L;units/L	ALT SerPl-cCnc
Blood Gas					
	pO2	Oxygen	2703-7	mm Hg	pO2 BldA
	pCO2	Carbon dioxide	2019-8	mm Hg	pCO2 BldA
	pH(arterial)	pH	2744-1		pH BldA
	Base excess	Base excess	1925-7	mmol/L	Base excess BldA-sCnc
	Bicarbonate	Bicarbonate	1960-4	mmol/L	HCO3 BldA-sCnc
Hematology					
	Hemoglobin	Hemoglobin	718-7	g/dL	Hgb Bld-mCnc
	Hematocrit	Hematocrit	4544-3	L/L;%	Hct Fr Bld Auto
	Partial thromboplastin time (PTT)	Coagulation surface induced	14979-9	Sec	aPTT Time PPP
	Prothrombin time (PT)	Coagulation tissue factor induced	5902-2	Sec	PT Time PPP
	INR	Coagulation tissue factor induced.INR	34714-6	INR(POC)	INR PPP
	Platelet count	Platelets	777-3	10^9/L	Platelet # Bld Auto
	White blood count (WBC)	Leukocytes	6690-2	10*3/uL	WBC # Bld Auto
Microbiology					
	Blood culture		600-7		
	Urine culture		630-4		
	Sputum culture		6460-0		

The Health Level Seven (HL7) Standard

The ANSI HL7 standard is widely used for data exchange in the health care industry, and is quite lengthy, covering a variety of situations in patient care and health care finance. This document covers the subset of HL7 that will be used for LIS (laboratory information system) records received by **HHIC** from outside systems. The basic unit transmitted in an HL7 implementation is the **message**. Messages are made up of several **segments**, each of which is one line of text, beginning with a three-letter code identifying the segment type. Segments are in turn made up of several **fields** separated by a delimiter character, "|". Below is an example LAB accession in HL7 2.3 format.
In this example, a message consisting of seven segments (MSH, PID, PV1, ORC, OBR, and OBX [0 thru 1]) is being sent to HHIC from a LAB database.

```
MSH|^~\&|YourHL7System|YourHIFACILITY |X| HHIC Database
|20110329082006||ORU^R01|201103290820062979|T|2.3
PID||55555^182P478_367903|15161516;1^^^1|55555^LAB^1|TEST^EMR^SAMPLE||19651015|F|||||||
|IB873749|45879|123456789|H
PV1||O|XOP^^^LAB|||16626|16626^TEST^PHYSICIAN||||||||||OP|182P478_367903560475_101_1|||
||||||||||||||||||||20110329000000
ORC|RE||E2908978T8191219L1143|||||||||16626^TEST^PHYSICIAN^LABT02|LAB
OBR|1|20110329082006|201103290820062979|ABC^Automated Bld
Cnt|||20110329045100|||||||20110329081100||16626^TEST^PHYSICIAN^LABT02||||T8191|219L1143^
0|||H|F||^^^^^R
OBX|0|NM|6690-2^Leukocytes^LN^WBC^WBC^LAB|0|11.8|10(9)/L|3.8-
11.2|H|||F|||20110329081700|12D0664165^LAB-HMCW\91-2135 Fort Weaver Road, # 300\Ewa
Beach\HI\96706-1929\Glen Doctor, MD
OBX|1|NM|^^LN^RBC^RBC^LAB|0|3.01|10(12)/L|3.9-5.2|L|||F|||20110329081700|12D0664165^LAB-
HMCW\91-2135 Fort Weaver Road, # 300\Ewa Beach\HI\96706-1929\Glen Doctor, MD
```

In the above example, the Message Header segment (**MSH**) carries the owner of the information being sent (**YourHIFACILITY**) and receiver (**HHIC Database**) and identifies the message as being of type **ORU**, Unsolicited Observation Result.
The Patient Identification segment (**PID**) carries the client's name (EMR TEST), birth date (19651015, in YYYYMMDD format), and other identifying fields.
PV1 carries the Patient Visit information, **ORC** carries Common Order information from the referring physician, **OBR** carries the observation request (e.g. perform biopsy), and several **OBX** segments carry the **LAB** laboratory observations, including clinical indications, gross description, and the diagnosis provided by the **LAB physician or** pathologist.
LAB will provide HL7 messages to communicate with **HHIC**. These files will be transmitted to the interface engine hosted at **HHIC**. Each HL7 file will contain one HL7 message that includes data for one**LAB** accession. HL7 does not require the use of a particular coding system to identify either the observation or the result. In the past, users tended to use their own unique code systems for identifying tests and other clinical observations because standard codes were not available. Such local code systems suffice for transmitting information within single institutions, but present high barriers to aggregating data from many sources for research or for public health record systems. Standard code systems such as LOINC® now exist for many of these purposes, and we strongly encourage their use in reporting. Standard codes (LOINC) can be sent as the only code in the OBX-3 field, or they can be sent along with the local code (your local lab code) as the second code system represented in that field (See OBX segment).

Message Segments: Field Specifications And Usage

HL7 Segment Structure
Each segment consists of several fields, separated by the field separator character, "|". The table below defines how each segment (described on pages 7-17) is structured.

Field/ Column	Description
SEQ	The ordinal position of the field in the segment. Since **HHIC** does not use all possible fields in the HL7 standard, these are not always consecutive.
NAME	HL7 element name for the field.
HHIC Use	Short explanation of the use of this field.
TYPE	HL7 data type of the field. See Appendix K for definition of HL7 data types.
R/O	Refers to if a field is required or optional. R means required for HL7 message for **LAB**. **RE** means indicated, required, but message will not be rejected if not present. **C** means conditional (Conditional on the trigger event or on some other field(s)). (See Appendix L)
LEN	Maximum length of the field

HL7 data types: Each field in the HL7 message has an HL7 data type. Appendix K of this document lists and defines the HL7 data types needed by**HHIC**. The elemental data types Numeric (NM) and String (ST) consist of one value, while some data types, such as Patient Name are composites.

Delimiter characters: Field values of composite data types consist of several components separated by the **component separator**, "^". When components are further divided into sub-components, these are separated by the **sub-component separator**, "&". Some fields are defined to permit repetitions separated by the **repetition character**, "~". When these special characters need to be included within text data, their special interpretations are prevented by preceding them with the **escape character**, "\".

MSH Segment

The MSH segment defines the intent, source, destination, and some specifics of the syntax of a message.

SEQ	NAME	HHIC Use	Type	R/O	LEN
1	Field Separator	"|"	ST	R	1
2	Encoding Characters	^~\&	ST	R	4
3	Sending Application	LIS e.g. "SENDER_GenericLABSYSTEM-LIS"	HD	R	227
4	Sending Facility	The sender of the message information, hospital name. hospital name^ CLIA code^CLIA YourHospital-Honolulu^45D3456781^CLIA	HD	R	227
5	Receiving Application	CLH, DLS or Hospital name	HD	R	227
6	Receiving Facility	The brief provider organization name assigned when the provider first registers with the lab	HD	R	227
7	Date/Time Of Message	20110602161633 YYYYMMDDHHMM[SS]	TS	R	26
9	Message Type	ORU^R01	MSG	R	7
10	Message Control Id	The sending system must assign an identifier for the message that is unique within the namespace of the sending facility	ST	R	50
11	Processing ID	P	PT	R	3
12	Version ID	2.3	VID	R	60

Notes:

MSH-1 Determines the field separator in effect for this message. Requires the HL7 recommended field separator of "|".

MSH-2 Determines the component separator, repetition separator, escape character, and sub-component separator in effect for the rest of this message. **HHIC** requires the HL7 recommended values of ^~\&.

Definition: Four characters in the following order:

Component separator '^' ASCII (94)

Repetition Separator '~' ASCII (126)

Escape character '\' ASCII (92)

Subcomponent separator '&' ASCII (38)

MSH-3 Name of the sending application. When sending, LAB will use their LAB Information System identifier.

MSH-4 Identifies the sender (the owner of the message information). When sending, **LAB** will use "Hospital Name."

MSH-5 Name of the RECEIVING application. Regional or hospital lab that is processing the order.

MSH-6 Identifies the message receiver. This field identifies the organization responsible for the operations of the receiving application.

MSH-7 Date and time the message was created. This includes the time zone. See the TS data type.YYYY[MM[DD[HHMM[SS[.S[S[S[S]]]]]]]][+/-ZZZZ] is the HL7 format for the Time Stamp. Z is the time zone offset. Send values only as far as needed. When a system has only a partial date, e.g., month and year, but not day, the missing values may be interpreted as zeros. The time zone is assumed to be that of the sender.

Example: 20110526132010-0800 – May 26th, 2011, 13:20:10, Pacific Time.

MSH-9 Two components give the HL7 message type/HL7 triggering event. For outbound results (to HHIC) this field should be "ORU^R01", where ORU is the message ID for Observation Result / Unsolicited and R01 is an Unsolicited Transmission.

MSH-10 The message control ID is a string (which may be a number) uniquely identifying the message among all those ever sent by the sending system. LAB will use "xxauniquevalue." CCYYMMDDnnnnnnn may be used, (or DDD - Julian date instead of MMDD) and nnnnnnn is the sequence number for that day. Calendar Date: CCYYMMDD with CC = century, YY = last 2 digits of year, and valid ranges of month = 01 through 12 and day = 01 through 31.

MSH-11 The processing ID to be used by **LAB** is **P** for production. T = Training / testing.

MSH-12 -- "2.3" to indicate HL7 Version 2.3.

NOTE: We have used 2.3 as the default version. 2.3 or higher may be sent, up to 2.5.1.

PID Segment

The PID segment is used by all applications as the primary means of communicating patient identification information. This segment contains permanent patient identifying and demographic information that, for the most part, is not likely to change frequently.

SEQ	NAME	HHIC Use	TYPE	R/O	LEN
3	Patient ID	Medical Record Number	CX	R	250
5	Patient Name	Last^First^Middle	XPN	R	250
7	Date/Time Of Birth	YYYYMMDD	TS	RE	26
8	Sex	F, M, or U	IS	R	1
18	Patient Account Number	Patient Account Number	CX	R	250
19	SSN – Patient	Sent if available	ST	RE	16

Notes:

PID-3 The unique medical record number of the patient's chart within the system. Patient's unique identifier(s) from the facility.

PID-5 Example:

Doe^Mary^A *[PatientLastName]^[PatientFirstName] ^[PatientMiddleName]. Last name and first name are required.*

PID-7 Give the year, month, and day of birth (YYYYMMDD). **LAB may** ignore any time component in the birth date. Time stamp (TS) data type must be in the format: YYYY[MM[DD[HHMM[SS[.S[S[S[S]]]]]]]][ ]. The user values the field only as far as needed. When a system has only a partial date, e.g., month and year, but not day, the missing values may be interpreted as zeros. The time zone is assumed to be that of the sender.

PID-8 Use F, M, or U (F = Female, M = Male, U = Unknown)

PID-18 This field is required and must contain an account number. Definition: This field contains the patient account number assigned by accounting to which all charges, payments, etc., are recorded. The entire number including the check digit will be considered the patient account number.

PID-19 Sent only if stored in lab system.

PV1 Segment

The PV1 (Patient Visit Segment Definition) segment is used by Registration/Patient Administration applications to communicate information on a visit-specific basis.

SEQ	NAME	HHIC Use	TYPE	R/O	LEN
2	Patient Class	E (Emergency Department visits), I (Inpatient Admission), O (Outpatient)	IS	R	1
44	Admission Date/Time	Date and time of the patient presentation.	TS	RE	26
45	Discharge Date/Time	Date and time of the patient discharge.	TS	RE	26

Notes:

PV1-2 Patient Class does not have a consistent industry-wide definition and is subject to site-specific variations. Patient Class = E (Emergency Department visits) or I (Inpatient Admission), or O (Outpatient). Literal values: “E”, “I” or “O”.

PV1-44 YYYYMMDDHHMM[SS[.S[S[S[S]]]]] [+/-ZZZZ]. Date and time patient arrived for services.

PV1-45 YYYYMMDDHHMM[SS[.S[S[S[S]]]]] [+/-ZZZZ] – Date and time patient was discharged from facility, as known/recorded/available.

Common Order (ORC) Segment

Used to transmit fields that are common to all orders. The ORC is NOT a required segment by HHIC.

OBR Segment

The Observation Request Segment carries general information about the sample, test, or result. For laboratory-based reporting, the OBR defines the attributes of the original request for laboratory testing. Essentially, the OBR describes a battery or panel of tests that is being requested or reported. The OBR is similar to a generic lab slip that is filled out when a physician requests a lab test. The individual test names and results for the panel of tests performed are reported in OBX segments, which are described below. As defined by the ORU syntax, there can be many OBXs per OBR, and there can be many OBRs per PID.

Example:

OBR|1|20110329082006|201103290820062979|ABC^Automated Bld Cnt|||20110329045100||||||20110329081100||16626^TEST^PHYSICIAN^LABT02||||T8191|219L1143^0|||H|F||^^^^^R

SEQ	NAME	HHIC Use	TYPE	R/O	LEN
3	Filler Order Number	LIS order number = internal access number	EI	R	50
4	Universal Service Identifier	Ordered test code ^^^[lab order code]^[description]	CE	R	250
7	Observation Date/Time	YYYYMMDDHHMMSS	TS	R	26
16	Ordering Provider	1434567516^LASTNAME^PHYSICIANFIRST [PhysicianID-NPI]^[PhysicianLastName]^[PhysicianFirstName]	XCN	R	250
22	Results Rpt/Status Chng - Date/Time	"activity end date/time"	TS	R	26
2	Result status	Only "F"	ID	R	1

Notes:

OBR-3 This is the **LAB (LIS)** internal order number.

Example: PL2010-123456 - *[LABAccessionNumber].*
Definition: It is assigned by the order filler (receiving) application. This string must uniquely identify the order (as specified in the order detail segment) from other orders in a particular filling application (e.g., clinical laboratory). This uniqueness must persist over time.

OBR-4 This is an element containing the **LAB** case sample procedure type ID and

description.

Components: <identifier (ST)> ^ <text (ST)> ^ <name of coding system (ST)> ^<alternateidentifier (ST)> ^ <alternate text (ST)> ^ <name of alternate coding system (ST)>
The LOINC is more desirable in the OBX segment, field 3. Panels will have one OBR followed by multiple OBX segments (one for each test in the panel).

OBR-7 This is the **LAB** collected date, including time and time zone. This field is the clinically relevant date/time of the observation. In the case of observations taken directly from a subject, it is the actual date and time the observation was obtained.

OBR-16 This is a complex element containing three components related to the ordering physician. **When the provider is assigned a National Provider ID (NPI) the NPI is transmitted as the ID**: 1) NPI or Hospital Physician ID (NPI strongly preferred), 2) last name of referring physician, and 3) first name of referring physician.

Example: 5551001234^Smith^Bob

OBR-22 This field is used to indicate the date and time that the results are composed into a report and released to the individual OBX), or that a status, is entered or changed.

OBR-25 This is the test status and will be "F" for finalized.

HL7 Table - Result status (For reference)

Value	Description
O	Order received; specimen not yet received
I	No results available; specimen received, procedure incomplete
S	No results available; procedure scheduled, but not done
A	Some, but not all, results available
P	Preliminary: A verified early result is available, final results not yet obtained
C	Correction to results
R	Results stored; not yet verified
F	Final results; results stored and verified. Can only be changed with a corrected result.
X	No results available; Order canceled.
Y	No order on record for this test. (Used only on queries)
Z	No record of this patient. (Used only on queries)

OBX Segment

The Observation/Result segment is used to transmit the observations of the **LAB**. OBX segments have great flexibility to report information. When properly coded, OBX segments report a large amount of information in a small amount of space. OBX segments within the ORU message are widely used to report laboratory and other clinical information.

There can be many OBX segments identified like OBX|1|, OBX|2|, OBX|3|, OBX|4|, OBX|5|, and

OBX|6|, etc.

Example:

OBX|0|NM|6690-2^Leukocytes^LN^WBC^WBC^LAB|0|11.8|10(9)/L|3.8-11.2|H|||F|||20110329081700|12D0664165^LAB-HMCW\91-2135 Fort Weaver Road, # 300\Ewa Beach\HI\96706-1929\Glen Doctor, MD
OBX|1|NM|^^LN^RBC^RBC^LAB|0|3.01|10(12)/L|3.9-5.2|L|||F|||20110329081700|12D0664165^LAB-HMCW\91-2135 Fort Weaver Road, # 300\Ewa Beach\HI\96706-1929\Glen Doctor, MD
OBX|2|NM|718-7^Hemoglobin^LN^HGB^Hemoglobin^LAB|0|9.2|g/dL|11.6-15.1|L|||F|||20110329081700|12D0664165^LAB-HMCW\91-2135 Fort Weaver Road, # 300\Ewa Beach\HI\96706-1929\Glen Doctor, MD
OBX|3|NM|4544-3^Hematocrit^LN^HCT^Hematocrit^LAB|0|27.2|%|34.1-44.2|L|||F|||20110329081700|12D0664165^LAB-HMCW\91-2135 Fort Weaver Road, # 300\Ewa Beach\HI\96706-1929\Glen Doctor, MD
OBX|4|NM|^^LN^MCV^MCV^LAB|0|90.3|fL|80-100||||F|||20110329081700|12D0664165^LAB-HMCW\91-2135 Fort Weaver Road, # 300\Ewa Beach\HI\96706-1929\Glen Doctor, MD
OBX|5|NM|^^LN^MCH^MCH^LAB|0|30.4|pg|27-33||||F|||20110329081700|12D0664165^LAB-HMCW\91-2135 Fort Weaver Road, # 300\Ewa Beach\HI\96706-1929\Glen Doctor, MD
OBX|6|NM|^^LN^MCHC^MCHC^LAB|0|33.7|g/dL|32-36||||F|||20110329081700|12D0664165^LAB-HMCW\91-2135 Fort Weaver Road, # 300\Ewa Beach\HI\96706-1929\Glen Doctor, MD
OBX|7|NM|^^LN^RDW^RDW^LAB|0|14.4|%|11-15||||F|||20110329081700|12D0664165^LAB-HMCW\91-2135 Fort Weaver Road, # 300\Ewa Beach\HI\96706-1929\Glen Doctor, MD
OBX|8|NM|777-3^Platelets^LN^PLTC^Platelet Count^LAB|0|119|10(9)/L|150-450|L|||F|||20110329081700|12D0664165^LAB-HMCW\91-2135 Fort Weaver Road, # 300\Ewa Beach\HI\96706-1929\Glen Doctor, MD

OBX Segment (continued)

SEQ	NAME	OBX - HHIC Use	TYPE	R/O	LEN
3	Observation Identifier	Local RESULT code^LOINC 4544-3^Hematocrit^LN^HCT^Hematocrit^LAB Result code^test description LOINC Code^LOINC description^LN^local code^local description^L	CE	R	250
4	Observation sub-ID	0	ST	R	20
5	Observation value	Result Example 1 - Hepatitis A IgM test was positive OBX|1|CE|5182-1^Hepatitis A Virus IgM Serum Antibody EIA^LN||G-A200^Positive^SNM| Example 2 - antimicrobial susceptibility testing OBX|1|SN|7059-9^Vancomycin Susceptibility, Gradient Strip^LN||<^1	*	C	9999
6	Units	Unit of measure	CE	RE	250
7	Reference ranges	Upper and lower limit	ST	RE	60
8	Abnormal flags	Result value - S, I, or R, and should be provided in addition to the numeric value in OBX-5 When findings other than susceptibility results are sent, the abnormal flag should be valued (e.g., "H", "N", or "A")	IS	RE	5
11	Observation Result Status	F= completed. Correct and final results	ID	R	1

OBX Segment (continued)

Notes:

OBX-3 <identifier (ST)> ^ <text (ST)> ^ <name of coding system (IS)> ^ <alternate identifier (ST)> ^ <alternate text (ST)> ^ <name of alternate coding system (IS)>

3.1 LOINC Code

3.2 Text LOINCdescription

3.3 Name of Coding System 'LN'

3.4 Alternate Identifier Local code here

3.5 Text Local description here

3.6 Alternate Coding System "L"

It is strongly recommended that OBX-3 be populated with as specific a LOINC®code as possible to prevent any misinterpretation of reported results.

OBX-4 Used for processing but not mapped

OBX-5 Result value. Example for blood culture

For antimicrobial susceptibility testing, the OBX segment would appear as:

OBX|1|SN|7059-9^Vancomycin Susceptibility, Gradient Strip^LN||**<^1**|...

where OBX-3 uses a LOINC® code and OBX-5 has a numeric value. The value type listed inOBX-2 determines the structure of the reported result here (i.e., SN). The SN data type has the following structure:

<comparator> ^ <num1(NM)> ^ <separator or suffix> ^ <num2 (NM)>

Some examples of the SN representation are:

|>^100| Greater than 100
|^100^-^200| equal to range of 100 through 200
|^1^:^228| ratio of 1 to 128 (e.g., the results of a serological test)
|^2^+| categorical response (e.g., an interpretation of occult blood positivity)

For results of a culture that yielded Neisseria meningitides, OBX-2 would be listed as a coded element(CE) and OBX-5 would appear as:

OBX Segment (continued)

L-22202^Neisseria meningitidis^SNM|

It is strongly recommended that the data types CE and SN be used whenever possible to minimize ambiguity in reporting. In those cases where laboratories have a local code which represents a canned comment, the local code can be placed in OBX5 as a CE data type, and the canned comment can be placed in an NTE directly following the OBX segment.
Example:

OBX|1|CE|600-7^Microorganism identified, Blood Culture^LN||^^^SALMPRES^^L|...
NTE|1|L|Numerous colonies of Salmonella were present on culture. A sub-
NTE|2|L|culture was inoculated and sent for further species identification.

OBX-6 Units, for example: |µg/mL^microgram/milliliter^ISO+|

OBX-7 Reference range. If numeric, the values of this field may report several values in one of the following three formats:

1. lower limit-upper limit when both lower and upper limits are defined, e.g., for potassium "3.5 - 4.5"
2. > lower limit if no upper limit, e.g., ">10"
3. < upper limit if no lower limit, e.g., "<15"

OBX-8 Abnormal flags should be used for reporting microbiology sensitivity data. Abnormal flags for antimicrobial sensitivity reporting should conform to the recommendations of National Committee of Clinical Laboratory Standards (NCCLS, http://www.nccls.org). For most reported findings, the allowable values are S, I, or R, and should be provided in addition to the numeric value in OBX-5. For ELR, when findings other than susceptibility results are sent, the abnormal flag should be valued (e.g., "H", "N", or "A") to distinguish between tests that are interpreted as normal and those that are interpreted as abnormal.

OBX-11 Value Type refers to the content.

NTE Segment

The optional Notes and Comments (NTE) segment is allowed to repeat and may be inserted after any of the OBX segments. The note segment applies to the information in the segment that immediately precedes it, i.e., the observation reported in the preceding OBX segment. The NTE segment can carry any text relevant to the event or the observation and can give its source. The NTE segment is not further defined by HL7.

SEQ	NAME	HHIC Use	TYPE	R/O	LEN
1	Set ID	NTE	SI	O	4
2	Source of Comment	Used when source of comment must be identified	ID	X	8
3	Comment	Comment	FT	RE	65536
4	Comment Type		CE	O	250

Notes:

NTE-1 This field may be used where multiple NTE segments are included in a message. Their numbering must be described in the application message definition

NTE-2 Used when source of comment must be identified

NTE-3 Contains the comment contained in the segment

NTE-3 Contains a value to identify the type of comment text being sent in the specific comment record.

References

See Version 2.3 of the Health Level 7 standard for a full description of all messages, segments, and fields. Information regarding HL7 is at www.hl7.org. See ELINCs standards at http://www.elincs.chcf.org

IMPACT SIIS 2.0 - Implementation Guide for HL7 Messages & Segments

http://www.impactportal.info/FileSystem/hl7/4-HL7Guide-ImpactSIIS%20through%202.5%202011.pdf

Selected HL7 Data Types And Segment Sequencing

Data Type	Data Type Name	Data Type	Data Type Name
CE	Coded element	**CQ**	Composite Quantity with Units
CWE	Coded with Exceptions	**CX**	Extended Composite Id with Check digit
DT	Date	**DTM**	Date/Time
EI	Entity Identifier	**ERL**	Error Location
FC	Financial Class	**FN**	Family Name
HD	Hierarchic Designator	**ID**	Coded Values for HL7 Tables
IS	Coded value for User-Defined Tables	**LA2**	Location with address variation 2
MSG	Message Type	**NM**	Numeric
PT	Processing Type	**SAD**	Street Address
SI	Sequence ID	**ST**	String
SN	Structured Numeric	**VID**	Version Identifier
TS	Time Stamp	**XCN**	Extended Composite ID Number and Name for Persons
XAD	Extended Address	**XTN**	Extended telephone number
XPN	Extended Person Name		

Segment Sequence and Nesting

The sequence of segments in a message instance is indicated by the sequence of segments in the message-structure specification. Braces, { . . . } surrounding a group of segments indicate one or more repetitions of the enclosed group may occur. Brackets, [. . .] surrounding a group of segments indicates that the enclosed group is optional. If a group of segments is optional and may repeat it is enclosed in brackets and braces, [{ . . . }].

MSH PID PV1 ORC OBR OBX OBR OBX OBX NTE

Optionality Of Segments: Designation And Meaning

Usage refers to the optionality of individual segments and groups of segments. The following designations and their meanings are used in message structures:

Value	Description	Comment
R	Required	A conforming sending application shall populate all “R” elements with a non-empty value. HHIC shall process (save / print / archive/etc.) or ignore the information conveyed by required elements. HHIC shall not raise an error due to the presence of a required element, but may raise an error due to the absence of a required element.
RE	Required but may be empty	The element may be missing from the message, but shall be sent by the sending application if there is relevant data to report. A conforming sending application shall be **capable** of providing all "RE" elements. If the conforming sending application knows the required values for the element, then it shall send that element. If the conforming sending application does not know the required values, then that element will be omitted. HHIC will be expected to process (save/print/archive/etc.) or ignore data contained in the element, but shall be able to successfully process the message if the element is omitted (no error message should be generated because the element is missing).
X	Not supported	For conformant sending applications, the element shall not be sent. HHIC shall ignore the element if it is sent. However, HHIC will not generate an application error if it receives the element.
C	Conditional - Specific to Message Profile	Used only in a *shared* message-structure specification, i.e., a specification that is shared by multiple Message Profiles. A shared message-structure is defined when the message structures of multiple message types are very similar. The specific usage of these segments is specified in each section where used.

Sample ORU Messages

Example 1:

MSH|^~\&|LIS|M|||20090518161040||ORU^R01|91380000032|P|2.3|
PID|||15161516^^^^M||TEST^EMR SAMPLE^||19651015|M|||||||||46456|
PV1||O|XOP||||14516^TEST^PHYSICIAN||LAB||||||||^|||||||||||||||||||||||||||
ORC|RE|||||||||||||||^|
OBR|||E2905964|^^^ADIF^CBC|||200905041213|||||||200905041223|^|14516^TEST^PHYSICIAN||||M3
017||||H|F|CBC^ADIF|^^^^^R|^^~^^~^^||||^^|^^|^^||200905041213|
OBX|1|NM|WBC^WBC|1|10.7|10(9)/L|3.5-10.0|H|||C|||200905050732|C^LAB IT|
OBX|1|TX|WBC^WBC|2|*CORRECTED 05/05 AT 0732: ORIGINAL: 5.1||||||C|||200905050732|C^LAB
IT|
OBX|2|NM|RBC^RBC|1|2.96|10(12)/L|4.4-6.0|L|||F|||200905041231|C^LAB IT|
OBX|3|NM|HGB^Hemoglobin|1|10.3|g/dL|14-17|L|||F|||200905041231|C^LAB IT|
OBX|4|NM|HCT^Hematocrit|1|31.4|%|41-51|L|||F|||200905041231|C^LAB IT|
OBX|5|NM|MCV^MCV|1|106.0|fL|80-100|H|||F|||200905041231|C^LAB IT|
OBX|6|NM|MCH^MCH|1|34.8|pg|27-33|H|||F|||200905041231|C^LAB IT|
OBX|7|NM|MCHC^MCHC|1|32.9|g/dL|32-36||||F|||200905041231|C^LAB IT|
OBX|8|NM|RDW^RDW|1|20.4|%|11-15|H|||F|||200905041231|C^LAB IT|
OBX|9|NM|PLTC^Platelet Count|1|58|10(9)/L|150-450|L|||F|||200905041231|C^LAB IT|
OBX|10|NM|MPV^MPV|1|12.5|fL|6.9-10.9|H|||F|||200905041231|C^LAB IT|
OBX|11|TX|DFTYP^Diff Method|1|Auto||||||F|||200905041231|C^LAB IT|
OBX|12|NM|ANEUT^Neutrophils|1|69|%|40-70||||F|||200905041231|C^LAB IT|
OBX|13|NM|ALYM^Lymphs|1|17|%|20-45|L|||F|||200905041231|C^LAB IT|
OBX|14|NM|AMONO^Monocytes|1|11|%|4-10|H|||F|||200905041231|C^LAB IT|
OBX|15|NM|AEOS^Eosinophils|1|3|%|0-6||||F|||200905041231|C^LAB IT|
OBX|16|NM|ABASO^Basophils|1|0|%|0-2||||F|||200905041231|C^LAB IT|
OBX|17|NM|ANEUTA^Neutrophils, Absolute|1|3.52|10(9)/L|1.4-7.0||||F|||200905041231|C^LAB
IT|
OBX|18|NM|ALYMA^Lymphs, Absolute|1|0.86|10(9)/L|0.7-4.5||||F|||200905041231|C^LAB IT|
OBX|19|NM|AMONOA^Monocytes, Absolute|1|0.55|10(9)/L|0.1-1.0||||F|||200905041231|C^LAB IT|
OBX|20|NM|AEOSA^Eosinophils, Absolute|1|0.13|10(9)/L|0-0.6||||F|||200905041231|C^LAB IT|
OBX|21|NM|ABASOA^Basophils, Absolute|1|0.02|10(9)/L|0-0.2||||F|||200905041231|C^LAB IT|

Example 2:

MSH|^~\&|LIS|M|||20090518161040||ORU^R01|91380000033|P|2.3|
PID|||15161516^^^^M||TEST^EMR SAMPLE^||19651015|M|||||||||46456|
PV1||O|XOP||||14516^TEST^PHYSICIAN||LAB|||||||^|||||||||||||||||||||||||
ORC|RE|||||||||||||||^|
OBR|||E2905966|^^^HA1C^HemoglobinA1C|||200905041213|||||||200905041223|^|14516^TEST^PHYSICI
AN||||M3017||||RL|F|HA1C^HA1C|^^^^^R|^^~^^~^^||||^^|^^|^^||200905041213|
OBX|1|NM|HA1C^Hemoglobin A1C|1|2.8|%|4.0-6.0|L|||F|||200905041232|C^LAB IT|
OBX|1|TX|HA1C^Hemoglobin A1C|2|Note: Values <7% meet the treatment goal for patients with
diabetes|||||||||200905041232|C^LAB IT|
OBX|1|TX|HA1C^Hemoglobin A1C|3| mellitus.|||||||||200905041232|C^LAB IT|
MSH|^~\&|LIS|M|||20090518161041||ORU^R01|91380000034|P|2.3|
PID|||15161516^^^^M||TEST^EMR SAMPLE^||19651015|M|||||||||46456|
PV1||O|XOP||||14516^TEST^PHYSICIAN||LAB|||||||^|||||||||||||||||||||||||
ORC|RE|||||||||||||||^|
OBR|||E2905965|^^^UMIC^Urinalysis|||200905041213|||||||200905041223|^|14516^TEST^PHYSICIA
N||||M3017||||HU|F|UA^UMIC|^^^^^R|^^~^^~^^||||^^|^^|^^||200905041213|
OBX|1|TX|UCOL^Color|1|Yellow||||||F|||200905041241|C^LAB IT|
OBX|2|TX|UAPP^Appearance|1|Clear||||||F|||200905041241|C^LAB IT|
OBX|3|NM|USGB^Specific Gravity|1|1.030||1.005-1.030||||C|||200905050733|C^LAB IT|
OBX|3|TX|USGB^Specific Gravity|2|*CORRECTED 05/05 AT 0733: ORIGINAL:
1.015||||||C|||200905050733|C^LAB IT|
OBX|4|TX|UESTB^Leukocyte Esterase|1|Negative||NEG||||F|||200905041241|C^LAB IT|
OBX|5|TX|UNITB^Nitrite|1|Positive||NEG|A|||C|||200905050733|C^LAB IT|
OBX|5|TX|UNITB^Nitrite|2|*CORRECTED 05/05 AT 0733: ORIGINAL:
Negative||||||C|||200905050733|C^LAB IT|
OBX|6|NM|UPHB^PH|1|7.0||5.0-7.5||||F|||200905041241|C^LAB IT|
OBX|7|TX|UPRTB^Protein|1|Negative|mg/dL|NEG||||F|||200905041241|C^LAB IT|
OBX|8|TX|UGLB^Glucose|1|Negative|mg/dL|NEG||||F|||200905041241|C^LAB IT|
OBX|9|TX|UKETB^Ketones|1|Negative|mg/dL|NEG||||F|||200905041241|C^LAB IT|
OBX|10|NM|UROB^Urobilinogen|1|0.2|EU/dL|0.2-1.0||||F|||200905041241|C^LAB IT|
OBX|11|TX|UBILB^Bilirubin|1|Positive||NEG|A|||C|||200905050733|C^LAB IT|
OBX|11|TX|UBILB^Bilirubin|2|*CORRECTED 05/05 AT 0733: ORIGINAL:
Negative||||||C|||200905050733|C^LAB IT|
OBX|12|TX|UBLDB^Blood|1|Negative||NEG||||F|||200905041241|C^LAB IT|
OBX|13|TX|UWBC^WBC|1|0-1|/hpf|0-5||||F|||200905041241|C^LAB IT|
OBX|14|TX|URBC^RBC|1|0-2|/hpf|0-2||||F|||200905041241|C^LAB IT|
OBX|15|TX|UBAC^Bacteria|1|None|/hpf|NONE||||F|||200905041241|C^LAB IT|
OBX|16|TX|UMUC^Mucus|1|None|/lpf|||||F|||200905041241|C^LAB IT|
OBX|17|TX|USQEP^Squamous Ep|1|Occ|/lpf|||||F|||200905041241|C^LAB IT|
OBX|18|TX|UCOM^Comments|1|CLEAN CATCH||||||F|||200905041241|C^LAB IT|

Example 3:

MSH|^~\&|LIS|M|||20090518161041||ORU^R01|91380000035|P|2.3|
PID|||15161516^^^^M||TEST^EMR SAMPLE^||19651015|M|||||||||46456|
PV1||O|XOP||||14516^TEST^PHYSICIAN||LAB|||||||^|||||||||||||||||||||||||||
ORC|RE|||||||||||||||^|
OBR|||E2905967|^^^ZZ01^Wound Cult,
Aero|||200905041213|||||||200905041223|^Leg|14516^TEST^PHYSICIAN||||M3018||||MC|F|WNDAE^Z
Z01|^^^^^R|^^~^^~^^||||^^|^^|^^||200905041213|
OBX|1|TX|SDES^Specimen Description|1|Leg||||||F|||200905041228|C^LAB IT|
OBX|2|TX|SREQ^Special Requests|1|None||||||F|||200905041228|C^LAB IT|
OBX|3|TX|CULT^Culture|1|Many (4+) Proteus mirabilis|||||F|||200905050758|C^LAB IT|
OBX|3|TX|CULT^Culture|2|Mod (3+) **Corrected Micro Report** Rhodotorula glutinis (
Previously|||||||||200905050758|C^LAB IT|
OBX|3|TX|CULT^Culture|3| reported as: Rhodotorula rubra|||||||||200905050758|C^LAB IT|
OBX|3|TX|CULT^Culture|4|Mod (3+) Pseudomonas aeruginosa|||||||||200905050758|C^LAB IT|
OBX|3|ST|CULT^Culture|5|. . . . . COMMENT . . . . . .
.|||||||||200905050758|C^LAB IT|
OBX|3|ST|CULT^Culture|6|Called to: Dr office and XOP/Ruth @ 05/05/2009 07:58AM By:
SG2515|||||||||200905050758|C^LAB IT|
OBX|3|ST|CULT^Culture|7|Read back done and verified as correct.|||||||||200905050758|C^LAB IT|
OBX|4|TX|RPT^Report Status|1|Final 05/05/2009||||||F|||200905050758|C^LAB IT|
OBX|5|TX|ORG^Organism|1|Many (4+) Proteus mirabilis|||||F|||200905041245|C^LAB IT|
OBX|6|TX|MTYP^Method|1|Kirby Bauer||||||F|||200905041245|C^LAB IT|
OBX|7|TX|AUG^Amox/k Clav'ate|1|Susceptible|||SS^|||F|||200905041245|C^LAB IT|
OBX|8|TX|AMPI^Ampicillin|1|Susceptible|||SS^|||F|||200905041245|C^LAB IT|
OBX|9|TX|CFZ^Cefazolin|1|Susceptible|||SS^|||F|||200905041245|C^LAB IT|
OBX|10|TX|CTN^Cefotetan|1|Susceptible|||SS^|||F|||200905041245|C^LAB IT|
OBX|11|TX|CAX^Ceftriaxone|1|Susceptible|||SS^|||F|||200905041245|C^LAB IT|
OBX|12|TX|CIP^Ciprofloxacin|1|Susceptible|||SS^|||F|||200905041245|C^LAB IT|
OBX|13|TX|GM^Gentamicin|1|Intermediate|||I^|||F|||200905041245|C^LAB IT|
OBX|14|TX|TE^Tetracycline|1|Resistant|||R^|||F|||200905041245|C^LAB IT|
OBX|15|TX|TS^Trimeth/sulfa|1|Susceptible|||SS^|||F|||200905041245|C^LAB IT|
OBX|16|TX|ORG^Organism|1|Mod (3+) Pseudomonas aeruginosa|||||F|||200905050758|C^LAB IT|
OBX|17|TX|MTYP^Method|1|MIC (ug/mL)||||||F|||200905050758|C^LAB IT|
OBX|18|TX|AK^Amikacin|1|2 Susceptible|||SS^|||F|||200905050758|C^LAB IT|
OBX|19|TX|AZT^Aztreonam|1|14 Intermediate|||I^|||F|||200905050758|C^LAB IT|
OBX|20|TX|CAZ^Ceftazidime|1|1 Susceptible|||SS^|||F|||200905050758|C^LAB IT|
OBX|21|TX|CAX^Ceftriaxone|1|1 Susceptible|||SS^|||F|||200905050758|C^LAB IT|
OBX|22|TX|CIP^Ciprofloxacin|1|<1 Susceptible|||SS^|||F|||200905050758|C^LAB IT|
OBX|23|TX|GM^Gentamicin|1|10 Resistant|||R^|||F|||200905050758|C^LAB IT|
OBX|24|TX|IMP^Imipenem|1|2 Susceptible|||SS^|||F|||200905050758|C^LAB IT|
OBX|25|TX|TZP^Piperacillin/Tazo|1|1 Susceptible|||SS^|||F|||200905050758|C^LAB IT|
OBX|26|TX|TIM^Ticar/k Clav'ate|1|2 Susceptible|||SS^|||F|||200905050758|C^LAB IT|
OBX|27|TX|TO^Tobramycin|1|6 Intermediate|||I^|||F|||200905050758|C^LAB IT|

Appendix A: HHIC USE ONLY – Edits Applied After Receipt

Proposed Edits Applied During or After Receipt of the Data File

Duplicate Laboratory Record

Two or more laboratory records were submitted representing the same laboratory test collected at the same date and time.

Resolution: Remove duplicate laboratory records so only one valid laboratory record exists for a single laboratory test collected at a specified date and time.

Failure to Link Laboratory Record with Discharge Record

The laboratory record did not link to a unique inpatient discharge record. The fields used to perform this link are the Medical/Health Record Number, Admission Date, and Account Number.

Resolution: Verify and correct the Medical/Health Record Number, Admission Date, and Account Number.

Admission Lab Algorithm

For the purpose of improving the severity of illness model, the admission lab results will be incorporated into existing risk models, e.g. 3M's APR-DRGs or other appropriate models. While lab results throughout the inpatient stay may be found to have an important predictive component, the results of selected admission labs (the 32 identified for this study) are known to improve the predictive power of existing risk models such as 3M's APRDRGs. Thus, the admission lab results of the 32 lab tests identified for this study will be identified for this purpose. HHIC will use the following algorithm.[2]

The first lab value on the day of admission will be used as the "admission lab" because it is most likely to reflect the patient's status prior to any major interventions. If a value is not available, particularly if the patient was admitted late in the day (e.g., after 6 PM), then next day values will be used if no major procedure is documented on the day of admission. If no value is available using this algorithm, a value within seven days prior to admission that is closest to the day of admission can be used. Otherwise, the value will be considered missing.

Future Validations/Definitions/Edits

Further validations and edits will be applied over the course of working with data files. They will be published as they are incorporated.

[2] The proposed algorithm is subject to change following as we work with providers and work with data in more detail.

ASCII FILE LAYOUT

Introduction

This document serves as a functional specification and technical requirements for integrating key lab results with Hawaii Health Information Corporation's (HHIC) inpatient database via an ASCII file layout. A library of 32 laboratory tests and the respective LOINC codes will be transmitted from each of our prospective Electronic Laboratory Reporting (ELR) providers.

HHIC uses the results of these lab tests to enhance the content of their existing statewide, all-payer hospital discharge database. The enhanced data set will be used to improve the predicative methodology to measure key patient outcomes, such as inpatient mortality.[3]

General Specifications

These instructions and specification are applicable to participating HHIC institutions submitting data to HHIC, effective with admissions of January, 2008.

Hospitalization-related **(Acute Inpatient)** laboratory results should be obtained from the hospital's clinical laboratory system/laboratory information system. Observed test results (e.g., finger stick) and other test results from glucometers, chemsticks, etc. should not be submitted. Submit test results specific to that laboratory test only. As an example, for the test of hemoglobin, do not submit a hemoglobin value that was reported as part of an arterial blood gas test result.

Units of Measure

Each laboratory test has a unique test code that represents both the laboratory test and the unit of measure. For example, the laboratory test lists Glucose with mg/dL as the unit of measurement. The laboratory test codes were designed to accept the submission of the units of measure used specified in the LOINC system. Please consult with the clinical laboratory system/laboratory information system personnel at your facility if you have questions regarding the laboratory units of measures outlined in Table 1.

Corrected Values

When two results are available for the same date and time the laboratory specimen was collected and one is labeled "corrected," submit the final corrected test result.

[3]This effort is supported by CER funding received from The Agency for Healthcare Research and Quality (AHRQ). Todd Seto, MD, from The Queen's Medical Center is the Primary Investigator and will direct the comparative effectiveness research component of the research. Jill Miyamura, PhD, HHIC, is Co-Principal Investigator. HHIC's role is to demonstrate the feasibility of enhancing inpatient all-payer data with clinical (laboratory) data to support the purpose of comparative effectiveness research. More information on the grant, its aims and methodology can be found at http://www.hcup-us.ahrq.gov/datainnovations.jsp.[3]

Data File Description

The file format will be a delimited text file where each column value is separated by a pipe (|) from the next column. Each line of the text file must contain a single record. An "end of file marker" must follow the line feed of the last record.

The file will be submitted in batch on a monthly basis.

Each submission should include a summary document with the following information: hospital name/ID, time frame of messages submitted, number of messages sent in the batch.

Separate batch files should be submitted for each hospital.

Transmission Options

Data will be transmitted to HHIC in one of the following ways:

1. Secure File Transfer Protocol (SFTP)
2. VPN

HHIC will collaborate with each provider to determine the best method.

TABLE 1. Summary of Required Laboratory Tests and LOINC

	Lab Test	Lab Test Name	LOINC	Units	LOINC SHORTNAME
Chemistry	Albumin	Albumin	1751-7	g/dL	Albumin SerPl-mCnc
	Alkaline phosphatase	Alkaline phosphatase	6768-6	U/L;units/L	ALP SerPl-cCnc
	Blood urea nitrogen (BUN)	Urea nitrogen	3094-0	mg/dL	BUN SerPl-mCnc
	Bilirubin (total)	Bilirubin	1975-2	mg/dL	Bilirub SerPl-mCnc
	Calcium	Calcium	17861-6	mg/dL	Calcium SerPl-mCnc
	Chloride	Chloride	2075-0	mmol/L	Chloride SerPl-sCnc
	Creatine kinase-MB	Creatine kinase.MB	13969-1	ng/mL; ug/L	CK MB SerPl-mCnc
	Creatinine	Creatinine	2160-0	mg/dL	Creat SerPl-mCnc
	Glucose	Glucose	2345-7	mg/dL	Glucose SerPl-mCnc
	Gamma glutamyl transferase	Gamma glutamyl transferase	2324-2	U/L;units/L	GGT SerPl-cCnc
	Potassium	Potassium	2823-3	mmol/L	Potassium SerPl-sCnc
	Phosphate	Phosphate	2777-1	mg/dL	Phosphate SerPl-mCnc
	BNP	Natriuretic peptide.B	30934-4	pg/mL	BNP SerPl-mCnc
	Sodium	Sodium	2951-2	mmol/L	Sodium SerPl-sCnc
	Troponin I	Troponin I.cardiac	10839-9	ug/L;ng/mL	Troponin I SerPl-mCnc
	SGOT	Aspartate aminotransferase	1920-8	U/L;units/L	AST SerPl-cCnc
	SGPT	Alanine aminotransferase	1742-6	U/L;units/L	ALT SerPl-cCnc
Blood Gas					
	pO2	Oxygen	2703-7	mm Hg	pO2 BldA
	pCO2	Carbon dioxide	2019-8	mm Hg	pCO2 BldA
	pH (arterial)	pH	2744-1		pH BldA
	Base excess	Base excess	1925-7	mmol/L	Base excess BldA-sCnc
	Bicarbonate	Bicarbonate	1960-4	mmol/L	HCO3 BldA-sCnc
Hematology					
	Hemoglobin	Hemoglobin	718-7	g/dL	Hgb Bld-mCnc
	Hematocrit	Hematocrit	4544-3	L/L;%	Hct Fr Bld Auto
	Partial thromboplastin time (PTT)	Coagulation surface induced	14979-9	Sec	aPTT Time PPP
	Prothrombin time (PT)	Coagulation tissue factor induced	5902-2	Sec	PT Time PPP
	INR	Coagulation tissue factor induced.INR	34714-6	INR(POC)	INR PPP
	Platelet count	Platelets	777-3	10^9/L	Platelet # Bld Auto
	White blood count (WBC)	Leukocytes	6690-2	10*3/uL	WBC # Bld Auto
Microbiolog					
	Blood culture		600-7		
	Urine culture		630-4		
	Sputum culture		6460-0		

Data Field Layout

DATA ELEMENT	DATA TYPE	HL7 Location (for reference)
Sending Facility	A	MSH-4
*Account Number	A	PID-18
Medical Record Number	A	PID-3
*Date of Birth	D	PID-7
Gender	A	PID-8
*Social Security Number	N	PID-19
*Patient First Name	A	PID-5
*Patient Last Name	A	PID-5
*Patient Middle Initial	A	PID-5
*Admission Date/Time	D	PV1-44
*Discharge Date/Time	D	PV1-45
Ordering Physician First Name	A	OBR-16
Ordering Physician Last Name	A	OBR-16
Ordering Physician Middle Initial	A	OBR-16
Physician Identifier	N	OBR-16
Receiving Application	A	MSH-5
Create Date/Time	D	MSH-7
Patient Class	A	PV1-2
Hospital Test (order)	A	OBR-4
Hospital Test (result – LOINC)	A	OBX-3
Observation Date/Time	D	OBR-7
Results Rpt/Status Chng-Date/Time	D	OBR-22
Results Status	A	OBR-25
Observation Value	A	OBX-5
Units (of Measure)	A	OBX-6
Reference Ranges	A	OBX-7
Abnormal Flags	A	OBX-8
Observation Results Status	A	OBX-11
Comments	A	NTE-3

*for linking lab file to HHIC patient files

Sending Facility

Data Element: Sending Facility

HL7 Location: MSH-4

Data Type: Alpha

Definition: Identifies the sender (the owner of the message information). When sending, **LAB** will use "Hospital Name."

NOTE: For files submitted by Clinical Laboratory, this number will be their internally assigned number for the hospitals.

Account Number

Data Element: Account Number

HL7 Location: PID-18

Data Type: Alphanumeric

Definition: The number assigned to the patient's visit by the hospital. The account number is typically used for charge and/or billing purposes.

Instructions: Valid characters: A through Z, 0 through 9, . (period), and - (hyphen).
Do not leave this field blank.

Medical Record Number

Data Element: Medical Record Number

HL7 Location: PID-3

Data Type: Alphanumeric

Definition: The number assigned to the patient's medical/health record by the hospital. The medical record number is typically used to do an audit of the history of treatment.

Instruction: Valid characters: A through Z, 0 through 9, . (period), and - (hyphen).
Do not leave this field blank.

Date of Birth

Data Element: Date of Birth

HL7 Location: PID-7

Data Type: Date

Definition: Month, day, and year (including century) of birth of the patient.

Instruction: YYYYMMDD
If the month, day or year of birth is a single digit, use a preceding zero.
There should be no blanks in this field.
Do not leave this field blank.

Gender

Data Element: Gender

HL7 Location: PID-8

Data Type: Alpha

Definition: Sex of patient

M = Male
F = Female
U = Unknown

Social Security Number

Data Element: Social Security Number

HL7 Location: PID-19

Data Type: Numeric

Definition: The number assigned by the Social Security Administration.

Instructions: Valid characters: 0 through 9, no hyphens or spaces.
If SSN is unknown leave blank.

Patient First Name

Data Element: Patient First Name

HL7 Location: PID-5

Data Type: Alphanumeric

Definition: The patient's first name.

Instructions: Exclude middle names and middle initials
Uppercase only

Patient Last Name

Data Element: Patient Last Name

HL7 Location: PID-5

Data Type: Alphanumeric

Definition: The patient's last name.

Instructions: Uppercase Only

Patient Middle Initial

Data Element: Patient Middle Initial

HL7 Location: PID-5

Data Type: Alphanumeric

Definition: The patient's middle initial.

Instructions: Include only the first middle initial.
Uppercase only.

Admission Date/Time

Data Element: Admission Date/Time

HL7 Location PV1-44

Data Type: Date

Definition: Month, day, year and time of admission to the hospital as an **acute** care patient.

Instruction: YYYYMMDDHHMMSS
If the month, day or year of admission is a single digit, use a preceding zero. There should be no blanks in this field.
Do not leave this field blank.

Discharge Date/Time

Data Element: Discharge Date/Time

HL7 Location: PV1-45

Data Type: Date

Definition: Month, day, year and time of discharge from the hospital as an **acute** care patient.

Instruction: YYYYMMDDHHMMSS
If the month, day or year of discharge is a single digit, use a preceding zero. There should be no blanks in this field.
Do not leave this field blank.

Ordering Physician First Name

Data Element: Physician First Name

HL7 Location: OBR-16

Data Type: Alphanumeric

Definition: The physician's first name.

Instructions: Exclude middle names and middle initials
Uppercase only

Ordering Physician Last Name

Data Element: Physician Last Name

HL7 Location: OBR-16

Data Type: Alphanumeric

Definition: The physician's last name.

Instructions: Uppercase Only

Ordering Physician Middle Initial

Data Element: Physician Middle Initial

HL7 Location: OBR-16

Data Type: Alphanumeric

Definition: The physician's middle initial.

Instructions: Include only the first middle initial.
Uppercase only.

Physician Identifier

Data Element: Physician Identifier

HL7 Location: OBR-16

Data Type: Numeric

Definition: Either the National Provider Identifier (NPI) that is issued to the individual physician by CMS or the identifier that is assigned to each physician by the hospital.

Instructions: Leave blank if unknown.

Hospital or Lab Reporting Results

Data Element: Hospital or Lab Reporting Results

HL7 Location: MSH-5

Data Type: Alpha

Definition: Name of the hospital or lab that is processing the order.

Create Date/Time

Data Element: Create Date/Time

HL7 Location: MSH-7

Data Type: Date

Definition: Date and time the message was created.

Instructions: YYYYMMDDHHMMSS
If the month, day or year of create date is a single digit, use a preceding zero. There should be no blanks in this field.
Do not leave this field blank.

Patient Class

Data Element: Patient Class

HL7 Location: PV1-2

Data Type: Alpha

Definition: Patient Class

E Emergency Department visits
I Inpatient Admission
O Outpatient

Hospital Test (Order)

Data Element: Hospital Test (Order)

HL7 Location: OBR-4

Data Type: Alpha

Definition: This is the local (ordered) test code.

Hospital Test (result – LOINC)

Data Element: Hospital Test (result – LOINC)

HL7 Location: OBX-3

Data Type: Alpha

Definition: LOINC Code

Instructions: It is strongly recommended that OBX-3 be populated with as specific a LOINC®code as defined in Table 1 to prevent any misinterpretation of reported results.

Observation Date/Time

Data Element: Observation Date/Time

HL7 Location: OBR-7

Data Type: Date

Definition: Month, day, year and time of lab test.

Instruction: YYYYMMDDHHMMSS
If the month, day or year of observation is a single digit, use a preceding zero. There should be no blanks in this field.
Do not leave this field blank.

Results Rpt/Status Chng Date/Time

Data Element: Results Rpt/Status Chng Date/Time

HL7 Location: OBR-22

Data Type: Date

Definition: Month, day, year and time of lab test.

Instruction: YYYYMMDDHHMMSS
If the month, day or year of results is a single digit, use a preceding zero.
There should be no blanks in this field.
Do not leave this field blank.

Results Status

Data Element: Results Status

HL7 Location: OBR-25

Data Type: Alpha

Definition: The current status of the results of the lab test.

Instruction: Only test status of "F" for finalized should be included.

Observation Value

Data Element: Observation Value

HL7 Location: OBX-5

Data Type: Alpha

Definition: Result of lab test.

Units

Data Element: Units

HL7 Location: OBX-6

Data Type: Alpha

Definition: Units of measure.

Reference Ranges

Data Element: Reference Ranges

HL7 Location: OBX-7

Data Type: Alpha

Definition: Reference range. If numeric, the values of this field may report several values in one of the following three formats:

4. lower limit-upper limit when both lower and upper limits are defined, e.g., for potassium "3.5 - 4.5"
5. > lower limit if no upper limit, e.g., ">10"
6. < upper limit if no lower limit, e.g., "<15"

Abnormal Flags

Data Element: Abnormal Flags

HL7 Location: OBX-8

Data Type: Alpha

Definition: Abnormal flags should be used for reporting microbiology sensitivity data. Abnormal flags for antimicrobial sensitivity reporting should conform to the recommendations of National Committee of Clinical Laboratory Standards (NCCLS, http://www.nccls.org). For most reported findings, the allowable values are S, I, or R, and should be provided in addition to the numeric value in OBX-5. When findings other than susceptibility results are sent, the abnormal flag should be valued (e.g., "H", "N", or "A") to distinguish between tests that are interpreted as normal and those that are interpreted as abnormal.

Observation Results Status

Data Element: Observation Results Status

HL7 Location: OBX-11

Data Type: Alpha

Definition: F= completed. Correct and final results

Comments

Data Element: Comments

HL7 Location: NTE-3

Data Type: Alpha

Definition: Contains the comment contained in the segment.

Appendix A: HHIC Use Only – Edits Applied After Receipt

Proposed Edits Applied During or After Receipt of the Data File

Duplicate Laboratory Record

Two or more laboratory records were submitted representing the same laboratory test collected at the same date and time.

Resolution: Remove duplicate laboratory records so only one valid laboratory record exists for a single laboratory test collected at a specified date and time.

Failure to Link Laboratory Record with Discharge Record

The laboratory record did not link to a unique inpatient discharge record. The fields used to perform this link are the Medical Record Number, Admission Date, and Account Number.

Resolution: Verify and correct the Medical Record Number, Admission Date, and Account Number.

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The first lab value on the day of admission will be used as the "admission lab" because it is most likely to reflect the patient's status prior to any major interventions. If a value is not available, particularly if the patient was admitted late in the day (e.g., after 6 PM), then next day values will be used if no major procedure is documented on the day of admission. If no value is available using this algorithm, a value within seven days prior to admission that is closest to the day of admission can be used. Otherwise, the value will be considered missing.

Future Validations/Definitions/Edits

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[4] The proposed algorithm is subject to change following as we work with providers and work with data in more detail.

Principal Source of Payment

Data Element: Principal Source of Payment

Length: 2

Position: 63 - 64

Data Type: Integer

Definition: Expected principal source of payment for this hospital admission.

01 = Medicare (Fee For Service Plans Only)
02 = Medicaid/QUEST Expanded Access (QExA)
04 = HMSA (any other HMSA plan)
05 = Kaiser
06 = Other Insurance
07 = Self Pay/Charity Care
08 = No Fault
09 = Workers' Compensation
11 = Unknown
12 = DOD (Department of Defense) (Tripler Use Only)
14 = HMSA Health Plan Hawaii
15 = AlohaCare (QUEST)
16 = Hawaii Management Alliance Association (HMAA)
17 = University Health Alliance (UHA)
19 = Kaiser Senior Advantage
20 = Veterans Administration (VA)/CHAMPVA
21 = TRICARE/CHAMPUS/Other Government
22 = HMSA QUEST
23 = Kaiser QUEST
24 = QUEST (any QUEST plan except AlohaCare, HMSA QUEST, Kaiser QUEST, Ohana Health Plan QUEST and United Healthcare Community Plan QUEST)
25 = Secure Horizons Medicare Advantage
26 = AlohaCare Advantage/Advantage Plus
27 = Summerlin Insurance
28 = HMSA Akamai Advantage
29 = Ohana Health Plan QUEST
30 = United Healthcare Community Plan QUEST
31 = Other Medicare Advantage Plan
32 = AARP Medicare Complete
33 = Humana (Choice/Gold Choice/Gold Plus) Medicare Advantage Plans
34 = United Healthcare Dual Complete Advantage Special Needs Plans (SNPs)

Instructions: Enter leading zero for single digit codes.
Do not leave this field blank.

Edits: INVALID PAY SOURCE - MUST BE 1 - 34
Pay source must be between 1 and 34

HHIC Note: Out-of-state Medicaid plans are also included in payer 02. (3/05)