

# Message Construction Guide for GP Practice Software Vendors: prostate cancer referral

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## Version History:

Date	Version	Authors	Reason for change
29/10/2009	1.1	Brian O'Mahony, Orla Doogue	Initial draft
13/11/2009	1.2	Brian O'Mahony, Orla Doogue	Copy of paper referral form on page 3 updated
14/01/2010	1.3	Martin Krim	Fixed errors in the sample message (Prev. attendance location and PSA Test OBX.6 structure)
03/03/2010	1.4	Martin Krim	Added paragraph on Previous Prostate Biopsy, amended PSA Test paragraph and sample message
13/04/2010	1.5	Senthil Nathan	Added 'Unknown' option to the 'Prostate Biopsy Result'
26/04/2010	1.6	Brian O'Mahony	Discussion of PSA Test changed.
04/05/2010	1.7	Brian O'Mahony	Amended sample message
20/01/2011	1.8	Senthil Nathan	Updated Figure1 with the latest Prostate Clinic paper referral form. Updated table1 to reflect field length changes to 'Previous attendance consultant detail', 'Previous attendance location detail', 'Urinalysis', 'Prostate Biopsy location detail'. Changed date format of 'Prostate Biopsy date' field. Updated

			<p>'PSA Test' guidelines note. Updated 'Discussion of Previous Prostate Biopsy' section to include new date format requirements.</p> <p>XML sample changes: Changed data type to FT, and OBX.5 date format of 'Prostate biopsy date'.</p>
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## NATIONAL RAPID ACCESS PROSTATE CLINIC REFERRAL FORM

Rapid access clinics aim to improve access to investigations for prostate cancer in men aged from 50 to 70 (or from aged 40 if they have a first degree relative with prostate cancer). Prostate cancer will continue to be diagnosed in general urology clinics.

**POST or FAX this FORM to ONLY ONE of the National Rapid Access Prostate Clinics to avoid duplication. (Please ✓)**

- |  |  |   |  |
|--|--|---|--|
| <input type="checkbox"/> Beaumont Hospital, Dublin 9 | Rapid Access Prostate Clinic due to open in 2010 | <input type="checkbox"/> Mater University Hospital      | Tel: (01) 803 2644 / 2295 Fax: (01) 803 4036     |
| <input type="checkbox"/> Cork University Hospital    | Rapid Access Prostate Clinic due to open in 2010 | <input type="checkbox"/> St. James's Hospital, Dublin 8 | Tel: (01) 416 2850 Fax: (01) 428 4090            |
| <input type="checkbox"/> Galway University Hospital  | Tel: (091) 542 053 Fax: (091) 542 092            | <input type="checkbox"/> St. Vincent's Univ. Hospital   | Tel: (01) 221 3055 Fax: (01) 221 4318            |
| <input type="checkbox"/> Limerick Regional Hospital  | Rapid Access Prostate Clinic due to open in 2010 | <input type="checkbox"/> Waterford Regional Hospital    | Rapid Access Prostate Clinic due to open in 2010 |

### Patient Details

Surname: \_\_\_\_\_  
 First Name: \_\_\_\_\_ DOB: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 \_\_\_\_\_  
 Mobile No: \_\_\_\_\_ Tel day: \_\_\_\_\_  
 Tel evening: \_\_\_\_\_  
 Hospital No. (if known): \_\_\_\_\_  
 First language: \_\_\_\_\_ Interpreter required: Yes  No   
 Wheelchair assistance: Yes  No

### General Practitioner Details

Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 \_\_\_\_\_  
 Telephone: \_\_\_\_\_ Mobile: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 GP Signature: \_\_\_\_\_ Date of referral: \_\_\_\_\_  
 Medical Council Registration No.: \_\_\_\_\_

### Referral information (please tick relevant boxes):

#### PREVIOUSLY SEEN BY UROLOGIST

No  Yes

Consultant: \_\_\_\_\_ Location: \_\_\_\_\_

#### DIGITAL RECTAL EXAMINATION

*(Strongly recommended & improves hospital triage)*  
 All men with an abnormal Digital Rectal Examination (DRE) should be referred regardless of PSA.

DRE-Prostate feels benign  DRE-Prostate feels suspicious

#### PAST MEDICAL HISTORY:

**Anticoagulants:** Yes  No   
 Plavix  Aspirin  Warfarin  Other

**Allergies:**  
 Yes  
 No \_\_\_\_\_

**Comments:**

#### INVESTIGATIONS

##### PROSTATE SPECIFIC ANTIGEN (PSA) TEST (Mandatory)

Please wait six weeks to do a PSA test if a patient has had an active urinary infection, prostate biopsy, TURP or prostatitis. In a man with a normal DRE, repeat an abnormal PSA test at 6 weeks before referral.

Total PSA (ng/ml)	Month	Year

Urinalysis  
*(to exclude infection)* **Result:** \_\_\_\_\_

Previous Prostate Biopsy  
*(please attach report if available)*  Yes  No  
 Normal  Abnormal

Hospital of prostate biopsy: \_\_\_\_\_

Date of prostate biopsy: \_\_\_\_\_

### FOR HOSPITAL USE:

Date of referral received: \_\_\_\_\_  
 Date of appointment offered: \_\_\_\_\_  
 Reason patient did not accept first appointment offered: \_\_\_\_\_

#### Prostate Team Triage

Urgent Referral  
 Routine Referral *(diverted to general urology clinic)*

Triaged by: \_\_\_\_\_

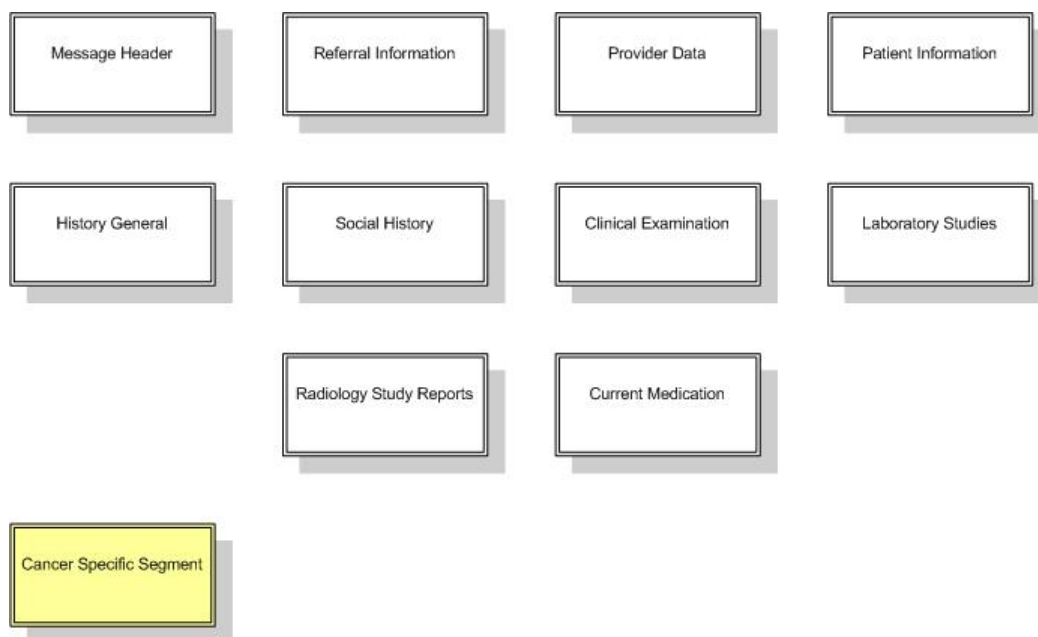
Figure 1 Prostate Cancer Paper Referral Form

## 1. Document Aim

This document aims to help GP Software Vendors to construct a prostate cancer referral message. It should be read in conjunction with the document 'Message Construction Guide for GP Software Vendors: Generic cancer referral format'. At time of writing, the most recent version of this document was version 1.8, dated 20/01/2010. Please refer to this or a later version, available from Healthlink.

In general the approach is to make completion of the form as easy as possible for the GP and to automatically include existing relevant information from the patient record. This includes history, investigation, medication and allergy information. The National Cancer Control Programme colour theme for the prostate cancer referral is blue.

The architecture for cancer referral messages is modular and reusable. Most segments are common to all cancer referrals. Each referral type has a cancer specific segment. This document describes the prostate cancer segment.



**Figure 2 Architecture of Cancer Referral Messages**

## 2. Prostate Cancer Specific Segment

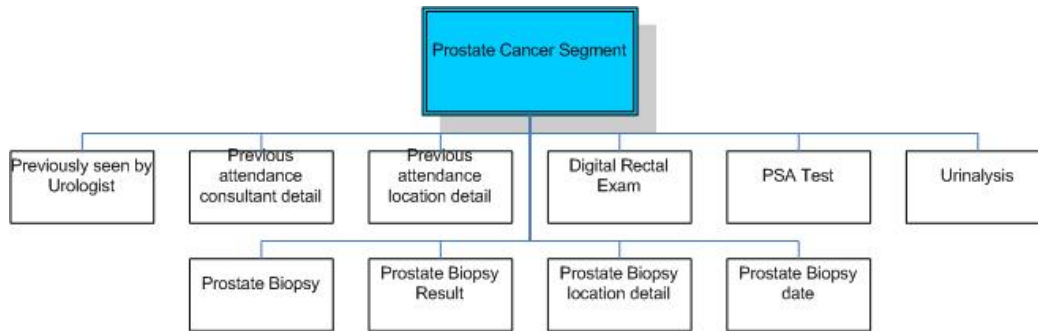


Figure 3 OBX Segments for Prostate Cancer Segment OBR

### Data Items for Prostate Cancer Segments

Field	Mandatory	Value	Comment
Previously seen by urologist	Yes	Populated by WS	Yes or No
Previous attendance consultant detail	No	Varchar(1000)	The name of the consultant whom the patient previously attended
Previous attendance location detail	No	Varchar(1000)	The location where the patient previously attended
Digital Rectal Exam	No	Populated by WS	DRE- Prostate feels benign or DRE- Prostate feels suspicious
PSA Test	Yes	Result in OBX.5, units in OBX.6 and date of test in OBX.14.	Multiple PSA test results are possible. PSA results automatically searched for and filled by practice software system
Urinalysis	No	Varchar(1000)	Results of dipstick urinalysis
Prostate Biopsy	Yes	Populated by WS	Yes or No
Prostate Biopsy Result	No	Populated by WS	Normal, Abnormal or Unknown

Prostate Biopsy location detail	No	Varchar(1000)	The location where the patient had a prostate biopsy
Prostate Biopsy date	No	dd/mm/yyyy	The day/month/year of the prostate biopsy

**Table 1 Data Items for Prostate Cancer Segment**

### **Discussion of the PSA Test**

The text displayed on the referral form for the PSA Test should be as follows:

*'All men with an abnormal Digital Rectal Examination (DRE) should be referred to a urologist regardless of PSA results. Please wait six weeks to do a PSA test if a patient has had an active urinary infection, prostate biopsy, TURP, or prostatitis. In a man with a normal DRE, repeat an abnormal PSA test at 6 weeks before referral.'*

The logic to be applied to the PSA test is as follows:

- where the DRE is abnormal, a PSA test is not mandatory;
- where the DRE is normal, at least one PSA test result is mandatory;

Thus even though two PSA tests are advised where the DRE is normal, a referral can be made with a normal DRE and only one PSA result.

The GP practice software system should automatically search for and fill the referral message with the results of PSA tests. You should include as many PSA test results as are available in the patient record. Normally, you will have at least two PSA results, as the GP is advised to repeat abnormal PSA results after a six-week interval. The result for total PSA, units, range and date should be reported. Please note the date format in the OBX.14/TS.1, section 2857-1, see sample message below.

### **Discussion of Urinalysis**

This is the result of a dipstick analysis of urine. It is filled as a text field. An example of a urinalysis result would be:

WBCs ++, Nitrites+, Protein+, RBCs++,

### **Discussion of Previous Prostate Biopsy**

An answer to this question is mandatory. If the answer is 'Yes' the GP should provide answers to subsequent questions. Ideally, hospital, date and result of the biopsy should be reported. If date of the biopsy is available please note the date format in the OBX.5, section X0009-3 and OBX.14/TS.1, sections X0005-0, X0009-1, X0009-2 and X0009-3, see sample message below.

### **3. Segments to Include from Generic Message Construction Guide**

In the construction of the prostate cancer referral message you will need to include segments from the generic message construction guide, including the

segments shown in Figure 2 above. Please refer to the document 'Message Construction Guide for GP Software Vendors: Generic cancer referral format, version 1.9 or later. Of particular interest are the following segments.

**History General: History of Present Illness**

Use this segment to describe any symptoms or complaints related to this referral. Consider using the consultation note in your system to populate this segment.

**History General: History of Past Illness**

Auto populate this field with active medical problems identified in the patient electronic record.

**History General: History of Allergies**

Auto populate this field with information on allergies described in the patient electronic record.

**History General: History of Family Member Diseases**

Auto populate this field with family history information derived from the patient electronic record.

**Social History**

Information on smoking and alcohol status should be auto populated, where available. Where relevant, information on first language, whether an interpreter is required and whether mobility is impaired should be provided.

**Clinical Examination**

An optional text field should be available in case the GP wants to include clinical examination details. For example:

Clinical Examination: BP 140/90, pulse normal, abdomen normal,

**Laboratory Studies**

The results of the PSA tests are included in the Prostate Cancer Specific Segment. You should also make available an optional text field in case the GP wants to include the results of other relevant laboratory tests. For example:

Other Laboratory Results: Hb 12.5 g%, Creatinine normal

**Radiology Study Reports**

You should make available an optional text field in case the GP wants to include the results of radiology investigations. For example:

Radiology Results: Abdominal ultrasound normal, CXR normal

If you wish, text comments on clinical examination, other laboratory studies and radiology results can be incorporated into one optional text box entitled 'Additional Comments' or 'Comments' or 'Clinical Comments'.



**Current Medication: Anticoagulant Use**

This gives a yes or no answer to the question 'Is the patient on anticoagulants?'. You should require the GP to provide a yes or no answer to this question. The question as to whether a patient is taking anticoagulants has the code X0010-0, is positioned as an OBX segment within the Current Medication OBR and has a yes or no answer.

**Current Medication: Current Medication**

This lists all the medication currently in use by the patient, both repeat prescriptions and once off prescriptions. One OBX segment is used to report each drug. The drug name, dose, frequency and route of administration are included. You should automatically fill this field from prescribing information in the patient electronic record.

#### 4. LOINC Codes

Field	LOINC code
Urology Study (OBR code)	28620-3
Previously seen by urologist	X0001-0
Previous attendance consultant detail	X0002-1
Previous attendance location detail	X0002-2
Digital Rectal Exam	10205-3
PSA Test	2857-1
Urinalysis	24357-6
Prostate Biopsy	X0005-0
Prostate Biopsy Result	X0009-1
Prostate Biopsy location detail	X0009-2
Prostate Biopsy date	X0009-3

Table 2 LOINC codes for OBX and OBR segments for prostate cancer

## 5. Message Fragment for Prostate Cancer Specific Segment

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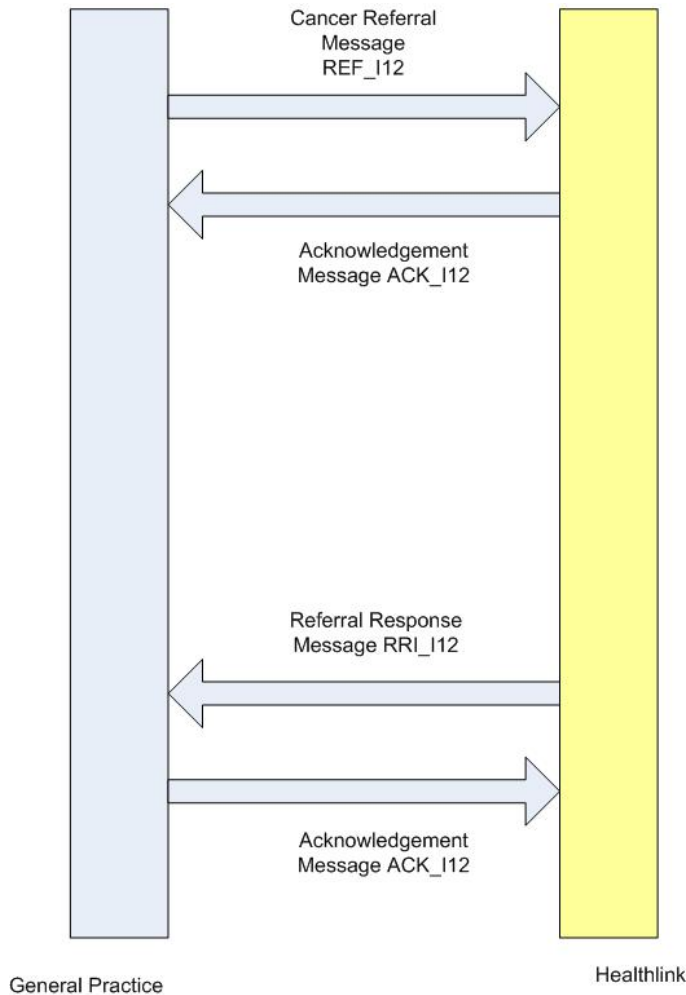
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## 6. Message Flow

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.



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

**Figure 4 Message Flow Diagram**

The documents 'A Guide to the Referral Response Message for GP Practice Software Vendors' version 0.5 or higher, and 'Message Construction Guide for GP Software Vendors: acknowledgement message' version 0.4 or higher, available from Healthlink, should be consulted for a discussion on how to handle acknowledgement and referral response messages and how to manage the practice workflow around these messages. If no acknowledgement message is received back from Healthlink then the cancer centre has not received the referral.