HL7 REF Message Integration

Addressing REF messages for electronic messaging with Medical-Objects

Resources:

HL7AUSD-STD-OO-ADRM-2021.1

HL7 2.3.1 International Standard.

AS4700.6 Australian Standard (with both amendments).

MSIA Working Group Recommendations document – Hl7 interoperability working group report version 2.1 final.

Medical-Objects uses provider identifiers to address its messages. REF messages use the PRD (Provider data) segment.

The current standard HL7AUSD-STD-OO-ADRM-2021.1 linked above mandates:

- Inclusion of the PV1 segment to all REF messages (In particular PV1-9 (Consulting Doctor).

- Inclusion of the "Intended Recipient" Provider Role to determine the recipient of the message (In particular the PRD-1 (Provider Role) and PRD-7 (Provider identifiers).

Addressing REF messages:

It is important to note that the PRD segment can appear multiple times in a message. Additionally note that the Provider Role (PRD-2) is a repeatable field and should be used to determine the provider's role in the patient care.

For example if a REF message for two recipients is generated then it should contain a PRD segment for each provider as well as the referring provider for a total of three PRD segments. If the message is to be delivered to each of the providers then the messaging software requires a 'flag' to determine which PRD segment it should use in each of the files to prevent the message being delivered to the same provider multiple times, this is done by placing the Intended recipient provider role as a repeat in the respective PRD segment for the message and updating the PV1-9 to contain the details of the provider 'flagged' in the PRD segments as the intended recipient.

Note that is is advised that the IR role is placed after other roles for backwards compatibility. Some older software only check the first PRD-1 repeat when importing and may not recognise the IR role.

Input Example (Not the final message):

MSH|

RF1|

PRD|RP^Referring Provider^HL70286|Doe^John^^^MR|

PRD|RT^Referred to Provider^HL70286|Primary^Recipient^^^DR|

PRD|CP^Consulting Provider^HL70286|JustaCopy^TO^^^MR|

PID|

OBR|

OBX|

PV1|

In the example above we can see that there are three PRD segments contained within this message. The first PRD segment contains the Referring Provider which, unless the doctor requires a copy to be sent to himself, does not need to have an additional file generated and marked as the intended recipient. What we would expect to see is two files should be generated and the intended recipient should be populated against each of the recipients in the separate files. Additionally their details should be placed in the PV1 segment as we can see in the following output examples.

Output file 1:

MSH|

RF1|

PRD|RP^Referring Provider^HL70286|Doe^John^^^MR|||||1234567A^AUSHICPR

PRD|RT^Referred to Provider^HL70286~IR^Intended
recipient^HL70286|Primary^Recipient^^^DR|||||0000000Y^AUSHICPR

PRD|CP^Consulting Provider^HL70286|JustaCopy^TO^^^MR|||||5522447X^AUSHICPR

PID|

OBR|

OBX|

PV1|||||||||||0000000Y^Primary^Recipient^^^

Output File 2:

MSH|

RF1|

PRD|RP^Referring Provider^HL70286|Doe^John^^^MR|||||1234567A^AUSHICPR

PRD|RT^Referred to Provider^HL70286|Primary^Recipient^^^DR|||||0000000Y^AUSHICPR

PRD|CP^Consulting Provider^HL70286~IR^Intended
recipient^HL70286|JustaCopy^TO^^^MR|||||5522447X^AUSHICPR

PID|

OBR|

OBX|

PV1|||||||||||5522447X^JustaCopy^TO^^^MR^^^^AUSHICPR

Addressing to an MO Routing ID

MSH|

RF1|

PRD|RP^Referring Provider^HL70286|Doe^John^^^MR|||||1234567A^AUSHICPR

PRD|RT^Referred to Provider^HL70286~IR^Intended
recipient^HL70286|MO^Recipient^^^Mr|||||CU4556000R9^Medical-Objects^VDI

PRD|CP^Consulting Provider^HL70286|JustaCopy^TO^^^MR|||||5522447X^AUSHICPR

PID|

OBR|

OBX|

PV1|||||||||||CU4556000R9^MO^Recipient^^^Mr^^^Medical-Objects&7C3E3682-91F6-11D2-8F2C-
444553540000&GUID^L^^^UPIN

How do I define the primary recipient and copy to providers of a message?

It should be noted there is no crystal clear way to determine which provider is the 'Primary recipient' and which are the 'copy to' providers, However it is our belief that the 'Referred To Provider' role should only appear once in the message for the Primary recipient (Unless there are multiple primary recipients). Any providers with other roles could then be classed as "copy to" providers in the message.

If your message is a notification, an informative message, then the 'Referred to Provider' role should not appear in the message. This is because as a notification as it is purely informative and is not being referred to anyone. The role "Intended Recipient" should still be used as we still need to define which provider to deliver the message to.

Note:

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This is our interpretation of what's currently available in HL7AUSD-STD-OO-ADRM-2021.1. If you require further clarification or would like to propose a change please contact the Australian HL7 Orders and Observations Work Group https://confluence.hl7australia.com/display/OO

Supplying a message to a Copy Doctor

Scenario:

A result is to be sent to the original orderer of the message and 1 copy doctor listed also needs a copy of the result.

(Please contact Medical Objects support and ask if your server is a Gateway or Practice Server)

Capricorn or GATEWAY Server

Message 1 - The original orderer receives a copy.

MSH-10 Unique for every message

RF1-6 Unique Value Same as in Message 2.

OBR-3 Unique Value Same as in Message 2.

PRD IR Original Orderer of Message

PV1-9 Original Orderer of Message

OBR-16 same as PV1-9

PRD CP One for each copy doctor

OBR-28 Everyone who receives this message, including the original orderer.

OBR-32 Report Author

Message 2 - The Copy Doctor receives a copy.

MSH-10 Unique for every message

RF1-6 Unique Value Same as in Message 1.

OBR-3 Unique Value Same as in Message 1.

PRD IR The Copy Doctor

PV1-9 The Copy Doctor

OBR-16 Original Orderer of Message. NOT same as PV1-9

PRD CP One for each copy doctor.

PRD RT Original Orderer of Message.

OBR-28 Everyone who receives this message, including the original orderer.

OBR-32 Report Author

PRACTICE Server

Message 1 - The original ordered.

PRD IR Original Orderer of Message

PV1-9 Original Orderer of Message

OBR-16 same as PV1-9

PRD CP One for each copy doctor

OBR-28 A list of the Copy Doctors excluding the provider listed in PV1-9 (Delivery will NOT be based upon this field.)

OBR-32 Report Author