

# 2. Control

## 2. 控制

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## 2.2 INTRODUCTION

### 介绍

The Control chapter of this Standard defines the generic rules that apply to all messages. Subsequent sections define functionally specific messages to be exchanged among certain applications. The specific aspects of message definition that are addressed herein are:

本标准的控制一章定义了应用于所有信息的总体规则。以后各章规定了特定应用软件之间（数据）交换的特殊功能的信息。此处提到的信息定义包括以下部分：

- a) the form to be used in functional chapters for describing messages. This includes their purpose, their contents, and the interrelationships among them. This form is called an abstract message definition because it is purely a level 7 (application) definition.  
在特定章节中描述信息的形式。包括目的、内容、以及它们之间的相互关系。此形式称为抽象信息定义，因为这是纯粹的第7层（应用）定义。
- b) the HL7 encoding rules for converting an abstract message into a string of characters that comprises an actual message  
HL7 编码规则，用于将一抽象信息转换成一包含实际信息的字符串。
- c) the programming procedures required to exchange messages using the HL7 specifications  
使用 HL7 特定规则交换信息的编程过程。
- d) the anticipated relationship with lower level protocols  
处于低层协议的预期关系。
- e) certain message segments that are components of all messages  
特定信息段，为所有信息的组件。
- f) a single message, the acknowledgment message, that may be used unchanged in multiple applications.

一简单信息，亦称为确认信息，此信息在多应用软件中保持不变。

## 2.3 CONCEPTUAL APPROACH

### 基本概念

#### 2.3.1 Trigger events

##### 触发事件

The Standard is written from the assumption that an event in the real world of healthcare creates the need for data to flow among systems. The real-world event is called the trigger event. For example, the trigger event a patient is admitted may cause the need for data about that patient to be sent to a number of other systems. The trigger event, an observation (e.g., a CBC result) for a patient is available, may cause the need for that observation to be sent to a number of other systems. When the transfer of information is initiated by the application system that deals with the triggering event, the transaction is termed an unsolicited update.

此标准的编写是假定在现实生活中卫生服务事件产生系统间的数据交换需求。这一实际事件称为触发事件。比如：触发事件——一个病人被收入院，可能产生病人数据被传送到其它相关系统的需求。触发事件——一个病人的有效观测结果（如：CBC 结果），可能产生此观测结果被传送到其他系统的需求。当信息的传递是由处理触发事件的应用系统所引起时，此（数据）交换称为主动更新。

Note: No assumption is made about the design or architecture of the application system creating the unsolicited update. The scope of HL7 is restricted to the specification of messages between application systems and the events triggering them.

注：对于创建主动更新的（交换数据）的应用系统而言，其设计和构件无前提假设。HL7 只对应用系统和触发事件之间的特定信息进行规定。

HL7 allows the use of trigger events at several different levels of data granularity and inter-relationships. For example, most Patient Administration (ADT) trigger events concern single objects (such as an admit event, which creates a message that contains data about a single person and/or account). Other ADT trigger events are concerned with relationships between more than one object (e.g., the merge events, which specify patient or account merges). Some ADT trigger events pertain to a collection of objects that may have no significant inter-relationships (e.g., a record-oriented location-based query, whose response contains data about a collection of inpatients who are related only temporarily by local geography).

HL7 允许触发事件在多个不同的数据间隔和相互关系的层面上使用。例如，大多数病人管理（ADT）触发事件针对单一对象（如一个入院事件触发一个包含病人数据和/或账号的信息）。其它 ADT 触发事件针对一个以上对象的相互关系（如，合并事件，规定了病人或账号的合并）。另外一些 ADT 触发事件是针对一组没有明显内在联系的对象（如，一个纪录导向的局域查询，其包括一些住院病人的数据，这些数据只是暂时地放在一起）。

### 2.3.2 Acknowledgments: original mode

#### 确认：初始模式

When the unsolicited update is sent from one system to another, this acknowledgment mode specifies that it be acknowledged at the application level. The reasoning is that it is not sufficient to know that the underlying communications system guaranteed delivery of the message. It is also necessary to know that the receiving application processed the data successfully at a logical application level.

当主动更新请求从一个系统送到另外一个系统时，确认模式是在应用层上确认这一主动更新的。这样设置的原因是，不仅在基本的通信系统确保信息的传递，而且还需要知道接收端程序在逻辑应用层上成功地对数据进行了处理。

The acknowledgment may contain data of interest to the system that initiated the exchange. For example, if a patient care system has processed the trigger event a lab test is ordered for a patient, it may send an unsolicited update to a lab application identifying the patient, the test ordered, and various other information about the order. The ancillary system will acknowledge the order when it has processed it successfully. For some pairings of patient care and ancillary department systems the acknowledgment may also include the ancillary identification number that was assigned. (HL7 does not require Order Entry and Results Reporting applications to interface in this manner, but it supports those that do.)

确认模式用系统所感兴趣的数据来开始信息交流。例如，一个病人服务系统处理触发事件——病人预定一化验检查，系统将发送一个主动更新（请求）到化验室应用程序来确认病人，以及其他的预定信息。辅助系统将成功的处理有关检查预定信息。在一些病人服务及其辅助系统中，确认模式也包括系统分配的确认号。（HL7 并不要求预定登录和结果报告程序一定使用这一方式进行工作，但它支持这一方式）。

The HL7 Standard makes no assumptions about the ownership of data. It also makes no requirements of its own on the subsequent action of the recipient of data, nor does it make any assumption about the design or architecture of the receiving application system. The scope of HL7 is restricted to the specification of messages between application systems, and the events triggering them. HL7 does not explicitly support, but can be used with, systems that support store and forward and data broadcast facilities (see the HL7 Implementation Support Guide).

HL7 标准对数据的所有权不做任何假定。它不但自己对接受数据的一系列行为没有要求，而且也对数据接收应用系统的设计或建构不作任何规定。HL7 的规定范围仅局限于应用系统之间交流的特定信息，和相应的触发事件。HL7 没有明确的支持系统，但能应用于支持存储、转发、以及数据公布的系统。（见 HL7 应用支持指南）

The HL7 Standard makes no functional interpretation of the requirement that a system commit the data in a message to its database before acknowledging it. All that is required is that the receiving system accept responsibility for the data, providing the same integrity test that it would apply to data from any source. To continue the prior example, the ancillary system may acknowledge the order after placing it in an input queue, expecting to fully process the order into its database at a future time. The only assumption is that the input queue is maintained at the same level of integrity as the database.

HL7 要求一个系统在对信息确认之前把信息中的数据提交到它的数据库中，但对这一要求没有功能上的解释。所要求的是：接收系统对数据负责，并提供整体化测试以适用于任何来源的数据。我们继续以前述例子为例：辅助系统可以将预定请求放入一个输入排队序列中，以后再进行确认，并在将来全面处理数据库中预定信息。其仅有假定是：输入队列以如同数据库形式的保留，即保留在整体化的相同层中。

### 2.3.3 Acknowledgments: enhanced mode

#### 确认：增强模式

The HL7 acknowledgment paradigm has been extended to distinguish both accept and application acknowledgments, as well the conditions under which each is required. With a positive accept acknowledgment, the receiving system commits the message to safe storage in a manner that releases the sending system from the need to resend the message. After the message has been processed by the receiving system, an application acknowledgment may be used to return the resultant status to the sending system.

HL7 确认范例已经扩展到要区别接受确认和应用程序水平确认，以及各自所要求的条件。对于一正确的接受（信息）确认，接收系统会把信息提交给安全存储库，该方式能使发送系统免于重新发送信息。当信息已经被接受系统处理之后，应用程序水平确认将给（信息）发送系统返回处理结果状态。

### 2.3.4 Queries

#### 查询

Query documentation including messages, segments, special protocols, implementation considerations and examples have been moved to chapter 5. The unsolicited display messages were also moved because their message syntax is query-like in nature.

查询文档包括信息，信息段，特定协议，执行注意事项和例子（见第 5 章）。主动提供的显示信息也被转移，因为这些信息的语法本质上是与查询一致的。

## 2.4 COMMUNICATIONS ENVIRONMENT

### 通信环境

The HL7 Standard defines the messages as they are exchanged among application entities and the procedures used to exchange them. As such, it conceptually operates at the seventh level of the ISO model for Open System Interconnection (OSI). It is primarily concerned with the data content and interrelationship of messages and with communicating certain application-level error conditions.

HL7 标准是定义信息在应用程序实体中交换的信息和交换过程。正是这样，从概念上讲，它运行在 ISO 模式的第七层上。它基本上考虑信息的数据内容和信息间的相互关系，也考虑通讯中特定应用水准的出错情况。

Since the OSI protocols are not universally implemented, the HL7 Working Group is interested in providing standards that will be useful in the interim. It is also recognized that there is now, and will continue to be, interest in communicating health data among systems operating in

communications environments that provide a high level of functionality, but use protocols other than ISO OSI. The universe of environments of interest to HL7 includes, but is not restricted to:

既然 OSI 协议没有被广泛的实施, 所以 HL7 工作组有兴趣提供暂时标准。即在现在以及将来, 感兴趣于通信系统环境中的卫生数据的交流, 该系统功能性强, 但采用非 ISO OSI 的传输协议。HL7 兴趣领域包括以下内容, 但不局限于此。

- a) ad hoc environments that do not provide even basic transport reliability. Such environments consist of point-to-point RS-232 links, modems, and even LANs, if their connection to host computers is made via RS-232 communications links. Until OSI high level standards become truly prevalent, many healthcare interfaces will be implemented over such links. In such an environment, the HL7 Lower Level Protocols (LLP) may be used between systems to enhance the capabilities of the communications environment. The HL7 Lower Level Protocols are defined in the HL7 Implementation Guide, which is not an official part of the Standard.

特别地, 此环境不提供最基本的传输可靠性。如果他们与主机的联系是通过 RS-232 通信链接实现时, (通信) 环境由点对点的 RS-232 链接、调制解调器和甚至局域网组成。在 OSI 高层标准被广泛采用前, 许多卫生服务接口将实施于这些链接上。在这样的环境下, HL7 低层协议 (LLP) 将用于系统之间来加强环境交流的能力。HL7 低层协议的内容定义在 HL7 的应用指南中, 该应用指南并不是标准的官方部分。

- b) environments that support a robust transport level, but do not meet the high level requirements. This includes environments such as TCP/IP, DECNET, and SNA.

此环境提供一个强大的传输层, 但它仍不能满足高层的要求。此环境包括如 TCP/IP, DECNET, 和 SNA。

- c) ISO and proprietary networks that implement up to presentation and other high level services. IBM's SNA LU6.2 and SUN Microsystems's NFS are examples of complete proprietary networks.

ISO 以及目前还在使用的私人网络和其他高层服务 (系统)。IBM 的 SNA LU6.2 和 SUN 微系统的 NFS 是完全的私人网络范例。

- d) two or more applications running on the same physical and/or logical machine that are not tightly integrated. In these environments, the messaging capabilities may be provided by inter-process communications services (e.g., Pipes in a UNIX System).

未进行一体化的运行在同一物理和/或逻辑意义上的两个以上的应用系统。在这一环境下, 信载能力由内部处理服务器提供 (比如: UNIX 系统的 Pipes)

The HL7 Standard assumes that the communications environment will provide the following capabilities:

HL7 标准规定通讯环境提供以下功能:

- a) error free transmission. Applications can assume that they correctly received all of the transmitted bytes in the order in which they were sent. This implies that error checking is done at a lower level. However, sending applications may not assume that the message was actually received without receiving an acknowledgment message.

无错误传输。应用系统假定收到的传输比特是完全正确的, 且与发送的顺序一致。这表明检错工作在低层完成。然而, 发送端应用系统在没有收到确认信息之前并不认为信息被正确地接受。

- b) character conversion. If the two machines exchanging data use different representations of the same character set, the communications environment will convert the data from one representation to the other.

字符转换。如果交换数据的两台机器使用不同的字符集代码，通讯环境将会把一端的代码转化为另一种。

- c) message length. HL7 sets no limits on the maximum size of HL7 messages. The Standard assumes that the communications environment can transport messages of any length that might be necessary. In practice, sites may agree to place some upper bound on the size of messages and may use the message continuation protocol, described later in this chapter, for messages that exceed the upper limit.

信息长度。HL7 对其信息的最大长度没有明确的限制。此标准假定通讯环境能传输任意长度的信息。实际上，一些场合可能同意给信息长度规定上限，而对于超过上限的信息可以采用信息继续协议处理，这将在后面的章节中谈到。

Note: Just as HL7 makes no assumptions about the design or architecture of the application systems sending and receiving HL7 messages, it makes no assumptions about the communications environment beyond those listed above. In particular, aside from the above assumptions, the communications environment, including its architecture, design and implementation, is outside the scope of HL7.

注意：正如 HL7 并没有规定传送和接受 HL7 信息的应用系统的设计和结构一样，HL7 也没有其通信环境做硬性规定。实际上，除了上面的规定，其通信环境、以及通信环境的结构，设计和应用都不在 HL7 标准的范围之内。

## 2.5 HL7 MESSAGES

### HL7 信息

This section and Sections 2.6, “SEGMENTS,” through 2.10, “Use of escape sequences in text fields,” define the components of messages and provide the methodology for defining abstract messages that are used in later chapters. A message is the atomic unit of data transferred between systems. It is comprised of a group of segments in a defined sequence. Each message has a message type that defines its purpose. For example the ADT Message type is used to transmit portions of a patient’s Patient Administration (ADT) data from one system to another. A three-character code contained within each message identifies its type. These are listed in the Message Type list, Appendix A.

这一节和 2.4 节“信息段”到 2.10 节“文本字段中 escape 系列的使用”定义信息的组件并为以后章节提供信息定义的抽象框架和信息定义方法。一个信息是数据在系统之间交换的基本单元。它由顺序确定的一组片段组成。每一个信息有信息类型以定义该信息目的。例如，ADT 信息的类型是用来传输系统之间的病人管理数据。每一个信息使用三个字节的代码定义其信息类型。这些信息类型见附录 A。

The real-world event that initiates an exchange of messages is called a trigger event. (See Section 2.3.1, “Trigger events,” for a more detailed description of trigger events.) Appendix A contains the codes that represent all defined trigger events. These codes represent values such as A patient is admitted or An order event occurred. There is a one-to-many relationship between message types and trigger event codes. The same trigger event code may not be associated with more than one message type; however a message type may be associated with more than one trigger event.

引起信息交换的现实事件叫触发事件。（见第 2.1.1 节 “触发事件”，该节对触发事件有一个更详细的描述。）附录 A 包括所有已经定义的触发事件的代码。这些代码代表一定的确切含义，例如一个病人入院事件或一个预定事件发生。在信息类型和触发事件的代码之间存在着一对多的关系。同样的触发事件代码不能对应一个以上的信息类型，然而一个信息类型却可以对应多个触发事件。

All message types and trigger event codes beginning with the letter “Z” are reserved for locally-defined messages. No such codes will be defined within the HL7 Standard.

所有以字母“Z”开头的信息类型和触发事件都被保留为地方定义的信息。HL7 标准并不定义这样的代码。

## 2.6 SEGMENTS

### 信息段

A segment is a logical grouping of data fields. Segments of a message may be required or optional. They may occur only once in a message or they may be allowed to repeat. Each segment is given a name. For example, the ADT message may contain the following segments: Message Header (MSH), Event Type (EVN), Patient ID (PID), and Patient Visit (PV1).

一个信息段是数据字段的逻辑组。一个信息的信息段可以是必须的也可以是可选择的。该信息段可以在信息中只出现一次或者该信息段允许被重复。每一个信息段有一个确定的名字。例如，ADT 信息包括下面的信息：信息头（MSH），事件类型（EVN），病人标识符（PID），和病人访视。（PV1）。

Each segment is identified by a unique three-character code known as the Segment ID. Although the actual segments are defined in various chapters, the ID codes assigned to the various segments are listed in Appendix A.

每一个信息段用一个唯一的三个字母的代码来标识，该代码就是信息段的标识符（ID）。虽然实际的信息段将在以下不同的章节来定义，然而赋值于不同信息段的 ID 代码被列在附录 A 中。

All segment ID codes beginning with the letter Z are reserved for locally-defined messages. No such codes will be defined within the HL7 Standard.

所有以字母“Z”开头的信息段的 ID 代码被保存在地方定义的信息中。HL7 标准并不定义这些代码。

## 2.7 FIELDS

### 字段

Definition: A field is a string of characters.

定义：字段就是一串字符串。

HL7 does not care how systems actually store data within an application. When fields are transmitted, they are sent as character strings. Except where noted, HL7 data fields may take on the null value. Sending the null value, which is transmitted as two double quote marks (“”), is



different from omitting an optional data field. The difference appears when the contents of a message will be used to update a record in a database rather than create a new one. If no value is sent, (i.e., it is omitted) the old value should remain unchanged. If the null value is sent, the old value should be changed to null. (For further details, see Section 2.11, “Message construction rules,” – step 2d.)

HL7 标准并不在意系统怎样用应用程序来储存数据，当字段被传输时，它们将以字符串的形式来传输。除此之外要注意的是，HL7 数据字段有时会显示无效值。传输的无效值不同于一个忽略的可选择的数据字段，该无效值是以两个双重引用的标志来传输的。当一个信息的内容是用以更新数据库里的一个记录而不是创建一个新的记录时，差别将会显示出来。即如果没有传送任何值（例如，该值被忽略了），旧值将会保持不变。如果传送的是无效值，旧值将会变为无效。（详见第 2.11 节，“信息组建规则”-第 2d 步）

The various chapters of the Standard contain segment attribute tables. These tables list and describe the data fields in the segment and characteristics of their usage. A comprehensive data dictionary of all HL7 fields is provided in Appendix A. In defining a segment, the following information is specified about each field:

这个标准的不同章节包括描述信息段属性的表格。这些表格列出并且描述了在数据字段中的信息段，及其使用的特征。附录 A 中提供一个包括 HL7 字段的广泛的数据字典。在定义信息段的时候，下面列出了每一个字段的具体信息：

### 2.7.1 Position (sequence within the segment)

#### 位置（信息段中的次序）

Definition: Ordinal position of the data field within the segment. This number is used to refer to the data field in the text comments that follow the segment definition table.

定义：信息段中的数据字段的依次的位置。这个号码用于查阅原文注释中的数据字段，而该注释接在信息段定义表格的后面。

In the segment attribute tables this information is provided in the column labeled SEQ.

在描述信息段属性的表格中，这些信息在以 SEQ 为标志的专栏中。

### 2.7.2 Maximum length

#### 最大长度

Definition: Maximum number of characters that one occurrence of the data field may occupy.

In the segment attribute tables this information is in a column labeled LEN.

定义：数据字段能占据的最大的字节数。在描述信息段属性的表格中，这些信息在以 LEN 为标志的专栏中。

The maximum length is not of conceptual importance in the abstract message or the HL7 coding rules. The length of a field is normative, but can be changed on a site specific basis. It is calculated to include the component and subcomponent separators that are

defined below. Because the maximum length is that of a single occurrence, the repetition separator is not included in calculating the maximum length (See Section 2.7.5, “Repetition”). A composite data type may not have a maximum length less than the maximum length of its largest component data type (i.e., in PID-3, CX includes HD, which in turn includes an IS, ID, and ST).

在抽象信息或 HL7 代码标准中，最大长度在概念上是不重要的。一个字段的长度是标准的，但是在一个特定的场所可以改变。字段的长度包括下面将要定义的组件和子组件分隔符。由于最大的长度常个别出现，因此在计算最大长度时，重复分隔符不包括在内（见第 2.5.5 节“重复”）。合成的数据类型的最长的长度不能比最大构成数据类型的最大长度少。（例如，在 PID-3 中，CX 包括 HD，并依次包括 IS，ID 和 ST。）

The following conventions have been applied:

下面是将被应用的协定：

- 1) The maximum length of the data field shall be expressed as a number.

数据字段的最大长度应以一数字来表达。

- 2) If the maximum length needs to convey the notion of a Very Large Number, the number 65536 should be displayed to alert the user. This convention takes the place of the practice in versions prior to 2.4 of abbreviating this expression as 64K.

如果最大长度需要传达一个很大的数字概念，则用数字 65536 的显示来警告使用者。这个协定代替了在早于 2.4 的版本中的 64K 的简略表达。

- 3) If the maximum length cannot be definitively expressed because the data type for the field is variable, the symbolic number 99999 should be displayed. This convention takes the place of the practice in versions prior to 2.4 of displaying the notation “varies” or some other non-numeric description.

如果由于数据类型的多样性，最大长度不能被确定的表达，将显示象征性的数字 99999。这个协定代替了在早于 2.4 的版本中显示“多样”的注解或一些其他的非数字的描述。

The following maximum field lengths are specified:

下面列出的是最大字段长度：

Maximum Field Lengths 最大字段长度

Field Type 字段类型	Data Type 数据类型	Length 长度
Coded fields: 编码字段	CE	250
	CX	250
	CNE	250
	CWE	250
	CK	250

	CN	250
Phone number field:  电话数字字 段	XTN	250
Name fields:  名字字段	XCN	250
	XPN	250
	XON	250
	PPN	250
Address fields:  地址字段	XAD	250

### 2.7.3 Data type

#### 数据类型

Definition: Restrictions on the contents of the data field.

定义：在数据字段中内容的限制。

In the segment attribute tables this information is provided in the column labeled DT. If the data type of the field is variable, the notation “varies” will be displayed.

在描述信息段属性的表格中，这些信息显示在以 DT 为标志的专栏中。如果字段的数据类型是多样的，将显示注释“多样”。

There are a number of data types defined by HL7. These are explained in Section 2.9, “Data types.”

有许多被 HL7 所定义的数据类型。将在第 2.9 节“数据类型”中进行解释。

### 2.7.4 Optionality

#### 可选性

Definition: Whether the field is required, optional, or conditional in a segment.

定义：一个信息段中的字段是必须的，可选择的，还是有条件的。

In the segment attribute tables this information is provided in the column labeled OPT.

在描述信息段属性的表格中，这些信息将显示在以 OPT 为标志的专栏中。

The designations for optionality are:

选择性的名称如下：

R - Required

必须的

O - Optional

可选择的

C - 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 this field.

在触发事件或其他字段中是有条件的。紧接着描述信息段属性的表格的字段定义应详述此字段的条件性运算法则。

X - not used with this trigger event

不用于这个触发事件。

B - 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.

为了与 HL7 以前的版本进行兼容而保留。紧接着描述信息段属性的表格的字段定义应指出在以前版本中，此字段的可选择性。

Note: For Versions 2.3 and higher: the optionality of fields should be explicitly documented in the segment field definitions that follow each segment definition table; if the optionality of fields within a segment changes depending on the trigger event, that optionality should also be explicitly documented. For fields defined by HL7 data types containing multiple components or subcomponents, the optionality of a given component or subcomponent must be specified in the detailed field definitions that follow the formal segment attribute tables. (See also Sections 2.8, “MESSAGE DELIMITERS,” 2.9, “Data types,” and 2.11, “Message construction rules”)

注意：对于 2.3 版本以及更高的版本。字段的可选择性应清楚的记录在紧接每一个信息段定义表格的信息段字段定义中。如果在信息段中的字段的的选择性根据触发事件而改变，则选择性应被清楚的记录。

对于包括多个组件或子组件且被 HL7 数据类型所定义的字段，一个给定的组件或子组件的选择性应具体列在详细的字段定义中，而该字段定义紧接着描述信息段属性的表格。（见 2.8 节，“信息分隔”，2.9 节，“数据类型”以及 2.11 节，“信息组建规则”）

### 2.7.5 Repetition

#### 重复性

Definition: Whether the field may repeat.

定义：字段是否可以重复

In the segment attribute tables this information is provided in the column labeled RP/#.

在描述信息段属性的表格中，这些信息在以 RP/#为标志的列中。

The designations for Repetition are:

重复性的名称如下：

N or blank	-	no repetition
N 或空格		不可重复
Y	-	the field may repeat an indefinite or site-determined number of times
		字段可重复的次数不确定或由地点决定。
(integer)	-	the field may repeat up to the number of times specified by the integer
整数		字段可重复的次数为一特定整数。

Each occurrence may contain the number of characters specified by the field's maximum length. (See Section 2.7.2, "Maximum length.")

每一次出现都可包括字段指定的最大长度的字节数。（见第 2.5.2 节“最大长度”）

Usage Note: For improved readability some technical committees opt to leave the Repetition fields blank to indicate that the field may NOT repeat. A blank may NOT be construed to mean that the field may optionally repeat.

用法注意：为了提高可读性，一些技术委员可能会将重复字段设置为空白点以说明字段不可重复。空白不能被解释为字段可以被选择性的重复。

### 2.7.6 Table

#### 表格

Definition: The table attribute of the data field definition specifies the HL7 identifier for a set of coded values.

定义：数据字段定义的表格属性为一系列代码值指定 HL7 标识符。

In the segment attribute tables, the table identifier is provided in the column labeled TBL#. An entry in the table number column means that the table name and the element name are equivalent. If this attribute is not valued or blank, there is not a table of values defined for the field.

在信息段属性表格中，表格标识符显示在以 TBL#为标志的专栏中。在表格数据栏的登录将意味着表格的名字和元素的名字是相同的。如果这个属性没有被赋值或是空白的，那么将没有一个为此字段定义的表格值。

A number of conventions have been applied to this attribute of the data field definition.

有许多协定用于数据字段定义的属性中。

1. If more than one table is applicable, the format xxxx/yyyy will be used to so designate multiple tables. Details on multiple tables will be specified in field notes.

如果可以应用一个以上的表格，那么 xxxx/yyyy 格式将用于指定多重表格。多重表格的详细情况将列在字段注意事项中。

2. If the field is of data type ID or IS a table number will be allocated even if, in the case of IS, there may be a notation "No Suggested values"

如果字段是数据类型 ID 或 IS 的话，一个表格数字将被分配。如果字段是数据类型 IS 的话，无建议值时也将出现一个注释“没有建议值”。

3. If the field is of data type CE and one or more externally or locally defined tables may be used, the symbolic number 9999 will appear in the column. This is to indicate that table values are used, but no HL7/User Defined table can be allocated. The narrative may constrain which external tables can be used.

如果字段是数据类型 CE，并且一个或多个外部或局部的定义表格被使用，则象征性的数字 9999 将出现在专栏里。这说明表格的值被使用了，但是不分配 HL7/User 定义表格。这种叙述将限制外部表格使用的范围。

4. Tables embedded in field components or subcomponents will not be cited in the attribute column. The exception to this convention are the CE, CNE, CWE and CF data types where the table is dependent on the field context. This also applies to the CM data type if it contains embedded tables.

字段的组件和子组件中的表格将不在属性栏中引用。此协定的例外形式是 CE，CNE，CWE 和 CF 数据类型，表格是依赖字段环境的。这也适用于 CM 数据类型，如果 CM 数据类型也包括镶嵌表格的话。

- a) Data types having embedded tables are identified in *HL7 Table 440 -Data types*. These tables are defined in the data type section. They may, however, be constrained in the field note section. The field note definition supercedes the definition in the data type section.

镶嵌在表格中的数据类型在 HL7 表格 440-数据类型中被识别。这些表格在数据类型章节被定义。然而，他们也被限制在字段注意章节。字段注意章节的定义代替了数据类型章节的定义。

- b) Tables embedded in fields with a data type of CE, CF CNE, CM or CWE are only defined in the field notes section.

镶嵌在字段中并且拥有数据类型包括 CE, CF, CNE, CM 或 CWE 的表格仅仅定义在字段注意章节。

HL7 defines table values in 3 ways: HL7 defined, user-defined and externally defined

HL7 用三种方法定义表格值：HL7 定义的，用户定义的和外部定义的。

User-defined Tables: A user-defined table is a set of values that are locally or site defined. This accommodates certain fields, like *PV1-3 - Assigned patient location*, that will have values that vary from institution to institution. Even though these tables are not defined in the Standard, they are given a user-defined table number to facilitate implementations. HL7 sometimes publishes suggested values that a site may use as a starter set (e.g., *table 0001- Sex*). The IS data type is often used to encode values for these tables. Note that some of these tables (e.g., *table - 0302 Point of care*) may reference common master files.

用户定义的表格：用户定义的表格是一系列局部的或据不同地点定义的值。这种方法能容纳确定的字段，象 PV1-3-赋值的病人场所，它的赋值在不同的情况下是不同的。即使这些表格在标准中没有定义，它们也将被给予一个用户定义的表格数字以便方便实施。HL7 有时公布假定值，而某一地点可以把该假定值作为一个启动钮（例如，表格—001 性）。IS 数据类型常用于编码这些表格的值。注意这些表格（例如，表格-0302 注意点）中的一些可能参考共同的主文件。

There are some user-defined tables that contain values that might be standardized across institutions but for which no applicable official standard exists. For these a set of suggested values may be listed in Appendix A. These suggested values appear in the text in a standard box format (e.g., *HL7 Table 0062 - Event reason* in Section 3.4.1.4, “Event reason code”). It is recommended that these values be used where applicable within an institution and serve as a basis for extensions as required. These values may, however, be redefined locally. The appropriate functional committee within HL7 solicits suggestions for additional values from institutions that are applying the Standard.

有许多用户定义的表格包括应该通过协会标准化的值，但是这些协会并没有适当的正式标准。因此有一系列假定的值列在附录 A 中。这些假定值以一个标准箱格式出现在文章中。（例如，HL7 表 0062-在 3.4.1.4 章节的事件推论“事件推论代码”）。有人建议，这些值应该适当的应用在协会中，并且作为一个进一步延伸的基础。然而，这些值或许会被局部定义。HL7 内部适当的功能委员会希望协会能给出一些建议关于适用于标准的例外的值。

HL7 Tables: An HL7 table is a set of values defined and published by HL7. They are a part of the HL7 Standard because they affect the interpretation of the messages that contain them. These values may not be redefined locally; however, the table itself may be extended to accommodate locally defined values. This is particularly applicable in the case of *HL7 table 0003 - Event Type*. The ID data type is most often used to encode values for HL7 tables. The values are listed in Appendix A. These HL7 tables also appear in the text in a standard box format (e.g., *HL7 table 0003 Event Type*)

HL7 表格：一个 HL7 表格是一系列由 HL7 所定义并公布的值。由于该表格影响容纳它们的信息的解释，因此它们也作为 HL7 标准的一部分。虽然这些值不能被局部重新定义，但是表格本身能被扩展，以至于能容纳局部定义的值。这尤其适用于 0003-事件类型的 HL7 表格。ID 数据类型最常用于编码 HL7 表格的值。该值列在附录 A 中。HL7 表格也出现在标准箱格式的文本中（例如，HL7 表格的 0003 事件类型）

HL7 External Tables: An external table is a set of coded values defined and published by another standards organization. External tables are used to populate fields like *FTI-19-Diagnosis Code - FTI*. Another example, the encoding of clinical observations using LOINC codes. The CE data type is used to represent values for these fields.

HL7 外部表格：一个外部表格是由另外一个标准组织定义并公布的一系列代码值。外部表格用于组装如 FTI-19 诊断代码-FTI。另外一个例子是用 LOINC 代码进行的观测资料的编码。CE 数据类型也用于代表这些字段的值。

Table numbers 9000 and above are reserved for externally-defined tables published by HL7. Such tables arise from applications where the concepts and possibly the codes are established by external agencies due to regulatory requirements or agreements between HL7 and other Standards Developing Organizations. They are published by HL7 on behalf of other organizations. Their contents are not subject to approval by HL7 ballot. Such tables will be published with HL7 Standards. However, they may be updated more frequently than HL7 Standards. HL7 will provide free downloads of the most recent versions of these tables via the Internet without requiring membership in HL7.

表格代码 9000 及以上值保存在 HL7 所公布的外部定义的表格中。这些表格来源于应用系统，而在这些应用系统中概念和或代码是由外部中介所制定的，并且外部中介制定代码是需要 HL7 和其他制定标准的组织之间恰当的要求或同意。这些表格都被代表其他组织的 HL7 所公布，他们的内容不易被 HL7 投票通过，这些表格将被 HL7 标准所公布。然而，这些表格也许比 HL7 标准更经常更新，HL7 将通过 internet 提供这些表格最新版本的自由下载，而且不需要必须是 HL7 的成员。

### 2.7.7 ID number

#### ID 代码

Small integer that uniquely identifies the data item throughout the Standard. In the segment definition this information is provided in the column labeled ITEM #.

代码为一小整数，是唯一贯穿整个标准的数据项目标识。在信息段中定义中，以 ITEM#为标志的专栏提供这个信息。

### 2.7.8 Name

#### 命名

Descriptive name for the data item. In the segment attribute tables this information is provided in the column labeled ELEMENT NAME.

数据项目的描述性命名。在信息段属性的表格中，这些信息在以**元素命名**为标志的专栏中被提供。

When the same name is used in more than one segment, it must have the same data type and semantic meaning in each segment as well as the same ID number. To deal with any ambiguities arising from this convention, whenever a field is referenced herein, the segment name and position must always be included.



当同样的命名用于一个以上的信息段时，在同一信息段中必须有同样的数据类型和涵义以及同样的 ID 代码。为了处理由于此协定造成的混淆，不论一个字段在这里何时被提到，信息段的命名和位置必须总是包括在内。

## 2.8 MESSAGE DELIMITERS

### 信息分隔符

In constructing a message, certain special characters are used. They are the segment terminator, the field separator, the component separator, subcomponent separator, repetition separator, and escape character. The segment terminator is always a carriage return (in ASCII, a hex 0D). The other delimiters are defined in the MSH segment, with the field delimiter in the 4th character position, and the other delimiters occurring as in the field called Encoding Characters, which is the first field after the segment ID. The delimiter values used in the MSH segment are the delimiter values used throughout the entire message. In the absence of other considerations, HL7 recommends the suggested values found in Figure 2-1 delimiter values.

在构造一个信息的过程中，需要用到确定的特殊字符。这些特使字符是信息段的中止符、字段分隔符、组件分隔符、下一组件分隔符、重复分隔符和 escape 分隔符。信息段的中止符是一个回车键（在 ASCII 中是一个十六进制 0D）。其它的分隔符被定义在 MSH 信息段中，同时 MSH 信息段中也包括占四个字节位置的字段分隔符，以及在称为编码字符的字段中的其它分隔符，这些分隔符是信息段 ID 之后的第一个字段。用在 MSH 信息段中的分隔符值是用于整个信息中的分隔符。鉴于其它考虑，HL7 建议在图 2-1 分隔符值中的假定值。

At any given site, the subset of the possible delimiters may be limited by negotiations between applications. This implies that the receiving applications will use the agreed upon delimiters, as they appear in the Message Header segment (MSH), to parse the message.

在一个给定的场所，可能的分隔符的子组件会被应用程序之间的流通所限制。这意味着接收应用程序将用已协定的分隔符来解析信息，正如他们出现在信息头信息段中一样。

Figure 2-1. Delimiter values (分隔符值)

Delimiter 分隔符	Suggested Value 假定值	Encoding Character Position 编码字符位置	Usage 用法
Segment Terminator 信息段中止符	<cr> (hex 0D) 回车符 十六进制 0D	-	Terminates a segment record. This value cannot be changed by implementors. 终止一个信息段记录，这个值不能随应用场合而改变。
Field Separator 字段分隔符		-	Separates two adjacent data fields within a segment. It also separates the segment ID from the first data field in each segment. 用于信息段中分隔两个相邻的数据字段。也可以在同一信息段中分隔第一个数据字段信息段 ID 号。

Component Separator 组件分隔符	^	1	Separates adjacent components of data fields where allowed.  在允许的地方，分隔数据字段相邻的组件。
Subcomponent Separator 子组件分隔符	&	4	Separates adjacent subcomponents of data fields where allowed. If there are no subcomponents, this character may be omitted.  在允许的地方，分隔数据字段中相邻的子组件。如果没有子组件，该字符将被忽略。
Repetition Separator 重复分隔符	~	2	Separates multiple occurrences of a field where allowed.  在允许的地方，分隔多次出现的字段。
Escape Character Escape 字符	\	3	Escape character for use with any field represented by an ST, TX or FT data type, or for use with the data (fourth) component of the ED data type. If no escape characters are used in a message, this character may be omitted. However, it must be present if subcomponents are used in the message.  Escape 字符用在以 ST, TXF 或 FT 数据类型为代表的字段中，或用于 ED 数据类型的数据（第四）组件中。如果信息中没有使用 escape 字符，该字符将被忽略。然而，如果子组件用在信息中，该字符必须存在。

## 2.9 DATA TYPES

### 数据类型

The data types in this section are listed in alphabetical order.

这一节的数据类型以字母顺序列出。

Note: For data types which contain multiple components or subcomponents, the examples given in this section do not specify the optionality of the component or subcomponents. This must be specified in the field definitions that follow the formal segment attribute tables.

注意：对于包括多种组件和子组件的数据类型。这一节给出的例子并没有具体阐述组件或子组件的可选择性。这种可选择性必须在紧接正式信息段属性表格之后的字段定义中具体阐述。

Except for the TS data type and the maximum or minimum lengths for several other data types (CE, PN, TX, FT), the field length of HL7 attributes is specified in the segment attribute tables, and any specific length of the components or subcomponents of those attributes must be specified in

the field definitions that follow the formal segment attribute tables. In general, HL7 does not specify the lengths of components and/or subcomponents.

除了 TS 数据类型和其它许多数据类型（CE, PN, TX, FT）最大或最小的长度之外，HL7 属性的字段长度都将在信息段属性表格中具体阐述，并且具有这些属性的组件或子组件的任何特定长度也必须在字段定义中具体阐述，字段定义是紧接着正式信息段属性表格的。总之，HL7 不能具体阐述组件和/或子组件的长度。

(The data type examples in this Standard are given using the standard HL7 encoding rules, with the delimiter values from Figure 2-1 of Section 2.8, “MESSAGE DELIMITERS.” Although only one set of encoding rules is defined as a standard in HL7 Version 2.4, other encoding rules are possible (but since they are non-standard, they may only be used by a site-specific agreement).

In certain data type definitions, square brackets, “[” and “]”, are used to specify optional parts of a data type (or of a data type component or subcomponent).

（在此标准中的数据类型的例子是用 HL7 编码标准来给出的，同时使用在 2.6 节图 2-1 的分隔符值，“信息分隔符”。虽然 HL7 的 2.4 版本标准中只有一个系列的编码规则被定义，但是其它的编码规则也被应用（但是既然它们是非标准的，它们仅仅能被具体场所的协定所使用。）。在确定的数据类型定义中，方括号，“[”和“]”，用于详述一个数据类型（或一个数据类型的组件或子组件）的可选择部分。

The following table lists the data types by category. An alpha listing of the data types is also available. See [HL7 Table 0440](#)

下表分类列出数据类型。该分类是按字母顺序的。见 HL7 表格 0440。

Figure 2-2. HL7 data types by category

图 2-2 HL7 数据类型分类

Data Type Category/ Data type 数据类型分类 / 数据类型	Data Type Name 数据类型命名	LEN 长度	HL7 Section Reference H L 7 章节指南	Notes/Format 注意事项 / 格式
Alphanumeric 文字及数字				
ST	String 字符串	199	<b>2.9.43</b>	
TX	Text data 文本数据	65536	<b>2.9.48</b>	
FT	Formatted text 格式化文本	65536	<b>2.9.20</b>	
SRT	Sort order 排序次序		<b>2.9.42</b>	<sort-by field/parameter (varies)> ^ <sequencing (ID)>
Numerical 数字				

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Data Type Category/ Data type 数据类型分类 / 数据类型	Data Type Name 数据类型命名	LEN 长度	HL7 Section Reference H L 7 章节指南	Notes/Format 注意事项 / 格式
CQ	Composite quantity with units 包括单位的合成数量		<b>2.9.10</b>	<quantity (NM)> ^ <units (CE)>
MO	Money 钱		<b>2.9.26</b>	<quantity (NM)> ^ <denomination (ID)>
NM	Numeric 数字型		<b>2.9.28</b>	
SI	Sequence ID 次序标识符		<b>2.9.40</b>	
SN	Structured numeric 结构数字		<b>2.9.41</b>	<comparator (ST)> ^ <num1 (NM)> ^ <separator/suffix (ST)> ^ <num2 (NM)>
Identifier 标识符				
ID	Coded values for HL7 tables H L 7 表格的代码值		<b>2.9.22</b>	
IS	Coded value for user-defined tables 用户定义表格的代码值		<b>2.9.23</b>	
VID	Version identifier 版本标识符		<b>2.9.50</b>	<version ID (ID)> ^ <internationalization code (CE)> ^ <international version ID (CE)>
HD	Hierarchic designator 等级指示符		<b>2.9.21</b>	<namespace ID (IS)> ^ <universal ID (ST)> ^ <universal ID type (ID)>
EI	Entity identifier 实体标识符		<b>2.9.17</b>	<entity identifier (ST)> ^ <namespace ID (IS)> ^ <universal ID (ST)> ^ <universal ID type (ID)>
RP	Reference pointer 参考指示符		<b>2.9.37</b>	<pointer (ST) > ^ < application ID (HD)> ^ <type of data (ID)> ^ <subtype (ID)>
PL	Person location		<b>2.9.29</b>	<point of care (IS) > ^ <room (IS) > ^ <bed (IS)> ^ <facility

Data Type Category/ Data type 数据类型分类 / 数据类型	Data Type Name 数据类型命名	LEN 长度	HL7 Section Reference H L 7 章节指南	Notes/Format 注意事项 / 格式
	个人地点			(HD)> ^ < location status (IS )> ^ <person location type (IS)> ^ <building (IS )> ^ <floor (IS )> ^ <location description (ST)>
PT	Processing type 处理类型		<b>2. 9. 32</b>	<processing ID (ID)> ^ <processing mode (ID)>
Date/Time 日期 / 时间				
DT	Date 日期		<b>2. 9. 15</b>	YYYY[MM[DD]]
TM	Time 时间		<b>2. 9. 44</b>	HH[MM[SS[. S[S[S[S]]]]]] [+/-ZZZZ]
TS	Time stamp 时间标志		<b>2. 9. 47</b>	YYYY[MM[DD][HHMM[SS[. S[S[S[S]]]]]]] [+/-ZZZZ] ^ <degree of precision>
Code Values 代码值				
CE	Coded element 代码元素	250	<b>2. 9. 3</b>	<identifier (ST)> ^ <text (ST)> ^ <name of coding system (IS)> ^ <alternate identifier (ST)> ^ <alternate text (ST)> ^ <name of alternate coding system (IS)>
CNE	Coded with no exceptions 无例外的代码	250	<b>2. 9. 8</b>	<identifier (ST)> ^ <text (ST)> ^ <name of coding system (IS)> ^ <alternate identifier (ST)> ^ <alternate text (ST)> ^ <name of alternate coding system (IS)> ^ <coding system version ID (ST)> ^ alternate coding system version ID (ST)> ^ <original text (ST) >
CWE	Coded with exceptions 有例外的代码	250	<b>2. 9. 11</b>	<identifier (ST)> ^ <text (ST)> ^ <name of coding system (IS)> ^ <alternate identifier (ST)> ^ <alternate text (ST)> ^ <name of alternate coding system (IS)> ^ <coding system version ID (ST)> ^ alternate coding system version ID (ST)> ^ <original text (ST) >
CF	Coded element with formatted values 有格式化值的代码 元素		<b>2. 9. 4</b>	<identifier (ID)> ^ <formatted text (FT)> ^ <name of coding system (IS)> ^ <alternate identifier (ID)> ^ <alternate formatted text (FT)> ^ <name of alternate coding system

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Data Type Category/ Data type 数据类型分类 / 数据类型	Data Type Name 数据类型命名	LEN 长度	HL7 Section Reference H L 7 章节指南	Notes/Format 注意事项 / 格式
				(IS)>
CK	Composite ID with check digit 有效验数位的合成标识符	250	<b>2.9.5</b>	<ID number (NM)> ^ <check digit (NM)> ^ <code identifying the check digit scheme employed (ID)> ^ < assigning authority (HD)>
CN	Composite ID number and name 合成代码的号码和命名	250	<b>2.9.7</b>	<ID number (ST)> ^ <family name (FN)> ^ <given name (ST)> ^ < second and further given names or initials thereof (ST)> ^ <suffix (e.g., JR or III) (ST)> ^ <prefix (e.g., DR) (ST)> ^ <degree (e.g., MD) (IS)> ^ <source table (IS)> ^ <assigning authority (HD)>
CX	Extended composite ID with check digit 有效验数位的扩展合成代码	250	<b>2.9.12</b>	<ID (ST)> ^ <check digit (ST)> ^ <code identifying the check digit scheme employed (ID)> ^ < assigning authority (HD)> ^ <identifier type code (ID)> ^ < assigning facility (HD)> ^ <effective date (DT)> ^ <expiration date (DT)>
XCN	Extended composite ID number and name 扩展合成代码的号码和命名	250	<b>2.9.52</b>	In Version 2.3 and later, use instead of the CN data type. <ID number (ST)> ^ <family name (FN)> ^ <given name (ST)> ^ <second and further given names or initials thereof (ST)> ^ <suffix (e.g., JR or III) (ST)> ^ <prefix (e.g., DR) (ST)> ^ <degree (e.g., MD) (IS)> ^ <source table (IS)> ^ <assigning authority (HD)> ^ <name type code (ID)> ^ <identifier check digit (ST)> ^ <code identifying the check digit scheme employed (ID)> ^ <identifier type code (IS)> ^ <assigning facility (HD)> ^ <name representation code (ID)> ^ <name context (CE)> ^ <name validity range (DR)> ^ < name assembly order (ID)>
Generic 种类				
CM	Composite 合成物		<b>2.9.6</b>	No new CM' s are allowed after HL7 Version 2.2. <i>The CM data type is maintained strictly for backward compatibility and may not be used</i>

Data Type Category/ Data type 数据类型分类 / 数据类型	Data Type Name 数据类型命名	LEN 长度	HL7 Section Reference H L 7 章节指南	Notes/Format 注意事项 / 格式
				<i>for the definition of new fields.</i>
Demographics 人口统计学				
AD	Address 地址		2.9.1	<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)>
FN	Family name 姓		2.9.19	<surname (ST)> ^ <own surname prefix (ST)> ^ <own surname (ST)> ^ <surname prefix from partner/spouse (ST)> ^ <surname from partner/spouse (ST)> Note: Appears ONLY in the PN and other PN-containing data types (PPN, XCN, XPN).
PN	Person name 名		2.9.30	<family name (FN)> ^ <given name (ST) ^ < second and further given names or initials thereof (ST)> ^ <suffix (e.g., JR or III) (ST)> ^ <prefix (e.g., DR) (ST)> ^ <degree (e.g., MD) (IS)>
SAD	Street Address 街道地址		2.9.38	<street or mailing address (ST)> ^ <street name (ST)> ^ <dwelling number (ST)> Note: Appears ONLY in the XAD data type.
TN	Telephone number 电话号码		2.9.45	[NN] [(999)]999-9999[X99999][B99999][C any text]
XAD	Extended address 长期地址	250	2.9.51	In Version 2.3 and later, replaces the AD data type. <street address (SAD)> ^ <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)> ^ <address validity range (DR)>
XPN	Extended person	250	2.9.54	In Version 2.3, replaces the PN

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Data Type Category/ Data type 数据类型分类 / 数据类型	Data Type Name 数据类型命名	LEN 长度	HL7 Section Reference H L 7 章节指南	Notes/Format 注意事项 / 格式
	name 别名			data type. <family name (FN)> ^ <given name (ST)> ^ <second and further given names or initials thereof (ST)> ^ <suffix (e.g., JR or III) (ST)> ^ <prefix (e.g., DR) (ST)> ^ <degree (e.g., MD) (IS)> ^ <name type code (ID)> ^ <name representation code (ID)> ^ <name context (CE)> ^ <name validity range (DR)> ^ <name assembly order (ID)>
XON	Extended composite name and ID number for organizations 组织的扩展复合名和标识符号码	250	2.9.53	<organization name (ST)> ^ <organization name type code (IS)> ^ <ID number (NM)> ^ <check digit (NM)> ^ <code identifying the check digit scheme employed (ID)> ^ <assigning authority (HD)> ^ <identifier type code (IS)> ^ <assigning facility ID (HD)> ^ <name representation code (ID)>
XTN	Extended telecommunications number 长期电信号码	250	2.9.55	In Version 2.3 and later, replaces the TN data type. [NNN] [(999)]999-9999 [X999999] [B999999] [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)>
Specialty/Chapter Specific 专业 /				
Waveform 波形				
CD	Channel definition 信号定义		2.9.2	For waveform data only, see Chapter 7, Section 7.16.2. <channel identifier (CM)> ^ <waveform source (CM)> ^ <channel sensitivity/units (CM)> ^ <channel calibration parameters (CM)> ^ <sampling frequency (NM)> ^ <minimum/maximum data values (CM)>



Data Type Category/ Data type 数据类型分类 / 数据类型	Data Type Name 数据类型命名	LEN 长度	HL7 Section Reference H L 7 章节指南	Notes/Format 注意事项 / 格式
MA	Multiplexed array 多元的排列		<b>2.9.25</b>	For waveform data only, see Chapter 7, Section 7.15.2. <sample 1 from channel 1 (NM)> ^ <sample 1 from channel 2 (NM)> ^ <sample 1 from channel 3 (NM)> ... ^ <sample 2 from channel 1 (NM)> ^ <sample 2 from channel 2 (NM)> ^ <sample 2 from channel 3 (NM)> ... ^
NA	Numeric array 数字排列		<b>2.9.27</b>	For waveform data only, see Chapter 7, Section 7.15.1. <value1 (NM)> ^ <value2 (NM)> ^ <value3 (NM)> ^ <value4 (NM)> ^ ...
ED	Encapsulated data 压缩数据		<b>2.9.16</b>	Supports ASCII MIME-encoding of binary data. <source application (HD)> ^ <type of data (ID)> ^ <data subtype (ID)> ^ <encoding (ID)> ^ <data (ST)>
Price Data 价格数据				
CP	Composite price 合成价格		<b>2.9.9</b>	In Version 2.3, replaces the M0 data type. <price (M0)> ^ <price type (ID)> ^ <from value (NM)> ^ <to value (NM)> ^ <range units (CE)> ^ <range type (ID)>
Patient Administration /Financial Information 病人管理/金融信息				
FC	Financial class 金融种类		<b>2.9.18</b>	<financial class (IS)> ^ <effective date (TS)>
Extended Queries 长期查询				
QSC	Query selection criteria 查询选择标准		<b>2.9.34</b>	<segment field name (ST)> ^ <relational operator (ID)> ^ <value (ST)> ^ <relational conjunction (ID)>
QIP	Query input parameter list 查询输入参数列表		<b>2.9.33</b>	<segment field name (ST)> ^ <value1 (ST) & value2 (ST) & value3 (ST) ...>

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Data Type Category/ Data type 数据类型分类 / 数据类型	Data Type Name 数据类型命名	LEN 长度	HL7 Section Reference H L 7 章节指南	Notes/Format 注意事项 / 格式
RCD	Row column definition 行定义		<b>2.9.35</b>	<segment field name (ST)> ^ <HL7 data type (ID)> ^ <maximum column width (NM)>
Master Files 主文件				
DLN	Driver' s license number 驾驶执照号码		<b>2.9.13</b>	<license number (ST)> ^ <issuing state, province, country (IS)> ^ <expiration date (DT)>
JCC	Job code/class 工作代码/类		<b>2.9.24</b>	<job code (IS)> ^ <job class (IS)>
VH	Visiting hours		<b>2.9.49</b>	<start day range (ID)> ^ <end day range (ID)> ^ <start hour range (TM)> ^ <end hour range (TM)>
Medical Records/Information Management 医学记录/信息管理				
PPN	Performing person time stamp 执行的个人时间标志	250	<b>2.9.31</b>	<ID number (ST)> ^ <family name (FN)> ^ <given name (ST) ^ <second and further given names or initials thereof (ST)> ^ <suffix (e.g., JR or III) (ST)> ^ <prefix (e.g., DR) (ST)> ^ <degree (e.g., MD) (IS)> ^ <source table (IS)> ^ <assigning authority (HD)> ^ <name type code(ID)> ^ <identifier check digit (ST)> ^ <code identifying the check digit scheme employed (ID)> ^ <identifier type code (IS)> ^ <assigning facility (HD)> ^ <date/time action performed (TS)> ^ <name representation code (ID)> ^ <name context (CE)> ^ <name validity range (DR)> ^ <name assembly order (ID)>
Time Series: 时间系列				
DR	Date/time range 日期/时间范围 错误! 未定义书签。		<b>2.9.14</b>	<range start date/time (TS)> ^ <range end date/time (TS)>

Data Type Category/ Data type 数据类型分类 / 数据类型	Data Type Name 数据类型命名	LEN 长度	HL7 Section Reference H L 7 章节指南	Notes/Format 注意事项 / 格式
RI	Repeat interval 重复间隔		<b>2.9.36</b>	Scheduling Chapter Only: <repeat pattern (IS)> ^ <explicit time interval (ST)>
SCV	Scheduling class value pair 时序安排分类值对 <b>错误！未定义书签。</b>		<b>2.9.39</b>	Scheduling Chapter Only: <parameter class (IS)> ^ <parameter value (ST)>
TQ	Timing/quantity 时间/数量		<b>2.9.46</b>	For timing/quantity specifications for orders, see Chapter 4, Section 4.3. <quantity (CQ)> ^ <interval (*)> ^ <duration (*)> ^ <start date/time (TS)> ^ <end date/time (TS)> ^ <priority (ST)> ^ <condition (ST)> ^ <text (TX)> ^ <conjunction (ID)> ^ <order sequencing (*)> ^ <occurrence duration (CE)> ^ <total occurrences (NM)>

- for subcomponents of these elements please refer to the definition in the text.
- 关于这些组件的子组件参考本章的定义。

### 2.9.1 AD - address

#### AD—地址

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)>

组件:

Note: Replaced by the XAD data type as of v 2.3.

注意：在 2.3 版本中为 XAD 数据类型所代替。

Example:

例如:

|10 ASH LN^#3^LIMA^OH^48132 |

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### 2.1.1.1 Street address (ST)

#### 街道地址 (ST)

The street or mailing address of a person or institution. When referencing an institution, this first component is used to specify the institution name. When used in connection with a person, this component specifies the first line of the address.

个人或机构的街道或邮编地址。当提到一个机构时，首先使用这个组件来阐述机构的名字。当这个机构与个人联系起来时，这个组件被放在地址的第一行。

### 2.1.1.2 Other designation (ST)

#### 其他名称 (ST)

Second line of address. In general, it qualifies address. Examples: Suite 555 or Fourth Floor. When referencing an institution, this component specifies the street address.

其他名称在地址的第一行。总之，它使地址合法化。例如：Suite 555 或第四层。当提到一个机构时，则使用这个组件来阐述街道的地址。

### 2.1.1.3 City (ST)

#### 城市 (ST)

### 2.1.1.4 State or province (ST)

#### 州或省 (ST)

State or province should be represented by the official postal service codes for that country.

州或省可用该国的官方邮局服务代码来代表。

### 2.1.1.5 Zip or postal code (ST)

#### 地址缩写或邮局代码 (ST)

Zip or postal codes should be represented by the official codes for that country. In the US, the zip code takes the form 99999[-9999], while the Canadian postal code takes the form A9A9A9.

地址缩写或邮局代码应该用该国的官方代码来代表。在美国，地址缩写代码使用 99999[-9999] 的形式，而加拿大的邮局代码使用 A9A9A9 的形式。

### 2.1.1.6 Country (ID)

#### 国家 (ID)

Defines the country of the address. ISO 3166 provides a list of country codes that may be used.<sup>1</sup> This ISO table has three separate forms of the country code: HL7 specifies that the

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<sup>1</sup> Available from ISO 1 Rue de Varembe, Case Postale 56, CH 1211, Geneva, Switzerland.

3-character (alphabetic) form be used for the country code. Refer to [HL7 Table 0399 - Country code](#) for valid values.

定义国家的地址。ISO3166 提供一系列可供使用的国家代码。这种 ISO 表格有三个分离的国家代码：HL7 标准具体列出了用于国家代码的（按字母顺序的）三个字节的格式。其有效值参考 HL7 表格 0399-国家代码。

#### 2.1.1.7 Address type (ID)

##### 地址类型 (ID)

Type is optional and defined by [HL7 Table 0190 - Address type](#).

该地址类型由 HL7 表格 0190-地址类型所定义。

HL7 Table 0190 - Address type

HL7 表格 0190-地址类型

Value 取值	Description 描述
BA	Bad address 坏地址
N	Birth (nee) (birth address, not otherwise specified) 出生日期（出生地址，没有以别的方式说明）
BDL	Birth delivery location (address where birth occurred) 出生地（出生时所在之处）
F	Country Of Origin 原居住国
C	Current Or Temporary 当前或临时居住国
B	Firm/Business 公司/商行
H	Home 家庭住址
L	Legal Address 合法地址
M	Mailing 邮寄地址
O	Office 工作地址
P	Permanent

Value 取值	Description 描述
	永久地址
RH	Registry home. Refers to the information system, typically managed by a public health agency, that stores patient information such as immunization histories or cancer data, regardless of where the patient obtains services. 注册家庭地址。参见由公共卫生代理处所管理的信息系统，该信息系统储存了如预防免疫记录或与癌症有关数据之类的病人的信息，并且不管病人在哪里接受的服务。
BR	Residence at birth (home address at time of birth) 出生时住址（出生时的家庭地址）

2.1.1.8 Other geographic designation (ST)

其他地理名称 (ST)

Other geographic designation includes county, bioregion, SMSA, etc.

其他地理名称包括国家，生物地区，SMSA 等。

2.1.2 CD – channel definition

CD – 路径定义

Components: <channel identifier (CM)> ^ <waveform source (CM)> ^ <channel sensitivity/units (CM)> ^ <channel calibration parameters (CM)> ^ <sampling frequency (NM)> ^ <minimum/maximum data values (CM)>

This data type is used for labeling of digital waveform data. See Chapter 7, Section 7.16.2, “CD – channel definition,” for a complete description of this data type.

此数据类型用于标记数字化波形数据。见第七章，7.16.2 节，“CD-路径定义”，将对该数据类型有一个全面的描述。

2.1.3 CE – coded element

CE – 编码元素

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

Length: 250

长度: 250

This data type transmits codes and the text associated with the code.

这种数据类型传输与代码相连的代码和文本。

Example:

例如:

|F-11380^CREATININE^I9^2148-5^CREATININE^LN|

### 2.1.3.1 Identifier (ST)

#### 标识符(ST)

Sequence of characters (the code) that uniquely identifies the item being referenced by the <text>. Different coding schemes will have different elements here.

标识符是唯一能识别被文本引用的项目的一系列字符（代码）。不同的编码规则将在此有不同的元素。

### 2.1.3.2 Text (ST)

#### 文本(ST)

Name or description of the item in question. E.g., myocardial infarction or X-ray impression. Its data type is string (ST).

对讨论的项目的命名或描述。例如，心肌梗塞或 X 线影像，它的数据类型是字符串 (ST)。

### 2.1.3.3 Name of coding system (IS)

#### 编码系统的命名 (IS)

Each coding system is assigned a unique identifier. This component will serve to identify the coding scheme being used in the identifier component. The combination of the **identifier** and **name of coding system** components will be a unique code for a data item. Each system has a unique identifier.

每一个编码系统被指定一个唯一的标识符。在标识符组件中，这个组件用于识别使用的编码规则。标识符和编码系统命名组件的联合将唯一确定一个数据项目的代码。每一个系统有一个唯一的标识符。

[\*User-defined Table 0396 - Coding system\*](#) contains the allowable values. The table includes ASTM E1238-94, Diagnostic, procedure, observation, drug ID, and health outcomes coding systems as identified in the tables in Section 7.1.4, “Coding schemes.” Others may be added as needed.

用户定义的表格 0396-编码系统包含其容许值。这些表格包括 ASTM E1238-94，诊断，程序，观察资料，药物 ID 和在 7.1.4 节表格“编码规则”中被识别的卫生情况编码系统。如果需要的话，还可以增加其他值。

Some organizations that publish code sets author more than one. The coding system, then, to be unique is a concatenation of the name of the coding authority organization and the name of its code set or table. When an HL7 table is used for a CE data type, the **name of coding system** component is defined as **HL7nnnn** where **nnnn** is the HL7 table number. Similarly, ISO tables will be named ISOnnnn, where nnnn is the ISO table number.

公布编码组作者的组织不止一个。而唯一的编码系统将编码作者组织的名字和它的编码组或表格的名字一一对应起来。当一个 HL7 表格用于一个 CE 数据类型时，编码系统组件的名字定义为 HL7nnn，此处的 nnn 是 HL7 表格号码。同样，ISO 表格将被定义为 ISOnnnn，此处的 nnnn 是 ISO 表格号码。

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### 2.1.3.4 Alternate identifier (ST)

#### 备用标识符 (ST)

For explanation, see text after 2.8.3.6.

详细的解释见 2.8.3.6 之后的文章。

### 2.1.3.5 Alternate text (ST)

#### 备用文本 (ST)

For explanation, see text after 2.8.3.6.

详细的解释见 2.8.3.6 之后的文章。

### 2.1.3.6 Name of alternate coding system (IS)

#### 备用编码系统的命名 (IS)

Note on the Alternate components (4, 5, 6) (for components 1, 2, 3)

记录在可替换组件 (4, 5, 6) 上 (也适用于组件 1, 2, 3)。

These three components are defined analogously to the above for the alternate or local coding system. If the *alternate text* component is absent, and the alternate identifier is present, the *alternate text* will be taken to be the same as the *text* component. If the *alternate coding system* component is absent, it will be taken to mean the locally-defined system.

这三个组件的定义与上述备用或局部编码系统的定义类似。如果备用文本组件不存在，而备用标识符存在的话，备用文本将与文本组件一样被采用。如果备用编码系统组件不存在，它将意味着采用局部定义的系统。

**Note:** The presence of two sets of equivalent codes in this data type is semantically different from a repetition of a CE-type field. With repetition, several distinct codes (with distinct meanings) may be transmitted.

**注意:** 在此数据类型中两组相等代码的存在本质上是不同于CE类型字段的重复。因为通过重复，许多不同的代码（有不同含义）将被传输，

Refer to [User-defined table 0396 Coding Systems](#) for valid values. When an HL7 table is used for a CE data type, the **name of coding system** component is defined as **HL7nnnn** where **nnnn** is the HL7 table number. Guidelines for the diagnostic, procedure, observation, drug, and health outcomes coding systems use are presented in Chapter 7.

编码系统的有效取值可参考用户定义的表格 0396。当 HL7 表格用于 CE 数据类型时，编码系统组件的命名定义为 HL7nnnn，此处的 nnnn 是 HL7 表格号码。至于诊断指南、程序、观察结果、药物和卫生情况编码系统则列在第七章中。



### 2.1.4 CF – coded element with formatted values

#### CF—有格式化值的编码元素

This data type transmits codes and the formatted text associated with the code. This data type can be used to transmit for the first time the formatted text for the **canned text** portion of a report, for example, a standard radiologic description for a normal chest X-ray. The receiving system can store this information and in subsequent messages only the identifier need be sent. Another potential use of this data type is transmitting master file records that contain formatted text. This data type has six components as follows:

这种数据类型传输与代码相连的代码和格式化文本。这种数据类型能首先用于传输一个报告的录音部分，为格式化文本，例如：一个正常胸部 X 线的音像描述。接收系统能储存这些信息，并且在后续的信息里，只有其标识符需要传送出去。这种数据类型的另外一个可能的用途是传输包含格式化文本的主文件记录。这种数据类型的六个组件如下：

Components: <identifier (ID)> ^ <formatted text (FT)> ^ <name of coding system (IS)> ^ <alternate identifier (ID)> ^ <alternate formatted text (FT)> ^ <name of alternate coding system (IS)>

The components, primary and alternate, are defined exactly as in the CE data type with the exception of the second and fifth components, which are of the formatted text data type.

除了第二和第四个组件，由于它们是格式化数据类型之外，主要的和备用组件都被精确的定义为 CE 数据类型。

Example:

例如：

```
OBX||CF|71020^CXR^CPMC||79989^H\Description:\N\\.sp\\ti+4\Heart is not enlarged. There is no
evidence of pneumonia, effusion, pneumothorax or any masses.
\ .sp+3\H\Impression:\N\\.sp\\.ti+4\Negative chest. CPMC
```

### 2.1.5 CK – composite ID with check digit

#### CK—有效验数位的复合标识符

Components: <ID number (NM)> ^ <check digit (NM)> ^ <code identifying the check digit scheme employed (ID)> ^ <assigning authority (HD)>

Length: 250

长度: 250

This data type is used only in *CDM-11-Contract number* as defined in chapter 8, section 8.10.2.11. If a site is not using check digits for a particular CK field, the second and third components are not valued. Example:

这种数据类型仅仅用在定义于第八章、8.10.2.11 节的 CDM-11-契约号码中。如果对于一个特殊的 CK 字段，某场合没有使用效验数字，则第二和第三个组件是无效的。例如：

```
|128952^6^M11^ADT01|
```

## Chapter 2: Control

### 2.1.1.1 ID number (NM)

标识符号码 (NM)

### 2.1.1.2 Check digit (NM)

效验数字 (NM)

The check digit in this data type is not an add-on produced by the message processor. It is the check digit that is part of the identifying number used in the sending application. If the sending application does not include a self-generated check digit in the identifying number, this component should be valued null.

这种数据类型中的效验数字并不是信息处理器所提供的补充，而是用在发送应用程序中的识别号码的一部分。如果发送应用程序在识别号码中没有包括同一效验数字，则此组件将无效。

### 2.1.1.3 Code identifying the check digit scheme employed (ID)

识别正在应用的效验数字结构的代码 (ID)

The check digit scheme codes are defined in [HL7 Table 0061 - Check digit scheme](#).

效验数字结构代码定义在 HL7 表格 0061-效验数字结构。

HL7 Table 0061 - Check digit scheme HL7 表格 0061-效验数字结构

Value 值	Description 描述
NPI	Check digit algorithm in the US National Provider Identifier 美国国家供给标识符的效验数字运算法则
ISO	ISO 7064: 1983
M10	Mod 10 algorithm (运算法则)
M11	Mod 11 algorithm (运算法则)

The algorithm for calculating a Mod10 check digit is as follows:

计算一个 Mod10 效验数字的运算法则如下：

Assume you have an identifier = 12345. Take the odd digit positions, counting from the right, i.e., 531, multiply this number by 2 to get 1062. Take the even digit positions, starting from the right (i.e., 42), prepend these to the 1062 to get 421062. Add all of these six digits together to get 15. Subtract this number from the next highest multiple of 10, i.e., 20 - 15 to get 5. The Mod10 check digit is 5. The Mod10 check digit for 401 is 0; for 9999, it's 4; for 99999999, it's 8.

假定你有一个标识符=12345，取奇数位，从右开始数，例如，531，用 2 乘于这个数，得 1062。取偶数位，从右开始数，（例如，42），把此数置于 1062 之后，得 421062。再把所有这六个数字相加得 15。从下一个 10 的最高的倍数中减去这个数，例如，20-15 得 5。则 Mod10 的效验数字是 5。401 的 Mod10 的效验数字是 0；9999 的是 4；99999999 的是 8。

The algorithm for calculating a Mod11 check digit is as follows:

计算一个 Mod11 效验数字的运算法则如下：

### Terms 条件

d = digit of number starting from units digit, followed by 10' s position, followed by 100' s position, etc.

从个位字开始的数字号码，跟着是十位，百位等等。

w = weight of digit position starting with the units position, followed by 10' s position, followed by 100' s position etc. Values for w = 2, 3, 4, 5, 6, 7, 2, 3, 4, 5, 6, 7, etc. (repeats for each group of 6 digits)

从个位开始的数字位置权重，跟着是十位，百位等。W 的值=2, 3, 4, 5, 6, 7, 2, 3, 4, 5, 6, 等。（按每组六个数字重复）

c = check digit

效验数字

### Calculation 计算

(Step 1) m = sum of (d \* w) for positions 1, 2, etc. starting with units digit

for d = digit value starting with units position to highest order

for w = weight value from 2 to 7 for every six positions starting with units digit

从个位数开始相应的 1、2 等位置 (d\*w) 的值之和。其中，d 的是从个位数开始向高位推进的不同位数的值，w 的值是 2 到 7 的数，对应从个位数开始每六个位置的权重值。

(Step 2) c1 = m mod 11

m 模 11

(Step 3) if c1 = 0 then reset c1 = 1

c1

如果为 0，则重置 c1=1。

(Step 4) = (11 - c1) mod 10

(11 - c1) 模 10

### Example:

例如：

if the number is 1234567, then the mod 11 check digit = 4  
如果号码是 1234567，则 mod11 效验数字=4。

The calculations are:

计算如下：

$$\begin{aligned} M &= (7*2)+(6*3)+(5*4)+(4*5)+(3*6)+(2*7)+(1*2) \\ &= 14 + 18 + 20 + 20 + 18 + 14 + 2 \\ &= 106 \\ c1 &= 106 \bmod 11 \\ &= 7 \\ c &= (11-c1) \bmod 10 \\ &= 4 \bmod 10 \\ &= 4 \end{aligned}$$

Other variants of these check digit algorithms exist and may be used by local bilateral site agreement.

这些效验数字运算法则的其他变量是存在的，并可被局部双边协议使用。

### 2.1.1.4 Assigning authority (HD)

赋值权限 (HD)

The assigning authority is a unique identifier of the system (or organization or agency or department) that creates the data. It is a HD data type. Assigning authorities are unique across a given HL7 implementation. [User-defined Table 0363 - Assigning authority](#) is used as the HL7 identifier for the user-defined table of values for the first sub-component, namespace ID.

赋值权限是对创造数据的系统（或组织，代理处或部门）的唯一的标识符。它是 HD 数据类型。赋值权限在整个特定的 HL7 执行过程中是唯一的。用户定义表格 0363-赋值权限被用作 HL7 标识符，用于第一个子组件（命名区间 ID）的用户定义的表格值。

User-defined Table 0363 - Assigning authority

用户定义表格 0363-赋值权限

Value 值	Description 描述
AUSDVA	Australia - Dept. of Veterans Affairs 澳大利亚-退伍军人事务部门
AUSHIC	Australia - Health Insurance Commission 澳大利亚-卫生保险代办处
CANAB	Canada - Alberta 加拿大-Alberta
CANBC	Canada - British Columbia

Value 值	Description 描述
	加拿大-英国哥伦比亚
CANMB	Canada - Manitoba 加拿大-Manitoba
CANNB	Canada - New Brunswick
CANNF	Canada - Newfoundland
CANNS	Canada - Nova Scotia
CANNT	Canada - Northwest Territories
CANNU	Canada - Nanavut
CANON	Canada - Ontario
CANPE	Canada - Prince Edward Island
CANQC	Canada - Quebec
CANSK	Canada - Saskatchewan
CANYT	Canada - Yukon Territories
NLVWS	NL - Ministerie van Volksgezondheid, Welzijn en Sport
USCDC	US Center for Disease Control 美国疾病控制中心
USHCFA	US Healthcare Finance Authority 美国卫生服务筹资权力机构
USSSA	US Social Security Administration 美国社会安全局

**Note:** When the HD data type is used in a given segment as a component of a field of another data type, [User-defined Table 0300 - Namespace ID](#) (referenced by the first sub-component of the HD component) may be redefined (given a different user-defined table number and name) by the technical committee responsible for that segment.

By site agreement, implementors may continue to use [User-defined Table 0300 - Namespace ID](#) for the first sub-component

注意：当 HD 数据类型用在一个假定的信息段中作为另外的数据类型的一个字段的组件时，用户定义的表格0300-命名区间 ID（参见 HD 组件的第一个子组件）将被负责这个信息段的技术委员会重新定义（即给出一个不同的用户定义的表格号码和名字）。

通过地方协议，执行者将继续使用用户定义的表格0300-命名区间 ID 为第一个子组件。

## 2.1.2 CM - composite

### CM—组合

A field that is a combination of other meaningful data fields. Each portion is called a **component**. The specific components of CM fields are defined within the field descriptions. Certain other composites have been separately identified and are described below.

其他有意义的数据字段的联合字段。其每一个部分称为一个组件。CM 字段的具体的组件被定义在字段的描述中。确定的其他合成部分已经分别定义并在下面描述。

No new CMs are allowed after HL7 version 2.2. *The CM data type is maintained strictly for backward compatibility and may not be used for the definition of new fields.*

HL7 的 2.2 以上版本就没有新的所允许的 CMs 字段。**CM 数据类型严格保持向后兼容，且不能用于新字段的定义。**

Wherever a component of an HL7 field is itself an HL7 data type which contains components, its delimiters are demoted by one. Thus a component designated as a CE data type should be encoded as <identifier & text & name of coding system> (see Section 2.9.3, “CE – coded element”). Note that since HL7 delimiters are not recursive, an HL7 data type containing components cannot be a subcomponent. When this level of detail is needed, each component of the HL7 data type can be encoded as a separate subcomponent. For an example of this, see the encoding of the filler order number in the order sequencing component of the Timing/Quantity data type.

不任在何种情况下，当一个 HL7 字段的组件本身是一个包含组件的 HL7 数据类型，那么它的分隔符都将降一级。因此，被指定作为 CE 数据类型的组件应该被编码为<标识符&文本&编码系统的命名>(见 2.9.3 节，“CE-编码元素”)。注意，既然 HL7 分隔符不是递归的，包括组件的 HL7 数据类型就不能是一个子组件。当需要该水平的详情时，HL7 的每一个组件能够被编码为分离的子组件。例子见时间/数量数据类型的预定号组件中的填写预定号编码。

### 2.1.3 CN – composite ID number and name

#### CN-复合 ID 号码和命名

Components: <ID number (ST)> ^ <family name (FN)> ^ <given name (ST)> ^ < second and further given names or initials thereof (ST)> ^ <suffix (e.g., JR or III) (ST)> ^ <prefix (e.g., DR) (ST)> ^ <degree (e.g., MD) (IS)> ^ <source table (IS)> ^ <assigning authority (HD)>

组件

Subcomponents of family name: <surname (ST)> ^ <own surname prefix (ST)> ^ <own surname (ST)> ^ <surname prefix from partner/spouse (ST)> ^ <surname from partner/spouse (ST)>

子组件

**Note:** Replaced by XCN data type as of v. 2.3.

**注意:** 可被 2.3 版本的 XCN 数据类型所代替。

**Length:** 250

**长度:** 250

This data type is used when identifying a person both as a coded value and with a text name. For specific fields, individual sites may elect to omit the ID or the name. Example:

此种数据类型用于使用一个代码值和一个文本名字来确认一个人的情况下。对于具体的字段，个人位置可用来忽略标识符或命名。例如：

```
|12372^RIGGINS^JOHN^"^^"^^"^^MD^ADT1|
|12372^"^^"^^"^^ADT1|
^RIGGINS^JOHN^"^^"^^"^^MD|z
```

#### 2.1.1.1 ID number (ST)

##### 标识符号码(ST)

Coded ID according to a user-defined table, defined by the 8th component. If the first component is present, either the source table or the assigning authority must be valued.

根据用户定义的表格确定的编码标识符，由第八个组件所定义。如果第一个组件存在，则原始资料表格或赋值权限必须被赋值。

#### 2.1.1.2 Family name (FN)

##### 姓(FN)

This component allows full specification of the surname of a person. Where appropriate, it differentiates the person's own surname from that of the person's partner or spouse, in cases where the person's name may contain elements from either name. It also permits messages to distinguish the surname prefix (such as "van" or "de") from the surname root. See section 2.9.19, "FN – family name".

这个组件允许对姓的全面阐述。在适当的地方，由于考虑到一个人的名字可能包括来自任意一方的名字，该组件将一个人自己的姓从他的同伴或配偶中区分出来。它也运用信息来从姓的根源上区分姓的前缀（例如“van”或“de”）。见 2.9.19 节“FN-姓”。

#### 2.1.1.3 Given name (ST)

##### 名(ST)

First name

名字

#### 2.1.1.4 second and further given names or initials thereof (ST)

##### 第二个和以后的名字或其他名字首字母(ST)

#### 2.1.1.5 Suffix (ST)

##### 后缀(ST)

Used to specify a name suffix (e.g., Jr. or III).

用于描述名字的后缀。（例如，Jr. 或 III）。

#### 2.1.1.6 Prefix (ST)

##### 前缀(ST)

Used to specify a name prefix (e.g., Dr.).

用于描述名字的后缀。（例如，Dr.）

2.1.1.7 Degree (IS)

学位 (IS)

Used to specify an educational degree (e.g., MD). Refer to *User-defined Table 0360 - Degree* for suggested values.

用于描述受教育程度（例如，MD）。建议值请参考用户定义的表格 0360-学位。

2.1.1.8 Source table (IS)

原始资料表格 (IS)

[User-defined Table 0297 - CN ID source](#) is used as the HL7 identifier for the user-defined table of values for this component. Used to delineate the first component.

用户定义的表格 0297-CNID 原始资料为这个组件的用户定义的表格值的 HL7 标识符。用于描绘第一个组件。

User-defined Table 0297 - CN ID source

用户定义表格 0297-CNID 原始资料

Value 值	Description 描述
	No suggested values defined 没有定义建议值。

2.1.1.9 Assigning authority (HD)

赋值权限 (HD)

The assigning authority is a unique identifier of the system (organization or agency or department) that creates the data. It is a HD data type. *User-defined Table 0363 - Assigning authority* is used as the HL7 identifier for the user-defined table of values for the first sub-component of the HD data type, *namespace ID*.

赋值权限是创建数据的系统(组织、代理机构、或部门)的唯一标识符。它是一个 HD 数据类型。用户定义的表格 0363-赋值权限被用作 HL7 标识符，用于第一个 HD 数据类型子组件的用户定义表格值，即命名区间 ID。

**Note:** When the HD data type is used in a given segment as a component of a field of another data type, [User-defined Table 0300 - Namespace ID](#), (referenced by the first sub-component of the HD component) may be redefined (given a different user-defined table number and name) by the technical committee responsible for that segment.  
当 HD 数据类型用在一个给定的信息段中，作为另外一个数据类型字段的组件。而用户定义的表格0300-命名区间（被 HD 组件的第一个子组件所引用）将被负责这个信息段的技术委员会重新定义，并给一个不同的用户定义的表格号码和名字。  
By site agreement, implementors may continue to use [User-defined Table 0300 - Namespace ID](#) for the first sub-component.

根据地方协定，执行者可继续采用用户定义的表格 0300-命名区间 ID 为第一个子组件定值。



## 2.1.2 CNE - coded with no exceptions

### CNE-无例外的编码

Components: <identifier (ST)> ^ <text (ST)> ^ <name of coding system (IS)> ^ <alternate identifier (ST)> ^ <alternate text (ST)> ^ <name of alternate coding system (IS)> ^ <coding system version ID (ST)> ^ <alternate coding system version ID (ST)> ^ <original text (ST)>

组件:

**Length:** 250

**长度:** 250

#### 2.1.1.1.. Identifier (ST)

##### 标识符 (ST)

Sequence of characters (the code) that uniquely identifies the item being referenced by the <text>. Different coding schemes will have different elements here.

标识符是用来唯一确定被<文本>所引用的项目的字符系列（即代码）。此处，不同的编码规则将有不同的标识符（编码）。

#### 2.1.1.2 Text (ST)

##### 文本 (ST)

Name or description of the item in question. E.g., myocardial infarction or X-ray impression. Its data type is string (ST). This is the corresponding text assigned by the coding system to the identifier.

文本是正在讨论的项目的命名或描述。例如，心肌梗塞或 X 线影像。它的数据类型是字符串（ST）。这是被编码系统指定给标识符的通信文本。

#### 2.1.1.3 Name of coding system (IS)

##### 编码系统的命名 (IS)

Each coding system is assigned a unique identifier. This component will serve to identify the coding scheme being used in the identifier component. The combination of the **identifier** and **name of coding system** components will be a unique code for a data item. Each system has a unique identifier.

每一个编码系统被指定一个唯一的标识符。此组件用于识别用在标识符组件中的编码规则。标识符和编码系统命名组件的联合使用将标识一个数据项目的唯一编码。每一个系统由一个唯一的标识符。

[User-defined Table 0396 - Coding system](#) contains the allowable values. The table includes ASTM E1238-94, Diagnostic, procedure, observation, drug ID, and health outcomes coding systems as identified in the tables in Section 7.2.5, “Coding schemes.” Others may be added as needed.

[用户定义表格 0396-编码系统包括允许值。](#)这种表格包括 ASTM E1238-94，诊断，程序，观察资料，药物标识符，和确定在 7.2.5 节“编码规则”中的卫生情况编码系统。如果需要，可以增加其他的项目。

Some organizations that publish code sets author more than one. The coding system, then, to be unique is a concatenation of the name of the coding authority organization and the name of its code set or table. When an HL7 table is used for a CE data type, the *name of coding system* component is defined as **HL7nnnn** where *nnnn* is the HL7 table number. Similarly, ISO tables will be named ISOnnnn, where *nnnn* is the ISO table number.

一些组织公布一个以上编码组。则要唯一标志一编码系统，就要将编码权限组织的名字和它的编码组或表格结合起来。当一个 HL7 表格用于一个 CE 数据类型时，编码系统组件的名字被定以为 HL7nnnn，此处 nnnn 是 HL7 表格号码。同样的，ISO 表格将被命名为 ISOnnnn，此处的 nnnn 是 ISO 表格号码。

### 2.1.1.4 Alternate identifier (ST)

#### 备用标识符 (ST)

Analogous to “Identifier” above. See 2.9.8.10, “Usage notes:” for further description.

备用标识符与上面所提到的“标识符”相类似。见 2.9.8.10 节，“用法注意”有更详细地描述。

### 2.1.1.5 Alternate text (ST)

#### 备用文本 (ST)

Analogous to “Text” above. See 2.9.8.10, “Usage notes:” for further description.

备用文本与上面所提到的“文本”相类似。见 2.9.8.10 节，“用法注意”有更详细地描述。

### 2.1.1.6 Name of alternate coding system (IS)

#### 备用编码系统的命名 (IS)

Analogous to “Name of Coding System” above. See 2.9.8.10, “Usage notes:” for further description.

备用编码系统的命名与上面所提到的“编码系统的命名”相类似。见 2.9.8.10 节，“用法注意”有更详细地描述。

### 2.1.1.7 Coding system version ID (ST)

#### 编码系统版本标识符 (ST)

This is the version ID for the coding system identified by component 1-3. It belongs conceptually to components 1-3 and appears here only for reasons of backward compatibility.

这是由组件 1-3 所标识的编码系统版本 ID 号。概念上它属于组件 1-3，并且此处出现仅仅是为了向后兼容。

## 2.1.1.8 Alternate coding system version ID (ST)

## 备用编码系统版本标识符 (ST)

This is the version ID for the coding system identified by components 4-6. It belongs conceptually to the group of Alternate components (see note 2.9.3.6) and appears here only for reasons of backward compatibility.

这是由组件 4-6 标识的编码系统版本 ID 号。概念上它属于可替换组件（见 2.9.3.6 的注意事项），并且此处出现仅仅是为了向后兼容。。

## 2.1.1.9 Original text (ST)

## 初始文本 (ST)

The original text that was available to an automated process or a human before a specific code was assigned. This component is optional.

在一个具体的代码被指定之前，初始文本对自动化处理或由人自己处理都是可用的。这个组件是可选择的。

## 2.1.1.10 Usage notes:

## 使用注意:

Components 1-3 and 7: The *identifier* is required and must be a valid code. *Coding system* must either be present and have a value from the set of allowed coding systems or if not present it will be interpreted to have the same meaning as if it had been valued with the code meaning “HL7 coding system.” [User-defined Table 0396 - Coding system](#) contains the allowable values. If the coding system is any system other than “HL7 coding system,” *version ID* must be valued with an actual version ID. If the coding system is “HL7 coding system,” *version ID* may have an actual value or it may be absent. If *version ID* is absent, it will be interpreted to have the same value as the HL7 version number in the message header. Text description of code is optional but its use should be encouraged since it makes messages easier to review for accuracy, especially during interface testing and debugging.

组件 1-3 和 7：这些组件的标识符是必须的而且必须是有效值。编码系统也必须是存在的，并且其取值来自于一批有效的编码系统值；或者，如果编码系统不存在，则该编码系统将被翻译，以至于它好像是用“HL7 编码系统”的代码含义所赋值一样，与“HL7 编码系统”的代码有同样的含义。用户定义的表格 0396-编码系统包含其有效取值。如果编码系统是任何一个除了“HL7 编码系统”之外的系统的话，版本标识符必须由一个实际的版本标识符来赋值。如果编码系统是“HL7 编码系统”，版本标识符将有一个实际值或者它将存在。如果版本标识符是存在的，该版本标识符将被翻译以至与信息头中的 HL7 版本标识符有同样的值。代码的文本描述是可选择的，但是既然文本描述使得信息更容易精确的评论，尤其是在接口检测和调试的过程中，应该鼓励文本描述的使用。

Component 9: This is the original text that was available to an automated process or a human before a specific code was assigned. This component is optional.

组件 9：在一个具体的代码被指定之前，初始文本对自动化处理或由人自己处理都是可用的。这个组件是可选择的。

Components 3-6 and 8: These components are optional. They are used to represent the local or user seen code as described. If present, components 3-6 and 8 obey the same rules of use and interpretation as described for components 1-3 and 7. If both are present, the identifiers in component 4 and component 1 should have exactly the same meaning, i.e., they should be exact synonyms.

组件 3-6 和 8：这些组件是可选择的。它们用于代表所描述的局部的或用户可见的代码。如果存在的话，组件 3-6 和 8 服从于上面所描述的组件 1-3 和 7 一样的标准。如果两者都存在的话，组件 4 和组件 1 中的标识符应该正好有同样的含义，例如，他们应该有一样的同义词。

CNE usage note: The CNE data type should be used when a required or mandatory coded field is needed.

CNE 使用注意：当需要一个要求的或强制的编码字段时，应该使用 CNE 数据类型。

[\*User-defined Table 0396 - Coding system\*](#) contains the allowable values. The table includes ASTM E1238-94, diagnostic, procedure, observation, drug and health outcomes coding systems. When an HL7 table is used for a CE data type, the ***name of coding system*** component is defined as ***HL7nnnn*** where ***nnnn*** is the HL7 table number. Guidelines for their use are presented in Chapter 7, Section 7.1, “Introduction and Overview.”

用户定义表格 0396-编码系统包含所允许的值。表格包括 ASTM E1238-94，诊断，程序，观察结果，药物和卫生情况编码系统。当 HL7 表格用作 CE 数据类型时，编码系统组件的命名定义为 HL7nnnn，此处的 nnnn 是 H L 7 表格号码。CE 的使用指南在第 7 章，7.1 节，“介绍和概述”。

Examples:

例子：

1. If the Value Type field (sequence 2) of the OBX segment was defined to be of type CNE, and the desired *value type* was a number, the shortest representation of the *value type* field would be identical to the current ID field syntax:

如果 OBX 信息段的（赋值类型）字段（序列 2）被定义为 CNE 数据类型，则期望所赋值的类型为一数字，赋值类型最短的表述将与当前的 ID 字段语法相同。

```
OBX|1|NM|718-7^Hemoglobin^LN||13.4|GM/DL|14-18|N||S|F<cr>
```

A more verbose representation of the same OBX segment that included *text* would be:

包含文本的同样的 OBX 信息段的更为冗长的表述如下：

```
OBX|1|NM^Numeric|718-7^Hemoglobin^LN||13.4|GM/DL|14-18|N||S|F<cr>
```

An even more verbose representation of the same OBX segment that included *text* and *coding system* would be:

包含文本和编码系统同样的 OBX 信息段的更为冗长的表述如下：

```
OBX|1|NM^Numeric^HL70125|718-7^Hemoglobin^LN||13.4|GM/DL|14-18|N||S|F<cr>
```

To retain the information about the code used in the original system that created the data, alternative coding scheme data could be included:

为了保留用在创建数据的初始系统中的代码的信息，可选择的编码规则数据能够被包含进去：

```
OBX|1|NM^Numeric^HL70125^NUM^Number^99LAB|718-7^Hemoglobin^LN||13.4|GM/DL|14-18|N||S|F<cr>
```

If in addition to the above, one wanted to capture the version of vocabulary being used, and the HL7 version was “2.3.1”, and the 99LAB coding scheme version was “1.1”, the field would appear as:

如果除了上述情况，有人想采用正在使用的词汇版本，该 HL7 的版本是 2.3.1，而且 99LAB 编码规则版本是 1.1。其字段显示如下：

```
OBX|1|NM^Numeric^HL70125^NUM^Number^99LAB^2.3.1^1.1|718-7^Hemoglobin^LN||13.4|GM/DL|14-18|N||S|F<cr>
```

Furthermore, if one wanted to include the “user seen” text of the value format, and the user had seen “Decimal” as the field type on a data entry screen, the field would appear as:

而且，如果想包括赋值格式的“用户可见的”文本，并且正如在一个数据录入屏幕上的字段类型一样，用户已经看见了“十进制”，则字段将显示如下：

```
OBX|1|NM^Numeric^HL70125^NUM^Number^99LAB^2.3.1^1.1^Decimal|718-7^Hemoglobin^LN||13.4|GM/DL|14-18|N||S|F<cr>
```

Finally, a user could use the abbreviated form for the primary identifier, and use the long form for the alternative identifier.

最后，一个用户能用简短的表作为基本的标识符，也可使用可选择的标识符的长表。

```
OBX|1|NM^^^NUM^Number^99LAB^^1.1^Decimal|718-7^Hemoglobin^LN||13.4|GM/DL|14-18|N||S|F<cr>
```

2. If the *value type* field had been defined as a CNE field, and if the desired *value type* was not in the value set, **a valid OBX instance could not be created.** For example, if a laboratory system had an internal value type of “Decimal Range”, since there is no corresponding *value type* available in HL7 table 0125, no valid OBX instance could be created. The following instance would be incorrect. In all valid instances of CNE fields, the identifier field **must** have a valid value from the specified table.

如果赋值类型字段被定义为 CNE 字段，并且如果想要的赋值类型不在赋值组中，则一个有效的 OBX 实例将不能被创建。例如，如果一个化验系统有一个十进制范围的内部赋值类型，并且既然在 HL7 表格 0125 中没有可运用的相应的赋值类型，所以也没有有效的 OBX 实例被创建。紧接着的实例是不对的。在所有 CNE 字段有效的实例中，标识符字段必须有一个来自具体表格的有效值。

#### **Incorrect (no valid identifier)**

#### **不正确的（无效标识符）**

```
OBX|1|^^^DR^Decimal Range^99LAB^^1.1^Decimal Range|718-7^Hemoglobin^LN||13.4|GM/DL|14-18|N||S|F<cr>
```

3. If the *coding scheme* is anything other than an HL7 table identifier, the coding scheme must be a valid scheme from the coding schemes specified in Chapter 7. For example, if the *Observation Identifier* field (sequence 3) of the OBX segment was typed as a CNE field, and LOINC version 1.0k was being used as the source of values for *Observation Identifier*, then the following OBX instance would be valid:

如果编码规则是除了 HL7 表格标识符之外的任意符号，则编码规则必须是来自第 7 章中详述的编码规则的有效规则。例如，如果，OBX 信息段的观测标识符字段（序列 3）被规定为一个 CNE 字段。并且，LOINC 版本 1.0k 正在被用作观测标识符的值的来源，那么接下来的 OBX 实例是有效的。

```
OBX|1|NM|718-7^Hemoglobin^LN^^^^1.0k||13.4|GM/DL|14-18|N||S|F<cr>
```

However, the following OBX instance would be incorrect, since the coding scheme designation “LOCAL” is not in the list of valid coding scheme identifiers, nor does it conform to the rules described in Chapter 7 for creating valid “local” coding scheme identifiers.

然而，既然编码规则名称 “LOCAL” 不在有效编码规则标识符的列表中，而且它也不遵从描述在第 7 章中的规则来创建有效的 “local” 编码规则标识符，那么接下来的 OBX 实例是不对的，

### Incorrect (invalid coding scheme)

#### 不正确的（无效编码规则）

```
OBX|1|NM|9587-2^Hemoglobin^LOCAL^^^^1.0k||13.4|GM/DL|14-18|N||S|F<cr>
```

A valid OBX instance using a local coding scheme “99LAB” would be allowed, since “99LAB” conforms to the rules for identifying local coding schemes as described in Chapter 7. The valid OBX instance would be represented as follows:

既然 “99LAB” 遵从在第 7 章描述的识别局部编码规则的规则，那么使用局部编码规则 “99LAB” 的一个有效的 OBX 实例将被允许。有效的 OBX 实例被表述如下：

```
OBX|1|NM|9587-2^Hemoglobin^99LAB^^^^6.5||13.4|GM/DL|14-18|N||S|F<cr>
```

Finally, if the coding scheme is anything other than an HL7 table identifier, a version number must be present. The following OBX instance is incorrect because it is missing a valid version number even though the coding scheme LN (LOINC) is valid:

最后，如果编码规则是除了 HL7 表格标识符之外的任意值，则必须存在一个版本号码。接下来的 OBX 实例是不对的，因为虽然编码规则 LN (LOINC) 是有效的，它也忽视了一个有效版本号码。

### Incorrect (missing version number)

#### 不正确的（缺失版本号码）

```
OBX|1|NM|718-7^Hemoglobin^LN||13.4|GM/DL|14-18|N||S|F<cr>
```

## 2.1.2 CP – composite price

### CP-复合价格

Components: <price (MO)> ^ <price type (ID)> ^ <from value (NM)> ^ <to value (NM)> ^ <range units (CE)> ^ <range type (ID)>

组件:

Subcomponents of price: <quantity (NM)> & <denomination (ID)>

价格的子组件：

**Note:** This data type is often used to define a repeating field within a given segment.

**注意:** 这种数据类型经常用来定义在一个给定信息段中的重复字段

**Note:** Replaces M0 as of v 2.3.

**注意:** 这种数据类型可代替 2.3 版本的 M0.

Example:

例如：

```
|100.00&USD^UP^0^9^min^P^50.00&USD^UP^10^59^min^P^10.00&USD^UP^60^999^P^50.00&USD^AP^200.00&USD^PF^80.00&USD^DC|
```

#### 2.1.1.1 Price (M0)

价格 (M0)

The only required component; usually containing a decimal point. Note that each component of the M0 data type (Section 2.9.26, “M0 – money”) is a subcomponent here.

M0 是唯一必须的组件；它通常包含一个十进制小数点。注意 M0 数据类型的每一个组件（见 2.9.26 节，“M0-钱”）在此处是一个子组件。

#### 2.1.1.2 Price type (ID)

价格类型 (ID)

A coded value, data type ID. Refer to [HL7 Table 0205 – Price type](#) for valid values.

价格类型是一个编码值，数据类型 ID。有效值可参考 HL7 表格 0205-价格类型。

HL7 Table 0205 – Price type

HL7 表格 0205-价格类型

Value 值	Description 描述
AP	administrative price or handling fee 管理价格或处理费用
DC	direct unit cost 直接单位成本
IC	indirect unit cost 间接单位成本
PF	professional fee for performing provider 提供服务者的专业收费

Value 值	Description 描述
TF	technology fee for use of equipment 使用仪器的技术收费
TP	total price 总价格
UP	unit price, may be based on length of procedure or service 单位价格，基于程序或服务的长度的单位价格

#### 2.1.1.3 From value (NM)

##### 起始值 (NM)

Each is a NM data type; together they specify the “range.” The range can be defined as either time or quantity. For example, the range can indicate that the first 10 minutes of the procedure has one price. Another repetition of the data type can use the range to specify that the following 10 to 60 minutes of the procedure is charged at another price per; a final repetition can specify that the final 60 to N minutes of the procedure at a third price.

每一个起始值都是一个 NM 数据类型；他们一起阐述”范围”。范围能被定义为时间型或数值型。例如，范围可表明程序开始的十个记录有一个价格。此数据类型的其他重复能用范围来阐述以下情况：程序的接下来的 10 到 60 各纪录标以另一单价；最后的重复能用第三种价格来阐述程序的最后 60 到 N 个纪录。

Note that, if the <price type> component is TP, both <from value> and <to value> may be null.

注意到，如果<价格类型>组件是 TP，那么<起始值>到<到达值>将是无效的。

#### 2.1.1.4 To value (NM)

##### 到达值 (NM)

See <from value> above.

见上面所述的<起始值>

#### 2.1.1.5 Range units (CE)

##### 范围单元 (CE)

Subcomponents of range units: <identifier (ST)> & <text (ST)> & <name of coding system (IS)> & <alternate identifier (ST)> & <alternate text (ST)> & <name of alternate coding system (IS)>

A coded value, data type CE, defined by the standard table of units for either time or quantity (see for example, the tables in Section 7.1.4, “Coding schemes”). This describes the units associated with the range, e.g., seconds, minutes, hours, days, quantity (*i.e.*, count); it is required if <from value> and <to value> are present.



一个编码值，为数据类型 CE，是由时间或数量的单元标准表格所定义的。（例子见，7.1.4 节，“编码规则”）。它描述了与范围相联系的单元，例如，秒，分钟，小时，日期，数值（例如，计算的数值）；如果<起始值> 和 <到达值>存在的话，要求有范围单元。

Range type (ID)

范围类型 (ID)

Refers to [HL7 Table 0298 – CP range type](#) for valid values.

有效值参考 HL7 表格 0298-CP 范围类型。

HL7 Table 0298 – CP range type

HL7 表格 0298-CP 范围类型

Value 值	Description 描述
P	Pro-rate. Apply this price to this interval, pro-rated by whatever portion of the interval has occurred/been consumed  优惠费用。如果把这种价格运用给间隔, 不论出现/消费的间隔为多大比例都将使用优惠费率。
F	Flat-rate. Apply the entire price to this interval, do not pro-rate the price if the full interval has not occurred/been consumed  统一费用。把整个价格运用于间隔, 如果没有产生整个间隔, 优惠费用就不会被消费。

## 2.1.2 CQ – composite quantity with units

### CQ-单元格复合数值

Components: <quantity (NM)> ^ <units (CE)>

**Note:** In future versions, CQ fields should be avoided because the same data can usually be sent as two separate fields, one with the value and one with the units as a CE data type.

**注意:** 在将来的版本中，因为同样的数据能作为两个分离的字段被传送，其中一个以值的形式，另一个以数据类型为CE 的单位形式，所以需要避免 CQ 字段。

Examples:

例如:

|123.7^kg| kilograms is an ISO unit  
|150^lb&&ANSI+| weight in pounds is a customary US unit defined within ANSI+.

## Chapter 2: Control

---

### 2.1.1.1 Quantity (NM)

数值 (NM)

### 2.1.1.2 Units (CE)

单位 (CE)

The units in which the quantity is expressed. Field-by-field, default units may be defined within the specifications. When the observation is measured in the default units, the units need not be transmitted. If the measure is recorded in units different from the default, the measurement units must be transmitted as the second component. If the units are ISO+ units, then units should be recorded as lowercase abbreviations as specified in Chapter 7. If the units are ANSI or local, the units and the source table must be recorded as specified in Chapter 7. But in these cases the component separator should be replaced by the subcomponent delimiter

表达数量的单位。逐个字段地，缺省单位可用详细地说明来定义。当观察以缺省单位表示时，该单位就不用传送出去。如果采用不同于缺省的单位进行测量时，则检测单位必须作为第二个组件而传送出去。如果单位是 ISO+ 单位，那么此单位将以小写字母缩写值而被纪录，具体见第 7 章。如果单位是 ANSI 或 local，则单位和源表格必须被记录，具体见第 7 章。但是在这种情况下，组件分隔符将被子组件分隔符所代替。

Subcomponents for units: <identifier (ST)> & <text (ST)> & <name of coding system (IS)> & <alternate identifier (ST)> & <alternate text (ST)> & <name of alternate coding system (IS)>

子组件:

### 2.1.2 CWE - coded with exceptions

#### CWE-例外编码

Components: <identifier (ST)> ^ <text (ST)> ^ <name of coding system (IS)> ^ <alternate identifier (ST)> ^ <alternate text (ST)> ^ <name of alternate coding system (IS)> ^ <coding system version ID (ST)> ^ alternate coding system version ID (ST) ^ <original text (ST)>

组件:

<b>Length:</b> 250
--------------------

<b>长度:</b> 250
----------------

### 2.1.1.1 Identifier (ST)

标识符 (ST)

Sequence of characters (the code) that uniquely identifies the item being referenced by the <text>. Different coding schemes will have different elements here.

标识符是唯一标识<文本>所指项目的字符序列（代码）。

#### 2.1.1.2 Text (ST)

##### 文本 (ST)

Name or description of the item in question. E.g., myocardial infarction or X-ray impression.

文本是讨论中的项目的命名或描述。例如，心肌梗塞或 X 线影像。

#### 2.1.1.3 Name of coding system (IS)

##### 编码系统的命名 (IS)

Each coding system is assigned a unique identifier. This component will serve to identify the coding scheme being used in the identifier component. The combination of the **identifier** and **name of coding system** components will be a unique code for a data item. Each system has a unique identifier.

每一个编码系统被指定一个唯一的标识符。这个组件用于识别用在标识符组件中的编码规则，标识符和编码系统组件的名字是一个数据项目的唯一代码。每一个系统有一个唯一的标识符。

[\*User-defined Table 0396 - Coding system\*](#) contains the allowable values. The table includes ASTM E1238-94, Diagnostic, procedure, observation, drug ID, and health outcomes coding systems as identified in the tables in Section 7.1.4, “Coding schemes.” Others may be added as needed.

用户定义表格 0396-编码系统包含允许值。此表格包括 ASTM E1238-94，诊断，程序，观察结果，药物标识符和在 7.1.4 节的表格“编码规则”中被确认的卫生情况编码系统。如果需要，还可增加其他项目。

Some organizations that publish code sets author more than one. The coding system, then, to be unique is a concatenation of the name of the coding authority organization and the name of its code set or table. When an HL7 table is used for a CE data type, the **name of coding system** component is defined as **HL7nnnn** where **nnnn** is the HL7 table number. Similarly, ISO tables will be named ISOnnnn, where nnnn is the ISO table number.

有一些组织公布不止一个编码组作者。那么，将编码组织的名字和代码组名或表格结合使用来唯一标识编码系统。当 HL7 表格用作 CE 数据类型时，编码系统组件的名字被定义为 HL7nnnn，此处的 nnnn 是 HL7 表格号码。同样，ISO 表格也将被命名为 ISOnnnn，此处的 nnnn 是 ISO 表格号码。

#### 2.1.1.4 Alternate identifier (ST)

##### 备用标识符

Analogous to “Identifier” above. See 2.9.11.10, “Usage notes:” for further description.

与上述的“标识符”相类似，详细的解释见 2.9.11.10 “使用注意”。

#### 2.1.1.5 Alternate text (ST)

##### 备用文本 (ST)

Analogous to “Text” above. See 2.9.11.10, “Usage notes:” for further description.

与上述的“文本”相类似，详细的解释见 2.9.11.10 “使用注意”。

### 2.1.1.6 Name of alternate coding system (IS)

备用编码系统的命名 (ST)

Analogous to “Name of Coding System” above. See 2.9.11.10, “Usage notes:” for further description.

与上述的“编码系统的命名”相类似，详细的解释见 2.9.11.10 “使用注意”。

### 2.1.1.7 Coding system version ID (ST)

编码系统版本标识符 (ST)

This is the version ID for the coding system identified by components 1-3. It belongs conceptually to the group of component 1-3 and appears here only for reasons of backward compatibility.

这是由组件 1-3 所识别的编码系统的版本标识符。概念上，它属于组件 1-3 组，此处出现仅是为了向后兼容。

### 2.1.1.8 Alternate coding system version ID (ST)

备用编码系统版本标识符 (ST)

This is the version ID for the coding system identified by components 4-6. It belongs conceptually to the group of alternate components (see note 0, “Analogous to “Text” above. See 2.9.11.10, “Usage notes:” for further description. Name of alternate coding system (IS)” ) and appears here only for reasons of backward compatibility.

这是由组件 4-6 所识别的编码系统的版本标识符。概念上，它属于备用组件组（见注意 0：“类似与上述的“文本”，欲获得备用编码系统 (IS) 命名的详细的解释请见 2.9.11.10 “使用注意”。），此处出现仅是为了向后兼容。

### 2.1.1.9 Original text (ST)

初始文本 (ST)

The original text that was available to an automated process or a human before a specific code was assigned

初始文本是指：在指定一个具体的代码之前，可用于自动化处理或进行人工处理的文本。

### 2.1.1.10 Usage notes:

使用注意

This is a field that is generally sent using a code, but where the code may be omitted in exceptional instances or by site agreement. Exceptional instances arise when the coding system being used does not have a code to describe the concept in the text.

这是一个一般用代码来传送的字段，但是在此处，当在一些例外场合下或由地方协定情况下，此代码可以忽略。当使用的编码系统不使用代码来描述文本中的概念时，则将产生这种例外情况。

Components 1-3 & 7 are used in one of three ways:

组件 1-3 和 7 以下面三种方式使用：

- 1) **Coded:** The identifier contains a valid code from a coding system. The coding system must either be present and have a value from the set of allowed coding systems, or if not present, it will be interpreted to have the same meaning as if it had been valued with the code meaning “HL7 coding system.” [User-defined Table 0396 - Coding system](#) contains the allowable values. The table includes ASTM E1238-94, Diagnostic, procedure, observation, drug ID, and health outcomes coding systems as identified in the tables in Section 7.1.4, “Coding schemes.” If the coding system is any system other than “HL7 coding system”, version ID must be valued with an actual version ID. If the coding system is “HL7 coding system,” version ID may have an actual value or it may be absent. If version ID is absent, it will be interpreted to have the same value as the HL7 version number in the message header. Text description is optional, but its use should be encouraged to aid in readability of the message during testing and debugging.

**编码的方式：**标识符为一个来源于编码系统的有效代码。编码系统必须存在，并且取值为允许的编码系统组有效值；或者，如果其不存在，则表示采用的编码系统为“HL7 编码系统”，它与 HL7 编码系统有同样的含义。用户定义的表格 0396-编码系统包含允许的值。此表格包括 ASTM E1238-94，诊断，程序，观察结果，药物标识符和在 7.1.4 节的表格“编码规则”中被确认的卫生情况编码系统。如果编码系统是除了“HL7 编码系统”之外的任意系统，版本标识符必须被赋值于实际的版本标识符。如果编码系统是“HL7 编码系统”，版本标识符必须被赋值于实际的版本标识符，或者它必须存在。如果版本标识符存在，它将被翻译，以至于它与信息头中的 HL7 版本号码有同样的值。文本描述时可选择的，但是在检测或调试的过程中，应该使用它来帮助提高信息的阅读能力。

Example 1a: OBX segment where the observation identifier is a LOINC code and the observation value is being sent as a CWE value, and the value is taken from SNOMED International.

例 1a：在 OBX 信息段中，观察标识符是 LOINC 代码，并且观察值作为一个 CWE 值来传送，而且该值来自国际化 SNOMED。

```
OBX|1|CWE|883-9^ABO Group^LN|1|F-D1250^Type 0^SNM3^^^^3.4|||N||F<cr>
```

Example 1b: OBX segment where the observation identifier is a LOINC code and the observation value is being sent as an CWE value, and the value is taken from a (currently hypothetical) HL7 table.

例 1b：在 OBX 信息段中，观察标识符是 LOINC 代码，并且观察值作为一个 CWE 值来传送，而且该值来自一个（当前是假设的）HL7 表格。

```
OBX|1|CWE|883-9^ABO Group^LN|1|0^Type 0^HL74875^^^^2.3.1|||N||F<cr>
```

- 2) **Uncoded:** Text is valued, the identifier has no value, and coding system and version ID follow the same rules as discussed for option 1.

**未编码的格式：**赋值的文本，标识符没有赋值，而编码系统和版本标识符遵循在选择 1 中所讨论的同样的规则。

Example 2: OBX segment where the observation identifier is a LOINC code and the observation value is being sent as an CWE value, and the value is sent as text because the correct clinical value, “Wesnerian” was not found in the set of allowed values.

例 2：在 OBX 信息段中，观察标识符是 LOINC 代码，并且观察值作为一个 CWE 值来传送，而且由于正确的临床值 “Wesnerian” 在允许值组中不存在，所以该值作为文本被传送。

```
OBX|1|CWE|883-9^ABO Group^LN|1|^Wesnerian^SNM3^^^3.4|||A||F<cr>
```

- 3) **Data missing:** The name of the coding system is “HL7 CE Status,” version ID is either a real version, or if not present it has the same meaning as the version in the message header, and the identifier takes its value from one of the allowed CE field statuses. The codes for the allowed CE field statuses are shown below and will be maintained in a table as part of the HL7 vocabulary. Text description of code is optional.

**数据缺失：**此时的编码系统是“HL7 CE 状态”，版本号可以是一个真实的版本，或者如果不存在，它也可以和信息头中的版本有同样的含义，而且标识符的值来自允许的 CE 字段身份中的一个。来自允许的 CE 字段身份的代码被显示如下，而且将被作为 HL7 词汇量的一部分保促存在表格中。代码的文本描述时可选择的。

Example 3: OBX segment where the observation identifier is a LOINC code and the observation value is being sent as an LCE value, and no value can be sent because the test was not done.

例 3：在 OBX 信息段中，观察标识符是一个 LOINC 代码，并且观察值被作为一个 LCE 值来传送，而且由于没有作测试，也没有值被传送。

```
OBX|1|CWE|883-9^ABO Group^LN|1|NAV^Not Available^HL70353^^^2.3.1|||N||F<cr>
```

Component 9:

组件 9:

This is the original text that was available to an automated process or a human before a specific code was assigned. This field is optional.

这是在一个具体的代码被指定以前，可用于一个自动化处理过程或个人处理过程的初始文本。

Components 3-6 & 8:

组件 3-6 和 8:

Components 3-6 & 8 are optional. They are used to represent the local or user seen code. If present, components 3-6 & 8 obey the same rules of use and interpretation as described for components 1-3 & 7 (of the CWE data type). If both are present, the identifiers in component 4 and component 1 should have exactly the same meaning; i.e. they should be exact synonyms.

组件 3-6 和 8 是可选的。它们被用来代表局部的或用户可见的代码。如果存在，对组件 3-6 和 8 的解释遵从组件 1-3 和 7（CWE 数据类型）所描述的一样的规则。如果两者都存在，组件 1 和组件 4 的标识符应该恰好有同样的含义；例如，他们应该有恰好一样的同义词。

Example 4: OBX segment where the observation identifier is a LOINC code and the observation value is being sent as an CWE value, and the value is taken from SNOMED International. The user seen fields are being used to represent a local coding system (99LAB) used in the sending system.

例 4：在 OBX 信息段中，观察标识符是一个 LOINC 代码，并且观察值以一个 CWE 值来传送，而且该值来自国际化 SNOMED。用户可见的字段代表用在发送系统中的一个局部编码系统（99LAB）。

```
OBX|1|CWE|883-9^ABO Group^LN|1|F-D1250^Type 0^SNM3^0^0 Type Blood^99LAB^3.4^|||||F<cr>
```

Summary of CWE usage notes with table of status values for various states without values:

对没有赋值的各个国家而言，其带有状态取值表 CWE 使用注意的总结如下，：

The CWE data type should be used for coded fields that are optional or where it is permissible to send text for items that are not yet a part of the approved value set. In the normal situation, the identifier is valued with the code from the value set. If the value of the field is known, but is not part of the value set, then the value is sent as text, and the identifier has no value. If the field has an unknown status, then third form of the field is used (see **Data missing** above), and the appropriate status for the field is selected from the table of allowed statuses. When no code exists, use values from [HL7 Table 0353 - CWE statuses](#)

CWE 数据类型应该被用于可选择的编码字段，或者对于仍然不是被批准的值系列中一部分的项目，CWE 数据类型用在允许发送文本的地方。在正常的情况下，标识符是用来自取值系列的代码来赋值。如果已知字段值，但它不是值系列中的一部分，那么该值将被作为文本传送并且标识符没有赋值。如果不知道字段的身份，字段的第三种形式将被使用（见上述的数据忽略），字段的恰当的身份从允许身份的表格中选出。当代码不存在时，使用来自 HL7 表格 0353-CWE 身份的值。

HL7 Table 0353 - CWE statuses

HL7 表格 0353-CWE 身份

Code 代码	Description 描述
U	Unknown 不知道
UASK	Asked but Unknown 要求但是不知道
NAV	Not available 不可用的
NA	Not applicable 不能应用的
NASK	Not asked 没有要求

Where a text modifier might accompany a code, the “field” in the HL7 message would be of data type CWE and would be allowed to repeat. The first instance of the field would be used, as per option 1; i.e. the identifier would have a valid code. The second instance of the repeating field would be used, as per option 2, that is, the text description would take the value of the free text modifier.

对一个文本的修改可能伴随一个代码，此时 HL7 信息中的”字段”将是 CWE 数据类型，并且允许被重复。字段的第一个实例将作为每一个选择 1 使用，例如，标识符将有一个有效的代码。重复字段的第二个实例也将作为每一个选择 2 使用，也就是说，文本的描述将采用自由文本修改的值。

### 2.1.2 CX – extended composite ID with check digit

#### CX-效验数字的扩展复合标识符

Components: <ID (ST)> ^ <check digit (ST)> ^ <code identifying the check digit scheme employed (ID)> ^ < assigning authority (HD)> ^ <identifier type code (ID)> ^ < assigning facility (HD) ^ <effective date (DT)> ^ <expiration date (DT)>

组件:

Length: 250
-------------

Example:

例如:

|1234567^4^M11^ADT01^MR^University Hospital|

This data type is used for specifying an identifier with its associated administrative detail.

这种数据类型被用作识别和确定与之相关的管理细节。

#### 2.1.2.1 ID (ST)

##### ID 号 (ST)

Definition: The value of the identifier itself. It is similar to the CK data type (see Section 2.9.5, “CK – composite ID with check digit”) except that a ST data type is used instead of a NM data type.

定义：标识符本身的取值。除了 ST 数据类型被用来取代 NM 数据类型的情况下，它类似于 CK 数据型（参见 2.9.5, “CK-带校验数字的组合 ID “）。

#### 2.1.2.2 Check digit (ST)

##### 检验数字 (ST)

Defined as in the CK data type (see Section 2.9.5, “CK – composite ID with check digit”) except that an ST data type is allowed instead of an NM data type. The check digit in this data type is not an add-on produced by the message processor. It is the check digit that is part of the identifying number used in the sending application. If the sending application does not include a self-generated check digit in the identifying number, this component should be valued null.



在 CK 数据型数（参见 2.9.5，“CK-带检验数字的组合 ID”）中有定义，除了 ST 数据型取代 NM 数据型的情况下。这种数据型中的检验数字不是由信息处理者添加的，而是在发出申请时所用的确认数的一部分。如果发出的申请没有在确认数中包括一个自己生成的检验数字，这个组件应该是毫无意义。

### 2.1.2.3 Code identifying the check digit scheme employed (ID)

标识所用的检验数字规则的代码 (ID)

Defined as in the CK data type (see Section 2.9.5, “CK – composite ID with check digit”). Refer to *HL7 Table 0061– Check digit scheme* for valid values.

在 CK 数据型数（参见 2.9.5，“CK-以检验数字构成 ID”）有定义。参见 HL7 表 0061-有效值的检验数字规则。

**Note:** The check digit and code identifying check digit scheme are null if ID is alphanumeric.

注意：如果 ID 是由数字和字母组成的，那么检验数字和确定检验数字结构的代码没有意义。

### 2.1.2.4 Assigning authority (HD)

分配授权 (HD)

The assigning authority is a unique name of the system (or organization or agency or department) that creates the data. It is a HD data type. *User-defined Table 0363 – Assigning authority* is used as the HL7 identifier for the user-defined table of values for the first sub-component of the HD component, <namespace ID>.

分配授权是创建数据的系统（组织，机构或部门）所独有的名字。是一种 ID 数据型。用户定义表 0363-分配授权被用来作为一种 HL7 标识，用来标识 HD 组件（名称区间 ID）的第一子组件的用户取值。

**Note:** When the HD data type is used in a given segment as a component of a field of another data type, [User-defined Table 0300 – Namespace ID](#) (referenced by the first sub-component of the HD component) may be re-defined (given a different user-defined table number and name) by the technical committee responsible for that segment.

By site agreement, implementors may continue to use [User-defined Table 0300 – Namespace ID](#) for the first sub-component.

注意：当 HD 数据型在给定的信息段中用作另一数据型字段的组件时，用户定义表 0300-名称区间 ID（参照 HD 组件的第一子组件）可以由负责此信息段的技术委员会重新定义（给定一个用户定义的不同表号和名字）。

按地方协定，实施者可继续使用用户定义表 0300-第一子组件的名称区间 ID。

### 2.1.2.5 Identifier type code (ID)

标识符类型代码 (ID)

A code corresponding to the type of identifier. In some cases, this code may be used as a qualifier to the “Assigning authority” component. Refer to [HL7 Table 0203 – Identifier type](#) for suggested values.

与标识符类型相对应的代码。某些情况下，这个代码可用于限定“分配权限”的组件。参见 HL7 表 0203-提示值的限定符类型。

HL7 Table 0203 – Identifier type

HL7 表 0202-限制符类型

Value 价值	Description 描述
AM	American Express 美国快件
AN	Account number 帐号
BA	Bank Account Number 银行帐号
BR	Birth registry number 出生登记号
BRN	Breed Registry Number 品种登记号
DI	Diner' s Club card 用餐者俱乐部卡
DL	Driver' s license number 司机驾驶执照号
DN	Doctor number 医生编号
DR	Donor Registration Number 捐献者登记号
DS	Discover Card 发现卡
EI	Employee number 雇员号
EN	Employer number 雇主号
FI	Facility ID 设备 ID
GI	Guarantor internal identifier 保证者内部标识符
GN	Guarantor external identifier 保证者外部标识符
HC	Health Card Number 卫生卡号

Value 价值	Description 描述
JHN	Jurisdictional health number (Canada) 辖区卫生号（加拿大）
LN	License number 执照号
LR	Local Registry ID 当地登记 ID
MA	Medicaid number 医疗补助号
MC	Medicare number 医疗保险号
MCN	Microchip Number 微片号
MR	Medical record number 医疗记录号
MS	MasterCard 信用卡
NE	National employer identifier 国家雇主标识符
NH	National Health Plan Identifier 国家卫生计划标识符
NI	National unique individual identifier 国家独特个人标识符
NNxxx	National Person Identifier where the xxx is the ISO table 3166 3-character (alphabetic) country code 国家身份标识符，在 xxx 是 ISO 表 3166 上三个字符（字母）的国家代号之处
NPI	National provider identifier 国家供应者标识符
PEN	Pension Number 退休金号
PI	Patient internal identifier 病人内部标识符
PN	Person number 身份号
PRN	Provider number

Value 价值	Description 描述
	供应者号
PT	Patient external identifier 病人外部标识符
RR	Railroad Retirement number 铁路退休号
RRI	Regional registry ID 地区登记号
SL	State license 州许可证
SR	State registry ID 州登记号
SS	Social Security number 社会保障号
U	Unspecified 未指定的
UPIN	Medicare/HCFA' s Universal Physician Identification numbers 医疗保险/HCFA 普通内科医师确认号
VN	Visit number 调查号
VS	VISA 签证
WC	WIC identifier WIC 标识符
WCN	Workers' Comp Number 工人排字号
XX	Organization identifier 组织标识符

#### 2.1.2.6 Assigning facility (HD)

##### 分配设施 (HD)

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

子组件: (名称区间第 (IS)), (通用 ID(ST)) 和(通用 ID 类型 (ID))

Definition: The place or location identifier where the identifier was first assigned to the patient. This component is not an inherent part of the identifier but rather part of

the history of the identifier: as part of this data type, its existence is a convenience for certain intercommunicating systems.

定义：标识符被首次指定给病人的地点或定位标识符。这个组件不是一个标识符所固有的，而是标识符历史的部分：作为这种数据型的一部分，它的存在便于某些互通系统的进行。

**Note:** When the HD data type is used in a given segment as a component of a field of another data type, [User-defined Table 0300 - Namespace ID](#) (referenced by the first sub-component of the HD component), may be re-defined (given a different user-defined table number and name) by the technical committee responsible for that segment.

**注意：**当 HD 数据型作为另一数据型字段的组件被用于给定的信息段时，用户定义表 0300-名称区间 ID（参照 HD 组件的第一子组件），可以由负责该信息段的技术委员会重新定义（给定一个不同的用户自定义表号和表名）。

#### 2.1.2.7 Effective date (DT)

实施日期 (DT)

Definition: The first date, if known, on which the identifier is valid and active.

定义：如果已知的话，是标识有效和使用的第一个日期。

#### 2.1.2.8 Expiration date (DT)

终止日期 (DT)

Definition: The last date, if known, on which the identifier is valid and active.

定义：如果已知，是标识有效和使用的截止日期。

### 2.1.3 DLN - driver's license number

#### DLN-驾驶执照号

Components: <license number (ST)> ^ <issuing state, province, country (IS)> ^ <expiration date (DT)>

组成：<执照号 (ST)> ^ <发执照的州，省，国家 (IS)> ^ <终止日期 (DT)>

Definition: This field contains the driver's license information. For state or province refer to official postal codes for that country; for country refer to ISO 3166 for codes.

定义：此字段包含驾驶执照的信息。州或省参见该国的官方邮政编码；国家编码参见 ISO3166。

##### 2.1.1.1 Driver's license number (as ST data type)

驾驶执照号（如 ST 数据型）

This field contains the driver's license number.

该字段包含驾驶执照号。

2.1.1.2 Issuing state, province, country (IS)

发放执照的州，省，国家（IS）

Issuing authority for driver' s license. For state or province refer to official postal codes for that country; for country refer to ISO 3166 for codes. (The ISO 3166 table has three separate forms of the country code: HL7 specifies that the 3-character (alphabetic) form be used for the country code.) [User-defined Table 0333 - Driver' s license issuing authority](#) is used as the HL7 identifier for the user-defined table of values for this component.

发放执照的官方机构。州或省参见该国的官方邮政编码：国家编码参见 ISO3166。（ISO3166 表有三个单独的国家代码表：HL7 特别的用三个字符（字母型）来编成国家代码。）用户定义表 0333-驾驶执照签发单位被用于使用者定义的该组件数值表的 HL7 标识符。

User-defined Table 0333 - Driver' s license issuing authority

用户定义表 0333 -驾驶执照签发单位

Value	Description
值	描述
	No suggested values defined 无定义的建议值

2.1.1.3 Expiration date (DT)

终止日期（DT）

Expiration date (DT) for driver' s license.

驾驶执照的终止日期。

2.1.2 DR - date/time range

DR-日期/时间范围

Components: <range start date/time (TS)> ^ <range end date/time (TS)>

组成：<开始的日期/时间范围（TS）> ^ <结束的日期/时间范围（TS）>

Subcomponents of range start date/time and range stop date/time: YYYY[MM[DD[HHMM[SS[.S[S[S[S]]]]]]]] [+/-ZZZZ] & <degree of precision>

开始和结束日期/时间范围亚组件：

YYYY[MM[DD[HHMM[SS[.S[S[S[S]]]]]]]] [+/-ZZZZ] & <degree of precision>

2.1.1.1 Range start date/time (TS)

开始的日期/时间范围（TS）

Definition: The first component contains the earliest date/time (time stamp) in the specified range.

定义：包含特定范围内最早的日期时间（时间标志）的第一个组件。

#### 2.1.1.2 Range end date/time (TS)

结束的日期/时间范围（TS）

The second component contains the latest date/time in the specified range. Note that the TS (time stamp) data type allows the specification of precision.

包含特定范围内最晚的日期时间的第二个组件。注意 TS（时间标志）数据型允许精确性的详细说明。

### 2.1.2 DT - date

#### DT-日期

Format: YYYY[MM[DD]]

格式: YYYY[MM[DD]]

In prior versions of HL7, this data type was always specified to be in the format YYYYMMDD. In the current and future versions, the precision of a date may be expressed by limiting the number of digits used with the format specification YYYY[MM[DD]]. Thus, YYYY is used to specify a precision of “year,” YYYYMM specifies a precision of “month,” and YYYYMMDD specifies a precision of “day.”

在 HL7 的早期版本，这种数据型一直规定为年月日的格式。在现在和将来的版本中，日期的精确性会以 YYYY[MM[DD]] 这种规范格式下有限的数字数目表示。这样，YYYY 用于详细说明“年”的精确性，YYYYMM 明确“月”，而 YYYYMMDD 则准确说明“日”。

By site-specific agreement, YYYYMMDD may be used where backward compatibility must be maintained.

按照特定地方协定，YYYYMMDD 可以用于需要保留向后相容性的地方。

Examples:

例:

|19880704|

|199503|

### 2.1.3 ED - encapsulated data

#### ED-压缩的数据

Components: <source application (HD)> ^ <type of data (ID)> ^ <data subtype (ID)> ^ <encoding (ID)> ^ <data (ST)>

组成: <来源应用程序 (HD)> ^ <数据类型 (ID)> ^ <数据亚类型 (ID)> ^ <编码 (ID)> ^ <数据 (ST)>

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

亚组件: <名称区间 ID (IS)> & <一般 ID (ST)> & <一般 ID 类型 (ID)>

This data type transmits encapsulated data from a source system to a destination system. It contains the identity of the source system, the type of data, the encoding method of the data, and the data itself. This data type is similar to the RP (reference pointer) data type of Section 2.9.37, “RP – reference pointer,” except that instead of pointing to the data on another system, it contains the data which is to be sent to that system.

这种数据类型将压缩数据从来源系统传送到目标系统。它包括来源系统的确认，数据类型，数据的编码和数据本身。这种数据类型类似于 2.9.37 的 RP（参照指示物）数据型，

“RP-参照指示物”，除了代替指向另一系统的数据之外，还包括将要发送到该系统的数据。

### 2.1.1.1 Source application (HD)

来源应用程序 (HD)

A unique name that identifies the system which was the source of the data. Identical format and restrictions as in reference pointer (see Section 2.9.37.2, “Application ID (HD)” ).

用以确定数据来源的系统的专有名称。其唯一格式和限制在参照指针相同中（见 2.9.37.2 “应用程序 ID (HD)” ）。

### 2.1.1.2 Type of data (ID)

数据类型 (ID)

Identical to “type of data” component in the reference pointer (RP) data type. (See Section 2.9.37.3, “Type of data (ID)” ).

等同于参照指针 (RP) 数据类型中的“数据类型”组件。（见 2.9.37.3, “数据类型 (ID)” ）

Refer to [HL7 Table 0191 - Type of referenced data](#) for valid values.

参见 HL7 表 0191- 有效值的参考数据类型。

### 2.1.1.3 Data subtype (ID)

数据亚型 (ID)

Identical to “subtype” component in the reference pointer (RP) data type. (See Section 2.9.37.4, “Subtype (ID)” ).

等同于参照指针 (RP) 数据类型中的“亚类型”组件。（见 2.9.37.4, “亚类型 (ID)” ）

Refer to [HL7 Table 0291 - Subtype of referenced data](#) for valid values.

参见 HL7 表 0291-有效值的参考数据的亚类型。



## 2.1.1.4 Encoding (ID)

## 编码 (ID)

The type of encoding, if present, used to represent successive octets of binary data as displayable ASCII characters. Refer to [HL7 Table 0299 - Encoding](#) for valid values.

编码的类型。如果存在的话，用于代表连续二进制数据的八进制字符，如同可显示的 ASCII 字符一样。参照 HL7 表 0299-有效值编码。

HL7 Table 0299 - Encoding

HL7 表 0299-编码

Value 值	Description 描述
A	No encoding - data are displayable ASCII characters. 不是所有的编码数据都是可显示的 ASCII 字符。
Hex 十六进制	Hexadecimal encoding - consecutive pairs of hexadecimal digits represent consecutive single octets. 十六进制编码-连续的十六进制数对以代表连续的单个字节。
Base64 基数 64	Encoding as defined by MIME (Multipurpose Internet Mail Extensions) standard RFC 1521. Four consecutive ASCII characters represent three consecutive octets of binary data. Base64 utilizes a 65-character subset of US-ASCII, consisting of both the upper and lower case alphabetic characters, digits "0" through "9," "+," "/", and ".". 以 MIME (多用网络邮件扩展名) 标准 RFC1521 编码。四个连续的 ASCII 字符代表三个连续的二进制数据字节。基数 64 利用一个 65 字符的 US-ASCII 子组件，该子组件包括上下两例字母型字符，数字“0”到“9”，“+”，“/”，和“.”。

Base64 is defined as follows (adapted from MIME Internet standard RFC 1521, which has precedence over this description). Proceeding from left to right across a 24-bit input group (three octets), each 6-bit group is used as an index into an array of 64 printable characters. The character referenced by the index is placed in the encoded string. These characters are shown in [HL7 Table 0290 - MIME base64 encoding characters](#), and are selected so as to be universally representable.

基数 64 定义如下 (适合于优先于此描述的 MIME (多用网络邮件扩展名) 标准 RFC1521)。从左至右读过一个 24 比特的输入组 (三字节)，每个 6 比特组用作索引来排列 64 个可打印的字符。索引编排的字符置入编码的字符串中。这些字符在 HL7 表 0290-MIME 基数编码字符中可以见到，同时选择以具有普遍代表性。

Special processing is performed if fewer than 24 bits are available in an input group at the end of data. A full encoding quantum is always completed at the end of data. When fewer than 24 input bits are available in an input group, zero bits are added (on the right) to form an integral number of 6-bit groups.

如果数据末尾的输入组少于 24 比特，那就要进行特殊的处理。在数据末尾通常完成一个完全的编码额。当输入组少于 24 比特时，添加 0 比特 (从右边) 以组成整数个 6 比特组。

Output character positions which are not required to represent actual input data are set to the character “=”. Since all canonically encoded output is an integral number of octets, only the following cases can arise: (1) the final quantum of input is an integral multiple of 24 bits; here, the final unit of encoded output will be an integral multiple of 4 characters with no “=” padding, (2) the final quantum of input is exactly 8 bits; here, the final unit of encoded output will be two characters followed by two “=” padding characters, or (3) the final quantum of input is exactly 16 bits; here, the final unit of encoded output will be three characters followed by one “=” padding character.

不需要代表真实输入数据的输出位置设定为字符“=”。既然所有的规范编码的输出值是整数个字节，只有下列情况会出现：（1）输入值的最后量是 24 比特的整数倍；此时，编码的输出量的最后单位将是没有“=”填充的 4 个字符的整数倍。（2）输入值的最后量刚好是 8 比特，此时，编码的输出量的最后单位将是其后有两个“=”填充字符的两个字符，或者（3）输入值的最后量恰好 16 比特，此时，编码的输出值的最后单位将是其后有一个“=”填充字符的三个字符。

HL7 Table 0290 – MIME base64 encoding characters

HL7 表 0290-MIME 基数编码字符

Value	Code	Value	Code	Value	Code	Value	Code
值	编码	值	编码	值	编码	值	编码
0	A	17	R	34	I	51	51 z
1	B	18	S	35	j	52	52 0
2	C	19	T	36	k	53	53 1
3	D	20	U	37	l	54	54 2
4	E	21	V	38	m	55	55 3
5	F	22	W	39	n	56	56 4
6	G	23	X	40	o	57	57 5
7	H	24	Y	41	p	58	58 6
8	I	25	Z	42	q	59	59 7
9	J	26	a	43	r	60	60 8
10	K	27	b	44	s	61	61 9
11	L	28	c	45	t	62	62 +
12	M	29	d	46	u	63	63 /
13	N	30	e	47	v		
14	O	31	f	48	w	(pad)	=
15	P	32	g	49	x		
16	Q	33	h	50	y		

The interpretation of the encoded octets by any of the encoding methods, beyond what is either implicit or specified in the represented data type (such as their ordering within 16-bit or 32-bit binary words on the destination application), is determined by the destination application and is beyond the scope of this Standard.

无论是使用暗示性的还是特定的有代表性的数据类型（比如在目的应用程序端的有序 16 比特或 32 比特二进制字），对任何编码方法的解释都由目标应用程序来决定，这超越了 HL7 标准的范围。

#### 2.1.1.5 Data (ST)

##### 数据 (ST)

Displayable ASCII characters which constitute the data to be sent from source application to destination application. The characters are limited to the legal characters of the ST data type, as defined in Section 2.9.43, “ST – string data,” and, if encoded binary, are encoded according to the method of Section 2.9.16.2, “Type of data (ID).”

可显示的 ASCII 字符组成了从来源应用程序输送到目标应用程序的数据。字符限于 ST 数据型的合法字符，正如 2.9.43 所定义的“ST-排列数据”，还有，如果编码成二进制，则按 2.9.16.2 “数据类型 (ID)” 的方法来编码。

If the encoding component (see Section 2.9.16.4, “Encoding (ID)”) = ‘A’ (none), then the data component must be scanned before transmission for HL7 delimiter characters, and any found must be escaped by using the HL7 escape sequences defined in Section 2.10, “Use of escape sequences in text fields.” On the receiving application, the data field must be de-escaped after being parsed.

如果编码组件（参见 2.9.16.4, “编码 (ID)”）= ‘A’（无），那么在传送之前必须扫描数据组件有无 HL7 分隔符，若发现有则必须用 2.10 节—“文本字段中 Escape 序列的使用”中定义的 HL7 Escape 序列来 Escape。在接收应用程序，数据字段在解析后必须去掉 Escape。（）

If the encoding component (see Section 2.9.16.4, “Encoding (ID)”) does not equal ‘A,’ then, after encoding, the (encoded) data must be scanned for HL7 delimiter characters, and any found must be escaped by using the HL7 escape sequences. Only then can the component be added to the HL7 segment/message. On the receiving application, the data field must be de-escaped after being parsed out of the message before being decoded. This can be expressed as ‘encode’, ‘escape’, parse, ‘de-escape’, ‘decode’.

如果编码部分（参见 2.9.16.4, “编码 (ID)”）不等于 ‘A’，则编码后，（编码的）数据必须扫描有无 HL7 分隔符，有任何发现必须用 HL7 Escape 序列进行 Escape。然后才能把该组件添加到 HL7 信息段或信息中。在接收应用程序端，数据字段在解析完编码了的信息后必须去掉 Escape。这可以表示为“编码”，“Escape”，解析，“去 Escape”，“去编码”。

## 2.1.2 EI – entity identifier

### EI-实体标识符

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

组成: <实体标识符 (ST)> ^ <名称区间 ID (IS)> ^ <一般 ID (ST)> ^ <一般 ID 类型 (ID)>

The entity identifier defines a given entity within a specified series of identifiers.

实体标识符定义一假设的实体，取值为特定的一系列标识符内的一个。

The EI is appropriate for, but not limited to, machine or software generated identifiers. The generated identifier goes in the first component. The remaining components, 2 through 4, are known as the *assigning authority*; they identify the machine/system responsible for generating the identifier in component 1.

EI 适用于，但是并不局限于机器或软件生成的标识符。生成的标识符存在于第一部分。剩余的部分，从 2 到 4，已知为分配授权；他们确认负责生成的一部分标识符的机器或系统。

The specified series, the *assigning authority*, is defined by components 2 through 4. The assigning authority is of the hierarchic designator (HD) data type, but it is defined as three separate components in the EI data type, rather than as a single component as would normally be the case. This is in order to maintain backward compatibility with the EI's use as a component in several existing data fields. Otherwise, the components 2 through 4 are as defined in Section 2.9.21, "HD - hierarchic designator." Hierarchic designators (HD) are unique across a given HL7 implementation.

指定的系列，分配授权，由组件 2 到 4 定义。分配授权属分层指定数据类型（HD），但是它定义为 EI 数据类型内三个不同的组件，而不是一般情况下的单个组件。这是为了保持在几个已有的数据字段内，与 EI 使用的向后兼容性。否则，组件 2 到 4 就像 2.9.21，“HD-分层指定者”中所定义的。分层指定者（HD）在经过一项假定的 HL7 执行中是独一无二的。

### 2.1.1.1 Entity identifier (ST)

#### 实体标识符 (ST)

The first component, <entity identifier>, is usually defined to be unique within the series of identifiers created by the <assigning authority>, defined by a hierarchic designator, represented by components 2 through 4. (See Section 2.9.21, "HD - hierarchic designator".)

第一个组件，<实体标识符>，常由<分配授权>所创造的标识符来唯一指定，或由等级指定符确定，亦或由第二到第四组件所指定。（参见 2.9.21，“HD-等级指定符”）

### 2.1.1.2 Namespace ID (IS)

#### 名称区间 ID (IS)

See Section 2.9.21.1, "Namespace ID (IS)" for definition.

定义参见 2.9.21.1，“名称区间 ID (IS)”。

The assigning authority is a unique identifier of the system (or organization or agency or department) that creates the data. [User-defined Table 0363 - Assigning authority](#) is used as the HL7 identifier for the user-defined table of values for this component.

分配授权是创建数据的系统（组织，机构 或部门）独有的标识符。用户定义表 0363-分配授权提供了用户定义的这个组件的 HL7 标识符的数值表。

<b>Note:</b> When the HD is used as a part of another data type, in this case as part of the EI data type, this table may be re-defined (given a different user-defined table number and name) by the technical committee responsible for that segment.
---

By site agreement, implementers may continue to use [User-defined Table 0300 - Namespace ID](#) for the first component

**注意：** 当 HD 被用于另一数据型的一部分时，在这种情况下，作为 EI 数据型的部分，这个表可以由负责那个节段的技术委员会重新定义（给定一个不同的用户定义表号和表名）。

### 2.1.1.3 Universal ID (ST)

#### 一般 ID (ST)

See Section 2.9.21.2, “Universal ID (ST)” for definition.

定义参见 2.9.21.2, “一般 ID (ST)”。

### 2.1.1.4 Universal ID type (ID)

#### 一般 ID 类型 (ID)

Refer to [HL7 Table 0301 - Universal ID type](#) for valid values. See Section 2.9.21.3, “Universal ID type (ID),” for definition.

有效值参见 HL7 表 0301—一般 ID 类型。定义参见 2.9.21.3, “一般 ID 类型 (ID)”。

## 2.1.2 FC - financial class

### FC—经济等级

Components: <financial class (IS)> ^ <effective date (TS)>

组件：<经济等级 (IS)> ^ <有效期 (TS)>

### 2.1.1.1 Financial class (IS)

#### 经济等级 (IS)

This component contains the financial class assigned to a person. [User-defined Table 0064 - Financial class](#) is used as the HL7 identifier for the user-defined table of values for this component.

这个部分包括赋予个人的经济等级。作为 HL7 标示符的用户定义的这个组件的数值表为用户定义表 0064—经济等级。

User-defined Table 0064 - Financial class

用户定义表 0064—经济等级

Value 值	Description 描述
	No suggested values defined 未定义建议值

### 2.1.1.2 Effective date (TS)

有效期 (TS)

This component contains the effective date/time of the person's assignment to the financial class specified in the first component.

此组件在第一组件中包含了说明的经济等级赋予个人的有效日期或时间。

### 2.1.2 FN – family name

#### FN-家庭名字

Components: <surname (ST)> ^ <own surname prefix (ST)> ^ <own surname (ST)> ^ <surname prefix from partner/spouse (ST)> ^ <surname from partner/spouse (ST)>

组件: <姓 (ST)> ^ <自己姓的前缀 (ST)> ^ <自己的姓 (ST)> ^ < 同伴/配偶的姓的前缀 (ST)> ^ <同伴/配偶的姓 (ST)>

This data type allows full specification of the surname of a person. Where appropriate, it differentiates the person's own surname from that of the person's partner or spouse, in cases where the person's name may contain elements from either name. It also permits messages to distinguish the surname prefix (such as "van" or "de") from the surname root.

这种数据类型允许对个人的姓进行详细说明。在合适的地方会将个人自己的姓和其同伴或配偶的区分开，以适用于一个人的姓名含有前两者名字的元素的情况。此方法同时也允许信息从姓的根源区分姓的前缀（例如“van”或“de”）。

**Note:** Appears ONLY in the PN and other PN-containing data types (PPN, XCN, XPN).

**注意:** 仅允许在 PN 和其他包含 PN 的数据类型 (PPN, XCN, XPN) 中出现。

#### 2.1.1.1 Surname (ST)

姓 (ST)

The atomic element of the person's family name. In most Western usage, this is the person's last name.

个人家庭名的主要元素。在西方大部分的用法中，它是指个人的姓。

#### 2.1.1.2 Own surname prefix (ST)

自己姓的前缀 (ST)

Internationalization usage for Germanic languages. This component is optional. An example of a <surname prefix> is the "van" in "Ludwig van Beethoven." Since the <surname prefix> doesn't sort completely alphabetically, it is reasonable to specify it as a separate sub-component of the PN and extended PN data types (XPN and XCN).

日耳曼语的国际化用法。这部分是选择性的。姓的前缀的一个例子是“Ludwig van Beethoven.”中的“van”。既然姓的前缀并没有按字母排序，那么将之定义为 PN 和扩展的 PN 数据型 (XPN 和 XCN) 一个单独的子组件是合理的。

**Note:** Subcomponents <own surname prefix>, <own surname>, <surname prefix from partner/spouse> and <surname from partner/spouse> decompose complex Germanic names such as “Irma de Jong-van Beethoven”. If these subcomponents are valued, the <surname> subcomponent should still be fully valued for backward compatibility, i.e. ...<sup>^</sup>de Jong-van Beethoven&de&Jong&van&Beethoven<sup>^</sup>...  
Also, for clarity, the <last name prefix> has been renamed to <own surname prefix>.

**注意:** 子组件<自己的姓的前缀>,<自己的姓>,<同拌/配偶的姓的前缀>以及<同拌/配偶的姓>分解了复杂的德国名字,例如” Irma de Jong-van Beethoven”。如果这些子组件被赋值,则<姓>子组件也应该完全赋值以保证向后兼容性,等等...<sup>^</sup>de Jong-van Beethoven&de&Jong&van&Beethoven<sup>^</sup>...

同时,为了清楚,<姓的前缀>重新命名为<自己的姓的前缀>。

### 2.1.1.3 Own surname (ST)

#### 自己的姓 (ST)

The portion of the surname (in most Western usage, the last name) that is derived from the person’s own surname, as distinguished from any portion that is derived from the surname of the person’s partner or spouse. This component is optional.

姓中来自个人自己的姓的部分(在大部分西方用法是在名字的最后),不同于来自同伴或配偶的其他任何部分。此组件是可选的。

If the person’s surname has legally changed to become (or incorporate) the surname of the person’s partner or spouse, this is the person’s surname immediately prior to such change. Often this is the person’s “maiden name”.

如果一个人的姓已经合法的成为(或者并入)同伴或配偶的姓,个人的姓立即优先于这种改变。通常这是个人的婚前姓。

### 2.1.1.4 Surname prefix from partner/spouse (ST)

#### 同伴/配偶的姓的前缀 (ST)

Internationalization usage for Germanic languages. This component is optional. An example of a <surname prefix> is the “van” in “Ludwig van Beethoven.” Since the <surname prefix> doesn’t sort completely alphabetically, it is reasonable to specify it as a separate sub-component of the PN and extended PN data types (XPN and XCN).

日耳曼语的国际化用法。这部分是选择性的。姓的前缀的一个例子是“Ludwig van Beethoven.”中的“van”。既然姓的前缀并没有按字母排序,那么将它作为PN和扩展的PN数据型(XPN和XCN)的一个单独的子组件是合理的。

**Note:** Subcomponents <own surname prefix>, <own surname>, <surname prefix from partner/spouse> and <surname from partner/spouse> decompose complex Germanic names such as “Irma de Jong-van Beethoven”. If these subcomponents are valued, the <surname> subcomponent should still be fully valued for backward compatibility, ie. ...<sup>^</sup>de Jong-van Beethoven&de&Jong&van&Beethoven<sup>^</sup>...  
Also, for clarity, the <last name prefix> has been renamed to <own surname prefix>.

**注意:** 子组件<自己姓的前缀>,<自己的姓>,<同拌/配偶的姓的前缀>和<同拌/配偶的姓>分解了复杂的德国姓名例如 “Irma de Jong-van Beethoven”。如果这些子组件被赋值,为了保持向后兼容性,子组件<姓>仍应完全赋值,如. ...<sup>^</sup>de Jong-van Beethoven&de&Jong&van&Beethoven<sup>^</sup>...

为了清楚,<姓的前缀>也已经改为<自己姓的前缀>。

### 2.1.1.5 Surname from partner/spouse (ST)

#### 同伴或配偶的姓 (ST)

The portion of the person's surname (in most Western usage, the last name) that is derived from the surname of the person's partner or spouse, as distinguished from the part derived from the person's own surname. This component is optional.

个人的姓(在大部分西方用法中位于名字的最后)中来自同伴和配偶的姓不同于来源于自己的姓。这个组件是任选的。

If no portion of the person's surname is derived from the surname of the person's partner or spouse, this component is not valued. Otherwise, if the surname of the partner or spouse has legally changed to become (or incorporate) the person's surname, this is the surname of the partner or spouse immediately prior to such change.

如果个人的姓中没有来自同伴或配偶的部分, 则这个不被赋值。 否则, 如果同伴或配偶的姓已经合法的变为(或者并入)个人的姓中, 那么同伴或配偶的姓立即优先于这种变化。

### 2.1.2 FT - formatted text data

#### FT - 格式化文本数据

This data type is derived from the string data type by allowing the addition of embedded formatting instructions. These instructions are limited to those that are intrinsic and independent of the circumstances under which the field is being used. The actual instructions and their representation are described later in this chapter. *The FT field is of arbitrary length (up to 64k)* and may contain formatting commands enclosed in escape characters. Example:

这种数据类型是通过允许给字符串数据类型添加内含的格式化指令而形成。这些指令局限于那些固有的, 独立于使用环境的部分。现行的指令及其表示法在本章的后面部分述及。FT 字段长度任意(高达 64k), 可能在 Escape 字符中包含格式化命令。例如:

```
|\.sp\(\skip one vertical line)|  
|\.sp\(\跳过一条竖线)
```

For additional examples of formatting commands see Section 2.10, "Use of escape sequences in text fields."

更多的格式化命令实例参见 2.10 节, "文本字段中 Escape 系列的用法"。

To include alternative character sets, use the appropriate escape sequence. See Section 2.16.9.20, "Character set", and Section 2.16.9.22, "Alternate character set handling."

为了包括选择性的字符集, 使用合适的 Escape 序列。参见 2.16.9.20, "字符集", 和 2.16.9.22, "备用字符集处理"。



### 2.1.3 HD - hierarchic designator

#### HD - 等级指定器

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

组成: <名称区间 ID (IS)> ^ <一般 ID(ST)> ^ <一般 ID 类型(ID)>

The HD is designed to be more powerful and more general replacement for the application identifier of HL7 versions 2.1 and 2.2. It adds two additional components, the <universal ID> and the <universal ID type> to the former *application ID* (which is renamed more generically to be the *namespace ID*)

HD 设计更有力和更全面的替代 HL7 版本 2.1 和 2.2 中应用程序标识符。它给以前的应用程序 ID(改为更加一般化的名字名称区间 ID)添加了两个部分, <一般 ID>和<一般数据类型>。

The basic definition of the HD is that it identifies an (administrative or system or application or other) entity that has responsibility for managing or assigning a defined set of instance identifiers (such as placer or filler number, patient identifiers, provider identifiers, etc.). This entity could be a particular health care application such as a registration system that assigns patient identifiers, a governmental entity such as a licensing authority that assigns professional identifiers or drivers' license numbers, or a facility where such identifiers are assigned.'

对 HD 的基本定义: 是它识别一个(管理的, 系统, 应用程序或则其他)实体, 这个实体负责管理或指派一套限定的场合标识符(比如放置者或填充者的号码, 病人标识符, 供应者标识符等)。这个实体可以是一个特殊的卫生服务应用程序, 例如指定病人标识符的登记系统, 一个政府实体例如分派专业标识符或驾驶执照的许可权, 或者指定了标识的设备。

In the case where a HD identifies an entity that assigns/creates instance identifiers such as a particular patient registration system, it defines an "assigning authority." In the case where a HD identifies a location where instance identifiers are given out (although they may be created by another entity at another location) such as a particular "department of motor vehicles office location," it defines an "assigning facility." These two different uses of the HD appear in many of the extended data types.

当 HD 识别了指定/创建一个特殊的登记系统的实体的种情况下, 它被定义为一个"分配权限"。当一个 ID 标识出的位置——比如一个特殊的"机动车辆办公部门所在地"(尽管他们可能由另一位置的另一个实体创造)时, 它被定义为一个"分配设备"。这两种 HD 的不同用法出现在很多扩展的数据类型中。

The "assigning authority" defined by the HD is similar in its role to the coding system (and version) part of the coded element data types: both identify a set of more discrete instance identifiers. The difference is that the set of HD-defined discrete instances contain identifiers of "real-world" things such as patient or clinical orders, while the coded element-defined set of discrete instances contains concept identifiers (codes).

HD 定义的"分配权限"在角色上类似于编码元件数据类型的译码系统(和版本)部分: 两者都识别一套不连续的情况标识符。区别在于: HD 定义的一套不连续情况标识符包括真实世界的事物, 例如病人或临床顺序; 然而编码元件定义的不连续情况包括概念标识符(编码)。

The HD is designed to be used either as a local identifier (with only the <namespace ID> valued) or a publicly-assigned identifier, a UID (<universal ID> and <universal ID type> both valued). Syntactically, the HD is a group of two identifiers: a local identifier defined by the first component, and a universal identifier defined by the second and third components. HDs that have defined third components (defined UID types) must have a second component that is unique within the series of IDs defined by that component.

HD 被设计为：或者用作地点标识符（仅带有赋值的<名称区间 ID>），或者用作公开分派的标识符——为一个 UID（<一般 ID>和<一般 ID 类型>都被赋值）。在语句构成，HD 是由两个标识符组成：第一组件定义地点标识，二、三组件定义一般标识。定义了第三组件（定义的 UID 类型）的 HD 必须有第二个组件，此部分定义的 ID 系列是唯一的。

**Note:** The HD is used in fields that in earlier versions of HL7 used the IS data type. Thus, a single component HD (only the first component valued) will look like a simple IS data type for older systems expecting a single component in the place of the HD data type.

**注意：** 在 HL7 的早期版本中，HD 用于使用 IS 数据类型的字段。这样，单个的组件 HD（仅第一部分被赋值）看起来就像一个简单的 IS 数据型，因为原来的系统预期一个简单组件取代 HD 数据型。

If the first component for the HD data type is present, the second and third components are optional. If the third component is present, then the second must also be present (although in this case the first is optional). The second and third components must either both be valued (both non-null), or both be not valued (both null).

This means that if all three components of the HD are valued, the entity identified by the first component is the same as the entity identified by components two and three taken together. However, implementers may choose, by site agreement, to specify that if all three components of the HD are valued, the first component defines a member in the set defined by the second and third components.

如果 HD 数据型的第一组件存在，那么第二组件和第三组件是可选性的。如果第三组件存在，则第二组件也必须存在（尽管这种情况下第一组件是可选的），第二组件和第三组件必须或者同时被赋值（全不为空）或者同时不被赋值（全为空）。

这意味着如果 HD 的三个组件都被赋值，第一组件识别的实体和第二、三组件联合识别的实体是一样的。然而，根据地方协议，实施者可以选择指定：如果 HD 的三个组件都被赋值，则第一组件指定了在第二、三组件中定义一个成员。

2.1.1.1 Namespace ID (IS)

名称区间 ID (IS)

[\*User-defined Table 0300 - Namespace ID\*](#) is used as the HL7 identifier for the user-defined table of values for this component.

此组件用作 HL7 标识符的用户定义数值表为 *用户定义表 0300-名称区间 ID*。

User-defined Table 0300 - Namespace ID

用户定义表 0300-名称区间 ID

Value 值	Description 描述
	No suggested values defined 无定义的假设值

**Note:** When the HD is used in a given segment (either as a field or as a component of another data type) this table may be re-defined (given a different user-defined table number and name) by the technical committee responsible for that segment.

**注意：** 当一信息段使用 HD 时(或者作为一个字段，或者作为另一数据类型的组件)，此表可以由负责该信息段的技术委员会重新定义(给定一个不同的用户定义表号和表名)。

### 2.1.1.2 Universal ID (ST)

#### 一般 ID(ST)

The HD' s second component, <universal ID> (UID), is a string formatted according to the scheme defined by the third component, <universal ID type> (UID type). The UID is intended to be unique over time within the UID type. It is rigorously defined. Each UID must belong to one of the specifically enumerated schemes for constructing UIDs (defined by the UID type). The UID (second component) must follow the syntactic rules of the particular universal identifier scheme (defined by the third component). Note that these syntactic rules are not defined within HL7 but are defined by the rules of the particular universal identifier scheme (defined by the third component).

HD 的第二个组件——<一般 ID>(UID)为根据第三组件——<一般 ID 类型>(UID)定义的方案格式化的字符串。UID 被设计为在整个 UID 类型内不随时间而变化。此数据类型被严格定义。每个 UID 必须从遵守为构建 UID(由 UID 型定义)而特别列举的规则之一。UID(第二组件)必须遵循特殊的一般标识符规则的语法规则(由第三组件定义)。注意这些语法规则不在 HL7 内定义,而是由特殊的一般标识符规则 (由第三组件定义) 的规则定义。

### 2.1.1.3 Universal ID type (ID)

#### 一般 ID 类型(ID)

The third component governs the interpretation of the second component of the HD. If the third component is a known UID refer to [HL7 Table 0301 - Universal ID type](#) for valid values, then the second component is a universal ID of that type.

第三组件支配 HD 第二组件的解释。如果第三组件是参照有效值的 HL7 表 0301—一般 ID 类型的一个已知的 UID，那末第二组件是此种类型的一个一般 ID。

HL7 Table 0301 - Universal ID type

HL7 表 0301—一般 ID 类型

Value 值	Description 描述
DNS	An Internet dotted name. Either in ASCII or as integers 互联网上打点的名称. 或者是 ASCII 或者是整数形式.
GUID	Same as UUID 同 UUID.
HCD	The CEN Healthcare Coding Scheme Designator. (Identifiers used in DICOM follow this assignment scheme.) CEN 卫生服务编码方案指定者. (DICOM 中使用的比哦阿师傅服从这个分配方案)
HL7	Reserved for future HL7 registration schemes 为将来的 HL7 注册方案而保留的.

Value 值	Description 描述
ISO	An International Standards Organization Object Identifier 一个国际标准组织目标标识符。
L, M, N	These are reserved for locally defined coding schemes. 这些为地方定义的编码规则而保留。
Random 随机	Usually a base64 encoded string of random bits. 通常是基数 64 编码的随机比特字符串。  The uniqueness depends on the length of the bits. Mail systems often generate ASCII string "unique names," from a combination of random bits and system names. Obviously, such identifiers will not be constrained to the base64 character set.  独特性体现在比特的长度，邮件系统经常从随机比特和系统名称的结合中产生 ASCII 字符串“独特的名称”。很明显，这样的标识符不会拘泥于基数 64 批字符。
UUID	The DCE Universal Unique Identifier DCE 一般性的独特标识符。
x400	An X.400 MHS format identifier 一个 X.400 信报处理系统的格式标识符
x500	An X.500 directory name 一个 X.500 目录名

**Note:** X400, X500, and DNS are not technically universally valid for all time. Names can be de-registered from an existing user and registered to a new user.

**注意:** X400, X500, 和字段名服务器在技术上不是一直普遍有效的。一个已经存在的使用者可以重新注册和登记成一个新的使用者。

Examples:

例:

Universal ID examples with only the 2<sup>nd</sup> and 3<sup>rd</sup> components valued:

仅第二、三组件被赋值的一般性 ID 样例:

`^1.2.344.24.1.1.3^ISO`

A HD consisting only of an ISO UID.

一个仅由一个国际标准化组织 UID 组成的 HD

`^1.2.34.4.1.5.1.5.1,1.13143143.131.3131.1^ISO`

The syntax of the second component is defined by the ISO standard for object identifiers, not by HL7 (for which the second component is of the ST data type). Thus the periods ( “.” ) and comma ( “,” ) in the second component are part of the ISO syntax, but are legal by the definition of the HL7 ST data type.

第二组件的语法由国际标准组织的目标标识符标准定义，而不是由 HL7 (为此第二组件属于 ST 数据型) 定义。这样，第二组件的句号 ( “.” ) 和逗号 ( “,” ) 是国际标准组织语法的一组件，但是根据 HL7 ST 数据型的定义，他们是合法的。

```
^14344.14144321.4122344.14434.654^GUID
```

```
^falcon.iupui.edu^DNS
```

An internet example

一个互联网样例

```
^40C983F09183B0295822009258A3290582^RANDOM
```

An example of a RANDOM UID

随机 UID 的一个样例

Local examples:

地方样例:

```
LAB1
```

Local use only: a HD that looks like an IS data type

仅地方使用：一个看起来象 IS 数据型的 HD。

```
PathLab^PL.UCF.UC^L
```

The ‘PathLab’ application is identified by the namespace component but it is also identified by the 2<sup>nd</sup> and 3<sup>rd</sup> components, (i.e., by the locally-defined UID system “L”). The two identifiers are equivalent.

‘PathLab’ 应用程序既可由名称区间组件识别又可由第二、三组件识别。(如由局部定义的 UID 系统 “L”)。两个标识符是等价的。

This is a more complex HD in which the middle component, which is locally defined, is itself structured. As with the ISO example above, the middle component’s structure is not defined by HL7 but by the site according to its own needs: the only requirement is that the middle component’s structure is allowed by the HL7 string (ST) data type.

这是一个更复杂的 HD，其中局部定义的中间组件是自发构成的。与上面的 ISO 样例一致，中间组件的结构不是由 HL7 定义而是由地方根据自己的需要定义的：唯一的要求是 HL7 字符串 (ST) 数据类型允许中间组件的结构。

```
RX.PIMS.SystemB.KP.CA.SCA
```

Local use only: a HD that looks like an IS data type. Again, note that the syntax of the first component is not defined by HL7 but by the site according to its own needs: the only requirement is that the first component’s structure is allowed by the HL7 string (ST) data type, which is used for values by the IS data type.

仅局部使用：貌似 IS 数据型的一个 HD。此外，请注意第一组件语法不是由 HL7 定义而是由当地根据自身需要定义的：对第一组件的唯一要求是，其结构是 HL7 字符串 (ST) 数据类型允许的结构，用于 IS 数据型。

```
^RX.PIMS.SystemB.CA.SCA^M
```

An alternate way to encode the previous example, illustrating the use of the third component value of “M” (see above [HL7 Table 0301](#)) to identify a locally-defined identifier set. The second component has the same value as the previous example but is now defined to be a member of a set of allowable values defined by a site for the identifier set “M”.

对前述例子进行编码的另一种替代方法为：举例说明第三组件”M”值的用法(参见上面的 HL7 表 0301)以识别局部定义的标识符集。第二组件取前述例子相同的值，但是现在定义为由当地定义的标识符”M”集的一批允许值的一个。

Examples containing both local and universal ID types:

包括局部和一般 ID 类型的例子：

LABI^1.2.3.3.4.6.7^ISO

A HD with an ISO “object Identifier” as a UID and a locally defined system name. Both the first component and the second and third (taken together) refer to the same entity. This example shows that the local value and the universal ID value may be transmitted with a single HD field.

带有一个 ISO”目标标识符”的 HD 作为 UID 和局部定义的系统名称。第一组件和第二、三组件(合并在一起)参照同样的实体。这个例子显示局部值和一般 ID 值可以以单个 HD 字段的形式进行传送。

### 2.1.2 ID – coded value for HL7 defined tables

#### HL7 定义的表的 ID 编码值

The value of such a field follows the formatting rules for an ST field except that it is drawn from a table of legal values. There shall be an HL7 table number associated with ID data types. An examples of an ID field is *OBR-25-result status*. This data type should be used only for HL7 tables (see Section 2.7.6, “Table”). The reverse is not true, since in some circumstances it is more appropriate to use the CE data type for HL7 tables.

除了来自合法值表之外，这样的字段的值遵循 ST 字段的格式规则。这里应有与 ID 数据类型有关的一个 HL7 表号。ID 字段的一个例子是 *OBR-25-result status*。这个数据类型仅用于 HL7 表(参见 2.7.6, “Table”)。反之并不成立，因为某些情况下在 HL7 表中用 CE 数据型更合适。

### 2.1.3 IS – coded value for user-defined tables

#### 用户定义的表的 IS 编码值

The value of such a field follows the formatting rules for a ST field except that it is drawn from a site-defined (or user-defined) table of legal values. There shall be an HL7 table number associated with IS data types. An example of an IS field is the *Event reason code* defined in Section 3.3.1.4, “Event reason code.” This data type should be used only for user-defined tables (see Section 2.7.6, “Table”). The reverse is not true, since in some circumstances, it is more appropriate to use the CE data type for user-defined tables.

除了来自当地定义的(或用户定义的)合法值表之外, 这样的字段的值遵循 ST 字段的格式规则。这里应有与 ID 数据类型有关的一个 HL7 表号。IS 字段的一个例子是 3.3.1.4 节“事件原因代码”中定义的事件原因代码。这种数据类型仅用于用户定义的表(参见 2.7.6, “Table”)反之则不对, 因为在某些情况下, 用户定义的表用 CE 数据类型更合适。

## 2.1.1.4 JCC - job code/class

### JCC - 工作代码/分类

Components: <job code (IS)> ^ <job class (IS)>

组件:<工作代码 (IS)> ^ <工作类型 (IS)>

#### 2.1.1.1 Job code (IS)

##### 工作代码 (IS)

This component contains the person's job code. [User-defined Table 0327 - Job code](#) is used as the HL7 identifier for the user-defined table of values for this component.

此组件包括个人的工作代码。用户定义表 0327-工作代码为此组件用户定义的数值表的 HL7 标识符。

User-defined Table 0327 - Job code

用户定义的表 0327-工作代码

Value 值	Description 描述
	No suggested values defined 无定义的假设值

#### 2.1.1.2 Job class (IS)

##### 工作分类 (IS)

This component contains the person's employee classification. [User-defined Table 0328 - Employee classification](#) is used as the HL7 identifier for the user-defined table of values for this component.

此组件包括个人的职工分类。用户定义的表 0328-职工分类为此组件的用户定义的数值表的 HL7 标识符。

User-defined Table 0328 - Employee classification

用户定义的表 0328-职工分类

Value 值	Description 描述
	No suggested values defined 无定义的假设值

### 2.1.2 MA – multiplexed array

#### MA-多元化排列

Components: <sample 1 from channel 1 (NM)> ^ <sample 1 from channel 2 (NM)> ^ <sample 1 from channel 3 (NM)> ... ^ <sample 2 from channel 1 (NM)> ^ <sample 2 from channel 2 (NM)> ^ <sample 2 from channel 3 (NM)> ... ^  
...

组件:<来自信道 1 的样本 1(NM)>^<来自信道 2 的样本 1(NM)>^<来自信道 3 的样本 1(NM)>...<来自信道 1 的样本 2(NM)>^<来自信道 2 的样本 2(NM)>^<来自信道 3 的样本 2(NM)>...

This data type is used to represent channel-multiplexed waveform data, (e.g., the digitized values from an analog-to-digital converter or other digital data source). Refer to Chapter 7, Section 7.14.1.2, “MA – multiplexed array,” for a complete description of this data type.

这种数据类型用于代表多元信道波形数据。(如, 来自类似数字转换器或其他数字型数据源的数字化值)。对这种数据型的全面描述请参见第 7 章, 7.14.1.2, ”MA-多元化数组”。

### 2.1.3 M0 – money

#### M0-钱

Components: <quantity (NM)> ^ <denomination (ID)>

组件:<数量(NM)>^<命名(ID)>

**Note:** Intent is that it appear only as a component of data type CP. Used independently in chapter 8, section 8.10.3.

**注意:** 目的在于它仅作为 CP 数据型的组件出现。在第 8 章, 8.10.3 节中独立使用。

#### 2.1.1.1 Quantity (NM)

##### 数量(NM)

The first component is a quantity.

第一组件是个数量。

#### 2.1.1.2 Denomination (ID)

##### 命名(ID)

The second component is the denomination in which the quantity is expressed. The values for the denomination component are those specified in ISO-4217. If the denomination is not specified, *MSH-17-country code* is used to determine the default. Example:

第二组件是数量表达形式的命名。ISO-4217 指定了命名组件的价值。如果命名没有指定, 用 MSH-17-国家代码来确定缺省值。例如:

|99.50^USD|

where USD is the ISO 4217 code for the U.S. American dollar.



此处 USD 是美元的 ISO4217 代码。

### 2.1.2 NA – numeric array

#### NA-数字性排列

This data type is used to represent a series (array) of numeric values, each one having a data type of NM. Refer to Chapter 7, Section 7.14.1.1, “NA – numeric array,” for a complete description of this data type.

这个数据型用于代表一系列数字性值。每个值有 NM 的一种数据类型。这种数据类型的全面描述参见第 7 章，7.14.1.1 节。

### 2.1.3 NM – numeric

#### NM-数字的

A number represented as a series of ASCII numeric characters consisting of an optional leading sign (+ or -), the digits and an optional decimal point. In the absence of a sign, the number is assumed to be positive. If there is no decimal point the number is assumed to be an integer. Examples:

```
|999|
|- 123.792|
```

Leading zeros, or trailing zeros after a decimal point, are not significant. For example, the following two values with different representations, “01.20” and “1.2”, are identical. Except for the optional leading sign (+ or -) and the optional decimal point (.), no non-numeric ASCII characters are allowed. Thus, the value <12 should be encoded as a structured numeric (SN) (preferred) or as a string (ST) (allowed, but not preferred) data type.

首位是 0，或小数点后的 0 没有意义。例如：下面用不同表示法的两个值是相同的。除了可选的前导符号 (+ 或 -) 和可选的小数点 (.) 外，不允许任何非数字性的 ASCII 字符。这样，小于 12 的值应该编码成结构化数字 (SN) (首选的) 或字符串 (ST) (可以但非首选) 数据类型。

### 2.1.4 PL – person location

#### PL-个人位置

Components: <point of care (IS)> ^ <room (IS)> ^ <bed (IS)> ^ <facility (HD)> ^ <location status (IS)> ^ <person location type (IS)> ^ <building (IS)> ^ <floor (IS)> ^ <location description (ST)>

组件: <服务地点 (IS)> ^ <房间 (IS)> ^ <床位 (IS)> ^ <设备 (HD)> ^ <位置状况 (IS)> ^ <个人位置类型 (IS)> ^ <建筑物 (IS)> ^ <楼层 (IS)> ^ <位置描述 (ST)>

**Note:** This data type contains several location identifiers that should be thought of in the following order from the most general to the most specific: facility, building, floor, point of care, room, bed.

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Additional data about any location defined by these components can be added in the following components: person location type, location description and location status.

**注意:** 这个数据类型包含几个位置标识符。这些标识符按以下从最普遍到最特殊的顺序排列：设备、建筑物、楼层、服务地点、房间、床位。这些组件所定义的其他关于位置的数据可以添加在下列组件中：个人位置类型、位置描述和位置状况

This data type is used to specify a patient location within a healthcare institution. Which components are valued depends on the needs of the site. For example for a patient treated at home, only the person location type is valued. It is most commonly used for specifying patient locations, but may refer to other types of persons within a healthcare setting.

这个数据类型用于指定卫生服务机构内病人的位置。对哪些组件赋值取决于地方的需要。以一个在家治疗的病人为例，仅有个人位置类型被赋值。指定病人的位置是最常用的，但是可以参照卫生服务机构内个人的其他类型。

Example: Nursing Unit

例:护理单位

A nursing unit at Community Hospital: 4 East, room 136, bed B

社区医院的护理单位：东边 4 号, 136 房间, B 床。

4E^136^B^CommunityHospital^^N^^

Example: Clinic

例: 门诊

A clinic at University Hospitals: Internal Medicine Clinic located in the Briones building, 3<sup>rd</sup> floor.

大学医院的门诊：Briones 大楼三层的内科门诊

InternalMedicine^^^UniversityHospitals^^C^Briones^3^

Example: Home

例: 家庭

The patient was treated at his home.

病人在家接受治疗。

^^^^H^^

### 2.1.1.1 Point of care (IS)

服务地点 (IS)

Conditional on person location type (e.g., nursing unit or department or clinic). After floor, most general patient location designation. [User-defined Table 0302 - Point of care](#) is used as the HL7 identifier for the user-defined table of values for this component.

在个人位置类型上是有条件的(如, 护理单位或科室或门诊)。是次于楼层的最常用的病人位置名称。此组件用户定义的数值表的 HL7 标识符见用户定义的表 0302-服务地点。

User-defined Table 0302 - Point of care

用户定义表 0302-服务地点

Value 值	Description 描述
	No suggested values defined 未定义建议值

#### 2.1.1.2 Room (IS)

##### 房间(IS)

Patient room. After point of care, most general person location designation. [User-defined Table 0303 - Room](#) is used as the HL7 identifier for the user-defined table of values for this component.

病房。是仅次于服务地点的最常用的个人位置名称。此组件用户定义的数值表的 HL7 标识符见用户定义表 0303-房间。

User-defined Table 0303 - Room

用户定义表 0303-房间

Value 值	Description 描述
	No suggested values defined 未定义建议值

#### 2.1.1.3 Bed (IS)

##### 床位(IS)

Patient bed. After room, most general person location designation. [User-defined Table 0304 - Bed](#) is used as the HL7 identifier for the user-defined table of values for this component.

病床。是仅次于房间的最常用的个人位置名称。此组件用户定义的数值表的 HL7 标识符见用户定义表 0304-床位。

User-defined Table 0304 - Bed

用户定义表 0304-床位

Value 值	Description 描述
	No suggested values defined 无定义的假设值

### 2.1.1.4 Facility (HD)

#### 设备 (HD)

Subject to site interpretation but generally describes the highest level physical designation of an institution, medical center or enterprise. Most general person location designation.

(See Section 2.9.21, “HD – hierarchic designator”) for discussion of data type.

服从地方解。但通常描述机构、医疗中心或企业的最高级物理名称。最一般的个人位置名称。

数据类型的讨论 (参见 2.9.21, “HD – hierarchic designator 等级指定符” )。

**Note:** When the HD data type is used in a given segment as a component of a field of another data type, [User-defined Table 0300 – Namespace ID](#) (referenced by the first sub-component of the HD component) may be redefined (given a different user-defined table number and name) by the technical committee responsible for that segment.

**注意:** 当 HD 数据类型作为另一数据类型字段的组件用于给定的字段时, 用户定义表 0300-名称区间 ID (参见 HD 组件的第一子组件) 可由负责此字段的技术委员会重新定义 (给定一个不同的用户定义表号和表名)。

### 2.1.1.5 Location status (IS)

#### 位置状况 (IS)

Location (e.g., Bed) status. [User-defined Table 0306 – Location status](#) is used as the HL7 identifier for the user-defined table of values for this component.

位置 (如床位) 状况。此组件用户定义的数值表的 HL7 标识符见 [用户定义表 0306-位置状况](#)。

User-defined Table 0306 - Location status

用户定义表 0306-位置状况

Value 值	Description 描述
	No suggested values defined 未定义建议值

## 2.1.1.6 Person location type (IS)

## 个人位置类型 (IS)

Person location type is the categorization of the person's location defined by facility, building, floor, point of care, room or bed. Although not a required field, when used, it may be the only populated field. Usually includes values such as nursing unit, department, clinic, SNF, physician's office. [User-defined Table 0305 - Person location type](#) is used as the HL7 identifier for the user-defined table of values for this component.

个人位置类型是由设备、建筑、楼层、服务点、房间或床位定义的个人位置类别。尽管不是必须的字段，但在使用时，它可以是唯一的入口学字段。通常包括如护理单位、科室、门诊、SNF 和医师办公室等数据。此组件用户定义的数值表的 HL7 标识符请见用户定义表 0305-个人位置类型。

User-defined Table 0305 - Person location type

用户定义表 0305-个人位置类型

Value 值	Description 描述
C	Clinic 门诊
D	Department 科室
H	Home 家庭
N	Nursing Unit 护理单位
O	Provider's Office 提供者的办公室
P	Phone 电话
S	SNF

## 2.1.1.7 Building (IS)

## 建筑 (IS)

After facility, most general person location designation. [User-defined Table 0307 - Building](#) is used as the HL7 identifier for the user-defined table of values for this component.

是仅次于设备的最常用的个人位置名称。此组件用户定义的数值表的 HL7 标识符见用户定义表 0307-建筑。

User-defined Table 0307 - Building

用户定义表 0307-建筑

Value 值	Description 描述
	No suggested values defined 未定义建议值

### 2.1.1.8 Floor (IS)

#### 楼层 (IS)

After building, most general person location designation. [User-defined Table 0308 - Floor](#) is used as the HL7 identifier for the user-defined table of values for this component.

是仅次于建筑的最常用的个人位置名称。此组件用户定义的数值表的 HL7 标识符见用户定义表 0308-楼层。

User-defined Table 0308 - Floor

用户定义表 0308-楼层

Value 值	Description 描述
	No suggested values defined. 未定义建议值

### 2.1.1.9 Location description (ST)

#### 位置描述 (ST)

A free text description of the location.

位置的自由文本描述。

## 2.1.2 PN - person name

### PN-个人姓名

Components: <family name (FN)> ^ <given name (ST)> ^ <second and further given names or initials thereof (ST)> ^ <suffix (e.g., JR or III) (ST)> ^ <prefix (e.g., DR) (ST)> ^ <degree (e.g., MD) (IS)>

Subcomponents of family name: <surname (ST)> &<own surname prefix (ST)> &<own surname (ST)> &<surname prefix from partner/spouse (ST)> &<surname from partner/spouse (ST)>

**Note:** Replaced by XPN data type as of v 2.3

**注意:** 在 2.3 版本中由 XPN 数据类型取代

Length: 48
长度: 48

This data type includes multiple free text components. The sending system may send upper- and lowercase or all uppercase. The receiving system may convert to all uppercase if required. Example:

这个数据类型包括多个自由文本组件。发送系统可发送大写字母和小写字母或全部是大写字母。如果需要，接受系统可全部将之转换为大写字母。

|SMITH^JOHN^J^III^DR^PHD|

#### 2.1.2.1 Family name (FN)

##### 家庭姓名(FN)

This component allows full specification of the surname of a person. Where appropriate, it differentiates the person's own surname from that of the person's partner or spouse, in cases where the person's name may contain elements from either name. It also permits messages to distinguish the surname prefix (such as "van" or "de") from the surname root. See section **2.9.19**

此组件允许对姓的完全描述。在合适的地方，它将自己的姓与同伴或配偶的姓区分开，在某些情况下，姓名可包含来自这两组件的元素。它也允许信息从姓的根源区分姓的前缀（如“van”或“de”）。参见 **2.9.19**

#### 2.1.2.2 Given name (ST)

##### 名字(ST)

First name.

名字

#### 2.1.2.3 Second and further given names or initials thereof (ST)

##### 第二个和其后的名字或字首大写字母(ST)

Multiple middle names may be included by separating them with spaces.

包含多个中间名可用空格分隔。

#### 2.1.2.4 Suffix (ST)

##### 后缀(ST)

Used to specify a name suffix (e.g., Jr. or III).

用于指定名字的后缀(如 Jr. 或 III)

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### 2.1.2.5 Prefix (ST)

姓前称谓(ST)

Used to specify a name prefix (e.g., Dr.).

用于指定名字的前缀(如, Dr.)

### 2.1.2.6 Degree (IS)

学位(IS)

Used to specify an educational degree (e.g., MD). Refer to [User-defined Table 0360 - Degree](#) for suggested values.

用于指定教育程度(如: MD)。建议值参见用户定义表 0360-学位。

#### 2.1.2.6.1 Internationalization note

国际性注解

In countries using ideographic or syllabic (phonetic) character sets, it is sometimes necessary to send the name in one or both of these formats, as well as an alphabetic format. The switching between the different character sets can be accomplished using a character set such as JIS X 0202 - ISO 2022 which provides an escape sequence for switching among different character sets and among single-byte and multi-byte character representations. When the name field is repeated, the different repetitions of the name may be represented by these different character sets. The details are as follows. (See also Section 2.9.2, "Escape sequences supporting multiple character sets for PN, XPN, XCN, XON, XAD, FT, ST and TX data types.")

在使用表意的或音节的(语音的)字符集的国家,有时有必要和字母格式一样,以这两种格式一起或其中一种来发送名字。不同字符串之间的转换可通过使用 JIS X 0202 - ISO 2022 这样的字符集来实现,这个字符集为不同字符集之间以及单字节和多字节形式间的转换提供了一个 escape 序列。当名字字段被重复时,名字的不同重复可由这些不同的字符集表示。具体细节如下所述。(参见 2.9.2 节,“支持 PN, XPN, XCN, XON, XAD, FT, ST 和 TX 数据类型的多重字符集的 escape 序列”)。

HL7 supports the following standards for Japanese characters:

HL7 支持下列日文字符标准:

JIS X 0201 for ISO-IR 13 (Japanese Katakana)

JIS X 0201 for ISO-IR 14 (Japanese Romaji)

JIS X 0208 for ISO-IR 87 (Japanese Kanji, Hiragana and Katakana)

JIS X 0212 for ISO-IR 159 (supplementary Japanese Kanji)

HL7 supports the following standards for European characters:



HL7 支持下列欧洲字符标准：

ISO 8859 (1-9) for ISO-IR 100, 101, 109, 110, 144, 127, 126, 138 and 148.

Character sets are referenced in HL7 as ASCII, 8859/1,.8859/2, ISO IR14, ISO IR87, and ISO IR159. DICOM uses codes laid out in ISO 2375, of the form. HL7 supports this naming as well, to facilitate interoperability.

HL7 中引用的字符集形式为 ASCII, 8859/1,.8859/2, ISO IR14, ISO IR87, and ISO IR159. DICOM 的使用列在表中的 ISO 2375. HL7 也支持这种命名以便于相互协作.

HL7 uses the Basic G0 Set of the International Reference Version of ISO 646:1990 (ISO IR-6) as the default character repertoire for character strings. This is a single-byte character set, identical to ASCII.

HL7 使用 ISO 646 国际参考版本的基本 G0 集： 1990 (ISO IR-6)为字符串的缺省字符库。这是个单字节字符集，与 ASCII 相同。

Each repetition of a PN, XPN, XON, XCN, or XAD field is assumed to begin with the default character set. If another character set is to be used, the HL7 defined escape sequence used to announce that character set must be at the beginning of the repetition, and the HL7 defined escape sequence used to start the default character set must be at the end of the repetition. Note also that several character sets may be intermixed within a single repetition as long as the repetition ends with a return to the default character set.

PN, XPN, XON, XCN 或 XAD 字段的每个重复段假定以缺省字符集开头。如果使用了另一个字符集，则 HL7 定义的用于标明该字符集的 escape 序列必须位于重复段的开头，且 HL7 定义的用于开始使用缺省字符集的 escape 序列必须位于重复片断的末尾。也要注意几个字符集可能混杂在一个重复段内，只要重复段结束于返回至缺省字符集。

An application must specify which character sets it supports in the field "MSH-18 Character Sets" and which character set handling scheme it supports in the field *MSH-20-Alternate character set handling scheme*. It is assumed that the sending and receiving applications are aware of how to map character set names (i.e., ISO-IR xxx) to escape sequences.

一个应用软件必须指定它在"MSH-18 个字符集"字段内支持哪些字符集，以及在 *MSH-20-替换字符集处理* 方案字段内支持那个字符集处理方案。假定发送和接受应用程序知道如何将字符集名称（如，ISO-IR xxx）印象到 escape 序列。

For example, in many Japanese messages there is a mix of Romaji (i.e., Roman characters), Katakana (phonetic representation of foreign words), Hiragana (phonetic representation of Japanese words) and Kanji (pictographs). Such a message would require 4 character sets be specified in the MSH.

例如，在许多日文信息中 Romaji（如，罗马字符），Katakana（外国文字的语音形式），Hiragana（日本文字的语音形式）and Kanji（象形文字）

### 2.1.2.7 References for internationalization of name

#### 名称国际化的参考

1. “Understanding Japanese Information Processing” by Ken Lunde, O’ Reilly Press  
“理解日文信息处理” Ken Lunde 著, O’ Reilly 出版社
2. “DICOM Supplement 9 : Multi-Byte Character Set Support”, ACR-NEMA  
“DICOM 附录 9:多字节字符集支持” , ACR-NEMA
3. ANSI X3.4:1986 ASCII character set  
ASCII 字符集
4. ISO 646:1990 Information Processing - ISO 7-bit coded character set for information interchange  
信息处理-信息交换的 ISO 7 位编码字符集
5. ISO/IEC 2022:1994 Information Technology - Character code structure and extension techniques  
信息技术-字符代码结构和扩展技术
6. ISO 2375:1986 Data Processing - Procedure for the registration of escape sequences  
数据处理- escape 序列的登记过程
7. ISO 6429:1990 Information Processing - Control functions for 7-bit and 8-bit coded character sets  
信息处理-7 位和 8 位编码的字符集的控制功能
8. ISO 8859 (1-9) Information Processing - 8-bit single-byte coded graphic character sets - parts 1-9  
信息处理-8 位单字节编码的图形字符集—1-9 组件
9. ENV 41 503:1990 Information systems interconnection - European graphic character repertoires and their coding  
信息系统连络-欧洲图形字符指定系统及其编码
10. ENV 41 508:1990 Information systems interconnection - East European graphic character repertoires and their coding  
信息系统连络-东欧图形字符指定系统及其编码

- |    |                 |  |
|----|-----------------|--|
| 11 | JIS X 0201-1976 | Code for Information Exchange  |
| .  |                 | 信息交换代码   |
| 12 | JIS X 0212-1990 | Code of the supplementary Japanese Graphic Character set for information interchange |
| .  |                 | 信息交换的增补日文图形字符集的代码  |
| 13 | JIS X 0208-1990 | Code for the Japanese Graphic Character set for information interchange              |
| .  |                 | 信息交换的日文图形字符集的代码  |
| 14 | RFC 1468        | Japanese Character Encoding for Internet Messages                                    |
| .  |                 | 编码互联网信息的日文字符   |

This approach is in harmony with DICOM.

此步骤与 DICOM 相协调。

Character Repertoires supported by DICOM are defined in Part 5, section 62E1, of Supplement 9. It says, “Values that are text or character strings can be composed of Graphic and Control Characters. The Graphic Character set, independent of its encoding, is referred to as a Character Repertoire. Depending on the native context in which Application Entities wish to exchange data using the DICOM standard, different character repertoires will be used. The Character Repertoires supported by DICOM are defined in ISO 8859.”

DICOM 支持的字符指令系统在附录 9 的 62E1 的第 5 部分定义。它写道：“文本或字符串的值可由图形和控制字符组成。独立于编码的图形字符集参见字符指令系统。使用何种字符指定系统取决于应用程序实体希望采用 DICOM 标准交换数据的确切场合。DICOM 支持的字符指令系统在 ISO8859 中定义。”

In addition, DICOM supports the following Character Repertoires for the Japanese Language:

另外，DICOM 支持下列日语的字符指令系统：

JIS X 0201-1976 - Code for Information Exchange

信息交换代码

JIS X 0208-1990 - Code for the Japanese Graphic Character set for information interchange

信息交换的日文图形字符集的代码

JIS X 0212-1990 - Code of the supplementary Japanese Graphic Character set for information interchange

信息交换的增补日文图形字符集的代码

### 2.1.3 PPN – performing person time stamp

#### PPN-实施者时间标记

Components: <ID number (ST)> ^ <family name (FN)> ^ <given name (ST) ^ <second and further given names or initials thereof (ST)> ^ <suffix (e.g., JR or III) (ST)> ^ <prefix (e.g., DR) (ST)> ^ <degree (e.g., MD) (IS)> ^ <source table (IS)> ^ <assigning authority (HD)> ^ <name type code(ID)> ^ <identifier check digit (ST)> ^ <code identifying the check digit scheme employed (ID)> ^ <identifier type code (IS)> ^ <assigning facility (HD)> ^ <date/time action performed (TS)> ^ <name representation code (ID)> ^ <name context (CE)> ^ <name validity range (DR)> ^ <name assembly order (ID)>

Subcomponents of family name: <surname (ST)> &<own surname prefix (ST)> &<own surname (ST)> &<surname prefix from partner/spouse (ST)> &<surname from partner/spouse (ST)>

Subcomponents of name context: <identifier (ST)> & <text (ST)> & <name of coding system (IS)> & <alternate identifier (ST)> & <alternate text (ST)> & <name of alternate coding system (IS)>

Subcomponents of name validity range: <date range start date/time (TS)> & <date range end date/time (TS)>

**Length:** 250

**长度:**250

This data type is the equivalent of an XCN data type joined with a TS data type. However, since HL7 does not support subcomponents in Version 2.3, the XCN data type has been flattened.

这种数据类型等同于一个 XCN 数据型加上一个 TS 数据型。然而，既然 HL7 不支持 2.3 版本的子组件，XCN 数据型已被去掉。

#### 2.1.1.1 ID number (ST)

##### ID 号(ST)

Coded ID according to a user-defined table, defined by the 8<sup>th</sup> component. If the first component is present, either the source table or the assigning authority must be valued.

按用户定义表的编码的 ID，由第 8 组件定义。如果第一组件存在，数据来源表或分配权限必须赋值。

#### 2.1.1.2 Family name (FN)

##### 姓(FN)

This component allows full specification of the surname of a person. Where appropriate, it differentiates the person's own surname from that of the person's partner or spouse, in cases where the person's name may contain elements from either name. It also permits messages to distinguish the surname prefix (such as "van" or "de") from the surname root. See section 2.9.19.

此组件允许对个人姓的详细说明。在恰当的场所，即当个人的姓可包含自己的姓和同伴或配偶的姓这两者的组件时，那么它能把个人自己的姓和同伴或配偶的区分开来。它也允许信息从姓的根源区分姓的前缀（如“van” or “de”）。参见 2.9.19 节。

### 2.1.1.3 Given name (ST)

名(ST)

First name.

名字

### 2.1.1.4 Second and further given names or initials thereof (ST)

第二个和其他或首个大写字母(ST)

Multiple middle names may be included by separating them with spaces.

可包含用空格隔开的多重中间名。

### 2.1.1.5 Suffix (ST)

后缀(ST)

Used to specify a name suffix (e.g., Jr. or III).

用于指定名字的后缀(如: Jr. 或 III)

### 2.1.1.6 Prefix (ST)

前缀(ST)

Used to specify a name prefix (e.g., Dr.).

用于指定名字的前缀(如: Dr.)

### 2.1.1.7 Degree (IS)

学历(IS)

Used to specify an educational degree (e.g., MD). Refer to [User-defined Table 0360 - Degree](#) for suggested values.

用于指定教育程度(如: MD)。建议值参见用户定义表 0360-学历。

### 2.1.1.8 Source table (IS)

来源表(IS)

[User-defined Table 0297 - CN ID](#) source is used as the HL7 identifier for the user-defined table of values for this component. Used to delineate the first component.

此组件的用户定义值表(作为 HL7 标识符)参见用户定义表 0297-CN ID。用于描述第一组件。

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### 2.1.1.9 Assigning authority (HD)

#### 分配权限 (HD)

The assigning authority is a unique identifier of the system (or organization or agency of department) that creates the data. It is a HD data type. [User-defined Table 0363 - Assigning authority](#) is used as the HL7 identifier for the user-defined table of values for the first sub-component of the HD component, <namespace ID>.

分配权限是创建数据的系统(组织, 机构或部门)唯一的标识符。它是 HD 数据型。用户定义表 0363-分配权限为 HD 组件的第一子组件—<名称区间 ID>的用户定义数值表以作为 HL7 标识符。

**Note:** When the HD data type is used in a given segment as a component of a field of another data type, [User-defined Table 0300 - Namespace ID](#) (referenced by the first sub-component of the HD component) may be re-defined (given a different user-defined table number and name) by the technical committee responsible for that segment.

**注意:** 当 HD 数据型作为另一个数据类型字段的组件用于给定的信息段时, 用户定义表 0300-名称区间 ID (被 HD 组件的第一子组件所参考) 可由负责该信息段的技术委员会重新定义(给定一个不同的用户定义表号和表名)。

By site agreement, implementers may continue to use [User-defined Table 0300 - Namespace ID](#) for the first sub-component.

根据地方协议, 实施者可继续使用第一子组件的用户定义表 0300-名称区间 ID。

### 2.1.1.10 Name type code (ID)

#### 名字类型代码 (ID)

A code that represents the type of name. Refer to [HL7 Table 0200 - Name type](#) for valid values (see Section 2.9.55, “XPN - extended person name”).

代表名字类型的代码。有效值参见 HL7 表 0200-名字类型(参见 2.9.55, “XPN - 扩展的人名”)

### 2.1.1.11 Identifier check digit (ST)

#### 标识符校验数位 (ST)

The check digit in this data type is not an add-on produced by the message processor. It is the check digit that is part of the identifying number used in the sending application. If the sending application does not include a self-generated check digit in the identifying number, this component should be valued null.

这种数据类型的校验数位不是由信息处理器添加的。校验数位是发送端应用程序使用的识别号的一组件。如果发送端应用程序在识别号不包括的一个自己生成的校验数位, 则此组件应该赋值为零。

### 2.1.1.12 Code identifying the check digit scheme employed (ID)

#### 识别使用的校验数位规则的代码 (ID)

Refer to [HL7 Table 0061 - Check digit scheme](#) for valid values.

有效值参见 HL7 表 0061-校验数位规则

## 2.1.1.13 Identifier type code (IS)

## 标识符类型代码 (IS)

A code corresponding to the type of identifier. In some cases, this code may be used as a qualifier to the “Assigning authority” component. Refer to [HL7 Table 0203 – Identifier type](#) for suggested values.

与标识符类型相应的代码。在某些情况下，这个代码可用作“分配权限”组件的指定符。建议值参见 HL7 表 0203-标识符类型。

## 2.1.1.14 Assigning facility (HD)

## 分配设备 (HD)

The place or location identifier where the identifier was first assigned to the patient. This component is not an inherent part of the identifier but rather part of the history of the identifier: as part of this data type, its existence is a convenience for certain intercommunicating systems.

第一次将标识符指定给病人的地点或位置标识符。这个组件不是标识符的内在组件而是标识符历史的一部分：作为这种数据类型的一组件，它的存在是为了方便某些特定的通信系统。

**Note:** When the HD data type is used in a given segment as a component of a field of another data type, [User-defined Table 0300 – Namespace ID](#) (referenced by the first sub-component of the HD component) may be re-defined (given a different user-defined table number and name) by the technical committee responsible for that segment.

**注意：** 当 HD 数据类型作为另一个数据类型字段的组件用于给定的信息段时，用户定义表 0300-名称区间 ID (被 HD 组件的第一子组件所参考) 可由负责该信息段的技术委员会重新定义 (给定一个不同的用户定义表号和表名)。

## 2.1.1.15 Date/time action performed (TS)

## 采取行动的日期或时间 (TS)

This component describes when the activity was performed.

这个组件描述了什么时候采取行动。

**Note:** If this field is not null, both the performing person and the time stamp must be valued.

**注意：** 如果这个字段不为空，执行者和时间标记必须赋值。

## 2.1.1.16 Name representation code (ID)

## 名字表示法代码 (ID)

Different name/address types and representations of the same name/address should be described by repeating of this field, with different values of the Name/Address Type and/or Name/Address Representation component.

不同的名字/地址类型和同样的名字或地址的表示法应该由对该字段的重复使用来描述。名字/地址类型和/或名字/地址表示法不同组件的有不同的值。

**Note:** This new component remains in “alphabetic” representation with each repetition of the field using these data types. I.e. even though the name may be represented in an ideographic character set, this component will remain represented in an alphabetic character set.

**注意:** 这个新的组件保持用“字母顺序”的形式表示，字段的每个重复使用这些数据类型。也就是说，即使名字可能表示为表意字符集，此组件仍将保持字母字符集的形式。

HL7 Table 0465 – Name/address representation

HL7 表 0465-名字/地址表示法

Value 值	Description 描述
I	Ideographic (i.e., Kanji) 表意型(如, Kanj)
A	Alphabetic (i.e., Default or some single-byte) 字母型(如, 缺省值或某些单字节)
P	Phonetic (i.e., ASCII, Katakana, Hiragana, etc.) 语音型(如, ASCII, 片假名, 平假名, 等)

In general this component provides an indication of the representation provided by the data item. It does not necessarily specify the character sets used. Thus, even though the representation might provide an indication of what to expect, the sender is still free to encode the contents using whatever character set is desired. This component provides only hints for the receiver, so it can make choices regarding what it has been sent and what it is capable of displaying.

通常来讲，这个组件给数据项提供的表示法提供了一个标识。它并不一定指定使用的字符集。这样，即使表示法可能指出了预期结果，但发送者仍然任意使用任何字符集来编码内容。此组件仅仅为接受者提供了标识，因此它可根据发送的内容和它所能显示的内容作出选择。

### 2.1.1.17 Name context (CE)

#### 名字场景(CE)

Subcomponents of name context: <identifier (ST)> & <text (ST)> & <name of coding system (IS)> & <alternate identifier (ID)> & <alternate text (ST)> & <name of alternate coding system (IS)>

This component is used to designate the context in which a name is used. The main use case is in Australian healthcare: indigenous patients who prefer to use different names when attending different healthcare institutions. Another use case occurs in the US where health practitioners can be licensed under slightly different names and the reporting of the correct name is vital for administrative purposes. Refer to chapter 3, section 3.4.2.6 for more detailed information on how to use this table. Refer to *User-defined table 0448 – Name context* for suggested values;

这个组件用于指定使用名字的场景，主要的使用场合是在澳大利亚医疗服务中：在不同医疗服务机构就医时愿意使用不同的名字的本土病人。另一个使用场合是在美国，从事医疗服务者可以用不同的名字领



取执照，对管理而言，报告真实姓名非常重要。有关如何使用该表的详细信息参见第 3 章、3.4.2.6 节。建议值参见用户定义表 0448-名字场景。

User-defined Table 0448 - Name context

用户定义表 0448-名字场景

Value 值	Description 描述
	No suggested values defined 未定义建议值

#### 2.1.1.18 Name validity range (DR)

##### 名字有效范围(DR)

This component contains the start and end date/times which define the period during which this name was valid. See section 2.9.14, “DR – date/time range” for description of subcomponents.

这个组件包括指定名字有效期的起始和结束日期/时间。其子组件的描述参见 2.9.14, “DR –日期/时间范围”

#### 2.1.1.19 Name assembly order (ID)

##### 名字结合的顺序(ID)

A code that represents the preferred display order of the components of this person name. Refer to [HL7 Table 0444 - Name assembly order](#) for valid values.

表示个人名字组件偏好的显示顺序的代码。有效值参见 HL7 表 0444-名字结合顺序。

HL7 Table 0444 - Name assembly order

HL7 表 0444-名字结合顺序

Value 值	Description 描述
G	Prefix Given Middle Family Suffix 前缀 名 中间名 姓 后缀
F	Prefix Family Middle Given Suffix 前缀 姓 中间名 名 后缀

## 2.1.2 PT – processing type

### PT-处理类型

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

This data type indicates whether to process a message as defined in HL7 Application (level 7) Processing rules.

这个数据类型指明是否按 HL7 应用程序 (第 7 层) 处理规则来处理信息。

### 2.1.1.1 Processing ID (ID)

处理 ID(ID)

A value that defines whether the message is part of a production, training, or debugging system. Refer to [HL7 Table 0103 – Processing ID](#) for valid values.

其值定义信息是否是生产、培训或调试系统的一部分。有效值参见 HL7 表 0103-处理 ID。

### 2.1.1.2 Processing mode (ID)

处理模式 (ID)

A value that defines whether the message is part of an archival process or an initial load. Refer to [HL7 Table 0207 – Processing mode](#) for valid values.

其值定义信息是否是归档处理或初始装载的一部分。有效值参见 HL7 表 0207-处理模式。

## 2.1.2 QIP – query input parameter list

### QIP-查询输入参数列表

Components: <segment field name (ST) > ^ <value1 (ST) & value2 (ST) & value3 (ST) ...>

Example:

例:

|@PID.5.1^EVANS|

Definition: This field contains the list of parameter names and values to be passed to the stored procedure.

定义: 这个字段包含了要传送到储存过程的参数名字和值的列表。

### 2.1.1.1 Segment field name (ST)

信息段字段名(ST)

This component contains the segment field name.

这个组件包含了信息段字段名。

Naming conventions:

命名习惯:

Segment field names are designated by the “@” symbol concatenated with the HL7 segment ID followed by the sequence number for the field separated by a period (see sections 2.6, “SEGMENTS” and 2.7.1, “Position (sequence within the segment)” for a definition of segment ID and sequence number). If the field is divided into components, the designation may be suffixed with “.nn,” to identify a particular component (a suffix of “.3” indicates the third component of the field); otherwise, the whole field is assumed. If the field is further divided into subcomponents, the designation is suffixed with “.nn.mm,” which identifies the component and subcomponent requested by relative position.

信息段字段名由 HL7 信息段 ID 与连接的 “@” 符号共同指定，其中 HL7 信息段 ID 之后有字段序列号以分隔信息段（信息段 ID 和序列号的定义参见 2.6，“信息段”和 2.7.1，“位置（信息段中的系列号）”。如果字段分成几个组件，名称可加上后缀 “.nn,” 以识别特殊组件（后缀 “.3” 指明字段的第三组件）：否则，则整个字段不被分割。如果字段进一步分成子组件，则名称加上后缀 “.nn.mm,” 以识别相关位置要求的组件和子组件。

Site-specific segment field names may be used. In this case, the site-specific segment ID (if the field is not being added to an existing HL7 segment) and the sequence number must be defined so that they do not conflict with existing HL7 segment IDs and field sequence numbers.

可以使用地方指明的信息段字段名。这种情况下，地方指明的信息段 ID（如果此字段不是要添加到一个已经存在的 HL7 信息段的话）和序列号必须被定义。因此它们并不和已经存在的 HL7 信息段 ID 以及字段序列号相矛盾。

Values for this field are defined in the function-specific chapters of this specification.

这个字段的值在本说明书的特定功能章节中定义。

**Note:** If the “@” is being used as one of the delimiter characters defined in MSH-2-encoding characters, it must be “escaped.” (See Section 2.10.1, “Formatting codes”.)

**注意：** 如果 “@” 正用作 MSH-2-编码字符中定义的分隔字符之一，它必须被 “escaped.”（参见 2.10.1，“格式化代码”。）

#### 2.1.1.2 Value1 & value2 & value3 (ST)

值 1 和值 2 和值 3(ST)

This component contains the field value or values in the form “value1& value2 & value3...”

这个组件包含字段名或表格”值 1 和值 2 和值 3...” 中的值。

A single valued parameter contains only a single subcomponent in the second component: thus no subcomponent delimiters are needed (e.g., <segment field name> ^ <value>). A simple list of values (i.e., a one-dimensional array) may be passed instead of a single value by separating each value with the subcomponent delimiter: ,” <segment field name> ^ <value1 & value2 &...>”

单个被赋值的参数仅包含第二组件的单个子组件：这样不需要任何子组件分隔符（如：<信息段字段名>^<值>）。一简单的数值列表（如：一个一维数组）可以替代单个值被传递，通过用子组件分隔符分隔每个值：” <信息段字段名>^<值 1 和值 2 和...>”。

### 2.1.2 QSC – query selection criteria

#### QSC-查询选择标准

Components: <segment field name(ST)> ^ <relational operator (ID)> ^ <value (ST)> ^ <relational conjunction (ID)>

Example:

例:

|@PID.5.1^EQ^EVANS|

Definition: This field indicates the conditions that qualify the rows to be returned in the query response. (This field conveys the same information as the “WHERE” clause in the corresponding SQL expression of the query, but is formatted differently.)

定义：这个字段指明了在查询应答中限定行返回的条件。（这个字段传递了和查询语言 SOL 中” WHERE” 语句相同的信息，只是格式不一样。）

#### 2.1.1.1 Segment field name (ST)

##### 信息段字段名(ST)

The name of the field that is participating as a qualifier (usually the “key”). Refer to Section 2.9.33.1, “Segment field name (ST),” for segment field name conventions.

参与作为指定符的字段名(通常是” 关键”)。信息段字段名协议参见 2.9.33.1, ” 信息段字段名(ST)”

#### 2.1.1.2 Relational operator (ID)

##### 相关操作者(ID)

Refer to [HL7 Table 0209 – Relational operator](#) for valid values.

有效值参见 HL7 表 0209-相关操作者。

HL7 Table 0209 – Relational operator

HL7 表 0209-有关操作者

Relational operator 有关操作者	Value 值
EQ	Equal 等于
NE	Not Equal 不等于
LT	Less than 小于
GT	Greater than

Relational operator 有关操作者	Value 值
	大于
LE	Less than or equal 小于或等于
GE	Greater than or equal 大于或等于
CT	Contains 包含
GN	Generic 普通的

## 2.1.1.3 Value (ST)

值 (ST)

The value to which the field will be compared.

字段要作何种比较的值。

## 2.1.1.4 Relational conjunction (ID)

相关连接词 (ID)

Refer to [HL7 Table 0210 – Relational conjunction](#) for valid values. The relational conjunction is defined as follows: If more than one comparison is to be made to select qualifying rows, a conjunction relates this repetition of the field to the next.

有效值参见 HL7 表 0210-相关连接词。相关连接词定义如下：如果选择合格的行要做多个比较，一个连接词将字段的这个重复段与下一个相关连。

HL7 Table 0210 – Relational conjunction

HL7 表 0210-相关连接词

Relational conjunction 相关连接词	Note 注意事项
AND	Default 缺省
OR	

- When applied to strings, the relational operators LT, GT, LE, and GE imply an alphabetic comparison.

应用于字符串时，有关操作者 LT, GT, LE 和 GE 暗示一个字母的比较。

- A “generic” comparison selects a record for inclusion in the response when the beginning of the designated field matches the select string.

当指定的字段与选择字符集相匹配时, 一个”普通的”比较就选择一个包含在应答中的记录。

- Where a repeating field is specified as an operand, a match on any instance of that field qualifies the row for inclusion in the response message.

当字段使应答信息中的行合格的情形下, 重复字段被指定为一个操作和匹配。

- AND takes precedence over OR. More sophisticated precedence rules require that the query be expressed as an embedded query language message or a stored procedure query message (see chapter 5)

AND 优先于 OR。更复杂的优先规则要求此查询要表达为内在的查询语言信息或储存程序查询信息 (参见第 5 章)。

### 2.1.2 RCD - row column definition

#### RCD-行列定义

Components: <segment field name (ST)> ^ <HL7 data type (ID)> ^ <maximum column width (NM)>

Example: This defines a column containing the value of the “last name” component of PID-5, expressed as a ST data type with a maximum width of 20.

例: 这里定义了包含 PID-5 的”姓”组件值的列, 该组件表达为最大宽度 20 的 ST 数据型。

|@PID.5.1^ST^20|

Definition: This specifies the format of a column in terms of a segment field name, a data type, and a maximum length. It consists of three components:

定义: 这里指定了按信息段字段名、数据类型和最大长度的纵列格式, 它包含三个组件。

#### 2.1.1.1 Segment field name (ST)

##### 信息段字段名(ST)

The HL7 segment field name, which identifies the field occupying the column. (Refer to Section 2.9.33.1, “Segment field name (ST),” for segment field name definition conventions.)

识别占据此列的字段的 HL7 信息段字段名。(信息段字段名定义协议参见 2.9.33.1, ”信息段字段名(ST)” )

#### 2.1.1.2 HL7 data type (ID)

##### HL7 数据类型(ID)

The two or three character HL7 data type. Refer to HL7 Table 0440 - Data Types for valid values.

含二或三字符的 HL7 数据型。有效值参见 HL7 表 0440-数据类型。

### 2.1.1.3 Maximum column width (NM)

最大列宽 (NM)

The maximum width of the column, as dictated by the responding system. (This may vary from the HL7-defined maximum field length.)

列的最大宽度。由系统所规定(这可不同于 HL7 定义的最大字段长度。)

## 2.1.2 RI - repeat interval

### RI-重复间隔

Components: <repeat pattern (IS)> ^ <explicit time interval (ST)>

Definition: This field contains the interval between repeating appointments. The default setting indicates that the appointment should occur once, when the component is not valued. The definition of this field is equivalent to the definition of the Interval component of the Quantity/Timing field given in Chapter 4, Section 4.4.2 “Interval component (CM).”

定义：此字段包含重复指令间的间隔。缺省设置标明：当此组件未被赋值时，指令应该出现一次。该字段的定义等同于第 4 章 4.4.2—“间隔组件 (CM)”中给定的数量/定时字段间隔组件中的定义。

#### 2.1.1.1 Repeat pattern (IS)

重复模式 (IS)

The first component is defined by *User-defined Table 0335 - Repeat pattern*. See Section 4.3.2.1 “Repeat pattern,” for further details.

第一组件由用户定义表 0335-重复模式定义。更多详细资料参见 4.3.2.1, “重复模式”。

#### 2.1.1.2 Explicit time interval (ST)

明确的时间间隔 (ST)

The second component explicitly lists the actual times referenced by the code in the first subcomponent, in the following format: HHMM, HHMM, HHMM, ... This second subcomponent will be used to clarify the first subcomponent in cases where the actual administration times vary within an institution. See Section 4.4.2.2, “Explicit time interval,” for further details.

第二组件明确地列出了第一个子组件中代码所参考的实际时间。格式如下：HHMM, HHMM, HHMM, ... 在一个机构内实际管理时间不一样的情况下，这第二个子组件将用于阐明第一个子组件。更多的详细资料参见 4.4.2.2, “明确的时间间隔”。

### 2.1.2 RP – reference pointer

#### RP-参考指示器

Components: <pointer (ST) > ^ < application ID (HD)> ^ <type of data (ID)> ^ <subtype (ID)>

This data type transmits information about data stored on another system. It contains a reference pointer that uniquely identifies the data on the other system, the identity of the other system, and the type of data.

这个数据类型传送储存在另一系统中的数据信息。它包含一个可唯一识别其他系统的数据、其他系统身份和数据类型的参考指针。

#### 2.1.1.1 Pointer (ST)

##### 指针(ST)

A unique key assigned by the system that stores the data. The key, which is a ST data type, is used to identify and access the data.

由储存数据的系统指定的唯一钥匙。这个钥匙是 ST 数据类型，用于识别和存取数据。

#### 2.1.1.2 Application ID (HD)

##### 应用程序 ID(HD)

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

A unique designator of the system that stores the data. It is a HD data type (See Section 2.9.21, “HD – hierarchic designator”). Application ID’s must be unique across a given HL7 implementation.

储存数据的系统的唯一指定符。它是 HD 数据型(参见 2.9.21, “HD – hierarchic designator”), 在特定的 HL7 实施过程中，应用程序 ID 必须是唯一的。

#### 2.1.1.3 Type of data (ID)

##### 数据类型(ID)

An ID data type that declares the general type of data. Refer to [HL7 Table 0191– Type of referenced data](#) for valid values.

宣告数据的一般类型的 ID 数据类型。有效值参见 HL7 表 0191-参考数据类型。

HL7 Table 0191 – Type of referenced data

HL7 表 0191-参考数据类型

Value 值	Description 描述
AP	Other application data, typically uninterpreted binary data (HL7 V2.3 and later)



Value 值	Description 描述
	其他应用数据, 以无解释的二进制数据为代表(HL7 V2.3 及其后版本)
AU	Audio data (HL7 V2.3 and later) 音频数据 (HL7 V2.3 及其后版本)
FT	Formatted text (HL7 V2.2 only) 格式化文本 (仅 HL7 V2.2)
IM	Image data (HL7 V2.3 and later) 图像数据 (HL7V2.3 及其后版本)
multipart	MIME multipart package MIME 多组件包裹\
NS	Non-scanned image (HL7 V2.2 only) 非扫描图像 (仅 HL7 V2.2)
SD	Scanned document (HL7 V2.2 only) 扫描文件 (仅 HL7V2.2)
SI	Scanned image (HL7 V2.2 only) 扫描图像 (仅 HL7 V2.2)
TEXT	Machine readable text document (HL7 V2.3.1 and later) 可机读文本文件 (HL7V2.3.1 及其后版本)
TX	Machine readable text document (HL7 V2.2 only) 可机读文本文件 (仅 HL7V2.2)

#### 2.1.1.4 Subtype (ID)

##### 亚型 (ID)

An ID data type declaring the format for the data of subcomponent <main type>. Refer to [HL7 Table 0291 – Subtype of referenced data](#) for valid values.

宣告子组件<主要类型>的数据格式的 ID 数据类型。有效值参见 HL7 表 0291-参考数据亚型。

HL7 Table 0291 – Subtype of referenced data

HL7 表 0291-参考数据亚型

Value 值	Description 描述
BASIC	ISDN PCM audio data ISDN PCM 音频文件
DICOM	Digital Imaging and Communications in Medicine 医学数字成像和交流

Value 值	Description 描述
FAX	Facsimile data 传真数据
GIF	Graphics Interchange Format 图形交换格式
HTML	Hypertext Markup Language 超文本涨价语言
JOT	Electronic ink data (Jot 1.0 standard) 电子墨数据 (Jot 1.0 标准)
JPEG	Joint Photographic Experts Group 联合照相专家小组
Octet-stream	Uninterpreted binary data 未解释的二进制数据
PICT	PICT format image data PICT 格式图像数据
PostScript	PostScript program 附言程序
RTF	Rich Text Format 丰富的文本格式
SGML	Standard Generalized Markup Language (HL7 V2.3.1 and later) 一般化标准的涨价语言 (HL7 V2.3.1 及其后)
TIFF	TIFF image data TIFF 图像数据
x-hl7-cda-level-one	HL7 Clinical Document Architecture Level One document HL7 临床一级文件机构的文件
XML	Extensible Markup Language (HL7 V2.3.1 and later) 可扩展的涨价语言 (HL7 V2.3.1 及其后)

#### 2.1.1.5 Type-subtype combinations

##### 型-亚型结合

Possible subtypes are specific to main types (though in principle the same subtype could be used for more than one main type), and so are defined under their main types.

可能的亚型对主要的类型而言是特定的 (尽管原则上同样的亚型可用于多个主要类型), 在它们的主要类型下也是这样定义的。

Additional subtypes may be added to this Standard. In addition, private, non-standard subtypes may be defined by agreement between cooperating parties. All private, non-standard subtypes should begin with the letter **Z** to distinguish them from the standard subtypes.

附加的亚型可加入这个标准。另外，私有的、不标准的亚型可根据合作派别间的协议来定义。所有私有的、不标准的亚型应以字母 **Z** 开头以把它们和标准亚型区分开。

#### *2.1.1.5.1 Image subtypes*

##### 图像亚型

TIFF = TIFF image data

TIFF (Tagged Image File Format) is one of the common formats for scanned images. Its first version was developed in 1986 by Aldus Corporation as a standard for encoding scanned images. The official version of the TIFF standard is now maintained by Adobe Corporation. TIFF format is specified in the document “TIFF, Revision 6.0.” Adobe Systems Incorporated, 1585 Charleston Road, P.O. Box 7900, Mountain View, CA 94039-7900. (415) 961-4400

TIFF(标记的图像文件格式)是扫描图像常用格式的一种。它的第一个版本在 1986 年由 Aldus 公司开发成功以作为编码扫描图像的标准。TIFF 标准的正式版本现在由 Adobe 公司维护，地址是 1585 查尔斯顿路, 7900 信箱, 芒特威尔, 加拿大, . 94039-7900. (415) 961-4400

The subtype “TIFF” implies recognition of that trademark and all the rights it entails.

亚型” TIFF”意味着对该商标的承认和它所具有的全部权利。

PICT = PICT format image data

PICT is one of the common formats for scanned images. PICT is a graphics format developed by Apple Computer, Inc., Cupertino, California. PICT format is officially defined in the book set “Inside Macintosh,” published by Addison-Wesley Publishing Company, Reading, Massachusetts.

PICT 是扫描图形常用的格式之一。PICT 是由位于加利福尼亚州卡普蒂诺的苹果电脑公司开发的图形格式。。.PICT 格式在”在麦金托什内”这套丛书中正式给出定义，由位于马萨诸塞州瑞丁的爱迪生-韦斯利出版公司出版。

DICOM = the Digital Imaging and Communications in Medicine (DICOM) standard

DICOM is the format developed jointly by the American College of Radiology (ACR) and the National Electrical Manufacturers Association (NEMA) as the standard for interchange of radiological images and ancillary data. It is standardized as NEMA PS3, and is available from: NEMA, 2101 L Street NW, Washington, DC 20037

DICOM 是由美国放射学院 (ACR) 和国家电子制造业协会 (NEMA) 联合开发的格式，作为放射性图像和辅助数据交换的标准。它的标准化形式可从下列地址索取：NEMA, 2101 L 街 NW, 华盛顿特区 20037。

DICOM specifies a complete communications standard, including a generic messaging service for two-way exchange of imaging-related information between applications, as well as transfer of the actual images. In HL7, the use of DICOM data is limited to images only.

DICOM 详细说明了完全的交流标准，包括一个为应用程序间双向交换图形有关信息，以及实际图像的交换而设置的一般性信息服务。在 HL7 中，DICOM 数据的使用仅限于图像。

Images in this subtype shall be encoded according to the Generic DICOM File Format defined in DICOM Part 10, Media Storage and File Format (NEMA PS3.10). This shall be in accordance with the Image Information Object Definitions of DICOM Part 3 (NEMA PS3.3), Data Structure and Semantics of DICOM Part 5 (NEMA PS3.5), and the Data Dictionary of DICOM Part 6 (NEMA PS3.6).

这个亚型的图像应该按 DICOM 第 10 组件、媒体存储和文件格式 (NEMA PS3.10) 中定义的普通 DICOM 文件格式来编码。这应与 DICOM 第 3 组件 (NEMA PS3.3) 的图像信息目标定义、DICOM 第 5 组件 (NEMA PS3.5) 的数据结构和语义学、以及 DICOM 第 6 组件 (NEMA PS3.6) 的数据词典相一致。

The Generic DICOM File Format consists of two parts: a DICOM File Meta Information Header, immediately followed by a DICOM Data Set. The DICOM Data Set contains the image or images specified according to DICOM Part 10. The DICOM File Meta Information Header contains, among other information, a Transfer Syntax UID (Unique Identifier) which completely specifies the encoding of the Data Set according to DICOM Part 5. This encoding defines big endian vs. little endian byte ordering, as well as image compression via the JPEG (Joint Photographics Experts Group) standard (ISO/IS 10918-1 and 10918-2). The transfer syntax of the File Meta Information Header itself is little endian byte ordered, as required by DICOM Part 10.

普通的 DICOM 文件格式包括两个组件：一个 DICOM 文件 Meta 信息头，其后紧接着一个 DICOM 数据组。DICOM 数据组包含图像或根据 DICOM 第 10 组件指定的图像。DICOM 文件 Meta 信息头在其他信息中包括一个完全根据 DICOM 第 5 组件指定数据组编码的传输句法 UID (唯一标识符)。这个编码定义了大 endian 字节对小 endian 字节顺序，以及经 JPEG (联合照相专家小组) 标准 (ISO/IS 10918-1 and 10918-2) 的图像压缩。文件 Meta 信息头的转数据法本身是有序的小 endian 字节，正如 DICOM 第 10 组件所要求的一样。

FAX = facsimile data

Facsimile data as specified by CCITT standards F1.60, F1.80, F1.82, and F1.84.

传真数据由 CCITT 标准 F1.60、F1.80、F1.82、和 F1.84 指定。

Jot = electronic ink data, as specified by the Jot 1.0 standard

The JOT standard, proposed jointly by Slate Corporation, Microsoft, Apple, Lotus, GO, and General Magic, allows handwritten notes, sketches, signatures and other free-form written data to be transmitted. It is the standard by which portable pen computers or workstations equipped with stylus-input tablets can represent and exchange information.

JOT 标准由 Slate 公司、微软、苹果、Lotus、GO、和 General Magic 联合提出，它允许传送手写的笔记，草图，签名和其他自由形式书写的数据。便携式钢笔电脑或装配了铁笔输入写字板的工作站可以使用此标准来表现和交换信息。

It represents electronic ink as a series of stylus strokes, and therefore contains necessary information for potential automatic handwriting recognition, which would be lost

if converted to other image representations. It may, however, be readily converted to another image representation for purposes of printing or display.

它将电子墨表现为铁笔的一系列打击，因此包含了为可能的自动书写识别提供的必要信息，如果这些信息转换成其他图像表现形式就有可能丢失。然而，为了打印或显示，它很容易转换成另一种图像表现形式。

The JOT 1.0 standard is available from: Software Publishers Association, 1730 M Street Northwest, Suite 700  
Washington, DC 20036-4510, (202) 452-1600

JOT 1.0 标准可从下列地址得到：软件出版者协会，1730 M 街西北，700 组 华盛顿特区 20036-4510，(202) 452-1600。

#### *2.1.1.5.2 Audio subtypes*

##### 音频亚型

`basic = ISDN PCM audio data`

Telephone quality audio data, encoded as 8-bit ISDN mu-law Pulse Code Modulation sampled at 8 kHz, according to CCITT Fascicle III.4, Recommendation G.711. This subtype may be used for voice mail messages as well as voice dictation.

按 CCITT 从 III.4，推荐的 G.711，电话品质音频数据编码成在 8 kHz 取样调制的 8 位 ISDN mu-法脉冲码。这种亚型可用于声音邮件信息和声音听写。

#### *2.1.1.5.3 Application subtypes*

##### 应用程序亚型

`octet-stream = uninterpreted binary data`

This subtype is for binary data which has none of the other standard formats as given by Section 2.9.37.3, "Type of data (ID)." Its interpretation by the system utilizing the data must be mutually agreed upon by sending and receiving parties.

这个亚型用于不具有任何 2.9.37.3，"数据类型(ID)"中给定的其他标准格式的二进制数据。使用数据的系统对它的解释必须由发送和接受方互相同意。

`PostScript = PostScript program`

A PostScript language program typically representing a formatted document for printing on a PostScript printer, or for display on a computer screen via a PostScript interpreter.

附言语言程序典型地表现了要在附言打印机上打印的格式化文件，或者经由附言注释器在计算机屏幕上显示。

PostScript consists of the original specification, PostScript level 1, described in "PostScript Language Reference Manual," Addison-Wesley, 1985, and a more advanced variant, PostScript level 2, described in "PostScript Language Reference Manual," Addison-Wesley, Second Edition, 1990. PostScript is a registered trademark of Adobe Systems, Inc. Use of

the subtype “PostScript” implies recognition of that trademark and all the rights it entails.

附言包括原说明书、一级附言(在”附言语言参考手册”，Addison-Wesley, 1985 中描述)，以及更高级的变量二级附言(在”附言语言参考手册”，Addison-Wesley, 第二版, 1990 中描述)部分。PostScript 是 Adobe 系统公司的注册商标。使用亚型”附言”意味着对该商标以及它所承担的权利的承认。

Other types may be added as needed.

需要时可添加其他类型.

Example:

例:

|1234A321634BC`EFC`SD|

### 2.1.2 SAD - street address

#### SAD-街道地址

Components: <street or mailing address (ST)> ^ <street name (ST)> ^ <dwelling number (ST)>

**Note:** Appears ONLY in the XAD data type

**注意:** 仅以 XAD 数据类型出现.

##### 2.1.1.1 Street or mailing address (ST)

##### 街道或邮寄地址 (ST)

The street or mailing address of a person or institution. When referencing an institution, this first component is used to specify the institution name. When used in connection with a person, this component specifies the first line of the address.

个人或机构的街道或邮寄地址。当设计机构时，这第一组件用于指定机构名称。当用于连接个人时，此组件指定地址的第一行。

##### 2.1.1.2 Street name (ST)

##### 街道名 (ST)

##### 2.1.1.3 Dwelling number (ST)

##### 住址号 (ST)

### 2.1.2 SCV - scheduling class value pair

#### SCV-安排等级数值对

Components: <parameter class (IS)> ^ <parameter value (ST)>

For use only with the scheduling chapter.

仅供和安排章节一起使用。

Definition: This data type is used to communicate parameters and preferences to the filler application regarding the selection of an appropriate *time slot*, *resource*, *location*, or *filler override criterion* for an appointment.

定义：这种数据类型用于给为约定选择合适的时间通道、来源、位置、或填充代理佣金标准的填充应用程序传达参数和偏好。

#### 2.1.1.1 Parameter class (IS)

##### 参数等级 (IS)

The first component of this field is a code identifying the parameter or preference being passed to the filler application. Refer to [User-defined table 0294 Time selection criteria parameter class codes](#) for suggested values.

此字段的第一组件是识别正在传递给填充应用程序的参数或偏好的代码。建议值参见用户定义表 0294，时间选择标准参数等级代码。

User-defined Table 0294 - Time selection criteria parameter class codes

用户定义表-0294 时间选择标准参数等级代码 **错误！未定义书签。**

Parameter Class 参数等级	Description: Valid Values 描述:有效值
Prefstart 优先开始	The preferred start time for the appointment request, service or resource. Any legal time specification in the format HHMM, using 24-hour clock notation 指令要求, 服务或资源的首选开始时间.. 格式 HHMM 中的任何合法时间规范, 使用 24 小时时钟符号.
Prefend 优先结束	The preferred end time for the appointment request, service or resource. Any legal time specification in the format HHMM, using 24-hour clock notation 指令要求, 服务或资源的首选结束时间.. 格式 HHMM 中的任何合法时间规范, 使用 24 小时时钟符号.
Mon 星期一	An indicator that Monday is or is not preferred for the day on which the appointment will occur. OK = Preferred appointment day NO = Day is not preferred  星期一是或不是指令执行的首选日子的指示器.  OK=首选指令日  NO=不是首选日
Tue 星期二	An indicator that Tuesday is or is not preferred for the day on which the appointment will occur. OK = Preferred appointment day NO = Day is not preferred  星期二是或不是指令执行的首选日子的指示器.  OK=首选指令日  NO=不是首选日
Wed 星期三	An indicator that Wednesday is or is not preferred for the day on which the appointment will occur. OK = Preferred appointment day NO = Day is not preferred

Parameter Class 参数等级	Description: Valid Values 描述:有效值
	星期三是或不是指令执行的首选日子的指示器。  OK=首选指令日  NO=不是首选日
Thu 星期四	An indicator that Thursday is or is not preferred for the day on which the appointment will occur. OK = Preferred appointment day NO = Day is not preferred  星期四是或不是指令执行的首选日子的指示器。  OK=首选指令日  NO=不是首选日
Fri 星期五	An indicator that Friday is or is not preferred for the day on which the appointment will occur. OK = Preferred appointment day NO = Day is not preferred  星期五是或不是指令执行的首选日子的指示器。  OK=首选指令日  NO=不是首选日
Sat 星期六	An indicator that Saturday is or is not preferred for the day on which the appointment will occur. OK = Preferred appointment day NO = Day is not preferred  星期六是或不是指令执行的首选日子的指示器。  OK=首选指令日  NO=不是首选日
Sun 星期日	An indicator that Sunday is or is not preferred for the day on which the appointment will occur. OK = Preferred appointment day NO = Day is not preferred  星期日是或不是指令执行的首选日子的指示器。  OK=首选指令日  NO=不是首选日

#### 2.1.1.2 Parameter value (ST)

##### 参数值(ST)

The second component is the actual data value for that parameter.

第二组件是该参数的实际数据值。

For example, if a filler application allows preference parameters to be passed to specify a preferred start time, a preferred end time, and preferred days of the week for the appointment, it may define the following parameter class codes and valid data sets.

例如，如果应用程序允许优先选择参数被传递以指定优先开始时间，优先结束时间以及星期内的指令优先日，它可以定义下列参数等级代码和有效数据组。



## 2.1.2 SI - sequence ID

### SI-序列 ID

A non-negative integer in the form of a NM field. The uses of this data type are defined in the chapters defining the segments and messages in which it appears.

NM 字段形式的非负整数。这种数据型的用法在定义它出现的信息段和信息的章节中定义。

## 2.1.3 SN - structured numeric

### SN-结构化数字

Components: <comparator (ST)> ^ <num1 (NM)> ^ <separator/suffix (ST)> ^ <num2 (NM)>

The structured numeric data type is used to unambiguously express numeric clinical results along with qualifications. This enables receiving systems to store the components separately, and facilitates the use of numeric database queries. The corresponding sets of values indicated with the <comparator> and <separator/suffix> components are intended to be the authoritative and complete set of values. If additional values are needed for the <comparator> and <separator/suffix> components, they should be submitted to HL7 for inclusion in the Standard.

结构化数字数据型用于表明合格的确切的数字显示的临床结果。这使接受系统能个别的存储组件，还使用数字数据库查询变得方便。和<比较符>以及<分隔符/后缀>一起显示的相应数值组有意作为权威和完全的数值组。如果<比较符>以及<分隔符/后缀>组件需要附加值，它们应提交给 HL7 以包括在标准中。

If <num1> and <num2> are both non-null, then the separator/suffix must be non-null. If the separator is “-”, the data range is inclusive; e.g., <num1> - <num2> defines a range of numbers  $x$ , such that:  $\langle \text{num1} \rangle \leq x \leq \langle \text{num2} \rangle$ .

如果<数 1>和<数 2>都不为空，那末分隔符/后缀必不为空。如果分隔符是“-”，那么数据区间是内涵的；如：<数 1>-<数 2>定义的数  $x$  的区间是：<数 1>≤ $x$ ≤<数 2>。

#### 2.1.1.1 Comparator (ST)

##### 比较符(ST)

Defined as greater than, less than, greater than or equal, less than or equal, equal, and not equal, respectively (= “>” or “<” or “>=” or “<=” or “=” or “<>”

定义大于，小于，大于或等于，小于或等于，等于，以及不等于，分别是(= “>” or “<” or “>=” or “<=” or “=” or “<>”

If this component is not valued, it defaults to equal (“=”).

如果此组件没有赋值，缺省值为等于(“=”)。

## Chapter 2: Control

---

### 2.1.1.2 Num1 (NM)

数 1 (NM)

A number.

一个数.

### 2.1.1.3 Separator/suffix (ST)

分隔符/后缀 (ST)

“-” or “+” or “/” or “.” or “:”

“-” 或 “+” 或 “/” 或 “.” 或 “:”

Examples:

例:

>^100	(greater than 100) (大于 100)
^100^-^200	(equal to range of 100 through 200) (等于从 100 到 200 的范围)
^1^:228	(ratio of 1 to 128, e.g., the results of a serological test) (1 比 128 的比值, 如. 血清学化验的结果)
^2^+	(categorical response, e.g., occult blood positivity) (无条件的反应, 如, 血液隐性阳性)

### 2.1.1.4 Num2 (NM)

数 2 (NM)

A number or null depending on the measurement.

取决于测量的数值或零。

## 2.1.2 SRT - sort order

### SRT-排序次序

Components: <sort-by field(ST)> ^ <sequencing (ID)>

Specifies those parameters by which the response will be sorted and by what method.

指定反应排序参数和根据何种方法排序的参数。

Example: In a tabular response query, where the return data is known by column name, the SRT might look like

例: 在制表应答查询中, 返回数据可从纵列名处获得, SRT 可能看起来象:

|LastName^A~FirstName^A|

Example: In a segment response query, where the return data is known by segment and offset, the SRT field would use segment field name notation,

例：在信息段应答查询中，返回数据可从信息段和分量处获得，SRT 字段将使用信息段字段名符号。

|PID.3.1^A~PID.3.2|

#### 2.1.1.1 Sort-by field (ST)

##### 按字段排序(ST)

Identifies the field by which the response will be sorted. In a tabular response, this will be the column name to sort by. In the Segment Pattern and the Display Response, this will be the segment field name to sort by. (see QIP in Section 2.9.33.1, “Segment field name (ST)” for segment field name definition.)

识别将应答分类的字段。在制表应答中，将按纵列名排序。在信息段模式和显示应答，将按信息段字段名排序。(信息段字段名定义参见 2.9.33.1, “信息段字段名(ST)” 的 QIP)

See Chapter 5, “Query”, for a complete discussion of queries and their responses.

查询及其应答的完整讨论参见第 5 章, “查询”。

#### 2.1.1.2 Sequencing (ID)

##### 先后顺序(ID)

Identifies how the field or parameter will be sorted; and, if sorted, whether the sort will be case sensitive (the default) or not. Refer to [HL7 Table 0397 - Sequencing](#) for valid values

识别字段或参数将如何排序；如果已排序，是否区分大小写(缺省值)。有效值参见 HL7 表 0397-先后顺序。

HL7 Table 0397 - Sequencing

HL7 表 0397-先后顺序

Value 值	Description 描述
A	Ascending 递增
AN	Ascending, case insensitive 递增, 区分大小写
D	Descending 递减
DN	Descending, case

Value	Description
值	描述
	insensitive 递减, 区分大小写
N	None 无

### 2.1.2 ST - string data

#### ST-字符集数据

String data is left justified with trailing blanks optional. Any displayable (printable) ACSII characters (hexadecimal values between 20 and 7E, inclusive, or ASCII decimal values between 32 and 126), except the defined escape characters and defined delimiter characters. Example:

字符串数据要对末尾的可选空格进行调整。除了定义的 escape 字符和定义的分隔符以外，为任何可显示的(可打印的) ACSII 字符(20 和 7E 间的十六进制值，包括两端值，或 32 和 126 间的 ASCII 十进制值)。如：

```
|almost any data at all|
```

To include any HL7 delimiter character (except the segment terminator) within a string data field, use the appropriate HL7 escape sequence (see Section 2.10.1, “Formatting codes”).

为了将任何 HL7 分隔符(除了信息段终结符)包含在字符串数据字段内，要使用合适的 HL7 escape 序列(参见 2.10.1 节, ” 格式化代码” )。

**Usage note:** The ST data type is intended for short strings (e.g., less than 200 characters). For longer strings the TX or FT data types should be used (see Sections 2.9.48, “TX - text data” or 2.9.20, “FT - formatted text data”).

**用法注意：** ST 数据类型设计用于简短的字符串(如，小于 200 字符)。长字符应该使用 TX 或 FT 数据类型(参见 2.9.48, ” TX-文本数据” 或 2.9.20, “FT - formatted text data”)。

**Alternate character set note:** ST - string data may also be used to express other character sets. See Section 2.15.9.18, “Character set”, and Section 2.15.9.20, “Alternate character set handling” for details.

**备用字符集注意事项：** ST-字符串数据也可用于表示其他字符集。详细情况参见 2.15.9.18, ” 字符集” 和 2.15.9.20, ” 备用字符集处理” 。

### 2.1.3 TM - time

#### TM-时间

Format: HH[MM[SS[.S[S[S[S]]]]]] [+/-ZZZZ]

In prior versions of HL7, this data type was always specified to be in the format HHMM[SS[.SSSS]] [+/-ZZZZ] using a 24 hour clock notation. In the current and future

versions, the precision of a time may be expressed by limiting the number of digits used with the format specification as shown above. By site-specific agreement, HHMM[SS[.SSSS]][+/-ZZZZ] may be used where backward compatibility must be maintained.

在 HL7 以前的版本中，这种数据类型常被指定为使用 24 小时时钟表示的 HHMM[SS[.SSSS]][+/-ZZZZ] 格式。对于现在和将来的版本，时间的准确性可通过对使用上面所示的格式规范的数字进行限制来明确。根据特定的地方协议，HHMM[SS[.SSSS]][+/-ZZZZ] 可用在为向后兼容性而保留的地方。

Thus, HH is used to specify a precision of “hour,” HHMM is used to specify a precision of “minute,” HHMMSS is used to specify a precision of seconds, and HHMMSS.SSSS is used to specify a precision of ten-thousandths of a second.

这样，HH 用于指定精确到”小时”，HHMM 用于指定精确到”分钟”，HHMMSS.SSSS 用于指定精确到千分之十秒。

In each of these cases, the time zone is an optional component. The fractional seconds could be sent by a transmitter who requires greater precision than whole seconds. Fractional representations of minutes, hours or other higher-order units of time are not permitted.

在每个例子中，时区是可选的。小数形式的秒可由要求比整个秒更高精确性的传送者发送。分钟、小时或其他更高的时间单位的小数形式是不允许的。

**Note:** The time zone [+/-ZZZZ], when used, is restricted to legally-defined time zones and is represented in HHMM format.

注意：时区 [+/-ZZZZ] 在使用时，对其的使用局限于合法定义的时区，它表现为 HHMM 格式。

The time zone of the sender may be sent optionally as an offset from the coordinated universal time (previously known as Greenwich Mean Time). Where the time zone is not present in a particular TM field but is included as part of the date/time field in the MSH segment, the MSH value will be used as the default time zone. Otherwise, the time is understood to refer to the local time of the sender. Midnight is represented as 0000. Examples:

发送方的时区可作为调整的通用时间的分量而选择性的发送（过去称为格林尼治标准时间）。在时间不在特殊 TM 字段内，但却是 MSH 信息段内日期/时间字段的一组件，则 MSH 值将用作缺省时区。否则，时间解释为参照发送者当地的时间。午夜表示为 0000。例：

235959+1100	1 second before midnight in a time zone eleven hours ahead of Universal Coordinated Time (i.e., east of Greenwich). 通用调整时间(如，东格林威治)前十一小时的时区内的午夜前 1 秒。
0800	Eight AM, local time of the sender. 上午八点，发送者当地时间。
093544.2312	44.2312 seconds after Nine thirty-five AM, local time of sender. 上午九点三十五分 44.2312 秒，发送者当地时间。
13	1pm (with a precision of hours), local time of sender. 下午一点(时间精确到小时)，发送者当地时间。

### 2.1.4 TN – telephone number

#### TN-电话号码

For use in the United States and conforming countries, the telephone number is always in the form:

为了在美国和遵守规则的国家使用，电话号码通常用下列形式：

Format: [NN] [(999)]999-9999[X999999][B999999][C any text]

**Note:** Replaced by XTN data type as of

**注意:** 为 v 2.3 的 XTN 数据型所替代。

The optional first two digits are the country code. The optional **X** portion gives an extension. The optional **B** portion gives a beeper code. The optional **C** portion may be used for comments like, **After 6:00**. While no explicit limit is placed on the text field, receiving systems may be expected to truncate values that are more than 10 characters long. To accommodate the variability of institutional phone systems, the length of the extension and beeper numbers may be extended by local agreement. Examples:

可选的前两个数字是国家代码。可选的 X 组件提供扩展名。可选的 B 部分提供寻呼机的代码。可选的 C 部分可用类似 **6: 00 之后** 的注解。虽然没有对文本字段的明确限制，但接受系统预计将截断超过 10 字符长度的值。为了调节机构电话系统的可变性，扩展名和寻呼机号码的长度可以由地方协议进行扩展。例如：

| (415) 925-0121X305 |  
| 234-4532CWEE KENDS |

### 2.1.5 TQ – timing quantity

#### TQ-定时数量

Describes when a service should be performed and how frequently. See Chapter 4 (Section 4.3, “QUANTITY/TIMING (TQ) DEFINITION”) for a complete description of this data type.

描述服务实施的时间和频率。这种数据类型的完整描述参见第四章 (4.3 节, “数量/定时(TQ)定义”)。

### 2.1.6 TS – time stamp

#### TS-时间标记

Format: YYYY[MM[DD[HHMM[SS[.S[S[S[S]]]]]]]]][+/-ZZZZ]^<degree of precision>

Contains the exact time of an event, including the date and time. The date portion of a time stamp follows the rules of a date field and the time portion follows the rules of a time field. The time zone (+/-ZZZZ) is represented as +/-HHMM offset from UTC (formerly Greenwich Mean Time (GMT)), where +0000 or -0000 both represent UTC (without offset). The specific data representations used in the HL7 encoding rules are compatible with ISO 8824-1987 (E).

包含事件的确切时间，包括日期和时间。事件标记的日期组部分遵从日期字段的规则，时间部分遵从时间字段的规则。时区 (+/-ZZZZ) 表示为 UTC 的 +/-HHMM，来自于 (原来的格林威治标准时间 (GMT))，在这个地方 +0000 或 -0000 都代表 UTC (无偏移量)。HL7 编码规则中使用的特殊数据表示法与 ISO 8824-1987 (E) 兼容。

In prior versions of HL7, an optional second component indicates the degree of precision of the time stamp (Y = year, L = month, D = day, H = hour, M = minute, S = second). This optional second component is retained only for purposes of backward compatibility.

在 HL7 的以前版本中，可选的第二组件指明了时间标记的精确程度 (Y=年, L=月, D=天, H=小时, M=分钟, S=秒)。这个可选的第二组件仅是为了向后兼容性而保留。

By site-specific agreement, YYYYMMDD[HHMM[SS[.S[S[S[S]]]]]] [+/-ZZZZ]^<degree of precision> may be used where backward compatibility must be maintained.

根据地方协议，YYYYMMDD[HHMM[SS[.S[S[S[S]]]]]] [+/-ZZZZ]^<degree of precision> 可用在向后兼容性而必须保留的地方。

In the current and future versions of HL7, the precision is indicated by limiting the number of digits used, unless the optional second component is present. Thus, YYYY is used to specify a precision of “year,” YYYYMM specifies a precision of “month,” YYYYMMDD specifies a precision of “day,” YYYYMMDDHH is used to specify a precision of “hour,” YYYYMMDDHHMM is used to specify a precision of “minute,” YYYYMMDDHHMMSS is used to specify a precision of seconds, and YYYYMMDDHHMMSS.SSSS is used to specify a precision of ten thousandths of a second. In each of these cases, the time zone is an optional component. Note that if the time zone is not included, the timezone defaults to that of the local time zone of the sender. Also note that a TS valued field with the HHMM part set to “0000” represents midnight of the night extending from the previous day to the day given by the YYYYMMDD part (see example below). Maximum length of the time stamp is 26. Examples:

在 HL7 现在和将来的版本中，如果可选的第二组件不存在的话，则精确性通过限制使用的数字数目来指明。这样，YYYY 用于指定“年”的精确性，YYYYMM 指定“月”的精确性，YYYYMMDD 指定“天”的精确性，YYYYMMDDHH 用于指定“小时”的精确性，YYYYMMDDHHMM 用于指定“分钟”的精确性，YYYYMMDDHHMMSS 用于指定秒的精确性，YYYYMMDDHHMMSS.SSSS 用于指定千分之十秒的精确性。在每种情况，时区是可选的组件。注意如果没有包括时区，时区默认为发送者当地时区。还要注意 HHMM 设置为“0000”的 TS 赋值的字段代表从前一天延伸到由 YYYYMMDD 组件给定那天的夜晚的午夜 (参见下面的例子)。时间标记的最大长度是 26。例：

|19760704010159-0500|

1:01:59 on July 4, 1976 in the Eastern Standard Time zone (USA).

1976 年 7 月 4 日 1:01:59, 东部标准时区 (美国)。

|19760704010159-0400|

1:01:59 on July 4, 1976 in the Eastern Daylight Saving Time zone (USA).

1976 年 7 月 4 日 1:01:59, 东部夏令时区 (美国)。

|198807050000|

Midnight of the night extending from July 4 to July 5, 1988 in the local time zone of the sender.

从 1998 年 7 月 4 日到 7 月 5 日夜间的午夜, 发送者当地的时区。

|19880705|

Same as prior example, but precision extends only to the day. Could be used for a birthdate, if the time of birth is unknown.

和前面的例子一样, 但是精确性仅扩展到天。如果出生时间不知道的话, 可用作生日。

|19981004010159+0100|

1:01:59 on October 4, 1998 in Amsterdam, NL. (Time zone=+0100).

1998 年 10 月 4 日 1:01:59, 阿姆斯特丹. 荷兰. (时区=+0100)。

The HL7 Standard strongly recommends that all systems routinely send the time zone offset but does not require it. All HL7 systems are required to accept the time zone offset, but its implementation is application specific. For many applications the time of interest is the local time of the sender. For example, an application in the Eastern Standard Time zone receiving notification of an admission that takes place at 11:00 PM in San Francisco on December 11 would prefer to treat the admission as having occurred on December 11 rather than advancing the date to December 12.

HL7 标准强烈推荐所有的系统要常规的发送时区分量, 但不是要求必须这样做。所有 HL7 系统都要求接受时区分量, 但它的执行是根据特定的应用程序而定。对许多应用程序来讲, 关心的时间是发送者当地的时间。例如, 东部标准时区的应用程序接受了 12 月 11 日晚 11 点发生在旧金山的允许进入通告, 该应用程序宁愿将允许进入看作发生在 12 月 11 日而不是延后到 12 月 12 日。

**Note:** The time zone [+/-ZZZZ], when used, is restricted to legally-defined time zones and is represented in HHMM format.

**注意:** 时区[+/-ZZZZ]在使用时, 对其的使用限制在合法定义的时区范围内, 并以 HHMM 格式表示。

One exception to this rule would be a clinical system that processed patient data collected in a clinic and a nearby hospital that happens to be in a different time zone. Such applications may choose to convert the data to a common representation. Similar concerns apply to the transitions to and from daylight saving time. HL7 supports such requirements by requiring that the time zone information be present when the information is sent. It does not, however, specify which of the treatments discussed here will be applied by the receiving system.

这个规则的一个例外是: 处理接受门诊病人数据的临床系统和邻近医院恰巧在不同的时区。这样的应用程序可能选择将数据转换成普通的表示法。类似的考虑是用于转换成夏令时或夏令时转换成别的时间。HL7 通过要求信息发送时有时区信息这一方法来支持这样的必要条件。然而, 它并不指定接受系统将要采用这里讨论的哪种处理方法。



### 2.1.7 TX – text data

#### TX-文本数据

String data meant for user display (on a terminal or printer). Such data would not necessarily be left justified since leading spaces may contribute greatly to the clarity of the presentation to the user. Because this type of data is intended for display, it may contain certain escape character sequences designed to control the display. Escape sequence formatting is defined later in this chapter in Section 2.10 “**Use of escape sequences in text fields.**” Leading spaces should be included. Trailing spaces should be removed. Example:

使用终端（在终端或打印机上）显示字符串数据。对这样的数据没有必要对其的合理性进行证明，因为引导空格可以很大程度的保证对用户表达清楚。因为这种数据类型设计是用于显示，它可以包含某些用于控制显示的 escape 字符序列。escape 序列格式化在本章后面的”文本字段内 escape 序列的用法”组件定义。应包括引导空格。且应移走末尾空格。例：

```
| leading spaces are allowed. |
```

Since TX data is intended for display purposes, the repeat delimiter, when used with a TX data field, implies a series of repeating lines to be displayed on a printer or terminal. Therefore, the repeat delimiters are regarded as paragraph terminators or hard carriage returns (e.g., they would display as though a CR/LF were inserted in the text (DOS type system) or as though a LF were inserted into the text (UNIX style system)).

既然 TX 数据的设计是用于显示，则当重复分隔符在和 TX 数据字段一起使用时，意味着将有一系列重复线条显示在打印机或终端上。因此，重复分隔符被当作段落终结符或硬回车（如，尽管 CR/LF 被插入到文本 (DOS 类型系统) 或尽管 LF 被插入到文本 (UNIX 类型系统) 中，它们仍将显示。).

A receiving system would word-wrap the text between repeat delimiters in order to fit it into an arbitrarily sized display window but start any line beginning with a repeat delimiter on a new line.

接受系统会将重复分隔符之间文本进行分行处理，以便使它适应大小固定的显示视窗内，但是会以重复分隔符开始而另起一行。

**Length:** 65536

**长度:**65536

To include alternative character sets, use the appropriate escape sequence. See Section 2.16.9.20, “MSH-18 Character set (ID) 00692”, and Section 2.16.9.22, “MSH-20 Alternate character set handling scheme (ID) 01317.”

为了包括备用字符集，需要使用合适的 escape 序列。参见 2.16.9.20, “MSH-18 字符集 (ID) 00692”, 和 2.16.9.22, “MSH-20 备用字符集处理规则 (ID) 01317”。

### 2.1.8 VH – visiting hours

#### VH-探视小时数

Components: <start day range (ID)> ^ <end day range (ID)> ^ <start hour range (TM)> ^ <end hour range (TM)>

Definition: This data type contains the hours when a patient location is open for visiting. Refer to [HL7 Table 0267 – Days of the week](#) for valid values for the first two components.

定义：这种数据类型包含了病房对探视开放的小时数。前两组件的有效值参见 HL7 表 0267-星期中的天。

#### 2.1.8.1 Start day range (ID)

日期范围的开始日 (ID)

Starting day of visiting hours range. See HL7 Table 0267 – Days of the week for valid values.

探视小时数的开始日子。有效值参见 HL7 表 0267-本星期中的日期。

#### 2.1.8.3 End day range (ID)

日期范围的结束日 (ID)

Ending day of visiting hours range. Starting day of visiting hours range. See [HL7 Table 0267 – Days of the week](#) for valid values.

探视小时数范围的结束日子。有效值参见 HL7 表 0267-星期中的日期。

HL7 Table 0267 – Days of the week

HL7 表 0267-星期中的日期

Value 值	Description 描述
SAT	Saturday 星期六
SUN	Sunday 星期天
MON	Monday 星期一
TUE	Tuesday 星期二
WED	Wednesday 星期三
THU	Thursday 星期四

Value	Description
值	描述
FRI	Friday 星期五

#### 2.1.8.4 Start hour range (TM)

##### 小时范围的开始 (TM)

Starting hour on starting day of visiting hours range (see first component, 2.9.49.1, “Start day range (ID)” ).

探视小时范围的开始：当天的开始小时（参见第一组件， 2.9.49.1, ” 日期范围的开始 (ID)” ）。

#### 2.1.8.5 End hour range (TM)

##### 小时范围的结束 (TM)

Ending hour on ending day of visiting hours range (see second component, 2.9.49.2, “End day range (ID)” ).

探视小时范围的结束：当天的结束小时（参见第二组件， 2.9.49.1, ” 日期范围的结束 (ID)” ）。

### 2.1.9 VID - version identifier

#### VID-版本标识符

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

##### 版本 ID(ID)

Used to identify the HL7 version. Refer to [HL7 Table 0104 - Version ID](#) for valid values.

用于识别 HL7 版本。有效值参见 HL7 表 0104-版本 ID。

#### 2.1.9.2 Internationalization code (CE)

##### 国际化代码(CE)

Used to identify the international affiliate country code. The values to be used are those of ISO 3166 -1:1977. The ISO 3166 table has three separate forms of the country code: HL7 specifies that the 3-character (alphabetic) form be used for the country code.

用于识别国际会员国代码。使用的值源于 ISO 3166 -1: 1977。 ISO 3166 表有三个单独的国家代码表：HL7 指定 3 字符(字母型)表用作国家代码。

Refer to [HL7 Table 0399 - Country code](#) for the 3-character codes as defined by ISO 3166 table.

ISO3166 表定义的 3 字符代码参见 HL7 表 0399-国家代码。

## Chapter 2: Control

### 2.1.9.3 International version ID (CE)

#### 国际版本 ID(CE)

This field component identifies international affiliate's version; it is especially important when the international affiliate has more than a single local version associated with a single US version.

这个字段组件识别国际会员的版本；当国际会员拥有一个以上与美国版本相关的当地版本时，则尤为重要。

### 2.1.10 XAD - extended address

#### XAD-扩展的地址

Components: <street address (SAD)> ^ <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)> ^ <address validity range (DR)>

Subcomponents of street address (SAD): <street or mailing address (ST)> & <street name (ST)> & <dwelling number (ST)> Subcomponents of address validity range (DR): <date range start date/time (TS)> & <date range end date/time (TS)>

**Note:** Replaces the AD data type as of v 2.3.

**注意:** 替换版本 2.3 中的 AD 数据类型。

**Length:** 250

**长度:**250

Example of usage for US:

美国用法举例:

|1234 Easy St.^Ste. 123^San Francisco^CA^95123^USA^B^SF^|

This would be formatted for postal purposes as

这个将为邮寄而格式化成:

1234 Easy St.

Ste. 123

San Francisco CA 95123

Example of usage for Australia:

澳大利亚用法举例:

|14th Floor^50 Paterson St^Coorparoo^QLD^4151|

This would be formatted for postal purposes using the same rules as for the American example as

为邮寄的目的它将格式化，格式化时使用与美国例子中相同的规则，例如:

14th Floor

50 Paterson St

Coorparoo QLD 4151

**International note:** Countries typically have a standard method of formatting addresses. This data type does not specify the formatting usages, only the components of a postal address.

**国际注意事项:** 国家典型地具有将地址格式化的标准方法。这个数据型并不指定格式化用法，而是只指定邮寄地址的组件。

#### 2.1.10.1 Street address (SAD)

街道地址 (SAD)

See section 2.9.38, “SAD - street address” for description of components.

组件的描述参见 2.9.38, ” SAD-街道地址”。

#### 2.1.10.2 Other designation (ST)

其他名称 (ST)

Second line of address. In US usage, it qualifies address. Examples: Suite 555 or Fourth Floor. When referencing an institution, this component specifies the street address.

地址的第二行。在美国用法中，它指定了地址。例如：555 套房或第四层。当涉及机构时，此组件指定街道地址。

#### 2.1.10.3 City (ST)

城市 (ST)

This may be the name of the city, or district or place depending upon the national convention for formatting addresses for postal usage.

这可以是城市、地区或住所的名称，取决于邮寄用法中格式化地址的国家习俗。

#### 2.1.10.4 State or province (ST)

州或省 (ST)

State or province should be represented by the official postal service codes for that country.

州或省应该用该国的官方邮政编码表示。

#### 2.1.10.5 Zip or postal code (ST)

邮政区码或邮政编码 (ST)

Zip or postal codes should be represented by the official codes for that country. In the US, the zip code takes the form 99999[-9999], while the Canadian postal code takes the form A9A9A9, and the Australian Postcode takes the form 9999

邮政区码或邮政编码应该用该国的官方编码表示。在美国，邮政区码用 99999[-9999]的形式，然而加拿大的邮政编码用 A9A9A9 的形式，澳大利亚则用 9999 的形式。

### 2.1.10.6 Country (ID)

#### 国家(ID)

Defines the country of the address. ISO 3166 provides a list of country codes that may be used. The ISO 3166 table has three separate forms of the country code: HL7 specifies that the 3-character (alphabetic) form be used for the country code. [HL7 Table 0399 - Country code](#) is defined to contain these 3-character codes.

定义地址中的国家。ISO3166 提供了可使用的国家代码列表，ISO 表有三个单独的国家代码表：HL7 指定国家代码使用 3 字符(字母型)表。HL7 表 0399-国家代码定义成包括这些 3 字符代码。

### 2.1.10.7 Address type (ID)

#### 地址类型(ID)

Address type is optional and defined by [HL7 Table 0190 - Address type](#).

地址类型是可选的，由 HL7 表 0190-地址类型定义。

### 2.1.10.8 Other geographic designation (ST)

#### 其他地理名称(ST)

Other geographic designation includes county, bioregion, SMSA, etc.

其他地理名称包括国家、生物区域、SMSA 等等。

### 2.1.10.9 County/parish code (IS)

#### 县/教区代码(IS)

A code that represents the county in which the specified address resides. [User-defined Table 0289 - County/parish](#) is used as the HL7 identifier for the user-defined table of values for this component. When this component is used to represent the county (or parish), component 8 <other geographic designation> should not duplicate it (i.e., the use of <other geographic designation> to represent the county is allowed only for the purpose of backward compatibility, and should be discouraged in this and future versions of HL7).

表示指定地址所在县的代码。此组件作为 HL7 标识符的用户定义的数值表参见用户定义表 0289-县/教区。当此组件用于表示县(或教区)时，第 8 组件<其他地理名称>不应与它重复(如，使用<其他地理名称>来代表县只有在为了保持向后兼容性时才允许，而在这个和将来的 HL7 版本中不应提倡)。

Allowable values: codes defined by government.

允许值：政府定义的代码。

User-defined Table 0289 - County/parish

用户定义表 0289-县/教区

Value 值	Description 描述
	No suggested values defined 无定义的暗示值

## 2.1.10.10 Census tract (IS)

## 人口普查地域 (IS)

A code that represents the census tract in which the specified address resides. [User-defined Table 0288 - Census tract](#) is used as the HL7 identifier for the user-defined table of values for this component.

指定居住的地址所在的人口普查地域的代码。此组件中作为 HL7 标识符的用户定义的数值表来自用户定义表 0288-人口普查地域。

Allowable Values: codes defined by government.

允许值：政府定义的代码。

User-defined Table 0288 - Census tract

用户定义表 0288-人口普查地域

Value 值	Description 描述
	No suggested values defined. 未定义建议值

## 2.1.10.11 Address representation code (ID)

## 地址表示法代码 (ID)

Different <name/address types> and representations of the same name/address should be described by repeating of this field, with different values of the <name/address type> and/or <name/address representation> component.

不同的<名字/地址类型>和同样名字/地址的不同表示法应被这个字段重复描述。当然使用<名字/地址类型>和/或<名字/地址表示法>组件的不同值来描述。

**Note:** Also note that this new component remains in "alphabetic" representation with each repetition of the fields using these data types. I.e. even though the address may be represented in an ideographic character set, this component will remain represented in an alphabetic character set.

**注意：** 还要注意使用这种数据类型的重复字段的这个新的组件保持“字母型”表示法。也就是说，即使地址可表示为表意字符集，此组件仍保持用字母型字符集表示。

Refer to *HL7 table 0465 - Name/address representation* for valid values.

有效值参见 HL7 表 0465–名字/地址表示法。

In general this component provides an indication of the representation provided by the data item. It does not necessarily specify the character sets used. Thus, even though the representation might provide an indication of what to expect, the sender is still free to encode the contents using whatever character set is desired. This component provides only hints for the receiver, so it can make choices regarding what it has been sent and what it is capable of displaying.

一般来讲，这个组件指示了由数据项提供的表示法。它不一定指定使用的字符集。这样，即使表示法可以提供预期结果的指示，但发送者仍然任意使用任何字符集来编码内容。这个组件仅为接收者提供暗示，所以它可以根据发送的内容和它所能显示的内容来作出选择。

### 2.1.10.12 Address validity range (DR)

#### 地址有效范围 (DR)

This component contains the start and end date/times which define the period in which this address was valid

这个组件包括定义地址有效时期的起始和结束日期/时间。

Date range start date/time (TS)

日期范围开始日期/时间 (TS)

Date range end date/time (TS)

日期范围结束日期/时间 (TS)

### 2.1.11 XCN – extended composite ID number and name for persons

#### XCN–个人的扩展复合 ID 号和名字

Components: <ID number (ST)> ^ <family name (FN)> ^ <given name (ST)> ^ <second and further given names or initials thereof (ST)> ^ <suffix (e.g., JR or III) (ST)> ^ <prefix (e.g., DR) (ST)> ^ <degree (e.g., MD) (IS)> ^ <source table (IS)> ^ <assigning authority (HD)> ^ <name type code (ID)> ^ <identifier check digit (ST)> ^ <code identifying the check digit scheme employed (ID)> ^ <identifier type code (IS)> ^ <assigning facility (HD)> ^ <name representation code (ID)> ^ <name context (CE)> ^ <name validity range (DR)> ^ <name assembly order (ID)>

Subcomponents of family name: <surname (ST)> & <own surname prefix (ST)> & <own surname (ST)> & <surname prefix from partner/spouse (ST)> & <surname from partner/spouse (ST)>

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)>

Subcomponents of name context: <identifier (ST)> & <text (ST)> & <name of coding system (IS)> & <alternate identifier (ST)> & <alternate text (ST)> & <name of alternate coding system (IS)>

Subcomponents of name validity range: <date range start date/time (TS)> & <date range end date/time (TS)>

**Note:** Replaces CN data type as of v 2.3.

**注意:** 替代版本 2.3 的 CN 数据型。



Length: 250

长度:250

This data type is used extensively appearing in the PV1, ORC, RXO, RXE, OBR and SCH segments , as well as others, where there is a need to specify the ID number and name of a person.

这种数据类型广泛地用在 PV1、ORC、RXO、RXE、OBR 和 SCH 信息段中，还有其他的需要指定个人 ID 号和名字的地方。

Example without assigning authority and assigning facility:

没有分配权限和分配设备的例子：

```
|1234567^Smith^John^J^III^DR^PHD^ADT01^^L^4^M11^MR|
```

Examples with assigning authority and assigning facility:

分配权限和分配设备的例子：

Dr. Samuel Semmelweiss's provider ID was assigned by the Provider Master and was first issued at Fairview Hospital within the University Hospitals System. Since IS table values (first component of the HD) were not used for assigning authority and assigning facility, components 2 and 3 of the HD data type are populated and demoted to sub-components as follows:

Samuel Semmelweiss 博士的提供者 ID 由提供者雇主分配，在大学医院系统内的 Fairview 医院发出。既然 IS 表数值 (HD 的第一组件) 不用于分配权限和分配设备，所以 HD 数据型的第二和第三组件被组装和降级成如下的子组件：

```
12188^Semmelweiss^Samuel^S^IV^Dr^MD^^&Provider Master.University Hospitals&L^9^M10^DN^&Fairview Hospital.University Hospitals&L^A
```

Ludwig van Beethoven's medical record number was assigned by the Master Patient Index and was first issued at Fairview Hospital within the University Hospitals System.

Ludwig van Beethoven 的医疗纪录号由主要病人索引分配，并由大学医院系统内的 Fairview 医院第一次发出。

```
10535^van Beethoven^van^Ludwig^A^III^Dr^PHD^^&MPI.University Hospitals&L^3^M10^MR^&Fairview Hospital.University Hospitals&L^AID number (ST)
```

ID 号 (ST)

This string refers to the coded ID according to a user-defined table, defined by the 9<sup>th</sup> component. If the first component is present, either the source table or the assigning authority must be valued.

这个字符串参见编码的 ID，此编码的 ID 是根据第 9 组件定义的用户定义表而定。如果第一组件存在，来源表或分配权限就必须被赋值。

### 2.1.11.2 Family name (FN)

姓(FN)

This component allows full specification of the surname of a person. Where appropriate, it differentiates the person's own surname from that of the person's partner or spouse, in cases where the person's name may contain elements from either name. It also permits messages to distinguish the surname prefix (such as "van" or "de") from the surname root. See section **2.9.19**, "FN – family name".

这组件允许对个人姓的完整说明。在合适的地方，它将个人的自己的姓与同伴或配偶的区分开，在个人的名字可能包含这两者的组件的情况下，它也允许信息从姓的根源区分姓的前缀（如“van”或“de”）。参见 **2.9.19**，“FN – 姓”。

### 2.1.11.3 Given name (ST)

名(ST)

First name.

名

### 2.1.11.4 Second and further given names or initials thereof (ST)

第二和其他名或词首大写字母(ST)

Multiple middle names may be included by separating them with spaces.

包括多重中间名，可通过用空格将其分开来。

### 2.1.11.5 Suffix (ST)

后缀(ST)

Used to specify a name suffix (e.g., Jr. or III).

用于指定名字的后缀(如：Jr. 或 III)。

### 2.1.11.6 Prefix (ST)

前缀(ST)

Used to specify a name prefix (e.g., Dr.).

用于指定名字的前缀(如：Dr.)。

### 2.1.11.7 Degree (IS)

学历(IS)

Used to specify an educational degree (e.g., MD). Refer to [User-defined Table 0360 – Degree](#) for suggested values.

用于指定教育程度(如：MD)。建议值参见用户定义表 0360-学历。

## 2.1.11.8 Source table (IS)

## 来源表 (IS)

[User-defined Table 0297 - CN ID](#) source is used as the HL7 identifier for the user-defined table of values for this component. Used to delineate the first component.

此组件中作为 HL7 标识符的数值表来源于用户定义表 0297-CN ID。用于界定第一组件。

## 2.1.11.9 Assigning authority (HD)

## 分配权限 (ID)

The assigning authority is a unique identifier of the system (or organization or agency of department) that creates the data. [User-defined Table 0363 - Assigning authority](#) is used as the HL7 identifier for the user-defined table of values for the first sub-component of the HD component, <namespace ID>.

分配权限唯一标识创建数据的系统(组织、机构或部门)。用作 HL7 标识符的 HD 组件的第一子组件—<名字区间 ID>的数值表来自用户定义表 0363-分配权限。

**Note:** When the HD data type is used in a given segment as a component of a field of another data type, [User-defined Table 0300 - Namespace ID](#) (referenced by the first sub-component of the HD component) may be re-defined (given a different user-defined table number and name) by the technical committee responsible for that segment.

By site agreement, implementers may continue to use [User-defined Table 0300 - Namespace ID](#) for the first sub-component.

**注意:** 当 HD 数据型作为另一数据型的一组组件用在给定的信息段时, 用户定义表 0300-名字区间 ID (被 HD 组件的第一子组件参照) 可由负责该信息段的技术委员会重新定义 (给定一个不同的用户定义表号和表名)。

根据地方协议, 实施者可继续为第一子组件使用用户定义表 0300-名字区间 ID。

## 2.1.11.10 Name type code (ID)

## 名字类型代码 (ID)

A code that represents the type of name. Refer to [HL7 Table 0200 - Name type](#) for valid values (see Section 2.9.54.7, “Name type code (ID)” ).

代表名字类型的代码。有效值参见 HL7 表 0200-名字类型 (参见 2.9.54.7, “名字类型代码 (ID)” )。

## 2.1.11.11 Identifier check digit (ST)

## 标识符校验数位 (ST)

The check digit in this data type is not an add-on produced by the message processor. It is the check digit that is part of the identifying number used in the sending application. If the sending application does not include a self-generated check digit in the identifying number, this component should be valued null.

这个数据型中的校验数位不是由信息处理器添加生成的。校验数位正是发送应用程序使用的识别号的一部分。如果发送应用程序没有在识别号中包含一个自身生成的校验数位, 该组件应定义为空。

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### 2.1.11.12 Code identifying the check digit scheme employed (ID)

识别所用校验数位规则的代码 (ID)

Refer to [HL7 Table 0061 – Check digit scheme](#) for valid values.

有效值参见 HL7 表 0061–校验数位规则。

### 2.1.11.13 Identifier type code (IS)

标识符类型代码 (IS)

A code corresponding to the type of identifier. In some cases, this code may be used as a qualifier to the <assigning authority> component. Refer to [HL7 Table 0203 – Identifier type](#) for suggested values.

标识符类型相应的代码。在某些情况下，这个代码可用于指定<分配权限>组件的指定词。建议值参见 HL7 表 0203–标识符类型。

### 2.1.11.14 Assigning facility (HD)

分配设备 (HD)

The place or location identifier where the identifier was first assigned to the person. This component is not an inherent part of the identifier but rather part of the history of the identifier: as part of this data type, its existence is a convenience for certain intercommunicating systems.

标识符第一次分配给个人的地点或位置标识。这个组件不是标识符的内在组件，而是此标识符历史的一部分：作为这种数据类型的一组件，它的存在是为了方便某些交流系统。

**Note:** When the HD data type is used in a given segment as a component of a field of another data type, [User-defined Table 0300 – Namespace ID](#) (referenced by the first sub-component of the HD component) may be re-defined (given a different user-defined table number and name) by the technical committee responsible for that segment.

**注意：** 当 HD 数据类型作为另一数据类型的一组件用在给定的信息段时，用户定义表 0300–名字区间 ID (被 HD 组件的第一子组件参照) 可由负责该信息段的技术委员会重新定义 (给定一个不同的用户定义表号和表名)。

### 2.1.11.15 Name representation code (ID)

名字表示法代码 (ID)

Different <name/address types> and representations of the same <name/address> should be described by repeating of this field, with different values of the <name/address type> and/or <name/address representation> component.

不同的<名字/地址类型>和同样<名字/地址>的不同表示法应由这个字段通过对<名字/地址类型>和/或<名字/地址表示法>组件的重复不同值来描述。

**Note:** This new component remains in “alphabetic” representation with each repetition of the field using these data types. I.e., even though the name may be represented in an ideographic character set, this component will remain represented in an alphabetic character set.

**注意：** 对使用这些数据类型字段的每一次重复的此新的组件将保留“字母型”表示法。也就是说，即使名字可表示为表意字符集，此组件仍将表示为字母型字符集。

Refer to *HL7 Table 0465 - Name/address representation* for valid values.

有效值参见 HL7 表 0465-名字/地址表示法。

In general this component provides an indication of the representation provided by the data item. It does not necessarily specify the character sets used. Thus, even though the representation might provide an indication of what to expect, the sender is still free to encode the contents using whatever character set is desired. This component provides only hints for the receiver, so it can make choices regarding what it has been sent and what it is capable of displaying.

总的来说，这个组件指示了由数据项提供的表示法，但它不一定指定使用的字符集。这样，即使表示法可能提供了预期结果的指示，发送者仍然随意地使用任何字符集去编码内容。这个组件仅仅为接受者提供了建议，所以它可以根据发送内容和它所能显示的内容来作出选择。

#### 2.1.11.16 Name context (CE)

##### 名字场景 (CE)

This component is used to designate the context in which a name is used. The main use case is in Australian healthcare for indigenous patients who prefer to use different names when attending different healthcare institutions. Another use case occurs in the US where health practitioners can be licensed under slightly different names and the reporting of the correct name is vital for administrative purposes. Refer to [User-defined Table 0448 - Name context](#) for suggested values.

这个组件用于指明名字使用处的场景。主要的使用情况是在澳大利亚医疗服务，本地病人在不同的医疗服务机构就医时愿意用不同的名字。另一种使用情况是在美国，医疗服务从业者可以用略有不同的名字来获得执照，真正名字的报告对管理非常重要。建议值参见用户定义表 0448-名字场景。

User-defined Table 0448 - Name context

用户定义表 0448-名字场景

Value 值	Description 描述
	No suggested values defined 无定义的建议值

#### 2.1.11.17 Name validity range (DR)

##### 名字有效范围 (DR)

This component contains the start and end date/times that define the period during which this name was valid. See section 2.9.14, “DR - date/time range” for description of subcomponents.

这个组件包括定义名字有效的起始和结束日期/时间。子组件的描述参见 2.9.14, “DR - date/time range”。

2.1.11.18 Name assembly order (ID)

名字结合顺序(ID)

A code that represents the preferred display order of the components of this person name.

[Refer to HL7 Table 0444 - Name assembly order](#) for valid values

表示首选的个人名字组件显示顺序的代码。有效值参见 HL7 表 0444-名字结合顺序。

2.1.12 XON - extended composite name and identification number for organizations

XON-组织的扩展复合名和识别号

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

Length: 250

长度:250

This data type is used in fields (e.g., PV2-23, NK1-13, PD1-3, OBR-44) to specify the name and ID number of an organization.

这种数据类型用在字段(如, PV2-23, NK1-13, PD1-3, OBR-44)中用于指定组织的名字和 ID 号。

Example 1:

例 1:

The ID for Fairview Hospital was assigned by the University Hospital enterprise' s Hospital Master and was first issued at the Central Offices.

Fairview 医院的 ID 由大学医院计划的医院主管分配, 并在中心办公室第一次发布。

Fairview Hospital^L^716^9^M10^&Hospital Master.University  
Hositals&L^XX^&Central Offices.University Hositals&L^A

Example 2:

例 2:

Fairview Hospital has another ID that was issued by HCFA. Assigning Authority, HCFA, values only the first HD component, an IS data type and assigning facility is not relevant. This information might be transmitted accordingly:

Fairview 医院有另一个由 HCFA 发布的 ID。分配权限组织—HCFA 仅对 HD 第一组件进行赋一 IS 数据型的值, 而且分配设备是无关的。信息可能按下面方式传递:

Fairview Hospital^L^4544^3^M10^HCFA^XX^^A

## 2.1.12.1 Organization name (ST)

## 组织名称 (ST)

The name of the specified organization.

指定机构的名称。

## 2.1.12.2 Organization name type code (IS)

## 组织名称类型代码 (IS)

A code that represents the type of name i.e., legal name, display name. Refer to [User-defined Table 0204 - Organizational name type](#) for suggested values.

代表名称类型的代码，如：合法名、显示名。建议值参见用户定义表 0204-组织的名称类型。

User-defined Table 0204 - Organizational name type

用户定义表 0204-组织的名称类型

Value 值	Description 描述
A	Alias name 别名
L	Legal name 合法名
D	Display name 显示名
SL	Stock exchange listing name 证券交易列表名

## 2.1.12.3 ID number (NM)

## ID 号 (NM)

## 2.1.12.4 Check digit (NM)

## 校验数位 (NM)

The check digit in this data type is not an add-on produced by the message processor. It is the check digit that is part of the identifying number used in the sending application. If the sending application does not include a self-generated check digit in the identifying number, this component should be valued null.

这种数据类型的校验数位不是由信息处理器添加生成的。校验数位正是发送应用程序使用的识别号的一部分。如果发送应用程序不在识别号内包含一个自身生成的校验数位，此组件应赋值为零。

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### 2.1.12.5 Code identifying the check digit scheme employed (ID)

识别所使用的校验数位规则的代码 (ID)

The check digit scheme codes are defined in [HL7 Table 0061 – Check digit scheme](#).

校验数位配置代码在 HL7 表 0061-校验数位规则中定义。

### 2.1.12.6 Assigning authority (HD)

分配权限 (HD)

The assigning authority is a unique identifier of the system (or organization or agency or department) that creates the data. Assigning authorities are unique across a given HL7 implementation. [User-defined Table 0363 – Assigning authority](#) is used as the HL7 identifier for the user-defined table of values for the first sub-component of the HD component <namespace ID>.

分配权限唯一标识创建数据的系统(组织、机构或部门)。在整个 HL7 实施中, 分配权限是唯一标识的。作为 HL7 标识符的 HD 组件的第一子组件<名称区间>的用户定义的数值表请见用户定义表 0363-分配权限。

<b>Note:</b>	When the HD data type is used in a given segment as a component of a field of another data type, <a href="#">User-defined Table 0300 – Namespace ID</a> (referenced by the first sub-component of the HD component) may be re-defined (given a different user-defined table number and name) by the technical committee responsible for that segment.  By site agreement, implementors may continue to use <a href="#">User-defined Table 0300 – Namespace ID</a> for the first sub-component.
<b>注意:</b>	当 HD 数据型作为另一数据型的组件用于给定的信息段中时, 用户定义表 0300-名称区间 ID(被 HD 组件的第一子组件参照)可由负责该信息段的技术委员会重新定义(给定一个不同的用户定义表号和表名)。根据地方协议, 实施者可继续为第一子组件使用用户定义表 0300-名称区间 ID。

### 2.1.12.7 Identifier type code (IS)

标识符类型代码 (IS)

A code corresponding to the type of identifier. In some cases, this code may be used as a qualifier to the “Assigning authority” component. Refer to [HL7 Table 0203 – Identifier type](#) for suggested values.

标识符类型相应的代码。某些情况下, 这个代码可用作”分配权限”组件的指定词。建议值参见 HL7 表 0203-标识符类型。

### 2.1.12.8 Assigning facility ID (HD)

分配设备 ID (HD)

The place or location identifier where the identifier was first assigned to the person. This component is not an inherent part of the identifier but rather part of the history of the identifier: as part of this data type, its existence is a convenience for certain intercommunicating systems.



标识符第一次分配给个人处的地点或位置标识。这个组件不是标识符的内在组件，而是标识符历史的一部分。作为这种数据类型的一组件，它的存在是为了方便某些交流系统。

**Note:** When the HD data type is used in a given segment as a component of a field of another data type, [User-defined Table 0300 – Namespace ID](#) (referenced by the first sub-component of the HD component) may be re-defined (given a different user-defined table number and name) by the technical committee responsible for that segment.

**注意:** 当 HD 数据类型作为另一数据类型的组件用于给定的信息段中时，用户定义表 0300-名称区间 ID (被 HD 组件的第一子组件参照) 可由负责该信息段的技术委员会重新定义 (给定一个不同的用户定义表号和表名)。

#### 2.1.12.9 Name representation code (ID)

##### 名称表示法代码 (ID)

Different <name/address types> and representations of the same <name/address> should be described by repeating of this field, with different values of the <name/address type> and/or <name/address representation> component.

不同的<名称/地址类型>和相同<名称/地址类型>的不同表示法应通过对该字段进行来表示，重复的<名字/地址类型>和/或<名字/地址表示法>组件的取值不同。

**Note:** This new component remains in “alphabetic” representation with each repetition of the field using these data types, i.e. even though the name may be represented in an ideographic character set, this component will remain represented in an alphabetic character set.

**注意:** 对这些数据型的字段的每一重复的这个新的组件保留“字母型”表示法，也就是说，即使名称可表示为表意字符集，这个组件仍将保持表示为字母型字符集。

Refer to *HL7 Table 0465 – Name/address representation code* for valid values.

有效值参见 HL7 表 0465-名称/地址表示法代码。

In general this component provides an indication of the representation provided by the data item. It does not necessarily specify the character sets used. Thus, even though the representation might provide an indication of what to expect, the sender is still free to encode the contents using whatever character set is desired. This component provides only hints for the receiver, so it can make choices regarding what it has been sent and what it is capable of displaying.

总的来说，这个组件指示了由数据项提供的表示法。它不一定指定使用的字符集。这样，即使表示法可能提供了预期结果的指示，发送者仍然可随意地使用任何字符集去编码内容。这个组件仅仅为接受者提供了建议，它可以根据发送内容和它所能显示的内容来作出选择。

#### 2.1.13 XPN – extended person name

##### XPN-扩展的人名

**Components:** In Version 2.3, replaces the PN data type. <family name (FN)> ^ <given name (ST)> ^ <second and further given names or initials thereof (ST)> ^ <suffix (e.g., JR or III) (ST)> ^ <prefix (e.g., DR) (ST)> ^ <degree (e.g., MD) (IS)> ^ <name type code (ID)> ^ <name representation code (ID)> ^ <name context (CE)> ^ <name validity range (DR)> ^ <name assembly order (ID)>

**Subcomponents of family name:** <surname (ST)> ^ <own surname prefix (ST)> ^ <own surname (ST)> ^ <surname prefix from partner/spouse (ST)> ^ <surname from partner/spouse (ST)>

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Subcomponents of name context: <identifier (ST)> & <text (ST)> & <name of coding system (IS)> & <alternate identifier (ST)> & <alternate text (ST)> & <name of alternate coding system (IS)>

Subcomponents of name validity range: <date range start date/time (TS)> & <date range end date/time (TS)>

Length: 250

<b>Note:</b> Replaces PN data type as of v 2.3.
---

<b>注意:</b> 替代版本 2.3 的 PN 数据型.
-------------------------------

Example:

例:

|Smith^John^J^III^DR^PHD^L|

### 2.1.13.1 Family name (FN )

姓 (FN)

This component allows full specification of the surname of a person. Where appropriate, it differentiates the person's own surname from that of the person's partner or spouse, in cases where the person's name may contain elements from either name. It also permits messages to distinguish the surname prefix (such as "van" or "de") from the surname root. See section **2.9.19**, "FN – family name".

这个组件允许对个人姓的完整说明。在合适的地方，在个人的名字可能包含这两者的组件的情况下，它将个人自己的姓与同伴或配偶的区分开。它也允许信息从姓的根源区分姓的前缀（如，“van”或“de”）。参见 **2.9.19**，“Fn-姓”。

### 2.1.13.2 Given name (ST)

名 (ST)

First name.

名字

### 2.1.13.3 Second and further given names or initials thereof (ST)

第二个和其他名或词首大写字母 (ST)

Multiple middle names may be included by separating them with spaces.

包含多重中间名，可通过用间隔将其分开。

### 2.1.13.4 Suffix (ST)

后缀 (ST)

Used to specify a name suffix (e.g., Jr. or III).

用于指定名字的后缀（如，Jr. 或 III）。

## 2.1.13.5 Prefix (ST)

## 前缀(ST)

Used to specify a name prefix (e.g., Dr.).

用于指定名字的前缀(如, Dr.)。

## 2.1.13.6 Degree (IS)

## 学历(IS)

Used to specify an educational degree (e.g., MD). Refer to [User-defined Table 0360 - Degree](#) for suggested values.

用于指定教育程度(如, MD)。建议值参见用户定义表 0360-学历。

User-defined Table 0360 - Degree

用户定义表 0360-学历

Value 值	Description 描述
AAS	Associate of Applied Science 应用科学的副学士
AA	Associate of Arts 文科副学士
ABA	Associate of Business Administration 工商管理副学士
AE	Associate of Engineering 工程副学士
AS	Associate of Science 理科副学士
BA	Bachelor of Arts 文学士
BBA	Bachelor of Business Administration 工商管理学士
BE	Bachelor of Engineering 工程学士
BFA	Bachelor of Fine Arts 美术学士
BN	Bachelor of Nursing 护理学士

Value 值	Description 描述
BS	Bachelor of Science 理学士
BSL	Bachelor of Science - Law 理学-法学士
BT	Bachelor of Theology 神学士
CER	Certificate 证书
DIP	Diploma 文凭
DBA	Doctor of Business Administration 工商管理博士
DED	Doctor of Education 教育博士
PharmD	Doctor of Pharmacy 药学博士
PHE	Doctor of Engineering 工程博士
PHD	Doctor of Philosophy 哲学博士
PHS	Doctor of Science 理学博士
MD	Doctor of Medicine 医学博士
DO	Doctor of Osteopathy 正骨学博士
HS	High School Graduate 中学毕业生
JD	Juris Doctor 法学博士
MA	Master of Arts 文科硕士
MBA	Master of Business Administration 工商管理硕士

Value 值	Description 描述
MCE	Master of Civil Engineering 土木工程硕士
MDI	Master of Divinity 神学硕士
MED	Master of Education 教育学硕士
MEE	Master of Electrical Engineering 电子工程硕士
ME	Master of Engineering 工程硕士
MFA	Master of Fine Arts 美术硕士
MME	Master of Mechanical Engineering 机械工程硕士
MS	Master of Science 理学硕士
MSL	Master of Science - Law 理学-法学硕士
MT	Master of Theology 神学硕士
NG	Non-Graduate 非毕业生
SEC	Secretarial Certificate 秘书证书
TS	Trade School Graduate 中等专业学校毕业生

## 2.1.13.7 Name type code (ID)

## 名称类型代码 (ID)

A code that represents the type of name. Refer to [HL7 Table 0200 - Name type](#) for valid values.

表示名称类型的代码。有效值参见 HL7 表 0200-名称类型。

HL7 Table 0200 – Name type

HL7 表 0200-名称类型

Value 值	Description 描述
A	Alias Name 别名
B	Name at Birth 出生名
C	Adopted Name 采用的名字
D	Display Name 显示名
I	Licensing Name 许可名
L	Legal Name 合法名
M	Maiden Name 婚前姓
N	Nickname /” Call me” Name/Street Name 昵称/呼叫名/街道名
P	Name of Partner/Spouse (retained for backward compatibility only) 同伴或配偶的名字(仅为向后兼容性而保留)
R	Registered Name (animals only) 登记名(仅用于动物)
S	Coded Pseudo-Name to ensure anonymity 为保证匿名性而编码的假名
T	Indigenous/Tribal/Community Name 本土的/部落的/社区的名字
U	Unspecified 未指定

**Note:** The content of Legal Name is country specific. In the US the legal name is the same as the current married name.

**注意:** 合法名的内容随国家不同而不同。在美国, 合法名和现在的婚后名字一样。

## 2.1.13.8 Name representation code (ID)

## 名字表示法代码 (ID)

Different <name/address types> and representations of the same <name/address> should be described by repeating of this field, with different values of the <name/address type> and/or <name/address representation> component.

不同的<名称/地址类型>和同样<名称/地址类型>的不同表示法应通过对该字段进行重复来表示，且<名字/地址类型>和/或<名字/地址表示法>的不同重复组件的取值不同。

**Note:** This new component remains in "alphabetic" representation with each repetition of the field using these data types. I.e. even though the name may be represented in an ideographic character set, this component will remain represented in an alphabetic character set.

**注意:** 对这些数据类型的字段的每一次重复的此的组件来保持"字母型"表示法。也就是说，即使名字可表示为表意字符集，此组件仍将表示为字母型字符集。

Refer to *HL7 Table 0465 - Name/address representation* for valid values.

有效值参见 HL7 表 0465-名字/地址表示法。

In general this component provides an indication of the representation provided by the data item. It does not necessarily specify the character sets used. Thus, even though the representation might provide an indication of what to expect, the sender is still free to encode the contents using whatever character set is desired. This component provides only hints for the receiver, so it can make choices regarding what it has been sent and what it is capable of displaying.

总的来说，这个组件指示了由数据项提供的表示法。它不一定指定使用的字符集。这样，即使表示法可能提供了预期结果的指示，发送者仍然随意地使用任何字符集去编码内容。这个组件仅仅为接受者提供了建议，所以它可以根据发送内容和它所能显示的内容来作出选择。

## 2.1.13.9 Name context (CE)

## 名字场景 (CE)

Subcomponents of name context: <identifier (ID)> & <text (ST)> & <name of coding system (IS)> & <alternate identifier (ID)> & <alternate text (ST)> & <name of alternate coding system (IS)>

This component is used to designate the context in which a name is used. The main use case is in Australian healthcare for indigenous patients who prefer to use different names when attending different healthcare institutions. Another use case occurs in the US where health practitioners can be licensed under slightly different names and the reporting of the correct name is vital for administrative purposes. Refer to [User-defined Table 0448 - Name context](#) for suggested values.

这个组件用于指明名字使用处的场景。主要的使用情况是在澳大利亚医疗服务，本地病人在不同的医疗服务机构就医时愿意用不同的名字。另一种使用情况是在美国，医疗服务从业者可以用略有不同的名字来获得执照，真正名字的报告对管理非常重要。建议值参见用户定义表 0448-名字场景。

### 2.1.13.10 Name validity range (DR)

#### 名字有效范围(DR)

This component contains the start and end date/times which define the period during which this name was valid. See section 2.9.14, “DR – date/time range” for description of subcomponents.

这个组件包括定义名字有效的起始和结束时间。子组件的描述参见 2.9.14, “DR – date/time range”。

### 2.1.13.11 Name assembly order (ID)

#### 名字结合顺序(ID)

A code that represents the preferred display order of the components of this person name. Refer to *HL7 0444 – Name assembly order* for valid values.

表示此人名的各组件的首选显示顺序的代码。有效值参见 HL7 表 0444-名字结合顺序。

## 2.1.14 XTN – extended telecommunication number

### XTN-扩展的无线电通讯号

Components: [NNN] [(999)]999-9999 [X999999] [B999999] [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)>

**Note:** Replaces TN data type as of v 2.3

注意：替代版本 2.3 的 TN 数据型。

**Length:** 250

**长度:**250

Example:

例:

(415)555-3210^ORN^FX^

#### 2.1.14.1 [(999)] 999-9999 [X999999] [C any text]

#### [(999)] 999-9999 [X999999] [C 任何文本]

Defined as the TN data type (see Section 2.9.45, “TN – telephone number”), except that the length of the country access code has been increased to three.

定义为 TN 数据型(参见 2.9.45, ” TN-电话号码”), 除了国家通路代码的长度已增加到三的之外.



## 2.1.14.2 Telecommunication use code (ID)

## 无线电通讯使用代码(ID)

A code that represents a specific use of a telecommunication number. Refer to [HL7 Table 0201 – Telecommunication use code](#) for valid values.

代表无线电通讯号的特定用法的代码。有效值参见 HL7 表 0201-无线电通讯使用代码。

HL7 Table 0201 – Telecommunication use code

HL7 表 0201-无线电通讯使用代码

Value 值	Description 描述
PRN	Primary Residence Number 主要的住宿号
ORN	Other Residence Number 其他住宿号
WPN	Work Number 工作号
VHN	Vacation Home Number 度假房屋号
ASN	Answering Service Number 回答服务号
EMR	Emergency Number 紧急号码
NET	Network (email) Address 网络(电子邮件)地址
BPN	Beeper Number 寻呼机号

## 2.1.14.3 Telecommunication equipment type (ID)

## 无线电通讯设备类型(ID)

A code that represents the type of telecommunication equipment. Refer to [HL7 Table 0202 – Telecommunication equipment type](#) for valid values.

表示无线电通讯设备类型的代码。有效值参见 HL7 表 0202-无线电通讯设备类型。

HL7 Table 0202 – Telecommunication equipment type

HL7 表 0202-无线电通讯设备类型

Value 值	Description 描述
PH	Telephone 电话
FX	Fax 传真
MD	Modem 调制解调器
CP	Cellular Phone 便携式电话
BP	Beeper 寻呼机
Internet	Internet Address: Use Only If Telecommunication Use Code Is NET 网络地址: 仅在无线电通讯使用代码是 NET 时用
X.400	X.400 email address: Use Only If Telecommunication Use Code Is NET X.400 电子邮件地址: 仅在无线电通讯使用代码是 NET 时用

## 2.1.14.4 Email address (ST)

## 电子邮件地址 (ST)

**Internationalization note:** To make this data type interoperate with CEN' s Telecommunication data attribute group, we allow use of the second component for email addresses. The presence of an email address is specified by the addition of the value *NET* to the Phone Use Code table, and the type of Internet address is specified with the values *Internet* and *X.400* to the Phone Equipment Type table. When used for an Internet address, the first component of the XTN data type will be null. If the @-sign is being used as a subcomponent delimiter, the HL7 subcomponent escape sequence may be used when encoding an Internet address (see Section 2.10.1, "Formatting codes").

**国际化注意事项:** 为了使这个数据类型与 CEN 的无线电通讯数据属性群协作, 我们允许使用第二组件作为电子邮件地址的。电子邮件地址是通过将值 *NET* 添加到电话使用代码表来指定, *Internet* 地址的类型由 *Internet* 和指定到电话设备类型表的 *X.400* 来表示。当用作 *Internet* 地址使用时, XTN 数据型的第一组件将为空。如果 @- 标记正用作子组件分隔符, 则当编码 *Internet* 地址时, 可使用 HL7 子组件 escape 序列 (参见 2.10.1, "格式化代码")。

**Note:** 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 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).

**注意:** 第五到第九组件重申了第一组件在允许局部和国际电话号码共同表达的分界表中的基本功能。在版本 2.3 中, 电话号码的推荐表是使用分界表而不是使用第一组件支持的未结构化的表格(仅为保持向后兼容性而保留)。

## 2.1.14.5 Country code (NM)

国家代码 (NM)

## 2.1.14.6 Area/city code (NM)

地区/城市代码 (NM)

## 2.1.14.7 Phone number (NM)

电话号码 (NM)

## 2.1.14.8 Extension (NM)

扩展名 (NM)

## 2.1.14.9 Any text (ST)

任何文本 (ST)

## 2.2 USE OF ESCAPE SEQUENCES IN TEXT FIELDS

## 在文本字段 ESCAPE 序列的使用

## 2.2.1 Formatting codes

## 格式化代码

When a field of type TX, FT, or CF is being encoded, the escape character may be used to signal certain special characteristics of portions of the text field. The escape character is whatever display ASCII character is specified in the <escape character> component of *MSH-2-encoding characters*. For purposes of this section, the character \ will be used to represent the character so designated in a message. An **escape sequence** consists of the escape character followed by an escape code ID of one character, zero (0) or more data characters, and another occurrence of the escape character. The following escape sequences are defined:

当正在编码 TX、FT 或 CF 类型的字段时，escape 字符可用于标记文本字段的某些特定部分。Escape 字符是由 MSH-2-编码字符的< escape 字符>组件来指定，可以是任何的可显示的 ASCII 字符。此章节的目的为，字符“\”将用于代表在信息中来代表这个字符。一个 **escape 序列** 包括一个 Escape 字符、紧随其后的此字符的 escape 代码 ID、0 或更多的数据字符，以及另一个 escape 字符。下列的 escape 序列被定义：

\H\	start highlighting
	强调开始
\N\	normal text (end highlighting)
	标准文本 (强调结束)

\F\	field separator
	字段分隔符
\S\	component separator
	组件分隔符
\T\	subcomponent separator
	子组件分隔符
\R\	repetition separator
	重复分隔符
\E\	escape character
	escape 字符
\Xddd...	hexadecimal data
\	十六进制数据
\Zddd...	locally defined escape sequence
\	局部定义的 escape 序列

The **escape sequences** for field separator, component separator, subcomponent separator, repetition separator, and escape character are also valid within an ST data field.

字段分隔符、组件分隔符、子组件分隔符、重复分隔符和 escape 字符的 **escape 序列** 在 ST 数据字段内也有效。

No escape sequence may contain a nested escape sequence.

escape 序列不可包含一个嵌套的 escape 序列。

### 2.2.2 Escape sequences supporting multiple character sets for, FT, ST, and TX data types

#### Escape 序列支持 FT、ST 和 TX 数据型的多重字符集

The following HL7 escape sequences are defined to support multiple character sets for fields, components and sub-components that are defined as data types FT, ST, and TX. They allow HL7 parsers to use escape codes (defined in the standards used below), without breaking, and without being non-conformant to the HL7 escape paradigm defined in this section.

下列 HL7 escape 序列被定义为支持 FT、ST 和 TX 数据型的字段、组件和子组件的多重字符集。他们允许 HL7 解析者使用 escape 代码(在下面使用的标准中定义)、不必中断、不必和这组件定义的 HL7 范例不一致。

\Cxyy\ single-byte character set escape sequence with two hexadecimal values, xx and yy, that indicate the escape sequence defined for one of the character repertoires supported for the current message (i.e., ISO-IR xxx).

有两个十六进制数值 xx 和 yy 的单字节字符集 escape 序列, 表明此 Escape 系列被定义为一个字符指令系统以支持当前的信息 (如, ISO-IR xxx)。

\Mxyyzz\ multi-byte character set escape sequence with three hexadecimal values, xx, yy and zz. zz is optional.

有三个十六进制数值 xx, yy 和 zz 的多字节字符集序列, 其中 Zz 是可选的。

Common character set escape sequences include the following which are defined in the standards mentioned:

定义在标准中的普通字符集的 escape 序列如下:

Single-byte character sets:

单字节字符集:

\C2842\	ISO-IR6 G0 (ISO 646 : ASCII)
\C2D41\	ISO-IR100 (ISO 8859 : Latin Alphabet 1)
	拉丁字母表 1
\C2D42\	ISO-IR101 (ISO 8859 : Latin Alphabet 2)
	拉丁字母表 2
\C2D43\	ISO-IR109 (ISO 8859 : Latin Alphabet 3)
	拉丁字母表 3
\C2D44\	ISO-IR110 (ISO 8859 : Latin Alphabet 4)
	拉丁字母表 4
\C2D4C\	ISO-IR144 (ISO 8859 : Cyrillic)
	古斯拉夫语
\C2D47\	ISO-IR127 (ISO 8859 : Arabic)
	阿拉伯语

\C2D46\	ISO-IR126 (ISO 8859 : Greek)
	希腊语
\C2D48\	ISO-IR138 (ISO 8859 : Hebrew)
	希伯来语
\C2D4D\	ISO-IR148 (ISO 8859 : Latin Alphabet 5)
	拉丁字母表 5
\C284A\	ISO-IR14 (JIS X 0201 -1976: Romaji)
	罗马字母
\C2949\	ISO-IR13 (JIS X 0201 : Katakana)
	(日本字母)片假名
Multi-byte codes:	
\M2442\	ISO-IR87 (JIS X 0208 : Kanji, hiragana and katakana)
	日本汉字, 平假名和片假名
\M242844\	ISO-IR159 (JIS X 0212 : Supplementary Kanji)
	增补日本汉字

### 2.2.3 Highlighting

#### 强调部分

In designating highlighting, the sending application is indicating that the characters that follow somehow should be made to stand out, but leaving the method of doing so to the receiving application. Depending on device characteristics and application style considerations, the receiving application may choose reverse video, boldface, underlining, blink, an alternate color or another means of highlighting the displayed data. For example the message fragment:

在指明需要强调的部分时，发送应用程序应该指明发出的跟随某些情况的字符应该突出，但是把具体如何做的方法留给接收应用程序。基于于对服务特点和应用程序类型的考虑，接收应用程序可选择反白显示，黑体字，下划线，闪亮，替换的颜色或另一种方式突出显示数据。 例如信息段：

```
DSP| TOTAL CHOLESTEROL \H\240*\N\ [90 - 200]
```

might cause the following data to appear on a screen or report:

可能导致下列数据显示在屏幕或报告上：

TOTAL CHOLESTEROL        240\*    [90 - 200]

whereas another system may choose to show the 240\* in red.

而另一系统可选择以红色显示 240\*.

## 2.2.4 Special character

### 特殊字符

The special character escape sequences (\F\, \S\, \R\, \T\, and \E\) allow the corresponding characters to be included in the data in a text field, though the actual characters are reserved. For example, the message fragment

虽然实际的字符被保留，特殊字符的 escape 序列允许相应的字符包括在文本字段的数据中。例如信息段：

```
DSP|  TOTAL CHOLESTEROL        180  \F\90 - 200\F\
DSP|  \S\-----\S\
```

would cause the following information to be displayed, given suitable assignment of separators:

将导致下列信息被显示，并适当分配分隔符的：

```
TOTAL CHOLESTEROL        180  |90 - 200|
^-----^
```

## 2.2.5 Hexadecimal

### 十六进制

When the hexadecimal escape sequence (\Xdddd...\) is used the X should be followed by 1 or more pairs of hexadecimal digits (0, 1, . . . , 9, A, . . . , F). Consecutive pairs of the hexadecimal digits represent 8-bit binary values. The interpretation of the data is entirely left to an agreement between the sending and receiving applications that is beyond the scope of this Standard.

当使用十六进制 escape 序列(\Xdddd...\)时，X 后面应跟有 1 对或更多对十六进制数字(0, 1, . . . , 9, A, . . . , F)。连续的十六进制数字对代表 8 位二进制数值。对数据的解释全部留给发送和接受应用程序间的协议，这些超过此标准范围的。

## 2.2.6 Formatted text

### 格式化文本

If the field is of the formatted text (FT) data type, formatting commands also may be surrounded by the escape character. Each command begins with the . (period) character. The following formatting commands are available:

如果字段属于格式化文本的 (FT) 数据类型，则格式化命令也可以被 escape 字符环绕。每个命令以。(句号) 字符开始。下列格式化命令是有效的：

`.sp <number>` End current output line and skip <number> vertical spaces. <number> is a positive integer or absent. If <number> is absent, skip one space. The horizontal character position remains unchanged. Note that for purposes of compatibility with previous versions of HL7, “`^\.sp\`” is equivalent to “`^\.br\.`”

结束当前输出行，并跳过<号码>垂直空格。<号码>是正整数或缺失。如果缺少<号码>，则跳过一个空格。水平字符位置保持不变。注意为了保持对以前 HL7 版本的兼容性，“`^\.sp\`”等于“`^\.br\.`”。

`.br` Begin new output line. Set the horizontal position to the current left margin and increment the vertical position by 1.

开始新的输出行。将水平位置设定到现在的左边以及增加一个垂直位置。

`.fi` Begin word wrap or fill mode. This is the default state. It can be changed to a no-wrap mode using the `.nf` command.

开始自动换行或填充模式。这是缺省状态。它可用 `.nf` 命令改为不自动换行模式。

`.nf` Begin no-wrap mode.

开始不自动换行模式。

`.in <number>` Indent <number> of spaces, where <number> is a positive or negative integer. This command cannot appear after the first printable character of a line.

在<号码>是正或负整数处，缩进<号码>个空格，. 这个命令不能在一行的第一个可打印字符后出现。

`.ti <number>` Temporarily indent <number> of spaces where number is a positive or negative integer. This command cannot appear after the first printable character of a line.

当<号码>是正或负整数时，临时缩进<号码>个间隔。这个命令不能在一行的第一个可打印字符后出现。

`.sk < number>` Skip <number> spaces to the right.

跳过<号码>个空格到右边。

`.ce` End current output line and center the next line.

结束当前输出行并将光标移到下一行。



The component separator that marks each line defines the extent of the temporary indent command (.ti), and the beginning of each line in the no-wrap mode (.nf). Examples of formatting instructions that are NOT included in this data type include: width of display, position on page or screen, and type of output devices.

此组件分隔符每一行进行标记以定义临时缩进度命令(.ti)，以及每一行的非自动换行模式(.nf)开始位置。并不包括在这种数据类型内的格式化指令的例子包括：显示宽度，页面和屏幕的位置和输出设备的类型。

Figure 2-3 is an example of the FT data type from a radiology impression section of a radiology report:

图 2-3 是来自放射学报告的放射学影像部分的一个 FT 数据型的例子：

Figure 2-3. Formatted text as transmitted

图 2-3 传递的格式化文本

```
\.in+4\\.ti-4\ 1. The cardiomedastinal silhouette is now within normal limits.^\\.sp\\.ti-4\ 2. Lung
fields show minimal ground glass appearance.. A loop of colon visible in the left upper quadrant is
distinctly abnormal with the appearance of mucosal effacement suggesting colitis.\.in-4\|
\.in+4\\.ti-4\ 1, 心脏侧影在正常值范围内.^\\.sp\\.ti-4\ 2., 肺部区域有细小的圆形玻璃状体.^\\.sp\\.ti-4\ 3, 左上
1/4 段结肠有明显的异常, 表现为 mucosal effacement, 建议可能有大肠炎症。
```

Figure 2-4 shows one way of presenting the data in Figure 2-3. The receiving system can create many other interpretations by varying the right margin.

图 2-4 为图 2-3 中数据的一种显示方法。接收系统可以通过改变右边界来创造许多其他的解释。

Figure 2-4. Formatted text in one possible presentation

图 2-4 一个可能的显示的格式化文本

```
1. The cardiomedastinal silhouette is now within normal limits.

心脏侧影在正常值范围内

2. Lung fields show minimal ground glass appearance.

肺部区域有细小的圆形玻璃状体

3. A loop of colon visible in the left upper quadrant is distinctly abnormal with the appearance of mucosal
effacement suggesting
colitis.

左上 1/4 段结肠有明显的异常, 表现为 mucosal effacement, 建议可能有大肠炎症。
```

## 2.2.7 Local

### 局部（当地）

When the local escape sequence (\Zdddd...\) is used the Z should be followed by characters that are valid in a TX field. The interpretation of the data is entirely left to an

agreement between the sending and receiving applications that is beyond the scope of this Standard.

当使用局部（当地）escape 序列（\Zdddd...\）时，Z 后面应该跟有 TX 文本内有效的字符。对数据的解释全部留给了发送和接受应用程序间的协议，这超越这个标准范围的。

## 2.3 MESSAGE CONSTRUCTION RULES

### 信息构建规则

**Note:** These message construction rules define the standard HL7 encoding rules, creating variable length delimited messages. Although only one set of encoding rules is defined as a standard in HL7 Version 2.3, other encoding rules are possible (but since they are non-standard, they may only be used by a site-specific agreement).

**注意：** 这些信息构建规则定义标准的 HL7 编码规则，创建可变长度定界的信息。尽管仅有一组编码规则定义为 HL7 版本 2.3 的标准，其他编码规则是可能的（但是因为他们不标准，他们仅可按地方指定的协议使用）。

Step 1 Construct the segments in the order defined for the message. Each message is constructed as follows:

步骤 1 按信息定义的顺序构建信息段。每条信息构建如下：

a) the first three characters are the segment ID code

前三个字符是信息段 ID 代码

b) each data field in sequence is inserted in the segment in the following manner:

序列中的每个数据字段按下列方式插入信息段：

1) a field separator is placed in the segment

一个字段分隔符放入信息段

2) if the value is not present, no further characters are required

如果值不存在，不需要更多的字符

3) if the value is present, but null, the characters "" (two consecutive double quotation marks) are placed in the field

如果值存在，但为空，字符 ""（两个连续的双引号）放入字段

4) otherwise, place the characters of the value in the segment. As many characters can be included as the maximum defined for the data field. It is not necessary, and is undesirable, to pad fields to fixed lengths. Padding to fixed lengths is permitted. Encode the individual data fields as shown in Section 2.9, "Data types."

否则，将数值的字符放入信息段。因为许多字符可以作为数据字段定义的最大值包括在内。给字段附上固定的长度是不必要的，也是不受欢迎的。附上固定的长度是允许的。编码单个数据字段如 2.9, "Data types." 所示。

5) if the field definition calls for a field to be broken into components, the following rules are used:

如果字段定义要求字段分解成不同组件，使用下列规则：

- i. if more than one component is included they are separated by the component separator

如果包括多个组件，它们由组件分隔符分隔

- ii. components that are present but null are represented by the characters ""

存在但为空的组件用字符""表示

- iii. components that are not present are treated by including no characters in the component

不存在的组件用组件不包含字符进行处理

- iv. components that are not present at the end of a field need not be represented by component separators. For example, the two data fields are equivalent:

不存在于字段末尾的组件不需要用组件分隔符表示。例如，以下两个数据字段是相等的：

|ABC`DEF``| and |ABC`DEF|.

- 1) if the component definition calls for a component to be broken into subcomponents, the following rules are used:

如果组件定义要求将组件分解成子组件，则使用下列规则：

- i. if more than one subcomponent is included they are separated by the subcomponent separator

如果包含多个子组件，它们用子组件分隔符分隔

- ii. subcomponents that are present but null are represented by the characters ""

存在但为空的子组件用字符""表示

- iii. subcomponents that are not present are treated by including no characters in the subcomponent

不存在的子组件用在子组件中不含字符来处理

- iv. subcomponents that are not present at the end of a component need not be represented by subcomponent separators. For example, the two data components are equivalent:

不存在于组件末尾的子组件不需要用子组件分隔符来表示。例如，两个数据组件是相等的：

^XXX&YYY&&^ and ^XXX&YYY^.

- 1) if the field definition permits repetition of a field, the repetition separator is used only if more than one occurrence is transmitted. In such a case, the repetition separator is placed between occurrences. If three occurrences are transmitted, two repetition separators are used.)

如果字段定义允许字段的重复，重复分隔符仅在传递重复字段时使用。在这种情况下，重复分隔符放在出现的字段之间。如果传递三个重复字段，则用两个重复分隔符。

In the example below, two occurrences of telephone number are being sent:

在下面的例子中，正在发送电话号码的两个子段：

|234-7120~599-1288B1234|

- a) repeat Step 1b while there are any fields present to be sent. If all the data fields remaining in the segment definition are not present there is no requirement to include any more delimiters.

在出现任何要发送的字段时重复步骤 1b。如果所有保留在信息段定义的数据字段不存在，没有必要包含任何更多的分隔符。

- b) end each segment with an ASCII carriage return character  
用 ASCII 回车字符结束每个信息段

Step 2 Repeat Step 1 until all segments have been generated.

The following rules apply to receiving HL7 messages and converting their contents to data values:

步骤 2 重复步骤 1 直到已经生成了所有的信息段。

下列规则适用于接收 HL7 信息以及将它们的内容转换成数据值：

- a) ignore segments, fields, components, subcomponents, and extra repetitions of a field that are present but were not expected  
忽视那些存在但没有预期出现的信息段、字段、组件、子组件，和字段的重复。
- b) treat segments that were expected but are not present as consisting entirely of fields that are not present  
将预期了但不存在的信息段处理为由不存在的全部字段而组成。
- c) treat fields and components that are expected but were not included in a segment as not present.  
将预期了但不包括在信息段内的字段和组件处理为不存在。

### 2.3.1 Encoding rules notes

#### 编码规则注意事项

If a segment is to be continued across messages, use the extended encoding rules. These rules are defined in terms of the more general message continuation protocol (see Section 2.15.2, “Continuation messages and segments”).

如果信息段跨越好几个信息时，将使用扩展的编码规则。这些规则在更加一般化的信息继续协议的项目中定义（参见 2.15.2, “继续信息和信息段”）。

### 2.3.2 Version compatibility definition

#### 版本兼容性定义

The above rules for receiving HL7 messages and converting their contents to data values allow the following definition of a backward compatibility requirement between the 2.x versions of HL7:

接收 HL7 信息和将它们的内容转换成数据值的上述规则允许 HL7 版本 2.x 间的向后兼容性要求的下列要求:

- a) New messages may be introduced.

可以引入新的信息

- b) New segments may be introduced to an existing message. In general these will be introduced at the end of a message, but they may be introduced elsewhere within the message if the segment hierarchy makes this necessary.

新的信息段可以引入到已经存在的信息中。总的来说, 这些将在信息的末尾被引入, 但是它们可以引入到信息内的其他地方, 如果信息段层次使之成为必要的话。

- c) New fields may be added at the end of a segment, new components may be added at the end of a field, new subcomponents may be added at the end of a component, and a non-repeating field may be made repeating.

新的字段可在信息段的末尾添加, 新的组件可在字段的末尾添加, 新的子组件可在组件的末尾添加, 还有不重复的字段可变成重复。

- d) Existing optional segments, fields, components, and subcomponents may be made conditional or required.

已经存在的可选性信息段、字段、组件和子组件可变成有条件的或必需的。

If a non-repeating field is made repeating, the first instance of that repeating field must have the same meaning as the non-repeating field had in the prior version of HL7.

如果不重复的字段变成重复的, 该重复字段的第一个使用场合必须有和不重复字段在以前的 HL7 版本中相同的意思。

For existing fields in existing segments, data types may be changed by the above rule in point “c” if the leftmost (prior version) part of the field has the same meaning as it had in the prior version of HL7. In other words, if the new parts of the field (those that are part of the new data type) are ignored, what remains is the old field (defined by the old data type), which has the same meaning as it had in the prior version of HL7. When optional elements are made required or conditional, what remains for older versions is not changed.

对已有的信息段中已有的字段, 数据类型可以根据点 “c” 中的上述规则改变, 如果字段最左边 (以前的版本) 的组件和它在 HL7 以前的版本中的意思相同。换句话说, 如果字段新的组件 (属新的数据类型的那组件) 被忽视, 保留的是和以前的 HL7 版本中的意思相同的旧的字段 (由旧的数据类型定义)。当可选的组件变成必需的或有条件的, 为更老的版本保留的内容没有改变。

## 2.4 CHAPTER FORMATS FOR DEFINING HL7 MESSAGES

### 定义 HL7 信息的章节格式

Subsequent chapters of this document describe messages that are exchanged among applications in functionally-specific situations. Each chapter is organized as follows:

## Chapter 2: Control

---

这篇文献的后面章节描述了在特定功能情况下的应用程序间交流的信息. 每一章结构如下:

- a) **purpose.** This is an overview describing the purpose of the chapter, general information and concepts.

**目的.** 这是对本章的目的, 一般信息和内容总的描述.

- b) **trigger events and messages.** There is a list of the trigger events. For each trigger event the messages that are exchanged when the trigger event occurs are defined using the HL7 abstract message syntax as follows:

**触发事件和信息.** 这里有一张触发事件的列表. 对每个触发事件, 在触发事件发生时交流的信息的用下列的 HL7 摘要信息语法定义:

Each message is defined in special notation that lists the segment IDs in the order they would appear in the message. Braces, { . . . }, indicate one or more repetitions of the enclosed group of segments. (Of course, the group may contain only a single segment.) Brackets, [ . . . ], show that the enclosed group of segments is optional. If a group of segments is optional and may repeat it should be enclosed in brackets and braces, { [ . . . ] }.

每个信息的定义为: 将信息段 ID 按它们将在信息中的出现顺序来列出. 大括号, { . . . }, 表示信息段群的一个或多个重复. (当然, 信息段群可仅包含单个信息段.) 中括号, [ . . . ], 显示信息段群是可选的. 如果信息段群是可选的而且可重复, 它应该括在中括号和大括号中, { [ . . . ] }.

**Note:** [ {...} ] and { [...]} are equivalent.

**注意:** [ {...} ] 和 { [...]} 是相等的.

Whenever braces or brackets enclose more than one segment ID a special stylistic convention is used to help the reader understand the hierarchy of repetition. For example, the first segment ID appears on the same line as the brace, two columns to the right. The subsequent segment IDs appear under the first. The closing brace appears on a line of its own in the same column as the opening brace. This convention is an optional convenience to the user. If there is conflict between its use and the braces that appear in a message schematic, the braces define the actual grouping of segments that is permitted.

无论在大括号和中括号括入多少个信息段 ID, 一个特殊的格式协定用来帮助读者理解重复的层次. 例如, 第一个信息段 ID 出现在和大括号同一行, 距右边两纵列. 随后的信息段 ID 在第一行下出现. 结束的大括号出现在自己这行与开始大括号相同的纵列中. 这个协定由使用者根据自己的方便选择. 如果在它的使用和出现在信息中的括号之间有冲突, 则大括号定义允许的实际信息段群.

A choice of one segment from a group of segments is indicated by using angle brackets to delimit the group and vertical bar delimiters between the several segments.

Example: The ORM^001, as described in chapter 4 section 4.4.1, allows a choice of order detail segments. The choice would be represented as follows:

信息段组中的一个信息段是通过用尖括号来给信息段组定界, 几个信息段之间的用垂直线条分隔符 “|” 来指明.

例: ORM^001, 正如第 4 章 4.4.1 中描述的那样, 允许具体信息段进行如下顺序选择. 顺序的选择采用下列形式表示:

<OBR|RQD|RQ1|RXO|ODS|ODT>

c) **message segments.** The segments defined in a chapter are then listed in a functional order designed to maximize conceptual clarity.

**信息中的信息段.** 一章中信息段的定义将按功能性顺序进行排列，且排列顺序尽量使概念清晰。

d) **examples.** Complete messages are included.

**例子.** 包括完整的信息。

e) **implementation considerations.** Special supplementary information is presented here. This includes issues that must be addressed in planning an implementation.

**执行中需要考虑的事项.** 这里有特殊的补充信息。这个事项必须在实施的计划中提及。

f) **outstanding issues.** Issues still under consideration or requiring consideration are listed here.

**突出问题.** 这里列出仍在考虑之中或需要考虑的问题。

Consider the hypothetical triggering event **a widget report is requested**. It might be served by the Widget Request (WRQ) and Widget Report (WRP) messages. These would be defined in the Widget chapter (say Chapter XX). The Widget Request message might consist of the following segments: Message Header (MSH), Widget ID (WID). The Widget Report message might consist of the following segments: Message Header (MSH), Message acknowledgment (MSA), one or more Widget Description (WDN) Segments each of which is followed by a single Widget Portion segment (WPN) followed by zero or more Widget Portion Detail (WPD) segments.

考虑到假设的触发事件——医疗小器械报告请求。医疗小器械请求 (WRQ) 和医疗小器械报告 (WRP) 信息为它提供服务。这些应在医疗小器械一章中定义 (参见 XX 第章)。医疗小器械信息可由下列信息段组件: 信息头 (MSH), 信息确认 (MSA), 一个或多个医疗小器械描述 (WDN) 信息段, 每个 (WDN) 信息段后有一个简单医疗小器械位置信息段 (WPN), 而简单医疗小器械位置信息段 (WPN) 后跟随有零个或多个医疗小器械细节信息段 (WPD)。

2.4.1 HL7 abstract message syntax example

HL7 摘要信息语法样例

The schematic form for this hypothetical exchange of messages is shown in Figure 2-5:

信息的假设交换的示意表如图 2-5 所示:

Figure 2-5. Hypothetical schematic message

假设的示意信息

Trigger Event: WIDGET REPORT IS REQUESTED

触发事件: 医疗小器械报告请求

<b>WRQ</b>	<b>Widget Request</b>	<b>Chapter</b>
	医疗小器械要求	章节
<b>MSH</b>	Message Header	2
	信息头	

<u>WRQ</u>	<u>Widget Request</u>	<u>Chapter</u>
	医疗小器械要求	章节
WID	Widget ID 医疗小器械 ID	XX
<u>WRP</u>	<u>Widget Report</u>	<u>Chapter</u>
	医疗小器械报告	章节
<a href="#">MSH</a>	Message Header 信息头	2
<a href="#">MSA</a>	Message Acknowledgment 信息确认	2
{ WDN	Widget Description 医疗小器械描述	XX
WPN	Widget Portion 医疗小器械组件	XX
}		

The WID, WDN, WPN, and WPD segments would be defined by the widget committee in the widget chapter, as designated by the Arabic numeral XX in the right column. The MSH and MSA segments, although included in the widget messages, are defined in another chapter. They are incorporated by reference into the widget chapter by the chapter number XX.

WID, WDN, WPN 和 WPD 信息段由医疗小器械章节的医疗小器械委员会来定义, 由右列中的阿拉伯数字 XX 指派. MSH 和 MSA 信息段, 尽管包含在医疗小器械之内, 在另一章中定义. 它们被参照按章节号 XX 合并进医疗小器械章节中.

On the other hand, the widget committee might decide that the WPN and WPD segments should appear in pairs, but the pairs are optional and can repeat. Then the schematic for the WRP message would be as shown in Figure 2-6.

另一方面, 医疗小器械委员会可决定 WPN 和 WPD 信息段应成对出现, 但对子是可选的和可重复的. 然后 WRP 信息的示意将如图 2-6 所示.

Figure 2-6. WPN and WPD segments in pairs

图 2-6 成对的 WPN 和 WPD 信息段

<u>WRF</u>	<u>Widget Report</u>	<u>Chapter</u>
	医疗小器械报告	章节
<a href="#">MSH</a>	Message Header 信息头	2
<a href="#">MSA</a>	Message Acknowledgment 信息确认	2
{ WDN	Widget Description 医疗小器械描述	XX
[ { WPN	Widget Portion 医疗小器械组件	XX
WPD	Widget Portion Detail 医疗小器械组件细节	XX
} ]		
}		

If the widget committee determined that at least one pair of WPN and WPD segments must follow a WDN, then the notation would be as shown in Figure 2-7.

如果医疗小器械委员会决定至少一对 WPN 和 WPD 信息段必须跟有一个 WDN , 那么符号将如图 2-7 所示.



Figure 2-7. At least one pair of WPN and WPD

图 2-7 至少一对 WPN 和 WPD

<u>WRP</u>	<u>Widget Report</u>	<u>Chapter</u>
	医疗小器械报告	章节
<a href="#">MSH</a>	Message Header	2
	信息头	
<a href="#">MSA</a>	Message Acknowledgment	2
	信息确认	
{ WDN	Widget Description	XX
	医疗小器械描述	
{ WPN	Widget Portion	XX
	医疗小器械组件	
WPD	Widget Portion Detail	XX
	医疗小器械组件细节	
}		
}		

2.5 APPLICATION (LEVEL 7) PROCESSING RULE

应用程序处理规则（第 7 层）

2.5.1 Original and enhanced processing rules

初始和增强处理规则

The processing rules described here apply to all exchanges of messages, whether or not the HL7 encoding rules or Lower Layer Protocols are used. They represent the primary message processing mode. Certain variants are documented in Section 2.13.2, “Application (level 7) processing rules, deferred processing two phase reply (original acknowledgment mode only).” These include:

此处所描述的处理规则运用于所有的信息交换过程中, 而不管 HL7 解码规则或低层协议是否被使用。它们代表基本的信息处理模式。在 2.13.2 节, “（第 7 层）运用程序处理规则, 延迟的处理两相回应（初始化确认模式）。”有确定变量的纪录。它们包括:

- a) the application processing rules for a special processing mode, deferred processing.  
This mode remains in the specification only for backward compatibility.

用于特殊处理模式运用程序处理规则, 即延迟处理。这种模式保存在详细说明中仅仅为了保持向后兼容性。

- b) an optional sequence number protocol

可选择的序号协议

- c) an optional protocol for continuing a very long message

为了继续一个长信息的可选择的协议

The processing rules were extended in Version 2.2 of the Standard. The extensions provide a greater degree of flexibility in the way that messages can be acknowledged, as specified by several new fields in the Message Header segment. To provide backward compatibility with prior versions, the absence of these fields implies that the extended processing rules

are not used. In the remainder of this section the extended mode is called the enhanced acknowledgment mode; the prior version is called the original acknowledgment mode.

在标准的 2.2 版本中，扩展了该处理规则。扩展在信息能被确认的方式上提供了一个更大程度的弹性，正如在信息头信息段中有许多新的字段所阐述的那样。为了提供以前的版本的向后兼容性，这些字段的出现标明，扩展处理规则并没有被使用。在这一节剩下的组件，扩展模式被叫做增强确认模式；以前的版本叫初始确认模式。

Because the protocol describes an exchange of messages, it is described in terms of two entities, the initiating and responding systems. Each is both a sender and receiver of messages. The initiating system sends first and then receives, while the responding system receives and then sends.

由于协议描述了信息的交换，它是依据两个实体来描述的，即初始系统和应答系统。两个系统都既是信息的发送者，又是信息的接收者。初始系统首先发送然后接受，同时应答系统接收信息再发送出去。

In overview this exchange proceeds as follows:

这种信息交换过程概述如下：

Step 1 the initiating system constructs an HL7 message from application data and sends it to the responding system

第一步，初始系统构建一个来自于运用程序数据的 HL7 信息，然后把它发送给应答系统。

Step 2 responder receives message and

第二步，应答系统接收信息并

2.1 when the original acknowledgment rules apply:

当运用初始确认规则时：

- a) validates the message syntactically and against the detailed rules described in Section 2.13.1.2.1, If it fails, a reject message is constructed by the protocol software and returned to the initiator; if it does not fail, continue to the next step (2.1, b)

依照语法使信息有效化并不使用描述在 2.13.1.2.1 节的详细规则。如果失败的话，协议软件将形成一个落选信息，并把它返回给初始的发送者；如果没有失败，则接着到第二步。(2.1, b)

- b) passes the message to the application, which:

把信息传送给运用程序，此运用程序可以：

- 1) creates a response message, or  
创建一个应答信息，或者
- 2) creates an error message, or  
创建一个错误的信息，或者
- 3) creates a reject message

创建一个拒绝的信息

c) sends the response, error, or reject message

发送应答，错误，或拒绝信息

Initiator passes the message to the initiating application.

初始的发送者将此信息传送给初始应用程序。

## 2.2 when enhanced acknowledgment rules apply:

当运用增强确认模式时：

See section 2.13.1.2.2

见 2.13.1.2.2 节

a) the responding system receives the message and commits it to safe storage. This means that the responding system accepts the responsibility for the message in a manner that releases the sending system from any obligation to resend the message. The responding system now checks the message header record to determine whether or not the initiating system requires an accept acknowledgment message indicating successful receipt and secure storage of the message. If it does, the accept acknowledgment message is constructed and returned to the initiator.

应答系统接收信息后，把它提交给安全存储器。这表明了应答系统以一种方式要对信息负责，此方式将发送系统从重新发送信息的职责中解脱出来。然后应答系统开始核对信息头纪录，来决定是否初始系统要求一个接受确认信息来表明信息已经被成功地接受并安全的保存。

b) at this point, the requirements of the applications involved in the interface determine whether or not more information needs to be exchanged. This exchange is referred to as an application acknowledgment and includes information ranging from simple validation to a complex application-dependent response. If the receiving system is expected to return application-dependent information, it initiates another exchange when this information is available. This time, the roles of initiator and responder are reversed.

在这一点上，参与信息接口工作的应用程序要求能决定是否需要交换更多的信息。这种交换将被作为一个应用程序水平上的确认，并且这种信息交换不仅包含简单的确认，而且有一个复杂的依赖应用程序的应答。如果接收系统被希望返回依赖应用程序的信息，如果这信息是有效的，那么这将开始另一轮信息交换。这时，发送者和应答者承担的角色发生了对换。

The details follow.

细节如下。

### 2.5.1.1 Initiation

初始系统（发送端）

The initiating application creates a message with data values as defined in the appropriate chapter of this Standard. The fields shown below should be valued in the MSH segment (as defined under the MSH segment definition of this chapter). The message is encoded

## Chapter 2: Control

according to the applicable rules and sent to the lower level protocols, which will attempt to deliver it to the responding application. (For definitions of the MSH fields see Section 2.16.9, “MSH – message header segment”)

初始端的应用程序用创建一个信息，信息的数据值定义在此标准的适当章节。下面所显示的字段将在 MSH 信息段中赋值（这章中的 MSH 信息段定义中有相应的定义）。信息根据应用规则来编码，并被传送到低层协议，而低层协议将把它传送给应答系统（MSH 字段的定意见 2.16.9 节，“MSH-信息头信息段”）

Field	Notes
字段	注意
<i>MSH-3-sending application</i> MSH-3 发送应用程序	
<i>MSH-4-sending facility</i> MSH-4 发送设备	
<i>MSH-5-receiving application</i> MSH-5 接收应用程序	
<i>MSH-6-receiving facility</i> MSH-6 接收设备	
<i>MSH-7-date/time of message</i> MSH-7 信息的日期/时间	
<i>MSH-9-message type</i> MSH-9 信息类型	
<i>MSH-10-message control ID</i> MSH-10 信息控制标识符	Unique identifier used to relate the response to the initial message. 是将应答与初始信息联系起来的唯一的标识符。
<i>MSH-11-processing ID</i> MSH-11 处理标识符	
<i>MSH-12-version ID</i> MSH-12 版本标识符	
<i>MSH-13-sequence number</i> MSH-13 序列号码	
<i>MSH-14-continuation pointer</i> MSH-14 继续指针	Used in implementation of message continuation protocol. See Section 2.15.2, “Continuation messages and segments”. Also see chapter 5. 用在信息继续协议的实施中。见 2.15.2 节，“继续信息和信息段”。见第五章。

Certain other fields in the MSH segment are required for the operation of the HL7 encoding rules; they will not be relevant if other encoding rules are employed.

为遵守 HL7 编码规则，在 MSH 信息段中要求特定的其他字段；如果应用了其他编码规则，那么它们要不要就无关紧要了。

The event code in the second component of *MSH-9-message type* is redundantly shown elsewhere in some messages. For example, the same information is in the EVN segment of the ADT message. This is for compatibility with prior versions of the HL7 protocol. Newly-defined messages should only show the event code in *MSH-9-message type*.

第二组件“*MSH-9-信息类型*”中的事件代码在一些信息中重复多余的出现在其他地方。例如，同样的信息出现在 ADT 信息中的 EVN 信息段。这是为了与 HL7 协议以前的版本兼容。新定义的信息仅在 MSH-9 信息类型中的显示事件代码。

#### 2.5.1.2 Response

应答

The protocol software in the responding system does one of the following:

在应答系统中的协议软件进行下面中的一项：

##### 2.13.1.2.1. When the original acknowledgment rules apply

当应用初始确认规则时

**Note:** Both MSH-15-accept acknowledgment type and MSH-16-application acknowledgment type are null or not present.

**注意：**MSH-15 接受确认类型和 MSH-16 应用程序确认类型都是无效的，或是不存在的。

a) accepts the message

接受信息

b) validates it against at least the following criteria:

按下面的标准验证信息：

1) the value in *MSH-9-message type* is one that is acceptable to the receiver

MSH-9 信息类型中的值为接收方可以接受的值

2) the value in *MSH-12-version ID* is acceptable to the receiver

MSH-12 版本标识符中的值为接收方可以接受的值

3) the value in *MSH-11-processing ID* is appropriate for the application process handling the message

对于处理信息的应用程序而言，MSH-11 处理标识符中的值是适当的。

If any of these edits fail, the protocol software rejects the message. That is, it creates an ACK message with **AR** in *MSA-1-acknowledgment code*.

如果对以上的验证编辑（检验）的任何一项失败的话，协议软件将拒绝此信息。那就是说，它创建一个 ACK 信息，确认信息的 MAS-1-确认代码的值为 AR。

c) if the message passes the edits, the message is passed to the receiving application, which performs one of these functions:

如果信息通过了验证，信息将被传送给接收应用程序，该接收应用程序将履行下面的功能：

- 1) process the message successfully, generating the functional response message with a value of **AA** in *MSA-1-acknowledgment code*.

成功的处理信息, 并创建用功能的应答信息, 应答信息的 MAS-1-确认代码值为 AA。

-OR-

或

- 2) send an error response, providing error information in functional segments to be included in the response message with a value of **AE** in *MSA-1-acknowledgment code*.

发送一个出错应答, 应答信息在功能信息段中提供错误信息, 且 MAS-1-确认代码的值为 AE。

-OR-

或

- 3) fail to process (reject) the message for reasons unrelated to its content or format (system down, internal error, etc.). For most such problems it is likely that the responding system will be able to accept the same message at a later time. The implementers must decide on an application-specific basis whether the message should be automatically sent again. The response message contains a value of **AR** in *MSA-1-acknowledgment code*.

由于其他原因（与信息的内容或格式无关的, 如系统破坏, 内部错误等）而不能处理（或拒绝）此信息。对于大多数的问题来说, 应答系统将在以后的时间内能接受同样的信息。对此时信息的交换执行而言, 是否要者再次自动发送信息降取决于特定的应用程序。应答信息中 MAS-1-确认代码 的取值为 AR。

- d) passes the message to the initiating system

将信息传递给初始系统

- e) the protocol software in the initiating system passes the response message to the initiating application

在初始系统里的协议软件将应答信息传递给初始应用程序。

In all the responses described above the following values are put in the MSA segment. Note that the field definitions for the MSA segment fields are in Section 2.16.8, “MSA - message acknowledgment segment” :

在所有上面描述的应答中, MSA 信息段的取值如下所示。注意, 对于 MSH 信息段字段的字段定义见 2.16.8 节, “MSH-信息确认信息段”。

Field	Notes
字段	注意
<i>MSA-1-acknowledgment code</i> <i>MSA-1-确认代码</i>	As described above. 正如上面所描述的
<i>MSA-2-message control ID</i> <i>MSA-2-信息控制标识符</i>	MSH-10-message control ID from MSH segment of incoming message. 来自引入信息的 MSH 信息段的 MSH-10-信息控制标

	标识符
<i>MSA-3-text message</i> <i>MSA-3-文本信息</i>	Text description of error. 出错描述文本
<i>MSA-4-expected sequence number</i> <i>MSA-4-预期的序列号码</i>	As described in Section 2.15.1, “Sequence number protocol,” (if the sequence number protocol is being used).  正如 2.15.1 节“序列号码协议”所描述的那样(如果序列号码协议正在使用的话)。
<i>MSA-5-delayed acknowledgment type</i> <i>MSA-5-延迟的确认类型</i>	For use only as described in Section Application (level 7) processing rules, deferred processing two phase reply (original acknowledgment <b>mode only</b> ).”  对于仅仅用于延迟处理两阶段应答（仅仅用于初始确认模式），应用程序（第 7 层）的处理规则中有相应描述。

The MSH segment in the response is constructed anew following the rules used to create the initial message described above. In particular, *MSH-7-date/time of message* and *MSH-10-message control ID* refer to the response message; they are not echoes of the fields in the initial message. *MSH-5-receiving application*, *MSH-6-receiving facility*, and *MSH-11-processing ID* contain codes that are copied from *MSH-3-sending application*, *MSH-4-sending facility* and *MSH-11-processing ID* in the initiating message.

应答中的 MSH 信息段依据用于创建上述初始信息的规则来重新构建。尤其是，信息的 MSH-7-日期/时间和 MSH-10-信息控制标识符参见应答信息；它们在初始信息中没有对应字段。MSH-5-接收应用程序，MSH-6-接收设备，和 MSH-11-处理标识符包括一些代码，该代码是从初始信息中的 MSH-3-发送应用程序，MSH-4-发送设备和 MSH-11-处理标识符中复制过来的。

#### 2.13.1.2.2. When enhanced acknowledgment rules apply

当应用增强确认规则时

**Note:** At least one of MSH-15-accept acknowledgment type or MSH-16-application acknowledgment type is not null.

**注意：** MSH-15-接受确认类型或 MSH-16-应用程序确认类型至少有一个不能是空值。

a) accepts the message

接受此信息

b) makes an initial determination as to whether or not the message can be accepted, based on factors such as:

基于下面的因素来决定信息是否能被接受：

1) the status of the interface

接口的状态

2) the availability of safe storage onto which the message can be saved

对信息进行储存的安全储存系统的有效性

3) the syntactical correctness of the message, if the design of the receiving system includes this type of validation at this phase

信息的语法正确性，如果在此阶段设计的接收系统要做这项确认的话。

- 4) the values of *MSH-9-message type*, *MSH-12-version ID*, and *MSH-11-processing ID*, if the design of the receiving system includes this type of validation at this phase

MSH-9-信息类型，MSH-12-版本标识符和 MSH-11-处理标识符的值，如果在此阶段设计的接收系统要做这项确认的话。

- c) examines the Message Header segment (MSH) to determine whether or not the initiating system requires an accept acknowledgment.

检测信息头信息段 (MSH) 来决定初始系统是否要求一个接受的确认信息。

If it does, the responding system returns a general acknowledgment message (ACK) with:

如果要的话，则应答系统将返回一个确认信息 (ACK)，并带有以下特征：

- 1) a commit accept (CA) in *MSA-1-acknowledgment code* if the message can be accepted for processing

如果信息能被接受来进行处理，则提交一个 MSH-1-确认代码取值为 CA 的接受（确认）信息。

- 2) a commit reject (CR) in *MSA-1-acknowledgment code* if the one of the values of *MSH-9-message type*, *MSH-12-version ID* or *MSH-11-processing ID* is not acceptable to the receiving application

如果对接收应用程序来说，MSH-9-信息类型，MSH-12-版本标识符或 MSH-11-处理标识符三个字段的取值中只要有一个是不可接受的，则将提交一个 MSH-1-确认代码取值为 CR 的拒绝（确认）信息。

a commit error (CE) in *MSA-1-acknowledgment code* if the message cannot be accepted for any other reason (e.g., sequence number error)

如果信息由于其他原因（例如，序列号码错误）而不能被接受，则将提交一个 MSH-1-确认代码取值为 CE 的出错（确认）信息。

For this response, the following values are put in the MSA segment. Note that the field definitions for the MSA segment fields are in Section 2.16.8, “MSA - message acknowledgment segment” :

对于这个应答，MSA 信息段的取值如下。注意对于 MSA 信息段的字段定义见 2.16.8 节“MSA-信息确认信息段”。

Field	Notes
字段	注意
<i>MSA-2-message control ID</i> <i>MSA-2-信息控制标识符</i>	MSH-10-message control ID from the incoming message. 来自引入信息的 MSH-10-信息控制标识符
<i>MSA-1-acknowledgment code</i> <i>MSA-1-确认代码</i>	As described above. 同上
<i>MSA-3-text message</i> <i>MSA-3-文本信息</i>	Text description of error. 出错描述文本
<i>MSA-4-expected sequence number</i>	As described in Section 2.15.1, “Sequence number protocol” (if the sequence number protocol is being used).



MSA-4-期望的序列号码

2.15.1 节所描述的“序列号码协议”（如果序列号码协议正在使用）

The MSH segment in the response is constructed anew following the rules used to create the initial message described above. In particular, *MSH-7-date/time of message* and *MSH-10-message control ID* refer to the response message; they are not echoes of the fields in the initial message. *MSH-5-receiving application*, *MSH-6-receiving facility*, and *MSH-11-processing ID* contain codes that are copied from *MSH-3-sending application*, *MSH-4-sending facility* and *MSH-11-processing ID* in the initiating message.

在应答中的 MSH 信息段依据用于创建上述初始信息的规则来重新构建。尤其是，信息的 MSH-7-日期/时间和 MSH-10-信息控制标识符参见应答信息；他们并不是初始信息中字段的重复。MSH-5-接收应用程序，MSH-6-接收设备，和 MSH-11-处理标识符包括代码，该代码是从在初始信息中的 MSH-3-发送应用程序，MSH-4-发送设备和 MSH-11-处理标识符中复制过来的。

**Note:** MSH-15-accept acknowledgment type and MSH-16-application acknowledgment type are not valued (not present or null). At this point, the accept portion of this message exchange is considered complete.

**注意:** MSH-15 接收确认类型和 MSH-16-应用确认类型没有被赋值（不存在货物晓得）。在这一点上，这个信息交换的接收组件被认为是完全的。

- d) If the message header segment indicates that the initiating system also requires an application acknowledgment, this will be returned as the initial message of a later exchange.

如果信息头信息段表明，初始系统也要求一个应用程序确认，它将作为一个较晚交换的初始信息而返回。

For this response, the following values are put in the MSA segment. Note that the field definitions for the MSA segment fields are in Section 2.16.8, “MSA – message acknowledgment segment”:

对于这个应答，下面的值放在 MSA 信息段中。注意对于 MSA 信息段的字段定义见 2.16.8 节“MSA-信息确认信息段”。

Field 字段	Notes 注意
<i>MSA-2-message control ID</i> <i>MSA-2-信息控制标识符</i>	Identifies the initial message from the original initiating system as defined in Section 2.13.1.1, “Initiation”. 确认来自定义在 2.13.1.1 节“开始”的最初的初始系统的初始信息
<i>MSA-1-acknowledgment code</i> <i>MSA-1-确认代码</i>	Uses the application (processing) acknowledgment codes as described in Section 2.13.1.2.1, “When the original acknowledgment rules apply”. 使用描述在 2.13.1.2.1 节“当初始确认规则应用时”中的应用程序(处理程序)确认代码
<i>MSA-3-text message</i> <i>MSA-3-文本信息</i>	Text description of error. 出错描述文本

For this message, the receiving system acts as the initiator. Since the message it sends is application-specific, the layouts of these application-level response messages are defined in the relevant application-specific chapter. If needed, this application acknowledgment message can itself require (in *MSH-15-accept acknowledgment type*) an accept acknowledgment message (MSA). *MSH-16-application acknowledgment type*, however, is always null, since the protocol does not allow the application acknowledgment message to have an application acknowledgment.

对于这些信息，接收系统扮演（信息）发起者的角色。既然它发送的信息是针对具体应用程序的，这些应用程序层应答信息的定义见相关的相关的特定应用程序章节。如果需要的话，这种应用程序层确认信息本身能要求一个接受确认信息（MSA），（用 MSH-15-接收确认类型来表示）。然而，既然协议不允许应用程序水平确认信息有一个应用程序水平的确认，所以其 MSH-16-应用程序水平确认类型为空值。

At this point, the application acknowledgment portion of this message exchange is considered complete.

在这一点上，这些信息交换的应用程序水平确认组件被认为是完全的。

If the processing on the receiving system goes through multiple stages, chapter-defined messages may be used to relay status or informational changes to other systems (including the original initiating system). Such messages are not part of the acknowledgment scheme for the original message, but are considered to be independent messages triggered by events on the (original) responding system.

如果接收系统中的处理经历了多个阶段，有特定章节定义的信息可用于转发状态或信息的改变到其他系统（包括最初的初始系统）。对于初始信息而言，这些信息并不是确认结构的一组件，但是他们被认为是由（最初）应答系统所触发的独立的信息。

**Note:** The original acknowledgment protocol is equivalent to the enhanced acknowledgment protocol with *MSH-15-accept acknowledgment type* = NE and *MSH-16-application acknowledgment type* = AL, and with the application acknowledgment message defined so that it never requires an accept acknowledgment (*MSH-15-accept acknowledgment type* = NE).

**注意：**，当增强模式下确认信息的 MSH-15-接收确认类型=NE，MSH-16-应用程序水平确认类型=AL，并且定义的应用程序水平确认信息从累不要求一个接受确认（亦即 MSH-15-接收确认类型=NE）时，则初始确认协议与增强确认协议是等同的。

### 2.5.2 Application (level 7) processing rules, deferred processing two phase reply (original acknowledgment mode only)

#### 应用程序（第 7 层）处理规则，延迟处理两阶段应答（仅用初始确认模式）

(This section remains in the specification only for reasons of providing backward compatibility: it is to be used only with the original acknowledgment protocol. For the original acknowledgment protocol, it creates a generic form of an asynchronous application level acknowledgment, the MCF message.)

（这一节的存在仅仅为了提供向原版本的兼容：只有与初始确认模式协议一起，它才能被使用。对于初始确认协议，它创建了一个 MCF 信息，此信息为可用于不同应用水平确认的一般形式。）

The application processing rules for deferred processing are described here. In this mode the responding system sends an acknowledgment to the initiating system that means the

message has been placed in some type of secure environment (e.g., disk storage), and the receiving system commits to processing it within a reasonable amount of time, if a) the message contains the necessary information, and b) nothing causes the message's request for action to be canceled before the responding system processes the request.

在此详述了延迟处理的应用程序处理规则。在此模式里，应答系统发送一个确认到初始系统，这意味着，信息已经被放在了某种安全的环境中（例如，磁盘储存），并且，接受系统在合理的时间内负责处理它，实施的两个条件如下，a) 此信息包含必要的内容，b) 在应答系统处理要求之前，不可能使信息运行的要求被取消。

**Note:** Neither of these two conditions is completely checked at the time of the first acknowledgment. They are both checked at the time of processing.

**注意：**两个条件都不可能在第一次确认时，被完全检查，他们将同时在处理时被检查。

The receipt of the first delayed acknowledgment by the initiating system means that the responding system has taken responsibility for the subsequent processing of the message. This also implies that the initiating system no longer needs to keep the particular message in its current form to send out later. For example, if the sending system were maintaining a queue of outgoing messages, the particular message could be deleted from the output queue at this point.

初始系统对第一个延迟确认的接收表明，应答系统要负责对信息进行将来处理。这也表明了，初始系统不再需要保存当前的特定形式下的特定信息以备将来发送。例如，如果发送系统保留一组即将发送的信息，这样特殊的信息能从输出队列中删除。

The receipt of the second delayed acknowledgment message informs the initiating application of either: a) the application's successful processing of the initial message, or b) an error that prevented its processing. If the receiving application needs to return detailed change of status information, an application-specific message will be used. An example of the latter is the General Order message (ORM) described in Chapter 4.

第二个延迟确认信息的接收是告知初始应用程序：a) 应用程序成功地处理了初始信息，或 b) 出现一个阻止处理的错误。如果接收应用程序要求返回信息的详细变化，则将使用特定的应用程序水平信息。后者的例子见第四章的一般预定信息（ORM）。

The general delayed acknowledgment protocol is implemented on a site-specific and application-specific basis as needed. At a particular site, for a given transaction type the choices are:

一般的延迟确认协议用于一个具体地点和具体应用程序中。在一特定地点，对一给定的传输类型，可供的选择为：

a) do not allow deferred acknowledgments

不允许延迟确认

b) all messages will have a deferred acknowledgment

所有的信息将有一个延迟确认。

d) only exceptional cases (errors) will receive the deferred acknowledgment

仅仅在异常情况下（出错）时将收到延迟确认。

In overview the processing for options b) and c) proceeds as follows:

一般来说，对 b) 和 c) 选择的处理如下：

Initiator receives message from sending application and sends it to the responding system.

初始端从发送应用程序处接收信息并将之发送给应答系统。

The responding system receives the message from the initiating system and

应答系统从初始系统（发送段）接收信息后进行：

- a) partially validates it syntactically and against the detailed rules described in Section 2.13.1, “Original and enhanced processing rules.” This validation need not be complete but should be sufficient to determine the application that will ultimately respond to the message. If this validation fails, a reject message is constructed by the protocol software and returned to the initiator.

组件的从语法上和 2.13.1 节，“Original and enhanced processing rules.” 描述的规则来确认其是否合法。这个合法检验不必完全，但应该能足以确定最终对此信息进行应答的应用程序。如果合法检查失败，协议软件将创建一拒绝信息并反馈给初始端。

- b) (if the message passes this validation) stores it and constructs a response message that simply acknowledges receipt. *MSA-5-delayed acknowledgment type* then has a value of **D**.

（如果信息通过了合法检验）则将其存储并创建一应答信息以简单表示接收确认。这样，*MSA-5-延迟确认类型*取值为 **D**。

- c) subsequently passes the message to the application, which:

接着将信息传递给应用程序，应用程序就：

- 1) creates a response message, or

创建一应答信息，或者

- 2) creates an error message, or

创建一错误信息，或者

- 3) creates a reject message

创建一拒绝信息

- d) The protocol software sends the response, error, or reject message to the initiating system as an unsolicited update with no value present in *MSA-5-delayed acknowledgment type*.

协议软件发送应答、错误、或拒绝信息给初始系统，这些信息作为主动更新，其 *MSA-5-延迟确认类型* 没有取值。

The protocol software of the initiating system responds to the response, error, or reject message with simple acknowledgment and passes it to the initiating application.

初始系统的协议软件对应答、错误、以及拒绝信息做出回应并传给初始应用系统，回应为简单确认信息。

The details follow.

细节如下：

#### 2.5.2.1 Initiation

初始系统（发送端）

The rules for creating the initial message are exactly as defined in Section 2.13.1, “Original and enhanced processing rules,” for the original acknowledgment rules.

对原确认规则而言，2.13.1 节，“Original and enhanced processing rules”对创建初始信息的规则作了准确规定，

#### 2.5.2.2 Response

应答

The processing in the responding system follows this pattern:

应答系统的处理工作]采取以下的方式：

- a) the protocol software accepts the message and validates it against at least the following criteria:

协议软件是依靠下面的标准来接受信息并认定其有效：

- 1) the value in *MSH-9-message type* is one that is acceptable to the receiver

*MSH-9-信息类型*的取值是一个最接收方能接受的值。

- 2) the value in *MSH-12-version ID* is acceptable to the receiver

*MSH-12-版本 ID 号*的取值是一个最接收方能接受的值。

- 3) the value in *MSH-11-processing ID* is appropriate for the application process handling the message

*MSH-11-处理 ID 号*的取值对于处理信息的应用程序处理器是合适的。

If any of these edits fail, the protocol software rejects the message. That is, it creates an ACK message with **AR** in *MSA-1-acknowledgment code*.

如果（上面）的校对任何一条出现问题，则协议软件拒绝接受这一信息。这样，协议软件就创建一个 *MSA-1-确认代码*取值为 AR 的确认信息。

- b) If the message passes the edits, the protocol software stores it and generates a response message of type ACK with a value of **AA** in *MSA-1-acknowledgment code* and **D** in *MSA-5-delayed acknowledgment type*.

如果信息通过了校对，协议软件就存储它，并创建一个 ACK 应答信息，此 ACK 信息的 *MSA-1-确认代码* 取值为 AA 并且 *MSA-5-延迟确认类型* 取值为 D。

- c) Subsequently the protocol software passes the message to the application, which performs one of these functions:

接着，协议软件将此信息传递给应用程序，应用程序执行以下功能之一。

- 1) processes the message successfully, generating the functional response message (message type MCF) with a value of **AA** in *MSA-1-acknowledgment code*.

成功地处理信息，并产生一 *MSA-1-确认代码* 取值为 AA 的功能应答信息（类型为 MCF）。

- OR -

- 或 -

- 2) creates an error response, providing error information in functional segments to be included in the response message, which has a value of **AE** in *MSA-1-acknowledgment code*.

创建一个错误应答，在功能信息段提供出错信息，此功能段是在一 *MSA-1-确认代码* 取值为 AE 的应答信息中。

- OR -

- 或 -

- 3) fails to process (rejects) the message for reasons unrelated to its content or format (system down, internal error, etc.) For most such problems it is likely that the responding system will be able to accept the same message at a later time. The implementors must decide on an application-specific basis whether the message should be automatically sent again. The MSA segment of the response message contains a value of **AR** in *MSA-1-acknowledgment code*.

因为与信息的内容或形式无关的原因（如：系统关闭，内部出错等）而没有处理（拒绝）信息。对于大部分这种问题，应答系统可能能够在以后接收相同的信息。实施者必须在特定应用的基础上决定是否自动重发信息。此时，应答信息的 MSA 信息段的 *MSA-1-确认代码* 取值为 AR。

- d) the application passes the message to the protocol software, which constructs a message of type MCF with **F** in *MSA-5-delayed acknowledgment type*.

应用程序将此信息传递给协议软件，协议软件构建一 *MSA-5-延迟确认类型* 取值为 F 的 MCF 信息。

- e) the protocol software passes the message to the initiating system as an unsolicited update.

协议软件将此信息传递给初始系统（发送系统），以作为一主动更新。

- f) the protocol software in the initiating system passes the response message to the initiating application and generates a simple ACK message. No value is present in *MSA-5-delayed acknowledgment type*.

初始系统的协议软件将此应答信息传递给初始（发送端）应用程序并创建一简单 ACK 信息。但在 *MSA-5-延迟确认类型* 中没有取值。。

All other values are put in the MSA segment as described in Section 2.13.1, “Original and enhanced processing rules.”

MSA 信息段的其他取值在 2.13.1 节，“初始与增强模式处理规则”中有叙述。

2.6 ACKNOWLEDGMENT MESSAGES

确认信息

Acknowledgment messages may be defined on an application basis. However the simple general acknowledgment message (ACK) may be used where the application does not define a special message (application level acknowledgment) and in other cases as described in Section 2.13.1, “Original and enhanced processing rules.” *The MCF message is included only for backward compatibility with HL7 Version 2.1 (see Section 2.12.2, “Application (level 7) processing rules, deferred processing two phase reply (original acknowledgment mode only)”).*

确认信息可以定义在应用程序水平上。然而，简单一般确认信息（ACK）也可以用在应用程序并没有定义这一特定信息（应用程序水平的确认）的场合以及 2.13.1 节，“初始及增强处理规则”所描述的场合。这里也包括 MCF 信息，其目的仅仅是为了和原来的 HL7 2.1 版本进行兼容（见 2.12.2 节，“应用程序（水平 7）处理规则，延迟处理两阶段应答（仅用于初始应答模式）”）。

2.6.1 ACK – general acknowledgment

ACK – 一般确认

The simple general acknowledgment (ACK) can be used where the application does not define a special application level acknowledgment message or where there has been an error that precludes application processing. It is also used for accept level acknowledgments. The details are described in Section 2.13.1, “Original and enhanced processing rules.”

简单一般确认（ACK）能用于以下场合：应用程序没有定义一特定应用水平的确认信息；在应用程序进行处理之前已经存在错误。它也可以用作接受水平的确认信息。其详细描述见 2.13.1 节，“Original and enhanced processing rules

<u>ACK varies ACK</u>	<u>General Acknowledgment</u>	<u>Chapter</u>
	一般确认	
<a href="#">MSH</a>	Message Header 信息头	2
<a href="#">MSA</a>	Message Acknowledgment 信息确认	2
[ <a href="#">ERR</a> ]	Error 错误	2

**Note:** For the general acknowledgment (ACK) message, the value of *MSH-9-2-Trigger event* is equal to the value of *MSH-9-2-Trigger event* in the query message being acknowledged. The value of *MSH-9-3-Message structure* for the general acknowledgment message is always ACK.

**注：**对一般确认信息(ACK)而言，其 *MSH-9-2-触发事件* 的值与被确认的查询信息的 *MSH-9-2-触发事件* 的取值相等。一般确认信息的 *MSH-9-3-信息构架* 总是 ACK。

2.6.2 MCF - delayed acknowledgment

MCF-延迟确认

*This message remains in the specification only for reasons of backward compatibility with HL7 Version 2.1.* It is used as part of the protocol which creates a generic form of an asynchronous application level acknowledgment, the MCF message. See Section 2.13.2.2, “Response.”

在规范中保留这一信息仅仅是为了与 HL7 原来的版本兼容。它被用作其协议的一部分，这一协议创建一个通常形式的非同步应用水平上的确认—MCF 信息。见 2.13.2.2 节，“应答”。

The first MCF message, sent after the initial receipt has the following structure.

第一个 MCF 信息，在开始接收到信息以后发送，其拥有以下的结构。

<u>MCF^varies^ACK</u>	<u>Delayed Acknowledgment</u>	<u>Chapter</u>
	延迟确认	章节
<a href="#">MSH</a>	Message Header 信息头	2
<a href="#">MSA</a>	Message Acknowledgment 信息确认	2
[ <a href="#">ERR</a> ]	Error 错误	2

The second MCF message, sent after application processing, has this structure:

第二个 MCF 信息，在应用程序处理了以后发送，其拥有以下结构

<u>MCF^varies^ACK</u>	<u>Delayed Acknowledgment</u>	<u>Chapter</u>
	延迟确认	章节
<a href="#">MSH</a>	Message Header 信息头	2
<a href="#">MSA</a>	Message Acknowledgment 信息确认	2
[ <a href="#">ERR</a> ]	Error 错误	2

2.7 SPECIAL HL7 PROTOCOLS

This section contains several extensions to the basic HL7 message protocol. These extensions represent implementation choices, and are to be used on a site-specific and application-specific basis as needed.

本节为 HL7 基本信息协议的扩展，这些扩展（协议）代表了实践时的不同选择，在特定的场地和特定的应用应用程序中需要使用它们。

2.7.1 Sequence number protocol

序号协议

For certain types of data transactions between systems the issue of keeping databases synchronized is critical. An example is an ancillary system such as lab, which needs to know the locations of all inpatients to route stat results correctly. If the lab receives



an ADT transaction out of sequence, the census/location information may be incorrect. Although it is true that a simple one-to-one acknowledgment scheme can prevent out-of-sequence transactions between any two systems, only the use of sequence numbers can prevent duplicate transactions.

对于系统间某些特定数据的传输处理而言，保持数据库同步是一个非常关键的问题。例如：一个像化验室这样的辅助系统需要知道所有住院病人所在的地方以便正确的发送统计结果。如果化验室收到一个超出序号的 ADT 传输的话，检查/定位信息将出错。虽然简单的一对一确认模式确实能阻止任何两个系统之间的出现超出序号的传输，但仅仅使用序列号就能排除重复传输的可能。

<b>Note:</b>	Although this sequence number protocol is limited to the use of sequence numbers on a single transaction stream between two applications, this sequencing protocol is sufficiently robust to allow the design of HL7-compatible store-and-forward applications.
<b>注:</b>	虽然序号协议仅限于将序号用于两应用程序之间的简单传输（信息）流，但序号协议强大到能使HL7 与存储与转发应用程序兼容。

a) initial conditions:

初始条件:

- 1) the system receiving the data stream is expected to store the sequence number of the most recently accepted transaction in a secure fashion before acknowledging that transaction. This stored sequence number allows comparison with the next transaction's sequence number, and the implementation of fault-tolerant restart capabilities.

数据流接收系统能在进行确认前以保密的方式存储最近接受的传输序号，被存储的序号将与下一个（信息）传输的序号进行比较，并且允许具备容忍错误出现后重新开始的能力。

- 2) the initiating system keeps a queue of outgoing transactions indexed by the sequence number. The length of this queue must be negotiated as part of the design process for a given link. The minimum length for this queue is one.

初始系统（发送系统）保留一个以序号为标志的外发传输队列。队列的长度必须要进行交涉以作为一个给定链接的处理设计的一部分。队列的最小长度为 1。

- 3) the sequence number is a positive (non-zero) integer; and it is incremented by one (by the initiating system) for each successive transaction.

序号是一个非零正整数，且（初始系统）每进行一次传输将其增加 1。

b) starting the link:

开始链接

- 1) the value of 0 (zero) for a sequence number is reserved: it is allowed only when the initiating system (re-)starts the link.

值为 0（零）的序号被保留：仅当初始系统重新建立链接时方可使用。

- 2) if the receiving system gets a transaction with a 0 (zero) in the sequence number field, it should respond with a general acknowledgment message whose MSA contains a sequence number one greater than the sequence number of the last transaction it accepted in the Expected Sequence Number field. If this value does not exist (as on the first startup of a given link), the MSA should contain a sequence number of -1, meaning that the receiving system will use the positive, non-zero sequence number of

the first transaction it accepts as its initial sequence number (see resynching the link, item e below).

如果接收系统收到一个序号字段中取值为 0（零）的传输时，它应该返回一个一般确认信息，确认信息的 MSA 包含了一个序号，其值比它接受的上一个传输的序号大 1，序号值在期望序号字段中。如果（序号）值不存在（如第一次启动一个链接），那么 MSA 应该含有一个值为-1 的序号，表示接收系统将使用它接受的第一个传输的非零正序号作为初始序号（见重新同步化链接，即下面的 e 项）。

- 3) the initiating system then sends the transaction indexed by the expected sequence number (if that expected transaction is still on its queue). Otherwise the link is frozen until an operator intervenes.

然后初始系统发送以期望序号标识的传输（如果期望传输仍然在队列中话）。否则将中断链接直到一个操作干预。

- c) normal operation of the link:

链接的标准操作:

As it accepts each transaction, the receiving system securely stores the sequence number (which agrees with its expected sequence number), and then acknowledges the message by echoing the sequence number in *MSA-4-expected sequence number*.

当接受每一个传输时，接收系统会秘密存储其（传输）序号（与其期望序号相一致），然后通过 在 *MSA-4 期望序号（字段中）* 返回序号的方法对信息进行确认。

- d) error conditions (from point of view of initiating system). These are generated by the receiving system, by its comparison of the sequence number sent out (with the MSH in *MSH-13-sequence number*) with the expected sequence number (*MSA-4-expected sequence number* received with the MSA).

出错情况（从初始系统的角度）。（出错信息）由接收系统产生，（方式为：接收系统）通过比较发出序号（在 MSH 的 MSH-13-序号字段中）与期望序号（在接收端的 MSA 的 MSA-4-期望序号中）。

- 1) **expected sequence number is one greater than current value.** The previous acknowledgment was lost. That transaction was sent again. Correct by sending next transaction.

期望序号比当前值大 1。原确认信息被丢失。传输需要重发。通过发送下一个传输而得到更正。

- 2) **expected sequence number less than current value.** Initiating system can try starting again by issuing a transaction with a sequence number of zero; or freeze the link for operator intervention.

期望序号小于当前值。初始系统可以通过发送一个序号为零的传输而重新开始；或者中断链接以待操作员的干预。

- 3) **other errors:** freeze the link for operator intervention

其他 错误：中断链接以待操作员的干预。

- e) forcing resynchronization of sequence numbers across the link. The value of -1 for a sequence number is reserved: it is allowed only when the initiating system is resynching the link. Thus if the receiving system gets a value of -1 in the sequence number field, it should return a general acknowledgment message with a -1 in the

expected sequence number field. The receiving system then resets its sequence number, using the non-zero positive sequence number of the next transaction it accepts.

强迫链接的序号重新同步化。值为-1的序号被保留：仅当初始系统要重新同步化链接时采用。这样如果接收系统在序号字段中获得的值为-1时，它应该在其期望序号字段中返回序号值为-1以进行（信息）确认。接收系统重新设置其序号，使用它要接受的下一个传输的序号，即非零整数序号。

f) notes

注意：

When the initiating system sends a message with a sequence number of **0** or **-1** (see b or e above), the segments beyond the MSH need not be present in the message, or, if present, all fields can be null. In terms of the responding system, for these two cases, only a General acknowledgment message is needed.

当初始系统发送一个序号为 0 或-1 的信息时（见上述的 b 或 e），信息中没有必要有 MSH 前面的信息段，或者，如果有的话，其所有的字段为空值。对于应答系统而言，在上述两种情况下，它只需要（发出）一般确认信息。

## 2.7.2 Continuation messages and segments

### 信息与信息段的连续

Sometimes, implementation limitations require that large messages or segments be broken into manageable chunks. We use the term “fragmentation” to describe how a logical message is broken into one or more separate HL7 messages. HL7 consciously identifies two situations where this may happen.

有时候，由于实际的需要，大信息或信息段要被分割成几个可管理的分块。我们使用术语“分裂”来描述一个逻辑信息如何分割成一个或更多独立的 HL7 信息。HL7 对可能出现的两种情况有自觉鉴别能力。

- First, a single segment may be too large. HL7 uses the “ADD” segment to handle breaking a single segment into several smaller segments.

第一，一个简单信息段可能太大。HL7 使用“ADD”信息段来分割一简单信息段成几个小信息段。

- Second, a single HL7 message may be too large. HL7 uses the DSC segment and the continuation protocol to handle message fragmentation.

第二，一简单 HL7 信息可能太大。HL7 使用 DSC 信息段以及连续协议来处理信息的分裂问题。

**Note:** HL7 does not define what “too large” means. Acceptable values are subject to site negotiations.

**注：** HL7 并不定义“太大”的具体含义。不同地方可通过协商来确定可接受的值。

See chapter 5 for a discussion of the continuation pointer segment and the continuation pointer field, and their use in the continuation of responses to queries and in the continuation of unsolicited update messages.

第五章有对连续指针信息段和连续指针字段的讨论，对查询应答的连续的用法，以及主动更新信息的连续问题。

### 2.7.2.1 Segment fragmentation/continuation using the ADD segment

使用 ADD 信息段的信息段分裂/连续问题

Beginning with version 2.4, the ADD segment can be used within a message to break a long segment into shorter segments within a single HL7 message.

从 2.4 版本开始, ADD 信息段能用于一个信息中来将一长信息段分割成几个短信息段, 这几个短信息段是在一个简单信息中。

**Note:** Unless some explicit agreement exists between systems, a receiving application should not infer semantic meaning from the placement of the ADD segment.

**注:** 除非系统间存在明显的协定, 否则接收端应用系统不能从 ADD 信息段的位置来推断语义。

To break a large segment,

分割一大信息段

- a) the segment being continued (call it ANY for this example) is ended at an arbitrary character position and terminated with the standard segment terminator (carriage return).

被连续的信息段 (本例中为 ANY) 结束于一武断的字符位置, 并以标准信息段结束符 (回车符) 结束。

- b) the following segment is the ADD segment. All characters after the ADD and field separator ( “|” ) are logically part of the preceding segment. All succeeding consecutive ADD segments contribute characters to the ANY segment until a non ADD segment is found.

紧接的信息段为 ADD 信息段。ADD 段后面的所有字符及字段分隔符 ( “|” ) 逻辑上是前面信息段的一部分。所有的后续的连续的 ADD 段对 ANY 贡献字符, 直到出现一个非 ADD 信息段。

- c) An ADD segment with no field separator takes on special meaning. See Section 2.14.2.3, “Segment fragmentation across messages.”

一个无字段分隔的 ADD 信息段有特定的意义。见 2.14.2.3 节—“跨信息的信息段的分裂”。

For example, segment “C” can be fragmented within an HL7 message as follows

例如: 信息段 “C” 能在一个 HL7 信息中进行分割如下:

```
A|1
B|2
C|34
ADD|5|678|
ADD|90
D|1
```

This is logically the same as

逻辑上等同于:

```
A|1
B|2
```

C|345|678|90

D|1

Note that the “|” at the end of the first ADD segment is part of the value, while the first “|” of each ADD is not.

注意：第一个 ADD 信息段结尾的 “|” 是其值的一部分，而每一个 ADD 的第一个 “|” 却不是。

### 2.7.2.2 Segment fragmentation/continuation using the DSC segment

使用 DSC 信息段的信息段分裂/连续问题

When a message itself must be fragmented and sent as several HL7 messages, the DSC segment is used.

当一则信息本身必须分割成几个 HL7 信息段发送时，则使用 DSC 信息段。

a) First, the logical message is broken after an arbitrary segment.

首先，这个逻辑意义上的信息武断的在一信息段后面被分割。

b) Next, a DSC segment is sent. The *DSC-1-Continuation pointer* field will contain a unique value which is used to match a subsequent message with this specific value.

接着，一个 DSC 信息段被发送。DSC-1-连续指针字段将包含一个唯一的取值，以用于和同样拥有这个特定取值的后续信息相匹配。

c) The DSC terminates the first fragment of the logical message.

- 这个 DSC 表示此逻辑意义上的信息的第一个片断的结束。

d) A subsequent message will contain in *MSH-14-Continuation pointer*, a value which matches the value from DSC-1. (The presence of a value in MSH-14 indicates that the message is a fragment of an earlier message.). Each subsequent message will have its own unique value for *MSH-10-Message control ID*. Coordination between *DSC-1-Continuation pointer* and the subsequent message's *MSH-14-Continuation pointer* is used to link the fragments in their proper order.

一个后续信息将在 MSH-14-连续指针有一个值与 DSC-1 的值相匹配。（MSH-14 中存在值则意味着这个信息是前面信息的片断。）每一后续信息的 MSH-10-信息控制 ID 号有唯一取值。DSC-1-连续指针与后续信息的 MSH-14-连续指针的匹配被用来以正确的顺序连接信息片断。

e) The logical message is the concatenation of the contents of the first message (which while having no value in MSH-14, did end with DSC, and hence was actually a message fragment), plus all subsequent fragments (as identified by values in MSH-14).

此逻辑信息是由第一个信息（在 MSH-14 字段中没有值，且以 DSC 结束，因此实际上是一个信息片断），加上所有的后续信息（由 MSH-14 中的值来标识）串联而成。

f) If enhanced mode acknowledgments are used to request an accept ACK, then the receiver will acknowledge each fragment with an ACK message. Since each fragment has its own

Message Control ID, each fragment level accept ACK will use the Message Control ID from the fragment it is acknowledging.

如果增强模式确认要求有一个 ACK 接受确认, 则接收系统将对每个信息片断进行确认, 每个确认使用一个 ACK 确认信息。既然每一个信息片断有自己的信息控制 ID 号, 则当进行信息确认时, 每个信息片断水平上的 ACK 接受确认将使用来自信息片断的信息控制 ID 号来进行。

- g) If enhanced mode acknowledgments are used to request an application level ACK, then the receiver will send an acknowledgment after receiving the final fragment.

如果增强模式确认要求有一个应用程序水平上的 ACK 确认, 则接收方将在收到最后一个信息片断后发出确认信息。

**Note:** The application level ACK should refer to the message by the Message Control ID of the first fragment.

**注:** 应用程序水平上的 ACK 确认应该是指第一个信息片断的信息控制 ID 号指定的信息。

**Note:** The receiver can tell that a given incoming message is a fragment by the presence of the trailing DSC. Subsequent HL7 messages are identified as fragments by the presence of an MSH-14 value. The presence of a DSC in a fragment indicates that more fragments are to follow.

**注:** 接收方能通过尾端的 DSC 的存在来判断到来的信息是信息片断。而 HL7 后续信息作为信息片断是以 MSH-14 有取值为标志。在一个信息片断中有 DSC 的存在则表示将有更多的信息片断接踵而来。

It is a protocol error to end a message with DSC, and then never send a fragment.

以一个带有 DSC 的信息作为结束而不发送其它的信息片断的情况是一个协议错误。

For example, a single logical message may be fragmented into three HL7 messages.

例如: 一个简单逻辑信息能被分割成三条 HL7 信息。

---- Sender HL7 message (incomplete, fragment1)---

---- 发送端的 HL7 信息 (不完整, 片断 1)---

MSH|||||||1001||2.4|123|..

A|...

B|...

DSC|W4xy

---- Sender HL7 message (fragment 2)---

---- S 发送端的 HL7 信息 (片断 2)---

MSH|||||||2106||2.4|124|W4xy|

C|...

D|...

DSC|V292

----- another HL7 message(fragment 3, final)---

----- 另一条 HL7 信息(片断 3, 最后的片断)---

MSH|||||||2401||2.4|125|V292

E|...

Such a sequence is logically the same as the single message

这样一个信息系列逻辑上和单一信息是一样的。

```
MSH|...|2.4|123|..
A|...
B|...
C|...
D|...
E|...
```

See example in section 2.18.4 for a more elaborate example.

2.18.4 节有一个更详细的例子。

### 2.7.2.3 Segment fragmentation across messages

跨越不同信息的信息段片断

If the last segment of a fragment itself needs to be broken, then the following idiomatic use of ADD shall apply.

如果一个信息片断的最后信息段本身需要分割时，那么将使用下面的惯常用法，即使用 ADD。

- a) the segment being continued (call it ANY for this example) is ended at an arbitrary character position and terminated with the standard segment terminator (carriage return).

要被连续的信息段（即前面的信息段）（本例中称为：ANY）武断的在一字符处结束，然后以标准的信息段终止符（回车符）终结。

- b) the following segment is the ADD segment. It will contain no characters other than "ADD". (The lack of characters signals the receiver that ANY will be continued.)

接下来的信息段是 ADD 信息段。它仅含有“ADD”而没有其他字符。（缺少字符是告知接收方：ANY 将被连续。）

- c) The second following segment will be the DSC, used as described above in Section 2.15.2.2, "Segment fragmentation/continuation using the DSC segment".

第二个后续信息段是 DSC，其用法在 2.15.2.2 节—“使用 DSC 信息段的信息段分裂/连续”中有描述。

- d) The first segment of the following fragment will be an ADD segment. The characters of this ADD segment are logically part of the ANY segment of the previous fragment.

接下来的信息片断的第一个信息段将是一个 ADD 段。逻辑上讲，这个 ADD 段的字符是前述信息片断中的 ANY 信息段的一部分。

For example

例如:

```
MSH|...|2.4|
A|12
ADD
DSC|JR97
----- (fragment 2)
MSH|...|2.4|JR97
ADD|345
```

is logically the same as

逻辑上等同于:

```
MSH|...|2.4
A|12345
```

e) transaction flow for a continued unsolicited message with a continued segment. first unsolicited message and acknowledgment:

带有要被连续信息段的要被连续的主动信息传输流。第一个主动信息及信息确认。

```
MSH
URD
[ URS ]
{DSP}                                (last DSP is incomplete
                                      最后的 DSP 是不完整的)
ADD                                  (contains no fields
                                      不包括字段)
DSC                                  (Continuation segment
                                      连续信息段)

MSH                                  (General acknowledgment
                                      一般信息确认)
MSA
[ ERR ]
```

f) second unsolicited message and acknowledgment:

第二个主动信息及信息确认

```
MSH                                  (contains continuation pointer from DSC segment of prior message
                                      包含了前面信息的 DSC 信息段的连续指针)
ADD                                  (contains remainder of data from continued DSP segment from prior
                                      message
                                      包含了前面信息的需连续的 DSP 信息段的剩余数据。)
{DSP}
```

**Note:** This second message could itself be continued with a second DSC and (if needed) a second ADD segment prior to it.

**注:** 第二个信息本身也能被连续, 此时此信息要有另一个 DSC 和 (DSC) 前面的另一个 ADD 信息段 (如果需要的话)。

```
MSH                                  (General acknowledgment
                                      一般确认)
MSA
[ERR]
```



### 2.7.3 HL7 batch protocol

#### HL7 批处理协议

There are instances when it is convenient to transfer a batch of HL7 messages. Common examples would be a batch of financial posting detail transactions (DFT's) sent from an ancillary to a financial system. Such a batch could be sent online using a common file transfer protocol, or offline via tape or diskette.

在传输一批 HL7 信息更为方便的情况下（使用本协议）。一般的例子是：一辅助系统将一批置入财务的详细处理（DFT）发送给财务系统。这样一个批处理（一批信息）能使用一般文件传输协议进行在线发送，也可以采用磁带或磁盘进行脱机传送。

#### 2.7.3.1 HL7 batch file structure

##### HL7 批处理文件结构

The structure of an HL7 batch file is given by the following (using the HL7 abstract message syntax)

下面给除了一个 HL7 批处理文件的结构（使用 HL7 抽象信息语法）

[FHS]	(file header segment 文件头信息段)
{ [BHS]	(batch header segment 批处理头信息段)
{ [MSH	(zero or more HL7 messages 0 或更多的 HL7 信息)
....	
....	
....	
] }	
[BTS]	(batch trailer segment 批处理尾信息段)
}	
[FTS]	(file trailer segment 文件尾信息段)

Notes:

注意：

The sequence numbering protocol has a natural application in batch transfers. See the discussion of batch acknowledgments that follows.

在批处理传输中自然要用到序号协议。见下面的批处理确认讨论：

Although a batch will usually consist of a single type of message, there is nothing in the definition that restricts a batch to only one message type.

虽然通常一个批处理只包含了一种类型的信息，但是并不规定一个批处理只含有一种类型的信息。

The HL7 file and batch header and trailer segments are defined in exactly the same manner as the HL7 message segments. Hence the HL7 message construction rules of Section 2.11, “**Message construction rules,**” can be used to encode and decode HL7 batch files.

HL7 的文件与批处理的头尾信息段的定义与 HL7 信息段的定义方式完全一样，因此，2.11 节—“信息结构规则”中信息结构规则同样适用于对 HL7 批处理文件的编码与解码。

There are only two cases in which an HL7 batch file may contain zero HL7 messages:

仅仅在两种情况下，HL7 批处理文件可以含有 0 个 HL7 信息。

- a) a batch containing zero HL7 messages may be sent to meet a requirement for periodic submission of batches when there are no messages to send.

一个不含 HL7 信息的批处理文件可以发送来满足这一要求：当没有信息发送时要求周期性发送批处理。

- b) a batch containing zero negative acknowledgment messages may be sent to indicate that all the HL7 messages contained in the batch being acknowledged are implicitly acknowledged. See Section 2.15.3.3, “Acknowledging batches.”

一个含有 0 个否定确认信息的批处理可以发送，以表示此被确认的批处理中包含的所有 HL7 信息是被隐含确认的。见 2.15.3.3 节—“确认批处理”。

### 2.7.3.2 Related segments and data usage

#### 相关信息段与数据的用法

The following segments defined in Section 2.16, “MESSAGE CONTROL SEGMENTS” relate to the HL7 Batch Protocol:

以下的与 HL7 批处理协议有关的信息段在 2.16 节—“信息控制段”中有定义

BHS Batch Header

BHS        批处理头

BTS Batch Trailer

BTS        批处理尾

FHS File Header

FHS 文件头

FTS        File Trailer

FTS        文件尾

The BTS segment contains a field, *BTS-3-batch totals*, which may have one or more totals drawn from fields within the individual messages. The method for computing such totals will be determined on a site or application basis unless explicitly stated in a functional chapter.

BTS 信息段包含了字段—BTS-3 批处理总数，一个或更多的总数是从单个信息的字段中得到。计算这些总数的方法由不同的场地或应用程序而定，除非在特定的功能章节中有详尽的规定。

## 2.7.3.3 Acknowledging batches

## 批处理的确认

In general, the utility of sending batches of data is that the data is accepted all at once, with errors processed on an exception basis. However, it is a permissible application of HL7 to acknowledge all messages. Several options for acknowledgment are given and will be chosen on an application basis. In these cases, the sequence numbering protocol can be useful to the applications processing the batch.

通常，使用批处理发送数据意味着数据立即被接受，不进行错误处理。然而，HL7 允许对所有的信息进行确认。几种确认的选择（方法）被给出且要根据应用程序进行选择。在这些情况下，序号协议对于应用程序处理批处理是很有用的。

The options are:

选择的方法有：

- a) all messages are acknowledged in the response batch.

在应答批处理时对所有的信息进行确认。

- b) the receiving system prints some form of batch control report, which is then dealt with manually by personnel at the sending system. No acknowledgments are performed by the protocol software.

接收系统打印某种形式的批处理控制报告，然后在发送系统端对其进行人工手工处理。协议软件并不执行确认。

- c) an automated acknowledgment batch is created containing acknowledgment messages only for those messages containing errors. In this mode an empty acknowledgment batch may be created (i.e., an HL7 batch file without any HL7 acknowledgment messages).

创建一自动确认批处理，此确认批处理只含有针对那些有错误的信息的确认信息。在这种模式下，有可能创建一个空的确认批处理（比如：一个不含有任何 HL7 确认信息的 HL7 批处理文件）。

In each case where there is a response batch, its format is a batch of individual messages. Each individual message is in the format defined for an online response in the chapters. Consider, for example, a batch that might be constructed to respond to a batch of Detailed Financial Transactions (Chapter 6). The messages in the response batch would consist entirely of ACK messages, since ACK is the response shown in Chapter 6.

以上每一种情况都存在一个应答批处理，其格式为一批个体信息。每一个体信息的格式被定义为本章的在线应答。例如：考虑一个对明细财务传输（DFT）进行应答的批处理（第 6 章），既然第 6 章中表明 ACK 为应答信息，则应答批处理中的信息将完全由 ACK 信息组成。

When batches are retransmitted after the correction of errors, *BHS-12-reference batch control ID* should contain the batch control ID of the original batch.

当批处理在更正错误以后重新发送，其 BHS-12—参考批处理控制 ID 号将含有原批处理的控制 ID 号。

### 2.7.3.4 Batch message as a query response

作为一查询应答的批处理信息

The HL7 query also can be used to query for a batch in the following manner:

HL7 查询也可用于对以下方式的批处理进行查询。

- a) use the value BB or BL of *QRD-5-deferred response type* to specify a batch response. The query will be acknowledged with a general acknowledgment as in the Deferred Access example above (see chapter 5)

使用 QRD-5—延迟应答类型中的 BB 或 BL 值来指定批处理应答。对查询的确认是采用一般确认，如上面延迟访问的例子（见第 5 章）

- b) in addition, insert into the batch file the QRD and QRF segments as follows:

此外，如下所述在批处理文件中插入 QRD 和 QRF 信息段

[FHS]	(file header segment 文件头信息段)
{ [BHS]	(batch header segment 批处理头信息段)
[QRD]	(the QRD and QRF define the
[QRF]	query that this batch is a response to
	QRD 和 QRF 定义此查询，表明此查询批处理是对一个或更多的 HL7 信息的应
	答。)
{ MSH	(one or more HL7 messages)
....	
....	
....	
}	
[BTS]	(batch trailer segment 批处理尾信息段)
}	
[FTS]	(file trailer segment 文件尾信息段)

- c) the acknowledgment of a batch is described in this chapter (see Section 2.15.3.3, “Acknowledging batches”).

对批处理的确认在本章中有描述（见 2.15.3.3 节，“批处理的确认”）

### 2.7.4 Modes for updating via repeating segments

#### 通过重复信息段进行更新的模式

When groups of repeating segments appear within a message it is not obvious from the basic HL7 abstract message syntax how best to apply the new group of repeating segments on the receiving system. HL7 suggests two methods: the “snapshot” mode and the “action code/unique identifier” mode.

当一则信息中含有成组的重复信息段时，对于在接受系统端如何应用这一新成组的重复信息段，基本 HL7 抽象信息语法结构并没有明显的优势。（于是）HL7 建议采用下面两种方法：“快照”模式和“动作代码/唯一标识符”模式。

Background:

背景:

The segments which repeat in HL7 messages Patient Administration (ADT)/Financial Information messages (AL1, DG1, PR1, GT1, IN1, IN2, IN3, NK1, NTE) present a problem if the requirement is to update only part of the information previously sent. Prior to Version 2.3 of the Standard, all such repeating segments had to be sent again in the update, because there was no way to indicate which ones changed and which ones did not. For example, if two DG1 segments were sent originally (containing a primary and secondary diagnosis), and then if a tertiary diagnoses needed to be sent, the sending system had to send all diagnoses which were currently valid, that is, three DG1 segments (containing primary, secondary and tertiary diagnosis). This way of doing things is referred to as the “snapshot” mode. In this mode, everything (all repeating segments) must be sent with every subsequent message in the series of messages.

在 HL7 信息—病人管理 (ADT) /财务情报信息 (AL1, DG1, PR1, GT1, IN1, IN2, IN3, NK1, NTE) 中存在重复信息段, 当要求更新以前发出信息的一部分时就会出现问题。在本标准的 2.3 以前的版本中, 这些重复信息段必须在更新中全部重发, 因为没有办法区分那一个改变了, 那一个信息段没有改变。例如: 如果开始发送了两个 DG1 信息段 (包含了初次和第二次诊断), 后来如果要发送第三次诊断, 则发送系统不得不发送当前有效的所有诊断, 亦即三个 DG1 信息段 (包括了初次、第二次以及第三次诊断)。这种方式被称为“快照”模式。在此模式中, 信息系列中的每一顺序信息发送时都要发送所有的重复信息段。

In the Order Entry, Observation Reporting, and Master Files chapters, action codes (e.g., order control codes and result status codes) and unique identifiers (e.g., placer and filler numbers) are currently specified as part of the ORC, OBR, OBX and MFE segments. So, except for the NTE segments, this problem exists mainly for the Patient Administration and Financial Management chapter segments.

在预定登录、观察报告, 以及主文件章节中, 动作代码 (如: 预订控制代码和结果状态代码) 以及唯一标识符 (如: 放置和填充数) 被指定为 ORC, OBR, OBX 和 MFE 信息段的一部分。这样, 除了 NTE 信息段, 主要是在病人管理和财务管理章节的信息段中存在问题。

For systems implementing Version 2.3 or higher, if a particular repeating segment can be updated by either of these two modes, the parties concerned will determine by agreement on a site-specific basis whether an interface will use the “snapshot” mode or the “action code/unique identifier” mode.

对于运行 2.3 或更高版本的系统而言, 一特定重复信息段的更新能采用两种模式中的任何一种, 特定的地方能通过协定来决定是采用“快照”模式还是采用“动作代码/唯一标识符”模式。

#### 2.7.4.1 Snapshot mode update definition

快照模式更新定义

In the “snapshot” mode, the group of repeating segments from the incoming message replaces the prior group of repeating segments on the receiving system. This is equivalent to a deletion of the prior group followed by the addition of the new group. The snapshot mode is the usual mode in Version 2.2 and 2.1 implementations of HL7, but it is also available for Version 2.3 and future versions. To specify “delete all of the segments in

Value 取值	Description 描述
A	Add/Insert 添加/插入
D	Delete 删除
U	Update 更新

level (MSH) fields; it functions across messages, not just within a message. The *unique identifier* will be chosen on a segment-specific basis, depending on the primary entity referenced by the segment. For some cases, such as a diagnosis code, it may be a CE data type. For others, such as a person identifier, it may be a CX data type. For others it may be an EI (entity identifier) data type.

一般唯一标识符的定义如下：它唯一标识了不随时间变化的重复信息段所定义的一个或多个重复实体中的一个。它与任何特定的在信息标识符水平（MSH）上的字段无关；它能跨越多个信息中发挥作用，而不仅限于在一个信息中。唯一标识符是在特定的信息段基础上来进行选择的，选择时的依据是信息段的主要实体。在某种情况下，如诊断代码，它可以是 CE 数据类型；对于另外一些情况，如病人标识符，它可以是 CX 数据类型；对于再另外一些情况下可以是 EI（实体标识）数据类型。

**Note:** This mode is available for use only for new segments for Version 2.3 and for new segments in future versions

**注：** 此模式仅仅适用于 2.3 或将来版本中的新信息段。

## 2.8 MESSAGE CONTROL SEGMENTS

### 信息控制段

The following segments are necessary to support the functionality described in this chapter.

为了支持本章描述的功能，以下的信息段是必须的。

**Note:** The HL7 message construction rules define the standard HL7 encoding rules, creating variable length delimited messages from the segments defined below. Although only one set of encoding rules is defined as a standard in HL7 Version 2.3, other encoding rules are possible (but since they are non-standard, they may only be used by a site-specific agreement).

**注：** HL7 信息结构规则定义了标准 HL7 编码规则，由以下定义的信息段组建可变长度的信息。虽然，在 HL7 2.3 版本中，只有一套编码规则作为标准，但也可能有其他编码规则（单既然其他编码规则是非标准化的，它们只能应用与其他特定的协定中）。

The segments in this section are listed in alphabetical order. The following chart shows a summary of the segments listed by category.

本节的信息段是按字母顺序进行排列。下图显示了按类别进行排列的信息段的概要。

Figure 2-8. HL7 message segments

Segment Category 信息段类别	Segment Name 信息段名	HL7 Section Reference 参考的 HL7 章节
Control 控制类		
	ADD	2.16.1

	BHS	2. 16. 2
	BTS	2. 16. 3
	DSC	2. 16. 4
	ERR	2. 16. 5
	FHS	2. 16. 6
	FTS	2. 16. 7
	MSA	2. 16. 8
	MSH	2. 16. 9
General Purpose 一般目的类		
	NTE	2. 16. 10
Query 查询类		
	All query segments have been moved to chapter 5  所有的查询类信息段见第五章	

### 2. 8. 1 ADD – addendum segment

#### ADD-附加信息段

The ADD segment is used to define the continuation of the prior segment in a continuation message. See Section 2.15.2, “Continuation messages and segments,” for details.

ADD 附加信息段是用来定义连续信息中前信息段的延续。详细内容见 2. 15. 2 节，“连续信息及信息段”。



HL7 Attribute Table - ADD - Addendum

HL7 属性表 —ADD-附加信息段

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
系列号	长度	类型	可选性	重复性	表号	项目号	元素名称
1-n	65536	ST	0			00066	Addendum Continuation Pointer 附加连续指针

## 2.8.1.1 ADD field definition

ADD 信息段中字段的定义

## 2.8.1.2 ADD-1 Addendum continuation pointer (ST) 00066

## ADD-1 附加连续指针 (ST) 00066

Definition: This field is used to define the continuation of the prior segment in a continuation message. See section 2.15.2, “Continuation messages and segments” for details. When the ADD is sent after the segment being continued, it contains no fields. It is only a marker that the previous segment is being continued in a subsequent message. Thus fields 1- N are not present. The sequence designation, 1- N, means the remainder of the fields in the segment being continued. These remainder of the segment being continued fields are present only when the ADD is sent with a continuation message.

定义：此字段是用来定义在一连续信息中对前一信息段的延续。详情见 2.15.2 节，“连续信息及信息段”。当一被延续的信息段发送后发送 ADD，它不包含任何字段。它只是一连续并发信息中前信息段被延续的标志，所以字段 1-N 是不存在的，将之序号命名为 1-N 是表示本信息段的其他字段被连续。仅仅当 ADD 在一连续信息中发送时，这些被连续的字段才可能存在。

## 2.8.2 BHS - batch header segment

## BHS- 批处理的头信息段

The BHS segment defines the start of a batch.

BHS 信息段定义一个批处理的开始

HL7 Attribute Table - BHS - Batch Header

HL7 属性表—BHS-批处理头信息段

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME
1	1	ST	R			00081	Batch Field Separator 批处理字段分隔符
2	3	ST	R			00082	Batch Encoding Characters 批处理编码字符
3	15	ST	0			00083	Batch Sending Application 批处理发送应用程序
4	20	ST	0			00084	Batch Sending Facility 批处理发送设备

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME
5	15	ST	0			00085	Batch Receiving Application 批处理接收应用程序
6	20	ST	0			00086	Batch Receiving Facility 批处理接收设备
7	26	TS	0			00087	Batch Creation Date/Time 批处理创建日期/时间
8	40	ST	0			00088	Batch Security 批处理的保密性
9	20	ST	0			00089	Batch Name/ID/Type 批处理名称/ID/类型
10	80	ST	0			00090	Batch Comment 批处理说明
11	20	ST	0			00091	Batch Control ID 批处理控制 ID
12	20	ST	0			00092	Reference Batch Control ID 参考批处理控制 ID

#### 2.8.2.1 BHS field definitions

##### BHS 字段定义

#### 2.8.2.2 BHS-1 Batch field separator (ST) 00081

##### BHS-1 批处理字段分隔符 (ST) 00081

Definition: This field contains the separator between the segment ID and the first real field, *BHS-2-batch 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).

定义：此字段包含了信息段 ID 和实际上的第一个字段—BHS-2，批处理编码字符—之间的分隔符，它充当了分隔符的功能并定义了信息的其他部分的分隔符。参考值为 |（ASCII 值：124）。

#### 2.8.2.3 BHS-2 Batch encoding characters (ST) 00082

##### BHS-2 批处理编码字符 (ST) 00082

Definition: This field contains the four characters in the following order: the component separator, repetition separator, escape characters, and subcomponent separator. Recommended values are ^^\\& (ASCII 94, 126, 92, and 38, respectively). See Section 2.8, “MESSAGE DELIMITERS.”

定义：此字段包含了以下四个字符（按相应的顺序）：组件分隔符、重复分隔符、Escape 字符、子组件分隔符。参考值为：^^\\&（ASCII 值分别为：94、126、92 以及 38）。见 2.8 节“信息分隔符”。

#### 2.8.2.4 BHS-3 Batch sending application (ST) 00083

##### BHS-3 批处理发送应用程序 (ST) 00083

Definition: This field uniquely identifies the sending application among all other applications within the network enterprise. The network enterprise consists of all those

applications that participate in the exchange of HL7 messages within the enterprise.  
Entirely site-defined.

定义：此字段标定了网络工作（程序）中的（信息）发送应用程序，网络作业（程序）包括网络中参与 HL7 信息交换的所有应用程序。这些程序完全是由地点而定的。

#### 2.8.2.5 BHS-4 Batch sending facility (ST) 00084

##### BHS-4 批处理发送设备 (ST) 00084

Definition: This field contains the address of one of several occurrences of the same application within the sending system. Absent other considerations, the Medicare Provider ID might be used with an appropriate sub-identifier in the second component. Entirely user-defined.

定义：此字段包含了发送系统中几个相同应用程序之一的地址。若不考虑其他因素，医疗服务提供者的 ID 号可能被用作此字段的第二个组件中的子标识符。此字段完全由用户定义。

#### 2.8.2.6 BHS-5 Batch receiving application (ST) 00085

##### BHS-5 批处理接收应用程序 (ST) 00085

Definition: This field uniquely identifies the receiving applications among all other applications within the network enterprise. The network enterprise consists of all those applications that participate in the exchange of HL7 messages within the enterprise.  
Entirely site-defined.

定义：此字段标定了网络工作（程序）中的（信息）接收应用程序，网络作业（程序）包括网络中参与 HL7 信息交换的所有应用程序。这些程序完全是由地点而定的。

#### BHS-6 Batch receiving facility (ST) 00086

##### BHS-6 批处理接收设备 (ST) 00086

Definition: This field identifies the receiving application among multiple identical instances of the application running on behalf of different organizations. See comments *BHS-4-batch sending facility*. Entirely site-defined.

定义：，此字段标识了在运行于不同组织机构的多个相同应用程序中的接收应用程序。见 *BHS-4, 批处理发送设备的说明*。此字段完全由地点决定。

#### 2.8.2.7 BHS-7 Batch creation date/time (TS) 00087

##### BHS-7 批处理创建日期/时间 (TS) 00087

Definition: This field contains the date/time that the sending system created the message. If the time zone is specified, it will be used throughout the message as the default time zone.

定义：此字段包含了发送系统创建信息的日期/时间。如果规定了时间字段，那么整个信息中的时间的采用这默认的时间字段。

### 2.8.2.8 BHS-8 Batch security (ST) 00088

#### BHS-8 批处理安全 (ST) 00088

Definition: In some applications of HL7, this field is used to implement security features. Its use is not yet further specified.

定义：在某些 HL7 应用程序中，这个字段被用来确定安全特性。但对其的使用仍然没有更进一步的规定。

### 2.8.2.9 BHS-9 Batch name/ID/type (ST) 00089

#### BHS-9 批处理名称/ID 号/类型 (ST) 00089

Definition: This field can be used by the application processing the batch. It can have extra components if needed.

定义：此字段被应用程序用来处理批处理信息。如果需要的话，这一字段可有扩展成分。

### 2.8.2.10 BHS-10 Batch comment (ST) 00090

#### BHS-10 批处理说明 (ST) 00090

Definition: This field is a comment field that is not further defined in the HL7 protocol.

定义：此字段为一说明字段，在 HL7 协议中没有进一步定义。

### 2.8.2.11 BHS-11 Batch control ID (ST) 00091

#### BHS-11 批处理控制 ID 号 (ST) 00091

Definition: This field is used to uniquely identify a particular batch. It can be echoed back in *BHS-12-reference batch control ID* if an answering batch is needed.

定义：此字段被用来唯一确定一特定的批处理信息。如果需要一应答批处理的话，它能在 *BHS-12*，参考 *批处理控制 ID* 号中有反馈信息。

### 2.8.2.12 BHS-12 Reference batch control ID (ST) 00092

#### BHS-12 参考批处理控制 ID 号 (ST) 00092

Definition: This field contains the value of *BHS-11-batch control ID* when this batch was originally transmitted. Not present if this batch is being sent for the first time. See definition for *BHS-11-batch control ID*.

定义：当批处理原先被传输过时，这个字段包含了 *BHS-11—批处理控制 ID* 号的取值。如果批处理是首次发送，这一字段不存在。见 *BHS-11—批处理控制 ID* 号的定义。

## 2.8.3 BTS – batch trailer segment

### BTS—批处理结尾信息段

The BTS segment defines the end of a batch.

BTS 信息段定义了一个批处理的结束。

HL7 Attribute Table - BTS - Batch Trailer

HL7 属性表—BTS-批处理结尾信息段

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME
1	10	ST	0			00093	Batch Message Count 批处理信息计数
2	80	ST	0			00090	Batch Comment 批处理说明
3	100	NM	0	Y		00095	Batch Totals 批处理总数

#### 2.8.3.1 BTS field definitions

BTS 字段定义

#### 2.8.3.2 BTS-1 Batch message count (ST) 00093

BTS-1 批处理信息计数 (ST) 00093

Definition: This field contains the count of the individual messages contained within the batch.

定义：此字段标示了在批处理中单个信息的个数。

#### 2.8.3.3 BTS-2 Batch comment (ST) 00090

BTS-2 批处理说明 (ST) 00090

Definition: This field is a comment field that is not further defined in the HL7 protocol.

定义：此字段为说明字段，在 HL7 协议中没有进一步的规定。

#### 2.8.3.4 BTS-3 Batch totals (NM) 00095

BTS-3 批处理总数 (NM) 00095

Definition: We encourage new users of this field to use the HL7 Version 2.3 data type of NM and to define it as “repeating.” This field contains the batch total. If more than a single batch total exists, this field may be repeated.

定义：我们鼓励新用户采用 HL7 2.3 版本中对此字段类型的规定，即 NM 数据类型并且定义为“可重复”。这个字段包含了批处理的总数。如果有一个以上的批处理存在，这个字段可以重复。

This field may be defined as a CM data type for backward compatibility with HL7 Versions 2.2 and 2.1 with each total being carried as a separate component. Each component in this case is an NM data type.

这一字段也可以定义为 CM 数据类型以便和 HL7 的 2.1 和 2.2 版本兼容，在这两个版本中，每个批处理总数字段带有一分隔组件，在这种情况下，组件是 NM 数据类型。

2.8.4 DSC - continuation pointer segment

DSC-连续指针信息段

The DSC segment is used in the continuation protocol.

DSC 信息段被用于连续（信息）协议中。

HL7 Attribute Table - DSC - Continuation Pointer

HL7 属性表—DSC-连续指针

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME
1	180	ST	0			00014	Continuation Pointer 连续指针
2	1	ID	0		<a href="#">0398</a>	01354	Continuation Style 连续格式

2.8.4.1 DSC field definitions

DSC 字段定义

2.8.4.2 DSC-1 Continuation pointer (ST) 00014

DSC-1 连续指针 (ST) 00014

Definition: This field contains the continuation pointer. In an initial query, this field is not present. If the responder returns a value of null or not present, then there is no more data to fulfill any future continuation requests. For use with continuations of unsolicited messages, see chapter 5 and section 2.15.2, "Continuation messages and segments." Note that continuation protocols work with both display- and record-oriented messages.

定义：此字段包含了连续指针。在一初始查询中，这个字段是不存在的。如果返回值是“Null”或“不存在”，则没有数据以执行将来的连续查询。欲知主动信息的连续用法，请见第五章以及 2.15.2 节——“连续信息与信息段”的内容。注意连续协议支持显示定位信息和记录定位信息。

2.8.4.3 DSC-2 Continuation style (ID) 01354

DSC-2 连续格式 (ID) 01354

Definition: Indicates whether this is a fragmented message (see Section 2.15.2, "Continuation messages and segments"), or if it is part of an interactive continuation message (see Section 5.6.3, "Interactive continuation of response messages").

定义：指定这是一个分割的信息片断（见 2.15.2 节，“连续信息与信息段”）还是一交互式连续信息的一部分（见 5.6.3 节，“交互式应答信息的连续”）。

Refer [to HL7 Table 0398 - Continuation style code](#) for valid values.

相应的有效取值见 HL7 表 0398-连续格式代码

HL7 Table 0398 – Continuation style code

HL7 表 0398—连续格式代码

Value	Description
F	Fragmentation 分割式连续
I	Interactive Continuation 交互式连续

## 2.8.5 ERR – error segment

### ERR—错误信息段

The ERR segment is used to add error comments to acknowledgment messages.

ERR 信息段被用来给确认信息段添加错误说明。

HL7 Attribute Table – ERR – Error

HL7 属性表—ERR—错误信息段

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME
1	80	CM	R	Y		00024	Error Code and Location 错误代码以及位置

#### 2.8.5.1 ERR field definition

#### ERR 字段定义

#### 2.8.5.2 ERR-1 Error code and location (CM) 00024

#### ERR-1 错误代码以及位置 00024

Components: <segment ID (ST)> ^ <sequence (NM)> ^ <field position (NM)> ^ <code identifying error (CE)>

Definition: This field identifies an erroneous segment in another message. The second component is an index if there is more than one segment of type <segment ID>. For systems that do not use the HL7 Encoding Rules, the data item number may be used for the third component. The fourth component (which references [HL7 Table 0357 – Message error condition codes](#), (as a CE data type)) is restricted from having any subcomponents as the subcomponent separator is now the CE's component separator.

定义：此字段标明在另一信息中的错误段。如果有一个以上的信息段类型（信息段 ID 号），则此字段的第二个组件为一个指示符。对于为采用 HL7 编码规则的系统而言，这一项目号码可被用于第三个组件。第四个组件（CE 数据类型），见 HL7 表 0357—信息错误条件代码，不能由任何子组件，由于自组件的分隔符已是 CE 类型组件分隔符。

**Note:** See section 2.16.8.7, MSA-6-error condition, for a listing of this table.

**注：** 见 2.16.8.6 节，MSA-6—错误情况列表

## 2.8.6 FHS - file header segment

### FHS-文件头信息段

The FHS segment is used to head a file (group of batches) as defined in Section 2.15.3, “HL7 batch protocol.”

FHS 信息段被用来指定一文件（一组批处理）的文件头，文件的定义见 2.15.3 节，“HL7 批处理协议”。

HL7 Attribute Table - FHS - File Header

HL7 属性表—FHS-文件头

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME
1	1	ST	R			00067	File Field Separator 文件字段分隔符
2	4	ST	R			00068	File Encoding Characters 文件编码字符
3	15	ST	0			00069	File Sending Application 文件发送应用程序
4	20	ST	0			00070	File Sending Facility 文件发送设备
5	15	ST	0			00071	File Receiving Application 文件接收应用程序
6	20	ST	0			00072	File Receiving Facility 文件接收设备
7	26	TS	0			00073	File Creation Date/Time 文件创建日期/时间
8	40	ST	0			00074	File Security 文件安全
9	20	ST	0			00075	File Name/ID 文件名称/ID 号
10	80	ST	0			00076	File Header Comment 文件头说明
11	20	ST	0			00077	File Control ID 文件控制 ID 号
12	20	ST	0			00078	Reference File Control ID 参考文件控制 ID 号

#### 2.8.6.1 FHS field definitions

##### FHS 字段定义

#### 2.8.6.2 FHS-1 File field separator (ST) 00067

##### FHS-1 文件字段分隔符 (ST) 00067

Definition: This field has the same definition as the corresponding field in the MSH segment.

定义：此字段与 MSH 信息段的相应字段有相同的定义。



**2.8.6.3 FHS-2 File encoding characters (ST) 00068****FHS-2 文件编码字符 (ST) 00068**

Definition: This field has the same definition as the corresponding field in the MSH segment.

定义：此字段与 MSH 信息段的相应字段有相同的定义。

**2.8.6.4 FHS-3 File sending application (ST) 00069****FHS-3 文件发送应用文件 (ST) 00069**

Definition: This field has the same definition as the corresponding field in the MSH segment.

定义：此字段与 MSH 信息段的相应字段有相同的定义。

**2.8.6.5 FHS-4 File sending facility (ST) 00070****FHS-4 文件发送设备 (ST) 00070**

Definition: This field has the same definition as the corresponding field in the MSH segment.

定义：此字段与 MSH 信息段的相应字段有相同的定义。

**2.8.6.6 FHS-5 File receiving application (ST) 00071****FHS-5 文件接收应用程序 (ST) 00071**

Definition: This field has the same definition as the corresponding field in the MSH segment.

定义：此字段与 MSH 信息段的相应字段有相同的定义。

**2.8.6.7 FHS-6 File receiving facility (ST) 00072****FHS-6 文件接收设备 (ST) 00072**

Definition: This field has the same definition as the corresponding field in the MSH segment.

定义：此字段与 MSH 信息段的相应字段有相同的定义。

**2.8.6.8 FHS-7 File creation date/time (TS) 00073****FHS-7 文件创建日期/时间 (TS) 00073**

Definition: This field has the same definition as the corresponding field in the MSH segment.

定义：此字段与 MSH 信息段的相应字段有相同的定义。

### 2.8.6.9 FHS-8 File security (ST) 00074

#### FHS-8 文件安全 (ST) 00074

Definition: This field has the same definition as the corresponding field in the MSH segment.

定义：此字段与 MSH 信息段的相应字段有相同的定义。

### 2.8.6.10 FHS-9 File name/ID (ST) 00075

#### FHS-9 文件名称/ID 号 (ST) 00075

Definition: This field can be used by the application processing file. Its use is not further specified.

定义：应用程序用此字段来处理文件。对其的使用没有进一步的规定。

### 2.8.6.11 FHS-10 File header comment (ST) 00076

#### FHS-10 文件头说明 (ST) 00076

Definition: This field contains the free text field, the use of which is not further specified.

定义：此字段为自由文本字段，对其的使用没有特定的规定。

### 2.8.6.12 FHS-11 File control ID (ST) 00077

#### FHS-11 文件控制 ID 号 (ST) 00077

Definition: This field is used to identify a particular file uniquely. It can be echoed back in *FHS-12-reference file control ID*.

定义：此字段被用来唯一的标识一特定的文件。它能在 *FHS-12-参考文件控制 ID* 号字段中存在反馈。

### 2.8.6.13 FHS-12 Reference file control ID (ST) 00078

#### FHS-12 参考文件控制 ID 号 (ST) 00078

Definition: This field contains the value of *FHS-11-file control ID* when this file was originally transmitted. Not present if this file is being transmitted for the first time.

定义：当文件原先被传输过时，此字段包含了 *FHS-11 文件控制 ID* 号字段的取值。但文件首次被传输时，此字段不存在。

## 2.8.7 FTS - file trailer segment

### FTS-文件结束信息段

The FTS segment defines the end of a file.

FTS-文件结束信息段定义了一个文件的结束。

HL7 Attribute Table - FTS - File Trailer

HL7 属性表—FTS-文件结束信息段

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME
1	10	NM	0			00079	File Batch Count 文件所包含的批处理数目
2	80	ST	0			00080	File Trailer Comment 文件结束说明

## 2.8.7.1 FTS field definitions

## FTS 字段定义

## 2.8.7.2 FTS-1 File batch count (NM) 00079

## FTS-1 文件包含的批处理数目 (NM) 00079

Definition: This field contains the number of batches contained in this file.

定义: 此字段表明了文件中所包含的批处理数目。

## 2.8.7.3 FTS-2 File trailer comment (ST) 00080

## FTS-2 文件结束说明 (ST) 00080

Definition: The use of this free text field is not further specified.

定义: 此字段为一自由文本字段, 但对其的使用没有进一步的规定。

## 2.8.8 MSA - message acknowledgment segment

## MSA-信息确认信息段

The MSA segment contains information sent while acknowledging another message.

MSA 信息段包含了另一信息发送的确认信息。

HL7 Attribute Table - MSA - Message Acknowledgment

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME
1	2	ID	R		<a href="#">0008</a>	00018	Acknowledgment Code 确认代码
2	20	ST	R			00010	Message Control ID 信息控制 ID 号
3	80	ST	0			00020	Text Message 文本信息
4	15	NM	0			00021	Expected Sequence Number 期望系列号
5	1	ID	B		<a href="#">0102</a>	00022	Delayed Acknowledgment Type 延迟确认类型
6	250	CE	0		<a href="#">0357</a>	00023	Error Condition 错误情况

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### 2.8.8.1 MSA field definitions

#### MSA 字段定义

### 2.8.8.2 MSA-1 Acknowledgment code (ID) 00018

#### MSA-1 确认代码 (ID) 00018

Definition: This field contains an acknowledgment code, see message processing rules. Refer to [HL7 Table 0008 – Acknowledgment code](#) for valid values.

定义：此字段包含了一个确认代码，见信息处理规则。参见 [HL7 表 0008 – 确认代码](#)

HL7 表 0008 – 确认代码

取值	说明
AA	Original mode: Application Accept – Enhanced mode: Application acknowledgment: Accept 原先模式：应用程序接受—增强模式：应用程序确认：接受
AE	Original mode: Application Error – Enhanced mode: Application acknowledgment: Error 原先模式：应用程序错误—增强模式：应用程序确认：有错误
AR	Original mode: Application Reject – Enhanced mode: Application acknowledgment: Reject 原先模式：应用程序拒绝—增强模式：应用程序确认：拒绝
CA	Enhanced mode: Accept acknowledgment: Commit Accept 增强模式：接受确认：表示接受
CE	Enhanced mode: Accept acknowledgment: Commit Error 增强模式：接受确认：表示有错误
CR	Enhanced mode: Accept acknowledgment: Commit Reject 增强模式：接受确认：表示拒绝

### 2.8.8.3 MSA-2 Message control ID (ST) 00010

#### MSA-2 信息控制 ID 号 (ST) 00010

Definition: This field contains the message control ID of the message sent by the sending system. It allows the sending system to associate this response with the message for which it is intended.

定义：此字段包含了系统发送的信息的信息控制 ID 号。它使得信息发送系统能与目的反馈信息建立联系。

### 2.8.8.4 MSA-3 Text message (ST) 00020

#### MSA-3 文本信息 (ST) 00020

Definition: This optional field further describes an error condition. This text may be printed in error logs or presented to an end user.

定义：此可选自段进一步描述了出错情况。此文本能在错误日志中打印出来或提供给终端用户。

Use of *MSA-3-text message* and *MSA-6-error condition* are deprecated in favor of *ERR-1-Error code and location*. The ERR segment allows for richer descriptions of the erroneous conditions.

热衷于 *ERR-1-错误代码及位置* 的人强烈反对 *MSA-3-文本信息* 和 *MSA-6-出错情况* 的使用。ERR 信息段就出错情况的描述更为丰富。

#### 2.8.8.5 MSA-4 Expected sequence number (NM) 00021

MSA-4 期望系列号 (NM) 00021

Definition: This optional numeric field is used in the sequence number protocol.

定义：此可选的数值字段被用于系列数值协议中。

#### 2.8.8.6 MSA-5 Delayed acknowledgment type (ID) 00022

MSA-5 延迟确认类型 (ID) 00022

Definition: ***This field has been retained for backward compatibility.*** This field is used only as described above, in Section 2.13.2, “Application (level 7) processing rules, deferred processing two phase reply (original acknowledgment mode only).” Otherwise this field is not used.

定义：**此字段能与原版本兼容**。对此字段使用的描述在前面的 2.13.2 节“应用程序（第七层）处理规则，推迟处理两阶段应答（仅仅工作于原来的确认模式中）”，否则不使用册此字段。

HL7 Table 0102 - Delayed acknowledgment type

HL7 表 0102 - 延迟确认类型

取值	说明
D	Message received, stored for later processing 已收到信息，存储起来以将来处理
F	acknowledgment after processing 处理以后进行信息确认

#### 2.8.8.7 MSA-6 Error condition (CE) 00023

MSA-6 出错情况 (CE) 00023

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

Definition: This field allows the acknowledging system to use a user-defined error code to further specify AR or AE type acknowledgments. This field is a generalized replacement for *MSA-3-text message*.

## Chapter 2: Control

定义：此字段允许确认系统使用用户定义错误代码来进一步确定 AR 或 AE 型确认，这一字段通常代替 MSA-3—文本信息。

Use of *MSA-3-text message* and *MSA-6-error condition* are deprecated in favor of *ERR-1-Error code and location*. The ERR segment allows for richer descriptions of the erroneous conditions.

热衷于 *ERR-1-出错代码及位置* 的人强烈反对对 *MSA-3-文本信息* 和 *MSA-6-出错情况* 的使用。ERR 信息段对错误情况的描述更为丰富。

The Message Error Condition codes are defined by [HL7 Table 0357 - Message error condition codes](#).

信息出错情况代码见 [HL7 表 0357 - 信息出错情况代码](#)

HL7 表 0357 - 信息出错情况代码

Error Condition Code 出错情况代码	Error Condition Text 出错情况文本	Description/Comment 描述/说明
Success 成功		
0	Message accepted 信息被接受	Success. Optional, as the AA conveys success. Used for systems that must always return a status code. 成功。可选，即 AA 传输成功，用于必须返回一状态代码的系统中
Errors 出错		
100	Segment sequence error 信息系列号出错	The message segments were not in the proper order, or required segments are missing. 信息中的信息段的顺序不正确，或者必须的信息段丢失。
101	Required field missing 必须的字段丢失	A required field is missing from a segment 某一信息段的必须字段丢失
102	Data type error 数据类型出错	The field contained data of the wrong data type, e.g. an NM field contained "F00". 字段包含有错误的数据类型。比如：一数值（NM）字段包含“F00”
103	Table value not found 未发现相应的表格中的取值	A field of data type ID or IS was compared against the corresponding table, and no match was found. 将一数据类型为 ID 或 IS 的字段于相应的取值表格进行比较，未发现匹配的取值。
Rejection 拒绝		
200	Unsupported message type 不支持的信息类型	The Message Type is not supported. 此信息类型不被支持

Error Condition Code 出错情况代码	Error Condition Text 出错情况文本	Description/Comment 描述/说明
201	Unsupported event code 不支持的事件代码	The Event Code is not supported. 此事件代码不被支持
202	Unsupported processing id 不被支持的处理 ID 号	The Processing ID is not supported. 此处理 ID 号不被支持
203	Unsupported version id 不被支持的版本 ID 号	The Version ID is not supported. 此版本 ID 号不被支持
204	Unknown key identifier 不认识的关键标识符	The ID of the patient, order, etc., was not found. Used for transactions <i>other than</i> additions, e.g. transfer of a non-existent patient.  未发现病人、预定等的 ID 号。用于对病人的处理时而不是添加病人，比如：试图传输一个不存在的病人的数据。
205	Duplicate key identifier 关键标识符出现重复	The ID of the patient, order, etc., already exists. Used in response to addition transactions (Admit, New Order, etc.).  病人、预定等的 ID 号已经存在。用于添加病人的操作中（如：入院，新预定等）
206	Application record locked 应用程序纪录锁定	The transaction could not be performed at the application storage level, e.g. database locked.  在程序进行存储工作时，处理不能被执行。如：数据库被锁定。
207	Application internal error 应用程序内部错误	A catchall for internal errors not explicitly covered by other codes.  以上错误代码不能覆盖的其他内部错误

### 2.8.9 MSH - message header segment

#### MSH-信息头信息段

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

MSH 信息段定义了信息的目的、源头、目的地以及其他信息中的特定语法。

HL7 Attribute Table - MSH - Message Header

HL7 属性表 - MSH - 信息头

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME 元素名称
1	1	ST	R			00001	Field Separator 字段分隔符
2	4	ST	R			00002	Encoding Characters 编码字符
3	180	HD	0		<a href="#">0361</a>	00003	Sending Application

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME
							元素名称
4	180	HD	0		<a href="#">0362</a>	00004	发送应用程序 Sending Facility 发送设备
5	180	HD	0		<a href="#">0361</a>	00005	Receiving Application 接收应用程序
6	180	HD	0		<a href="#">0362</a>	00006	Receiving Facility 接收设备
7	26	TS	R			00007	Date/Time Of Message 信息的日期/时间
8	40	ST	0			00008	Security 保密性
9	13	CM	R		<a href="#">0076/0003</a>	00009	Message Type 信息类型
10	20	ST	R			00010	Message Control ID 信息控制 ID 号
11	3	PT	R			00011	Processing ID 处理 ID 号
12	60	VID	R		<a href="#">0104</a>	00012	Version ID 版本 ID 号
13	15	NM	0			00013	Sequence Number 系列号
14	180	ST	0			00014	Continuation Pointer 连续指针
15	2	ID	0		<a href="#">0155</a>	00015	Accept Acknowledgment Type 接受确认类型
16	2	ID	0		<a href="#">0155</a>	00016	Application Acknowledgment Type 应用程序确认类型
17	3	ID	0		<a href="#">0399</a>	00017	Country Code 国家代码
18	16	ID	0	Y	<a href="#">0211</a>	00692	Character Set 字符集
19	250	CE	0			00693	Principal Language Of Message 信息的主要语言
20	20	ID	0		<a href="#">0356</a>	01317	Alternate Character Set Handling Scheme 操作规划另一字符集
21	10	ID	0	Y	<a href="#">0449</a>	01598	Conformance Statement ID 一致性申明 ID 号

### 2.8.9.1 MSH field definitions

MHS 字段定义

### 2.8.9.2 MSH-1 Field separator (ST) 00001

MSH-1 字段分隔符 (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).



定义：此字段为信息段 ID 号于事实第一字段—*MSH-2 编码字符*的分隔符。它执行分隔符的功能并且定义了信息中其他部分的分隔符。建议取值为|，（ASCII 值为：124）

### 2.8.9.3 MSH-2 Encoding characters (ST) 00002

#### MSH-2 编码字符 (ST) 00002

Definition: This field contains the four characters in the following order: the component separator, repetition separator, escape character, and subcomponent separator. Recommended values are ^~\& (ASCII 94, 126, 92, and 38, respectively). See Section 2.8, “**MESSAGE DELIMITERS.**”

定义：此字段按顺序包含了以下四个字符：组件分隔符、重复分隔符、Escape 字符，以及子组件分隔符。建议取值为“^~\& ”（ASCII 取值分别为：94，126，92 和 38）。见 2.8 节，“信息分隔符”。

### 2.8.9.4 MSH-3 Sending application (HD) 00003

#### MSH-3 发送应用程序 (HD) 00003

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

Definition: This field uniquely identifies the sending application among all other applications within the network enterprise. The network enterprise consists of all those applications that participate in the exchange of HL7 messages within the enterprise. Entirely site-defined. [User-defined Table 0361-Sending/receiving application](#) is used as the user-defined table of values for the first component.

定义：此字段唯一标定了整个单位网络工作（程序）中的（信息）发送应用程序，网络作业（程序）包括网络中参与 HL7 信息交换的所有应用程序。这个字段完全是由地点而定的。[用户定义表 0361-发送/接收应用程序](#)为其第一个组件的用户定义取指表。

User-defined Table 0361 - Sending/receiving application

用户定义表 0361 - 发送接收应用程序

Value 取值	Description 说明
	No suggested values defined 无建议值

**Note:** By site agreement, implementors may continue to use [User-defined Table 0300 - Namespace ID](#) for the first component.

**注：**根据场合协定，实际操作可以继续使用用户定义表 [0300 - 名称空间 ID](#) 作为其第一组件的取值。

### 2.8.9.5 MSH-4 Sending facility (HD) 00004

#### MSH-4 发送设备 (HD) 00004

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

Definition: This field further describes the sending application, *MSH-3-sending application*. With the promotion of this field to an HD data type, the usage has been

broadened to include not just the sending facility but other organizational entities such as a) the organizational entity responsible for sending application; b) the responsible unit; c) a product or vendor's identifier, etc. Entirely site-defined. [User-defined Table 0362 - Sending/receiving facility](#) is used as the HL7 identifier for the user-defined table of values for the first component.

定义：此字段进一步描述了发送应用程序，*MSH-3-发送应用程序*。由于将此字段设置为 HD 数据类型，其使用范围不仅包括发送设备，而且包括其他组织实体，比如：a) 对发送应用程序负责的组织实体；b) 责任单位；c) 一产品或卖主标识符等等。此字段完全由不同的场合决定，[用户定义表 0362-发送/接收设备](#)为其第一个组件的用户定义取指表。

User-defined Table 0362 - Sending/receiving facility

用户定义表 0362—发送/接收设备

Value 取值	Description 说明
	No suggested values defined 无建议值

**Note:** By site agreement, implementers may continue to use [User-defined Table 0300 - Namespace ID](#) for the first component.

**注：**按场合协定，实际操作可以继续使用用户定义表 [0300 - 名称空间 ID](#) 作为其第一组件的取值。

### 2.8.9.6 MSH-5 Receiving application (HD) 00005

#### MSH-5 接收应用程序 (HD) 00005

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

Definition: This field uniquely identifies the receiving application among all other applications within the network enterprise. The network enterprise consists of all those applications that participate in the exchange of HL7 messages within the enterprise. Entirely site-defined. [User-defined Table 0361-Sending/receiving application](#) is used as the HL7 identifier for the user-defined table of values for the first component.

定义：此字段唯一标定了整个单位网络工作（程序）中的（信息）接收应用程序，网络作业（程序）包括网络中参与 HL7 信息交换的所有应用程序。这个字段完全是由地点而定的。[用户定义表 0361-发送/接收应用程序](#)为其第一个组件的用户定义取指表。

**Note:** By site agreement, implementers may continue to use [User-defined Table 0300 - Namespace ID](#) for the first component.

**注：**按场合协定，实际操作可以继续使用用户定义表 [0300 - 名称空间 ID](#) 作为其第一组件的取值。

### 2.8.9.7 MSH-6 Receiving facility (HD) 00006

#### MSH-6 接收设备 (HD) 00006

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

Definition: This field identifies the receiving application among multiple identical instances of the application running on behalf of different organizations. [User-defined](#)

[Table 0362 - Sending/receiving facility](#) is used as the HL7 identifier for the user-defined table of values for the first component. Entirely site- defined.

定义：当运行于不同组织的程序相同时，此字段标定了众多相同应用程序中的接收应用程序。[用户定义表 0362-发送/接收](#)设备为其第一个组件的用户定义取指表。此字段为完全地点、场合定义字段。

**Note:** By site agreement, implementers may continue to use [User-defined Table 0300 - Namespace ID](#) for the first component.

**注：**按场合协定，实际操作可以继续使用用户定义表 [0300 - 名称空间 ID](#) 作为其第一组件的取值。

2.8.9.8 MSH-7 Date/time of message **错误！未定义书签。** (TS) 00007

MSH-7 信息的日期/时间**错误！未定义书签。** (TS) 00007

Definition: This field contains the date/time that the sending system created the message. If the time zone is specified, it will be used throughout the message as the default time zone.

定义：此字段包含了发送系统创建信息的日期/时间。如果时间字段确定了的话，整个信息将采用这个默认时间字段。

**Note:** This field was made required in version 2.4. Messages with versions prior to 2.4 are not required to value this field. This usage supports backward compatibility.

**注：**在 2.4 版本中，这个字段是必须有的。2.4 以前的版本对这个字段不作要求。但对其的使用能与以前的版本兼容。

2.8.9.9 MSH-8 Security (ST) 00008

MSH-8 保密 (ST) 00008

Definition: In some applications of HL7, this field is used to implement security features. Its use is not yet further specified.

定义：在某些 HL7 应用程序中，此字段被用来执行保密特性。但对其的使用没有进一步的规定。

2.8.9.10 MSH-9 Message type (CM) 00009

2.8.9.11 MSH-9 信息类型 (CM) 00009

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

Definition: This field contains the message type, trigger event, and the message structure ID for the message.

定义：此字段包括信息的类型、触发事件，以及信息中的信息结构 ID 号。

The first component is the message type code defined by [HL7 Table 0076 - Message type](#). This table contains values such as ACK, ADT, ORM, ORU etc. See section 2.17.1 or Appendix A for complete listing.

第一个组件是信息类型代码，[HL7 表 0076 - 信息类型](#)对其作了规定。表中包含了 CK, ADT, ORM, ORU 等取值。完全列表详见 2.17.1 节或附录 A。

The second component is the trigger event code defined by [HL7 Table 0003 – Event type](#). This table contains values like A01, 001, R01 etc. See section 2.17.2 or Appendix A for a complete listing

第二个组件是触发事件代码，[HL7 表 0003 – 触发事件](#)对其作了规定。表中包含了诸如：A01, 001, R01 等取值。完全列表详见 2.17.2 节或附录 A。

The third component is the abstract message structure code defined by [HL7 Table 0354 – Message structure](#). This table has two columns. The first column contains the value of this code, which describes a particular HL7 “abstract message structure definition” in terms of segments, as defined in sections 2.12, “CHAPTER FORMATS FOR DEFINING HL7 MESSAGES” and 2.12.1, “HL7 abstract message syntax example”. The second column of table 0354 lists the various HL7 trigger events that use the particular abstract message definition. For example, the message structure code ADT\_A01 describes the single abstract message structure used by the trigger events A01, A04, A05, A08, A13, A14, A28 and A31. See section 2.17.3 or Appendix A for a complete listing.

第三个组件是抽象信息结构代码，[HL7 表 0354 – 信息结构](#)对其作了规定。此表有两列，第一列为代码值，即以信息段的方式描述 HL7 “抽象信息结构定义”，见 2.12 节，“定义 HL7 信息的章节格式”和 2.12.1 小节，“HL7 抽象信息语法举例”中的定义。表 0354 中的第二列列出了不同的 HL7 触发事件，这些触发事件采用了特定的抽象信息定义。例如：信息结构代码 ADT\_A01 描述了触发事件 A01, A04, A05, A08, A13, A14, A28 和 A31 采用的单一抽象信息结构。完全列表见 2.17.3 节或附录 A。

The receiving system uses this field to recognize the data segments, and possibly, the application to which to route this message. For certain queries, which may have more than a single response event type, the second component may, in the response message, vary to indicate the response event type. See the discussion of the display query variants in chapter 5. The second component is not required on response or acknowledgment messages.

接收系统利用这个字段确认数据信息段，也有可能是应用程序利用它来确认远程信息。对于特定的查询，可能存在一个以上的应答事件类型，这样，此字段的第二个组件可以一应答信息中区别指示应答事件类型。见第五章的显示查询变量的讨论。在应答信息或确认信息中第二个组件并不是必须有的。

### 2.8.9.12 MSH-10 Message control ID (ST) 00010

MSH-10 信息控制 ID 号 (ST) 00010

Definition: This field contains a number or other identifier that uniquely identifies the message. The receiving system echoes this ID back to the sending system in the Message acknowledgment segment (MSA).

定义：此字段包含了一个用于唯一对信息进行标识的数字或其他标识符。在信息确认的信息段中 (MSA)，接收系统会将此 ID 号返回给发送系统。

### 2.8.9.13 MSH-11 Processing ID (PT) 00011

MSH-11 处理 ID 号 (PT) 00011

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

Definition: This field is used to decide whether to process the message as defined in HL7 Application (level 7) Processing rules. 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.

定义：此字段是用来决定是否处理为 HL7 应用程序（第七层）的处理规则所定义的信息。其第一组件定义了此信息是一个产品、一个训练、还是一个调试系统的一部分（其有效取值参见 [HL7 表 0103 – 处理 ID 号](#)）。其第二组件是定义此信息为一个文档处理还是一个初始装载的一部分（其有效取值参见 [HL7 表 0207 – 处理模式](#)）。不同的处理模式有不同的优先权。

HL7 Table 0103 – Processing ID

HL7 表 0103 – 处理 ID 号

Value 取值	Description 说明
D	Debugging 调试
P	Production 产品
T	Training 训练

HL7 Table 0207 – Processing mode

HL7 表 0207 – 处理模式

Value 取值	Description 说明
A	Archive 文档
R	Restore from archive 从文档中恢复
I	Initial load 初始装载
T	Current processing, transmitted at intervals (scheduled or on demand) 当前处理，内部传送（预定或需要）
Not present	Not present (the default, meaning <i>current</i> processing) 缺失（默认值，表示当前处理）

2.8.9.14 MSH-12 Version ID (VID) 00012

MSH-12 版本 ID 号 (VID) 00012

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

Definition: This field is matched by the receiving system to its own version to be sure the message will be interpreted correctly. Beginning with Version 2.3.1, it has two additional “internationalization” components, for use by HL7 international affiliates. The <internationalization code> is CE data type (using the ISO country codes where appropriate) which represents the HL7 affiliate. The <internal version ID> is used if the HL7 Affiliate has more than a single ‘local’ version associated with a single US version. The <internal version ID> has a CE data type, since the table values vary for each HL7 Affiliate.

定义：此字段是接收系统用来对信息进行自身版本的匹配，以保证信息的正确解释。自 2.3.1 开始，此字段有两个附加的“国际化”组件为 HL7 国际会员所采用。此<国际化代码>是 CE 数据类型（使用相应的 ISO 国家代码）以代表 HL7 的会员。如果 HL7 的会员拥有与唯一美国版本有关的一个以上的版本，则使用<内部版本代码 ID 号>。此<内部版本代码 ID 号>是 CE 数据类型，对于不同的 HL7 会员，其取值不同。

HL7 Table 0104 - Version ID

HL7 表 0104 - 版本 ID 号

Value 取值	Description 说明	Date 日期
2.0	Release 2.0	September 1988 1988 年 9 月
2.0D	Demo 2.0	October 1988 1988 年 10 月
2.1	Release 2. 1	March 1990 1990 年 3 月
2.2	Release 2.2	December 1994 1994 年 12 月
2.3	Release 2.3	March 1997 1997 年 3 月
2.3.1	Release 2.3.1	May 1999 1999 年 5 月
2.4	Release 2.4	November 2000 2000 年 11 月

2.8.9.15 MSH-13 Sequence number (NM) 00013

MSH-13 系列号 (NM) 00013

Definition: A non- null value in this field implies that the sequence number protocol is in use. This numeric field is incremented by one for each subsequent value.

定义：如果此字段的取值为非空，则意味着此系列号的协议正在使用。这个数值字段的取值是按系列顺序依次加一。

## 2.8.9.16 MSH-14 Continuation pointer (ST) 00014

## MSH-14 连续指针 (ST) 00014

Definition: This field is used to define continuations in application-specific ways.

定义：此字段是用来定义特定应用方式的连续性。

Only the sender of a fragmented message values this field.

仅仅是分割信息的发送方对其赋值。

## 2.8.9.17 MSH-15 Accept acknowledgment type (ID) 00015

## MSH-15 (信息) 接受确认类型 (ID) 00015

Definition: This field identifies the conditions under which accept acknowledgments are required to be returned in response to this message. Required for enhanced acknowledgment mode. Refer to [HL7 Table 0155 - Accept/application acknowledgment conditions](#) for valid values.

定义：此字段用来标定（信息）接受确认的条件，信息接受确认是对（发送）信息的反应。在增强确认模式下，此字段是必须有的。有效取值参见 [HL7 表.0155 - 接受/应用程序（对信息的）确认条件](#)

## 2.8.9.18 MSH-16 Application acknowledgment type (ID) 00016

## MSH-16 应用程序确认类型 (ID) 00016

Definition: This field contains the conditions under which application acknowledgments are required to be returned in response to this message. Required for enhanced acknowledgment mode.

定义：此字段用来标定（信息）接受确认的条件，信息接受确认是对（发送）信息的反应。在增强确认模式下，此字段是必须有的。

The following table contains the possible values for *MSH-15-accept acknowledgment type* and *MSH-16-application acknowledgment type*:

下表是 *MSH-15-接受确认信息类型*和 *MSH-16-应用程序确认类型*的可能取值

HL7 Table 0155 - Accept/application acknowledgment conditions

HL7 表 0155 - 接受/应用程序（对信息的）确认条件

Value 取值	Description 说明
AL	Always 总是确认
NE	Never 从不确认

Value 取值	Description 说明
ER	Error/reject conditions only 错误/是拒绝的仅有条件
SU	Successful completion only 成功完成

**Note:** If *MSH-15-accept acknowledgment type* and *MSH-16-application acknowledgment type* are omitted (or are both null), the original acknowledgment mode rules are used.

**注:** 如果 *MSH-15-接受确认信息类型*和 *MSH-16-应用程序确认类型*都为缺失值（或两者取值都为空值），则采用原来的确认模式规则。

### 2.8.9.19 MSH-17 Country code (ID) 00017

#### MSH-17 国家代码 (ID) 00017

**Definition:** This field contains the country of origin for the message. It will be used primarily to specify default elements, such as currency denominations. The values to be used are those of ISO 3166, which are reprinted here upon written approval from ANSI.<sup>2</sup> The ISO 3166 table has three separate forms of the country code: HL7 specifies that the 3-character (alphabetic) form be used for the country code.

**定义:** 此字段包含了信息来源的国家代码。它将主要被用来确定一些默认的元素，如：当前的命名规则。其取值采用 ISO 3166 的规定，ISO 3166 取得了 ANSI 的批准，在此我们重新摘录如下。ISO 3166 表有三个互相分开的国家代码表：HL7 规定国家代码表采用 3 字符的格式（按字母顺序排列）

Refer to [HL7 Table 0399 - Country code](#) for the 3-character codes as defined by ISO 3166 table.

欲知 ISO 3166 表中所定义的 3 字符代码，请参见 [HL7 表 0399 - 国家代码](#)

HL7 Table 0399 - Country code

HL7 表 0399 - 国家代码

Value	Description
ABW	ARUBA
AFG	AFGHANISTAN
AFT	FRENCH SOUTHERN TERRITORIES
AGO	ANGOLA
AIA	ANGUILLA
ALB	ALBANIA
AND	ANDORRA
ANT	NETHERLANDS ANTILLES
ARE	UNITED ARAB EMIRATES
ARG	ARGENTINA

<sup>2</sup> Available from ISO 1 Rue de Varembe, Case Postale 56, CH 1211, Geneve, Switzerland



Value	Description
ARM	ARMENIA
ASM	AMERICAN SAMOA
ATA	ANTARCTICA
ATG	ANTIGUA AND BARBUDA
AUS	AUSTRALIA
AUT	AUSTRIA
AZE	AZERBAIJAN
BDI	BURUNDI
BEL	BELGIUM
BEN	BENIN
BFA	BURKINA FASO
BGD	BANGLADESH
BGR	BULGARIA
BHR	BAHRAIN
BHS	BAHAMAS
BIH	BOSNIA AND HERZEGOVINA
BLR	BELARUS
BLZ	BELIZE
BMU	BERMUDA
BOL	BOLIVIA
BRA	BRAZIL
BRB	BARBADOS
BRN	BRUNEI DARUSSALAM
BTN	BHUTAN
BVT	BOUVET ISLAND
BWA	BOTSWANA
CAF	CENTRAL AFRICAN REPUBLIC
CAN	CANADA
CCK	COCOS (KEELING) ISLANDS
CHE	SWITZERLAND
CHL	CHILE
CHN	CHINA
CIV	COTE D' VOIRE
CMR	CAMEROON
COD	CONGO, THE DEMOCRATIC REPUBLIC OF THE
COG	CONGO
COK	COOK ISLAND
COL	COLOMBIA
COM	COMOROS
CPV	CAPE VERDE
CRI	COSTA RICA
CUB	CUBA
CXR	CHRISTMAS ISLAND
CYM	CAYMAN ISLANDS
CYP	CYPRUS
CZE	CZECH REPUBLIC
DEU	GERMANY

Value	Description
DJI	DJIBOUTI
DMA	DOMINICA
DNK	DENMARK
DOM	DOMINICAN REPUBLIC
DZA	ALGERIA
ECU	ECUADOR
EGY	EGYPT
ERI	ERITREA
ESH	WESTERN SAHARA
ESP	SPAIN
EST	ESTONIA
ETH	ETHIOPIA
FIN	FINLAND
FJI	FIJI
FLK	FALKLAND ISLANDS (MALVINAS)
FRA	FRANCE
FRO	FAROE ISLANDS
FSM	MICRONESIA, FEDERATED STATES OF
GAB	GABON
GBR	UNITED KINGDOM
GEO	GEORGIA
GHA	GHANA
GIB	GIBRALTAR
GIN	GUINEA
GLP	GUADELOUPE
GMB	GAMBIA
GNB	GUINEA-BISSAU
GNQ	EQUATORIAL GUINEA
GRC	GREECE
GRD	GRENADA
GRL	GREENLAND
GTM	GUATEMALA
GUF	FRENCH GUIANA
GUM	GUAM
GUY	GUYANA
HKG	HONG KONG
HMD	HEARD ISLAND AND MCDONALD ISLANDS
HND	HONDURAS
HRV	CROATIA
HTI	HAITI
HUN	HUNGARY
IDN	INDONESIA
IND	INDIA
IOT	BRITISH INDIAN OCEAN TERRITORY
IRL	IRELAND
IRN	IRAN, ISLAMIC REPUBLIC OF
IRQ	IRAQ

Value	Description
ISL	ICELAND
ISR	ISRAEL
ITA	ITALY
JAM	JAMAICA
JOR	JORDAN
JPN	JAPAN
KAZ	KAZAKSTAN
KEN	KENYA
KGZ	KYRGYZSTAN
KHM	CAMBODIA
KIR	KIRIBATI
KNA	SAINT KITTS AND NEVIS
KOR	KOREA, REPUBLIC OF
KWT	KUWAIT
LAO	LAO PEOPLE' S DEMOCRATIC REPUBLIC
LBN	LEBANNON
LBR	LIBERIA
LBY	LIBYAN ARAB JAMAHIRIYA
LCA	SAINT LUCIA
LIE	LIECHTENSTEIN
LKA	SRI LANKA
LSO	LESOTHO
LTU	LITHUANIA
LUX	LUXEMBOURG
LVA	LATVIA
MAC	MACAU
MAR	MOROCCO
MCO	MONACO
MDA	MOLDOVA, REPUBLIC OF
MDG	MADAGASCAR
MDV	MALDIVES
MEX	MEXICO
MHL	MARSHALL ISLANDS
MKD	MACEDONIA, THE FORMER YUGOSLAV REPUBLIC OF
MLI	MALI
MLT	MALTA
MMR	MYANMAR
MNG	MONGOLIA
MNP	NORTHERN MARIANA ISLANDS
MOZ	MOZAMBIQUE
MRT	MAURITANIA
MSR	MONTSERRAT
MTQ	MARTINIQUE
MUS	MAURITUS
MWI	MALAWI
MYS	MALAYSIA
MYT	MAYOTTE

Value	Description
NAM	NAMIBIA
NCL	NEW CALEDONIA
NER	NIGER
NFK	NORFOLK ISLAND
NGA	NIGERIA
NIC	NICARAGUA
NIU	NIUE
NLD	NETHERLANDS
NOR	NORWAY
NPL	NEPAL
NRU	NAURU
NZL	NEW ZEALAND
OMN	OMAN
PAK	PAKISTAN
PAN	PANAMA
PCN	PITCAIRN
PER	PERU
PHL	PHILIPPINES
PLW	PALAU
PNG	PAPUA NEW GUINEA
POL	POLAND
PRI	PUERTO RICO
PRK	KOREA, DEMOCRATIC PEOPLE' S REPUBLIC OF
PRT	PORTUGAL
PRY	PARAGUAY
PYF	FRENCH POLYNESIA
QAT	QATAR
REU	REUNION
ROM	ROMANIA
RUS	RUSSIAN FEDERATION
RWA	RWANDA
SAU	SAUDI ARABIA
SDN	SUDAN
SEN	SENEGAL
SGP	SINGAPORE
SGS	SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS
SHN	SAINT HELENA
SJM	SVALBARD AND JAN MAYEN
SLB	SOLOMON ISLANDS
SLE	SIERRA LEONE
SLV	EL SALVADOR
SMR	SAN MARINO
SOM	SOMALIA
SPM	SAINT PIERRE AND MIQUELON
STP	SAO TOME AND PRINCIPE
SUR	SURINAME
SVK	SLOVAKIA

Value	Description
SVN	SLOVENIA
SWE	SWEDEN
SWZ	SWAZILAND
SYC	SEYCHELLES
SYR	SYRIAN ARAB REPUBLIC
TCA	TURKS AND CAICOS ISLANDS
TCO	CHAD
TGO	TOGO
THA	THAILAND
TJK	TAJIKISTAN
TKL	TOKELAU
TKM	TURKMENISTAN
TMP	EAST TIMOR
TON	TONGA
TTO	TRINIDAD AND TOBAGO
TUN	TUNISIA
TUR	TURKEY
TUV	TUVALU
TWN	TAIWAN, PROVINCE OF CHINA
TZA	TANZANIA, UNITED REPUBLIC OF
UGA	UGANDA
UKR	UKRAINE
UMI	UNITED STATES MINOR OUTLYING ISLANDS
URY	URUGUAY
USA	UNITED STATES
UZB	UZBEKISTAN
VAT	HOLY SEE (VATICAN CITY STATE)
VCT	SAINT VINCENT AND THE GRENADINES
VEN	VENEZUELA
VGB	VIRGIN ISLANDS, BRITISH
VIR	VIRGIN ISLANDS, U.S.
VNM	VIET NAM
VUT	VANUATU
WLF	WALLIS AND FUTUNA
WSM	SAMOA
YEM	YEMEN
YUG	YUGOSLAVIA
ZAF	SOUTH AFRICA
ZMB	ZAMBIA
ZWE	ZIMBABWE

2.8.9.20 MSH-18 Character set (ID) 00692

MSH-18 字符集 (ID) 00692

Definition: This field contains the character set for the entire message. Refer to [HL7 Table 0211 - Alternate character sets](#) for valid values.

定义：此字段包含了整个信息的字符集。其有效取值参加 [HL7 表 0211 - 不同的字符集](#)

HL7 Table 0211 - Alternate character sets

HL7 表 0211 - 不同的字符集

Value 取值	Description 说明
ASCII	The printable 7-bit ASCII character set. (This is the default if this field is omitted) 可打印的 7 位 ASCII 字符集（此为默认取值）
8859/1	The printable characters from the ISO 8859/1 Character set ISO 8859/1 字符集中的可打印字符
8859/2	The printable characters from the ISO 8859/2 Character set ISO 8859/2 字符集中的可打印字符
8859/3	The printable characters from the ISO 8859/3 Character set ISO 8859/3 字符集中的可打印字符
8859/4	The printable characters from the ISO 8859/4 Character set ISO 8859/4 字符集中的可打印字符
8859/5	The printable characters from the ISO 8859/5 Character set ISO 8859/5 字符集中的可打印字符
8859/6	The printable characters from the ISO 8859/6 Character set ISO 8859/6 字符集中的可打印字符
8859/7	The printable characters from the ISO 8859/7 Character set ISO 8859/7 字符集中的可打印字符
8859/8	The printable characters from the ISO 8859/8 Character set ISO 8859/8 字符集中的可打印字符
8859/9	The printable characters from the ISO 8859/9 Character set ISO 8859/9 字符集中的可打印字符
ISO IR14	Code for Information Exchange (one byte) (JIS X 0201-1976). Note that the code contains a space, i.e. "ISO IR14". 信息交换代码（一个字节）(JIS X 0201-1976)。注意此代码中含有一个空格，如：“ISO IR14”
ISO IR87	Code for the Japanese Graphic Character set for information interchange (JIS X 0208-1990), Note that the code contains a space, i.e. "ISO IR87". 代表信息互换的日本图形字符集(JIS X 0208-1990)，注意此代码含有一个空格，如：“ISO IR87”
ISO IR159	Code of the supplementary Japanese Graphic Character set for information interchange (JIS X 0212-1990). Note that the code contains a space, i.e. "ISO IR159". 代表信息互换的日本图形补充字符集(JIS X 0212-1990)。注意此代码含有一个空格，如：“ISO IR159”

Value	Description
取值	说明
UNICODE	The world wide character standard from ISO/IEC 10646-1-19933 来自 ISO/IEC 10646-1-19934 的全世界范围的字符标准

**Note:** The field separator character must still be chosen from the printable 7-bit ASCII character set.

**注:** 此字段的分隔符仍必须选用可打印的 7 位 ASCII 字符集中的字符

The repetitions of this field to specify different character sets apply only to fields of the, FT, ST, and TX data types.

对此字段的重复是为了指定不同的字符集，以仅限于使用于 FT, ST, 以及 TX 数据类型的字段。

The field *MSH-18-character set* is an optional, repeating field of data type ID, using IDs outlined in [HL7 Table 0211 - Alternate character sets](#) (or equivalents from "ISO 2375").

*MSH-18-字符集* 字段是一个可选的、可重复的、ID 数据类型的字段，是用 [HL7 表 0211 - 不同的字符集](#)（或者可等同的使用“ISO 2375”）规定的 ID 来指定。

- if the field is not valued, the default single-byte character set (ASCII ("ISO IR6")) should be assumed. No other character sets are allowed in the message.
- 如果此字段没有取值，则假定采用默认的单字节字符集 (ASCII ("ISO IR6")), 这样信息中就不允许使用其他的字符集。
- if the field repeats, but the first element is NULL (i.e., present but unvalued), the single-byte ASCII ("ISO IR6") is assumed as the default character set.
- 如果此字段进行了重复，但其第一个元素（亦即字段）取值为空值（比如：这个字段存在但没有取值），则假定采用默认的单字节字符集 (ASCII ("ISO IR6"))。
- if the sequence is present and the first element is specified, this character set is regarded as the default character set for the message. This must be a single-byte character set (i.e., "ISO IR6", "ISO IR13", "ISO IR14", "ISO IR100", etc.).
- 如果提供了几个这样的字段，而且第一个元素（字段）也有相应的取值，那么这个字符集就成为信息采用的默认字符集。但这必须是单字节的字符集（比如：“ISO IR6”、“ISO IR13”、“ISO IR14”、“ISO IR100”，等等）。
- elements in the remainder of the sequence (i.e., elements 2..n) are alternate character sets that may be used. These may include multi-byte character sets (i.e., JIS X 0208).

<sup>3</sup> Available from The Unicode Consortium, P.O. Box 700519, San Jose, CA 95170-0519. See <http://www.unicode.org/unicode/consortium/consort.html>

<sup>4</sup> Available from The Unicode Consortium, P.O. Box 700519, San Jose, CA 95170-0519. See <http://www.unicode.org/unicode/consortium/consort.html>

- 这个（字段）系列的其他元素（字段）（比如：元素 2—n）是指定可以使用的其他不同的字符集。这些字符集可能包含了多字节的字符集（如：JIS X 0208）。
- the default character set should always be a single-byte character set. It should always have "ISO IR6" (ISO 646) or "ISO IR14" (JIS X 0201-1976) in the G0 area.
- 默认的字符集总是单字节字符集，且在 G0 地区，它应该总采用"ISO IR6" (ISO 646) 或者 "ISO IR14" (JIS X 0201-1976)。

### 2.8.9.21 MSH-19 Principal language of message (CE) 00693

#### MSH-19 信息采用的主要语言 (CE) 00693

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

Definition: This field contains the principal language of the message. Codes come from ISO 639.

定义：此字段规定了信息采用的主要语言。其代码来自 ISO 639。

### 2.8.9.22 MSH-20 Alternate character set handling scheme (ID) 01317

#### MSH-20 对不同字符集的操作方案 (ID) 01317

Definition: When any alternative character sets are used (as specified in the second or later components of *MSH-18 character sets*), and if any special handling scheme is needed, this component is to specify the scheme used, according to [HL7 Table 0356- Alternate character set handling scheme](#) as defined below:

定义：当（信息中）使用不同的字符集时（亦即 *MSH-18* 字符集的第二个或后面的组件作了相应的规定），而且如果需要特定的操作方案的话，这个组件是用来定义操作方案的，相应的取值见下表 [HL7 表 0356- 对不同字符集的操作方案](#)。

HL7 Table 0356 - Alternate character set handling scheme

HL7 表 0356 - 对不同字符集的操作方案

Value 取值	Description 说明
ISO 2022-1994	<p>This standard is titled "Information Technology - Character Code Structure and Extension Technique". This standard specifies an escape sequence from basic one byte character set to specified other character set, and vice versa. The escape sequence explicitly specifies what alternate character set to be evoked. Note that in this mode, the actual ASCII escape character is used as defined in the referenced ISO document. As noted in 1.6.1., escape sequences to/from alternate character set should occur within HL7 delimiters. In other words, HL7 delimiters are basic one byte characters only, and just before and just after delimiters, character encoding status should be the basic one byte set.</p> <p>此标准被命名为“信息技术—字符代码结构与扩展技术”。自标准指定了从基本的单字节字符集到特定的其他字符集的 Escape 系列，反之亦然。Escape 系列清晰的定义了什么字符集将被激活。注意，在此模式下，对实际上的 ASCII 的 Escape 字符的使用时采用 ISO 文档中的规定。1.6.1 节中已注明，来自不同的字符集中的 Escape 系列应出现在 HL7 分隔符中，换句话说，HL7 分隔符仅仅是基本的单字节字符，且对紧挨分隔符的字符而言，其字符编码状态应该是单子符</p>



Value	Description
取值	说明
2.3	<p>The character set switching mode specified in HL7 2.3, sections 2.8.28.6.1, and 2.9.2. Note that the escape sequences used in this mode do not use the ASCII "esc" character. They are "HL7 escape sequences" as defined in HL7 2.3, sec. 2.9 as defined in ISO 2022-1994 (Also, note that sections 2.8.28.6.1 and 2.9.2 in HL7 2.3 correspond to sections 2.8.31.6.1 and 2.9.2 in HL7 2.4.)</p> <p>HL7 的 2.3 版本中的 2.8.28.6.1 节,以及 2.9.2 节指定了字符集的切换模式。注意,在此模式下,Escape 系列并不使用 ASCII 中的“ESC”字符,而是定义在 HL7 2.3 版本的 2.9 节中的“Escape 系列”这个定义与 ISO 2022-1994 一致。(另请注意:HL7 2.3 版本中的 2.8.28.6.1 和 2.9.2 节对应于 HL7 2.4 版本中的 2.8.31.6.1 和 2.9.2 节。</p>
<null>	<p>This is the default, indicating that there is no character set switching occurring in this message.</p> <p>这表示默认值。表明在整个信息中没有字符集的切换。</p>

### 2.8.9.23 MSH-21 Conformance statement ID (ID) 01598

#### MSH-21 一致性陈述 ID 号 (ID) 01598

Definition: Sites may use this field to assert adherence to a Conformance Statement published by HL7 or by a site. Conformance Statements contain detailed explanations of grammar, syntax, and usage for a particular message or set of messages. Examples of the use of Conformance Statements appear in Chapter 5, "Query."

定义: 地方(终端)可以使用这个字段来申明自己对 HL7(中心)或地方颁布的一致性陈述的忠诚。一致性陈述包括对基本语法、句法、特定信息及信息集的使用的解释。第五章,“查询”章节中有一致性陈述的使用范例。

Repetition of this field allows more flexibility in creating and naming conformance statements. For example, the first repetition could reference a standard conformance statement, and the second, just some changes to it.

对此字段进行重复将使得创建和命名一致性陈述更加灵活。例如:第一各字段可以参考标准的一致性陈述,而第二个则可以对第一个稍加改变。

Values for HL7-standard conformance statements appear in [HL7 Table 0449 - Conformance statements](#) as defined below.

下表 [HL7 表 0449 - 一致性陈述](#) 规定了标准的一致性陈述的取值。

HL7 Table 0449 - Conformance statements

HL7 表 0449 - 一致性陈述

Value	Description
取值	说明

**Note:** As HL7 technical committees ballot conformance statements, table 449 will be populated with their identifiers. No identifiers have been issued as of v 2.4. As with any HL7 table, this table may be extended with site-defined identifiers.

**注:** 根据 HL7 技术委员会投票决定, 一致性陈述, 带有标识符的表 499 将被公布。现在的 2.4 版本还没有颁布相应的标识。地方可以就这个表进行扩展, 提出地方定义的标识符。

### 2.8.10 NTE – notes and comments segment

#### NTE – 注意提醒和说明信息段

The NTE segment is defined here for inclusion in messages defined in other chapters. It is commonly used for sending notes and comments.

此处对 NTE 信息段的定义适用于其他章节所定义的信息。它一般用于发送注意提醒和对信息的说明。

HL7 Attribute Table – NTE – Notes and Comments

HL7 属性表- NTE – 注意提醒和说明

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME 元素名称
1	4	SI	0			00096	Set ID - NTE 设置 NTE ID 号
2	8	ID	0		<a href="#">0105</a>	00097	Source of Comment 说明的来源
3	65536	FT	0	Y		00098	Comment 具体的说明
4	250	CE	0		<a href="#">0364</a>	01318	Comment Type 说明的类型

#### 2.8.10.1 NTE field definitions

##### NTE 字段定义

#### 2.8.10.2 NTE-1 Set ID – NTE (SI) 00096

##### NTE-1 设置 NTE ID 号 (SI) 00096

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

**定义:** 此字段用于信息中含有多个 NTE 信息段的情况。其数据在应用程序信息定义中有相应的描述。

#### 2.8.10.3 NTE-2 Source of comment (ID) 00097

##### NTE-2 说明的来源 (ID) 00097

**Definition:** This field is used when source of comment must be identified. This table may be extended locally during implementation. Refer to [HL7 Table 0105 – Source of comment](#) for valid values.

**定义:** 此字段用于说明来源必须指定的情况, 在实际应用中, 地方可就其取指表进行扩展, 其有效取值参见 [HL7 表 0105 – 说明的来源](#)

HL7 Table 0105 – Source of comment

HL7 表 0105 – 说明的来源

Value 取值	Description 说明
L	Ancillary (filler) department is source of comment 说明的来源为辅助部门
P	Orderer (placer) is source of comment 说明的来源为主导部门
0	Other system is source of comment 说明的来源为其他的系统

## 2.8.10.4 NTE-3 Comment (FT) 00098

## NTE-3 具体说明 (FT) 00098

Definition: This field contains the comment contained in the segment.

定义：此字段为说明信息段的说明内容。

**Note:** In the current HL7 version, this is a FT rather than a TX data type. Since there is no difference between a FT data type without any embedded formatting commands, and a TX data type, this change is compatible with the previous version.

**注：**在目前的 HL7 版本中，这是一个 FT 而不是 TX 数据类型。既然不含有嵌入的格式命令的 FT 数据类型和 TX 数据类型没有什么区别，那么这一变化能与以前的版本兼容。

## 2.8.10.5 NTE-4 Comment type (CE) 01318

## NTE-4 说明的类型 (CE) 01318

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

Definition: This field contains a value to identify the type of comment text being sent in the specific comment record. Refer to [User-defined Table 0364 – Comment type](#) for suggested values.

定义：此字段的取值指定在一特定的说明纪录中说明文本的类型，对其取值的建议见 用户定义表 [0364 – 说明的类型](#)

User-defined Table 0364 – Comment type

用户定义表 0364 – 说明的类型

Value 取值	Description 说明
PI	Patient Instructions 患者指南

Value 取值	Description 说明
AI	Ancillary Instructions 辅助指南
GI	General Instructions 一般的指南
1R	Primary Reason 主要原因
2R	Secondary Reason 第二原因
GR	General Reason 一般原因
RE	Remark 评论
DR	Duplicate/Interaction Reason 复制/交互原因

**Note:** A field already exists on the NTE record that identifies the Sources of Comment (e.g., ancillary, placer, other). However some applications need to support other types of comment text (e.g., instructions, reason, remarks, etc.). A separate NTE segment can be used for each type of comment (e.g., instructions are on one NTE and remarks on another NTE).

**注：**在 NTE 纪录中已有一个字段标识说明的来源（比如：辅助部门、主导部门，其他部门），然而，有些应用程序需要支持其它说明文本的类型（比如：指南、原因、评论等等），这样，不同类型的说明采用独立的 NTE 信息段（比如：指南在一个 NTE 信息段中，而评论在另一个 NTE 信息段中）。

2.9 MISCELLANEOUS HL7 TABLES USED ACROSS ALL CHAPTERS

所有章节使用的 HL7 混合表格

2.9.1 Message type table

信息类型表

HL7 Table 0076 – Message type

HL7 表 0076 – 信息类型

Message 信息	Description 说明	Chapter 章节
ACK	General acknowledgment message 一般确认信息	2

Message 信息	Description 说明	Chapter 章节
ADR	ADT response ADT 应答	3
ADT	ADT message ADT 信息	3
BAR	Add/change billing account 添加/改变账号	6
CRM	Clinical study registration message 临床研究注册信息	7
CSU	Unsolicited study data message 主动研究数据信息	7
DFT	Detail financial transactions 明细财务交易	6
DOC	Document response 文档应答	9
DSR	Display response 显示应答	5
EAC	Automated equipment command message 自动设备命令信息	13
EAN	Automated equipment notification message 自动设备通知信息	13
EAR	Automated equipment response message 自动设备应答信息	13
EDR	Enhanced display response 增强显示应答	2
EQQ	Embedded query language query 嵌入查询语言查询	2
ERP	Event replay response 事件显示应答	2
ESR	Automated equipment status update acknowledgment message 自动设备状态更新确认信息	13
ESU	Automated equipment status update message 自动设备状态更新信息	13
INR	Automated equipment inventory request message 自动设备库存请求信息	13

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Message 信息	Description 说明	Chapter 章节
INU	Automated equipment inventory update message 自动设备库存更新信息	13
LSR	Automated equipment log/service request message 自动设备日志/服务请求信息	13
LSU	Automated equipment log/service update message 自动设备日志/服务更新信息	13
MCF	Delayed Acknowledgment (Retained for backward compatibility only) 延迟确认（仅仅为向低版本兼容而保留）	2
MDM	Medical document management 医学文档管理	9
MPD	Master files delayed application acknowledgment 主文件延迟应用程序确认	8
MPK	Master files application acknowledgment 主文件应用程序确认	8
MPN	Master files notification 主文件通知	8
MPQ	Master files query 主文件查询	8
MFR	Master files response 主文件应答	8
NMD	Application management data message 应用程序管理数据信息	14
NMQ	Application management query message 应用程序管理查询信息	14
NMR	Application management response message 应用程序管理应答信息	14
OMD	Dietary order 餐饮预定	4
OMG	General clinical order message 一般临床预定信息	4
OML	Laboratory order message 化验室预定信息	4
OMN	Non-stock requisition order message 非库存请求预订信息	4

Message 信息	Description 说明	Chapter 章节
OMP	Pharmacy/treatment order message 药品/治疗预订信息	4
OMS	Stock requisition order message 库存请求预订信息	4
OMS	Stock requisition order message 库存请求预订信息	4
ORD	Dietary order acknowledgment message 餐饮预订确认信息	4
ORF	Query for results of observation 观察结果查询	7
ORG	General clinical order acknowledgment message 一般临床预订确认信息	4
ORL	Laboratory acknowledgment message (unsolicited) 化验室确认信息（主动）	7
ORM	Pharmacy/treatment order message 药品/治疗预订信息	4
ORN	Non-stock requisition - General order acknowledgment message 非库存请求—一般预订确认信息	4
ORP	Pharmacy/treatment order acknowledgment message 药品/治疗预订确认信息	4
ORR	General order response message response to any ORM 对任何 ORM 进行应答的一般预订应答信息	4
ORS	Stock requisition - Order acknowledgment message 库存请求—预订确认信息	4
ORU	Unsolicited transmission of an observation message 对观察主动传输的信息	7
OSQ	Query response for order status 预订状态查询应答	4
OSR	Query response for order status 预订状态查询应答	4
OUL	Unsolicited laboratory observation message 主动化验观察信息	7
PEX	Product experience message 产品经验信息	7

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Message 信息	Description 说明	Chapter 章节
PGL	Patient goal message 患者目标信息	12
PIN	Patient insurance information 患者保险情报	11
PMU	Add personnel record 添加个人纪录	15
PPG	Patient pathway message (goal-oriented) 患者路径信息（目标方向）	12
PPP	Patient pathway message (problem-oriented) 患者路径信息（问题方向）	12
PPR	Patient problem message 患者问题信息	12
PPT	Patient pathway goal-oriented response 患者目标方向路径应答	12
PPV	Patient goal response 患者目标应答	12
PRR	Patient problem response 患者问题应答	12
PTR	Patient pathway problem-oriented response 患者问题方向路径应答	12
QBP	Query by parameter 按参数查询	5
QCK	Deferred query 延迟查询	2
QCN	Cancel query 取消查询	5
QRY	Query, original mode 查询，原来的模式	3
QSB	Create subscription 创建处方	5
QSX	Cancel subscription/acknowledge message 取消处方/确认信息	5
QVR	Query for previous events 前一个事件查询	5



Message 信息	Description 说明	Chapter 章节
RAR	Pharmacy/treatment administration information 药品/治疗管理情报	4
RAS	Pharmacy/treatment administration message 药品/治疗管理信息	4
RCI	Return clinical information 返回临床情报	11
RCL	Return clinical list 返回临床清单	11
RDE	Pharmacy/treatment encoded order message 药品/治疗编码预订信息	4
RDR	Pharmacy/treatment dispense information 药品/治疗分发情报	4
RDS	Pharmacy/treatment dispense message 药品/治疗分发信息	4
RDY	Display based response 基于应答的显示	5
REF	Patient referral 患者提名	11
RER	Pharmacy/treatment encoded order information 药品/治疗编码预订情报	4
RGR	Pharmacy/treatment dose information 药品/治疗剂量情报	4
RGV	Pharmacy/treatment give message 药品/治疗供给信息	4
ROR	Pharmacy/treatment order response 药品/治疗预订应答	4
RPA	Return patient authorization 返回病人授权	11
RPI	Return patient information 返回病人情报	11
RPL	Return patient display list 返回病人显示清单	11
RPR	Return patient list 返回病人订单	11

## Chapter 2: Control

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Message 信息	Description 说明	Chapter 章节
RQA	Request patient authorization 请求患者授权	11
RQC	Request clinical information 请求临床情报	11
RQI	Request patient information 请求患者情报	11
RQP	Request patient demographics 请求患者人口统计学情报	11
RQQ	Event replay query 事件显示查询	2
RRA	Pharmacy/treatment administration acknowledgment message 药品/治疗管理确认信息	4
RRD	Pharmacy/treatment dispense acknowledgment message 药品/治疗分发确认信息	4
RRE	Pharmacy/treatment encoded order acknowledgment message 药品/治疗编码预订确认信息	4
RRG	Pharmacy/treatment give acknowledgment message 药品/治疗供给确认信息	4
RRI	Return referral information 返回提名情报	11
RSP	Segment pattern response] 信息段样式应答	5
RTB	Tabular response 列表应答	5
SIU	Schedule information unsolicited 主动的时间表情报	10
SPQ	Stored procedure request 库存手续请求	2
SQM	Schedule query message 时间表查询信息	10
SQR	Schedule query response 时间表查询应答	10
SRM	Schedule request message 时间表请求信息	10

Message 信息	Description 说明	Chapter 章节
SRR	Scheduled request response 时间表请求应答	10
SSR	Specimen status request message 样品状态请求信息	13
SSU	Specimen status update message 样品状态更新信息	13
SUR	Summary product experience report 总结产品经验报告	7
TBR	Tabular data response 列表数据应答	2
TCR	Automated equipment test code settings request message 自动设备测试代码的设置请求信息	13
TCU	Automated equipment test code settings update message 自动设备测试代码的设置更新信息	13
UDM	Unsolicited display update message 主动显示更新信息	2
VQQ	Virtual table query 虚拟表格查询	2
VXQ	Query for vaccination record 疫苗接种纪录查询	4
VXR	Vaccination record response 疫苗接种纪录应答	4
VXU	Unsolicited vaccination record update 主动疫苗接种纪录更新	4
VXX	Response for vaccination query with multiple PID matches 多匹配 PID 疫苗接种查询应答	4

## 2.9.2 Event type table

### 事件类型表

HL7 Table 0003 - Event type

HL7 表 0003 - 事件类型

Value 取值	Description 说明
A01	ADT/ACK - Admit/visit notification ADT/ACK - 入院/看病通知
A02	ADT/ACK - Transfer a patient ADT/ACK - 转入一个患者
A03	ADT/ACK - Discharge/end visit ADT/ACK - 转出/结束一个看病
A04	ADT/ACK - Register a patient ADT/ACK - 注册一个患者
A05	ADT/ACK - Pre-admit a patient ADT/ACK - 预接收一个患者
A06	ADT/ACK - Change an outpatient to an inpatient ADT/ACK - 将门诊病人改为住院病人
A07	ADT/ACK - Change an inpatient to an outpatient ADT/ACK-将一个住院病人改为门诊病人
A08	ADT/ACK - Update patient information ADT/ACK-更新病人情报
A09	ADT/ACK - Patient departing - tracking ADT/ACK-病人离开-跟踪
A10	ADT/ACK - Patient arriving - tracking ADT/ACK-病人抵达——跟踪
A11	ADT/ACK - Cancel admit/visit notification ADT/ACK-取消入院/看病通知
A12	ADT/ACK - Cancel transfer ADT/ACK-取消转院
A13	ADT/ACK - Cancel discharge/end visit ADT/ACK-取消放弃/结束看病
A14	ADT/ACK - Pending admit ADT/ACK-未决定的入院
A15	ADT/ACK - Pending transfer

Value 取值	Description 说明
	ADT/ACK-为决定的转院
A16	ADT/ACK - Pending discharge ADT/ACK-为决定的放弃
A17	ADT/ACK - Swap patients ADT/ACK-交换病人
A18	ADT/ACK - Merge patient information (for backward compatibility only) ADT/ACK-合并病人情报（仅为向低版本兼容）
A19	QRY/ADR - Patient query QRY/ADR - 病人查询
A20	ADT/ACK - Bed status update ADT/ACK-床位状态更新
A21	ADT/ACK - Patient goes on a “leave of absence” ADT/ACK-病人开始暂时离开
A22	ADT/ACK - Patient returns from a “leave of absence” ADT/ACK-病人暂时离开后返回
A23	ADT/ACK - Delete a patient record ADT/ACK-删除一个病人纪录
A24	ADT/ACK - Link patient information ADT/ACK-连接病人情报
A25	ADT/ACK - Cancel pending discharge ADT/ACK-取消未决定的放弃
A26	ADT/ACK - Cancel pending transfer ADT/ACK-取消未决定的转院
A27	ADT/ACK - Cancel pending admit ADT/ACK-取消未决定的入院
A28	ADT/ACK - Add person information ADT/ACK-添加人员情报
A29	ADT/ACK - Delete person information ADT/ACK-删除人员情报
A30	ADT/ACK - Merge person information (for backward compatibility only) ADT/ACK-合并人员情报（仅为向低版本兼容）
A31	ADT/ACK - Update person information ADT/ACK-更新人员情报
A32	ADT/ACK - Cancel patient arriving - tracking

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Value 取值	Description 说明
	ADT/ACK-取消病人抵达—跟踪
A33	ADT/ACK - Cancel patient departing - tracking ADT/ACK-取消病人离开—跟踪
A34	ADT/ACK - Merge patient information - patient ID only <b>(for backward compatibility only)</b> ADT/ACK-合并病人情报-仅用病人的 ID 号合并（仅为向低版本兼容）
A35	ADT/ACK - Merge patient information - account number only <b>(for backward compatibility only)</b> ADT/ACK-合并病人情报-仅用账号合并（仅为向低版本兼容）
A36	ADT/ACK - Merge patient information - patient ID and account number <b>(for backward compatibility only)</b> ADT/ACK-合并病人情报-用病人的 ID 号和账号合并（仅为向低版本兼容）
A37	ADT/ACK - Unlink patient information ADT/ACK-解除病人情报链接
A38	ADT/ACK - Cancel pre-admit ADT/ACK-取消预订入院
A39	ADT/ACK - Merge person - patient ID <b>(for backward compatibility only)</b> ADT/ACK-合并人员-用病人的 ID 号（仅为向低版本兼容）
A40	ADT/ACK - Merge patient - patient identifier list ADT/ACK-合并病人-用病人的标识符列表
A41	ADT/ACK - Merge account - patient account number ADT/ACK-合并账号-用病人的账号
A42	ADT/ACK - Merge visit - visit number ADT/ACK-合并看病-用看病号
A43	ADT/ACK - Move patient information - patient identifier list ADT/ACK-移动病人情报-用病人的标识列表
A44	ADT/ACK - Move account information - patient account number ADT/ACK - 移动账号情报-病人账号
A45	ADT/ACK - Move visit information - visit number ADT/ACK - 移动看视情报-看视号
A46	ADT/ACK - Change patient ID <b>(for backward compatibility only)</b> <b>ADT/ACK - 改变病人 ID 号（仅为向低版本兼容）</b>
A47	ADT/ACK - Change patient identifier list ADT/ACK - 改变病人标识列表
A48	ADT/ACK - Change alternate patient ID <b>(for backward compatibility only)</b>

Value 取值	Description 说明
	ADT/ACK - 改变预备病人 ID 号（仅为向低版本兼容）
A49	ADT/ACK - Change patient account number ADT/ACK - 改变病人账号
A50	ADT/ACK - Change visit number ADT/ACK - 改变看视号
A51	ADT/ACK - Change alternate visit ID ADT/ACK - 改变预备看视 ID 号
A52	ADT/ACK - Cancel leave of absence for a patient ADT/ACK - 取消病人缺席离开
A53	ADT/ACK - Cancel patient returns from a leave of absence ADT/ACK - 取消病人缺席离开而返回
A54	ADT/ACK - Change attending doctor ADT/ACK - 改变主治医生
A55	ADT/ACK - Cancel change attending doctor ADT/ACK - 对改变主治医生的取消
A60	ADT/ACK - Update allergy information ADT/ACK - 更新过敏情报
A61	ADT/ACK - Change consulting doctor ADT/ACK - 更新咨询医生
A62	ADT/ACK - Cancel change consulting doctor ADT/ACK - 取消对咨询医生的改变
B01	PMU/ACK - Add personnel record PMU/ACK - 添加个人记录
B02	PMU/ACK - Update personnel record PMU/ACK - 更新个人记录
B03	PMU/ACK - Delete personnel re cord PMU/ACK - 删除个人记录
B04	PMU/ACK - Active practicing person PMU/ACK - 现行工作个人
B05	PMU/ACK - Deactivate practicing person PMU/ACK - 使工作个人无效
B06	PMU/ACK - Terminate practicing person PMU/ACK - 终止工作个人
C01	CRM - Register a patient on a clinical trial

Value 取值	Description 说明
	CRM - 在临床试验上登记病人
C02	CRM - Cancel a patient registration on clinical trial (for clerical mistakes only) CRM - 删除临床试验病人登记
C03	CRM - Correct/update registration information CRM - 更正/更新登记信息
C04	CRM - Patient has gone off a clinical trial CRM - 病人离开临床试验
C05	CRM - Patient enters phase of clinical trial CRM - 病人进入临床试验阶段
C06	CRM - Cancel patient entering a phase (clerical mistake) CRM - 病人进入临床试验阶段的取消 (出错)
C07	CRM - Correct/update phase information CRM - 更正/更新阶段信息
C08	CRM - Patient has gone off phase of clinical trial CRM - 病人一离开临床试验阶段
C09	CSU - Automated time intervals for reporting, like monthly CSU - 报告的自动时间段, 如: 月报
C10	CSU - Patient completes the clinical trial CSU - 病人完成了临床试验
C11	CSU - Patient completes a phase of the clinical trial CSU - 病人完成了临床试验的一个阶段
C12	CSU - Update/correction of patient order/result information CSU - 更新/更正病人预定/结果信息
I01	RQI/RPI - Request for insurance information RQI/RPI - 对保险信息提出请求
I02	RQI/RPL - Request/receipt of patient selection display list RQI/RPL - 请求/接收病人选择显示列表
I03	RQI/RPR - Request/receipt of patient selection list RQI/RPR - 请求/接收病人选择列表
I04	RQD/RPI - Request for patient demographic data RQD/RPI - 对病人人口学数据提出请求
I05	RQC/RCI - Request for patient clinical information RQC/RCI - 对病人临床信息提出请求
I06	RQC/RCL - Request/receipt of clinical data listing



Value 取值	Description 说明
	RQC/RCL - 请求/接收临床数据列表
I07	PIN/ACK - Unsolicited insurance information PIN/ACK - 主动保险信息
I08	RQA/RPA - Request for treatment authorization information RQA/RPA - 请求治疗授权信息
I09	RQA/RPA - Request for modification to an authorization RQA/RPA - 对授权更新的请求
I10	RQA/RPA - Request for resubmission of an authorization RQA/RPA - 请求重新发送授权
I11	RQA/RPA - Request for cancellation of an authorization RQA/RPA - 请求取消收授权
I12	REF/RRI - Patient referral REF/RRI - 病人提名
I13	REF/RRI - Modify patient referral REF/RRI - 更新病人提名
I14	REF/RRI - Cancel patient referral REF/RRI - 取消病人提名
I15	REF/RRI - Request patient referral status REF/RRI - 病人提名状态请求
J01	QCN/ACK - Cancel query/acknowledge message QCN/ACK - 取消查询/确认信息
J02	QSN/ACK - Cancel subscription/acknowledge message QSN/ACK - 取消处方/确认信息
K11	RSP - Segment pattern response RSP - 信息段模式应答
K13	RTB - Tabular response RTB - 表格化应答
K15	RDY - Display response RDY - 显示应答
K21	RSP - Get person demographics response RSP - 获取病人人口学数据应答
K22	RSP - Find candidates response RSP - 查找候选人应答
K23	RSP - Get corresponding identifiers response

Value 取值	Description 说明
	RSP - 获取相应的标识符应答
K24	RSP - Allocate identifiers response RSP - 分配标识符应答
K25	RSP - Personnel Information by Segment Response RSP - 信息段应答的个人信息
M01	MFN/MFK - Master file not otherwise specified ( <b>for backward compatibility only</b> ) MFN/MFK - 主文件，否则不指定（仅为向低版本兼容）
M02	MFN/MFK - Master file - staff practitioner MFN/MFK - 主文件-从业职员
M03	MFN/MFK - Master file - test/observation ( <b>for backward compatibility only</b> ) MFN/MFK - 主文件-检测/观察（仅为向低版本兼容）
M04	MFN/MFK - Master files charge description MFN/MFK - 主文件收费描述
M05	MFN/MFK - Patient location master file MFN/MFK - 病人定位主文件
M06	MFN/MFK - Clinical study with phases and schedules master file MFN/MFK - 具有阶段和时间进度的临床研究主文件
M07	MFN/MFK - Clinical study without phases but with schedules master file MFN/MFK - 无阶段但有时间进度的临床研究主文件
M08	MFN/MFK - Test/observation (numeric) master file MFN/MFK - 检验/观察（数值）主文件
M09	MFN/MFK - Test/observation (categorical) master file MFN/MFK - 检验/观察（分类）主文件
M10	MFN/MFK - Test /observation batteries master file MFN/MFK - 检验/观察绝对主文件
M11	MFN/MFK - Test/calculated observations master file MFN/MFK - 检验/计算观察主文件
M12	MFN/MFK - Master file notification message MFN/MFK - 主文件通知信息
N01	NMQ/NMR - Application management query message NMQ/NMR - 应用程序管理查询信息
N02	NMD/ACK - Application management data message (unsolicited) NMD/ACK - 应用程序管理数据信息（主动）
O01	ORM - Order message (also RDE, RDS, RGV, RAS)

Value 取值	Description 说明
	ORM – 预订信息 (也是 RDE, RDS, RGV, RAS)
O02	ORR - Order response (also RRE, RRD, RRG, RRA) ORR – 预订应答 (也是 RRE, RRD, RRG, RRA)
O03	OMD – Diet order OMD – 定餐
O04	ORD – Diet order acknowledgment ORD – 定餐确认
O05	OMS – Stock requisition order OMS – 库存请求的预订
O06	ORS – Stock requisition acknowledgment ORS – 库存请求的确认
O07	OMN – Non-stock requisition order OMN – 非库存请求的预订
O08	– Non-stock requisition acknowledgment ORN – 非库存请求的确认
O09	OMP – Pharmacy/treatment order OMP – 药品/治疗预订
O10	ORP – Pharmacy/treatment order acknowledgment ORP – 药品/治疗预订的确认
O11	RDE – Pharmacy/treatment encoded order RDE – 药品/治疗编码化预订
O12	RRE – Pharmacy/treatment encoded order acknowledgment RRE – 药品/治疗编码化预订的确认
O13	RDS – Pharmacy/treatment dispense RDS – 药品/治疗分配
O14	RRD – Pharmacy/treatment dispense acknowledgment RRD – 药品/治疗分配的确认
O15	RGV – Pharmacy/treatment give RGV – 药品/治疗的供给
O16	RRG – Pharmacy/treatment give acknowledgment RRG – 药品/治疗供给的确认
O17	RAS – Pharmacy/treatment administration RAS – 药品/治疗的管理
O18	RRA – Pharmacy/treatment administration acknowledgment RRA – 药品/治疗管理的确认

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Value 取值	Description 说明
O19	OMG – General clinical order OMG –一般临床预订
O20	ORG/ORL – General clinical order response ORG/ORL –一般临床预订的应答
O21	OML - Laboratory order OML –化验预订
O22	ORL - General laboratory order response message to any OML ORL –对任意 OML 的一般化验预订的应答信息
P01	BAR/ACK - Add patient accounts BAR/ACK –添加病人账号
P02	BAR/ACK - Purge patient accounts BAR/ACK –清理病人账号
P03	DFT/ACK - Post detail financial transaction DFT/ACK –邮递详细财务交易
P04	QRY/DSP – Generate bill and A/R statements QRY/DSP –产生账单及 A/R 陈述
P05	BAR/ACK – Update account BAR/ACK –更新账户
P06	BAR/ACK - End account BAR/ACK- 结束账户
P07	PEX - Unsolicited initial individual product experience report PEX –主动初始化个人工作经验报告
P08	PEX - Unsolicited update individual product experience report PEX –主动更新个人工作经验报告
P09	SUR - Summary product experience report SUR –总结工作经验报告
P10	BAR/ACK –Transmit Ambulatory Payment Classification(APC) BAR/ACK –发送流动支付分类(APC)
PC1	PPR - PC/ problem add PPR –PC/问题添加
PC2	PPR - PC/problem update PPR - PC/问题更新
PC3	PPR - PC/ problem delete PPR - PC/问题删除
PC4	QRY - PC/ problem query

Value 取值	Description 说明
	QRY - PC/问题查询
PC5	PRR - PC/ problem response PRR - PC/问题应答
PC6	PGL - PC/ goal add PGL - PC/目标添加
PC7	PGL - PC/ goal update PGL - PC/目标更新
PC8	PGL - PC/ goal delete PGL - PC/目标删除
PC9	QRY - PC/ goal query QRY - PC/目标查询
PCA	PPV - PC/ goal response PPV - PC/目标应答
PCB	PPP - PC/ pathway (problem-oriented) add PPP - PC/路径（问题定位）添加
PCC	PPP - PC/ pathway (problem-oriented) update PPP - PC/路径（问题定位）更新
PCD	PPP - PC/ pathway (problem-oriented) delete PPP - PC/路径（问题定位）删除
PCE	QRY - PC/ pathway (problem-oriented) query QRY - PC/路径（问题定位）查询
PCF	PTR - PC/ pathway (problem-oriented) query response PTR - PC/路径（问题定位）查询的应答
PCG	PPG - PC/ pathway (goal-oriented) add PPG - PC/路径（目标定位）添加
PCH	PPG - PC/ pathway (goal-oriented) update PPG - PC/路径（目标定位）更新
PCJ	PPG - PC/ pathway (goal-oriented) delete PPG - PC/路径（目标定位）删除
PCK	QRY - PC/ pathway (goal-oriented) query QRY - PC/路径（目标定位）查询
PCL	PPT - PC/ pathway (goal-oriented) query response PPT - PC/路径（目标定位）查询的应答
Q01	QRY/DSR - Query sent for immediate response QRY/DSR –发送查询以获得立即应答

Value 取值	Description 说明
Q02	QRY/QCK - Query sent for deferred response QRY/QCK –发送查询以获得延迟应答
Q03	DSR/ACK - Deferred response to a query DSR/ACK –对查询的延迟应答
Q04	EQQ – Embedded query language query EQQ –嵌入了查询语言的查询
Q05	UDM/ACK - Unsolicited display update message UDM/ACK –主动显示更新信息
Q06	OSQ/OSR - Query for order status OSQ/OSR –预订状态查询
Q07	VQQ – Virtual table query VQQ –虚拟表格查询
Q08	SPQ – Stored procedure request SPQ –存储手续请求
Q09	RQQ – event replay query RQQ –时间重放查询
Q16	QSB – Create subscription QSB –创建处方
Q17	QVR – Query for previous events QVR –原来事件查询
Q21	QBP – Get person demographics QBP-获取个人人口学数据
Q22	QBP – Find candidates QBP –查找候选人
Q23	QBP – Get corresponding identifiers QBP –获取相应标识符
Q24	QBP – Allocate identifiers QBP –分配标识符
Q25	QBP - Personnel Information by Segment Query QBP –通过信息段查询的个人信息
Q26	ROR - Pharmacy/treatment order response ROR –对药品/治疗预定的应答
Q27	RAR - Pharmacy/treatment administration information RAR –药品/治疗管理信息
Q28	RDR - Pharmacy/treatment dispense information

Value 取值	Description 说明
	RDR -药品/治疗分配信息
Q29	RER - Pharmacy/treatment encoded order information RER -药品/治疗编码化预订信息
Q30	RGR - Pharmacy/treatment dose information RGR -药品/治疗剂量信息
QNC	Varies - Query cancellation Varies -查询取消
R01	ORU/ACK - Unsolicited transmission of an observation message ORU/ACK -一观察信息的主动传输
R02	QRY - Query for results of observation QRY -观察结果查询
R03	QRY/DSR Display-oriented results, query/unsol. update <b>(for backward compatibility only) (Replaced by Q05)</b> QRY/DSR 定位显示的结果, 查询/主动更新 (仅为向低版本兼容) (被 Q05 取代)
R04	ORF -Response to query; transmission of requested observation ORF -对查询的应答, 传输被请求的观察
ROR	ROR - Pharmacy prescription order query response ROR -药品处方预订查询应答
R07	EDR - Enhanced Display Response EDR -增强显示应答
R08	TBR -Tabular Data Response TBR -表格数据应答
R09	ERP - Event Replay Response ERP -事件显示应答
R21	OUL - Unsolicited laboratory observation OUL -主动化验观察
S01	SRM/SRR - Request new appointment booking SRM/SRR -新预约请求
S02	SRM/SRR - Request appointment rescheduling SRM/SRR -预约时间改变请求
S03	SRM/SRR - Request appointment modification SRM/SRR -预约更改请求
S04	SRM/SRR - Request appointment cancellation SRM/SRR -预约取消请求
S05	SRM/SRR -Request appointment discontinuation

Value 取值	Description 说明
	SRM/SRR –预约中止请求
S06	SRM/SRR - Request appointment deletion SRM/SRR –预约删除请求
S07	SRM/SRR - Request addition of service/resource on appointment SRM/SRR –对预约添加服务/资源的请求
S08	SRM/SRR - Request modification of service/resource on appointment SRM/SRR -对预约的服务/资源进行更改的请求
S09	SRM/SRR - Request cancellation of service/resource on appointment SRM/SRR –取消预约的服务/资源的请求
S10	SRM/SRR - Request discontinuation of service/resource on appointment SRM/SRR –对预约的服务/资源进行中止的请求
S11	SRM/SRR - Request deletion of service/resource on appointment SRM/SRR -对预约的服务/资源进行删除的请求
S12	SIU/ACK - Notification of new appointment booking SIU/ACK –新预约通知
S13	SIU/ACK - Notification of appointment rescheduling SIU/ACK –改变预约时间的通知
S14	SIU/ACK - Notification of appointment modification SIU/ACK –更改预约的通知
S15	SIU/ACK - Notification of appointment cancellation SIU/ACK –取消预约的通知
S16	SIU/ACK - Notification of appointment discontinuation SIU/ACK –中止预约的通知
S17	SIU/ACK - Notification of appointment deletion SIU/ACK –删除预约的通知
S18	SIU/ACK -Notification of addition of service/resource on appointment SIU/ACK –对预约添加服务/资源的请求
S19	SIU/ACK - Notification of modification of service/resource on appointment SIU/ACK -对预约进行更改服务/资源的请求
S20	SIU/ACK - Notification of cancellation of service/resource on appointment SIU/ACK -对预约进行取消服务/资源的请求
S21	SIU/ACK - Notification of discontinuation of service/resource on appointment SIU/ACK -对预约进行中止其服务/资源的请求
S22	SIU/ACK - Notification of deletion of service/resource on appointment SIU/ACK –删除预约的服务/资源的请求



Value 取值	Description 说明
S23	SIU/ACK - Notification of blocked schedule time slot(s) SIU/ACK –有安排的时间段的通知
S24	SIU/ACK - Notification of opened ("unblocked") schedule time slot(s) SIU/ACK –空闲的时间段的通知
S25	SQM/SQR - Schedule query message and response SQM/SQR –安排查询信息与应答
S26	SIU/ACK - Notification that patient did not show up for schedule appointment SIU/ACK- 病人未在预约时到来的通知
T01	MDM/ACK - Original document notification MDM/ACK –原始文档通知
T02	MDM/ACK - Original document notification and content MDM/ACK –原始文档通知及内容
T03	MDM/ACK - Document status change notification MDM/ACK –文档状态改变通知
T04	MDM/ACK - Document status change notification and content MDM/ACK –文档状态改变通知及内容
T05	MDM/ACK - Document addendum notification MDM/ACK –文档补遗通知
T06	MDM/ACK - Document addendum notification and content MDM/ACK –文档补遗通知及内容
T07	MDM/ACK - Document edit notification MDM/ACK –文档编辑通知
T08	MDM/ACK - Document edit notification and content MDM/ACK –文档编辑通知及内容
T09	MDM/ACK - Document replacement notification MDM/ACK –文档代替通知
T10	MDM/ACK - Document replacement notification and content MDM/ACK –文档代替通知及内容
T11	MDM/ACK - Document cancel notification MDM/ACK –文档删除通知
T12	QRY/DOC -Document query QRY/DOC –文档查询
U01	ESU/ACK – Automated equipment status update ESU/ACK –自动设备状态更新
U02	ESR/ACK – Automated equipment status request

Value 取值	Description 说明
	ESU/ACK –自动设备状态请求
U03	SSU/ACK -Specimen status update SSU/ACK –样本状态更新
U04	SSR/ACK - specimen status request SSR/ACK –样本状态请求
U05	INU/ACK - Automated equipment inventory update INU/ACK -自动设备库存更新
U06	INR/ACK - Automated equipment inventory request INR/ACK - 自动设备库存请求
U07	EAC/ACK - Automated equipment command EAC/ACK - 自动设备命令
U08	EAR/ACK - Automated equipment response EAR/ACK - 自动设备应答
U09	EAN/ACK - Automated equipment notification EAN/ACK - 自动设备通知
U10	TCU/ACK - Automated equipment test code settings update TCU/ACK - 自动设备检测代码设置更新
U11	TCR/ACK - Automated equipment test code settings request TCR/ACK - 自动设备检测代码设置请求
U12	LSU/ACK - Automated equipment log/service update LSU/ACK - 自动设备日志/服务更新
U13	LSR/ACK - Automated equipment log/service request LSR/ACK - 自动设备日志/服务请求
V01	VXQ - Query for vaccination record VXQ - 疫苗接种记录查询
V02	VXX - Response to vaccination query returning multiple PID matches VXX - 可返回多PID匹配的疫苗接种查询应答。
V03	VXR - Vaccination record response VXR - 疫苗接种记录应答
V04	VXU - Unsolicited vaccination record update VXU - 主动接种疫苗记录更新
Varies	MFQ/MFR - Master files query (use event same as asking for e.g., M05 - location) MFQ/MFR - 主文件查询（使用如：M05-位置一样的请求事件）
W01	ORU - Waveform result, unsolicited transmission of requested

Value 取值	Description 说明
	information ORU - 波形结果, 对情报请求的主动传输
W02	QRF - Waveform result, response to query QRF - 波形结果, 查询应答

### 2.9.3 Message structure table

#### 信息结构标

HL7 Table 0354 - Message structure

HL7 表 0354 - 信息结构

Value 取值	Events 事件
ACK	Varies 不同事件
ADR_A19	A19
ADT_A01	A01, A04, A08, A13
ADT_A02	A02
ADT_A03	A03
ADT_A05	A05, A14, A28, A31
ADT_A06	A06, A07
ADT_A09	A09, A10, A11, A12
ADT_A15	A15
ADT_A16	A16
ADT_A17	A17
ADT_A18	A18
ADT_A20	A20
ADT_A21	A21, A22, A23, A25, A26, A27, A29, A32, A33
ADT_A24	A24
ADT_A30	A30, A34, A35, A36, A46, A47, A48, A49
ADT_A37	A37
ADT_A38	A38
ADT_A39	A39, A40, A41, A42
ADT_A43	A43, A44
ADT_A45	A45

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Value 取值	Events 事件
ADT_A50	A50, A51
ADT_A52	A52, A53, A55
ADT_A54	A54
ADT_A60	A60
ADT_A61	A61, A62
BAR_P01	P01
BAR_P02	P02
BAR_P05	P05
BAR_P06	P06
BAR_P10	P10
CRM_C01	C01, C02, C03, C04, C05, C06, C07, C08
CSU_C09	C09, C10, C11, C12
DFT_P03	P03
DOC_T12	T12
DSR_P04	P04
DSR_Q01	Q01
DSR_Q03	Q03
EAC_U07	U07
EAN_U09	U09
EAR_U08	U08
EDR_R07	R07
EQQ_Q04	Q04
ERP_R09	R09
ESR_U02	U02
ESR_U02	U02
ESU_U01	U01
INR_U06	U06
INU_U05	U05
LSU_U12	U12, U13
MDM_T01	T01, T03, T05, T07, T09, T11
MDM_T02	T02, T04, T06, T08, T10
MFD_MFA	MFA
MFK_M01	M01, M02, M03, M04, M05, M06, M07, M08, M09, M10, M11
MFN_M01	M01

Value 取值	Events 事件
MFN_M02	M02
MFN_M03	M03
MFN_M04	M04
MFN_M05	M05
MFN_M06	M06
MFN_M07	M07
MFN_M08	M08
MFN_M09	M09
MFN_M10	M10
MFN_M11	M11
MFN_M12	M12
MFQ_M01	M01, M02, M03, M04, M05, M06
MFR_M01	M01, M02, M03, M04, M05, M06
NMD_N02	N02
NMQ_N01	N01
NMR_N01	N01
OMD_003	003
OMG_019	019
OML_021	021
OMN_007	007
OMP_009	009
OMS_005	005
ORD_004	004
ORF_R04	R04
ORG_020	020
ORL_022	022
ORM_001	001
ORN_008	008
ORP_010	010
ORR_002	002
ORR_002	002
ORS_006	006
ORU_R01	R01
OSQ_Q06	Q06

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Value 取值	Events 事件
OSR_Q06	Q06
OUL_R21	R21
PEX_P07	P07, P08
PGL_PC6	PC6, PC7, PC8
PMU_B01	B01, B02
PMU_B03	B03
PMU_B04	B04, B05
PPG_PCG	PCC, PCG, PCH, PCJ
PPP_PCB	PCB, PCD
PPR_PC1	PC1, PC2, PC3
PPT_PCL	PCL
PPV_PCA	PCA
PRR_PC5	PC5
PTR_PCF	PCF
QBP_Q11	Q11
QBP_Q13	Q13
QBP_Q15	Q15
QBP_Q21	Q21, Q22, Q23, Q24, Q25
QCK_Q02	Q02
QCN_J01	J01, J02
QRY_A19	A19
QRY_P04	P04
QRY_PC4	PC4, PC9, PCE, PCK
QRY_Q01	Q01
QRY_Q02	Q02
QRY_Q26	Q26
QRY_Q27	Q27
QRY_Q28	Q28
QRY_Q29	Q29
QRY_Q30	Q30
QRY_R02	R02
QRY_T12	T12
QSB_Q16	Q16
QVR_Q17	Q17

Value 取值	Events 事件
RAS_017	017
RCI_I05	I05
RCL_I06	I06
RDE_001	001
RDR_RDR	RDR
RDS_013	013
RDY_K15	K15
REF_I12	I12, I13, I14, I15
RER_RER	RER
RGR_RGR	RGR
RGV_015	015
ROR_ROR	ROR
RPA_I08	I08, I09, I10, I11
RPI_I01	I01, I04
RPL_I02	I02
RPR_I03	I03
RQA_I08	I08, I09, I10, I11
RQC_I05	I05, I06
RQI_I01	I01, I02, I03, I07
RQP_I04	I04
RQQ_Q09	Q09
RRA_002	002
RRA_018	018
RRD_014	014
RRE_012	012
RRG_016	016
RRI_I12	I12, I13, I14, I15
RSP_K11	K11
RSP_K21	K21
RSP_K22	K22
RSP_K23	K23, K24
RTB_K13	K13
SPQ_Q08	Q08
SQM_S25	S25

Value 取值	Events 事件
SQR_S25	S25
SRM_S01	S01, S02, S03, S04, S05, S06, S07, S08, S09, S10, S11
SRR_S01	S01, S02, S03, S04, S05, S06, S07, S08, S09, S10, S11
SSR_U04	U04
SSU_U03	U03
SUR_P09	P09
SUR_P09	P09
TBR_R08	R08
TBR_R09	R09
TCU_U10	U10, U11
UDM_Q05	Q05
VQQ_Q07	Q07
VXQ_V01	V01
VXR_V03	V03
VXU_V04	V04
VXX_V02	V02
ORU_W01	W01
QRF_W02	W02

### 2.9.4 Data types table

#### 数据类型表

The LEN column in the data types table specifies the maximum length where there is an agreed upon specification across chapters

数据类型表中的 LEN 列定义了数据的最大长度，此最大长度适用于所有的章节。

HL7 Table 0440 - Data types

Value 取值	Description 描述	LEN 最大长度	Table# 表号	Comment 说明	HL7 Section Reference 参考的 HL7 章节
AD	Address 地址		0399/0190	Replaced by XAD as of v 2.3 在 2.3 版本中由 XAD 代替	2.9.1
CD	Channel definition 通道定义			For waveform data only; See Chapter 7, Section 7.16.2 for full	2.9.2



Value 取值	Description 描述	LEN 最大长度	Table# 表号	Comment 说明	HL7 Section Reference 参考的 HL7 章节
				specifications. 仅仅适用于波形数据，详细定义见第七章，7.16.2 节	
CE	Coded element 编码元素	250	0396		2.9.3
CF	Coded element with formatted values 带格式编码元素		0396		2.9.4
CK	Composite ID with check digit 核定数据与 ID 号的组合	250	0061/0363		2.9.5
CM	Composite 组合			Deprecated in v 2.3; retained for backward compatibility only. 2.3 版本中反对这一用法， 仅仅为向低版本兼容而保留。	2.9.6
CN	Composite ID number and name ID 号与名称的组合	250	0360/0297 /0363	Replaced by XCN as of v 2.3 在 2.3 版本中为 XCN 所代替	2.9.7
CNE	Coded with no exceptions 无例外的编码	250	0396		2.9.8
CP	Composite price 组合价格		0205/0298	Replaces M0 as of v 2.3. 2.3 版本中为 M0 所代替	2.9.9
CQ	Composite quantity with units 数量与单位的组合			In future versions, CQ fields should be avoided because the same data can usually be sent as two separate fields, one with the value and one with the units as a CE data type. 在将来的版本中，应避免 使用 CQ 字段，因为同一数 据能使用两部分字段传 输，采用 CE 数据类型，一 个表示数值，另一个表示	2.9.10

Value 取值	Description 描述	LEN 最大长度	Table# 表号	Comment 说明	HL7 Section Reference 参考的 HL7 章节
				单位。	
CWE	Coded with exceptions 无例外的编码	250	0396		2.9.11
CX	Extended composite ID with check digit 核定数据与 ID 号的组合扩展	250	0061/0363 /0203/		2.9.12
DLN	Driver' s license number 司机的执照号		0333		2.9.13
DR	Date/time range 日期/时间范围				2.9.14
DT	Date 日期				2.9.15
ED	Encapsulated data 压缩数据		0191/0291 /0299	Supports ASCII MIME- encoding of binary data. 支持 ASCII MIME-二进制数 据编码	2.9.16
EI	Entity identifier 实体标识		0363/0301		2.9.17
FC	Financial class 财务等级		0064		2.9.18
FN	Family name 家庭名称			Appears ONLY in the PN and other PN-containing data types (PPN, XCN, XPN). 仅在 PN 以及其他含有 PN 的数据类型 (PPN、XCN、 XPN) 中出现。	2.9.19
FT	Formatted text 格式化文本	65536			2.9.20
HD	Hierarchic designator 阶级指示符		0300/0301		2.9.21
ID	Coded values for HL7 tables HL7 表中的编码值				2.9.22

Value 取值	Description 描述	LEN 最大长度	Table# 表号	Comment 说明	HL7 Section Reference 参考的 HL7 章节
IS	Coded value for user-defined tables 用户定义表中的编码值				2.9.23
JCC	Job code/class 工作代码/类型		0327/0328		2.9.24
MA	Multiplexed array 多元数组			For waveform data only, see Chapter 7, Section 7.14.1.2. 仅仅适用于波形数据，见第七章，7.14.1.2 节	2.9.25
MO	Money 现金			Intent is that it appear only as a component of data type CP. Used independently in chapter 8, section 8.10.3. 其目的的显示 CP 数据的一部分，独立的用在第八章，8.10.3 节	2.9.26
NA	Numeric array 数值矩阵			For waveform data only, see Chapter 7, Section 7.14.1.1. 仅仅适用于波形数据，见第七章，7.14.1.1 节	2.9.27
NM	Numeric 数值				2.9.28
PL	Person location 人员位置		0302/0303 /0304/0306/0305/0307/0308		2.9.29
PN	Person name 人的姓名	48	0360	Replaced by XPN as of v 2.3 在 2.3 版本中为 XPN 所代替	2.9.30
PPN	Performing person time stamp 表示病人时间标志	250	0360/0297 /0363/0200/0061/0465/0448/0444	equivalent of an XCN joined with a TS 等同于 XCN 与 TS 的联合	2.9.31
PT	Processing type 处理类型		0103/0207		2.9.32

Value 取值	Description 描述	LEN 最大长度	Table# 表号	Comment 说明	HL7 Section Reference 参考的 HL7 章节
QIP	Query input parameter list 查询输入参数列表				2.9.33
QSC	Query selection criteria 查询选择标准		0209/0210		2.9.34
RCD	Row column definition 行列定义		0440		2.9.35
RI	Repeat interval 重复间隔		0335	For scheduling data only. See Chapter 10 仅仅适用于时间安排数据，见第十章	2.9.36
RP	Reference pointer 参考指针		0191/0291		2.9.37
SAD	Street Address 街道地址			Appears ONLY in the XAD data type. 仅仅出现在 XAD 数据类型中	2.9.38
SCV	Scheduling class value pair 时间顺序类数值配对			For scheduling data only. See Chapter 10 仅仅适用于时间顺序数据，见第十章	2.9.39
SI	Sequence ID 序列号				2.9.40
SN	Structured numeric 结构化数值				2.9.41
SRT	Sort order 排序		0397		2.9.42
ST	String 字符串	199			2.9.43
TM	Time 时间				2.9.44
TN	Telephone number 电话号码			Replaced by XTN as of v 2.3 在 2.3 版本中为 XTN 所代替	2.9.45

Value 取值	Description 描述	LEN 最大长度	Table# 表号	Comment 说明	HL7 Section Reference 参考的 HL7 章节
TQ	Timing/quantity 时间选择/数量			For detailed specifications see Chapter 4, Section 4.3. 详见第四章，4.3 节	2.9.46
TS	Time stamp 时间戳				2.9.47
TX	Text data 文本数据	65536			2.9.48
VH	Visiting hours 看病小时数		0267		2.9.49
VID	Version identifier 版本标识		0104		2.9.50
XAD	Extended address 扩展地址	250	0399/0190/0289/0288/0465	Replaces AD as of v 2.3 在 2.3 版本中为 AD 所代替	2.9.51
XCN	Extended composite ID number and name 扩展的 ID 号与名称的组合	250	360/297/363/200/61/203/465/448/444	Replaces CN as of v 2.3 在 2.3 版本中为 CN 所代替	2.9.52
XON	Extended composite name and ID number for organizations 对组织的扩展的名称与 ID 号组合	250	0204/0061/0363/0203/0465		2.9.53
XPN	Extended person name 扩展人名	250	0360/0200/0465/0448/0444	Replaces PN as of v 2.3. 在 2.3 版本中为 PN 所代替	2.9.54
XTN	Extended telecommunications number 扩展长途电话号码	250	0201/0202	Replaces TN as of v 2.3 在 2.3 版本中为 TN 所代替	2.9.55

### 2.9.5 Coding system table

#### 编码系统表

Chapter 7 is the steward for the Coding Systems table. The table is copied here for reader convenience.

第七章为编码系统表，在此对其复制是为了方便读者阅读。

User-defined Table 0396 – Coding System

用户定义表 0396 – 编码系统

Value 取值	Description 描述	Comment / Source 说明/来源	Category 类别
99zzz or L	Local general code (where z is an alphanumeric character)  地方一般编码（在此的 z 为数值字符）	Locally defined codes for purpose of sender or receiver. Local codes can be identified by L (for backward compatibility) or 99zzz (where z is an alphanumeric character).  地方为了发送与接受而定义的编码，地方的编码可以是L（向第版本兼容）或者为99zzz（在此的 z 为数值字符）	General code  一般编码
ACR	American College of Radiology finding codes  美国放射医学学院发现的编码	Index for Radiological Diagnosis Revised, 3 <sup>rd</sup> Edition 1986, American College of Radiology, Reston, VA. Reston, VA.  表示放射诊断修改版，1986 年第三版，美国放射医学学院，地址为：Index for Radiological Diagnosis Revised, 3 <sup>rd</sup> Edition 1986, American College of Radiology, Reston, VA。	Specific Non-Drug Code  特定的非药物编码
ART	WHO Adverse Reaction Terms  WHO 对有副反应的药物条款	WHO Collaborating Centre for International Drug Monitoring, Box 26, S-751 03, Uppsala, Sweden.  WHO 国际药物监督合作中心，地址为：WHO Collaborating Centre for International Drug Monitoring, Box 26, S-751 03, Uppsala, Sweden.	Drug code  药物编码
AS4	ASTM E1238/ E1467 Universal  全球的 ASTM E1238/ E1467	American Society for Testing & Materials and CPT4 (see Appendix X1 of Specification E1238 and Appendix X2 of Specification E1467).  美国检测，材料及 CPT4 协会（见附录 X1—E1238 详细说明，以及附录 X2—E1467 详细说明	Specific Non-Drug Code  特定的非药物编码
AS4E	AS4 Neurophysiology Codes  AS4 神经生理学编码	ASTM' s diagnostic codes and test result coding/grading systems for clinical neurophysiology. See ASTM Specification E1467, Appendix 2.  ASTM 诊断编码以及检测结果编码/临床神经生理学等级系统，见附录 2 中的 E1467 详细说明。	Specific Non-Drug Code  特定的非药物编码
ATC	American Type Culture Collection  美国型文化集成	Reference cultures (microorganisms, tissue cultures, etc.), related biological materials and associated data. American Type Culture Collection, 12301 Parklawn Dr, Rockville MD, 20852. (301) 881-2600. <a href="http://www.atcc.org">http://www.atcc.org</a>  参考文化（微生物，组织文化等等），相关的生物材料及关联数据，地址为：American Type Culture Collection, 12301 Parklawn Dr, Rockville MD, 20852. (301) 881-2600. <a href="http://www.atcc.org">http://www.atcc.org</a> 。	Specific Non-Drug Code  特定的非药物编码
C4	CPT-4	American Medical Association, P.O. Box 10946, Chicago IL 60610.	Specific Non-Drug Code

		美国医学协会， 地址为 American Medical Association, P.O. Box 10946, Chicago IL 60610.	特定的非药物编码
C5	CPT-5	(under development - same contact as above)  (未发展—联系方式同上)	Specific Non- Drug Code  特定的非药物编码
CAS	Chemical abstract codes  化学药物抽象编码	These include unique codes for each unique chemical, including all generic drugs. The codes do not distinguish among different dosing forms. When multiple equivalent CAS numbers exist, use the first one listed in USAN. USAN 1990 and the USP dictionary of drug names, William M. Heller, Ph.D., Executive Editor, United States Pharmacopeial Convention, Inc., 12601 Twinbrook Parkway, Rockville, MD 20852.  为每一种化学药物，包括所有的生物药物制订唯一编码。此编码 不能区分药物的不同剂型，当存在多个相同的CAS 代码时，使用 USAN (USAN 1990) 及 USP 药品名称目录列表中的第一个。  地址为: William M. Heller, Ph.D., Executive Editor, United States Pharmacopeial Convention, Inc., 12601 Twinbrook Parkway, Rockville, MD 20852.	Drug code  药物编码
CD2	CDT-2 Codes  CDT-2 编码	American Dental Association's Current Dental Terminology (CDT-2) code. American Dental Association, 211 E. Chicago Avenue,. Chicago, Illinois 60611.  美国牙医协会的当前牙医术语—CDT-2 编码。  地址为: American Dental Association's Current Dental Terminology (CDT-2) code. American Dental Association, 211 E. Chicago Avenue,. Chicago, Illinois 60611.	Specific Non- Drug Code  特定的非药物编码
CDCA	CDC Analyte Codes  CDC 分析编码	As above, for CDCM  与上述的 CDCM 相同	
CDCM	CDC Methods/Instruments Codes  CDC 方法/手段编码	Public Health Practice Program Office, Centers for Disease Control and Prevention, 4770 Buford Highway, Atlanta, GA, 30421. Also available via FTP: <a href="ftp.cdc.gov/pub/laboratory_info/CLIA">ftp.cdc.gov/pub/laboratory_info/CLIA</a> and Gopher: <a href="gopher.cdc.gov:70/11/laboratory_info/CLIA">gopher.cdc.gov:70/11/laboratory_info/CLIA</a>  疾病控制与预防中心的公共卫生实际项目办公室，  地址为: Public Health Practice Program Office, Centers for Disease Control and Prevention, 4770 Buford Highway, Atlanta, GA, 30421. Also available via FTP: <a href="ftp.cdc.gov/pub/laboratory_info/CLIA">ftp.cdc.gov/pub/laboratory_info/CLIA</a> and Gopher: <a href="gopher.cdc.gov:70/11/laboratory_info/CLIA">gopher.cdc.gov:70/11/laboratory_info/CLIA</a>	Drug code  药物编码
CDS	CDC Surveillance  CDC 监督 (编码)	CDC Surveillance Codes. For data unique to specific public health surveillance requirements. Epidemiology Program Office, Centers for Disease Control and Prevention, 1600 Clifton Rd, Atlanta, GA, 30333. (404) 639-3661.  CDC 监督编码。每一个公共卫生的监督需求的数据是唯一的。流 行病项目办公室，疾病控制与预防中心，  地址为: Epidemiology Program Office, Centers for Disease Control and Prevention, 1600 Clifton Rd, Atlanta, GA,	Specific Non- Drug Code  特定的非药物编码

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		30333. (404) 639-3661.	
CE	CEN ECG diagnostic codes CEN ECG 诊断编码	<p>CEN PT007. A quite comprehensive set of ECG diagnostic codes (abbreviations) and descriptions published as a pre-standard by CEN TC251. Available from CEN TC251 secretariat, c/o Georges DeMoor, State University Hospital Gent, De Pintelaan 185-5K3, 9000 Gent, Belgium or Jos Willems, University of Gathuisberg, 49 Herestraat, 3000 Leuven, Belgium.</p> <p>CEN PT007. 为 CEN TC251 在标准化之前出版的一套相当全面的 ECG 诊断编码 (缩写)。可从 CEN TC251 秘书处转获得。地址为:</p> <p>CEN TC251 secretariat, c/o Georges DeMoor, State University Hospital Gent, De Pintelaan 185-5K3, 9000 Gent, Belgium or Jos Willems, University of Gathuisberg, 49 Herestraat, 3000 Leuven, Belgium.</p>	Specific Non-Drug Code 特定的非药物编码
CLP	CLIP	<p>Simon Leeming, Beth Israel Hospital, Boston MA. Codes for radiology reports.</p> <p>临床报告编码。</p> <p>地址为: Simon Leeming, Beth Israel Hospital, Boston MA.</p>	Specific Non-Drug Code 特定的非药物编码
CPTM	CPT Modifier Code CPT 修正编码	<p>Available for the AMA at the address listed for CPT above. These codes are found in Appendix A of CPT 2000 Standard Edition. (CPT 2000 Standard Edition, American Medical Association, Chicago, IL).</p> <p>用于为上述的 CPT 而列出的地址中的 AMA。这些编码可在 CPT 2000 年标准版的附录 A 中找到。</p> <p>地址: (CPT 2000 Standard Edition, American Medical Association, Chicago, IL)。</p>	Specific Non-Drug Code 特定的非药物编码
CST	COSTART	<p>International coding system for adverse drug reactions. In the USA, maintained by the FDA, Rockville, MD.</p> <p>副反应药物的国际编码系统。在美国, 由 FDA, Rockville, MD 维护。</p>	Drug code 药物编码
CVX	CDC Vaccine Codes CDC 疫苗编码	<p>National Immunization Program, Centers for Disease Control and Prevention, 1660 Clifton Road, Atlanta, GA, 30333</p> <p>国家免疫项目, 疾病控制与预防中心。</p> <p>地址为: National Immunization Program, Centers for Disease Control and Prevention, 1660 Clifton Road, Atlanta, GA, 30333</p>	Drug code 药物编码
DCL	DICOM Class Label DICOM 分类标签	<p>From the Message Standards Classes table of the SNOMED-DICOM-Microglossary. College of American Pathologists, Skokie, IL, 60077-1034</p> <p>来自美国病理学者学会的 SNOMED-DICOM-Microglossary 的信息标准分类表</p> <p>地址为: Message Standards Classes table of the SNOMED-DICOM-Microglossary. College of American Pathologists, Skokie, IL, 60077-1034</p>	Specific Non-Drug Code 特定的非药物编码
DCM	DICOM modality codes DICOM 修订编码	Dean Bidgood, MD; Duke University Medical Center, Durham NC. Digital Imaging and Communications in Medicine (DICOM). From NEMA Publications PS-3.1 - PS 3.12: The	Specific Non-Drug Code



		<p>ACR-NEMA DICOM Standard. National Electrical Manufacturers Association (NEMA). Rosslyn, VA, 22209., 1992, 1993, 1995</p> <p>Dean Bidgood, MD, 杜克大学医学中心, Durham NC. 医学中数字化图像与通信 (DICOM) .</p> <p>地址为: Dean Bidgood, MD; Duke University Medical Center, Durham NC. Digital Imaging and Communications in Medicine (DICOM). From NEMA Publications PS-3.1 - PS 3.12: The ACR-NEMA DICOM Standard. National Electrical Manufacturers Association (NEMA). Rosslyn, VA, 22209., 1992, 1993, 1995</p>	特定的非药物编码
DQL	<p>DICOM Query Label</p> <p>DICOM 查询标签</p>	<p>HL7 Image Management Special Interest Group, Health Level Seven, Ann Arbor, MI.</p> <p>HL7 图像管理特定兴趣组。</p> <p>地址为: HL7 Image Management Special Interest Group, Health Level Seven, Ann Arbor, MI.</p>	<p>Specific Non-Drug Code</p> <p>特定的非药物编码</p>
E	EUCLIDES	<p>Available from Euclides Foundation International nv, Excelsiorlaan 4A, B-1930 Zaventem, Belgium; Phone: 32 2 720 90 60.</p> <p>来自: 欧几里得国际基金会</p> <p>地址为: Euclides Foundation International nv, Excelsiorlaan 4A, B-1930 Zaventem, Belgium; Phone: 32 2 720 90 60.</p>	<p>Specific Non-Drug Code</p> <p>特定的非药物编码</p>
E5	<p>Euclides quantity codes</p> <p>欧几里得数量编码</p>	<p>Available from Euclides Foundation International nv (see above)</p> <p>来自: 欧几里得国际基金会 (同上)</p>	<p>Specific Non-Drug Code</p> <p>特定的非药物编码</p>
E6	<p>Euclides Lab method codes</p> <p>欧几里得化验方法编码</p>	<p>Available from Euclides Foundation International nv, Excelsiorlaan 4A, B-1930 Zaventem, Belgium; Phone: 32 2 720 90 60.</p> <p>来自: 欧几里得国际基金会</p> <p>地址: Euclides Foundation International nv, Excelsiorlaan 4A, B-1930 Zaventem, Belgium; Phone: 32 2 720 90 60.</p>	<p>Specific Non-Drug Code</p> <p>特定的非药物编码</p>
E7	<p>Euclides Lab equipment codes</p> <p>欧几里得化验设备编码</p>	<p>Available from Euclides Foundation International nv (see above)</p> <p>来自: 欧几里得国际基金会</p> <p>(地址同上)</p>	<p>Specific Non-Drug Code</p> <p>特定的非药物编码</p>
ENZC	<p>Enzyme Codes</p> <p>酶编码</p>	<p>Enzyme Committee of the International Union of Biochemistry and Molecular Biology. Enzyme Nomenclature: Recommendations on the Nomenclature and Classification of Enzyme-Catalysed Reactions. London: Academic Press, 1992.</p> <p>国际生化与分子生物学联合会中的酶委员会。</p> <p>地址: Enzyme Nomenclature: Recommendations on the Nomenclature and Classification of Enzyme-Catalysed Reactions. London: Academic Press, 1992.</p>	<p>Specific Non-Drug Code</p> <p>特定的非药物编码</p>
FDDC	First DataBank Drug	National Drug Data File. Proprietary product of First DataBank, Inc. (800) 633-3453, or	Drug code

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	Codes 第一数据银行药物编码	<a href="http://www.firstdatabank.com">http://www.firstdatabank.com</a> . 国家药物数据文献,  地址: Proprietary product of First DataBank, Inc. (800) 633-3453, or <a href="http://www.firstdatabank.com">http://www.firstdatabank.com</a> .	药物编码
FDDX	First DataBank Diagnostic Codes 第一数据银行诊断编码	Used for drug-diagnosis interaction checking. Proprietary product of First DataBank, Inc. As above for FDDC.  用于药物诊断交互检查  地址: Proprietary product of First DataBank, Inc. As above for FDDC.	Drug code 药物编码
FDK	FDA K10	Dept. of Health & Human Services, Food & Drug Administration, Rockville, MD 20857. (device & analyte process codes).  地址为:  Dept. of Health & Human Services, Food & Drug Administration, Rockville, MD 20857. (device & analyte process codes).	Specific Non- Drug Code 特定的非药物编码
HB	HIBCC	Health Industry Business Communications Council, 5110 N. 40 <sup>th</sup> St., Ste 120, Phoenix, AZ 85018.  地址为:  Health Industry Business Communications Council, 5110 N. 40 <sup>th</sup> St., Ste 120, Phoenix, AZ 85018.	Specific Non- Drug Code
HCPCS	HCFA Common Procedure Coding System HCFA 一般程序编码系统	HCPCS: contains codes for medical equipment, injectable drugs, transportation services, and other services not found in CPT4.  HCPCS: 包含了医疗设备、注射性药物、运输服务、以及未含在 CPT4 中的其他服务的编码	Specific Non- Drug Code 特定的非药物编码
HHC	Home Health Care 家庭卫生服务	Home Health Care Classification System; Virginia Saba, EdD, RN; Georgetown University School of Nursing; Washington, DC.  家庭卫生服务分类系统  地址未: Home Health Care Classification System; Virginia Saba, EdD, RN; Georgetown University School of Nursing; Washington, DC.	Specific Non- Drug Code 特定的非药物编码
HI	Health Outcomes 卫生产出	Health Outcomes Institute codes for outcome variables available (with responses) from Stratis Health (formerly Foundation for Health Care Evaluation and Health Outcomes Institute), 2901 Metro Drive, Suite 400, Bloomington, MN, 55425-1525; (612) 854-3306 (voice); (612) 853-8503 (fax); <a href="mailto:dziegen@winternet.com">dziegen@winternet.com</a> . See examples in the Implementation Guide.  卫生产出产变量的卫生产出委员会编码, 卫生产出是对亚卫生的反应。(原为卫生服务与卫生产出委员会的基础)  地址为: 2901 Metro Drive, Suite 400, Bloomington, MN, 55425-1525; (612) 854-3306 (voice); (612) 853-8503 (fax); <a href="mailto:dziegen@winternet.com">dziegen@winternet.com</a> .  范例见应用指南	Specific Non- Drug Code 特定的非药物编码

HL7nnnn	HL7 Defined Codes where nnnn is the HL7 table number  HL7 定义的编码，此处的 nnnn 为 HL7 表号	Health Level Seven where nnnn is the HL7 table number  HL7，此处的 nnnn 为 HL7 表号	General code  一般编码
HPC	HCFA Procedure Codes (HCPCS)  HCFA 程序编码 (HCPCS)	Health Care Financing Administration (HCFA) Common Procedure Coding System (HCPCS) including modifiers. <sup>5</sup>  卫生服务筹资管理 (HCFA)，修订了的一般程序编码系统 (HCPCS)	Specific Non-Drug Code  特定的非药物编码
I10	ICD-10	World Health Publications, Albany, NY.  世界卫生组织出版社  地址为: World Health Publications, Albany, NY.	Specific Non-Drug Code  特定的非药物编码
I10P	ICD-10 Procedure Codes  ICD-10 程序编码	Procedure Coding System (ICD-10-PCS.) See <a href="http://www.hcfa.gov/stats/icd10.icd10.htm">http://www.hcfa.gov/stats/icd10.icd10.htm</a> for more information.  程序编码系统 (ICD-10-PCS.)，详细情况见： <a href="http://www.hcfa.gov/stats/icd10.icd10.htm">http://www.hcfa.gov/stats/icd10.icd10.htm</a>	Specific Non-Drug Code  特定的非药物编码
I9	ICD9	World Health Publications, Albany, NY.  世界卫生组织出版社  地址为: World Health Publications, Albany, NY.	Specific Non-Drug Code  特定的非药物编码
I9C	ICD-9CM	Commission on Professional and Hospital Activities, 1968 Green Road, Ann Arbor, MI 48105 (includes all procedures and diagnostic tests).  地址为: Commission on Professional and Hospital Activities, 1968 Green Road, Ann Arbor, MI 48105  (包括: 所有的程序和诊断检查)	Specific Non-Drug Code  特定的非药物编码
IBT	ISBT	International Society of Blood Transfusion. Blood Group Terminology 1990. VOX Sanguines 1990 58(2):152-169.  国际输血协会  地址为: International Society of Blood Transfusion. Blood Group Terminology 1990. VOX Sanguines 1990 58(2):152-169.	Specific Non-Drug Code  特定的非药物编码
IC2	ICHPPC-2	International Classification of Health Problems in Primary Care, Classification Committee of World	Specific Non-Drug Code

- 5 The HCPCS code is divided into three "levels." Level I includes the entire CPT-4 code by reference. Level II includes the American Dental Association's Current Dental Terminology (CDT-2) code by reference. Level II also includes the genuine HCPCS codes, approved and maintained jointly by the Alpha-Numeric Editorial Panel, consisting of HCFA, the Health Insurance Association of America, and the Blue Cross and Blue Shield Association. Level III are codes developed locally by Medicare carriers. The HCPCS modifiers are divided into the same three levels, I being CPT-4 modifiers, II CDT-2 and genuine HCPCS modifiers, and III being locally agreed modifiers.

The genuine HCPCS codes and modifiers of level II can be found at <http://www.hcfa.gov/stats/anhcpcdl.htm>. HCFA distributes the HCPCS codes via the National Technical Information Service (NTIS, [www.ntis.gov](http://www.ntis.gov)) and NTIS distribution includes the CDT-2 part of HCPCS Level II, but does not include the CPT-4 part (Level I). HCFA may distribute the CPT-4 part to its contractors.

		<p>Organization of National Colleges, Academies and Academic Associations of General Practitioners (WONCA), 3<sup>rd</sup> edition. An adaptation of ICD9 intended for use in General Medicine, Oxford University Press.</p> <p>主要（卫生）服务的卫生问题国际分类</p> <p>地址为：International Classification of Health Problems in Primary Care, Classification Committee of World Organization of National Colleges, Academies and Academic Associations of General Practitioners (WONCA), 3<sup>rd</sup> edition. An adaptation of ICD9 intended for use in General Medicine, Oxford University Press.</p>	特定的非药物编码
ICDO	<p>International Classification of Diseases for Oncology</p> <p>肿瘤疾病的国际分类</p>	<p>International Classification of Diseases for Oncology, 2<sup>nd</sup> Edition. World Health Organization: Geneva, Switzerland, 1990. Order from: College of American Pathologists, 325 Waukegan Road, Northfield, IL, 60093-2750. (847) 446-8800.</p> <p>肿瘤疾病的国际分类</p> <p>地址为：International Classification of Diseases for Oncology, 2<sup>nd</sup> Edition. World Health Organization: Geneva, Switzerland, 1990. Order from: College of American Pathologists, 325 Waukegan Road, Northfield, IL, 60093-2750. (847) 446-8800.</p>	<p>Specific Non-Drug Code</p> <p>特定的非药物编码</p>
ICS	ICCS	<p>Commission on Professional and Hospital Activities, 1968 Green Road, Ann Arbor, MI 48105.</p> <p>地址为：Commission on Professional and Hospital Activities, 1968 Green Road, Ann Arbor, MI 48105.</p>	<p>Specific Non-Drug Code</p> <p>特定的非药物编码</p>
ICSD	<p>International Classification of Sleep Disorders</p> <p>睡眠紊乱的国际分类</p>	<p>International Classification of Sleep Disorders Diagnostic and Coding Manual, 1990, available from American Sleep Disorders Association, 604 Second Street SW, Rochester, MN 55902</p> <p>睡眠紊乱的国际分类与编码手册</p> <p>地址为：International Classification of Sleep Disorders Diagnostic and Coding Manual, 1990, available from American Sleep Disorders Association, 604 Second Street SW, Rochester, MN 55902</p>	<p>Specific Non-Drug Code</p> <p>特定的非药物编码</p>
ISOnnnn	<p>ISO Defined Codes where nnnn is the ISO table number</p> <p>ISO 定义的编码，此处的 nnnn 指 ISO 表号</p>	<p>International Standards Organization where nnnn is the ISO table number</p> <p>国际标准化组织，此处的 nnnn 指 ISO 表号</p>	<p>General code</p> <p>一般编码</p>
IUPP	<p>IUPAC/IFCC Property Codes</p> <p>IUPAC/IFCC 属性编码</p>	<p>International Union of Pure and Applied Chemistry/International Federation of Clinical Chemistry. The Silver Book: Compendium of terminology and nomenclature of properties in clinical laboratory sciences. Oxford: Blackwell Scientific Publishers, 1995. Henrik Olesen, M.D., D.M.Sc., Chairperson, Department of Clinical Chemistry, KK76.4.2, Rigshospitalet, University Hospital of Copenhagen, DK-2200, Copenhagen.</p> <p><a href="http://inet.uni-c.dk/~qukb7642/">http://inet.uni-c.dk/~qukb7642/</a></p> <p>国际纯粹和应用化学联合会/国际临床化学联盟。</p> <p>书为（银皮包装）：Compendium of terminology and</p>	<p>Specific Non-Drug Code</p> <p>特定的非药物编码</p>

		nomenclature of properties in clinical laboratory sciences. Oxford: Blackwell Scientific Publishers, 1995. Henrik Olesen, M.D., D.M.Sc., Chairperson, Department of Clinical Chemistry, KK76.4.2, Rigshospitalet, University Hospital of Copenhagen, DK-2200, Copenhagen. <a href="http://inet.uni-c.dk/~qukb7642/">http://inet.uni-c.dk/~qukb7642/</a>	
IUPC	IUPAC/IFCC Component Codes IUPAC/IFCC 成分编码	Codes used by IUPAC/IFF to identify the component (analyte) measured. Contact Henrik Olesen, as above for IUPP. IUPAC/IFF 使用的编码以确定分析成分。IUPP 的地址同上，联系人：Henrik Olesen	Specific Non-Drug Code 特定的非药物编码
JCS	Japanese Chemistry 日本化学	Clinical examination classification code. Japan Association of Clinical Pathology. Version 8, 1990. A multiaxial code including a subject code (e.g., Rubella = 5f395, identification code (e.g., virus ab IGG), a specimen code (e.g., serum =023) and a method code (e.g., ELISA = 022) 临床化验分类编码 来源为：Japan Association of Clinical Pathology. Version 8, 1990. 为一个多层编码：包括一主代码（比如：风疹=5f395）、一辨认代码（如：病毒 ab IGG），一样本代码（如：血清=023），以及一方法代码（如：ELISA = 022）	Specific Non-Drug Code 特定的非药物编码
LB	Local billing code 地方编制的代码	Local billing codes/names (with extensions if needed). 地方编制的代码/名称（如需要可有扩展）	General code 一般编码
LN	Logical Observation Identifier Names and Codes (LOINC®) 逻辑观测标识的名称与编码 (LOINC®)	Regenstrief Institute, c/o LOINC, 1050 Wishard Blvd., 5 <sup>th</sup> floor, Indianapolis, IN 46202. 317/630-7433. Available from the Regenstrief Institute server at <a href="http://www.regenstrief.org/loinc/loinc.htm">http://www.regenstrief.org/loinc/loinc.htm</a> . Also available via HL7 file server: FTP/Gopher ( <a href="http://www.mcis.duke.edu/standards/termcode/loinclab">www.mcis.duke.edu/standards/termcode/loinclab</a> and <a href="http://www.mcis.duke.edu/standards/termcode/loinclin">www.mcis.duke.edu/standards/termcode/loinclin</a> ) and World Wide Web ( <a href="http://www.mcis.duke.edu/standards/termcode/loincl.htm">http://www.mcis.duke.edu/standards/termcode/loincl.htm</a> ). January 2000 version has identifiers, synonyms and cross-reference codes for reporting over 26,000 laboratory and related observations and 1,500 clinical measures. 来源：Regenstrief Institute, c/o LOINC, 1050 Wishard Blvd., 5 <sup>th</sup> floor, Indianapolis, IN 46202. 317/630-7433. Available from the Regenstrief Institute server at <a href="http://www.regenstrief.org/loinc/loinc.htm">http://www.regenstrief.org/loinc/loinc.htm</a> . 或来自 HL7 文件服务器：FTP/Gopher ( <a href="http://www.mcis.duke.edu/standards/termcode/loinclab">www.mcis.duke.edu/standards/termcode/loinclab</a> and <a href="http://www.mcis.duke.edu/standards/termcode/loinclin">www.mcis.duke.edu/standards/termcode/loinclin</a> ) and World Wide Web ( <a href="http://www.mcis.duke.edu/standards/termcode/loincl.htm">http://www.mcis.duke.edu/standards/termcode/loincl.htm</a> ). 2000 年 1 月的版本中有：2,600 次以上化验和相关观察，以及 1,500 次临床测量报告的标识符、同义词及交叉参考编码。	Specific Non-Drug Code 特定的非药物编码
MCD	Medicaid 穷人、伤残医疗补助制	Medicaid billing codes/names. Medicaid 编码/名称	Specific Non-Drug Code

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	度		特定的非药物编码
MCR	Medicare 医疗保险	Medicare billing codes/names. Medicare 编码/名称	Specific Non- Drug Code 特定的非药物编码
MDDX	Medispan Diagnostic Codes Medispan 诊断编码	Codes Used for drug-diagnosis interaction checking. Proprietary product. Hierarchical drug codes for identifying drugs down to manufacturer and pill size. MediSpan, Inc., 8425 Woodfield Crossing Boulevard, Indianapolis, IN 46240. Tel: (800) 428-4495. WWW: <a href="http://www.espan.com/medispan/pages/medhome.html">http://www.espan.com/medispan/pages/medhome.html</a> . As above for MGPI.  用于药物诊断的交互检查的编码。为私人编制。一等级编码能区分生产厂商和药物剂型。  来源: MediSpan, Inc., 8425 Woodfield Crossing Boulevard, Indianapolis, IN 46240. Tel: (800) 428-4495. WWW: <a href="http://www.espan.com/medispan/pages/medhome.html">http://www.espan.com/medispan/pages/medhome.html</a> .  如上面的 MGPI。	Drug code 药物编码
MEDC	Medical Economics Drug Codes 医学经济药物编码	Proprietary Codes for identifying drugs. Proprietary product of Medical Economics Data, Inc. (800) 223-0581.  确定药物的私人编码。  来源: Proprietary product of Medical Economics Data, Inc. (800) 223-0581.	Drug code 药物编码
MEDR	Medical Dictionary for Drug Regulatory Affairs (MEDDRA) 药物调整事务医学辞典 (MEDDRA)	Dr. Louise Wood, Medicines Control Agency, Market Towers, 1 Nine Elms Lane, London SW85NQ, UK Tel: (44)0 171-273-0000 WWW: <a href="http://www.open.gov.uk/mca/mcahome.htm">http://www.open.gov.uk/mca/mcahome.htm</a>  来源: Dr. Louise Wood, Medicines Control Agency, Market Towers, 1 Nine Elms Lane, London SW85NQ, UK Tel: (44)0 171-273-0000 WWW: <a href="http://www.open.gov.uk/mca/mcahome.htm">http://www.open.gov.uk/mca/mcahome.htm</a>	Drug code 药物编码
MEDX	Medical Economics Diagnostic Codes 医学经济诊断代码	Used for drug-diagnosis interaction checking. Proprietary product of Medical Economics Data, Inc. (800) 223-0581.  用于药物诊断交互检查。  地址为: Proprietary product of Medical Economics Data, Inc. (800) 223-0581.	Drug code 药物编码
MGPI	Medispan GPI	Medispan hierarchical drug codes for identifying drugs down to manufacturer and pill size. Proprietary product of MediSpan, Inc., 8425 Woodfield Crossing Boulevard, Indianapolis, IN 46240. Tel: (800) 428-4495.  Medispan 药物等级编码, 能区分生产厂家和剂型。  地址为: Proprietary product of MediSpan, Inc., 8425 Woodfield Crossing Boulevard, Indianapolis, IN 46240. Tel: (800) 428-4495.	Drug code 药物编码
MVX	CDC Vaccine Manufacturer Codes	As above, for CVX 同上, 如: CVX	Drug code 药物编码

	CDC 疫苗生产商编码		
NDA	NANDA	North American Nursing Diagnosis Association, Philadelphia, PA.  北美护理诊断协会  地址为: North American Nursing Diagnosis Association, Philadelphia, PA.	Specific Non- Drug Code  特定的非药物编码
NDC	National drug codes 国家药物编码	These provide unique codes for each distinct drug, dosing form, manufacturer, and packaging. (Available from the National Drug Code Directory, FDA, Rockville, MD, and other sources.)  为不同药物品种、剂型、生产厂商与药物包装的药物提供唯一的 编码。(可从国家药物编码目录或其他来源中获得)  地址为: National Drug Code Directory, FDA, Rockville, MD	Drug code 药物编码
NIC	Nursing Interventions Classification  护理干预分类	Iowa Intervention Project, College of Nursing, University of Iowa, Iowa City, Iowa  Iowa 干预项目  地址为: Iowa Intervention Project, College of Nursing, University of Iowa, Iowa City, Iowa	Specific Non- Drug Code  特定的非药物编码
NPI	National Provider Identifier  国家(卫生服务)提供 着标识	Health Care Finance Administration, US Dep' t. of Health and Human Services, 7500 Security Blvd., Baltimore, MD 21244.  卫生服务筹资管理  地址为: Health Care Finance Administration, US Dep' t. of Health and Human Services, 7500 Security Blvd., Baltimore, MD 21244.	Specific Non- Drug Code  特定的非药物编码
OHA	Omaha System  Omaha 系统	Omaha Visiting Nurse Association, Omaha, NB.  Omaha 看视互利协会  地址为: Omaha Visiting Nurse Association, Omaha, NB.	Specific Non- Drug Code  特定的非药物编码
OHA	Omaha	Omaha Visiting Nurse Association, Omaha, NB.  Omaha 看视互利协会  地址为: Omaha Visiting Nurse Association, Omaha, NB.	Specific Non- Drug Code  特定的非药物编码
POS	POS Codes  POS 编码	HCFA Place of Service Codes for Professional Claims (see <a href="http://www.hcfa.gov/medicare/poscode.htm">http://www.hcfa.gov/medicare/poscode.htm</a> ).  专家申明的 HCFA 服务地点编码(见: <a href="http://www.hcfa.gov/medicare/poscode.htm">http://www.hcfa.gov/medicare/poscode.htm</a> )	Specific Non- Drug Code  特定的非药物编码
RC	Read Classification  阅读分类	The Read Clinical Classification of Medicine, Park View Surgery, 26 Leicester Rd., Loughborough LE11 2AG (includes drug procedure and other codes, as well as diagnostic codes).  医学阅读临床分类  地址为: The Read Clinical Classification of Medicine, Park View Surgery, 26 Leicester Rd., Loughborough LE11 2AG  (除了诊断编码, 还包括药物程序及其它代码)	Specific Non- Drug Code  特定的非药物编码

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SDM	SNOMED- DICOM Microglossary  SNOMED- DICOM 微生物术语	College of American Pathologists, Skokie, IL, 60077-1034. (formerly designated as 99SDM).  美国病理学者协会  地址为: College of American Pathologists, Skokie, IL, 60077-1034.  (原称为: 99SDM)	Specific Non- Drug Code  特定的非药物编码
SNM	Systemized Nomenclature of Medicine (SNOMED)  医学系统化命名 (SNOMED)	Systemized Nomenclature of Medicine, 2 <sup>nd</sup> Edition 1984 Vols 1, 2, College of American Pathologists, Skokie, IL.  医学系统化命名  地址为:  Systemized Nomenclature of Medicine, 2 <sup>nd</sup> Edition 1984 Vols 1, 2, College of American Pathologists, Skokie, IL.	Specific Non- Drug Code  特定的非药物编码
SNM3	SNOMED International  国际 SNOMED	SNOMED International, 1993 Vols 1-4, College of American Pathologists, Skokie, IL, 60077-1034..  国际 SNOMED  地址为: SNOMED International, 1993 Vols 1-4, College of American Pathologists, Skokie, IL, 60077-1034..	Specific Non- Drug Code  特定的非药物编码
SNT	SNOMED topology codes (anatomic sites)  SNOMED 拓扑编码 (解剖 地点)	College of American Pathologists, 5202 Old Orchard Road, Skokie, IL 60077-1034.  美国病理学者协会  地址为: College of American Pathologists, 5202 Old Orchard Road, Skokie, IL 60077-1034.	Specific Non- Drug Code  特定的非药物编码
UC	UCDS	Uniform Clinical Data Systems. Ms. Michael McMullan, Office of Peer Review Health Care Finance Administration, The Meadows East Bldg., 6325 Security Blvd., Baltimore, MD 21207; (301) 966 6851.  同一临床数据系统。  地址为: Uniform Clinical Data Systems. Ms. Michael McMullan, Office of Peer Review Health Care Finance Administration, The Meadows East Bldg., 6325 Security Blvd., Baltimore, MD 21207; (301) 966 6851.	Specific Non- Drug Code  特定的非药物编码
UMD	MDNS	Universal Medical Device Nomenclature System. ECRI, 5200 Butler Pike, Plymouth Meeting, PA 19462 USA. Phone: 215-825-6000, Fax: 215-834-1275.  世界医疗设备命名系统。  地址为: Universal Medical Device Nomenclature System. ECRI, 5200 Butler Pike, Plymouth Meeting, PA 19462 USA. Phone: 215-825-6000, Fax: 215-834-1275.	Device code  设备编码
UML	Unified Medical Language  同一医学语言	National Library of Medicine, 8600 Rockville Pike, Bethesda, MD 20894.  国家医学图书馆  地址为: National Library of Medicine, 8600 Rockville Pike, Bethesda, MD 20894.	Specific Non- Drug Code  特定的非药物编码
UPC	Universal Product Code	The Uniform Code Council. 8163 Old Yankee Road, Suite J, Dayton, OH 45458; (513) 435 3070]	Specific Non- Drug Code



	世界产品代码	同一代码委员会 地址为:  The Uniform Code Council. 8163 Old Yankee Road, Suite J, Dayton, OH 45458; (513) 435 3070]	特定的非药物编码
UPIN	UPIN	Medicare/HCFA' s universal physician identification numbers, available from Health Care Financing Administration, U.S. Dept. of Health and Human Services, Bureau of Program Operations, 6325 Security Blvd., Meadows East Bldg., Room 300, Baltimore, MD 21207  医疗保险/HCFA 的世界医师认证号码。  来源于: Health Care Financing Administration, U.S. Dept. of Health and Human Services, Bureau of Program Operations, 6325 Security Blvd., Meadows East Bldg., Room 300, Baltimore, MD 21207	Specific Non-Drug Code  特定的非药物编码
W1	WHO record # drug codes (6 digit)  WHO 记录号药物编码 (6 位数字)	World Health organization record number code. A unique sequential number is assigned to each unique single component drug and to each multi-component drug. Eight digits are allotted to each such code, six to identify the active agent, and 2 to identify the salt, of single content drugs. Six digits are assigned to each unique combination of drugs in a dispensing unit. The six digit code is identified by W1, the 8 digit code by W2.  WHO 记录号编码。每一单成分药物和多成分药物都被分配一个唯一的系列号。每个代码拥有 8 位数字, 对单成分药物而言, 其中 6 位数字指定活跃制剂, 2 位数字指定其盐分; 在一分配单元中, 6 位数字被分配给每一个唯一的药物组成。6 位数字代码由 W1 标识, 8 位数字代码由 W2 标识。	Drug code  药物编码
W2	WHO record # drug codes (8 digit)  WHO 记录号药物编码 (8 位数字)	World Health organization record number code. A unique sequential number is assigned to each unique single component drug and to each multi-component drug. Eight digits are allotted to each such code, six to identify the active agent, and 2 to identify the salt, of single content drugs. Six digits are assigned to each unique combination of drugs in a dispensing unit. The six digit code is identified by W1, the 8 digit code by W2.  WHO 记录号编码。每一单成分药物和多成分药物都被分配一个唯一的系列号。每个代码拥有 8 位数字, 对单成分药物而言, 其中 6 位数字指定活跃制剂, 2 位数字指定其盐分; 在一分配单元中, 6 位数字被分配给每一个唯一的药物组成。6 位数字代码由 W1 标识, 8 位数字代码由 W2 标识。	Drug code  药物编码
W4	WHO record # code with ASTM extension  WHO 的带 ASTM 扩展的记录号编码	With ASTM extensions (see Implementation Guide), the WHO codes can be used to report serum (and other) levels, patient compliance with drug usage instructions, average daily doses and more (see Appendix X1 the Implementation Guide).  带有 ASTM 扩展 (见应用指南), 此 WHO 编码能用于报告血清 (以及其他) 水平、病人按用药指示服务情况、平均每天用药量及其它信息 (见应用指南的附录 X1)。	Drug code  药物编码
WC	WHO ATC  WHO 的 ATC	WHO' s ATC codes provide a hierarchical classification of drugs by therapeutic class. They are linked to the record number codes listed above.	Drug code  药物编码

		WHO 的 ATC 编码按药物疗效级别提供一药物等级分类。它们与上面列出的纪录号编码线连接。	
--	--	--	--

2.9.6 Yes/no indicator table

是/否指示表

The actual interpretation of Yes/No is context sensitive. Individual chapters will further refine the meaning of Yes/No in their specific context.

对是/否的实际解释是随场景而定的，特定的章节将就特定场合下的是/否作进一步的定义。

HL7 Table 0136 - Yes/no indicator

HL7 表 0136 - 是/否指示器

Value 取值	Description 描述
Y	Yes 是
N	No 否

2.10 SAMPLE CONTROL MESSAGES

控制信息举例

2.10.1 General acknowledgment

一般的确认

LAB acknowledges the message that ADT sent identified as ZZ9380. (LAB and ADT, the sending and receiving system IDs, are site-defined.) Both systems are associated with the same FACILITY, 767543. The **AA** code in the MSA segment indicates that the message was accepted by the application.

(以下例子为) LAB 对 ADT 发出的标识号为 ZZ9380 信息的确认。(LAB 与 ADT 为发送系统和接收系统 ID 号，是随场合而定的)，两系统拥有相同的设备—767543。MSA 信息段的 AA 代码表示 (发出的) 信息为 (接收) 应用程序所接受。

```
MSH|^~\&|LAB|767543|ADT|767543|19900314130405||ACK^^ACK_ACK|XX3657|P|2.4<cr>
MSA|AA|ZZ9380<cr>
```

## 2.10.2 Error return

### 错误返回

The **AR** code in MSA indicates that the application rejected the message for functional reasons. The optional ERR segment includes here that the 16th field of the PID segment with the SET ID value of 1 had an error which was defined by the locally-established code X3L. The optional text message UNKNOWN COUNTY CODE in the link is designed to help programmers and support personnel while reviewing message logs.

MSA 中出现 AR 代码表示应用程序由于功能上的原因而拒绝了这一信息。在此可选的 ERR 信息段包含了 PID 信息段的第 16 位字段，当出现一个地方定义编码 X3L 所定义的错误时，则设 ID 的值为 1。当程序员和职员收到错误信息日志时，这个可选的文本信息——UNKNOWN COUNTY CODE 将对它们有帮助。

```
MSH|^~\&|LAB|767543|ADT|767543|199003141304-0500|| ACK^ACK_ACK |XX3657|P|2.4<cr>
MSA|AR|ZZ9380|UNKNOWN COUNTY CODE<cr>
ERR|PID^1^16^X3L<cr>
```

## 2.10.3 Sequence number: initial message

### 序号：初始的信息

The sender initiates the link with a message that has no functional content. The sequence number is 0. The message type and event code are not used.

（信息）的发送端用一个没有任何内容的信息来建立初始连结。（这个信息的）序号为 0，其信息类型和时间代码没有被采用。

```
MSH|^~\&|ADT|767543|LAB|767543|199003141304-0500||^|XX3657|P|2.4|0<cr>
```

The responder uses a general acknowledgment. The expected sequence number is 1.

此时，应答系统使用一般确认，其期望的序号为 1。

```
MSH|^~\&|LAB|767543|ADT|767543|199003141304-0500|| ACK^ACK_ACK |ZZ9380|P|2.4<cr>
MSA|AA|XX3657||1<cr>
```

## 2.10.4 Example of message fragmentation

### 信息分割举例

This summarizes the methodology for splitting a single logical HL7 message among two or more actual HL7 messages. The actual specifications for this, the segment definitions of the ADD and DSC segments, and examples are in Section 2.14.2, "Continuation messages and segments".

在次对分割一简单逻辑上的 HL7 信息为两个或两个以上的实际信息的方法进行总结。对其的详细描述可见 2.14.2 节——“连续信息与信息段”中的 ADD 与 DSC 信息段的定义与举例。

Continuing of messages is a generic methodology that can be used for all HL7 message types. It can be used to split based on segment boundaries, on field boundaries, and to split a

single field among several messages. It utilizes two specific segments, ADD and DSC, as well as a field in the message header, *MSH-14-Continuation pointer*.

信息的连续是一个普通的方法，可以应用于 HL7 中所有的信息类型。将一简单信息分割成几个信息时可以按信息段的分界线进行分割，也可以按字段的分界线分割。除了使用信息头中的字段 MSH-14—连续指针外，它使用两种特殊的信息段：ADD 和 DSC（进行工作）。

When a message is continued, a unique continuation value is used. This same value will appear in MSH-14 and DSC-1 as appropriate for a single pair of messages. This allows messages to be "chained together".

当要连续一个信息时，必须采用一个唯一的连续值。对一对配好信息而言，相同的值将出现在 MSH-14 和 DSC-1 字段中，这将使两信息链接在一起。

Here are two examples of ways to create continuation pointers for fragmented messages. The only absolute requirement is that when the sending application values the continuation pointer, the receiving application can appropriately reconstruct the message.

此处有两种创建分割后信息的连续指针的方法举例。其仅要求当发送端应用程序为一连续指针赋值后，接收端应用程序能正确地将分割后的信息重组。

Sitecode-interfaceapplicationcode-date-sequentialcounterwithindate

场地代码-接口应用程序代码-日期-日期内系列计数器

This will guarantee uniqueness of this field.

这将保证此字段的唯一性。

e.g. BWH-LDS-19990331-27 for the 27<sup>th</sup> large message to be created on March 31, within the Discharge Summary interfaces at BWH

如：BWH-LDS-19990331-27 表示在 3 月 31 日创建的序号为 27 的大信息，此信息在“放弃总结接口程序 BWH”中。

An alternative method of valuing the continuation pointer:

为连续指针赋值的另一个方法为：

Sitecode-interfaceapplicationcode-medicalrecordnumber-datetime

场地代码-接口应用程序代码-医疗纪录号-日期时间

e.g. MGH-PCIS-1234567-19980331121314 for a message created on March 31, at 12:13:14pm for patient medical record number 1234567, within the PCIS interfaces at MGH

如：MGH-PCIS-1234567-19980331121314 表示创建于 3 月 31 日，12:13:14pm 的信息，信息的医疗纪录号为 1234567，此信息在 MGH 的 PCIS 接口程序中。

Sending Application Note: In the ADD segment, a trailing field delimiter, i.e. the vertical bar character, after the final field, has explicit meaning. The sending application should

not include a trailing field delimiter for the last field in the ADD segment unless it has completely valued the entire field from the message being continued.

对发送应用程序应注意：在 ADD 信息段中，结尾字段分隔符，即最后字段以后的字符，如垂直条子符“|”有明确的意义。这样，发送端应用程序不应在 ADD 信息段的最后字段中包括结尾字段分隔符，除非它能从被连续的信息中获得完全的字段取值。

Receiving Application Note: The receiving application will need to be concerned with a single segment and a single field being continued.

对接收端应用程序应注意：接收端应用程序是考虑要连续的一个简单信息段和字段。

Receiving a message with an empty ADD segment followed by a DSC segment is the notification that the segment preceding the ADD is being continued in a subsequent message. Note that the continuing message may not be the next one received! The receiver must match up the continuation pointer value from MSH-14 of subsequent messages to the DSC-1 continuation pointer value of the prior message. Also if the continuing message contains an ADD segment, the receiver should continue appending to the fields from the segment being continued with values from the ADD segment. For example, if OBX-5 is being continued, the continuation will appear in ADD-1 of the continuing message. If there were a value for OBX-13 of the original message, that would appear in ADD-9 of the continuing message, assuming that the remainder of the OBX segment fit into the single ADD segment.

若收到一个信息，它是一个空的 ADD 信息段，然后紧接着是一个 DSC 信息段，这就表示 ADD 信息段前面的信息段要与后面的信息连续。注意：要连续的信息并不一定紧接着被收到！接收端必须将后面信息的 MSH-14 字段中的连续指针与前面信息中的 DSC-1 连续指针相匹配。抑或如果后面要连续的信息中包含了 ADD 信息段，那么接收端（应用程序）就要把前面的信息与后面的信息在后面信息的 ADD 段连接起来。比如：如果 OBX-5 要被连续，那么连续的发生是在后续信息的 ADD-1 处。如果初始信息（即前面的信息）的 OBX-13 有取值，当我们假定 OBX 信息段的剩余部分在 ADD 信息段中，那么这个值将出现在后续信息的 ADD-9 中。

Question: if continuing a message after the completion of a complete segment, should the continuing message have an empty ADD segment or not? Answer: No. This means that a continuing message need not have an ADD segment, if the continued message was split on a segment boundary.

问题：如果要在一个完整的信息段后连续一个信息，是否这个后续的信息必须有一个空 ADD 信息段？回答是否定的。这表明当被连续的信息是在一信息段分界线上分割时，后续的信息段不一定必有 ADD 信息段。

Notation conventions: items within angle brackets are comments and not intended to represent a portion of an actual message. For example, <this is a comment>.

符号约定：尖括号内的成分是说明，不代表信息的一部分。比如：<此为一说明>。

Note the multiple continuation pointer values, one for each pair of physical messages.

注意：当出现多个连续指针值时，每一个值表示一对物理意义上的信息配对。

## Message 1

### 信息 1

```
MSH|...|<field-13>||...
PID|...
ORC|...
OBR|...
OBX|1|FT|^Discharge Summary|1|This is the first sentence of a long
message. This is the second sentence of a long message.
<snip>
This is the 967th sentence of “
ADD|
DSC|BWH-LDS-19990405-6|
```

### Message 2

#### 信息 2

```
MSH|...|<field-13>|BWH-LDS-19990405-6|
ADD|a long message. This is the 968th sentence of a long message.
<snip>
This is the 1001st line of
<there should be no trailing field delimiter after the last field in this ADD segment>
DSC|BWH-LDS-19990405-7|
```

### Message 3

#### 信息 3

```
MSH|...|<field-13>|BWH-LDS-19990405-7|
ADD|a long message. This is the 1002nd sentence of a long message. <snip> This is the final
sentence of this long message!|||||F||199707211325|
DG1|...
<end of message>
```

The following examples discuss an unsolicited transmission of an observation message, ORU^R01.

下面的例子是讨论一个观察信息—ORU^R01 的主动传输。

The expected result values in OBX-5, Observation Value, for reports (e.g. autopsy, pathology) may exceed the message length restrictions of one or more interfaces.

OBX-5 的期望结果值，亦即对于报告（比如：解剖，病理学）的观察值可能超过了一个或更多的结构程序所允许的长度。

Thus the OBX-5, Observation Value data element will be split into more than one message.

这样，OBX-5—观察值数据元素将被分割成一个以上的信息。

Here's an example intended to illustrate the interpretation of Chapter 2 and 7. It reflects a single logical message broken up into three distinct messages.

举这个例子的目的是形象的解释第二章和第七章的内容，它表示了将一个简单逻辑信息分割成三个信息。

Example 1, a single field being split across three messages

例 1，一个由于分割而分布在三个信息中的简单字段

Message #1: -----

第一个信息: -----

**Note:** MSH-14, continuation pointer, is empty.

**注:** MSH-14, 连续指针是空值。

```
MSH|...|<field-13>||...
PID|...
ORC|...
OBR|...
OBX|1|FT|^Discharge Summary|1|This is the first sentence of a long
message. This is the second sentence of a long message.
<snip>
This is the 967th sentence of “
ADD|
DSC|<continuation-pointer-value-1>|F
```

Message #2: -----

第二个信息: -----

Note: MSH-14, continuation pointer, is valued with the same value as in DSC-1, continuation pointer from the message this is continuing, in this case Message #1.

注: MSH-14—连续指针，被赋了此信息连续指针—DSC-1 中相同的值，说明此信息是第一个信息的连续。

```
MSH|...|<field-13>|<continuation-pointer-value-1>|
ADD|a long message. This is the 968th sentence of a long message.
<snip>
This is the 1001st line of
<there should be no trailing field delimiter after the last field in this ADD segment>
DSC|<continuation-pointer-value-2>|F
```

Message #3: -----

第三个信息: -----

Note: MSH-14, continuation pointer, is valued with the same value as in DSC-1, continuation pointer from the message this is continuing, in this case Message #1.

注: MSH-14—连续指针，被赋了此信息连续指针—DSC-1 中相同的值，说明此信息是第一个信息的连续。

```
MSH|...|<field-13>|<continuation-pointer-value-2>|
ADD|a long message. This is the 1002nd sentence of a long message. <snip> This is the final
sentence of this long message!|||F|199707211325|
```

<remaining segments after the big OBX from the original message go here, after the ADD segment>

PR1|...

DG1|...

---

Example 2, a single message being split across two messages, but on segment boundaries

例 2，一个被分割成两个信息的简单信息，但是分割点是在其信息段的分界处。

Message #1: -----

第一个信息: -----

<b>Note:</b> MSH-14, continuation pointer, is empty.
--

<b>注:</b> MSH-14—连续指针是空值。
---------------------------

MSH|...|<field-13>||...

PID|...

ORC|...

OBR|...

OBX|1|FT|^Discharge Summary|1|This is the first sentence of a long  
message. This is the final sentence of this long discharge summary!||||F||199707211325|  
DSC|<continuation-pointer-value-3>|F

Message #2: -----

第二个信息: -----

<b>Note:</b> MSH-14, continuation pointer, is valued with the same value as in DSC-1, continuation pointer from the message this is continuing, in this case Message #1.
--

<b>注:</b> MSH-14—连续指针，被赋了此信息连续指针—DSC-1 中相同的值，说明此信息是第一个信息的连续。
--

Note that no ADD segment is necessary, since a segment is not being split across two messages.

注意：既然没有跨两个信息的信息段，所以可以不需要 ADD 信息段。

MSH|...|<field-13>|<continuation-pointer-value-3>|

PR1|...

DG1|...



### 2.10.5 Master file update examples: with original and enhanced acknowledgment protocol

#### 主文件更新举例：在原来的确认协议和增强确认模式协议下

This example shows the lab system using the Master Files specification to send two update test dictionary entries to an ICU system. The OM1 (observation dictionary) segment, currently under development by HL7 and ASTM, carries the dictionary information. Several varieties of acknowledgment are shown. The choice of acknowledgment mode is site-specific.

本例为：化验室系统使用主文件说明给 ICU 系统发送两个更新了的检查辞典。当前由 HL7 和 ASTM 开发的 OM1（观察辞典）信息段携带了辞典情报。在此出现了几个不同的确认信息。确认的模式是随场地而定的。

#### 2.10.5.1 Original mode example:

在原来的（确认）模式下的例子：

```
MSH|^~\&|LABxxx|ClinLAB|ICU||19910918060544||MFN^M03|MSGID002|P|2.2
MFI|LABxxx^Lab Test Dictionary^L|UPD|||AL
MFE|MUP|199109051000|199110010000|12345^WBC^L
OM1|...
MFE|MUP|199109051015|199110010000|6789^RBC^L
OM1|...
```

Original mode acknowledgment of the HL7 message according to MFI Response Level Code of AL.

在 HL7 的原来的确认模式下，信息的确认是按照 AL 编码的 MFI 应答水平而定。

```
MSH|^~\&|ICU||LABxxx|ClinLAB|19910918060545||MFK|MSGID99002|P|2.2
MSA|AA|MSGID002
MFI|LABxxx^Lab Test Dictionary^L|UPD|||MFAA
MFA|MUP|199110010000|199110010040|S|12345^WBC^L
MFA|MUP|199110010000|199110010041|S|6789^RBC^L
```

#### 2.10.5.2 Enhanced mode example

增强模式举例

##### *2.18.5.2.1 Initial message with accept acknowledgment*

需进行接受确认的初始信息

```
MSH|^~\&|LABxxx|ClinLAB|ICU||19910918060544||MFN^M03|MSGID002|P|2.2|||AL|AL
MFI|LABxxx^Lab Test Dictionary^L|UPD|||AL
MFE|MUP|199109051000|199110010000|12345^WBC^L
OM1|...
MFE|MUP|199109051015|199110010000|6789^RBC^L
OM1|...

MSH|^~\&|ICU||LABxxx|ClinLAB|19910918060545||MSA|MSGID99002|P|2.2
MSA|CA|MSGID002
```

### 2.18.5.2.2 Application acknowledgment message

#### 应用程序的确认信息

```
MSH|^~\&|ICU|LABxxx|ClinLAB|19911001080504||MFK|MSGID5002|P|2.2||AL|
MSA|AA|MSGID002
MFI|LABxxx^Lab Test Dictionary^L|UPD||MFAA
MFA|MUP|199109051000|199110010040|S|12345^WBC^L
MFA|MUP|199109051015|199110010041|S|6789^RBC^L

MSH|^~\&|LABxxx|ClinLAB|ICU|19911001080507||ACK|MSGID444|P|2.2
MSA|CA|MSGID5002
```

### 2.10.5.3 Delayed application acknowledgment

#### 应用程序的延迟确认

**Note:** If the MFN message in Section 2.18.5.2, “Enhanced mode example” had not required an application acknowledgment at the message level (i.e., the application acknowledgment code of the MSH segment = NE), the (Master Files Chapter defined) MFD message could be used to provide a delayed application level acknowledgment not tied to the original MFN message.

**注:** 如果 2.18.5.2, 节一“增强模式举例”中的 MFN 信息并不要求应用程序在信息水平上进行信息确认（如：MSH 信息段的应用程序确认代码为 NE），则 MFD 信息能用于提供一个延迟的信息确认，但此确认与初始的 MFN 信息无关。

The following example includes an acknowledgment for an MFE segment not in the original message. This additional MFE was sent via another MFN message.

下面的例子中含有了对 MFE 信息段的确认，但 MFE 信息段并非初始信息的一部分。这个增加的 MFE 信息段是由另一个信息—MFN 发送的。

### 2.18.5.3.1 Initial message with accept acknowledgment

#### 需进行接受确认的初始信息

```
MSH|^~\&|LABxxx|ClinLAB|ICU|19910918060544||MFN^M03|MSGID002|P|2.2||AL|NE
MFI|LABxxx^Lab Test Dictionary^L|UPD||AL
MFE|MUP|199109051000|199110010000|12345^WBC^L
OM1|...
MFE|MUP|199109051015|199110010000|6789^RBC^L
OM1|...

MSH|^~\&|ICU|LABxxx|ClinLAB|19910918060545||MSA|MSGID99002|P|2.2
MSA|CA|MSGID002
```

### 2.18.5.3.2 Delayed application acknowledgment

#### 应用程序延迟确认

```
MSH|^~\&|ICU|LABxxx|ClinLAB|19911001080504||MFD|MSGID65002|P|2.2||AL|
MFI|LABxxx^Lab Test Dictionary^L|UPD||MFAA
MFA|MUP|199109051000|199110010040|S|12345^WBC^L
MFA|MUP|199109051015|199110010041|S|6789^RBC^L
MFA|MUP|199109051025|199110010041|S|4339^HGB^L
```

MSH|^~\&|LABxxx|ClinLAB|ICU||19911001080507||ACK|MSGID444|P|2.2  
MSA|CA|MSGID65002

## 2.11 OUTSTANDING ISSUES

### 突出的问题

The following items are being discussed in the Control/Query technical committee for addition to future versions of HL7:

控制/查询技术委员会正在讨论以下问题，考虑将其添加到 HL7 将来的版本中。

- 1) Rationalization and clarification of event structures.

时间结构的合理化和清晰化。

- 2) Creation of a network server for HL7 tables so that updates to them can be made public immediately, rather than waiting until the publication of the next version of the Standard.

为 HL7 表格创建一网络服务器，以使得对其的更新能及时地公布，而不要等到 HL7 标准的下一个版本发表后（大家才知道）。

- 3) Consideration of security. There are in general two types: application level security, which is partially addressed by the *security* field in the MSH segment. The second type, network security, needs to be addressed in the HL7 Implementation Guide. There are several commercially available encryption-based approaches to network level security.

对保密性的考虑。通常有两种形式：应用程序水平上的保密，在 MSH 信息段的保密字段由部分的提及。第二种形式为：网络保密。需要在应用指南中它进行考虑。对网络水平上的保密问题，可获得几个商业上密码加密方法。

- 4) Reviewing network application management messages for possible upgrade requirements.

就可能的更新要求而言，网络应用程序管理信息进行评价。

- 5) Creation of Implementation Technology Specifications (ITSs: encoding rules equivalents) for Version 3.

为 3. 版本建立应用技术规范（ITSs：相当于编码规则）

- 6) Specification of query functionality for version 3.

对 3. 版本的查询功能进行规范说明。