11.

Patient Referral

Chapter Chair/Editor:	Joe Peterson Wismer Martin, Inc.
Editor:	Robert M. Burkhead Oacis Healthcare Systems, Inc.

11.1 PURPOSE

The Patient Referral chapter defines the message set used in patient referral communications between mutually exclusive healthcare entities. These referral transactions frequently occur between entities with different methods and systems of capturing and storing data. Such transactions frequently traverse a path connecting primary care providers, specialists, payors, government agencies, hospitals, labs, and other healthcare entities. The availability, completeness, and currency of information for a given patient will vary greatly across such a spectrum.

The referral in this specification is viewed from the perspective of the provider as an individual, irrespective of his/her affiliation with a specific institution or campus. Events triggering this kind of message are not restricted to a hospital environment, but have a community-wide area of impact in which more extensive identification of patients and healthcare providers is needed. Therefore, a referral must contain adequate identification information to meet the broadly varying requirements of the dissimilar systems within the community.

This chapter describes the various events and resulting transactions that make up the referral message set. Examples have been provided to demonstrate the use of this specification within the events described. Each event example centers on a primary care provider's encounter with a patient. All of the examples in this chapter have been constructed using the HL7 Encoding Rules.

11.1.1 Patient referral and responses

When a patient is referred by one healthcare entity (e.g., a primary care provider) to another (e.g., a specialist or lab) or when a patient inquiry is made between two separate entities, little is known about the information each party requires to identify or codify the patient. The receiving entity may have no knowledge of the patient and may require a full set of demographics, subscriber and billing information, eligibility/coverage information, pre-authorization information, and/or clinical data to process the referral. If the receiving entity already has a record of the patient, the precise requirements for identifying that patient record will vary greatly from one entity to another. The existing record of a patient residing in the database of a specialist, a lab, or a hospital may require updating with more current information. In addition, providers receiving a referral often require detailed information about the provider making the referral, such as a physician's name and address.

For example, a primary care provider making a referral may need to obtain insurance information or pre-authorization from a payor prior to making a referral. Getting this information requires an inquiry and a response between the primary care provider and the payor. In addition, the primary care provider may

request results from a lab to accompany the referral. Getting these results may require an inquiry and a response between the primary care provider and the lab. The information could then be incorporated into a referral sent from the primary care provider to the specialist. As the referral is processed, requested procedures are performed, the results are observed, and the relevant data must be returned to the primary care provider. Such a response may frequently take the form of multiple responses as results become available.

The message set that encompasses these transactions includes the referral (REF), requests for information (RQA, RQC, RQP, RQI) and the returned patient information (RCI, RCL, RPA, RPI, RPL, RRI). The referral message originates a transaction and a return patient information message concludes the transaction. At least one RPA/RPI is required to complete a patient referral or a patient request transaction, although multiple RPI messages may be returned in response to a single REF message. The segments used in the REF, RQA, RQI, RQP, RRI, RPH, RCI, RCL, RPA and RPI messages encompass information about patient, guarantor and next of kin demographics, eligibility/coverage information, accident, diagnosis, requested procedures, payor pre-authorization, notes, and referring and consulting provider data.

11.1.1.1 Patient referral

There are clear distinctions between a referral and an order. An order is almost always an intra-enterprise transaction and represents a request from a patient's active provider to supporting providers for clearly defined services and/or results. While the supporting provider may exercise great discretion in the performance of an order, overall responsibility for the patient's plan of treatment remains with the ordering provider. As such, the ordering provider retains significant control authority for the order and can, after the fact, cause the order to be canceled, reinstated, etc. Additionally, detailed results produced by the supporting provider are always reported back to the ordering provider, who remains ultimately responsible for evaluating their value and relevance. A referral, on the other hand, can be either an intra- or an inter-enterprise transaction and represents not only a request for additional provider support but also a transfer of a portion or all of the responsibility for the patient's plan of treatment. Once the referral is made, the referring provider, during the transfer period, retains almost no control of any resulting actions. The referred-to provider becomes responsible for placing any additional orders and for evaluating the value and relevance of any results, which may or may not be automatically passed back to the referring provider. A referred-to provider may, in turn, also become a referring provider.

A referral message is used to support transactions related to the referral of a patient from one healthcare provider to another. This kind of message will be particularly useful from the perspective of a primary care provider referring a patient to a specialist. However, the application of the message should not be limited to this model. For example, a referral may be as simple as a physician sending a patient to another physician for a consultation or it may be as complex as a primary care provider sending a patient to a specialist for specific medical procedures to be performed and attaching the payor authorizations for those requested procedures as well as the relevant clinical information on the patient's case.

In a community model, stringent security requirements will need to be met when dealing with the release of clinical information. This message set facilitates the proper qualification of requests because the message packet will contain all the data required by any application in the community, including the necessary patient demographic information and the proper identification of the party requesting the information.

11.1.1.2 Responding to a patient referral

When a patient is referred by one provider to another or is pre-admitted, there is a great likelihood that subsequent transactions will take place between the initiating entity (the referring or admitting physician) and the responding entity (the specialist or hospital). The subsequent transactions might include a variety of queries, orders, etc. Within those subsequent transactions, there must be a way for the initiating system to refer to the patient. The "generic" patient information included in the original referral or the pre-admit

Patient Identification (PID) segment may not be detailed enough to locate the patient in the responding facility's database, unless the responding facility has assigned a unique identifier to the new patient. Similarly, the responding system may not have record retrieval capabilities based on any of the unambiguous, facility-neutral data elements (like the Social Security Number) included in the original referral or pre-admit PID segment. This problem could result in the responding system associating subsequent orders or requests with the wrong patient. One solution to this potential problem is for the responding system to utilize the RRI message and return to the initiating system the unique internal identifier it assigns to the patient, and with which it will primarily (or even exclusively) refer to that patient in all subsequent update operations. However, the intent of the RRI message is that it will supply the originator of the referral type message with sufficient patient demographic and/or clinical information to properly process continued transactions.

11.1.2 Application roles and data process

11.1.2.1 Application roles

This Standard assumes that there are four roles that an application can take on: a referring or referred-by provider application role, a referred-to provider application role, a querying application role, and an auxiliary application role. These application roles define the interactions an application will have with other applications in the messaging environment. In many environments, any single application may take on more than one application role.

This Standard's definition of application roles does not intend to define or limit the functionality of specific products developed by vendors of such applications. Instead, this information is provided to help define the model used to develop this Standard, and to provide an unambiguous way for applications to communicate with each other.

11.1.2.2 The referring provider application role

A referring provider application requests the services of another healthcare provider (a referred-to provider) application. There may or may not be any association between the referring provider application and the receiving entity. Although in most cases a referral environment will be inter-enterprise in nature, it is not limited to that model and applies to intra-enterprise situations also. Because the referring provider application cannot exert any control over the referred-to provider application, it must send requests to modify the status of the referred-to provider application. The referring provider application will often assume an auxiliary application role once a patient has been accepted by another application. Once this happens, the referring provider application may receive unsolicited status updates from the referred-to provider application concerning the care of a patient.

The analog of a referring provider application in a non-automated environment might be a primary care provider diagnosing a patient with a problem that must in turn be referred to a specialist for a service. The primary care provider would contact the specialist and refer the patient into his care. Often, the specialist may not receive the patient into his care, preferring instead to refer the patient to another healthcare provider. The referring provider will indicate the diagnosis and any requested services, and the specialist to whom the patient is referred will indicate whether the referral will be accepted as specified. Once a patient referral has been accepted by the specialist, the specialist may send out updates to the primary care provider concerning the status of the patient as regards any tests performed, their outcomes, etc.

11.1.2.3 The referred-to provider application role

A referred-to provider application, in the referral model, is one that performs one or more services requested by another healthcare provider (referring provider). In other words, a referred-to provider application exerts

control over a certain set of services and defines the availability of those services. Because of this control, no other application has the ability to accept, reject, or otherwise modify a referral accepted by a particular referred-to provider application.

Other applications can, on the other hand, make requests to modify the status of an accepted referral "owned by" the referred-to provider application. The referred-to provider application either grants or denies requests for information, or otherwise modifies the referrals for the services over which it exerts control.

Finally, the referred-to provider application also provides information about the referral encounter to other applications. The reasons that an application may be interested in receiving such information are varied. An application may have previously requested the status of the referral encounter, or it may simply be interested in the information for its own clinical reporting or statistical purposes. There are two methods whereby the referred-to provider applications disseminate this information: by issuing unsolicited information messages to auxiliary applications, or by responding to queries made by querying applications.

The analog of a referred-to provider application in a non-automated environment might be a specialist such as a cardiologist. A patient does not generally go to a cardiologist for routine health care. Instead, a patient generally goes to a primary care provider, who may diagnose the patient with a heart ailment and refer that patient to a cardiologist. The cardiologist would review the information provided with the referral request and determine whether or not to accept the patient into his care. Once the cardiologist accepts the patient, anyone needing information on the status of the patient must then make requests to the cardiologist. In addition, the cardiologist may forward unsolicited information regarding the treatment of the patient back to the primary care provider. Once the cardiologist accepts the referred patient, he/she may determine that additional information regarding the patient is needed. It will often take the role of a querying application by sending a query message to the patient's primary care provider and requesting additional information on demographics, insurance information, laboratory test results, etc.

11.1.2.4 The querying application role

A querying application neither exerts control over, nor requests changes to a referral. Rather than accepting unsolicited information about referrals, as does an auxiliary application, the querying application actively solicits this information using a query mechanism. It will, in general, be driven by an entity seeking information about a referral such as a referring provider application or an entity seeking information about a referred patient such as a referred-to provider application. The information that the querying application receives is valid only at the exact time that the query results are generated by the provider applications. Changes made to the referral or the referred patient's status after the query results have been returned are not communicated to the querying application until it issues another query transaction.

The analog of a querying application in a non-automated environment might be a primary care provider seeking information about a specific patient who has been referred to a specialist. For example, a patient may have been referred to a specialist in order that a specific test be performed, following which, the patient would return to the primary care provider. If the specialist has not forwarded information regarding the testing procedures for the patient to the primary care provider, the primary care provider would then query the specialist for the outcome of those procedures. Likewise, if a specialist received a referred patient without the preliminary diagnoses of test results, he/she might in turn query the primary care provider for the information leading to the diagnoses and subsequent referral.

11.1.2.5 The auxiliary application role

Like querying applications, an auxiliary application neither exerts control over nor requests changes to a referral or a referred patient. They, too, are only concerned with gathering information about a particular referral. An auxiliary application is considered an "interested third-party," in that it is interested in any changes to a particular referral or referred patient, but has no interest in changing it or controlling it in any

way. An auxiliary application passively collects information by receiving unsolicited updates from a provider application.

The analog of an auxiliary application in a non-automated environment might be any person receiving reports containing referral information. For example, an insurance company may need information about the activities a patient experiences during specific referral encounters. Primary care providers may need to forward information regarding all referred patients to a payor organization.

In turn, a primary care provider may have the ability to track electronically a patient's medical record. She or he would then be very interested in receiving any information regarding the patient (s)he has referred to a specialist.

11.1.2.6 Application roles in a messaging environment

In a messaging environment, these four application roles communicate using specific kinds of messages and trigger events. The following figure illustrates the relationships between these application roles in a messaging environment:
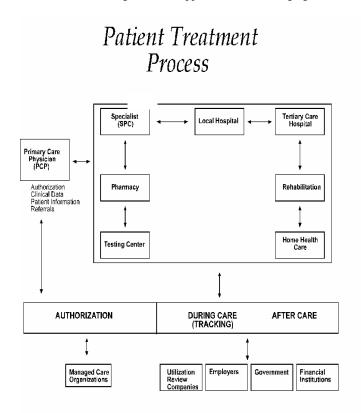
Figure 11-1. Application role messaging relationships

11.1.3 Glossary

11.1.3.1 **Benefits** are the services payable under a specific payor plan. They are also referred to as an insurance product, such as professional services, prescription drugs, etc.

11.1.3.2 **Clinical information** refers to the data contained in the patient record. The data may include such things as problem lists, lab results, current medications, family history, etc. For the purposes of this chapter, clinical information is limited to diagnoses (DG1& DRG), results reported (OBX/OBR), and allergies (AL1).

11.1.3.3 **Dependent** refers to a person who is affiliated with a subscriber, such as spouse or child.

11.1.3.4 **Eligibility/coverage** refers to the period of time a subscriber or dependent is entitled to benefits.

11.1.3.5 **Encounter** refers to a meeting between a covered person and a healthcare provider whose services are provided.

11.1.3.6 **Guarantor** refers to a person who has financial responsibility for the payment of a patient account.

11.1.3.7 **Healthcare provider** refers to a person licensed, certified or otherwise authorized or permitted by law to administer health care in the ordinary course of business or practice of a profession, including a healthcare facility.

11.1.3.8 **Payor** indicates a third-party entity who pays for or underwrites coverage for healthcare expenses. A payor may be an insurance company, a health maintenance organization (HMO), a preferred provider organization (PPO), a government agency or an agency such as a third-party administrator (TPA).

11.1.3.9 **Pre-authorization** refers to the process of obtaining prior approval as to the appropriateness of a service. Pre-authorization does not guarantee coverage.

11.1.3.10 **Primary care provider** indicates the provider responsible for delivering care as well as authorizing and channeling care to specialists and other providers in a gatekeeper system. The provider is also referred to as a case manager or a gatekeeper.

11.1.3.11 **Referral** means a provider's recommendation that a covered person receive care from a different provider.

11.1.3.12 **Referring provider** indicates the provider who requests services from a specialist or another primary care provider. A referring provider may, in fact, be a specialist who is referring a patient to another specialist.

11.1.3.13 **Referred-to-provider** typically indicates a specialty care provider who provides services at the request of a primary care provider or another specialty care provider.

11.1.3.14 **Specialist** means a provider of services which are beyond the capabilities or resources of the primary care provider. A specialist is also known as a specialty care provider who provides services at the request of a primary care provider or another specialty care provider.

11.1.3.15 **Subscriber** refers to a person who elects benefits and is affiliated with an employer or insurer.

11.2 PATIENT INFORMATION REQUEST MESSAGES AND TRIGGER EVENTS

Patient information may need to be retrieved from various enterprises. The definition of these enterprises often varies greatly. Some enterprises may be providers or reference laboratories, while others may be payors providing insurance information. In the first case, the message definitions will focus on patient and provider information, while in the latter case, the message definition will deal primarily with patient and subscriber identification.

11.2.1 RQI/RPI - request for insurance information (event I01)

This event triggers a message to be sent from one healthcare provider to another to request insurance information for a specified patient.

```
RQI                     Request Patient Information             Chapter

  MSH                   Message Header                          2
 {
    PRD                 Provider Data                           11
    [{CTD}]             Contact Data                            11
 }
  PID                   Patient Identification                  3
[{NK1}]                 Next of Kin/Associated Parties          6
[[{GT1}]                Guarantor                               6
  {
    IN1                 Insurance                               6
    [IN2]               Insurance Additional Info               6
    [IN3]               Insurance Add'l Info - Cert             6
  }
]
[{NTE}]                 Notes and Comments                      2


RPI                     Return Patient Information              Chapter

  MSH                   Message Header                          2
  MSA                   Message Acknowledgment                  3
 {
    PRD                 Provider Data                           11
    [{CTD}]             Contact Data                            11
 }
  PID                   Patient Identification                  3
[{NK1}]                 Next of Kin/Associated Parties          6
[[{GT1}]                Guarantor                               6
  {
    IN1                 Insurance                               6
    [IN2]               Insurance Additional Info               6
    [IN3]               Insurance Add'l Info - Cert             6
  }
]
[{NTE}]                 Notes and Comments                      2
```

11.2.2 RQI/RPL - request/receipt of patient selection display list (event I02)

This trigger event occurs when the inquirer specifies a request for a name lookup listing. Generally, this request is used by the responder when insufficient data is on hand for a positive match. In this case, the requester may ask for a list of possible candidates from which to make a selection. This event code is also used by the responder to signify that the return information contains a list of information rather than information specific to a single patient.

```
RQI                     Request Patient Information              Chapter

  MSH                   Message Header                              2
 {
    PRD                 Provider Data                              11
    [{CTD}]             Contact Data                               11
 }
  PID                   Patient Identification                      3
[{NK1}]                 Next of Kin/Associated Parties              6
[[{GT1}]                Guarantor                                   6
  {
    IN1                 Insurance                                   6
    [IN2]               Insurance Additional Info                   6
    [IN3]               Insurance Add'l Info - Cert                 6
  }
]
[{NTE}]                 Notes and Comments                          2


RPL                     Return Patient Display List              Chapter

  MSH                   Message Header                              2
  MSA                   Message Acknowledgment                      3
 {
    PRD                 Provider Data                              11
    [{CTD}]             Contact Data                               11
 }
[{NTE}]                 Notes and Comments                          2
[{DSP}]                 Display Data                                2
[ DSC ]                 Continuation Pointer                        2
```

11.2.3 RQI/RPR - request/receipt of patient selection list (event I03)

This trigger event occurs when the inquirer specifies a request for a listing of patient names. This event differs from event I02 (request/receipts of patient selection display list) in that it returns the patient list in repeating PID segments instead of repeating DSP segments.

```
RQI                     Request Patient Information          Chapter

  MSH                   Message Header                          2
 {
    PRD                 Provider Data                          11
    [{CTD}]             Contact Data                           11
 }
  PID                   Patient Identification                  3
[{NK1}]                 Next of Kin/Associated Parties          6
[[{GT1}]                Guarantor                               6
  {
    IN1                 Insurance                               6
    [IN2]               Insurance Additional Info               6
    [IN3]               Insurance Add'l Info - Cert             6
  }
]
[{NTE}]                 Notes and Comments                      2


RPR                     Return Patient List                  Chapter

  MSH                   Message Header                          2
  MSA                   Message Acknowledgment                  3
 {
    PRD                 Provider Data                          11
    [{CTD}]             Contact Data                           11
 }
[{PID}]                 Patient Identification                  3
[{NTE}]                 Notes and Comments                      2
```

11.2.4 RQP/RPI - request for patient demographic data (event I04)

This event triggers a request from one healthcare provider to another for patient demographic information, including insurance and billing information. Typically, this transaction would occur between one provider to another, but it could also be directed to a payor.

```
RQP                     Request Patient Demographics         Chapter

  MSH                   Message Header                          2
 {
    PRD                 Provider Data                          11
    [{CTD}]             Contact Data                           11
 }
  PID                   Patient Identification                  3
[{NK1}]                 Next of Kin/Associated Parties          6
[{GT1}]                 Guarantor                               6
[{NTE}]                 Notes and Comments                      2
```

```
RPI                     Return Patient Information           Chapter

  MSH                   Message Header                          2
  MSA                   Message Acknowledgment                  3
 {
    PRD                 Provider Data                          11
    [{CTD}]             Contact Data                           11
 }
  PID                   Patient Identification                  3
[{NK1}]                 Next of Kin/Associated Parties          6
[[{GT1}]]               Guarantor                               6
   {
     IN1                Insurance                               6
     [IN2]              Insurance Additional Info               6
     [IN3]              Insurance Add'l Info - Cert             6
   }
]
[{NTE}]                 Notes and Comments                      2
```

11.2.5 RQC/RCI - request for patient clinical information (event I05)

This event is used to request clinical information for a specific patient. Generally, this transaction occurs between one provider and another (typically a laboratory or radiology, etc.). However, it may also be very useful for a payor-to-provider request for clinical observation information to be used in considering a request for treatment authorization.

```
RQC                     Request Clinical Information          Chapter

  MSH                   Message Header                          2
  QRD                   Query Definition                        5
  [QRF]                 Query Filter                            5
 {
    PRD                 Provider Data                          11
    [{CTD}]             Contact Data                           11
 }
  PID                   Patient Identification                  3
[{NK1}]                 Next of Kin/Associated Parties          6
[{GT1}]                 Guarantor                               6
[{NTE}]                 Notes and Comments                      2
```

Final Standard.

```
RCI                     Return Clinical Information             Chapter

  MSH                   Message Header                          2
  MSA                   Message Acknowledgment                  3
  QRD                   Query Definition                        5
  [QRF]                 Query Filter                            5
 {
    PRD                 Provider Data                           11
    [{CTD}]             Contact Data                            11
 }
  PID                   Patient Identification                  3
[{DG1}]                 Diagnosis                               6
[{DRG}]                 Diagnosis Related Group                 6
[{AL1}]                 Allergy Information                     3
[
 {
    OBR                 Observation Request                     4
    [{NTE}]             Notes and Comments                      2
    [
      {
OBX                     Observation/Result                      7
        [{NTE}]         Notes and Comments                      2
      }
    ]
  }
]
[{NTE}]                 Notes and Comments                      2
```

11.2.6 RQC/RCL - request/receipt of clinical data listing (event I06)

This event code is sent from one healthcare provider to another (typically a laboratory or radiology, etc.) to request a list of available clinical observation information. When the provider is dealing with a community model in which remote requests make transmission of large amounts of data impractical, this event code will provide for interactive lists of transactions from which more specific selections can be made.

```
RQC                     Request Clinical Information            Chapter

  MSH                   Message Header                          2
  QRD                   Query Definition                        5
  [QRF]                 Query Filter                            5
 {
    PRD                 Provider Data                           11
    [{CTD}]             Contact Data                            11
 }
  PID                   Patient Identification3
[{NK1}]                 Next of Kin/Associated parties          6
[ GT1 ]                 Guarantor                               6
[{NTE}]                 Notes and Comments                      2
```

```
RCL                     Return Clinical List                    Chapter

  MSH                   Message Header                          2
  MSA                   Message Acknowledgment                  2
  QRD                   Query Definition                        5
  [QRF]                 Query Filter                            5
 {
    PRD                 Provider Data                           11
    [{CTD}]             Contact Data                            11
 }
  PID                   Patient Identification                  3
[{DG1}]                 Diagnosis                               6
[{DRG}]                 Diagnosis Related Group                 6
[{AL1}]                 Allergy Information                     3
[{NTE}]                 Notes and Comments                      2
[{DSP}]                 Display Data                            2
[ DSC ]                 Continuation Pointer                    2
```

11.2.7 PIN/ACK - unsolicited insurance information (event I07)

This trigger event is used by an entity or organization to transmit to a healthcare provider the insurance information on a specific patient. Typically, the healthcare provider will be a primary care provider.

```
PIN                     Patient Insurance Information            Chapter

  MSH                   Message Header                           2
 {
    PRD                 Provider Data                            11
    [{CTD}]             Contact Data                             11
 }
  PID                   Patient Identification                   3
[{NK1}]                 Next of Kin/Associated Parties           6
[[{GT1}]]               Guarantor                                6
  {
    IN1                 Insurance                                6
    [IN2]               Insurance Additional Info                6
    [IN3]               Insurance Add'l Info -Cert               6
  }
]
[{NTE}]                 Notes and Comments                       2


ACK                     General Acknowledgment                   Chapter

  MSH                   Message Header                           2
  MSA                   Message Acknowledgment                   2
  [ ERR ]           Error Information                            2
```

11.3 PATIENT TREATMENT AUTHORIZATION REQUESTS

This functional definition applies to a request for treatment authorization. Although this message also pertains to the payor, it differs greatly from that of an insurance information request. This message is used to request an authorization for specific procedures. Just as patient identification was important in an insurance information request, the focus of this functional area is provider identification, requested treatments/procedures and, in many cases, clinical information on a patient needed to fulfill review or certification requirements.

11.3.1 RQA/RPA - request patient authorization message

All trigger events in this group use the following message definition.

```
RQA                   Request Patient Authorization              Chapter

  MSH                 Message Header                             2
[RF1]                 Referral Information                       11
[
    AUT               Authorization Information                  11
   [CTD]              Contact Data                               11
]
 {
    PRD               Provider Data                              11
   [{CTD}]            Contact Data                               11
 }
  PID                 Patient Identification                     3
[{NK1}]               Next of Kin/Associated Parties             6
[[{GT1}]]             Guarantor                                  6
  {
    IN1               Insurance                                  6
   [IN2]              Insurance Additional Info                  6
  [IN3]               Insurance Add'l Info - Cert                6
  }
]
[ ACC ]               Accident Information                       6
[{DG1}]               Diagnosis                                  6
[{DRG}]               Diagnosis Related Group                    6
[{AL1}]               Allergy Information                        3
[
  {
   PR1                Procedure                                  6
   [
       AUT            Authorization Information                  11
      [CTD]           Contact Data                               11
   ]
  }
]
[
  {
     OBR              Observation Request                        4
    [{NTE}]           Notes and Comments                         2
    [
     {
        OBX           Observation/Result                         7
       [{NTE}]        Notes and Comments                         2
     }
    ]
  }
]
[
  PV1                 Patient Visit                              3
  [PV2]               Patient Visit Additional Info              3
]
[{NTE}]               Notes and Comments                         2
```

```
RPA                       Return Patient Authorization              Chapter

  MSH                     Message Header                            2
  MSA                     Message Acknowledgment                    3
[RF1]                     Referral Information                      11
[
     AUT                  Authorization Information                 11
     [CTD]                Contact Data                              11
 ]
 {
     PRD                  Provider Data                             11
     [{CTD}]              Contact Data                              11
 }
  PID                     Patient Identification                    3
[{NK1}]                   Next of Kin/Associated Parties            6
[{GT1}]                   Guarantor                                 6
[
  {
     IN1                  Insurance                                 6
     [IN2]                Insurance Additional Info                 6
     [IN3]                Insurance Add'l Info - Cert               6
  }
]
[ ACC ]                   Accident Information                      6
[{DG1}]                   Diagnosis                                 6
[{DRG}]                   Diagnosis Related Group                   6
[{AL1}]                   Allergy Information                       3
{
  PR1                     Procedure                                 6
  [
     AUT                  Authorization Information                 11
     [CTD]                Contact Data                              11
  ]
}
[
  {
     OBR                  Observation Request                       4
     [{NTE}]              Notes and Comments                        2
     [
       {
          OBX             Observation/Result                        7
          [{NTE}]         Notes and Comments                        2
       }
     ]
  }
]
[
  PV1                     Patient Visit                             3
  [PV2]                   Patient Visit Additional Info             3
]
[{NTE}]                   Notes and Comments                        2
```

Note:	The abstract message definitions for both the RPA and RQA include the patient visit segments (PV1 and PV2). The PV1 and PV2 segments appear in the RPA and RQA as an optional grouping to specify the visit or encounter that **generated** the referral authorization request. The PV1 and PV2 **should not** be used to provide suggested information for a future encounter or visit generated by the referral authorization request.

The trigger events that use this message definition are described in Sections 11.3.2, "RQA/RPA - request for treatment authorization information (event I08)," through 11.3.5, "RQA/RPA - request for cancellation of an authorization (event I11)."

11.3.2 RQA/RPA - request for treatment authorization information (event I08)

This event triggers a message to be sent from a healthcare provider to a payor requesting authorization to perform specific medical procedures or tests on a given patient. The specific medical procedures must be

filled out in the PR1 segments. Each repeating PR1 segment may be paired with an AUT segment so that authorization information can be given regarding dollar amounts, number of treatments, and perhaps the estimated length of stay for treatment. The OBR and OBX segments should be used to include any relevant clinical information that may be required to support or process the authorization.

11.3.3 RQA/RPA - request for modification to an authorization (event I09)

This event triggers a message sent from a healthcare provider to a payor requesting changes to a previously referenced authorization. For example, a provider may determine that a substitute testing or surgical procedure should be performed on a specified patient.

11.3.4 RQA/RPA - request for resubmission of an authorization (event I10)

If a previously submitted request for treatment authorization is rejected or canceled, this event could trigger a resubmission message for a referenced authorization. For example, the payor may have rejected a request until additional clinical information is sent to support the authorization request.

11.3.5 RQA/RPA - request for cancellation of an authorization (event I11)

This event may trigger the cancellation of an authorization. It may be used by the provider to indicate that an authorized service was not performed, or perhaps that the patient changed to another provider. A payor may use this request to reject a submitted authorization request from a provider.

11.4 PATIENT REFERRAL MESSAGES AND TRIGGER EVENTS

These message definitions and event codes define the patient referral. Although only three trigger events are defined, the abstract message is very versatile and can provide for a wide variety of inter-enterprise transactions.

11.4.1 REF/RRI - patient referral message

The trigger events that use this message definition are described in Sections 11.4.2, "REF/RRI - patient referral (event I12)," through 11.4.5, "REF/RRI - request patient referral status (event I15)."

Chapter 11: Patient Referral

```
REF                     Patient Referral                    Chapter

MSH                     Message Header                      2
[RF1]                   Referral Information                11
[
   AUT                  Authorization Information           11
   [CTD]                Contact Data                        11
]
{
   PRD                  Provider Data                       11
   [{CTD}]              Contact Data                        11
}
 PID                    Patient Identification              3
[{NK1}]                 Next of Kin/Associated Parties      6
[{GT1}]                 Guarantor                           6
[
  {
   IN1                  Insurance                           6
   [IN2]                Insurance Additional Info           6
   [IN3]                Insurance Add'l Info -Cert           6
  }
]
 [ACC]                  Accident Information                6
[{DG1}]                 Diagnosis                           6
[{DRG}]                 Diagnosis Related Group             6
[{AL1}]                 Allergy Information                 3
[
  {
   PR1                  Procedure                           6
   [
     AUT                Authorization Information           11
     [CTD]              Contact Data                        11
   ]
  }
]
[
  {
   OBR                  Observation Request                 4
   [{NTE}]              Notes and Comments                  2
   [
     {
       OBX              Observation/Result                  7
       [{NTE}]          Notes and Comments                  2
     }
   ]
  }
]
[
 PV1                    Patient Visit                       3
 [PV2]                  Patient Visit Additional Info       3
]
[
 PV1                    Patient Visit                       3
 [PV2]                  Patient Visit Additional Info       3
]
[{NTE}]                 Notes and Comments                  2
```

```
RRI                     Return Referral Information         Chapter

 MSH                    Message Header                     2
[MSA]                   Message Acknowledgment             3
[RF1]                   Referral Information               11
[
    AUT                 Authorization Information           11
     [CTD]              Contact Data                       11
]
{    PRD        Provider Data                              11
     [{CTD}]            Contact Data                       11
}
 PID                    Patient Identification             3
[ACC]                   Accident Information               6
[{DG1}]                 Diagnosis                          6
[{DRG}]                 Diagnosis Related Group            6
[{AL1}]                 Allergy Information                3
[
  {
    PR1                 Procedure                          6
    [
        AUT             Authorization Information           11
         [CTD]          Contact Data                       11
    ]
  }
]
[
  {
    OBR                 Observation Request                4
     [{NTE}]            Notes and Comments                 2
    [
      {
        OBX             Observation/Result                 7
          [{NTE}]       Notes and Comments                 2
      }
    ]
  }
]
[
  PV1                   Patient Visit                      3
   [PV2]                Patient Visit Additional Info      3
]
[{NTE}]                 Notes and Comments                 2
```

Note: The abstract message definitions for both the REF and RRI include the patient visit segments (PV1 and PV2). The PV1 and PV2 segments appear in the REF as an optional grouping to specify the visit or encounter that **generated** the referral. The PV1 and PV2 **should not** be used to provide suggested information for a future encounter or visit generated by the referral.

The PV1 and PV2 are also included in the RRI message definition. It should be noted that these segments do not merely mirror the segments in the originating REF message. Rather, they may contain information regarding the visit or encounter that **resulted** from the referral.

11.4.2 REF/RRI - patient referral (event I12)

This event triggers a message to be sent from one healthcare provider to another regarding a specific patient. The referral message may contain patient demographic information, specific medical procedures to be performed (accompanied by previously obtained authorizations) and relevant clinical information pertinent to the patient's case.

11.4.3 REF/RRI - modify patient referral (event I13)

This event triggers a message to be sent from one healthcare provider to another regarding changes to an existing referral. Changes in a referral may include additional instructions from the referring provider, additional clinical information, and even additional information on patient demographics.

11.4.4 REF/RRI - cancel patient referral (event I14)

This event triggers a message to be sent from one healthcare provider to another canceling a referral. A previous referral may have been made in error, or perhaps the cancellation has come from the patient.

11.4.5 REF/RRI - request patient referral status (event I15)

This event triggers a message to be sent between healthcare providers regarding the status of a patient referral request. A previous referral has been made and acknowledged; however, no response has been received to indicate results and/or procedures performed.

11.5 SEGMENTS

11.5.1 RF1 - referral information segment

This segment represents information that may be useful when sending referrals from the referring provider to the referred-to provider.

Figure 11-2. RF1 attributes

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
1	200	CE	O		0283	01137	Referral Status
2	200	CE	O		0280	01138	Referral Priority
3	200	CE	O		0281	01139	Referral Type
4	200	CE	O	Y	0282	01140	Referral Disposition
5	200	CE	O		0284	01141	Referral Category
6	30	EI	R			01142	Originating Referral Identifier
7	26	TS	O			01143	Effective Date
8	26	TS	O			01144	Expiration Date
9	26	TS	O			01145	Process Date
10	200	CE	O	Y	0336	01228	Referral Reason
11	30	EI	O	Y		01300	External Referral Identifier

11.5.1.0 RF1 - field definitions

11.5.1.1 Referral status (CE) 01137

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

Definition: This field contains the status of the referral as defined by either the referred-to or the referred-by provider. Refer to *user-defined table 0283 - Referral status* for suggested values.

User-defined Table 0283 - Referral status

Value   **Description**

A	Accepted
P	Pending
R	Rejected
E	Expired

11.5.1.2 Referral priority (CE)   01138

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

Definition: This field contains the urgency of the referral. Refer to *user-defined table 0280 - Referral priority* for suggested values.

User-defined Table 0280 - Referral priority

Value	Description
S	STAT
A	ASAP
R	Routine

11.5.1.3 Referral type (CE)   01139

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

Definition: This field contains the type of referral. It is loosely associated with a clinical specialty or type of resource. Refer to *user-defined table 0281 - Referral type* for suggested values.

User-defined Table 0281 - Referral type

Value	Description
LAB	Laboratory
RAD	Radiology
MED	Medical
SKN	Skilled Nursing
PSY	Psychiatric
HOM	Home Care

11.5.1.4 Referral disposition (CE)   01140

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

Definition: This field contains the type of response or action that the referring provider would like from the referred-to provider. Refer to *user-defined table 0282 - Referral disposition* for suggested values.

User-defined Table 0282 - Referral disposition

Value	Description
WR	Send Written Report

RP	Return Patient After Evaluation
AM	Assume Management
SO	Second Opinion

11.5.1.5 Referral category (CE) 01141

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

Definition: This field contains the location at which the referral will take place. Refer to *user-defined table 0284 - Referral category* for suggested values.

User-defined Table 0284 - Referral category

Value	Description
I	Inpatient
O	Outpatient
A	Ambulatory
E	Emergency

11.5.1.6 Originating referral identifier (EI) 01142

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

Definition: This field contains the originating application's permanent identifier for the referral. This is a composite field.

The first component is a string of up to 15 characters that identifies an individual referral. It is assigned by the originating application, and it identifies a referral, and the subsequent referral transactions, uniquely among all such referrals from a particular processing application.

The second component is optional because this field, itself, is already defined as a *referral identifier*.

The third component is optional. If used, it should contain the application identifier for the referred-to or external applications (i.e., *not* the originating application). The application identifier is a string of up to 15 characters that is uniquely associated with an application. A given healthcare provider facility, or group of intercommunicating healthcare provider facilities, should establish a unique list of applications that may be potential originators and recipients, and then assign unique application identifiers to each of those applications. This list of application identifiers becomes one of the healthcare provider facility's master dictionary lists. Since applications fulfilling different application roles can send and receive referral messages, the assigning authority application identifier may not identify the application sending or receiving a particular message. Data elements on the Message Header (MSH) segment are available to identify the actual sending and receiving applications.

11.5.1.7 Effective date (TS) 01143

Definition: This field contains the date on which the referral is effective.

11.5.1.8 Expiration date (TS) 01144

Definition: This field contains the date on which the referral expires.

11.5.1.9 Process date (TS) 01145

Definition: This field contains the date on which the referral originated. It is used in cases of retroactive approval.

11.5.1.10 Referral reason (CE) 01228

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

Definition: This field contains the reason for which the referral will take place. Refer to *user-defined table 0336 - Referral reason* for suggested values.

User-defined Table 0336 - Referral reason

Value	Description
S	Second Opinion
P	Patient Preference
O	Provider Ordered
W	Work Load

11.5.1.11 External referral identifier (EI) 01300

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

Definition: This field contains an external application's permanent identifier for the referral. That is, this referral identifier does not belong to the application which originated the referral and assigned the originating referral identifier.

The first component is a string of up to 15 characters that identifies an individual referral. It is typically assigned by the referred-to provider application responding to a referral originating from a referring provider application, and it identifies a referral, and the subsequent referral transactions, uniquely among all such referrals for a particular referred-to provider processing application. For example, when a primary care provider (referring provider) sends a referral to a specialist (referred-to provider), the specialist's application system may accept the referral and assign it a new referral identifier which uniquely identifies that particular referral within the specialist's application system. This new referral identifier would be placed in the external referral identifier field when the specialist responds to the primary care physician.

The second component is optional because this field, itself, is already defined as a *referral identifier*.

The third component is optional. If used, it should contain the application identifier for the referred-to or external application (i.e., not the originating application. The application identifier is a string of up to 15 characters that is uniquely associated with an application. A given healthcare provider facility, or group of intercommunicating healthcare provider facilities, should establish a unique list of applications that may be potential originators and recipients, and then assign unique application identifiers to each of those applications. This list of application identifiers becomes one of the healthcare provider facility's master dictionary lists. Since applications fulfilling different application roles can send and receive referral messages, the assigning authority application identifier may not identify the application sending or receiving a particular message. Data elements on the Message Header (MSH) segment are available to identify the actual sending and receiving applications.

11.5.2 AUT - authorization information segment

This segment represents an authorization or a pre-authorization for a referred procedure or requested service by the payor covering the patient's health care.

Figure 11-3. AUT attributes

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
1	200	CE	O		0072	01146	Authorizing Payor, Plan ID
2	200	CE	R		0285	01147	Authorizing Payor, Company ID
3	45	ST	O			01148	Authorizing Payor, Company Name
4	26	TS	O			01149	Authorization Effective Date
5	26	TS	O			01150	Authorization Expiration Date
6	30	EI	C			01151	Authorization Identifier
7	25	CP	O			01152	Reimbursement Limit
8	2	NM	O			01153	Requested Number of Treatments
9	2	NM	O			01154	Authorized Number of Treatments
10	26	TS	O			01145	Process Date

11.5.2.0   AUT - field definitions

11.5.2.1 Authorizing payor, plan ID (CE)   01146

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

Definition: This field contains the ID of the coverage plan authorizing treatment. Values should be entries in a locally-defined table of plan codes. Refer to *user-defined table 0072 - Insurance company plans* for suggested values.

11.5.2.2 Authorizing payor, company ID (CE)   01147

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

Definition: This field contains the ID of the insurance company or other entity that administers the authorizing coverage plan. Values may be entries in a locally-defined table of payor codes. Refer to *user-defined table 0285 - Insurance company ID codes* for suggested values.

11.5.2.3 Authorizing payor, company name (ST)   01148

Definition: This field contains the name of the insurance company or other entity that administers the authorizing coverage plan.

11.5.2.4 Authorization effective date (TS)   01149

Definition: This field contains the effective date of the authorization.

11.5.2.5 Authorization expiration date (TS)   01150

Definition: This field contains the expiration date after which the authorization to treat will no longer be in effect from the perspective of the coverage plan.

11.5.2.6 Authorization identifier (EI)   01151

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

Health Level Seven, Version 2.3 © 1997. All rights reserved.

Final Standard.

Definition: This field contains the coverage application's permanent identifier assigned to track the authorization and all related billing documents. This field is conditionally required. It is not required when authorization information is being requested. However, it is required when this segment is contained in a message which is responding to a request and contains the authorization information. This is a composite field.

The first component of this field is a string of up to 15 characters that identifies an individual authorization. It is assigned by the coverage application, and it identifies an authorization, and the subsequent billing transactions resulting from the given authorization, uniquely among all such authorizations granted from a particular processing application.

The second component is optional because this field, itself, is already defined as an *authorization identifier*.

The third component is optional. If used it should contain the application identifier for the coverage application. The application identifier is a string of up to six characters that is uniquely associated with an application. A given healthcare provider facility, or group of intercommunicating healthcare provider facilities, should establish a unique list of applications that may be potential originators and recipients, and then assign unique application identifiers to each of those applications. This list of application identifiers becomes one of the healthcare provider facility's master dictionary lists. Since applications fulfilling different application roles can send and receive referral messages containing authorizations, the coverage application identifier may not identify the application sending or receiving a particular message. Data elements on the Message Header (MSH) segment are available to identify the actual sending and receiving applications.

11.5.2.7 Reimbursement limit (CP)   01152

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

Definition: This field contains the dollar limit for reimbursement specified by the coverage plan for the authorized treatment.

11.5.2.8 Requested number of treatments (NM)   01153

Definition: This field contains the *requested* number of times that the treatment may be administered to the patient without obtaining additional authorization.

11.5.2.9 Authorized number of treatments (NM)   01154

Definition: This field contains the number of times that the authorized treatment may be administered to the patient without obtaining additional authorization.

11.5.2.10 Process date (TS)   01145

Definition: This field contains the date that the authorization originated with the authorizing party.

11.5.3 PRD - provider data segment

This segment will be employed as part of a patient referral message and its related transactions. The PRD segment contains data specifically focused on a referral, and it is inter-enterprise in nature. The justification for this new segment comes from the fact that we are dealing with referrals that are external to the facilities that received them. Therefore, using a segment such as the current PV1 would be inadequate for all the

return information that may be required by the receiving facility or application. In addition, the PV1 does not always provide information sufficient to enable the external facility to make a complete identification of the referring entity. The information contained in the PRD segment will include the referring provider, the referred-to provider, the referred-to location or service, and the referring provider clinic address.

Figure 11-4. PRD attributes

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
1	200	CE	R	Y	0286	01155	Role
2	106	XPN	O	Y		01156	Provider Name
3	60	XAD	O			01157	Provider Address
4	60	PL	O			01158	Provider Location
5	100	XTN	O	Y		01159	Provider Communication Information
6	200	CE	O		0185	01161	Preferred Method of Contact
7	100	CM	O	Y		01162	Provider Identifiers
8	26	TS	O			01163	Effective Start Date of Role
9	26	TS	O			01164	Effective End Date of Role

11.5.3.0 PRD field definitions

11.5.3.1 Role (CE) 01155

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

Definition: This field contains the contact role that defines the relationship of the person described in this segment to the patient being referred. When a referral is inter-enterprise in nature, there are several important relationships that must be identified. For example, the proper identification of both the referring and the referred-to provider is critical for proper processing of a referral. In addition, some enterprises may want information regarding a consulting provider or the identity of the person who actually prepared the referral. This contact role may also expand to represent affiliated persons to whom information regarding this referral must be forwarded or copied. Refer to *user-defined table 0286 - Provider role* for suggested values.

User-defined Table 0286 - Provider role

Value	Description
RP	Referring Provider
PP	Primary Care Provider
CP	Consulting Provider
RT	Referred to Provider

11.5.3.2 Provider name (XPN) 01156

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

Definition: This field contains the name of the provider identified in this segment. Generally, this field will describe a physician associated with the referral. However, it is not limited to physicians. This field may contain the name of any valid healthcare provider associated with this referral. If this Provider Name is a physician's name, you may refer to *PRD-1-provider identifiers* (Section 11.5.3.7) for the physician identifier.

11.5.3.3 Provider address (XAD) 01157

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

Definition: This field contains the mailing address of the provider identified in this segment. One of the key components to completing the "circle of care" and provider/institution bonding is the issuance of follow-up correspondence to the referring provider.

11.5.3.4 Provider location (PL) 01158

```
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)>

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

Definition: This field contains the location of the provider as needed when a provider that may be external to a given enterprise must be referenced. For example, if this provider represented the referred-to physician, the *PRD-4-provider location* should identify the clinic of the physician or provider to whom this referral has been sent. The identification of the provider's location is specified by an application and facility identifier carried in the facility field. The application ID and facility ID would be used in the same manner as their corresponding fields in the MSH segment (*MSH-3-sending application, MSH-5-receiving application MSH-4-sending facility, MSH-6-receiving facility*). That is, the facility field will contain an application identifier and facility identifier which describe the location of this provider. However, it should be noted that they may describe a different location because the provider location being referenced in this field *may not be* the location from which the message originated, which is being described by the MSH.

11.5.3.5 Provider communication information (XTN) 01159

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

Definition: This field contains information, such as the phone number or electronic mail address, used to communicate with the provider or organization.

11.5.3.6 Preferred method of contact (CE) 01161

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

Definition: This field contains the preferred method to use when communicating with the provider. Refer to *user-defined table 0185 - Preferred method of contact* for suggested values.

11.5.3.7 Provider identifiers (CM) 01162

```
Components: <ID number (ST)> ^ <type of ID number (IS)> ^ <other qualifying info (ST)>
```

Definition: This repeating field contains the provider's unique identifiers such as UPIN, Medicare and Medicaid numbers. Refer to *PRA-6-practitioner ID numbers* in Chapter 8 (Section 8.6.3.6, "Practitioner ID numbers") for suggested values.

11.5.3.8 Effective start date of role (TS) 01163

Definition: This field contains the date that the role of the provider effectively began. For example, this date may represent the date on which a physician was assigned as a patient's primary care provider.

11.5.3.9 Effective end date of role (TS) 01164

Definition: This field contains the date that the role of the provider effectively ended. For example, this date may represent the date that a physician was removed as a patient's primary care provider.

Note:	The *PRD-8-effective start date of role* and *PRD-9-effective end date of role* fields should *not* be used as trigger events. For example, they should not be used to trigger a change in role. These two dates are for informational purposes only.

11.5.4 CTD - contact data segment

The CTD segment may identify any contact personnel associated with a patient referral message and its related transactions. The CTD segment will be paired with a PRD segment. The PRD segment contains data specifically focused on provider information in a referral. While it is important in an inter-enterprise transaction to transmit specific information regarding the providers involved (referring and referred-to), it may also be important to identify the contact personnel associated with the given provider. For example, a provider receiving a referral may need to know the office manager or the billing person at the institution of the provider who sent the referral. This segment allows for multiple contact personnel to be associated with a single provider.

Figure 11-5. CTD attributes

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
1	200	CE	R	Y	0131	01155	Role
2	106	XPN	O	Y		01165	Contact Name
3	60	XAD	O			01166	Contact Address
4	60	PL	O			01167	Contact Location
5	100	XTN	O	Y		01168	Contact Communication Information
6	200	CE	O		0185	01170	Preferred Method of Contact
7	100	CM	O	Y		01171	Contact Identifiers

11.5.4.0   CTD field definitions

11.5.4.1 Role (CE) 01155

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

Definition: This field contains the contact role that defines the relationship of the person described in this segment to the patient being referred. When a referral is inter-enterprise in nature, there are some important relationships that must be identified. For example, it may be necessary to identify the contact representative at the clinic that sent the referral. Refer to *user-defined table 0131 - Contact role* for suggested values.

11.5.4.2 Contact name (XPN) 01165

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

Definition: This field contains the name of the contact person identified in this segment. Generally, this field will describe a person or provider associated with the referral. If this contact name is a physician, you may refer to the *CTD-7-contact identifiers* (Section 11.5.4.7) for the physician identifier.

11.5.4.3 Contact address (XAD) 01166

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

Final Standard.

Definition: This field contains the mailing address of the contact person identified in this segment. One of the key components for completing the "circle of care" and provider/institution bonding is the issuance of follow-up correspondence to the referring provider.

11.5.4.4 Contact location (PL)   01167

```
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)>

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

Definition: This field contains the location of the contact, which is required when a contact that may be external to a given enterprise must be referenced. For example, if this contact represents the office manager of the referred-to physician, then the contact location should identify the clinic of the physician or provider to whom this referral has been sent. The identification of the contact's location is specified by an application and facility identifier carried in the facility field. The application identifier and the facility identifier would be used in the same manner as their corresponding fields in the MSH segment (*MSH-3-sending application, MSH-5-receiving application, MSH-4-sending facility, MSH-6-receiving facility*). That is, the facility field will contain an application identifier and facility identifier which describe the location of this contact. However, it should be noted that they may describe a different location because the contact location being referenced in this field *may not be* the location from which the message originated, which is being described by the MSH.

11.5.4.5 Contact communication information (XTN)   01168

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

Definition: This field contains the information, such as the phone number or electronic mail address, used to communicate with the contact person or organization.

11.5.4.6 Preferred method of contact (CE)   01170

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

Definition: This field contains the preferred method to use when communicating with the contact person. Refer to *user-defined table 0185 - Preferred method of contact* for suggested values.

11.5.4.7 Contact identifiers (CM)   01171

```
Components: <ID number (ST)> ^ <type of ID number (IS)> ^ <other qualifying info (ST)>
```

Definition: This repeating field contains the contact's unique identifiers such as UPIN, Medicare and Medicaid numbers. Refer to Chapter 8 (Section 8.6.3.6, "Practitioner ID numbers") for suggested values.

11.6 EXAMPLES

The following examples will demonstrate the proposed way in which the RQI, RQA and REF messages can be used with the I01 (request for insurance information), I08 (request for treatment authorization information), I15 (request patient referral status) and I06 (request/receipt of clinical data listing) event codes. The events are presented in the order in which they would occur in a typical patient encounter. The first event to occur when the patient visits the medical practice is the verification of eligibility/coverage information. Next, the patient will be diagnosed and may be referred to a specialist for further treatment. This procedure may require a request for pre-authorization from the

payor, which will be forwarded to the referral provider. Once the referral provider begins treatment, messages regarding the status or outcome of the treatment will be sent to the referring provider. Queries may also be sent to the specialist and reference laboratories.

11.6.1 RQI message using an I01 event with an immediate response

When a patient arrives for an appointment, the office staff will frequently need to verify the patient's insurance information. In the following RQI message example, Dr. Blake is sending an insurance information request to the Washington State Insurance Company for her patient, Cary Joe Brown. The response from the payor is shown in a more complete IN1 segment. However, it should be noted that in addition to the IN1 segment, this return information could have been placed in the NTE segment to serve as display data. This strategy would serve a broader community of diverse application systems that might have different levels of ability to process the record-formatted data.

```
MSH|^~\&|BLAKEMD|EWHIN|MSC|EWHIN|19940107155043||RQI^I01|BLAKEM7888|P|2
    .3|||NE|AL<cr>
PRD|RP|BLAKE^BEVERLY^^^DR^MD|N. 12828 NEWPORT HIGHWAY^^MEAD^WA^99021|
    ^^^BLAKEMD&EWHIN^^^^^BLAKE MEDICAL CENTER|BLAKEM7899<cr>
PRD|RT|WSIC||^^^MSC&EWHIN^^^^^WASHINGTON STATE INSURANCE COMPANY<cr>
PID|||402941703^9^M10||BROWN^CARY^JOE||19600309||||||||||402941703<cr
    >
IN1|1|PPO|WA02|WSIC (WA State Code)|<cr>
```

```
MSH|^~\&|MSC|EWHIN|BLAKEMD|EWHIN|19940107155212||RPI^I01|MSC2112|P|2.3|
    ||ER|ER<cr>
MSA|AA|BLAKEM7888|ELIGIBILITY INFORMATION FOUND<cr>
PRD|RP|BLAKE^BEVERLY^^^DR^MD|N. 12828 NEWPORT HIGHWAY^^MEAD^WA^99021|
    ^^^BLAKEMD&EWHIN^^^^^BLAKE MEDICAL CENTER|BLAKEM7899<cr>
PRD|RT|WSIC||^^^MSC&EWHIN^^^^^WASHINGTON STATE INSURANCE COMPANY<cr>
PID|||402941703^9^M10||BROWN^CARY^JOE||19600301||||||||||402941703,CR
    >
IN1|1|PPO|WA02|WSIC (WA State Code)|11223 FOURTH
    STREET^^MEAD^WA^99021^USA|ANN
    MILLER|509)333-1234|987654321||||19901101||||BROWN^CARY^JOE|1|19600
    309|N. 12345 SOME
    STREET^^MEAD^WA^99021^USA||||||||||||||||402941703||||||01|M<cr>
```

11.6.2 RQA message using an I08 event with an immediate response

When the attending physician decides to refer the patient for treatment to another healthcare provider, pre-authorization may be required by the payor. In the following RQA example, Dr. Blake is requesting the appropriate pre-authorization from Washington State Insurance Company for a colonoscopy on Cary Joe Brown. The request includes the diagnosis, in case it is a factor in the approval decision. As shown below, the immediate response indicates approval of the request that was made on 01/10/94 and that expires on 05/10/94. In actuality, most payors require some human intervention in the pre-authorization process and would probably not respond immediately.

```
MSH|^~\&|BLAKEMD|EWHIN|MSC|EWHIN|19940110105307||RQA^I08|BLAKEM7898|P|2
   .3|||NE|AL<cr>
PRD|RP|BLAKE^BEVERLY^^^DR^MD|N. 12828 NEWPORT HIGHWAY^^MEAD^WA^99021|
   ^^^BLAKEMD&EWHIN^^^^^BLAKE MEDICAL CENTER|BLAKEM7899<cr>
PRD|RT|WSIC||^^^MSC&EWHIN^^^^^WASHINGTON STATE INSURANCE COMPANY<cr>
PID|||402941703^9^M10||BROWN^CARY^JOE||19600309|||||||||||||402941703<cr
   >
IN1|1|PPO|WA02|WSIC (WA State Code)|11223 FOURTH
   STREET^^MEAD^WA^99021^USA|ANN
   MILLER|509)333-1234|987654321||||19901101||||BROWN^CARY^JOE|1|19600
   309|N. 12345 SOME
   STREET^^MEAD^WA^99021^USA|||||||||||||||||402941703||||||01|M<cr>
DG1|1|I9|569.0|RECTAL POLYP|19940106103500|0<cr>
PR1|1|C4|45378|Colonoscopy|19940110105309|00<cr>


MSH|^~\&|MSC|EWHIN|BLAKEMD|EWHIN|19940110154812||RPA^I08|MSC2112|P|2.3|
   ||ER|ER<cr>
MSA|AA|BLAKEM7888<cr>
PRD|RP|BLAKE^BEVERLY^^^DR^MD|N. 12828 NEWPORT HIGHWAY^^MEAD^WA^99021|
   ^^^BLAKEMD&EWHIN^^^^^BLAKE MEDICAL CENTER|BLAKEM7899<cr>
PRD|RT|WSIC||^^^MSC&EWHIN^^^^^WASHINGTON STATE INSURANCE COMPANY<cr>
PID|||402941703^9^M10||BROWN^CARY^JOE||19600301|||||||||||||402941703<cr
   >
IN1|1|PPO|WA02|WSIC (WA State Code)|11223 FOURTH
   STREET^^MEAD^WA^99021^USA|ANN
   MILLER|(509)333-1234|987654321||||19901101||||BROWN^CARY^JOE|1|1960
   0309|N. 12345 SOME
   STREET^^MEAD^WA^99021^USA|||||||||||||||||402941703||||||01|M<cr>
 DG1|1|I9|569.0|RECTAL POLYP|19940106103500|0<cr>
PR1|1|C4|45378|Colonoscopy|19940110105309|00<cr>
AUT|PPO|WA02|WSIC (WA State Code)|19940110|19940510|123456789|175|1<cr>
```

11.6.3 RQA message using an I08 event with a deferred response

In the following example of a pre-authorization request, the payor indicates his receipt of the request (a standard acknowledgment message), but defers issuing a pre-authorization to a later time. This response represents a more typical payor transaction sequence. Note the use of the "Accept Acknowledgment Type," requiring the receiving system to respond in all cases to receipt of the message.

```
MSH|^~\&|BLAKEMD|EWHIN|MSC|EWHIN|19940110105307||RQA^I08|BLAKEM7898|P|2
    .3|||AL|AL<cr>
PRD|RP|BLAKE^BEVERLY^^^DR^MD|N. 12828 NEWPORT HIGHWAY^^MEAD^WA^99021|
    ^^^BLAKEMD&EWHIN^^^^^BLAKE MEDICAL CENTER|BLAKEM7899<cr>
PRD|RT|WSIC||^^^MSC&EWHIN^^^^^WASHINGTON STATE INSURANCE COMPANY<cr>
PID|||402941703^9^M10||BROWN^CARY^JOE||19600301|||||||||||||402941703<cr
    >
IN1|1|PPO|WA02|WSIC (WA State Code)|11223 FOURTH
    STREET^^MEAD^WA^99021^USA|ANN
    MILLER|(509)333-1234|987654321||||19901101||||BROWN^CARY^JOE|1|1960
    0309|N. 12345 SOME
    STREET^^MEAD^WA^99021^USA|||||||||||||||||402941703||||||01|M<cr>
PR1|1|C4|45378|Colonoscopy|19940110105309|00<cr>


MSH|^~\&|MSC|EWHIN|BLAKEMD|EWHIN|1994011015315||MCF|MSC2112|P|2.3|||ER|
    ER<cr>
MSA|AA|BLAKEM7888<cr>


MSH|^~\&|MSC|EWHIN|BLAKEMD|EWHIN|19940111102304||RPA^I08|MSC2113|P|2.3|
    ||ER|ER<cr>
MSA|AA|BLAKEM7888<cr>
PRD|RP|BLAKE^BEVERLY^^^DR^MD|N. 12828 NEWPORT HIGHWAY^^MEAD^WA^99021|
    ^^^BLAKEMD&EWHIN^^^^^BLAKE MEDICAL CENTER|BLAKEM7899<cr>
PRD|RT|WSIC||^^^MSC&EWHIN^^^^^WASHINGTON STATE INSURANCE COMPANY<cr>
PID|||402941703^9^M10||BROWN^CARY^JOE||19600301|||||||||||||402941703<cr
    >
IN1|1|PPO|WA02|WSIC (WA State Code)|11223 FOURTH
    STREET^^MEAD^WA^99021^USA|ANN
    MILLER|509)333-1234|987654321||||19901101||||BROWN^CARY^JOE|1|19600
    309|N. 12345 SOME
    STREET^^MEAD^WA^99021^USA|||||||||||||||||402941703||||||01|M<cr>
PR1|1|C4|45378|Colonoscopy|19940110105309|00<cr>
AUT|PPO|WA02|WSIC (WA State Code)|19940110|19940510|123456789|175|1<cr>
```

11.6.4 REF message using an I11 event with an immediate response

Once pre-authorization has been received, the patient is referred to the referral provider. In the following example, Dr. Blake is referring Cary Joe Brown to Dr. Jose Jimenez for a colonoscopy. The referral message includes the patient's demographic information, diagnosis and the pre-authorization information retrieved during the previous transaction. The dates contained in the pre-authorization segment (e.g., authorization date and authorization expiration date) pertain to the authorization, given by a payor, for a specified procedure. They are not intended to imply any kind of schedule request. Scheduling will be handled by the referral provider and the patient in a separate transaction. Not all referrals will require a detailed chain of response messages, so in this case, a simple acknowledgment in the form of an RPI is returned with a note from the referred-to provider.

```
MSH|^~\&|BLAKEMD|EWHIN|JIME|EWHIN|19940111113142||REF^I11|BLAKEM7899|P|
    2.3|||NE|AL<cr>

RF1||R|MED|RP|O|REF4502|19940111|19940510|19940111<cr>

PRD|RP|BLAKE^BEVERLY^^^DR^MD|N. 12828 NEWPORT HIGHWAY^^MEAD^WA^99021|
    ^^^BLAKEMD&EWHIN^^^^^BLAKE MEDICAL CENTER|BLAKEM7899<cr>

CTD|PR|JONES^BUCK|N. 12828 NEWPORT
    HIGHWAY^^MEAD^WA^99021|^^^BLAKEMD&EWHIN^^^^^BLAKE MEDICAL
    CENTER<cr>

PRD|RT|JIMENEZ^JOSE^^^DR||^^^JIME&EWHIN^^^^^JIMENEZ AND
    SMITH|||||531886<cr>

PID|||1234567891^1^M10||BROWN^CARY^JOE||19600309|M||C|N. 12345 SOME
    STREET^^MEAD^WA^99021^USA|SPO|(509)466-6801|(509)466-0396|ENGL|M|M|
    |402941703| BROWN*CJ4298^WA<cr>

NK1|1|BROWN^KATHARINA^LOU|2|N. 12345 SOME
    STREET^^MEAD^WA^99021^USA|(509)466-6801<cr>

GT1|1||BROWN^CARY^JOE||N. 12345 SOME
    STREET^^MEAD^WA^99021^USA|(509)466-6801|(509)466-0396|19600309|M||1
    |402941703|||| WISMER*MARTIN|||456789|01<cr>

IN1|1|PPO|WA02|WSIC (WA State Code)|11223 FOURTH
    STREET^^MEAD^WA^99021^USA|ANN
    MILLER|509)333-1234|987654321|||||19901101||||BROWN^CARY^JOE|1|19600
    309|N. 12345 SOME
    STREET^^MEAD^WA^99021^USA||||||||||||||||402941703||||||01|M<cr>

ACC|19940105125700|WR|WISMER*MARTIN<cr>

 DG1|1|I9|569.0|RECTAL POLYP|19940106103500|0<cr>


PR1|1|C4|45378|Colonoscopy|19940110105309|00<cr>

AUT|PPO|WA02|WSIC (WA State Code)|19940110|19940510|123456789|175|1<cr>
```

```
MSH|^~\&|JIME|EWHIN|BLAKEMD|EWHIN|19940111152401||RRI^I11|JIME1123|P|2.
    3|||ER|ER<cr>
MSA|AA|BLAKEM7899<cr>

RF1|A|R|MED|RP|O|REF4502|19940111|19940510|19940111<cr>
PRD|RP|BLAKE^BEVERLY^^^DR^MD|N. 12828 NEWPORT HIGHWAY^^MEAD^WA^99021|
    ^^^BLAKEMD&EWHIN^^^^^BLAKE MEDICAL CENTER|BLAKEM7899<cr>
CTD|PR|JONES^BUCK|N. 12828 NEWPORT
    HIGHWAY^^MEAD^WA^99021|^^^BLAKEMD&EWHIN^^^^^BLAKE MEDICAL
    CENTER<cr>
PRD|RT|JIMENEZ^JOSE^^^DR||^^^JIME&EWHIN^^^^^JIMENEZ AND
    SMITH||||531886<cr>
PID|||1234567891^1^M10||BROWN^CARY^JOE||19600309|M||C|N. 12345 SOME
    STREET^^MEAD^WA^99021^USA|SPO|(509)466-6801|(509)466-0396|ENGL|M|M|
    |402941703| BROWN*CJ4298^WA<cr>
DG1|1|I9|569.0|RECTAL POLYP|19940106103500|0<cr>

PR1|1|C4|45378|Colonoscopy|19940111141509|00<cr>
NTE|||Patient is doing well.~Full recovery expected.<cr>
```

11.6.5 REF message using an I11 event with a deferred response

The following example demonstrates the ability of the referral provider to return a series of responses. For most referrals, multiple responses will be returned because referrals may contain multiple requested procedures that may be performed over a period of time. The referral provider determines the completion of this chain of messages and indicates that designation in the following example by setting the "Processed" flag in the MSA segment. This procedure will probably vary from network to network.

Final Standard.

```
MSH|^~\&|BLAKEMD|EWHIN|JIME|EWHIN|19940111113142||REF^I11|BLAKEM7899|P|
    2.3|||AL|AL<cr>
RF1||R|MED|RP|O|REF4502|19940111|19940510|19940111<cr>
PRD|RP|BLAKE^BEVERLY^^^DR^MD|N. 12828 NEWPORT HIGHWAY^^MEAD^WA^99021|
    ^^^BLAKEMD&EWHIN^^^^^BLAKE MEDICAL CENTER|BLAKEM7899<cr>
CTD|PR|JONES^BUCK|N. 12828 NEWPORT
    HIGHWAY^^MEAD^WA^99021|^^^BLAKEMD&EWHIN^^^^^BLAKE MEDICAL
    CENTER<cr>
PRD|RT|JIMENEZ^JOSE^^^DR||^^^JIME&EWHIN^^^^^JIMENEZ AND
    SMITH|||||531886<cr>
PID|||1234567891^1^M10||BROWN^CARY^JOE||19600309|M||C|N. 12345 SOME
    STREET^^MEAD^WA
    ^99021^USA|SPO|(509)466-6801|(509)466-0396|ENGL|M|M||402941703|BROW
    N*CJ4298^WA<cr>
NK1|1|BROWN^KATHARINA^LOU|2|N. 12345 SOME
    STREET^^MEAD^WA^99021^USA|(509)466-6801<cr>
GT1|1||BROWN^CARY^JOE||N. 12345 SOME
    STREET^^MEAD^WA^99021^USA|(509)466-6801
    |(509)466-0396|19600309|M||1|402941703||||WISMER*MARTIN|||456789|01
    <cr>
IN1|1|PPO|WA02|WSIC (WA State Code)|11223 FOURTH
    STREET^^MEAD^WA^99021^USA|ANN
    MILLER|(509)333-1234|987654321|||19901101||||BROWN^CARY^JOE|1|1960
    0309|N. 12345 SOME
    STREET^^MEAD^WA^99021^USA||||||||||||||||402941703||||||01|M<cr>
ACC|19940105125700|WR|WISMER*MARTIN<cr>
DG1|1|I9|569.0|RECTAL POLYP|19940106103500|0<cr>
PR1|1|C4|45378|Colonoscopy|19940110105309|00<cr>
AUT|PPO|WA02|WSIC (WA State Code)|19940110|19940510|123456789|175|1<cr>


MSH|^~\&|JIME|EWHIN|BLAKEMD|EWHIN|19940111154812||MCF|JIME1123|P|2.3|||
    ER|ER<cr>
MSA|AA|BLAKEM7899<cr>
```

```
MSH|^~\&|JIME|EWHIN|BLAKEMD|EWHIN|19940112152401||RRI^I11|JIME1124|P|2.
    3|||ER|ER<cr>
MSA|AA|BLAKEM7899<cr>
RF1|A|R|MED|RP|O|REF4502|19940111|19940510|19940111<cr>
PRD|RP|BLAKE^BEVERLY^^^DR^MD|N. 12828 NEWPORT
    HIGHWAY^^MEAD^WA^99021|^^^BLAKEMD&EWHIN^^^^^BLAKE MEDICAL
    CENTER|BLAKEM7899<cr>
CTD|PR|JONES^BUCK|N. 12828 NEWPORT
    HIGHWAY^^MEAD^WA^99021|^^^BLAKEMD&EWHIN^^^^^BLAKE MEDICAL
    CENTER<cr>
PRD|RT|JIMENEZ^JOSE^^^DR||^^^JIME&EWHIN^^^^^JIMENEZ AND
    SMITH|||||531886<cr>
PID|||1234567891^1^M10||BROWN^CARY^JOE||19600309|M||C|N. 12345 SOME
    STREET^^MEAD^WA^
    99021^USA|SPO|(509)466-6801|(509)466-0396|ENGL|M|M||402941703|BROWN
    *CJ4298^WA<cr>
DG1|1|I9|569.0|RECTAL POLYP|19940106103500|0<cr>


PR1|1|C4|45378|Colonoscopy|19940111141509|00<cr>
NTE|||Patient is doing well.~Full recovery expected.<cr>
```

11.6.6 RQC inquiry message using an I05 event with an immediate response

In this example, Dr. Blake is querying a reference laboratory for the results of all lab work performed on Cary Joe Brown between the dates of 03/20/94 and 03/22/94 and requests that the data be returned in a record or data elemented format. The message request contains all of the patient identification, as well as the provider identification necessary for the responding facility to qualify the request.

```
MSH|^~\&|BLAKEMD|EWHIN|EHS_LAB|EWHIN|19940410113142||RQC^I05|BLAKEM7899
    |P|2.3|||NE|AL<cr>
QRD|19940504144501|R|I|BLAKEM7899|||5^RD|PATIENT|RES|ALL<cr>
QRF|EHS_LAB^EWHIN|19940320000000|19940322235959<cr>
PRD|RP|BLAKE^BEVERLY^^^DR^MD|N.12828NEWPORT
    HIGHWAY^^MEAD^WA^99021|^^^BLAKEMD&EWHIN^^^^^BLAKE MEDICAL
    CENTER|BLAKEM7899<cr>
CTD|PR|JONES^BUCK|N. 12828 NEWPORT
    HIGHWAY^^MEAD^WA^99021|^^^BLAKEMD&EWHIN^^^^^BLAKE MEDICAL
    CENTER<cr>
PRD|RT|EMPLAB^EMPIRE LAB||^^^EHS_LAB&EWHIN^^^^^EIMPIRE LABORATORIES<cr>
PID|||1234567891^1^M10||BROWN^CARY^JOE||19600309|M||C|N.12345SOME
    STREET^^MEAD^WA^
    99021^USA|SPO|(509)466-6801|(509)466-0396|ENGL|M|M||402941703|BROWN
    *CJ4298^WA<cr>
```

```
MSH|^~\&|EHS_LAB|EWHIN|BLAKEMD|EWHIN|19940411152401||RPI^I05|EHSLAB4250
    |P|2.3|||ER|ER<cr>
MSA|AA|BLAKEM7899<cr>
QRD|19940504144501|R|I|BLAKEM7899|||5^RD|PATIENT|RES|ALL<cr>
QRF|EHS_LAB^EWHIN|19940320000000|19940322235959<cr>
PRD|RP|BLAKE^BEVERLY^^^DR^MD|N. 12828 NEWPORT
    HIGHWAY^^MEAD^WA^99021|^^^BLAKEMD&EWHIN^^^^^BLAKE MEDICAL
    CENTER|BLAKEM7899<cr>
CTD|PR|JONES^BUCK|N. 12828 NEWPORT
    HIGHWAY^^MEAD^WA^99021|^^^BLAKEMD&EWHIN^^^^^BLAKE MEDICAL
    CENTER<cr>
PRD|RT|EMPLAB^EMPIRE LAB||^^^EHS_LAB&EWHIN^^^^^EIMPIRE LABORATORIES<cr>
PID|||1234567891^1^M10||BROWN^CARY^JOE||19600309|M||C|N. 12345 SOME
    STREET^^MEAD^WA^
    99021^USA|SPO|(509)466-6801|(509)466-0396|ENGL|M|M||402941703|BROWN
    *CJ4298^WA<cr>
OBR|1||1045813^LAB|L1505.003^COMPLETE BLOOD COUNT
    (D)||||19940320104700|""|1^EA||||
    |19940320112400||CARMI||||||19940320104955|||F<cr>
OBX|1|ST|L1550.000^HEMOGLOBIN, AUTO HEME||11.6|g/dl|12.0-16.0|L|||F<cr>
OBX|2|ST|L1551.003^HEMATOCRIT (D)||36.4|%|36-45||||F<cr>
OBX|3|ST|L1552.000^RBC, AUTO HEME||3.94|mil/ul|4.1-5.1|L|||F<cr>
OBX|4|ST|L1553.000^MCV, AUTO HEME||92.3|fl|80-100||||F<cr>
OBX|5|ST|L1554.000^MCH, AUTO HEME||29.3|pg|26-34||||F<cr>
OBX|6|ST|L1555.000^MCHC, AUTO HEME||31.8|g/dl|31-37||||F<cr>
OBX|7|ST|L1557.000^RBC DISTRIBUTION WIDTH||15.3|%|0-14.8|H|||F<cr>
OBX|8|ST|L1558.003^PLATELET COUNT (D)||279|th/ul|140-440||||F<cr>
OBX|9|ST|L1559.000^WBC, AUTO HEME||7.9|th/ul|4.5-11.0||||F<cr>
OBX|10|ST|L1561.100^NEUTROPHILS, % AUTO||73.8|%|||||F<cr>
OBX|11|ST|L1561.510^LYMPHOCYTES, % AUTO||16.6|%|||||F<cr>
OBX|12|ST|L1562.010^MONOCYTES, % AUTO||7.3|%|||||F<cr>
OBX|13|ST|L1563.010^EOSINOPHILS, % AUTO||1.7|%|||||F<cr>
OBX|14|ST|L1564.010^BASOPHILS, % AUTO||0.7|%|||||F<cr>
OBX|15|ST|L1565.010^NEUTROPHILS, ABS AUTO||5.8|th/ul|1.8-7.7||||F<cr>
OBX|16|ST|L1566.010^LYMPHOCYTES, ABS AUTO||1.3|th/ul|1.0-4.8||||F<cr>
OBX|17|ST|L1567.010^MONOYCYTES, ABS AUTO||0.6|th/ul|0.1-0.8||||F<cr>
OBX|18|ST|L1568.010^EOSINOPHILS, ABS AUTO||0.1|th/ul|0-0.7||||F<cr>
OBX|19|ST|L1569.000^BASOPHILS, ABS AUTO||0.1|th/ul|0-0.2||||F<cr>
OBX|20|ST|L2110.003^PROTHROMBIN TIME (D)||30.7|sec|11.1-14.0|HH|||F<cr>
NTE|1|L|COAGULATION CRITICAL VALUES CALLED TO VICKIE QUASCHNICK~AT 1130
    BY VON~Therapeutic Ranges(oral anticoagulant):~Most clinical
    situations:  16.1 - 21.1 sec -~  (1.3 - 1.7 times the mean of the
    normal range)~Mech heart valve, recurrent embolism:  18.6 - 23.6
    sec -~  (1.5 - 1.9 times the mean of the normal range)<cr>
OBX|21|ST|L2110.500^INR||5.95|||||F<cr>
NTE|1|L|Therapeutic Range (oral anticogulant):~  Most clinical
    situations:  2.0 - 3.0~  Mech heart valve, recurrent embolism:  3.0
    - 4.0<cr>
OBX|22|ST|L3110.003^SODIUM (D)||141|mmol/l|135-146||||F<cr>
OBX|23|ST|L3111.003^POTASSIUM (D)||3.8|mmol/l|3.5-5.1||||F<cr>
```

Final Standard.   4/3/97

```
OBX|24|ST|L3112.003^CHLORIDE (D)||111|mmol/l|98-108|H|||F<cr>
OBX|25|ST|L3113.003^CO2 (TOTAL) (D)||23.7|mmol/l|23-30||||F<cr>
OBX|26|ST|L3114.000^ANION GAP||6||7-17|L|||F<cr>
OBX|27|ST|L3120.003^CREATININE (D)||1.4|mg/dl|0.5-1.2|H|||F<cr>
OBX|28|ST|L3121.003^UREA NITROGEN (D)||24|mg/dl|7-25||||F<cr>
OBX|29|ST|L3123.003^GLUCOSE (D)||123|mg/dl|65-115|H|||F<cr>
OBX|30|ST|L3126.003^CALCIUM (D)||8.7|mg/dl|8.4-10.2||||F<cr>
OBR|2||1045825^LAB|L2560.000^BLOOD GAS, ARTERIAL
    (R)|||19940320105800|""|
    1^EA|||||19940320105800||CARMI|||||||19940320105844|||F<cr>
OBX|1|ST|L2565.000^PH, ARTERIAL BLD GAS (R)||7.46||7.35-7.45|H|||F<cr>
OBX|2|ST|L2566.000^PCO2, ARTERIAL BLOOD GAS||28|mm/Hg|35-45|LL|||F<cr>
NTE|1|L|BLOOD GAS ANALYSIS CRITICAL VALUE(S) CALLED TO~DR. CARLSON.<cr>
OBX|3|ST|L2567.000^PO2, ARTERIAL BLOOD GAS||83|mm/Hg|80-100||||F<cr>
OBX|4|ST|L2568.000^O2 SAT, ART BLD GAS (R)||96|%|95-99||||F<cr>
OBX|5|ST|L2569.000^BASE EX, ARTERIAL BLD
    GAS||-2.1|mEq/l|-2.0-2.0|L|||F<cr>
OBX|6|ST|L2570.000^HCO3, ARTERIAL BLD GAS||19.4|mEq/l|22-26|L|||F<cr>
OBX|7|ST|L2571.000^PATIENT TEMP, ABG||96.2|deg F|||||F<cr>
OBX|8|ST|L2572.000^MODE, ABG||ROOM AIR||||||F<cr>
OBR|3||1045812^LAB|L2310.003^URINALYSISD)|||19940320121800|""|1^EA|||||
    19940320121800||CARMI|||||||19940320104953|||F<cr>
OBX|1|ST|L2320.303^SPECIFIC GRAVITY, UR
    (D)||1.015||1.002-1.030||||F<cr>
OBX|2|ST|L2320.403^PH, UR (D)||7.0||5.0-7.5||||F<cr>
OBX|3|ST|L2320.503^PROTEIN, QUAL, UR (D)||NEG|mg/dl|||||F<cr>
OBX|4|ST|L2320.703^GLUCOSE, QUAL, UR (D)||0|mg/dl|0-30||||F<cr>
OBX|5|ST|L2320.803^KETONES, UR (D)||NEG|mg/dl|||||F<cr>
OBX|6|ST|L2320.903^OCCULT BLOOD, UR (D)||SMALL|||A|||F<cr>
OBX|7|ST|L2321.003^BILIRUBIN, UR (D)||NEG||||||F<cr>
OBX|8|ST|L2321.100^LEUKOCYTES, UR||MOD|||A|||F<cr>
OBX|9|ST|L2321.200^NITRITES, UR||NEG||||||F<cr>
OBX|10|ST|L2321.300^UROBILINOGEN, UR||NEG||||||F<cr>
OBX|11|ST|L2342.000^MICRO SPUN VOLUME, UR||8|ml|8-8||||F<cr>
OBX|12|ST|L2350.003^RBC, UR (D)||5-10|/hpf|||||F<cr>
OBX|13|ST|L2350.100^WBC, UR||>100|/hpf|||||F<cr>
OBX|14|ST|L2350.200^EPITHELIAL CELLS, UR||2+||||||F<cr>
OBX|15|ST|L2350.300^BACTERIA, UR||2+|||A|||F<cr>
```

11.7 ISSUES

11.7.1 HL7 overlapping with ASC X12N

There have been discussions regarding overlap of the proposed Patient Referral Chapter with recent
development efforts by a committee within the ASC X12N organization. In the Healthcare Task Group (Task
Group 2) of the ASC X12N Insurance Subcommittee, the Services Review Working Group (Working Group
10) has been working on a referral transaction (Transaction 278). This transaction has been designed from a
payor perspective by focusing on *certification* of a referral or *notification* that a referral took place. This

focus deals primarily with the financial or reimbursement side of a referral. There are some similarities between the two messages. However, there are also some clear differences. For example, the ASC X12 transaction does not provide for provider-to-provider referrals containing clinical data. Referrals containing a patient's clinical record along with diagnoses and requested procedures are the major focus of the work being done by HL7. In an effort to alleviate some of the controversy that this issue has caused, sections of this HL7 Patient Referral chapter have been removed. These sections dealt primarily with eligibility and plan coverage information. That information will be specifically handled by ASC X12N transactions 271 and 272, and the new interactive transactions.

There are some convergence activities currently in progress. The HL7 - X12 Joint Coordinating Committee has been formed to facilitate efforts to unify these two standard development organizations as well as others. Work is in progress to harmonize HL7 trigger events within X12N transactions, as well as in joint data modeling. There has also been some work done at the working group level to harmonize the common data segments of the two respective referral messages. There is ongoing participation by both HL7 committees and X12N work groups to achieve a certain level of data compatibility.

The HL7 Executive Committee has directed HL7 to continue development of the Patient Referral Chapter for the following reasons:

- The HL7 - X12 coordination is on-going, but will not be complete in time for Standard Version 2.3.

- The HL7 Patient Referral Chapter addresses business needs that the X12 transaction does not (e.g., transmission of codified clinical data).