**Conformance Statement – MFN**

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# Introduction

## Purpose

The purpose of this document is to provide guidelines for the MFN message type.

## Target Group

This document is intended for external suppliers and system administrators at VGR.

## References

For details on the message segments and trigger events – review the HL7 Messaging Standard Version 2.6 Product Brief:

* Chapter 2 (Control)
* Chapter 2.A (Data types)
* Chapter 8 (Master Files)

## Message Profile

* HL7 Version 2.6
* Profile type: Constrainable

## Revision history

|  |  |  |  |
| --- | --- | --- | --- |
| Revision | Datum | Beskrivning | Utfärdare |
| PA1 | 2016-09-13 | Initial version | Albert Örwall |
| PA2 | 2016-12-21 | Updated Seq 7 in MSH to type DTM. | Robin Seybold |
| PA3 | 2016-12-27 | Updated HSA-ID definitions for PL segments. Removed the data types chapter. | Robin Seybold |

# MFN

VGR supports the following MFN trigger events:

* MFN^M05 File Notification – Patient Location

**MFN^M05^MFN\_M05 Master File Notification - Patient Location**

MSH Message Header  
[{ SFT }] Software  
[ UAC ] User Authentication Credential  
MFI Master File Name  
{ --- MF\_LOCATION begin  
 MFE Master File Entry  
 LOC Patient Location Master  
 ZLI Location Additional Information  
 [{ LRL }] Location Relationship  
 { --- MF\_LOC\_DEPT begin  
 LDP Location Department  
 ZLD Location Department Additional Information   
 } --- MF\_LOC\_DEPT end  
} --- MF\_LOCATION end

## MSH – Message Header

The MSH segment defines the intent, source, destination, and some specifics of the syntax of a message.

Usage: Required  
Cardinality: 1..1

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Seq. | Name | Type | Table | Len | Opt | Card | Contents |
| 1 | Field Separator | ST |  | 1 | R | 1..1 | e.g. | |
| 2 | Encoding Characters | ST |  | 4 | R | 1..1 | e.g. ^~\& |
| 3 | Sending Application | HD | 0361 | 227 | R | 1..1 |  |
| 3.1 | namespace ID | IS |  | 50 | R | .. | HSA-ID |
| 4 | Sending Facility | HD | 0362 | 227 | O | 0..1 |  |
| 4.1 | namespace ID | IS |  | 50 | O | .. | HSA-ID |
| 5 | Receiving Application | HD | 0361 | 227 | O | 0..1 |  |
| 5.1 | namespace ID | IS |  | 50 | O | .. | HSA-ID |
| 6 | Receiving Facility | HD | 0362 | 227 | O | 0..1 |  |
| 6.1 | namespace ID | IS |  | 50 | O | .. | HSA-ID |
| 7 | Date/Time Of Message | DTM |  | 24 | R | 1..1 | e.g. 200511250945 |
| 9 | Message Type | CM\_MSG | 0076 | 15 | R | 1..1 |  |
| 9.1 | message type | ID | 0076 | 3 | R | .. | e.g. MFN |
| 9.2 | trigger event | ID | 0003 | 3 | R | .. | e.g. M05 |
| 9.3 | message structure | ID | 0354 | 7 | O | .. | e.g. MFN\_M05 |
| 10 | Message Control ID | ST |  | 20 | R | 1..1 | e.g. 0000001 |
| 11 | Processing ID | PT |  | 3 | R | 1..1 |  |
| 11.1 | processing ID | ID | 0103 | 3 | R | .. | e.g. P |
| 12 | Version ID | VID | 0104 | 973 | R | 1..1 |  |
| 12.1 | version ID | ID | 0104 | 60 | R | .. | e.g. 2.6 |
| 18 | Character Set | ID | 0211 | 16 | O | 0..\* | e.g. UNICODE UTF-8 |

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

**2. Encoding Characters**This field contains the four characters in the following order: the component separator, repetition separator, escape character, and subcomponent separator. Recommended values and used by VGR are ^~\&, (ASCII 94, 126, 92, and 38).

**3. Sending Application**This field uniquely identifies the sending application among all other applications within the network enterprise. The network enterprise consists of all those applications that participate in the exchange of HL7 messages within the enterprise. Entirely site-defined and a parameter for VGR.

**4. Sending Facility**This field uniquely identifies the sending facility among all other applications within the network enterprise. The network enterprise consists of all those applications that participate in the exchange of HL7 messages within the enterprise. Entirely site-defined and a parameter for VGR.

**5. Receiving Application**This field uniquely identifies the receiving application among all other applications within the network enterprise. The network enterprise consists of all those applications that participate in the exchange of HL7 messages within the enterprise. Entirely site-defined and a parameter for VGR.

**6. Receiving Facility**This field uniquely identifies the receiving facility among all other applications within the network enterprise. The network enterprise consists of all those applications that participate in the exchange of HL7 messages within the enterprise. Entirely site-defined and a parameter for VGR.

**7. Date/Time Of Message**This field contains the date/time that the sending system created the message. If the time zone is specified, it is expected to be the local time zone.

**9. Message Type**Should be MFN^M05^MFN\_M05

**9.3. message structure**Only used when input is hl7 v2.xml

**10. Message Control ID**This field contains a number or other identifier that uniquely identifies the message. The receiving system echoes this ID back to the sending system in the Message acknowledgment segment (MSA).

**11.1. processing ID**Should be P for Production, T for Test

**12.1. version ID**Should be 2.6

**18. Character Set**Should be UNICODE UTF-8

## MFI - Master File Identification Segment

Usage: Required   
Cardinality: 1..1

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Seq. | Name | Type | Table | Len. | Opt | Card | Contents |
| 1 | Master File Identifier | CWE | 0175 | 250 | R | 1..1 |  |
| 1.1 | Identifier | ST |  | 20 |  |  | LOC |
| 2 | Master File Application Identifier | HD | 0361 | 180 | O | 0..1 |  |
| 3 | File-Level Event Code | ID | 0178 | 3 | R | 1..1 | e.g. UPD |
| 6 | Response Level Code | ID | 0179 | 2 | R | 1..1 | e.g. NE |

**1. Master File Identifier**  
This field is a CWE data type that identifies a standard HL7 master file.

**1.1 Identifier**This field should have the value *LOC* for a care unit masterfile.

**2. Master File Application Identifier**This field contains a HSA-id which uniquely identifies the application responsible for maintaining this file.

**3. File-Level Event Code**  
This field defines the file-level event code.

|  |  |  |
| --- | --- | --- |
| Value | Description | Comment |
| REP | Replace current version of this master file with the version contained in this message. |  |
| UPD | Change file records as defined in the record-level event codes for each record that follows. |  |

**6. Response Level Code**  
These codes specify the application response level defined for a given Master File Message at the MFE segment level as defined in HL7 table 0179 - Response level. Only “NE” (Never) is supported at the moment.

## Segment group: MF\_LOCATION

### MFE – Master File Entry

Usage: Required   
Cardinality: 1..1

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Seq. | Name | Type | Table | Len. | Opt | Card | Contents |
| 1 | Record-Level Event Code | ID | 0180 | 3 | R | 1..1 | e.g. MAD |
| 3 | Effective Date/Time | DTM |  | 24 | O | 0..1 |  |
| 4 | Primary Key Value – MFE | PL | 9999 | 200 | R | 1..1 |  |
| 4.4.2 | Universal ID | ST |  | 50 | R | 1..1 | e.g. SE2321000131-E000000007920 |
| 4.4.3 | Universal ID Type | ID | 0301 | 6 | R | 1..1 | L |
| 5 | Primary Key Value Type | ID | 0355 | 3 | R | 1..1 | PL |

**1. Record-Level Event Code**This field defines the record-level event for the master file record identified by the MFI segment and the primary key field in this segment.

|  |  |  |
| --- | --- | --- |
| Value | Description | Comment |
| MAD | Add record to master file |  |
| MDL | Delete record from master file |  |
| MUP | Update record for master file |  |
| MDC | Deactivate: discontinue using record in master file, but do not delete from database |  |
| MAC | Reactivate deactivated record |  |

**3. Effective Date/Time**

This field is used for deactivate, delete, reactivate events.

**4. Primary Key Value - MFE**

This field should match *LOC-1.*

**5. Primary Key Value Type**This field should have the value *PL*.

### LOC – Location Identification

The LOC segment can identify any patient location referenced by information systems. This segment gives physical set up information about the location.

Usage: Required   
Cardinality: 1..1

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Seq. | Name | Type | Table | Len. | Opt | Card | Contents |
| 1 | Primary Key Value – LOC | PL |  | 200 | R | 1..1 |  |
| 1.4.2 | Universal ID | ST |  | 50 | R | 1..1 | e.g. SE2321000131-E000000007920 |
| 1.4.3 | Universal ID Type | ID | 0301 | 6 | R | 1..1 | L |
| 2 | Location Description | ST |  | 48 | O | 0..1 | e.g. Måltider SÄS Borås |
| 3 | Location Type – LOC | IS | 0260 | 2 | R | 1..1 | D |
| 4 | Organization Name – LOC | XON |  | 250 | O | 0..1 |  |
| 4.1 | Organization Name | ST |  | 50 | O | 0..1 | e.g. Västra Götalandsregionen |
| 4.2 | Organization Name Type Code | IS | 0204 | 20 | O | 0..1 | e.g. D |
| 4.7 | Identifier Type Code | ID | 0203 | ID | O | 0..1 | e.g. XX |
| 4.10 | Organization Identifier | ST |  | 20 | O |  | e.g. 857200-3104 |
| 5 | Location Address | XAD |  | 250 | O | 0..n |  |
| 5.1 | Street Address | SAD |  | 184 | O | 0..1 | e.g. Brämhultsvägen 52 |
| 5.3 | City | ST |  | 50 | O | 0..1 | e.g. Borås |
| 5.5 | Postal Code | ST |  | 12 | O | 0..1 | e.g. 501 82 |
| 5.6 | Country | ID | 0399 | 3 | O | 0..1 | e.g. SWE |
| 5.7 | Address Type | ID | 0190 | 50 | O | 0..1 | e.g. B |
| 5.18 | Address Usage | ID | 0617 | 44 | O | 0..1 | e.g. V |
| 5.20 | Comment | ST |  | 199 | O | 0..1 |  |
| 6 | Location Phone | XTN |  | 250 | O | 0..n |  |
| 6.2 | Telecommunication Use Code | ID | 0201 | 3 | O | 0..1 | e.g. PRS |
| 6.3 | Telecommunication Equipment Type | ID | 0202 | 8 | O | 0..1 | e.g. PH |
| 6.4 | Communication Address | ST |  | 199 | C | 0..1 | e.g. boras@vgregion.se |
| 6.5 | Country Code | NM |  | 33 | C | 0..1 | e.g. 46 |
| 6.6 | Area/City Code | NM |  | 3 | C | 0..1 | e.g. 033 |
| 6.7 | Local Number | NM |  | 9 | C | 0..1 | e.g. 6161000 |
| 6.9 | Any Text | ST |  | 199 | O | 0..1 |  |

**1. Primary Key Value**This field contains the HSA-id of the unit the segment describes.

**2. Location Description**This field contains the unit’s official name.

**3. Location Type**This field contains the code identifying what type of location this is. Should always be “D” for a unit.

**4.1 Organization Name**This field contains the name of the care giver the unit belongs to.

**4.2 Organization Name Type Code**A code that represents the type of name i.e., legal name, display name.

**4.10 Identifier Type Code**This field contains the type code used for identifying the organization. Should be “XX” for Organization Number.

**4.10 Organization Identifier**This field contains the organization number of the care giver the care unit belongs to.

**5. Location Address**This field contains list of all addresses used by the unit. Address Type and Address Usage is used to specify the type of address.

|  |  |  |  |
| --- | --- | --- | --- |
| Type of address | Description | Address Type | Adress Usage |
| Invoice Address | Address for invoices. In Swedish: “Fakturaadress” | BI (Billing Address) | N/A |
| Visiting Address | Street address and other guidance to the correct street address, such as number of entry, floor, etc. The field “Comment” in Location Address can contain a description of the route to get to the unit. In Swedish: “Besöksadress” | B (Firm/Business) | V (Visit) |
| Internal Address | Address that apply to internal postal and transport functions. In Swedish: “Internadress” |  |  |
| Delivery Address | Address for delivery of goods. In Swedish: “Leveransadress” | SH (Shipping) |  |
| Post Address | Address for mail. In Swedish: “Postadress” | B (Firm/Business) | M (Mailing) |

**6. Location Phone**

This field contains a list of ways to communicate with the unit. Telecommunication Use Code and Telecommunication Equipment Code is used to specify the type of number/address. Communication Address or Country code/Area code/Local number is set depending on the type of communication.

|  |  |  |  |
| --- | --- | --- | --- |
| Type of number/address | Description | Telecommunication Use Code | Telecommunication Equipment Code |
| Direct telephone number | Direct telephone number within the organization. If a In Swedish: “Direkttelefon” | PRS (Personal) | PH (Telephone) |
| Public number | Direct telephone number shown to the public. Telephone hours is specified in the field "Any Text". In Swedish: “Direkttelefon – Publik” | PRN (Primary Residence Number) | PH (Telephone) |
| Pager number | Number to the unit’s pager. In Swedish: “Personsökare” / “Minicall” | BPN (Beeper Number) | BP (Beeper) |
| Mobile phone number | Mobile phone number to the unit. In the case of an overall unit, e.g. hospital or medical center, the phone should go to the management of the unit. In Swedish: “Mobiltelefon”. | N/A | CP (Celluar or Mobile Phone) |
| Telecommunications Device for the Deaf | Number to the unit’s telecommunications device for the deaf. In the case of an overall unit, e.g. hospital or medical center, the phone should go to the management of the unit. In Swedish: “Texttelefon” | N/A | TDD (Telecommunications Device for the Deaf) |
| Switchboard telephone number | Telephone number to the switchboard at the unit. | N/A | ASN (Answering Service Number) |
| Fax number | The unit’s fax number. In Swedish: “Faxnummer” | N/A | FX (Fax) |
| E-mail | E-mail address to the unit. In Swedish: “E-postadress”. | NET | X.400 (X.400 email address) |
| Website | URL to the unit or organization’s website. In Swedish: “Hemsida” | N/A | Internet (Internet Address) |

### LRL - Location Relationship

The LRL segment is used to identify one location's relationship to another location, the nearest lab, pharmacy, etc.

Usage: Optional  
Cardinality: 0..1

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Seq. | Name | Type | Table | Len. | Opt | Card | Contents |
| 1 | Primary Key Value – LRL | PL |  | 200 | R | 1..1 |  |
| 1.4.2 | Universal ID | ST |  | 50 | R | 1..1 | e.g. SE2321000131-E000000007920 |
| 1.4.3 | Universal ID Type | ID | 0301 | 6 | R | 1..1 | L |
| 4 | Location Relationship ID | CWE | 0325 | 250 | R | 1..1 |  |
| 4.1 | Identifier | ST |  | 3 | R | 1..1 | PAR |
| 6 | Patient Location Relationship Value | PL |  | 80 | R | 1..1 |  |
| 6.4.2 | Universal ID | ST |  | 50 | R | 1..1 | e.g. SE2321000131-E000000006227 |
| 6.4.3 | Universal ID Type | ID | 0301 | 6 | R | 1..1 | L |

**1. Primary Key Value**  
This field contains the HSA-id of the unit the segment describes. Should be the same as LOC-1.

**4. Location Relationship ID**This field contains an identifier code to show WHICH relationship is being communicated with this segment. “PAR” is the only supported value.

**6. Patient Location Relationship Value**This field contains a HSA-id that identifies the parent PDL unit.

### Segment group: MF\_LOC\_DEPT

#### LDP - Location Department

The LDP segment identifies how a patient location room is being used by a certain department. Multiple departments can use the same patient location, so there can be multiple LDP segments following an LOC segment. There must be at least one LDP segment for each LOC segment. This is not intended to include any current occupant information.

Usage: Required  
Cardinality: 1..1

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Seq. | Name | Type | Table | Len. | Opt | Card | Contents |
| 1 | Primay Key Value – LDP | PL |  | 200 | R | 1..1 |  |
| 1.4.2 | Universal ID | ST |  | 50 | R | 1..1 | e.g. SE2321000131-E000000007920 |
| 1.4.3 | Universal ID Type | ID | 0301 | 6 | R | 1..1 | L |
| 2 | Location Department | CWE | 0264 | 483 | R | 1..1 |  |
| 2.1 | Identifier | ST |  | 20 | R | 1..1 | e.g. E000000006227 |

**1. Primary Key Value - LDP**This field contains the institution's identification code for the location. The identifying key value. This field has the same components as the patient location fields in the PV1 segment (except that bed status is not included here). At least the first component of this field is required. The contents of this field must exactly match the content of its preceding MFE (MFE-4 - Primary Key Value - MFE) and its preceding LOC (LOC-1 - Primary Key Value - LOC).

**2. Location Department**  
This field contains the institution's department to which this location belongs, or its cost center.