



## Patient Record Flags

## HL7 Interface Specification

Patch DG\*5.3\*951

Patch DG\*5.3\*425

March 2019

Department of Veterans Affairs

Health Systems Design & Development (HSD&D)

## Revision History

Date	Description	Author
03/2019	Updated to include Patch DG*5.3*951 information and formatting fixes	D. Kelly, Technical Writer L. Behuniak, Project Manager
09/2003	Initial version for Patch DG*5.3*425	

## Table of Contents

<b>1</b>	<b>INTRODUCTION.....</b>	<b>1</b>
1.1	General .....	1
1.2	Assumptions .....	1
1.2.1	Message Content .....	1
1.2.2	Data Capture and Transmission.....	1
1.2.3	VA TCP/IP Lower Level Protocol .....	2
<b>2</b>	<b>HL7 CONTROL SEGMENTS .....</b>	<b>3</b>
2.1	Message Definitions .....	3
2.2	Segment Table Definitions .....	3
2.3	Message Control Segments .....	3
2.3.1	MSH - Message Header Segment .....	4
2.3.2	MSA – Message Acknowledgment Segment.....	5
2.3.3	ERR – Error Segment .....	5
2.3.4	PID - Patient Identification Segment .....	5
2.3.5	OBR – Observation Request Segment .....	6
2.3.6	OBX – Observation/Result Segment.....	7
2.3.7	QRD – Original Style Query Definition Segment.....	8
2.3.8	QRF – Query Filter .....	9
2.3.9	QPD – Query Parameter Definition.....	9
2.3.10	NTE – Notes and Comments .....	10
2.3.11	RCP – Response Control Parameter.....	11
2.3.12	QAK – Query Acknowledgement.....	11
2.4	Trigger Events and Message Definitions.....	11
2.4.1	Unsolicited Transmission of an Observation Message (R01).....	11
2.4.2	ORU Acknowledgment .....	12
2.4.3	Query for Results of Observation (R02).....	13
2.4.4	Response to Query, Transmission of Requested Observation (R04).....	14
2.4.5	Query by parameter requesting an RSP segment pattern response (Q11).....	15
2.4.6	Segment pattern response in response to QBP^Q11 (K11) .....	15
<b>3</b>	<b>SUPPORTED AND USER-DEFINED HL7 TABLES .....</b>	<b>16</b>
3.1	Table 0001 - Sex .....	16
3.2	Table 0002 - Marital Status .....	16
3.3	Table 0003 - Event Type Code.....	16
3.4	Table 0005 – Race .....	16
3.5	Table 0006 – Religion.....	17
3.6	Table 0008 – Acknowledgment Code.....	18
3.7	Table 0048 – What Subject Filter .....	19
3.8	Table 0076 - Message Type .....	20
3.9	Table 0091 – Query Priority.....	20
3.10	Table 0106 – Query/Response Format Code.....	20
3.11	Table 0126 – Quantity Limited Request .....	20
3.12	Table VA085 – Patient Record Flags .....	20
3.13	Table VA086 – PRF Error Codes.....	21

# **1 INTRODUCTION**

This document specifies the information needed for sharing National Patient Record Flag (PRF) assignment data between all sites that a patient visits. This data exchange will be triggered by specific events that relate to the assignment of a National PRF to a patient, the editing of an existing assignment in Veterans Health Information Systems and Technology Architecture (VistA), or the registration of a new patient. The basic communication protocol will be addressed, as well as the information that will be made available and how it will be obtained.

## **1.1 General**

This application will use the abstract message approach and encoding rules specified by Health Level 7 (standard for electronic data exchange/messaging protocol) (HL7). HL7 is used for communicating data associated with various events that occur in health care environments.

For example, when a National PRF assignment occurs in VistA, the event will trigger an update patient information message. This message is an unsolicited transaction to all VistA sites listed for the patient in the TREATING FACILITY LIST file (#391.91).

The formats of these messages conform to the Version 2.5 HL7 Interface Standards where applicable.

## **1.2 Assumptions**

The sharing of National PRF assignments assumes that all VistA sites will have:

- Installed and operational VistA HL7 software;
- Patch HL\*1.6\*39 installed to provide valid TCP links for all VistA sites;
- Installed and operational Master Patient Index/Patient Demographics (MPI/PD) system;
- A currently synchronized TREATING FACILITY LIST file (#391.91).

### **1.2.1 Message Content**

The data sent in the HL7 messages will be limited to the information that is required to uniquely identify the patient and generate a complete PRF assignment record in the receiving site. The data transmitted will be limited to available VistA data.

### **1.2.2 Data Capture and Transmission**

When National PRF assignments are created or edited, an event is generated to transmit the changes to all sites in the TREATING FACILITY LIST file (#391.91). Any changes made to the VistA database in non-standard ways, such as a direct global set by an application or by MUMPS code, will not be captured.

When a person is registered in VistA as a new patient, a query will be transmitted to the patient's Coordinating Master of Record (CMOR) site, requesting all the patient's existing National Patient Record Flag assignments.

### **1.2.3 VA TCP/IP Lower Level Protocol**

The HL7 V. 1.6 TCP/IP lower level protocol (LLP) will be used. Dynamic addressing via the HLL (“LINKS”) array will be used to enable the ORU~R01 Unsolicited Transmission of an Observation message to be transmitted to multiple VistA sites.

## **2 HL7 CONTROL SEGMENTS**

This section defines the HL7 control segments supported by VistA. The messages are presented separately and defined by category. Segments are also described. The messages are presented in the Message Control category.

### **2.1 Message Definitions**

From the VistA perspective, all incoming or outgoing messages are handled or generated based on an event.

In this section, and the following sections, the following elements will be defined for each message:

- the trigger events;
- the message event code;
- a list of segments used in the message;
- a list of fields for each segment in the message.

Each message is composed of segments. Segments contain logical groupings of data. Segments may be optional or repeatable. A [ ] indicates the segment is optional, the { } indicates the segment is repeatable. For each message category there will be a list of HL7 standard segments used for the message.

### **2.2 Segment Table Definitions**

For each segment, the data elements are described in table format. The table includes the sequence number (SEQ), maximum length (LEN), data type (DT), required or optional (R/O), repeatable (RP/#), the table number (TBL#), the element name, and the VistA description. Each segment is described in the following sections.

### **2.3 Message Control Segments**

This section describes the message control segments that are contained in message types described in this document. These are generic descriptions. Any time any of the segments described in this section are included in a message in this document, the VistA descriptions and mappings will be as specified here, unless otherwise specified in that section.

## 2.3.1 MSH - Message Header Segment

Table 1: MSH - Message Header Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
1	1	ST	R			Field Separator	Recommended value is ^ (caret)
2	4	ST	R			Encoding Characters	Recommended delimiter values: Component = ~ (tilde) Repeat =   (bar) Escape = \ (back slash) Sub-component = & (ampersand)
3	15	ST				Sending Application	Name field of HL7 Application Parameter file.
4	20	ST				Sending Facility	Sending station's facility number from Institution field of HL7 Communication Parameters file.
5	30	ST				Receiving Application	Name field of HL7 Application Parameter file.
6	30	ST				Receiving Facility	Receiving station's facility number from Institution field of HL Logical Link file.
7	26	TS				Date/Time of Message	Date and time message was created.
8	40	ST				Security	Not used
9	7	CM	R		0076 0003	Message Type	<u>2 Components</u> 1. Refer to Table 0076 2. Refer to Table 0003
10	20	ST	R			Message Control ID	Automatically generated by VISTA HL7 Package.
11	1	ID	R		0103	Processing ID	P (production)
12	8	ID	R		0104	Version ID	Version ID field of event protocol in Protocol file.
13	15	NM				Sequence Number	Not used
14	180	ST				Continuation Pointer	Not used
15	2	ID			0155	Accept Acknowledgment Type	NE (never acknowledge)
16	2	ID			0155	Application Acknowledgment Type	AL (always acknowledge)
17	2	ID				Country Code	Not used
18	6	ID		Y/3	0211	Character Set	Not used
19	60	CE				Principal Language of Message	Not used

## 2.3.2 MSA – Message Acknowledgment Segment

**Table 2: Message Acknowledgment Segment**

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
1	2	ID	R		0008	Acknowledgment Code	Refer to HL7 table 0008
2	20	ST	R			Message Control ID	Message Control ID of the message being acknowledged.
3	80	ST	O			Text Message	Error message text
4	15	NM	O			Expected Sequence Number	Not used
5	1	ID	B		0102	Delayed Acknowledgment Type	Not used
6	100	CE	O			Error Condition	Not used

## 2.3.3 ERR – Error Segment

**Table 3: Error Segment**

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
1	80	CM	R	Y		Error Code and Location	4 Components 1. Segment name 2. Sequence # 3. Field # 4. VA086 PRF Error Codes

## 2.3.4 PID - Patient Identification Segment

**Table 4: Patient Identification Segment**

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
1	4	SI				Set ID - Patient ID	Always set to '1'
2	20	CK				Patient ID (External ID)	Social Security Number field of Patient file.
3	20	CM	R	Y		Patient ID (Internal ID)	Integrated Control Number (ICN) field of Patient file. Component 1: ICN w/checksum Component 2: Checksum Component 3: Null Component 4: Assigning authority (subcomponent 1: 'USVHA', subcomponent 3: 'L' Component 5: Type 'NI'
4	12	ST				Alternate Patient ID	Not used
5	48	PN	R			Patient Name	Name
6	30	ST				Mother's Maiden Name	Not used
7	26	TS				Date of Birth	Date of birth
8	1	ID			0001	Sex	Refer to Table 0001
9	48	PN		Y		Patient Alias	Not used
10	1	ID			0005	Race	Not used
11	106	AD		Y		Patient Address	Not used
12	4	ID				County Code	Not used

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
13	40	TN		Y		Phone Number – Home	Not used
14	40	TN		Y		Phone Number – Business	Not used
15	25	ST				Language – Patient	Not used
16	1	ID			0002	Marital Status	Not used
17	3	ID			0006	Religion	Not used
18	20	CK				Patient Account Number	Not used
19	16	ST				SSN Number – Patient	Social security number and pseudo indicator.
20	25	CM				Driver's Lic Num – Patient	Not used
21	20	CK				Mother's Identifier	Not used
22	1	ID			0189	Ethnic Group	Not used
23	25	ST				Birth Place	Not used
24	2	ID				Multiple Birth Indicator	Not used
25	2	NM				Birth Order	Not used
26	3	ID		Y	0171	Citizenship	Not used
27	60	CE			0172	Veterans Military Status	Not used

### 2.3.5 OBR – Observation Request Segment

Table 5: Observation Request Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
1	4	SI	C			Set ID – OBR	Sequential number
2	22	EI	C			Placer Order Number	Not used
3	22	EI	C			Filler Order Number +	Not used
4	200	CE	R			Universal Service ID	<u>3 components:</u> 1. Patient Record Flag IEN 2. Name 3. PRF table – VA085 Based on field.02/file 26.13 <u>Example:</u> 1~Behavioral~VA085
5	2	ID	X			Priority	Not used
6	26	TS	X			Requested Date/time	Not used
7	26	TS	C			Observation Date/Time #	Date/Time field .02/file 26.14
8	26	TS				Observation End Date/Time #	Not used
9	20	CQ				Collection Volume *	Not used
10	60	XCN		Y		Collector Identifier *	Not used
11	1	ID			0065	Specimen Action Code *	Not used
12	60	CE				Danger Code	Not used
13	300	ST				Relevant Clinical Info.	Not used
14	26	TS	C			Specimen Received Date/Time *	Not used
15	300	CM			0070	Specimen Source *	Not used
16	80	XCN		Y		Ordering Provider	Not used
17	40	XTN		Y		Order Callback Phone Number	Not used
18	60	ST				Placer field 1	Not used
19	60	ST				Placer field 2	Not used

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
20	60	ST				Filler Field 1 +	Owner Site field .04/file 26.13
21	60	ST				Filler Field 2 +	Originating Site field .05/file 26.13 (Note: Used in ORF messages only.)
22	26	TS	C			Results Rpt/Status Chng - Date/Time +	Not used
23	40	CM				Charge to Practice +	Not used
24	10	ID			0074	Diagnostic Serv Sect ID	Not used
25	1	ID	C		0123	Result Status +	Not used
26	400	CM				Parent Result +	Not used
27	200	TQ		Y		Quantity/Timing	Not used
28	150	XCN		Y		Result Copies To	Not used
29	150	CM				Parent *	Not used
30	20	ID			0124	Transportation Mode	Not used
31	300	CE		Y		Reason for Study	Not used
32	200	CM				Principal Result Interpreter +	Not used
33	200	CM		Y		Assistant Result Interpreter +	Not used
34	200	CM		Y		Technician +	Not used
35	200	CM		Y		Transcriptionist +	Not used
36	26	TS				Scheduled Date/Time +	Not used
37	4	NM				Number of Sample Containers *	Not used
38	60	CE		Y		Transport Logistics of Collected Sample *	Not used
39	200	CE		Y		Collector's Comment *	Not used
40	60	CE				Transport Arrangement Responsibility	Not used
41	30	ID			0224	Transport Arranged	Not used
42	1	ID			0225	Escort Required	Not used
43	200	CE		Y		Planned Patient Transport Comment	Not used

### 2.3.6 OBX – Observation/Result Segment

Table 6: OBX – Observation/Result Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
1	10	SI				Set ID – OBX	Sequential number
2	2	ID			0125	Value Type	Always 'ST' for Status ID. Always 'TX' for Narrative, Comment, and DBRS ID's
3	590	CE	R			Observation Identifier	"S~Status~L" or "N~Narrative~L" or "C~Comment~L" or "D~DBRS-Update~L" or "D~DBRS-Delete~L"
4	20	ST				Observation Sub-ID	Sequential number when OBX.3 is "S" or "C". Used to separate multiple assignment history entries.

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
5	10	*		Y		Observation Value	ACTION field .03/file 26.14 or Assignment Narrative field 1/file 26.13 or History Comments field 1/file 26.14 or, in case of OBX.3 containing either "D~DBRS-Update~L" or "D~DBRS-Delete~L" first repetition contains value from last history entry in file 26.14, sub-file 26.142, field .01 (DBRS #) and second repetition contains value from last history entry in file 26.14, sub-file 26.142, field .02 (DBRS OTHER).
6	60	CE				Units	Not used
7	10	ST				References Range	Not used
8	5	ID		Y	0078	Abnormal Flags	Not used
9	5	NM				Probability	Not used
10	2	ID		Y	0080	Nature of Abnormal Test	Not used
11	1	ID	R		0085	Observ Result Status	Always 'F'inal
12	26	TS				Date Last Obs Normal Values	Not used
13	20	ST				User Defined Access Checks	Not used
14	26	TS				Date/Time of the Observation	Date/Time field .02/file 26.14 or from field .03, sub-file 26.142, file 26.14 in case of OBX.3.2 = "DBRS-Update" / "DBRS-Delete"
15	60	CE				Producer's ID	Not used
16	80	XCN				Responsible Observer	Not used
17	60	CE		Y		Observation Method	Not used
23	683	XON	O	N		Performing Organization Name	If OBX.3 = "C~Comment~L", component 3 of this field (OBX.23.3) contains station number from file 26.14, field .09

### 2.3.7 QRD – Original Style Query Definition Segment

Table 7: QRD – Original Style Query Definition Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
1	26	TS	R			Query Date/Time	Current Date/Time
2	1	ID	R		0106	Query Format Code	Always 'R'ecord
3	1	ID	R		0091	Query Priority	Always 'I'mmediate
4	10	ST	R			Query ID	DFN (ex. '7171694')

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
5	1	ID	O		0107	Deferred Response Type	Not used
6	26	TS	O			Deferred Response Date/Time	Not used
7	10	CQ	R		0126	Quantity Limited Request	10~'RD' records
8	60	XCN	R	Y		Who Subject Filter	Integrated Control Number <u>2 Components:</u> 1. ICN field 991.01/file 2 9. Assigning authority ('USVHA&&L')
9	60	CE	R	Y	0048	What Subject Filter	Always 'OTH~Other~HL0048'
10	60	CE	R	Y		What Department Data Code	Always 'PRFA~Patient Record Flags~L'
11	20	ST	O	Y		What Data Code Value Qual.	Not used
12	1	ID	O		0108	Query Results Level	Not used

## 2.3.8 QRF – Query Filter

Table 8: Query Filter

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
1	20	ST	R	Y		Where Subject Filter	Always 'PRF'
2	26	TS	O			When Data Start Date/Time	Not used
3	26	TS	O			When Data End Date/Time	Not used
4	60	ST	O	Y		What User Qualifier	Social Security Number field .09/file 2
5	60	ST	O	Y		Other QRY Subject Filter	Date of Birth field .03/file 2
6	12	ID	O	Y	0156	Which Date/Time Qualifier	Not used
7	12	ID	O	Y	0157	Which Date/Time Status Qualifier	Not used
8	12	ID	O	Y	0158	Date/Time Selection Qualifier	Not used
9	60	TQ	O			When Quantity/Timing Qualifier	Not used

## 2.3.9 QPD – Query Parameter Definition

Table 9: Query Parameter Definition

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
1	250	CWE	R		0471	Message Query Name	
1-1	20	ST	R			Identifier	"PRFREQ01"
1-2	40	ST	R			Text	"PRF Ownership Transfer Request"
2	32	ST	C			Query Tag	Query ID – sequential query number
3	30	ST	R			User Parameter 1	Patient's ICN
4	30	ST	R			User Parameter 2	PRF flag name from field 26.15/.01

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
5	50	XPN	R			User Parameter 3	Approver's name from field 200/.01  <b>This field is used in RSP^K11 message only, it's blank in QBP^Q11 message</b>
6	24	DTM	R			User Parameter 4	Approval/denial time stamp  <b>This field is used in RSP^K11 message only, it's blank in QBP^Q11 message</b>

### 2.3.10 NTE – Notes and Comments

Table 10: Notes and Comments

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
1	4	SI	R			Set ID – NTE	"1"
3	80	FT	O	1		Comment	"A" for approval or "D" for denial in RSP^K11 message. Request reason in QBP^Q11 message
3	80	FT	O	2		Comment	Response reason in RSP^K11 message.  <b>This field is used in RSP^K11 message only, it's blank in QBP^Q11 message</b>
4	2	CWE	O			Comment Type	"RE"
5	50	XCN	O			Entered by	<b>In QBP^Q11 message:</b> Requester's name from field 200/.01  <b>In RSP^K11 message:</b> Approver's name from field 200/.01
5.14	8	HD	R			Assigning Facility	
5.14.2	7	FT	R			Universal ID	Station # of facility or division.
6	24	DTM	O			Entered Date/Time	<b>In QBP^Q11 message:</b> Request timestamp  <b>In RSP^K11 message:</b> Approval/denial timestamp

### 2.3.11 RCP – Response Control Parameter

**Table 11: Response Control Parameter**

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
1	1	ID	O		0091	Query Priority	"D" (deferred)
2	10	CQ	O		0126	Quantity Limited Request	
2-1	1	NM	O			Quantity	"1"
2-2		CWE	O			Units	
2-2-1	2	ST	O			Identifier	"LI"
3	250	CNE	O		0394	Response Modality	
3-1	1	ST	O			Identifier	"T"

### 2.3.12 QAK – Query Acknowledgement

**Table 12: Query Acknowledgement**

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
1	32	ST	C			Query Tag	Query ID – sequential query number
2	2	ID	O		0208	Query Response Status	"OK" if patient + PRF flag combo has been found, "AR" otherwise.
3	250	CE	R		0471	Message Query Name	
3-1	20	ST	R			Identifier	"PRFREQ01"
3-2	50	ST	R			Text	"PRF Ownership Transfer Request"

## 2.4 Trigger Events and Message Definitions

Each triggering event is listed below, along with the applicable form of the message to be exchanged. The notation used to describe the sequence, option, and repetition of segments is described in the HL7 V. 2.3 *Standard Specification Manual*, Chapter 2, and in summary form, in Section 2.1 of this document.

### 2.4.1 Unsolicited Transmission of an Observation Message (R01)

Category I PRF assignment and assignment edit events will trigger an R01 message (Table 13) to be sent to each site listed for the patient in the TREATING FACILITY LIST file (#391.91) under the following circumstances:

- when a PRF is initially assigned to a patient;
- when an existing PRF assignment is edited.

**Table 13: Observational Report Message**

ORU	Observational Report Message	Section
MSH	Message Header	2.3.1
PID	Patient Identification	2.3.4
OBR	Observation Request	2.3.5
{OBX}	Observation/Result	2.3.6

### *Sample Message*

```
MSH^~| \&^PRF-SEND^500~DEVVPP.FO-ALBANY.MED.VA.GOV~DNS^PRF-RECV^500~FO-
ALBANY.MED.VA.GOV~DNS^20030314133623-0500^^ORU~R01^50044^T^2.3^^NE^AL^US

PID^1^999-99-9999~~^100999999V735077~735077~~USVHA&&L~NI^9873^DOE~JOHN^SMITH, ^19500404^M^^7^1
ROAD~RD 2~ANYTOWN~NY~33333^083^(555)555-5556^(555)555-5545^^S^0^^999999999

OBR^1^^1~BEHAVIORAL~VA085^^20030310111346-0500^^^^^^^^^^^^^1

OBX^1^TX^N~Narrative~L^^Description: This record flag was assigned to Mr. Doe because
on^^^^^F^^^20030311140002-0500

OBX^2^TX^N~Narrative~L^^March 1, 2003, he threatened a registration clerk with a
weapon.^^^^^F^^^20030311140002-0500

OBX^3^TX^N~Narrative~L^^|On March 10, 2003, the patient exhibited hostile behavior towards
the^^^^^F^^^20030311140002-0500

OBX^4^TX^N~Narrative~L^^Enrollment supervisor. The flag is being re-
activated^^^^^F^^^20030311140002-0500

OBX^5^TX^N~Narrative~L^^|Recommendation: Contact VA Police when the patient is on VA
premises.^^^^^F^^^20030311140002-0500

OBX^6^TX^N~Narrative~L^^|Further comments:^^^^^F^^^20030311140002-0500

OBX^7^ST^S~Status~L^^NEW ASSIGNMENT^^^^^F^^^20030311140002-0500

OBX^8^TX^C~Comment~L^^New record flag assignment.^^^^^F^^^20030311140002-0500
```

## **2.4.2 ORU Acknowledgment**

The site receiving an Unsolicited Transmission of an Observation Message will return an application Acknowledgment message (Table 14) to the sending site after completion of processing.

**Table 14: Received Acknowledgement**

<b>ACK</b>	<b>Acknowledgment</b>	<b>Section</b>
MSH	Message Header	2.3.1
MSA	Message Acknowledgment	2.3.2
[ERR]	Error	2.3.3

### *Sample Messages*

General Acknowledgment (ACK) message for a successful Unsolicited Transmission of an Observation Message (ORU~R01) (Figure 1).

**Figure 1: Unsolicited Transmission Acknowledgement**

```
MSH^~| \&^PRF-RECV^500~FO-ALBANY.MED.VA.GOV~DNS^PRF-SEND^500~DEVVPP.FO-
ALBANY.MED.VA.GOV~DNS^20030314133631-0400^^ACK~R01^50018490^T^2.3^^NE^NE^US
```

```
MSA^AA^50044
```

A General Acknowledgment (ACK) message is displayed for a failed Unsolicited Transmission of an Observation Message (ORU~R01) (Figure 2.) This indicates that the transmitting site is not the owner of the Patient Record Flag assignment.

**Figure 2: Unsolicited Transmission Observation Message- No Owner of Patient Record Flag**

```
MSH^~|\\&^PRF-RECV^500~FO-ALBANY.MED.VA.GOV~DNS^PRF-SEND^500~DEVVPP.FO-  
ALBANY.MED.VA.GOV~DNS^20030314133631-0400^^ACK~R01^50018490^T^2.3^^NE^NE^US  
  
MSA^AE^50044^^^^UU~Unauthorized Update~VA086
```

General Acknowledgment (ACK) message for a failed Unsolicited Transmission of an Observation Message (ORU~R01) indicating that no patient was found with the corresponding identifiers (Figure 3).

**Figure 3: Unsolicited Transmission Observation Message- No Patient Found with Corresponding Identifiers**

```
MSH^~|\\&^PRF-RECV^500~FO-ALBANY.MED.VA.GOV~DNS^PRF-SEND^500~DEVVPP.FO-  
ALBANY.MED.VA.GOV~DNS^20030314133631-0400^^ACK~R01^50018490^T^2.3^^NE^NE^US  
  
MSA^AE^50044  
  
ERR^PID~1~3~NM&No Match&VA086
```

### 2.4.3 Query for Results of Observation (R02)

The Register a Patient [DG REGISTER PATIENT], Load/Edit Patient Data [DG LOAD PATIENT DATA], and 10-10T Registration [DGRPT 10-10T REGISTRATION] options will trigger a Query message to be sent to the patient's CMOR site when a new patient is registered and the MPI/PD system has successfully returned a national ICN (Table 15).

**Table 15: Query Message that Patient is Registered**

QRY	Query	Section
MSH	Message Header	2.3.1
QRD	Query Definition	2.3.7
QRF	Query Filter	2.3.8

*Sample Message*

**Figure 4: Query Message that Patient is Registered**

```
MSH^~|\\&^PRF-QRY^500^PRF-QRYRESP^500^20030502094251-0500^^QRY~R02^500160^T^2.3^^^^^US  
  
ORD^20030502111910-  
0500^R^I^21^^10~RD^1001178082V735077~~~~~USVHA&&L^OTH~Other~HL0048^PRFA~Patient Record Flag  
Assignments~L  
  
QRF^PRF^^283769873^19500404
```

## 2.4.4 Response to Query, Transmission of Requested Observation (R04)

The CMOR site receiving a query will respond with all active and inactive Category I PRF assignments for the patient and associated assignment history data (Table 16).

**Table 16: Observational Report**

ORF	Observational Report	Section
MSH	Message Header	2.3.1
MSA	Message Acknowledgment	2.3.2
[ERR]	Error	2.3.3
QRD	Query Definition	2.3.7
{OBR}	Observation Request	2.3.5
{OBX}	Observation/Result	2.3.6

*Sample Message*

**Figure 5: Category 1 Patient Record Flag Assignments- Patient & History**

```

MSH^~|\\&^PRF-QRYRESP^500^PRF-QRY^500^200305020943-0400^^ORF~R04^50018644^T^2.3^^^^^US
MSA^AA^500162
QRD^20030502112018-0400^R^I^21^^10~RD^1001178082~~~~~USVHA&&L^OTH~Other~HL0048^PRFA~Patient
Record Flag Assignments~L
OBR^1^^1~BEHAVIORAL~VA085^^20030502094037-0400^^^^^^^^^500^500
OBX^1^TX^N~Narrative~L^^Working on the HL7 Query testing.(rbs)^^^^^F^^^20030502103408-0400
OBX^2^TX^N~Narrative~L^^|Description: Mr. McGillicudy verbally abused and threatened
a^^^^^F^^^20030502103408-0400
OBX^3^TX^N~Narrative~L^^registration clerk on 5/1/2003.^^^^^F^^^20030502103408-0400
OBX^4^TX^N~Narrative~L^^|Recommendation: Contact VHA security when Mr. McGillicuddy
presents^^^^^F^^^20030502103408-0400
OBX^5^TX^N~Narrative~L^^himself on the VAMC premises.^^^^^F^^^20030502103408-0400
OBX^6^ST^S~Status~L^^NEW ASSIGNMENT^^^^^F^^^20030502094037-0400
OBX^7^TX^C~Comment~L^^New record flag assignment.^^^^^F^^^20030502094037-0400
OBX^8^ST^S~Status~L^^CONTINUE^^^^^F^^^20030502103408-0400
OBX^9^TX^C~Comment~L^^Testing the HL7 query from VPP to FEX.(rbs)^^^^^F^^^20030502103408-0400

```

## **2.4.5 Query by parameter requesting an RSP segment pattern response (Q11)**

The CMOR site requesting transfer of Category I PRF flag ownership will send this message to the current owner of PRF flag in question (Table 17).

**Table 17: Message sent to Current Owner of PRF Flag in Question**

<b>QBP</b>	<b>Query</b>	<b>Section</b>
MSH	Message Header	2.3.1
QPD	Query Parameter Definition	2.3.9
NTE	Notes and Comments	2.3.10
RCP	Response Control Parameter	2.3.11

## **2.4.6 Segment pattern response in response to QBP^Q11 (K11)**

The CMOR site receiving transfer request for Category I PRF flag ownership (QBP^Q11) will respond with either approval or denial of the request (Table 18).

**Table 18: CMOR Response**

<b>RSP</b>	<b>Segment Pattern response</b>	<b>Section</b>
MSH	Message Header	2.3.1
MSA	Message Acknowledgment	2.3.2
QAK	Query Acknowledgement	2.3.12
QPD	Query Parameter Definition	2.3.9
NTE	Notes and Comments	2.3.10

### 3 SUPPORTED AND USER-DEFINED HL7 TABLES

#### 3.1 Table 0001 - Sex

Table 19: Table 0001 - Sex

VALUE	DESCRIPTION
F	FEMALE
M	MALE
O	OTHER
U	UNKNOWN

#### 3.2 Table 0002 - Marital Status

Table 20: Table 0002 - Marital Status

VALUE	DESCRIPTION
A	SEPARATED
D	DIVORCED
M	MARRIED
S	SINGLE
W	WIDOWED

#### 3.3 Table 0003 - Event Type Code

Table 21: Table 0003 - Event Type Code

VALUE	DESCRIPTION
R01	ORU/ACK - Unsolicited transmission of an observation message.
R02	QRY – Query for results of observation.
R04	ORF – Response to query; transmission of requested observation.

#### 3.4 Table 0005 – Race

Table 22: Table 0005 - Race

VALUE	DESCRIPTION
1	HISPANIC, WHITE
2	HISPANIC, BLACK
3	AMERICAN INDIAN OR ALASKA NATIVE
4	BLACK, NOT OF HISPANIC ORIGIN
5	ASIAN OR PACIFIC ISLANDER
6	WHITE, NOT OF HISPANIC ORIGIN
7	UNKNOWN

## 3.5 Table 0006 – Religion

Table 23: Table 0006 – Religion

VALUE	DESCRIPTION
0	CATHOLIC
1	JEWISH
2	EASTERN ORTHODOX
3	BAPTIST
4	METHODIST
5	LUTHERAN
6	PRESBYTERIAN
7	UNITED CHURCH OF CHRIST
8	EPISCOPALIAN
9	ADVENTIST
10	ASSEMBLY OF GOD
11	BRETHREN
12	CHRISTIAN SCIENTIST
13	CHURCH OF CHRIST
14	CHURCH OF GOD
15	DISCIPLES OF CHRIST
16	EVANGELICAL COVENANT
17	FRIENDS
18	JEHOVAH'S WITNESS
19	LATTER-DAY SAINTS
20	ISLAM
21	NAZARENE
22	OTHER
23	PENTECOSTAL
24	PROTESTANT, OTHER
25	PROTESTANT, NO DENOMINATION
26	REFORMED
27	SALVATION ARMY
28	UNITARIAN; UNIVERSALIST
29	UNKNOWN/NO PREFERENCE
30	NATIVE AMERICAN
31	BUDDHIST

## 3.6 Table 0008 – Acknowledgment Code

Table 24: Table 0008 – Acknowledgment Code

VALUE	DESCRIPTION
AA	Original mode: Application Accept Enhanced mode: Application acknowledgment: Accept
AE	Original mode: Application Error Enhanced mode: Application acknowledgment: Error
AR	Original mode: Application Reject Enhanced mode: Application acknowledgment: Reject
CA	Enhanced mode: Accept acknowledgment: Commit Accept
CE	Enhanced mode: Accept acknowledgment: Commit Error
CR	Enhanced mode: Accept acknowledgment: Commit Reject

### 3.7 Table 0048 – What Subject Filter

**Table 25: Table 0048 – What Subject Filter**

VALUE	DESCRIPTION
ADV	Advice/Diagnosis
ANU	Nursing unit lookup (returns patients in beds, excluding empty beds)
APN	Patient name lookup
APP	Physician lookup
ARN	Nursing unit lookup (returns patients in beds, including empty beds)
APM	Medical record number query, returns visits for a medical record number
APA	Account number query, return matching visit
CAN	Cancel. Used to cancel a query
DEM	Demographics
FIN	Financial
GOL	Goals
MRI	Most recent inpatient
MRO	Most recent outpatient
NCK	Network clock
NSC	Network status change
NST	Network statistic
ORD	Order
OTH	Other
PRB	Problems
PRO	Procedure
RES	Result
RAR	Pharmacy administration information
RER	Pharmacy encoded order information
RDR	Pharmacy dispense information
RGR	Pharmacy give information
ROR	Pharmacy prescription information
SAL	All schedule related information, including open slots, booked slots, blocked slots
SBK	Booked slots on the identified schedule
SBL	Blocked slots on the identified schedule
SOP	Open slots on the identified schedule
SSA	Time slots available for a single appointment
SSR	Time slots available for a recurring appointment
STA	Status
VXI	Vaccine Information

## **3.8 Table 0076 - Message Type**

**Table 26: Table 0076 - Message Type**

VALUE	DESCRIPTION
ACK	GENERAL ACKNOWLEDGMENT MESSAGE
ORU	OBSERVATION RESULT/UNSOLICITED
ORF	OBSERVATION RESULT/RECORD RESPONSE
QRY	QUERY, ORIGINAL MODE

## **3.9 Table 0091 – Query Priority**

**Table 27: Table 0091 – Query Priority**

VALUE	DESCRIPTION
D	Deferred
I	Immediate

## **3.10 Table 0106 – Query/Response Format Code**

**Table 28: Table 0106 – Query/Response Format Code**

VALUE	DESCRIPTION
D	Response is in Display format
R	Response is in Record format
T	Response is in Tabular format

## **3.11 Table 0126 – Quantity Limited Request**

**Table 29: Table 0126 – Quantity Limited Request**

VALUE	DESCRIPTION
CH	Characters
LI	Lines
PG	Pages
RD	Records
ZO	Locally Defined

## **3.12 Table VA085 – Patient Record Flags**

Table 30 will reference the IEN of the PRF NATIONAL FLAG file (#26.15) and the Flag Name.

**Table 30: Table VA085 – Patient Record Flags**

VALUE	DESCRIPTION
1	Behavioral

### **3.13 Table VA086 – PRF Error Codes**

Table 31 will contain the application acknowledgment error codes.

**Table 31: Table VA086 – PRF Error Codes**

VALUE	DESCRIPTION
FE	Filer error – an error occurred at the remote site when attempting to add or update an assignment
IF	Invalid Patient Record Flag – flag does not exist in receiving site's PRF National Flag file
IID	Invalid Observation ID – transmitted observation ID is not "N"arrative, "S"tatus or "C"omment
IOR	Invalid Originating Site – originating site does not exist in receiving site's Institution file
IOW	Invalid Owner Site – owner site does not exist in receiving site's Institution file
NM	No Match – transmitted ICN, DOB and SSN do not match the ICN, DOB and SSN at receiving site
UU	Unauthorized Update – originating site does not match the owner site in the receiving site's assignment record or an invalid action was transmitted (i.e., reactivate an active assignment)