AUTHORITY: section 192.667, RSMo 2000. Emergency rule filed Nov. 4, 1992, effective Nov. 14, 1992, expired March 13, 1993. Emergency rule filed March 4, 1993, effective March 14, 1993, expired July 11, 1993. Original rule filed Nov. 4, 1992, effective June 7, 1993. Emergency amendment filed April 1, 1993, effective April 11, 1993, expired Aug. 8, 1993. Emergency amendment filed Aug. 10, 1993, effective Aug. 20, 1993, expired Nov. 18, 1993. Amended: Filed April 1, 1993, effective Dec. 9, 1993. Amended: Filed April 13, 2001, effective Oct. 30, 2001.*

**Original authority: 192.667, RSMo 1992, amended 1993, 1995.*

19 CSR 10-33.040 Electronic Reporting of Patient Abstract Data by Hospitals for Public Health Syndromic Surveillance

PURPOSE: This rule establishes procedures for secure electronic reporting of patient abstract data for inpatients and outpatients by hospitals to the Department of Health and Senior Services for the purpose of conducting epidemiologic monitoring and studies and publishing information to safeguard the health of the citizens of Missouri as authorized by sections 192.020, 192.067 and 192.667, RSMo.

(1) The following definitions shall be used in the interpretation of this rule in addition to the definitions found in 19 CSR 10-33.010:

(A) Batch message file means the transmission of a file containing multiple discrete standard electronic messages to the department from the hospital data system on a periodic basis less than real time.

(B) Chief complaint means the textual literal or ICD-9-CM code or both pertaining to the initial complaint a patient stated during an acute care hospital encounter.

(C) Data encryption means the electronic obfuscation of data within an electronic message using industry standard practices for encryption including, but not limited to: Public Key Infrastructure (PKI), digital certificates/signatures, department generated symmetric keys, or by secure message transport protocols. Minimum requirements will be tripleDES 128-bit encryption.

(D) Default standard message means a standard electronic message meeting HL7 2.3.1 Admission, Discharge, and Transfer (ADT) specifications as identified in Exhibit A, included herein.

(E) Acute care hospital encounter means patients seen in the emergency room, urgent care and inpatient admissions of a hospital.

(F) Real time message means the transmission of discrete standard electronic messages to the department as they are generated by the hospital data system.

(G) Secure message transport protocol means a method of sending electronic data to the department in a way that prevents unauthorized access to the data. Possible methods include: Virtual Private Network (VPN), Secure File Transport Protocol (SFTP), secure socket layer (HTTPS/SSL), Secure SHell (SSH), encrypted files using TCP/IP, or other secure transmission protocol agreed upon by the hospital and the department.

(H) Standard electronic message means a real time message or batch message file meeting national or international standards for the electronic interchange of data. Standards include, but are not limited to, Health Level 7 (HL7), Extensible Mark-up Language (XML), Electronic Business XML (ebXML), Electronic Data Interchange (EDI), and other standards as they become available.

(I) Hospital means a hospital as defined in section 197.020, RSMo. For the purposes of this rule only, hospital shall not include a hospital in a rural area as defined in section 191.500, RSMo; a hospital designated by the Health Resources Services Administration as a small rural hospital; a hospital licensed as a psychiatric or a rehabilitative hospital; or a hospital without an emergency room. Following the completion of implementation of plans submitted to and approved by the department pursuant to section (4), the department may review the need to expand this definition to include hospitals in a rural area as defined in section 191.500, RSMo or hospitals designated by the Health Resources Services Administration as a small rural hospital.

(2) All hospitals shall submit to the department a minimum data set on acute care hospital encounters occurring after the date proposed by the hospital and approved by the department. This date shall be either between April 2004 and January 2007 or an earlier date agreed upon by the hospital and the department. Before April 2004, the department shall conduct a pilot study with hospitals that volunteer to participate in the pilot study. At the sole discretion of the department, the pilot study may be extended. If the pilot study is continued, the department shall inform hospitals that their planned implementation date has been postponed to a new date as determined by the department. The data shall be submitted as a default standard electronic message or other format as agreed upon by the hospital and the department, using secure message transport protocols and data encryption.

(A) The minimum dataset shall be submitted a minimum of once per day as a batch message file containing the previous day's hospital encounters and updates.

(B) Real time messages will be default standard electronic messages. Other message formats must be approved and agreed upon by the department prior to submission of real time messages.

(3) The minimum dataset shall include: record type, hospital identifier, unique encounter identifier, type of encounter, place of service, patient medical record number, patient name, patient Social Security number, patient birth date, patient sex, patient race, patient ethnicity, residence address, city of residence, state of residence, zip code, county code, admission date, type of admission, and chief complaint. See Exhibit A and Exhibit B, included herein, for default standard electronic message specifications.

(4) Every hospital shall submit to the department by November 1, 2003 a plan that specifies how and when they will submit data to the department in compliance with section (2) of this rule. This plan may be revised by the hospital, with the approval of the department, in the event the hospital's capacity to report electronic messages changes to support the default standard electronic message as either batch or real time messages. The hospital shall notify the department by sixty (60) days in advance of the date they plan to change the method in which they report data. This plan shall include but not be limited to:

(A) Timing of messages either real time or batch;

(B) Secure message transport protocols to be used when submitting data to the department;

(C) Proposed format of data if the hospital is not able to conform to the default standard electronic message defined in Exhibit A or Exhibit B;

(D) Proposed format code set domain values if the hospital is not able to conform to the code sets defined in Exhibit A or Exhibit B;

(E) Hospital technical contact(s) and contact information for the department to utilize in the event technical assistance or support is necessary;

(F) Expected date to begin sending messages;

(G) If a change request, the reason for change.

(5) Hospitals shall notify the department by sixty (60) days in advance if they plan to submit the required data to the department through an association or related organization with which the department has a binding agreement to obtain data. Providers selecting this option are responsible for ensuring that the data meet the data standards defined in this rule and are submitted to the association or related organization so the time schedule in section (2) of this rule is met. The association or related organization is responsible for ensuring that the data are provided to the department and conform to the specifications listed in Exhibit A of this rule, meeting the time schedule of section (2) of this rule.

(6) Hospitals may submit data directly to the department or through a third party acting as their agent, other than one with which the department has a binding agreement. Providers selecting this option are responsible for ensuring that all data specifications conform to the requirements of this rule.

(7) The department may release patient data on hospital encounters to a public health authority to assist the agency in fulfilling its public health mission. This data shall not be re-released in any form by the public health authority without the prior authorization of the department. Authorization for subsequent release of the data shall be considered only if the proposed release does not identify a patient, physician or provider. However, the department may authorize contact with the patient, physician or provider based upon the information supplied. The physician and provider that provided care to a patient shall be informed by the public health authority of any proposed contact with a patient.

(8) Any hospital which determines it will be temporarily unable to comply with any of the provisions of this rule or with the provisions of a previously submitted plan or plan of correction can provide the department with written notification of the expected deficiencies and a written plan of correction. This notification and plan of correction shall include the section number and text of the rule in question, specific reasons why the provider cannot comply with the rule, an explanation of any extenuating factors which may be relevant, the means the provider will employ for correcting the expected deficiency, and the date by which each corrective measure will be completed.

(9) Any hospital, which is not in compliance with these rules, shall be notified in writing by the department. The notification shall specify the deficiency and the action, which must be taken to be in compliance. The chief executive officer or designee shall have ten (10) working days following receipt of the written notification of noncompliance to provide the department with a written plan for correcting the deficiency. The plan of correction shall specify the means the provider will employ for correcting the cited deficiency and the date that each corrective measure will be completed.

(10) Upon receipt of a required plan of correction, the department shall review the plan to determine the appropriateness of the corrective action. If the plan is acceptable, the department shall notify the chief executive officer or designee in writing and indicate that implementation of the plan should proceed. If the plan is not acceptable, the department shall notify the chief executive officer or designee in writing and indicate the reasons why the plan was not accepted. A revised, acceptable plan of correction shall be provided to the department within ten (10) working days.

(11) Failure of the hospital to submit an acceptable plan of correction within the required time shall be considered continued and substantial noncompliance with this rule unless determined otherwise by the director of the department.

(12) Failure of any hospital to follow its accepted plan of correction shall be considered continued and substantial noncompliance with this rule unless determined otherwise by the director of the department.

(13) Any hospital in continued and substantial noncompliance with this rule shall be notified by registered mail and reported by the department to its Bureau of Hospital Licensing and Certification, Bureau of Narcotics and Dangerous Drugs, Bureau of Emergency Medical Services, Bureau of Home Health Licensing and Certification, Bureau of Radiological Health, State Public Health Laboratory, Bureau of Special Health Care Needs, the Division of Medical Services of the Department of Social Services, the Division of Vocational Rehabilitation of the Department of Elementary and Secondary Education and to other state agencies that administer a program with provider participation. The department shall notify the agencies that the provider is no longer eligible for participation in a state program.

(14) Any hospital that has been declared to be ineligible for participation in a state program shall be eligible for reinstatement by correcting the deficiencies and making written application for reinstatement to the department. Any provider meeting the requirements for reinstatement shall be notified by registered mail. The department shall notify state agencies that administer a program with provider participation that the provider's eligibility for participation in a state program has been reinstated.

19 CSR 10-33.040 HESS HL7 Exhibit A

Introduction

For the purposes of this rule, the HL7 v 2.3.1 message format will be used. ADT messages with a number of different event codes may carry information about chief complaint including A01 through A18. A04, Register a patient, will often be used to signal the beginning of a visit to the Emergency Department. A01, Admit/visit notification, and A08, Update patient information, may also be used to indicate changes to an initial A04 registration such as assigned or updated diagnosis or admission of an ER patient.

A general ADT message has the segment structure:

Segment	Description	HL7 Chapter
MSH	Message Header	2
EVN	Event Type	3
PID	Patient Identification	3
[PD1]	Additional Demographics	3
[{ NK1 }]	Next of Kin /Associated Parties	3
PV1	Patient Visit	3
[PV2]	Patient Visit - Additional Info.	3
[{ DB1 }]	Disability Information	3
[{ OBX }]	Observation/Result	7
[{ AL1 }]	Allergy Information	3
[{ DG1 }]	Diagnosis Information	6
[DRG]	Diagnosis Related Group	6
[{ PR1	Procedures	6
[{ROL}]	Role	12
}]		
[{ GT1 }]	Guarantor	6
[		
{ IN1	Insurance	6
[IN2]	Insurance Additional Info.	6
[{IN3}]	Insurance Add'l Info - Cert.	6
}		
]		
[ACC]	Accident Information	6
[UB1]	Universal Bill Information	6
[UB2]	Universal Bill 92 Information	6

Required data elements for public health syndromic surveillance reporting are located in segments MSH, PID, PV1, and PV2. The rest of this exhibit identifies the specific formats for these segments. Elements with an optionality (OPT) of "R" are required. All other elements are not required, therefore are not described in the details of each message segment. Complete HL7 documentation can be found at http://www.hl7.org/. These specifications are in compliance with the specifications for HL7 version 2.3.1.

MSH Segment – Message Header

The message header segment (MSH) defines the intent, source, destination, and some specifics of the syntax of a message. The attributes of the message header segment are listed in the table below.

MSH Attributes

SEQ	LEN	DT	OPT	TBL#	RP/#	ITEM#	Element Name
1	1	ST	R			00001	Field Separator
2	4	ST	R			00002	Encoding Characters
3	180	HD	O			00003	Sending Application
4	180	HD	R			00004	Sending Facility
5	180	HD	R			00005	Receiving Application
6	180	HD	R			00006	Receiving Facility
7	26	TS	R			00007	Date/Time Of Message
8	40	ST	O			00008	Security
9	7	CM	R	0076		00009	Message Type
10	20	ST	O			00010	Message Control ID
11	3	PT	R			00011	Processing ID
12	8	ID	R	0104		00012	Version ID
13	15	NM	O			00013	Sequence Number
14	180	ST	O			00014	Continuation Pointer
15	2	ID	O	0155		00015	Accept Acknowledgment Type
16	2	ID	O	0155		00016	Application Acknowledgment Type
17	2	ID	O			00017	Country Code
18	6	ID	O	0211	Y/3	00692	Character Set
19	60	CE	O			00693	Principal Language Of Message

Example Segment of MSH:

MSH|^~\&||MO Hospital^013319934^NPI|MOHESS|MODHSS|200302171830||ADT^A04||P|2.3.1<cr>

If elements that contain no data (e.g., "||") appear at the end of a segment, HL7 allows the elements to not appear. For example, the message above has no data populating elements 13-19, thus, the segment ends at element 12 (i.e., ...|2.3.1).

2.24.1.0 MSH field definitions

Field separator (ST) 00001

Definition: This field contains the separator between the segment ID and the first real field, MSH-2-encoding characters. As such it serves as the separator and defines the character to be used as a separator for the rest of the message. Recommended value is |, (ASCII 124).

Encoding characters (ST) 00002

Definition: This field contains the four characters in the following order: the component separator, repetition separator, escape character, and subcomponent separator. Expected values will be ^~\&, (ASCII 94, 126, 92, and 38, respectively

Sending facility (EI) 00004

Components: <namespace ID (IS)> ^ <universal ID (ST)> ^ <universal ID type (ID)>

This element contains the name of the originating hospital, National Provider Identifier (NPI), and "NPI" as the universal type. In the absence of an NPI, the hospital's Medicaid Provider ID may be used with the universal ID type identified as "MCID"

namespace ID	Name of originating hospital
universal ID	Unique NPI number of originating hospital
universal ID type	"NPI"

|MO Hospital^013319934^NPI|

Receiving application (EI) 00005

This element will always contain "MOHESS" for Missouri Hospital Electronic Syndromic Surveillance.

Receiving facility (EI) 00006

This element will always contain "MODHSS" for the Missouri Department of Health and Senior Services.

Date/time of message (TS) 00007

HL7 Format: YYYY[MM[DD[HHMM[SS[.S[S[S[S]]]]]]]][+/-ZZZZ]

EXAMPLE

|200302171830|

Definition: This field contains the date/time that the sending system created the message. Local time is expected, but, if the time zone is specified, it will be used throughout the message as the default time zone. Precision to the minute level is acceptable for the purpose of this message and time zone is not required.

Message type (CM) 00009

Components: <message type (ID)> ^ <trigger event (ID)> ^ <message structure (ID)>

Definition: This field contains the message type, trigger event, and abstract message structure code for the message. The first component is the message type edited by *HL7 table 0076 - Message type*; second is the trigger event code edited by *HL7 table 0003 - Event type*; third is the abstract message structure code edited by *HL7 Table 0354 - Message structure*.

For Hospital Syndromic Surveillance all messages will be of type ADT and trigger events will be A01, A04, or A08. Message structure will not be used.

|ADT^A04|

Processing ID (PT) 00011

Components: <processing ID (ID)> ^ <processing mode (ID)>

EXAMPLE

|P|

Definition: This field is used to decide whether to process the message as defined in HL7 Application (level 7) Processing rules, above. The first component defines whether the message is part of a production, training, or debugging system (refer to *HL7 table 0103 - Processing ID* for valid values). The second component defines whether the message is part of an archival process or an initial load (refer to *HL7 table 0207 - Processing mode* for valid values). This allows different priorities to be given to different processing modes.

Most messages for Hospital Syndromic Surveillance will be Production messages. Other values will only be accepted for the purposes of initial testing, debugging, or archival data as instructed by MODHSS.

Table 0103 - Processing ID

Value	Description
D	Debugging
P	Production
T	Training

Table 0207 - Processing mode

Value	Description
A	Archive
R	Restore from archive
I	Initial load
not present	Not present (the default, meaning *current* processing)

Version ID (VID) 00012

```
Components:  <version ID (ID)> ^ <internationalization code (CE)> ^ <internal
          version ID (CE)>

EXAMPLE
    |2.3.1|
```

Definition: This field is matched by the receiving system to its own version to be sure the message will be interpreted correctly. Preferred version is 2.3.1.

Table 0104 - Version ID

Value	Description	
2.0	Release 2.0	September 1988
2.0D	Demo 2.0	October 1988
2.1	Release 2. 1	March 1990
2.2	Release 2.2	December 1994
2.3	Release 2.3	March 1997
2.3.1	Release 2.3.1	

19 CSR 10-33.040 HESS HL7 Exhibit A

1.0 PID Segment – Patient Identification

The PID segment is used as the primary means of communicating patient identification information. This segment contains permanent patient identifying and demographic information that is not likely to change frequently.

PID Attributes

SEQ	LEN	DT	OPT	TBL#	RP/#	ITEM#	Element Name
1	4	SI	R			00104	Set ID - Patient ID
2	20	CX	O			00105	Patient ID (External ID)
3	20	CX	R		Y	00106	Patient ID (Internal ID)
4	20	CX	O		Y	00107	Alternate Patient ID - PID
5	48	XPN	R			00108	Patient Name
6	48	XPN	O			00109	Mother's Maiden Name
7	26	TS	R			00110	Date/Time of Birth
8	1	IS	R	0001		00111	Sex
9	48	XPN	O		Y	00112	Patient Alias
10	1	IS	R	0005		00113	Race
11	106	XAD	R		Y	00114	Patient Address
12	4	IS	O			00115	County Code
13	40	XTN	R		Y	00116	Phone Number - Home
14	40	XTN	O		Y	00117	Phone Number - Business
15	60	CE	O	0296		00118	Primary Language
16	1	IS	O	0002		00119	Marital Status
17	3	IS	O	0006		00120	Religion
18	20	CX	O			00121	Patient Account Number
19	16	ST	R			00122	SSN Number - Patient
20	25	CM	O			00123	Driver's License Number - Patient
21	20	CX	O		Y	00124	Mother's Identifier
22	3	IS	R	0189		00125	Ethnic Group
23	60	ST	O			00126	Birth Place
24	2	ID	O	0136		00127	Multiple Birth Indicator
25	2	NM	O			00128	Birth Order
26	4	IS	O	0171	Y	00129	Citizenship
27	60	CE	O	0172		00130	Veterans Military Status
28	80	CE	O			00739	Nationality
29	26	TS	O			00740	Patient Death Date and Time
30	1	ID	R	0136		00741	Patient Death Indicator

Example Segment of PID

PID|1||95101100001^^^^ MO Hospital&013319934&NPI ||Doe^John^Q^Jr||19641004|M||W|2166 Wells Drat B^Jefferson City^MO^65101^USA^^Cole||^^^^206^6793240||||||423523049|||N|||||||N|<cr>

PID-1 Set ID-patient ID (SI)
This field allows for multiple PID segments (i.e. multiple patient reports) with a single MSH. The Set ID field is used to identify repetitions. For hospital-based reporting, it is strongly recommended that information for only one patient be sent per message, in other words, one PID per MSH. Thus, PID-1 may be left blank or should appear as:

|1|

PID-3 Patient ID (internal ID) (CX)
PID-3 is essentially the patient identifier (i.e., medical record number) from the hospital, which is submitting the report to public health officials. The field has the same components as PID-2:

<ID (ST)> ^ <check digit (ST)> ^ <code identifying the check digit scheme employed (ID)> ^ <assigning authority (HD)> ^ <identifier type code (IS)> ^ <assigning facility (HD)>

The <assigning facility> is a component of PID-2, and thus is separated from the other components by a "^". The component <assigning facility> has three subcomponents which are separated with a "&". Since HL7 allows users to define the subcomponents of the HD data type, the <assigning facility> has the following definition for the hospital-based reporting message:

namespace ID	Name of originating hospital
universal ID	Unique NPI number of originating hospital
universal ID type	"NPI"

Repeating Identifiers
Repeating Identifiers are used when there is a need to represent multiple internal identifiers used at an institution. The field would appear as:

|95101100001^^^^MO Hospital&013319934&NPI|~|56850125M7^^^^MO Hospital&013319934&NPI|

PID-5 Patient Name (XPN)
Field has the following components:

<family name (ST)> ^ <given name (ST)> ^ <middle initial or name (ST)> ^ <suffix (e.g., JR or III) (ST)> ^ <prefix (e.g., DR) (ST)> ^ <degree (e.g., MD) (ST)> ^ <name type code (ID)>

For example:

|Doe^John^Q^Jr|

PID-7 Date/Time of Birth (TS)
The field has the same structure as defined for MSH-7. The field should contain at least the year, month, and date. For example:

|19641004|

If the patient's age only is available, HL7 2.3 allows the degree of precision to be changed so that only the year is provided:

|1964|

PID-8 Sex (IS)

HL7 allows users to define the values for Table 0001. The accepted values for the hospital-based reporting message are:

Sex - Table 0001

Value	Description
F	Female
M	Male
U	Unknown / not stated

For example:

|M|

PID-10 Race (IS)

HL7 allows users to define the values for Table 0005. The values below are recommended for the hospital-based reporting message:

Race - Table 0005

Value	Description
W	White
B	Black
A	Asian or Pacific Islander
I	American Indian or Alaskan Native
M	Multiracial
O	Other
U	Unknown

For example:

|W|

If possible, "M" (multiracial) should be indicated as repeating values using the repetition character "~".

Example: |M|~|W|~|I|

PID-11 Patient Address (XAD)

This field contains the mailing address of the patient. This information is of great importance to agencies receiving reports. The information allows health officials to notify local agencies of potential public health problems in their jurisdictions.

Multiple addresses for the same person may be sent (using the repetition character "~") in the following sequence: the primary mailing address must be sent first in the sequence; if the primary mailing address is not sent then a repeat delimiter must be sent in the first sequence. The field has the following components:

<street address (ST)> ^ < other designation (ST)> ^ <city (ST)> ^ <state or province (ST)> ^ <zip or postal code (ST)> ^ <country (ID)> ^ <address type (ID)> ^ <other geographic designation (ST)> ^ <county/parish code (IS)> ^ <census tract (IS)>

For example:

|2166 Wells Dr^Apt B^Jefferson City^MO^65101^USA^^^Cole|

PID-13 Phone Number - Home (XTN)
Field will follow the HL7-defined structure for extended telecommunications number, data type XTN, which has the following components:

[NNN] [(999)]999-9999 [X99999] [B99999] [C any text] ^ <telecommunication use code (ID)> ^ <telecommunication equipment type (ID)> ^ <E-mail address (ST)> ^ <country code (NM)> ^ <area/city code (NM)> ^ <phone number (NM)> ^ <extension (NM)> ^ <any text (ST)>

Components five through nine reiterate the basic function of the first component in a delimited form that allows the expression of both local and international telephone numbers. In HL7 Version 2.3, the recommended form for the telephone number is to use the delimited form rather than the unstructured form supported by the first component (which is left in for backward compatibility only). Alternative home phone numbers can be provided with the repeating character "~".

For example:

|^^^^206^6793240^^call after 5:00 pm only ~ ^^^^206^6795772|

PID-14 Phone Number - Business (XTN)
Field will follow the HL7-defined structure for extended telecommunications number (XTN) as described in PID-13.

PID-19 Social Security Number (SSN) (ST)
This field contains the patient's social security number. The field should contain the 9 digit SSN without hyphens or spaces.

For example:

|423523049|

PID-22 Ethnic Group (IS)
The following table should be used for hospital-based reporting if the ethnic group of the patient is known:

Ethnic Group - Table 0189

Value	Description
H	Hispanic
N	Non-Hispanic
U	Unknown

For example:

|N|

PID-29 Patient death date and time (TS)
Field is optional for HL7 2.3 but is recommended for hosptial-based reporting if available.

PID-30 Patient death indicator (ID)
Field is optional for HL7 2.3 but is recommended for hospital-based reporting if available. HL7 requires the use of *HL7 table 0136 - Yes/No Indicator* for PID-30 where Y=yes and N=no.

An example for a patient that died is:

|Y|

PV1 Segment – Patient visit segment

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

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
1	4	SI	O			00131	Set ID - PV1
2	1	IS	R		0004	00132	Patient Class
3	80	PL	O			00133	Assigned Patient Location
4	2	IS	R		0007	00134	Admission Type
5	20	CX	O			00135	Preadmit Number
6	80	PL	O			00136	Prior Patient Location
7	60	XCN	O	Y	0010	00137	Attending Doctor
8	60	XCN	O	Y	0010	00138	Referring Doctor
9	60	XCN	O	Y	0010	00139	Consulting Doctor
10	3	IS	O		0069	00140	Hospital Service
11	80	PL	O			00141	Temporary Location
12	2	IS	O		0087	00142	Preadmit Test Indicator
13	2	IS	O		0092	00143	Re-admission Indicator
14	3	IS	R		0023	00144	Admit Source
15	2	IS	O	Y	0009	00145	Ambulatory Status
16	2	IS	O		0099	00146	VIP Indicator
17	60	XCN	O	Y	0010	00147	Admitting Doctor
18	2	IS	O		0018	00148	Patient Type
19	20	CX	R			00149	Visit Number
20	50	FC	O	Y	0064	00150	Financial Class
21	2	IS	O		0032	00151	Charge Price Indicator
22	2	IS	O		0045	00152	Courtesy Code
23	2	IS	O		0046	00153	Credit Rating
24	2	IS	O	Y	0044	00154	Contract Code
25	8	DT	O	Y		00155	Contract Effective Date
26	12	NM	O	Y		00156	Contract Amount
27	3	NM	O	Y		00157	Contract Period
28	2	IS	O		0073	00158	Interest Code
29	1	IS	O		0110	00159	Transfer to Bad Debt Code
30	8	DT	O			00160	Transfer to Bad Debt Date
31	10	IS	O		0021	00161	Bad Debt Agency Code
32	12	NM	O			00162	Bad Debt Transfer Amount
33	12	NM	O			00163	Bad Debt Recovery Amount
34	1	IS	O		0111	00164	Delete Account Indicator
35	8	DT	O			00165	Delete Account Date
36	3	IS	O		0112	00166	Discharge Disposition
37	25	CM	O		0113	00167	Discharged to Location
38	80	CE	O		0114	00168	Diet Type
39	2	IS	O		0115	00169	Servicing Facility
40	1	IS	O		0116	00170	Bed Status
41	2	IS	O		0117	00171	Account Status
42	80	PL	O			00172	Pending Location
43	80	PL	O			00173	Prior Temporary Location
44	26	TS	R			00174	Admit Date/Time

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
45	26	TS	O			00175	Discharge Date/Time
46	12	NM	O			00176	Current Patient Balance
47	12	NM	O			00177	Total Charges
48	12	NM	O			00178	Total Adjustments
49	12	NM	O			00179	Total Payments
50	20	CX	O		0203	00180	Alternate Visit ID
51	1	IS	O		0326	01226	Visit Indicator
52	60	XCN	O	Y	0010	01274	Other Healthcare Provider

Example

PV1|1|E||E|||||||||7|||||8399193^^^MO Hospital&013319934&NPI|||||||||||||||||||||||||033120031420<cr>

Set ID - PV1 (SI) 00131

Definition: This field contains the number that identifies this transaction. For the first occurrence of the segment, the sequence number shall be one, for the second occurrence, the sequence number shall be two, etc.

Patient class (IS) 00132

Definition: This field is used by systems to categorize patients by site. It does not have a consistent industry-wide definition. It is subject to site-specific variations. Refer to *user-defined table 0004 - Patient class* for suggested values.

User-defined Table 0004 - Patient class

Value	Description
E	Emergency
I	Inpatient
O	Outpatient
P	Preadmit
R	Recurring Patient
B	Obstetrics

Admission type (IS) 00134

Definition: This field indicates the circumstances under which the patient was or will be admitted. Refer to *user-defined Table 0007 - Admission type* for suggested values.

User-defined Table 0007 - Admission type

Value	Description
A	Accident
E	Emergency
L	Labor and Delivery
R	Routine

Admit source (IS) 00144

Definition: This field indicates where the patient was admitted. Refer to *user-defined table 0023 - Admit source* for suggested values. This field is used on UB92 FL19. The UB codes listed, as examples are not an exhaustive or current list; refer to a UB specification for additional information.

Note: The official title of UB is "National Uniform Billing Data Element Specifications." Most of the codes added came from the UB-92 specification, but some came from the UB-82.

User-defined Table 0023 - Admit source

Value	Description
1	Physician Referral
2	Clinic Referral
3	HMO Referral
4	Transfer from a Hospital
5	Transfer from a Skilled Nursing Facility
6	Transfer from Another Health Care Facility
7	Emergency Room
8	Court/Law Enforcement
9	Information Not Available

Visit number (CX) 00149

```
Components:  <ID (ST)> ^ <check digit (ST)> ^ <code identifying the check
          digit scheme employed (ID)> ^ <assigning authority (HD)> ^
          <identifier type code (IS)> ^ <assigning facility (HD)>

Subcomponents of assigning authority:  <namespace ID (IS)> & <universal ID
          (ST)> & <universal ID type (ID)>

Subcomponents of assigning facility:   <namespace ID (IS)> & <universal ID
          (ST)> & <universal ID type (ID)>
```

Definition: ***For backward compatibility***, an NM data type may be sent, but HL7 recommends that new implementations use the CX data type. This field contains the unique number assigned to each patient visit. The assigning authority and identifier type code are strongly recommended for all CX data types.

Admit date/time (TS) 00174

Definition: This field contains the admit date/time. It is to be used if the event date/time is different than the admit date and time, i.e., a retroactive update. This field is also used to reflect the date/time of an outpatient/emergency patient registration.

PV2 Segment – Patient visit – additional information segment

In order to leverage data available in existing clinical information system, chief complaint data will be sent in a ***PV2*** segment ***Admit Reason*** element. This element is a CE data type but should be sent as free text. The location or institution and date/time would be inferred from the ***MSH*** segment.

The ***PV2*** segment description in this implementation guide is IDENTICAL to the HL7 V2.3.1 ***PV2*** description in Chapter 3 except that the ***Admit Reason*** element is required and the discussion of this element has been expanded.

PV2 attributes

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
1	80	PL	C			00181	Prior Pending Location
2	60	CE	O		0129	00182	Accommodation Code
3	60	CE	R			00183	Admit Reason
4	60	CE	O			00184	Transfer Reason
5	25	ST	O	Y		00185	Patient Valuables
6	25	ST	O			00186	Patient Valuables Location
7	2	IS	O		0130	00187	Visit User Code
8	26	TS	O			00188	Expected Admit Date/Time
9	26	TS	O			00189	Expected Discharge Date/Time
10	3	NM	O			00711	Estimated Length of Inpatient Stay
11	3	NM	O			00712	Actual Length of Inpatient Stay
12	50	ST	O			00713	Visit Description
13	90	XCN	O	Y		00714	Referral Source Code
14	8	DT	O			00715	Previous Service Date
15	1	ID	O		0136	00716	Employment Illness Related Indicator
16	1	IS	O		0213	00717	Purge Status Code
17	8	DT	O			00718	Purge Status Date
18	2	IS	O		0214	00719	Special Program Code
19	1	ID	O		0136	00720	Retention Indicator
20	1	NM	O			00721	Expected Number of Insurance Plans
21	1	IS	O		0215	00722	Visit Publicity Code
22	1	ID	O		0136	00723	Visit Protection Indicator
23	90	XON	O	Y		00724	Clinic Organization Name
24	2	IS	O		0216	00725	Patient Status Code
25	1	IS	O		0217	00726	Visit Priority Code
26	8	DT	O			00727	Previous Treatment Date
27	2	IS	O		0112	00728	Expected Discharge Disposition
28	8	DT	O			00729	Signature on File Date
29	8	DT	O			00730	First Similar Illness Date
30	80	CE	O		0218	00731	Patient Charge Adjustment Code
31	2	IS	O		0219	00732	Recurring Service Code
32	1	ID	O		0136	00733	Billing Media Code
33	26	TS	O			00734	Expected Surgery Date & Time
34	1	ID	O		0136	00735	Military Partnership Code
35	1	ID	O		0136	00736	Military Non-Availability Code
36	1	ID	O		0136	00737	Newborn Baby Indicator
37	1	ID	O		0136	00738	Baby Detained Indicator

Example PV2 Segment
PV2|||789.00^ABDMNAL PAIN UNSPCF SITE^I9C<cr>
PV2|||^STOMACH ACHE<cr>

Admit reason (CE) 00183

```
Components:  <identifier (ST)> ^ <text (ST)> ^ <name of coding
             system (ST)> ^ <alternate identifier (ST)> ^ <alternate
             text (ST)> ^ <name of alternate coding system (ST)>
```

Definition: This field contains a short description of the reason for patient's visit. This reason may be coded as ICD-9-CM or ICD-10 codes but will often be sent as free text. If the reason is sent as a coded value, the text component must be sent in order to allow systems, which rely on text to operate without having access to tables of coding systems that include text descriptions.

Complete Message Example

MSH|^~\&||MO Hospital^013319934^NPI|MOHESS|MODHSS|200302171830||ADT^A04||P|2.3.1<cr>
PID|1||95101100001^^^^MO Hospital&013319934&NPI||Doe^John^Q^Jr||19641004|M||W|2166 Wells Dr^Apt B^Jefferson City^MO^65101^USA^^^Cole||^^^^206^6793240|||M|||423523049|||N<cr>
PV1|1|E||E|||||||||7|||||||8399193^^^MO Hospital&013319934&NPI||||||||||||||||||||||200302171420<cr>
PV2|||789.00^ABDMNAL PAIN UNSPCF SITE^I9C<cr>

As an alternative for hospitals that are not able to support HL7 messages, the following format will be used for transmission of data. The structure closely follows the fields defined in the HL7 message format.

All fields will be left justified with unknown values padded with spaces. Each record should end with a carriage return (ASC13) or carriage return/line feed (ASC13 ASC10).

The required column in Table 1 indicates whether a field is Required (R), Optional (O) or Conditionally (C) required. See the description to determine the requirements for conditional fields.

Table 1 – Hospital Syndromic Surveillance ASCII file structure

Field Name	Relative Position	Field Length	Required	Format	Description
Record Type	1	1	R	A	4 = New Record 8 = Update of previously sent record
Sending Facility Identifier	2-11	10	R	A/N	This field shall contain the National Provider Identifier (NPI) for the hospital/facility sending data. If no NPI is available, use the Medicare provider number of state assigned number.
Sending Facility Name	12-41	30	R	A/N	Name of the originating hospital
Date/Time of Message	42-53	12	R	N	YYYYMMDDHHMM format for date and time record or message set is generated.
Processing ID	54	1	R	A	Unless directed by DHSS, all records should be Production records "P" P = Production D = Debugging/Testing.
Patient Medical Record Number	55-74	20	R	A/N	Medical Record Number of the patient.
Patient Last Name	75-104	30	R	A/N	Last name of patient. No space should be embedded within a last name as in MacBeth. Titles (for example, Sir, Msgr., Dr.) should not be recorded. Record hyphenated names with the hyphen, as in Smith-Jones.
Patient First Name	105-124	20	R	A/N	First name of patient.
Patient Middle Name	125-144	20	O	A/N	Middle name or initial of patient, if known.
Patient Name Suffix	145-150	6	O	A/N	Record suffixes such as JR, SR, III, if known
Date of Birth	151-158	8	R	N	YYYYMMDD date of birth. If only age is known, record YYYY as year of birth.
Sex	159	1	R	A	Patient sex at time of encounter M = Male F = Female U = Unknown

19 CSR 10-33.040 HESS Structure File Exhibit B

Field Name	Relative Position	Field Length	Required	Format	Description
Race	160	1	R	A	W = White B = Black or African American A = Asian or Pacific Islander I = American Indian or Alaska Native M = Multiracial (two or more races) O = Other U = Unknown
Ethnicity	161	1	R	A	H = Hispanic or Latino N = Not Hispanic or Latino U = Unknown
Residence Address Line 1	162-191	30	R	A/N	Free form address line
Residence Address Line 2	192-221	30	C	A/N	Free form address line, if needed.
City	222-246	25	R	A/N	Patient city of residence.
State	247-248	2	R	A/N	Postal abbreviation for state of residence. Use 97 for homeless, 98 for non-US.
Zip Code	249-253	5	R	N	First five digits (homeless = 99997, non-US = 99998)
County Code	254-256	3	R	N	Use FIPS codes (homeless = 997, non-US = 998)
Country Code	257-260	4	R	N	Use FIPS codes (homeless = 9997)
Phone Number Area Code	261-263	3	O	N	Format 999 if known, blank if not known
Phone Number	264-271	8	O	A/N	Format 999-9999 including hyphen if known, blank if not known.
Extension	272-276	5	O	A/N	Telephone extension, if necessary or known.
Social Security Number	277-285	9	R	N	Contains the 9-digit SSN without hyphens or spaces
Patient Death Indicator	286	1	O	A	If available. Y = Yes N = No
Patient Death Date Time	287-298	12	C	N	YYYYMMDDHHMM representation of Date and Time (if known) of death if indicator is "Y".
Patient Class	299	1	R	A	Used to categorize patients by site. E = Emergency I = Inpatient O = Outpatient P = Preadmit R = Recurring patient B = Obstetrics
Admission Type	300	1	R	A	Indicates the circumstances under which the patient was or will be admitted A = Accident E = Emergency L = Labor and delivery R = Routine
Unique Encounter Identifier	301-320	20	R	A/N	Unique identifier within facility for each patient encounter or visit.

Field Name	Relative Position	Field Length	Required	Format	Description
Admit Date/Time	321-342	12	R	N	YYYYMMDDHHMM This field contains the admit date and time. This field is also used to reflect the date/time of an emergency patient or outpatient registration
Admit Reason Text	343-462	120	R	A/N	Textual literal chief complaint. The text must be sent even if a code is available.
Admit Reason Code	463-472	10	O	A/N	Diagnostic code for the reason for visit or chief complaint, if available. Not all hospitals will have this code available at the time of the initial report to DHSS.
Admit Reason Coding Scheme	473-480	8	C	A/N	Standardized Coding scheme used for the Admit Reason Code, if used. I9C = ICD-9-CM I10 = ICD-10 SNOMED = SNOMED
Filler	481-500	20	R		Spaces