

**Implementation Guide for Transmission of
Patient Chief Complaint
as Public Health Information using
Version 2.3.1 of the
Health Level Seven (HL7) Standard Protocol**

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Centers for Disease Control and Prevention



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Revision History

Date	Author	Comments
01-Oct-02	J. Marc Overhage	Initial draft
04-Nov-02	J. Marc Overhage	Added materials to make the guide more “stand alone” including message structure, MSH, PID, PV1 segment information
15-Feb-03	J. Marc Overhage	Revised based on initial comment feedback
24-May-03	Scott Robertson	Editorial revision for internal consistency and integrity check against HL7 v2.3.1
27-May-03	Scott Robertson	Final editorial changes to move document out of “draft” status

Credits

A working group (members are listed in the Appendix) convened by the CDC and eHealth Initiative Public Private Collaboration created materials that formed the basis for this implementation guide.

Using this guide

This document is to be used along with the *Implementation Guide for Transmission of Laboratory-Based Reporting of Public Health Reporting Information using Version 2.3.1 of the Health Level Seven (HL7) Standard Protocol* and the HL7 Version 2.3.1 Standard. It provides details specific to the electronic communication of limited information about reasons for health care encounters – commonly called the chief complaint. This document follows the specifications described in the HL7 Standard version 2.3.1 and focuses on one type of HL7 message, the ADT Message (ADT).

Background

Monitoring disease occurrence is a cornerstone of public health decision-making. This monitoring, referred to as public health surveillance, can be used to trigger case or outbreak investigations, follow trends, evaluate the effect of prevention measures such as immunizations, and suggest public health priorities. Because disease trends have the potential to shift rapidly, especially with infectious diseases, surveillance needs to be ongoing, timely, and complete.

Chief complaint data from hospital admissions, emergency department visits, outpatient visits or physician office visits may be useful for public health surveillance purposes. Because these visits usually result in a bill being submitted electronically, the data are often captured in electronic form. The essential data that are needed about such an encounter include the visit date/time, the place the visit occurred, and the reason for the visit. Information about the patient's identity, home address, work address and occupation are potentially desirable in order to allow chief complaint data to be linked with other data about that individual (orders, laboratory results), to allow geographic cluster analysis and to weight probabilities. In some states, health care providers are legally mandated to provide these observations to public health.

Because there may be concerns about patient confidentiality given that this is surveillance, some organizations may be reluctant to release these patient identifiers even though permitted to do so under HIPAA. Lack of these identifiers may make the data less useful and strategies that would allow these data to be shared while still allowing data to be matched may be needed.

Conventions

In order to provide concrete guidance, each message use case will be presented in three versions: as a message segment structure, message schema and message example.

Message Segment Structure

Also known as the HL7 Abstract Message Syntax. This format specifies the order of HL7 segments and segment groups, whether they are optional or mandatory, and whether or not they repeat. It does not include detailed information about the data elements within the segments. It illustrates the overall structure of the message.

Message Schema

This format describes how data elements within segments are valued, typically using generic terms (e.g. date of birth, medical record number). It illustrates the content of the message.

Message Example

This format provides a concrete example of individual data elements within the segments of a message. It illustrates the formatting of individual data elements.

Generic ADT Message

ADT messages with a number of different event codes may carry information about chief complaint. A04, register a patient, will often be used to signal the beginning of a visit to the Emergency Department but each institution will have to select the event codes that communicate chief complaint information.

	<u>Generic ADT message</u>
MSH	Message Header
EVN	Event Type
PID	patient identification
[{ NK1 }]	Next of Kin / Associated Parties
PV1	Patient visit information
[PV1]	Patient visit - additional information

The generic ADT message segment structure above represents the common segment structure of ADT messages that pertain to the transmission of patient chief complaints as described in this guide. While the various HL7 v2.3.1 ADT structures (e.g., ADT_A01, ADT_A02, etc.) include additional segments, the structure displayed above is common to ADT messages that can be used for reporting chief complaints.

Segment Definitions

The Segment Attribute Table summarizes the field content of a specified segment. The column headers for the Segment Attribute Table are described as follows:

Segment Attribute Table Header Definitions

Header Text	Description
SEQ	The sequence of the elements as they are numbered in the segment.
LEN	The length of the element.
DT	The data type of the element.
OPT	Whether the field is required, optional, or conditional in a segment as defined by HL7 2.3.1. These do not refer to requirements for reporting in the context of this guide. The designations

Header Text	Description
	are: <i>R</i> Required. <i>O</i> Optional. <i>C</i> Conditional on the trigger event or on some other field(s). The field definitions following the segment attribute table should specify the algorithm that defines the conditionality for the field. <i>X</i> Not used with this trigger event. <i>B</i> Left in for backward compatibility with previous versions of HL7. The field definitions following the segment attribute table should denote the optionality of the field for prior versions.
RP/#	Indicates if element repeats. IF the number of repetitions is limited, the number of allowed repetitions is given.
TBL#	Specific table reference. Tables defined in HL7 v2.3.1 and used in this guide are listed in Appendix B.
ITEM#	HL7 unique item number for each element.
Element Name	Descriptive name of element in the segment.
OPT for ELR	Whether the field is required or ignored specifically in the context of this guide. The designations are: <i>R</i> Required. <i>O</i> Optional. <i>I</i> Ignored.
REP for ELR	Whether the field can repeat in the context of this guide. Follows the same convention as RP/#.
IMPLEMENTATION COMMENTS	Addition comments related to the use of the field in the context of this guide.

The field definitions following the Segment Attribute Table serve to clarify, extend or constrain the meaning or intent of the field in the context of this guide. Not all fields present in a segment will have accompanying narrative.

Use Case

James Massie presents at the emergency room of MyHospital complaining of a rash and fever that have been persisting for 3 days. Information is collected from Mr. Massey to establish him within the various systems used at MyHospital. The ADT application of MyHospital sends a message to the Indiana Department of Health Services registering Mr. Massey as a patient at MyHospital with specific reference to this visit and chief complaint.

Message Structure

This message structure is a proper subset of HL7 v2.3.1 ADT_A01, the structure associated with the A04 event of the ADT message type. This limited structure addresses

the minimum content requirements to represent a patient registration within the context of this guide and HL7 v2.3.1 requirements.

<u>ADT^A04^ADT_A01</u>	<u>ADT - Register a patient</u>	<u>Chapter</u>
MSH	Message Header	2
EVN	Event Type	3
PID	Patient Identification	3
[{ NK1 }]	Next of Kin/Associated Parties	3
PV1	Patient Visit Information	3
[PV1]	Patient Visit - Additional Information	3

Message Schema

```

MSH|^~\&| sending application | sending facility |
    receiving application |||ADT^A04^ADT_A01| message
    control id |P|2.3.1...<cr>

EVN|| recorded date/time ...<cr>

PID||| patient ids || patient name ...<cr>

NK1| set id | next of kin name | next of kin relationship |
    next of kin phone ...<cr>

PV1||| patient type
    ||||||||||||||||||||||||||||||||||||||| admit
    date/time | discharge date/time | ...<cr>

PV2||| chief complaint ||||| expected admit date/time |
    expected discharge date/time |||||||||||||||
    clinic/organization |...<cr>
    
```

Message Example

```

MSH|^~\&|ADT|MyHospital^543876^CMS|NEDSS|IN-
    DOH|200303101501|ADT^A04^ADT_A04|||2.3.1|<cr>

EVN||200303101501|<cr>

PID|||191919^^^MyHospital^MR|MASSIE^JAMES^A||19560129|M|||
    171 ZOBERLEIN^^ISHPEMING^MI^49849^"^^|(900)485-
    5344|(900)485-5344|S|C|10199925^^^MyHospital^AN|<cr>

NK1|1|||123 INDUSTRY WAY^^ISHPEMING^MI^49849^"^^|
    (900)545-1200|EM^EMPLOYER|19940605||PROGRAMMER|||ACME
    SOFTWARE COMPANY|<cr>

PV1||E|||||200303101445|<cr>
    
```

PV2|||^Rash and fever for 3 days|<cr>

Segment Details

MSH - Message Header Segment

MSH – Message Header Segment attributes

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME	OPT for ELR	IMPLEMENTATION COMMENTS
1	1	ST	R			00001	Field separator		
2	4	ST	R			00002	Encoding characters		
3	180	HD	O			00003	Sending application		
4	180	HD	O			00004	Sending facility		
5	180	HD	O			00005	Receiving application		
6	180	HD	O			00006	Receiving facility		
7	26	TS	O			00007	Date/Time of message		
8	40	ST	O			00008	Security		
9	7	CM	R		0076 / 0003	00009	Message type		
10	20	ST	R			00010	Message control ID		
11	3	PT	R			00011	Processing ID		
12	60	VID	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		

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME	OPT for ELR	IMPLEMENTATION COMMENTS
17	2	ID	O			00017	Country code		
18	10	ID	O	Y	0211	00692	Character set		
19	60	CE	O			00693	Principal language of message		
20	20	ID	O		0356	01317	Alternate character set handling scheme		

MSH field definitions

MSH-4 Sending facility (HD) 00004

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

Definition: In order to clearly identify the sending institution, the sending facility field should be constructed as follows: The sending institution will use the CMS Provider of Services (POS) code (available for download at <http://www.cms.hhs.gov/data/download/default.asp>) to identify itself in this field. They should include the text name of the institution, followed by the unique CMS Provider of service identifier and finally, the identifier type “CMS”. For example:

```
MSH|^~\&||MyHospital^543876^CMS|...<cr>
```

If the CMS identifier is for a multifacility or multiple location entity, append an integer identifier to the CMS POS code using a decimal to separate them. For example

```
MSH|^~\&||MyFirstHospital^543876.1^CMS|...<cr>
```

MSH-5 Receiving application (HD) 00005

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

Definition: Uniquely identifies the receiving application among all other applications within the network enterprise. The network enterprise consists of all the applications that participate in the exchange of HL7 messages within the enterprise. This field should contain the text “NEDSS”. For example:

```
MSH|^~\&||MyFirstHospital^543876^CMS||NEDSS|...<cr>
```

MSH-6 Receiving facility (HD) 00006

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

Definition: This field identifies the receiving application among multiple identical applications running on behalf of different organizations. This field should contain either “CDC” or the two character state abbreviation followed by a hyphen and then the characters “DOH” to indicate department of health. For Indiana this would be “IN-DOH”

MSH|^~\&||MyFirstHospital^543876^CMS||NEDSS|IN-DOH|...<cr>

MSH-12 Version ID (VID) 00012

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

Definition: Matched by the receiving system to its own HL7 version to be sure the message will be interpreted correctly.

The version ID should contain 2.3.1.

PID - Patient Identification

See *Implementation Guide for Transmission of Laboratory-Based Reporting of Public Health Reporting Information using Version 2.3.1 of the Health Level Seven (HL7) Standard Protocol* for a discussion of this segment.

In Patient Administration (ADT) messages, there is typically a PID – Patient Identification segment. For many public health purposes, such as surveillance, the patient identification fields may not be populated in order to protect patient’s confidentiality. However, it is often important to be able to re-identify a patient that comes to public health’s attention. Issues and processes related to patient confidentiality and the possibly re-identification should be carefully considered, but are beyond the scope of this implementation guide.

PV1 – Patient Visit Segment

The PV1 segment is used to communicate information on a visit-specific basis.

PV1 – Patient Visit Segment attributes

SEQ	LEN	DT	OPT	RP#	TBL#	ITEM #	ELEMENT NAME	OPT for ELR	IMPLEMENTATION COMMENTS
1	4	SI	O			00131	Set ID - PV1	I	
2	1	IS	R		0004	00132	Patient Class	I	
3	80	PL	O			00133	Assigned Patient Location	I	
4	2	IS	O		0007	00134	Admission Type	I	
5	20	CX	O			00135	Preadmit Number	I	
6	80	PL	O			00136	Prior Patient Location	I	
7	60	XC N	O	Y	0010	00137	Attending Doctor	I	
8	60	XC N	O	Y	0010	00138	Referring Doctor	I	
9	60	XC N	O	Y	0010	00139	Consulting Doctor	I	
10	3	IS	O		0069	00140	Hospital Service	I	
11	80	PL	O			00141	Temporary Location	I	
12	2	IS	O		0087	00142	Preadmit Test Indicator	I	
13	2	IS	O		0092	00143	Re-admission Indicator	I	
14	3	IS	O		0023	00144	Admit Source	I	
15	2	IS	O	Y	0009	00145	Ambulatory Status	I	
16	2	IS	O		0099	00146	VIP Indicator	I	
17	60	XC N	O	Y	0010	00147	Admitting Doctor	I	
18	2	IS	O		0018	00148	Patient Type	I	
19	20	CX	O			00149	Visit Number	I	
20	50	FC	O	Y	0064	00150	Financial Class	I	
21	2	IS	O		0032	00151	Charge Price Indicator	I	
22	2	IS	O		0045	00152	Courtesy Code	I	

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME	OPT for ELR	IMPLEMENTATION COMMENTS
23	2	IS	O		0046	00153	Credit Rating	I	
24	2	IS	O	Y	0044	00154	Contract Code	I	
25	8	DT	O	Y		00155	Contract Effective Date	I	
26	12	NM	O	Y		00156	Contract Amount	I	
27	3	NM	O	Y		00157	Contract Period	I	
28	2	IS	O		0073	00158	Interest Code	I	
29	1	IS	O		0110	00159	Transfer to Bad Debt Code	I	
30	8	DT	O			00160	Transfer to Bad Debt Date	I	
31	10	IS	O		0021	00161	Bad Debt Agency Code	I	
32	12	NM	O			00162	Bad Debt Transfer Amount	I	
33	12	NM	O			00163	Bad Debt Recovery Amount	I	
34	1	IS	O		0111	00164	Delete Account Indicator	I	
35	8	DT	O			00165	Delete Account Date	I	
36	3	IS	O		0112	00166	Discharge Disposition	I	
37	25	CM	O		0113	00167	Discharged to Location	I	
38	80	CE	O		0114	00168	Diet Type	I	
39	2	IS	O		0115	00169	Servicing Facility	I	
40	1	IS	B		0116	00170	Bed Status	I	
41	2	IS	O		0117	00171	Account Status	I	
42	80	PL	O			00172	Pending	I	

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME	OPT for ELR	IMPLEMENTATION COMMENTS
							Location		
43	80	PL	O			00173	Prior Temporary Location	I	
44	26	TS	O			00174	Admit Date/Time	O	Optional means to provide temporal context to the chief complaint
45	26	TS	O			00175	Discharge Date/Time	O	Optional means to provide temporal context to the chief complaint
46	12	NM	O			00176	Current Patient Balance	I	
47	12	NM	O			00177	Total Charges	I	
48	12	NM	O			00178	Total Adjustments	I	
49	12	NM	O			00179	Total Payments	I	
50	20	CX	O		0203	00180	Alternate Visit ID	I	
51	1	IS	O		0326	01226	Visit Indicator	I	
52	60	XCN	O	Y	0010	01274	Other Healthcare Provider	I	

PV1 field definitions

PV1-3 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

PV1-44 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.

Within the context of this guide, the use of PV1-44 Admit Date, PV1- Discharge Date, PV2-8 – Expected Admit Date or PV2-9 Expected Discharge Date are optional information that provides a temporal context for the chief compliant.

PV1-45 Discharge date/time (TS) 00175

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

Within the context of this guide, the use of PV1-44 Admit Date, PV1- Discharge Date, PV2-8 – Expected Admit Date or PV2-9 Expected Discharge Date are optional information that provides a temporal context for the chief compliant.

PV2 – Patient Visit – Additional Information Segment

The PV2 segment is a continuation of the visit-specific information of the PV1 segment.

In order to leverage data available in existing clinical information systems, the chief complaint data should be sent in *PV2-3 Admit Reason*. This element is a CE data type which also supports free-text information as is almost uniformly sent by physician practice management systems and hospital admission, discharge, transfer systems. *PV2-12 Visit Description* element was considered as an alternative but this field, as ST data type describing the visit, might be used for other purposes in some systems.

PV2 – Patient Visit – Additional Information Segment attributes

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME	OPT for ELR	IMPLEMENTATION COMMENTS
1	80	PL	C			00181	Prior Pending Location	I	
2	60	CE	O		0129	00182	Accommodation Code	I	

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME	OPT for ELR	IMPLEMENTATION COMMENTS
3	60	CE	O			00183	Admit Reason	R	Even though specified as a CE this field will usually contain free text.
4	60	CE	O			00184	Transfer Reason	I	
5	25	ST	O	Y		00185	Patient Valuables	I	
6	25	ST	O			00186	Patient Valuables Location	I	
7	2	IS	O		0130	00187	Visit User Code	I	
8	26	TS	O			00188	Expected Admit Date/Time	O	Optional means to provide temporal context to the chief complaint
9	26	TS	O			00189	Expected Discharge Date/Time	O	Optional means to provide temporal context to the chief complaint
10	3	NM	O			00711	Estimated Length of Inpatient Stay	I	
11	3	NM	O			00712	Actual Length of Inpatient Stay	I	
12	50	ST	O			00713	Visit Description	I	
13	90	XC N	O	Y		00714	Referral Source Code	I	
14	8	DT	O			00715	Previous Service Date	I	
15	1	ID	O		0136	00716	Employment Illness Related Indicator	I	
16	1	IS	O		0213	00717	Purge Status Code	I	
17	8	DT	O			00718	Purge Status Date	I	
18	2	IS	O		0214	00719	Special Program Code	I	
19	1	ID	O		0136	00720	Retention Indicator	I	
20	1	NM	O			00721	Expected Number of Insurance Plans	I	
21	1	IS	O		0215	00722	Visit Publicity Code	I	
22	1	ID	O		0136	00723	Visit Protection Indicator	I	
23	90	XO N	O	Y		00724	Clinic Organization Name	O	Optional means to specify the clinic or organization other

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME	OPT for ELR	IMPLEMENTATION COMMENTS
									than that associated with the message header
24	2	IS	O		0216	00725	Patient Status Code	I	
25	1	IS	O		0217	00726	Visit Priority Code	I	
26	8	DT	O			00727	Previous Treatment Date	I	
27	2	IS	O		0112	00728	Expected Discharge Disposition	I	
28	8	DT	O			00729	Signature on File Date	I	
29	8	DT	O			00730	First Similar Illness Date	I	
30	80	CEI S	O		0218	00731	Patient Charge Adjustment Code	I	
31	2	IS	O		0219	00732	Recurring Service Code	I	
32	1	ID	O		0136	00733	Billing Media Code	I	
33	26	TS	O			00734	Expected Surgery Date & Time	I	
34	1	ID	O		0136	00735	Military Partnership Code	I	
35	1	ID	O		0136	00736	Military Non-Availability Code	I	
36	1	ID	O		0136	00737	Newborn Baby Indicator	I	
37	1	ID	O		0136	00738	Baby Detained Indicator	I	

PV2 field definitions

PV2-3 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 can 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.

PV2-8 Expected Admit Date/Time (TS) 00188

Definition: This field contains the date and time that the patient is expected to be admitted. This field is also used to reflect the date/time of an outpatient/emergency patient registration.

Within the context of this guide, the use of PV1-44 Admit Date, PV1- Discharge Date, PV2-8 – Expected Admit Date or PV2-9 Expected Discharge Date are optional information that provides a temporal context for the chief compliant.

PV2-9 Expected Discharge Date/Time (TS) 00189

Definition: This field contains the date and time that the patient is expected to be discharged. This is a non-event related date used by ancillaries to determine more accurately the projected workloads. This field is also used to reflect the anticipated discharge date/time of an outpatient/emergency patient, or an inpatient.

Within the context of this guide, the use of PV1-44 Admit Date, PV1- Discharge Date, PV2-8 – Expected Admit Date or PV2-9 Expected Discharge Date are optional information that provides a temporal context for the chief compliant.

PV2-23 Clinic organization name (XON) 00724

```
Components: <organization name (ST)> ^ <organization name type code (ID)> ^  
<ID number (ID)> ^ <check digit (NM)> ^ < check digit scheme (ID)>  
^ <assigning authority (HD)> ^ <identifier type code (ID)> ^  
<assigning facility (HD)> ^ <name representation code (ID)>
```

```
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: This field contains the organization name or sub-unit and identifier that is associated with the (visit) episode of care. For example, the Allergy or Oncology Clinic within the facility might be named.

Within the context of this guide, the use of PV1-23 is optional information used to identify the particular Organization or Clinic where the chief compliant was encountered. This may represent a more specific organization/clinic identification than that provided in the MSH segment.

NK1 - Next Of Kin / Associated Parties Segment

The NK1 segment contains information about the patient's other related parties. Any associated parties may be identified. Utilizing *NK1-1-set ID*, multiple NK1 segments can be sent to patient accounts.

If a person or organization fulfills multiple contact roles, for example, a person is an emergency contact and a next of kin, it is recommended to send a NK1 segment for each contact role with the differing roles identified in NK1-7 Contact Role.

NK1 – Next Of Kin / Associated Parties Segment attributes

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME	OPT for ELR	IMPLEMENTATION COMMENTS
1	4	SI	R			00190	Set ID - NK1	R	
2	48	XP N	O	Y		00191	Name	O	
3	60	CE	O		0063	00192	Relationship	R	Required if patient's employment information is being sent. Only segments with a value of EMR are stored by public health
4	106	XA D	O	Y		00193	Address	O	
5	40	XT N	O	Y		00194	Phone Number	O	
6	40	XT N	O	Y		00195	Business Phone Number	O	
7	60	CE	O		0131	00196	Contact Role	I	
8	8	DT	O			00197	Start Date	I	
9	8	DT	O			00198	End Date	I	
10	60	ST	O			00199	Next of Kin / Associated Parties Job Title	O	
11	20	JCC	O		0327/ 0328	00200	Next of Kin / Associated Parties Job Code/Class	O	
12	20	CX	O			00201	Next of Kin / Associated Parties Employee Number	O	
13	90	XO N	O	Y		00202	Organization Name - NK1	O	
14	80	CE	O		0002	00119	Marital Status	I	
15	1	IS	O		0001	00111	Sex	I	

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME	OPT for ELR	IMPLEMENTATION COMMENTS
16	26	TS	O			00110	Date/Time of Birth	I	
17	2	IS	O	Y	0223	00755	Living Dependency	I	
18	2	IS	O	Y	0009	00145	Ambulatory Status	I	
19	80	CE	O	Y	0171	00129	Citizenship	I	
20	60	CE	O		0296	00118	Primary Language	I	
21	2	IS	O		0220	00742	Living Arrangement	I	
22	80	CE	O		0215	00743	Publicity Code	I	
23	1	ID	O		0136	00744	Protection Indicator	I	
24	2	IS	O		0231	00745	Student Indicator	I	
25	80	CE	O		0006	00120	Religion	I	
26	48	XP N	O	Y		00746	Mother's Maiden Name	I	
27	80	CE	O		0212	00739	Nationality	I	
28	80	CE	O	Y	0189	00125	Ethnic Group	I	
29	80	CE	O	Y	0222	00747	Contact Reason	I	
30	48	XP N	O	Y		00748	Contact Person's Name	O	
31	40	XT N	O	Y		00749	Contact Person's Telephone Number	O	
32	106	XA D	O	Y		00750	Contact Person's Address	O	
33	32	CX	O	Y		00751	Next of Kin/Associated Party's Identifiers	I	
34	2	IS	O		0311	00752	Job Status	I	
35	80	CE	O	Y	0005	00113	Race	I	
36	2	IS	O		0295	00753	Handicap	I	
37	16	ST	O			00754	Contact Person Social Security Number	I	
38									
39									
40									

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME	OPT for ELR	IMPLEMENTATION COMMENTS
41									
42									
43									
44									
45									
46									

NK1 field definitions

NK1-1 Set ID - NK1 (SI) 00190

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.

NK1-2 Name (XPN) 00191

Components: <family name (IS)> & <last name prefix (IS)> ^ <given name (IS)> ^ <middle initial or name (IS)> ^ <suffix (e.g., JR or III) (IS)> ^ <prefix (e.g., DR) (IS)> ^ <degree (e.g., MD) (IS)> ^ <name type code (ID) > ^ <name representation code (ID)>

Definition: This field contains the employer's name. Multiple names for the same person are allowed, but the legal name must be sent in the first sequence. If the legal name is not sent, then the repeat delimiter must be sent in the first sequence. Refer to Chapter 2 for the name type code table.

NK1-3 Relationship (CE) 00192

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 the actual personal relationship that the next of kin/associated party has to the patient. This field may have values from *user-defined table 0063 - Relationship* but only segments with a value of EMR , employer, for this field will be stored.

NK1-4 Address (XAD) 00193

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)> ^ <address representation code (ID)>

Definition: This field contains the address of the next of kin/associated party. Multiple addresses are allowed for the same person. The mailing address must be sent in the first sequence. If the mailing address is not sent, then the repeat delimiter must be sent in the first sequence.

NK1-5 Phone number (XTN) 00194

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

Definition: This field contains the telephone number of the next of kin/associated party. Multiple phone numbers are allowed for the same person. The primary telephone number must be sent in the first sequence. If the primary telephone number is not sent, then the repeat delimiter must be sent in the first sequence. Refer to Chapter 2 for suggested telecommunication use and equipment type codes.

NK1-6 Business phone number (XTN) 00195

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

Definition: This field contains the business telephone number of the next of kin/associated party. Multiple phone numbers are allowed for the same person. The primary business telephone number must be sent in the first sequence. If the primary business telephone number is not sent, then the repeat delimiter must be sent in the first sequence. Refer to Chapter 2 for suggested telecommunication use and equipment type codes.

NK1-10 Next of kin / associated parties job title (ST) 00199

Definition: This field contains the title of the patient at their place of employment.

NK1-11 Next of kin / associated parties job code/class (JCC) 00200

Components: <job code (IS)> ^ <employee classification (IS)>

Definition: This field contains the job code/class of the patient at their place of employment. Refer to *user-defined tables 0327 - Job code* and *0328 - Employee classification* for suggested values.

NK1-12 Next of kin / associated parties employee number (CX) 00201

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, the ST data type can be sent; however HL7 recommends that the CX data type be used for new implementations.*** This field contains the employee number of the patient at their place of employment. The assigning authority and identifier type code are strongly recommended for all CX data types.

NK1-30 Contact person's name (XPN) 00748

Components: <family name (IS)> & <last name prefix (IS)> ^ <given name (IS)> ^ <middle initial or name (IS)> ^ <suffix (e.g., JR or III) (IS)> ^ <prefix (e.g., DR) (IS)> ^ <degree (e.g., MD) (IS)> ^ <name type code (ID)> ^ <name representation code (ID)>

Definition: This field contains the names of the people to contact, depending on the value of the relationship defined in *NK1-3-relationship*. This field is typically needed when the NK1 is an organization. The legal name should be sent first in the sequence. Refer to *HL7 table 0200 - Name type* for valid values.

NK1-31 Contact person's telephone number (XTN) 00749

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

Definition: This field contains the telephone numbers of the contact person depending on the value of the relationship defined in *NK1-3-relationship*. This field is typically needed when the NK1 is an organization. The primary telephone number must be sent in the first sequence. If the primary telephone number is not sent, then a repeat delimiter must be sent in the first sequence. Refer to *HL7 tables 0201 - Telecommunication use code* and *0202 - Telecommunication equipment type* for valid values.

NK1-32 Contact person's address (XAD) 00750

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)> ^ <address representation code (ID)>

Definition: This field contains the addresses of the contact person depending on the value of the relationship defined in *NK1-3-relationship*. This field is typically used when the NK1 is an organization. When multiple addresses are sent, the mailing address must be sent first in the sequence.

Appendix A – Public Private Collaboration Working Group Members

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