

A Guide to the Referral Response Message for GP Practice Software Vendors

File name: Response_Message_v0_15

Version: 0.15

Authors: Brian O'Mahony, Orla Doogue, Martin Krim, Senthil Nathan, Karen Wynne, Siobhan Hanrahan

Status: Completed

Date: 30/06/2017

Version History:

Date	Version	Authors	Reason for change
28/08/2009	0.2	Brian O'Mahony, Orla Doogue	Initial Draft
10/09/2009	0.3	Orla Doogue	Added Local code for 'OPD Clinic', 'Suggested Therapy for Consultants'
02/10/2009	0.4	Martin Krim	Reviewed MSH and RF1 segments
10/12/2009	0.5	Martin Krim	Updated message flow diagram
27/09/2010	0.6	Orla Doogue	Updated sections under 'Arranged and followed up by GP' and 'Arranged and followed up by Consultant'
27/01/2011	0.7	Senthil Nathan	XML sample changes: Changed HD.2 hospital department code, RF1.6 Origination Referral Identifier. Updated PRD.5 with XTN.3 field. Added new PRD.5 to include email addresses.
22/08/2011	0.8	Karen Wynne, Siobhan Hanrahan, Brian O'Mahony	Addendum added on use of the Referral Response Message in General Referrals.

24/02/2012	0.9	Karen Wynne	Updates for General Referral Response message. Include Triage Category in RF1. Update 'Reminder Comment' text.
07/05/2015	0.10	Karen Wynne	Addendum for Hospital vendors regarding MSH.6 segment
10/06/2015	0.11	Karen Wynne	Addendum for Hospital vendors regarding MSH.4 segment
24/06/2015	0.12	Karen Wynne	Addendum for Hospital vendors regarding MSH.4 segment
16/09/2015	0.13	Karen Wynne	Clarification on Addendum for the Referral Response Message in General Referrals for integrated hospital systems.
09/11/2016	0.14	Karen Wynne	Addendum for Day Procedures
30/06/2017	0.15	Karen Wynne	Update PRD section for Triaging Clinician

Table of Contents

A Guide to the Referral Response Message for GP Practice Software Vendors	1
Table of Contents	3
1. Document Aim	4
2. Overview	4
3. Message Flow	4
4. HL7 Segments to consider for RRI_I12 message	5
5. Referral Response Message	6
5.1 Referral Overview	6
5.2 OPD Details	6
5.3 No OPD	7
5.4 Arranged and Followed up by GP	7
5.5 Arranged and Followed up by Consultant	7
6. Message Header Segment (MSH)	8
7. Referral Information Segment (RF1)	9
8. Provider Data Segment (PRD)	10
9. Patient Identification Segment (PID)	10
10. Observation Request Segment (OBR)	12
11. Informing GPs and Practice Work Flow	20
12. Addendum: The Referral Response Message as Used for General Referrals	21
13. Addendum: For Hospital Vendors	24
Message Header Segment (MSH)	24

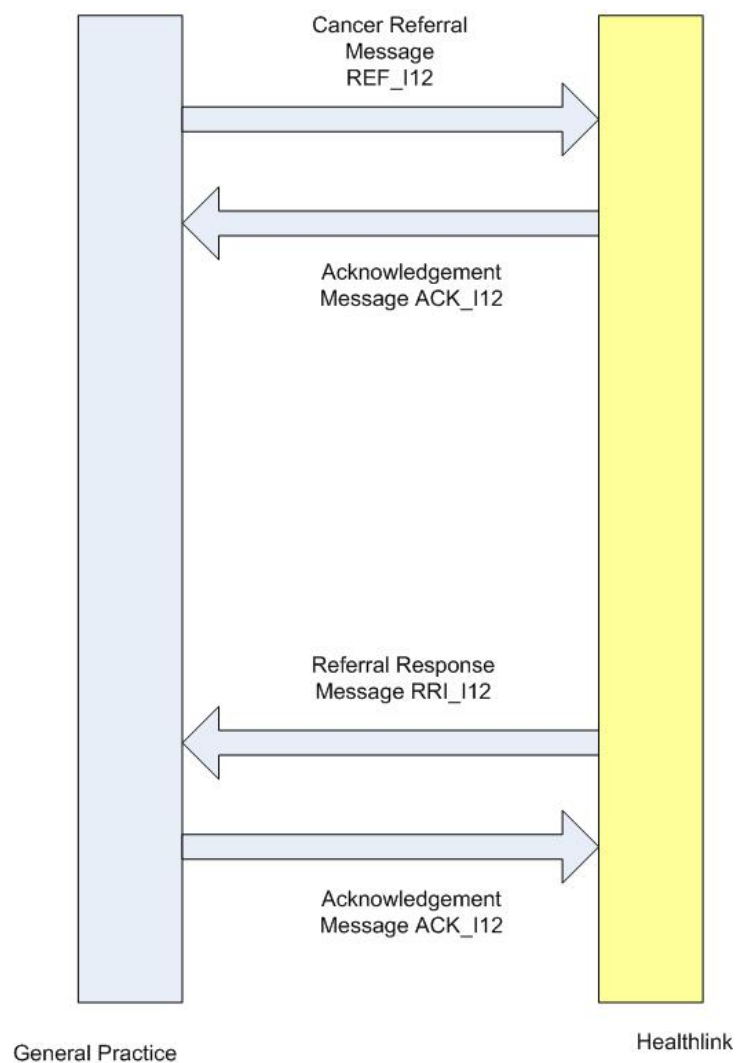
1. Document Aim

This document aims to help GP Software Vendors to understand the structure and content of the referral response message. It also aims to help GP Software Vendors consider how they should inform GPs of information contained in the referral response message and what workflow activities in the practice follow on from the message.

2. Overview

The cancer centre receives a cancer referral message from a GP. Within an agreed period of time, typically 5 to 7 working days, the cancer centre sends a referral response message to the GP.

3. Message Flow



Message Flow Diagram
version 0.1, dated 09/03/2009

Figure 1 Message Flow Diagram

4. HL7 Segments to consider for RRI_I12 message

This section describes the Health Level Seven version 2.4 segments that make up the referral response message, also known as the return referral information message, RRI_I12. This is the abstract structure of a referral response message. This message is used to inform a GP about OPD details and provide other relevant information. Segments within { } are repeatable and segments within [] are optional. The chapter numbers in the abstract message below relate to the relevant chapters in the HL7 version 2.4 standard. Many of the optional segments below are not described in this document but are defined in detail in the HL7 standard.

<u>RRI_I12</u>	<u>Return Referral Information</u>	<u>Chapter</u>
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

Table 1 Abstract Message Structure

These are the segments used in this implementation:

RRI_I12	Referral Response	HL7 Chapter
MSH	Message Header	2
RF1	Referral Information	11
PRD	Provider Data	11
PID	Patient Identification	3
OBR	Observation Request	7
OBX	Observation Result	7
NTE	Notes and Comments	2

Table 2 HL7 segments used in this implementation of Referral Response Message

5. Referral Response Message

When the Referral Response Message (RRI_I12) comes from the specialist cancer centre it contains important information for the GP. This message has the following functions:

5.1 Referral Overview

- Informs the GP that the cancer centre has received the referral;
- Indicates whether an OPD appointment has or has not been arranged;
- Includes any comments that the consultant or cancer centre wish to make;

5.2 OPD Details

- Informs GPs what time scale is in place for reviewing the patient, e.g. within 2 weeks, within 6 weeks or within 12 weeks for breast referrals;

OR

- If possible, informs the GP of the actual date of the patient's appointment;
- Provides a reminder to the GP to please ensure that patients bring relevant X-Rays, Scans and Radiology reports with them to their appointment;

5.3 No OPD

If a consultant chooses not to arrange an OPD appointment for the patient, then they are asked to complete additional fields indicating:

- The name of the GP with whom they discussed not accepting a referral;
- The date this was discussed and agreed;
- Comments on the discussion which took place and allocation of responsibilities;

5.4 Arranged and Followed up by GP

Some or all of the following may be included under this heading:

- Suggested therapy to be prescribed and followed up by the GP;
- Radiology to be arranged and followed up by the GP;
- Laboratory tests to be arranged and followed up by the GP;
 - Free-text box to allow for 'Other Blood Test' to be arranged and followed up by the GP;

5.5 Arranged and Followed up by Consultant

Some or all of the following may be included under this heading:

- Suggested therapy to be prescribed and followed up by the Consultant;
- Laboratory tests to be arranged and followed up by the Consultant;
- Radiology to be arranged and followed up by the Consultant;
 - If a Radiology test is selected, a free-text box may be filled with further information;
 - If a Radiology test is selected, 'Contrast' or 'Urgent' may need to be filled;

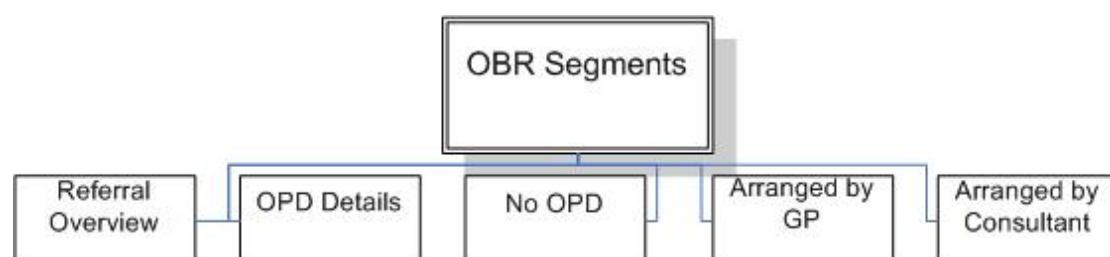


Figure 2 OBR Segments in Referral Response Message

Segment	Optionality
Referral Overview	Required
OPD Details	Conditional: either an 'OPD Details' segment or a 'No OPD' segment is required.
No OPD	Conditional: either an 'OPD Details' segment or a 'No OPD' segment is required.
Arranged by GP	Optional
Arranged by Consultant	Optional

Table 3 Optionality of OBR Segments

In its simplest iteration a referral response message would have OBR segments for Referral Overview and OPD Details.

6. Message Header Segment (MSH)

The Sending Application and Sending Facility relates to Healthlink and the Receiving Application and Receiving Facility relates to the GP practice. The information in these fields is the inverse of that contained in the original referral message REF_I12. The Message Control ID uniquely identifies the referral response message and is related to the original referral message. Where a referral message has a message control ID of REF200904011620543564, the referral response message will have the message control ID RRI200904011620543564. The first three letters change, the numbers remain the same. There is also a link between the referral message and the referral response message held in the RF1 segment, the Originating Referral ID, (RF1.6).

```

<MSH>
  <MSH.1>|</MSH.1>
  <MSH.2>^~\&lt;/MSH.2>
  <MSH.3>
    <HD.1>HLONLINE.HEALTHLINK.21</HD.1>
    <HD.2>/>
    <HD.3>/>
  </MSH.3>
  <MSH.4>
    <HD.1> St. James's Hospital </HD.1>
    <HD.2>904.001</HD.2>
    <HD.3>L</HD.3>
  </MSH.4>
  <MSH.5>
    <HD.1> HELIXPM </HD.1>
    <HD.2>/>
    <HD.3>/>
  </MSH.5>
  <MSH.6>

```

```

        <HD.1> Dr. Smith, John </HD.1>
        <HD.2>3564</HD.2>
        <HD.3>L</HD.3>
    </MSH.6>
    <MSH.7>
        <TS.1>20090403112035</TS.1>
    </MSH.7>
    <MSH.9>
        <MSG.1>RRI</MSG.1>
        <MSG.2>I12</MSG.2>
    </MSH.9>
    <MSH.10>RRI200904011620543564</MSH.10>
    <MSH.11>
        <PT.1>P</PT.1>
    </MSH.11>
    <MSH.12>
        <VID.1>2.4</VID.1>
    </MSH.12>
    <MSH.15>AL</MSH.15>
</MSH>

```

7. Referral Information Segment (RF1)

When a Referral Response Message (RR_I12) goes from Healthlink to the general practice then the Originating Referral ID (RF1.6) is the same as the RF1.6 of the original referral message.

```

<RF1>
    <RF1.1>
        <CE.1>P</CE.1>
        <CE.2>Pending</CE.2>
        <CE.3>L</CE.3>
    </RF1.1>
    <RF1.2>
        <CE.1>R</CE.1>
        <CE.2>Routine</CE.2>
        <CE.3>L</CE.3>
    </RF1.2>
    <RF1.3>
        <CE.1>Prostate</CE.1>
        <CE.2>Prostate</CE.2>
        <CE.3>L</CE.3>
    </RF1.3>
    <RF1.6>
        <EI.1>REF20090401103136</EI.1>
    </RF1.6>
    <RF1.7>
        <TS.1>20090401103136</TS.1>
    </RF1.7>
</RF1>

```

8. Provider Data Segment (PRD)

There are two provider data segments in the message, one for the GP, the Primary Care Provider and one for the Cancer Specialist, the Referred To Provider.

```
<RRI_I12.PROVIDER_CONTACT>
  <PRD>
    <PRD.1>
      <CE.1>RT</CE.1>
      <CE.2>Referred To Provider</CE.2>
      <CE.3>L</CE.3>
    </PRD.1>
    <PRD.2>
      <XPN.1>
        <FN.1> Lynch </FN.1>
      </XPN.1>
      <XPN.2>Thomas</XPN.2>
      <XPN.5>MR</XPN.5>
      <XPN.6>MB</XPN.6>
    </PRD.2>
    <PRD.3>
      <XAD.1>
        <SAD.1>Urology Department</SAD.1>
      </XAD.1>
      <XAD.2>St. James Hospital</XAD.2>
      <XAD.3>Dublin 8</XAD.3>
      <XAD.4/>
    </PRD.3>
    <PRD.4>
      <PL.1>Urology Department</PL.1>
    </PRD.4>
    <PRD.5>
      <XTN.1>01 4366066</XTN.1>
      <XTN.2>WPN</XTN.2>
      <XTN.3>PH</XTN.3>
    </PRD.5>
    <PRD.5>
      <XTN.1>01 4334336</XTN.1>
      <XTN.2>EMR</XTN.2>
      <XTN.3>CP</XTN.3>
    </PRD.5>
    <PRD.7>
      <PI.1>12345</PI.1>
    </PRD.7>
  </PRD>
</RRI_I12.PROVIDER_CONTACT>
<RRI_I12.PROVIDER_CONTACT>
  <PRD>
    <PRD.1>
      <CE.1>PP</CE.1>
      <CE.2>Primary Care Provider</CE.2>
      <CE.3>L</CE.3>
    </PRD.1>
    <PRD.2>
      <XPN.1>
        <FN.1>Murphy</FN.1>
      </XPN.1>
      <XPN.2>Graham Patrick</XPN.2>
      <XPN.5>DR</XPN.5>
      <XPN.6></XPN.6>
    </PRD.2>
```

```

<PRD.3>
  <XAD.1>
    <SAD.1>Happy Surgery</SAD.1>
  </XAD.1>
  <XAD.2>Any Town</XAD.2>
  <XAD.3>County Kildare</XAD.3>
  <XAD.4/>
</PRD.3>
<PRD.4>
  <PL.1>Test Practice</PL.1>
</PRD.4>
<PRD.5>
  <XTN.1>01 1236066</XTN.1>
  <XTN.2>WPN</XTN.2>
  <XTN.3>PH</XTN.3>
</PRD.5>
<PRD.5>
  <XTN.1>01 1234336</XTN.1>
  <XTN.2>EMR</XTN.2>
  <XTN.3>CP</XTN.3>
</PRD.5>
<PRD.5>
  <XTN.1>testpractice@test.com</XTN.1>
  <XTN.2>NET</XTN.2>
  <XTN.3>Internet</XTN.3>
</PRD.5>

<PRD.7>
  <PI.1>12349</PI.1>
</PRD.7>
</PRD>
</RRI_I12.PROVIDER_CONTACT>
<RRI_I12.PROVIDER_CONTACT>
  <PRD>
    <PRD.1>
      <CE.1>TC</CE.1>
      <CE.2>Triaging Clinician</CE.2>
      <CE.3>L</CE.3>
      <CE.4></CE.4>
      <CE.5></CE.5>
      <CE.6></CE.6>
    </PRD.1>
    <PRD.2>
      <XPN.1>
        <FN.1>Bloggs</FN.1>
      </XPN.1>
      <XPN.2>Joe</XPN.2>
      <XPN.3></XPN.3>
    </PRD.2>
    <PRD.3>
      <XAD.1>
        <SAD.1></SAD.1>
      </XAD.1>
      <XAD.2></XAD.2>
      <XAD.3></XAD.3>
      <XAD.4></XAD.4>
      <XAD.5></XAD.5>
    </PRD.3>
    <PRD.4>
      <PL.1></PL.1>
    </PRD.4>
    <PRD.7>

```

```

    <PI.1></PI.1>
    <PI.2></PI.2>
    <PI.3></PI.3>
  </PRD.7>
</PRD>
</RRI_I12.PROVIDER_CONTACT>

```

9. Patient Identification Segment (PID)

This identifies the patient. This is the same as described in the referral message.

10. Observation Request Segment (OBR)

A series of OBR/OBX segments contain information of interest to the GP. The OBR and OBX segments contain a Local code in OBR.4 or OBX.3 that describes the nature of the information contained in the segment.

Text	Segment Type	Local code
Referral Overview	OBR	X0017-0
Referral Received	OBX	X0018-0
OPD Arranged	OBX	X0019-0
Other Comments	OBX	X0020-0
OPD Details	OBR	X0021-0
OPD Clinic	OBX	X0021-1
Appointment Date	OBX	X0022-0
Appointment Interval	OBX	X0023-0
Reminder Comment	OBX	X0024-0
No OPD	OBR	X0025-0
Discussed with GP	OBX	X0026-0
Date Agreed with GP	OBX	X0027-0
Allocation of Responsibilities	OBX	X0028-0
Arranged and Followed up by GP	OBR	X0029-0
GP Laboratory Tests	OBX	X0030-0
GP Radiology	OBX	X0031-0
Suggested Therapy by GP	OBX	X0032-0

Arranged and Followed up by Consultant	OBR	X0033-0
Consultant Laboratory Tests	OBX	X0034-0
Consultant Radiology	OBX	X0035-0
Suggested Therapy by Consultant	OBX	X0036-0

Table 4 Local Codes for Referral Response Message Segments

The Placer Order number OBR.2 and Filler Order number OBR.3 reflect the message control IDs of the referral and referral response messages.

Here is a series of OBR/OBX segments for Referral Overview:

```

<RRI_I12.OBSERVATION>
  <OBR>
    <OBR.1>1</OBR.1>
    <OBR.2>
      <EI.1>REF200811271620543564</EI.1>
      <EI.2>Referral Control Number</EI.2>
      <EI.3/>
      <EI.4/>
    </OBR.2>
    <OBR.3>
      <EI.1>RRI200811271620543564</EI.1>
      <EI.2>Response Control Number</EI.2>
      <EI.3/>
      <EI.4/>
    </OBR.3>
    <OBR.4>
      <CE.1>X0017-0</CE.1>
      <CE.2>Referral Overview</CE.2>
      <CE.3>L</CE.3>
      <CE.4/>
      <CE.5/>
      <CE.6/>
    </OBR.4>
    <OBR.7>
      <TS.1>20090401</TS.1>
    </OBR.7>
    <OBR.25/>
  </OBR>
  <RRI_I12.RESULTS_NOTES>
    <OBX>
      <OBX.1>1</OBX.1>
      <OBX.2>FT</OBX.2>
      <OBX.3>
        <CE.1>X0018-0</CE.1>
        <CE.2>Referral Received</CE.2>
      </OBX.3>
    </OBX>
  </RRI_I12.RESULTS_NOTES>

```

```

        <CE.3>L</CE.3>
        <CE.4/>
        <CE.5/>
        <CE.6/>
    </OBX.3>
    <OBX.5>Your referral has been received</OBX.5>
    <OBX.6/>
    <OBX.7/>
    <OBX.8/>
    <OBX.11>F</OBX.11>
    <OBX.14>
        <TS.1>20090401</TS.1>
    </OBX.14>
</OBX>
</RRI_I12.RESULTS_NOTES>
<RRI_I12.RESULTS_NOTES>
    <OBX>
        <OBX.1>2</OBX.1>
        <OBX.2>FT</OBX.2>
        <OBX.3>
            <CE.1>X0019-0</CE.1>
            <CE.2>OPD Arranged</CE.2>
            <CE.3>L</CE.3>
        </OBX.3>
        <OBX.5>Yes</OBX.5>
        <OBX.6/>
        <OBX.7/>
        <OBX.8/>
        <OBX.11>F</OBX.11>
        <OBX.14>
            <TS.1>20090401</TS.1>
        </OBX.14>
    </OBX>
</RRI_I12.RESULTS_NOTES>
<RRI_I12.RESULTS_NOTES>
    <OBX>
        <OBX.1>2</OBX.1>
        <OBX.2>FT</OBX.2>
        <OBX.3>
            <CE.1>X0020-0</CE.1>
            <CE.2>Other Comments</CE.2>
            <CE.3>L</CE.3>
        </OBX.3>
        <OBX.5>We can see from your referral information
that this is an urgent case.</OBX.5>
        <OBX.6/>
        <OBX.7/>
        <OBX.8/>
        <OBX.11>F</OBX.11>
        <OBX.14>

```

```

                <TS.1>20090401</TS.1>
            </OBX.14>
        </OBX>
    </RRI_I12.RESULTS_NOTES>
</RRI_I12.OBSERVATION>

```

Here is a series of OBR/OBX segments for OPD Details:

```

<RRI_I12.OBSERVATION>
    <OBR>
        <OBR.1>2</OBR.1>
        <OBR.2>
            <EI.1>REF200811271620543564</EI.1>
            <EI.2>Referral Control Number</EI.2>
            <EI.3/>
            <EI.4/>
        </OBR.2>
        <OBR.3>
            <EI.1>RRI200811271620543564</EI.1>
            <EI.2>Response Control Number</EI.2>
            <EI.3/>
            <EI.4/>
        </OBR.3>
        <OBR.4>
            <CE.1>X0021-0</CE.1>
            <CE.2>OPD Details</CE.2>
            <CE.3>L</CE.3>
            <CE.4/>
            <CE.5/>
            <CE.6/>
        </OBR.4>
        <OBR.7>
            <TS.1>20090401</TS.1>
        </OBR.7>
        <OBR.25/>
    </OBR>
    <RRI_I12.RESULTS_NOTES>
        <OBX>
            <OBX.1>1</OBX.1>
            <OBX.2>FT</OBX.2>
            <OBX.3>
                <CE.1>X0022-0</CE.1>
                <CE.2>Appointment Date</CE.2>
                <CE.3>L</CE.3>
                <CE.4/>
            </OBX.3>
        </OBX>
    </RRI_I12.RESULTS_NOTES>
</RRI_I12.OBSERVATION>

```

```

        <CE.5/>
        <CE.6/>
    </OBX.3>
    <OBX.5>200910141100</OBX.5>
    <OBX.11>F</OBX.11>
    <OBX.14>
        <TS.1>20090401</TS.1>
    </OBX.14>
</OBX>
</RRI_I12.RESULTS_NOTES>
<RRI_I12.RESULTS_NOTES>
    <OBX>
        <OBX.1>2</OBX.1>
        <OBX.2>FT</OBX.2>
        <OBX.3>
            <CE.1>X0024-0</CE.1>
            <CE.2>Reminder Comment</CE.2>
            <CE.3>L</CE.3>
            <CE.4/>
            <CE.5/>
            <CE.6/>
        </OBX.3>
        <OBX.5>Please ensure that patients bring relevant X-
Rays, Scans and Radiology reports with them to their appointment.</OBX.5>
        <OBX.11>F</OBX.11>
        <OBX.14>
            <TS.1>20090401</TS.1>
        </OBX.14>
    </OBX>
</RRI_I12.RESULTS_NOTES>
</RRI_I12.OBSERVATION>

```

Here is a series of OBR/OBX segments for No OPD:

```

<RRI_I12.OBSERVATION>
    <OBR>
        <OBR.1>3</OBR.1>
        <OBR.2>
            <EI.1>REF200811271620543564</EI.1>
            <EI.2>Referral Control Number</EI.2>
            <EI.3/>
            <EI.4/>
        </OBR.2>
        <OBR.3>
            <EI.1>RRI200811271620543564</EI.1>
            <EI.2>Response Control Number</EI.2>
            <EI.3/>
            <EI.4/>
        </OBR.3>
        <OBR.4>
            <CE.1>X0025-0</CE.1>

```

```

        <CE.2>No OPD</CE.2>
        <CE.3>L</CE.3>
        <CE.4/>
        <CE.5/>
        <CE.6/>
    </OBR.4>
    <OBR.7>
        <TS.1>20090401</TS.1>
    </OBR.7>
</OBR>
<RRI_I12.RESULTS_NOTES>
    <OBX>
        <OBX.1>1</OBX.1>
        <OBX.2>FT</OBX.2>
        <OBX.3>
            <CE.1>X0026-0</CE.1>
            <CE.2>Discussed with GP</CE.2>
            <CE.3>L</CE.3>
        </OBX.3>
        <OBX.5>Non acceptance of this referral discussed with
Dr Barry Murphy</OBX.5>
        <OBX.11>F</OBX.11>
        <OBX.14>
            <TS.1>20090401</TS.1>
        </OBX.14>
    </OBX>
</RRI_I12.RESULTS_NOTES>
<RRI_I12.RESULTS_NOTES>
    <OBX>
        <OBX.1>2</OBX.1>
        <OBX.2>FT</OBX.2>
        <OBX.3>
            <CE.1>X0027-0</CE.1>
            <CE.2>Date Agreed with GP</CE.2>
            <CE.3>L</CE.3>
        </OBX.3>
        <OBX.5>20090828</OBX.5>
        <OBX.11>F</OBX.11>
        <OBX.14>
            <TS.1>20090401</TS.1>
        </OBX.14>
    </OBX>
</RRI_I12.RESULTS_NOTES>
<RRI_I12.RESULTS_NOTES>
    <OBX>
        <OBX.1>3</OBX.1>
        <OBX.2>FT</OBX.2>
        <OBX.3>
            <CE.1>X0028-0</CE.1>
            <CE.2>Allocation of Responsibilities</CE.2>

```

```

                                <CE.3>L</CE.3>
                                </OBX.3>
                                <OBX.5>GP agreed to review patient in three
months</OBX.5>
                                <OBX.11>F</OBX.11>
                                <OBX.14>
                                <TS.1>20090401</TS.1>
                                </OBX.14>
                                </OBX>
                                </RRI_I12.RESULTS_NOTES>
                                </RRI_I12.OBSERVATION>

```

Here is a series of OBR/OBX segments for Arranged and Followed up by GP:

```

<RRI_I12.OBSERVATION>
  <OBR>
    <OBR.1>3</OBR.1>
    <OBR.2>
      <EI.1>REF200811271620543564</EI.1>
      <EI.2>Referral Control Number</EI.2>
      <EI.3/>
      <EI.4/>
    </OBR.2>
    <OBR.3>
      <EI.1>RRI200811271620543564</EI.1>
      <EI.2>Response Control Number</EI.2>
      <EI.3/>
      <EI.4/>
    </OBR.3>
    <OBR.4>
      <CE.1>X0029-0</CE.1>
      <CE.2>Arranged and Followed up by GP</CE.2>
      <CE.3>L</CE.3>
      <CE.4/>
      <CE.5/>
      <CE.6/>
    </OBR.4>
    <OBR.7>
      <TS.1>20090401</TS.1>
    </OBR.7>
  </OBR>
  <RRI_I12.RESULTS_NOTES>
    <OBX>
      <OBX.1>1</OBX.1>
      <OBX.2>FT</OBX.2>
      <OBX.3>
        <CE.1>X0030-0</CE.1>
        <CE.2>GP Laboratory Tests</CE.2>
        <CE.3>L</CE.3>
      </OBX.3>
      <OBX.5>FBC, LFTs</OBX.5>
    </OBX>
  </RRI_I12.RESULTS_NOTES>
</RRI_I12.OBSERVATION>

```

```

        <OBX.11>F</OBX.11>
        <OBX.14>
            <TS.1>20090401</TS.1>
        </OBX.14>
    </OBX>
</RRI_I12.RESULTS_NOTES>
<RRI_I12.RESULTS_NOTES>
    <OBX>
        <OBX.1>2</OBX.1>
        <OBX.2>FT</OBX.2>
        <OBX.3>
            <CE.1>X0031-0</CE.1>
            <CE.2>GP Radiology</CE.2>
            <CE.3>L</CE.3>
        </OBX.3>
        <OBX.5>Ultrasound of abdomen</OBX.5>
        <OBX.11>F</OBX.11>
        <OBX.14>
            <TS.1>20090401</TS.1>
        </OBX.14>
    </OBX>
</RRI_I12.RESULTS_NOTES>
<RRI_I12.RESULTS_NOTES>
    <OBX>
        <OBX.1>3</OBX.1>
        <OBX.2>FT</OBX.2>
        <OBX.3>
            <CE.1>X0032-0</CE.1>
            <CE.2>Suggested Therapy by GP</CE.2>
            <CE.3>L</CE.3>
        </OBX.3>
        <OBX.5>Naproxen 250mg tds for 14 days</OBX.5>
        <OBX.11>F</OBX.11>
        <OBX.14>
            <TS.1>20090401</TS.1>
        </OBX.14>
    </OBX>
</RRI_I12.RESULTS_NOTES>
</RRI_I12.OBSERVATION>

```

Here is a series of OBR/OBX segments for Arranged and Followed up by Consultant:

```

<RRI_I12.OBSERVATION>
    <OBR>
        <OBR.1>1</OBR.1>
        <OBR.2>
            <EI.1>REF200811271620543564</EI.1>
            <EI.2>Referral Control Number</EI.2>
            <EI.3/>
            <EI.4/>
        </OBR.2>
    </OBR>

```

```

<OBR.3>
  <EI.1>RRI200811271620543564</EI.1>
  <EI.2>Response Control Number</EI.2>
  <EI.3/>
  <EI.4/>
</OBR.3>
<OBR.4>
  <CE.1>X0033-0</CE.1>
  <CE.2>Arranged and Followed up by
Consultant</CE.2>
  <CE.3>L</CE.3>
  <CE.4/>
  <CE.5/>
  <CE.6/>
</OBR.4>
<OBR.7>
  <TS.1>20090401</TS.1>
</OBR.7>
</OBR>
<RRI_I12.RESULTS_NOTES>
  <OBX>
    <OBX.1>1</OBX.1>
    <OBX.2>FT</OBX.2>
    <OBX.3>
      <CE.1>X0035-0</CE.1>
      <CE.2>Consultant Radiology</CE.2>
      <CE.3>L</CE.3>
    </OBX.3>
    <OBX.5>CT scan of chest and abdomen
arranged</OBX.5>
    <OBX.11>F</OBX.11>
    <OBX.14>
      <TS.1>200903111600</TS.1>
    </OBX.14>
  </OBX>
</RRI_I12.RESULTS_NOTES>
</RRI_I12.OBSERVATION>

```

11. Informing GPs and Practice Work Flow

Where a valid referral response message is received, the GP practice software system needs to notify the GP who made the initial cancer referral of the contents of the referral response message. There needs to be a failsafe procedure in place so that if this message is not viewed within a defined period of time, an alert is generated to other GPs and the practice manager or system administrator that the message remains unread.

Depending on the nature of the information contained in the OBR/OBX segments the GP may need to act on the referral response information. For example, the GP may

need to arrange an investigation, prescribe medication or review the patient. The GP practice software system should alert the GP to the need for these tasks and facilitate the actions required to complete these tasks.

If the GP does not receive a referral response message within a defined period of time, the GP needs to be alerted to this and informed to make contact with the specialist cancer centre by phone, fax or letter to confirm that the patient is being reviewed.

It is important and required that the system audit trail track the receipt of the referral response message, the reading of the message and any action that ensues.

12. Addendum: The Referral Response Message as Used for General Referrals

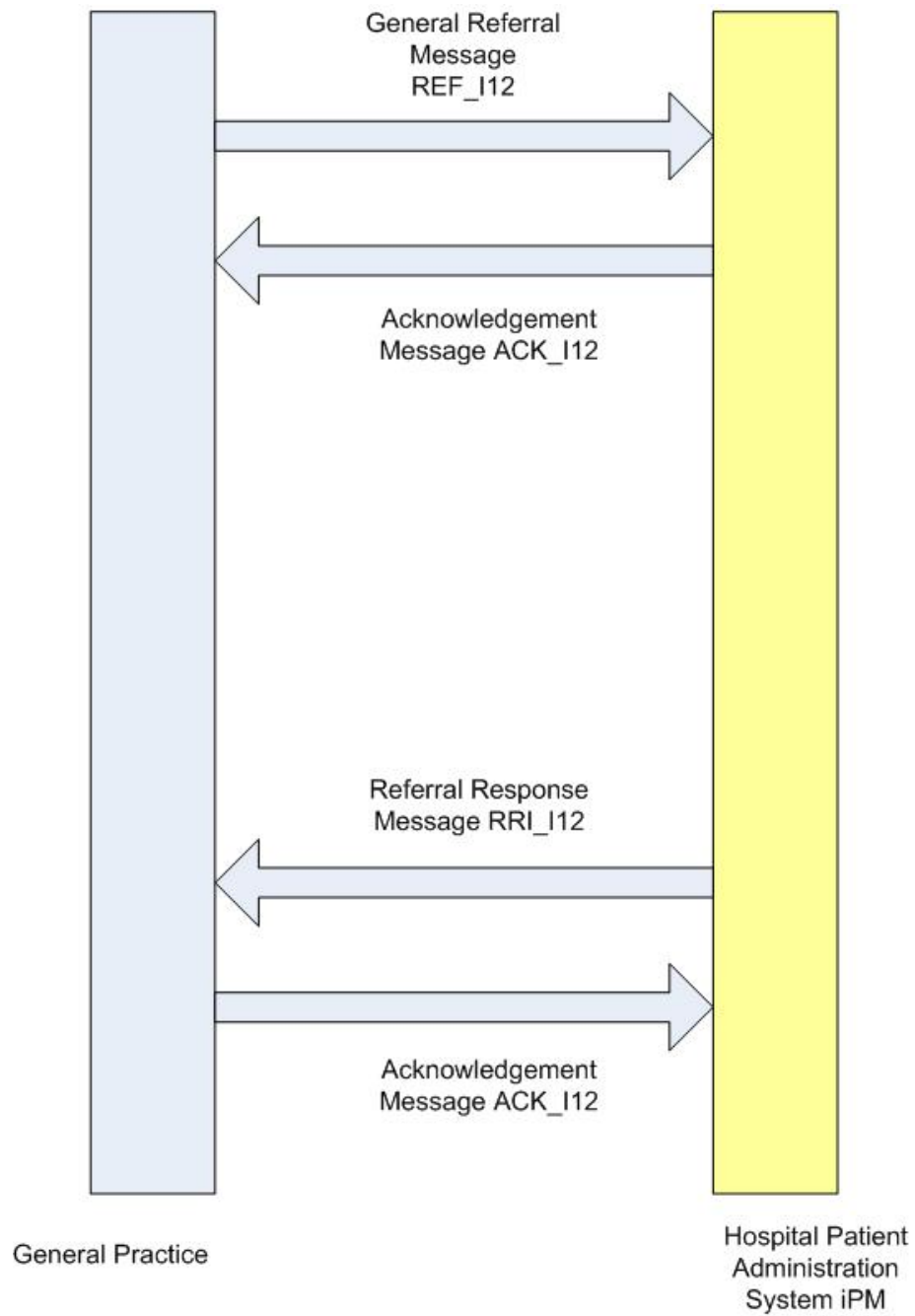
This addendum describes the use of the Referral Response Message for replying to General Referrals. General Referrals will be integrated into hospital systems as part of the HSE South Electronic General Referral Project.

The architecture of the Referral Response Message is the same for cancer and for general referrals. The message flow is different in terms of the sending application. In the case of the cancer referrals, the specialist cancer centres view and respond to the referrals using the Healthlink Online system. In the case of the general referrals the clinical staff, in hospitals which have integrated the referrals, use their hospital Patient Administration System (e.g. i.PM) to view and respond to the referrals.

Here is a table of differences between the response message as used for cancer referrals and for general referrals.

Topic	Comment
3. Message Flow	The general referral message moves from the GP system, through the Healthlink broker to the Hospital i.PM system. The referral response message returns from i.PM through the Healthlink broker to the GP system. See Figure 3 below.
5.1 Referral Overview	The 'OPD Arranged' field in the Referral Overview segment will contain the text 'Referral Accepted' or 'Referral Rejected'. The 'Other Comments' field in the Referral Overview segment will contain triage information from the hospital clinicians. The format will be: 'Triage Category: Routine' or 'Triage Category: Urgent'.
5.2 OPD Details	Where an appointment date can be given it will be contained in the 'Appointment Date' field. Where the patient has been placed on a waiting list, the 'Appointment Interval' field will contain information on the list, for example: 'Waiting list assignment: Orthopaedic routine

	waiting list. Current approximate wait time is 4 months. Please note that this may be subject to change depending on clinic capacity and demand.' Amended text for 'Reminder Comment': Please ensure the patient brings their medication details, along with relevant x-rays, scans and radiology reports, with them to their appointment.
6. Message Header Segment (MSH)	The Sending Application will be iPM.Healthlink.31 <pre><MSH.3> <HD.1>iPM.HEALTHLINK.31</HD.1></pre>
7. Referral Information Segment (RF1)	The 'Triage Category' dropdown will contain the values 'Routine' and 'Urgent'. This detail will be populated in segment RF1.2.
8. Provider Data Segment (PRD)	There will always be at least two PRD segments, one for the patient's normal GP and one for the Hospital specialty sending the response. When the Triaging Clinician's name is populated on a response form it will be populated into a new PRD segment. <pre><RRI_I12.PROVIDER_CONTACT> <PRD> <PRD.1> <CE.1>TC</CE.1> <CE.2>Triaging Clinician</CE.2> <CE.3>L</CE.3> </PRD.1></pre>
11. Informing GPs and Practice Work Flow	Support for managing referrals and for tracking referral and response messages is needed. The option of doing all referrals electronically will greatly increase the volume of referrals from GPs and supports the need for a usable system to monitor acknowledgements and responses to referrals. A summary screen to track all electronic referrals is required, including indications of which referrals have or have not been acknowledged and which have or have not received a response from the hospital.



Message Flow Diagram
version 0.4, dated 02/08/2011

Figure 3 Message Flow Diagram for General Referrals

13. Addendum: For Hospital Vendors

For hospitals intending on creating referral response message from within internal systems, the following format applies to the MSH.6 segment.

Message Header Segment (MSH)

Field	Mand	Value	Comment	HL7
Sending Facility	Yes	904.94	Hospital Code along with either the Healthlink Entity Code or Agency ID This value must reflect the value contained in the MSH.6/HD.3 segment of the corresponding referral (i.e. L or HospitalID.AgencyID)	<MSH.4>
Receiving Facility	Yes	012121.5044	GP's Medical Council Number along with Healthlink PracticeID (format MCN.HLPracticeID)	<MSH.6>

```
<MSH>
  <MSH.1>|</MSH.1>
  <MSH.2>^~\&amp;</MSH.2>
  <MSH.3>
    <HD.1>HLONLINE.HEALTHLINK.21</HD.1>
    <HD.2>/>
    <HD.3>/>
  </MSH.3>
  <MSH.4>
    <HD.1> St. James's Hospital </HD.1>
    <HD.2>904.94</HD.2>
    <HD.3>L</HD.3>
  </MSH.4>
  <MSH.5>
    <HD.1> HELIXPM </HD.1>
    <HD.2>/>
    <HD.3>/>
  </MSH.5>
  <MSH.6>
    <HD.1>Dr. Smith, John</HD.1>
```

```

        <HD.2>012121.5044</HD.2>
        <HD.3>MCN.HLPracticeID</HD.3>
    </MSH.6>
    <MSH.7>
        <TS.1>20090403112035</TS.1>
    </MSH.7>
    <MSH.9>
        <MSG.1>RRI</MSG.1>
        <MSG.2>I12</MSG.2>
    </MSH.9>
    <MSH.10>RRI200904011620543564</MSH.10>
    <MSH.11>
        <PT.1>P</PT.1>
    </MSH.11>
    <MSH.12>
        <VID.1>2.4</VID.1>
    </MSH.12>
    <MSH.15>AL</MSH.15>
</MSH>

```

13. Addendum: Day Cases/Procedures

This addendum describes the use of the Referral Response message for replying to Specialist Referral messages catering for day case procedures.

In the case of some specialist referrals the hospital department can request the patient attend day case procedure(s). The response form needs to allow for the display of the appropriate procedure(s) for which the patient can be requested to attend.

Arrange Day Case: Yes

- Indicate day procedure(s) to be carried out on the patient;
- If possible, informs the GP of the date and time of the patient's procedure(s);

Arrange Day Case: No

- When Arrange Day Case is Yes and Arrange OPD is No there is requirement to fill out the GP contacted and discussed details.
- When both Arrange Day Case is No AND Arrange OPD is No an additional field is displayed along with the original Arrange OPD details to indicate to the GP that the referral has been rejected.

Text	Segment Type	Local code
Referral Overview	OBR	X0017-0
Referral Received	OBX	X0018-0
Day Case Arranged	OBX	X00061-0
OPD Arranged	OBX	X0019-0
Other Comments	OBX	X0020-0
Day Case Details	OBX	X00063-0
Day Case Procedure(s)	OBX	X00062-0
Day Case Date	OBX	X00060-0
No OPD	OBR	X0025-0
Returned to GP	OBX	X0043-0
Discussed with GP	OBX	X0026-0

Date Agreed with GP	OBX	X0027-0
Allocation of Responsibilities	OBX	X0028-0