



Lung Cancer Rapid Access Service Referral User Interface Vendor Implementation Guidelines Document

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		<p>value for Smoker. Updated 'InvestigationRadResultCode' code table value. Changed field title 'Sex' to 'Gender'. Increased field length from 50 to 1000 chars for 'Other Clinical Findings', 'Laboratory Investigation' 'Chest X-Ray – Hospital Name & Comment', 'CT Scan – Hospital Name & Comment', 'Other Radiology Investigation', 'Current Medication - Details (Dosage, Frequency)'. Updated 'Smoker' field 'Comment' section. Added new field 'Specify Chest Signs'. Changed date format of 'Chest X-Ray' & 'CT Scan'.</p>		
1.5	<p>Karen Wynne Orla Doogue</p>	<p>Update screenshot to reflect database update for Information for Contrast CT i.e. proceed items with 'History of'</p> <p>Changed value of 'Chest X-Ray/CT Scan' – Date format</p>	3	11/03/2011

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1. Document Aim

The aim of this document is to assist GP software vendors to implement Lung Cancer Referral User Interface in their systems. Also it references to other supporting documents, which are required for this implementation.

2. Overview

The National Cancer Control Programme (NCCP) is launching cancer referrals electronically through Healthlink. To make the referral submission process more robust and user friendly GP software vendors have agreed to implement referrals on their Practice Management System (PMS). Completed Referrals will be uploaded to Healthlink via the Web Service (WS).

3. User Interface Flow

3.1 Hospital / Referral List

After clicking the referral link user need to select the desire hospital and the referral type to place a referral

Screenshot 3.1:

Please Select Public Hospital List:

Please Select Private Hospital List:

Please select referral type:

Note: Referral services are not available in every hospital that participates in the Healthlink.

3.2 Patient Search and Patient Demographics

Having selected the relevant referral the user needs to be able to search for the patient to be referred based on family name, first name and DOB as per the screenshot 3.2.1 below

Screenshot 3.2.1: (Patient Search)

Welcome: Doctor Test

Patient Family Name:

Patient First Name:

Patient DOB:

1	2	3	4	5									
Firstname	Familyname	DOB	Sex	Primary Street	Street 2	Hospital	Hosp.MRN						
FINTAN	TEST	01/01/1970 00:00:00 M		TEST ADDRESS 1	TEST ADDRESS 2	St. James's Hospital	0728269	Select					
JOANNE	BLOGGS	01/01/1940 00:00:00 F		ROAD ONE	COUNTY ONE	Mater Hospital	0225629	Select					
JOANNE	BLOGGS	01/01/1940 00:00:00 F		ROAD ONE	COUNTY ONE	Beaumont Hospital	0225629	Select					
JOE	BLOGGS	01/01/1910 00:00:00 M		MAIN STREET	TOWNLAND	Mater Hospital	29263	Select					
JOHN	TEST	01/01/1940 00:00:00 M		ADDRESS ONE	ADDRESS TWO	Mater Hospital	SMH56972	Select					

1 2 3 4 5

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z | [Reset](#)

Total Count: 23

[Click to create new patient >>](#)

When a match is found the user can then select the particular patient from the list and the demographic details (screenshot 3.2.2) are automatically populated. If no match found the user can add patient details manually by clicking the link 'Click to create new patient'.

Screenshot 3.2.2: (Patient Demographics)

GP Emergency Phone:*



Family Name:*	<input type="text"/>	Street Address:*	<input type="text"/>
First Name:*	<input type="text"/>	Address Line 2:*	<input type="text"/>
Title:	<input type="text" value="v"/>	Address Line 3:	<input type="text"/>
Date of Birth:*	<input type="text"/>	Address Line 4:	<input type="text"/>
Gender:*	<input type="text" value="v"/>		
First Language:*	English <input type="text" value="v"/>	Contact Details* (Please enter Phone and/or Mobile)	
Interpreter Required:*	No <input type="text" value="v"/>	Phone:	<input type="text"/>
Wheelchair Assistance:*	No <input type="text" value="v"/>	Mobile:	<input type="text"/>
Public/Private Patient:	<input type="text" value="v"/>	Email:	<input type="text"/>

3.3 Healthlink Electronic Lung Cancer Referral Form

Here is how the National Lung Cancer Rapid Access Clinic Referral Form looks like in the Healthlink Online web application with some sections expanded. Colour theme of the form is 'GREEN'.

Note: When implementing this referral for Private Hospital, referral form should not include NCCP logo.

Screenshot 3.3:

 <div>  </div>	
NATIONAL LUNG CANCER RAPID ACCESS SERVICE REFERRAL FORM	
Patient Name:	Mater Test
Date of Birth:	01/01/1980 (Age: 31 years)
Gender:	Female
Pregnancy Status:	
Main indications for referral are an abnormal chest x-ray or haemoptysis . Lung Cancer Guidelines	
Symptom / Reason for Referral:*	<input type="checkbox"/> Haemoptysis Other Persistent Unexplained Symptoms: <div></div>
Clinical Examination:*	<input checked="" type="checkbox"/> Chest signs Specify Chest Signs: <div></div> <input type="checkbox"/> Lymphadenopathy Other Clinical Findings: <div></div> <input type="checkbox"/> Hepatomegaly <input type="checkbox"/> Clubbing
Lab Investigation:	<div></div>
Rad Investigation:*	<div> <div>Chest X-Ray</div> <div>Other Rad Investigation: <div></div></div> </div> <div> <div>Hospital: <div></div></div> <div>Date: <div></div> / <div></div> MM/YYYY</div> <div>Result: <div></div></div> <div>CT Scan <div></div> <div></div></div> <div>Hospital: <div></div></div> <div>Date: <div></div> / <div></div> MM/YYYY</div> <div>Result: <div>Abnormal</div></div> <div>Comment: <div></div></div> </div>

Information for Contrast CT:	
<input type="checkbox"/>	History of Asthma
<input type="checkbox"/>	History of Renal Insufficiency
<input type="checkbox"/>	History of Allergy to Contrast Dye
Has patient been advised of possible diagnosis of lung cancer? <input type="radio"/> Yes <input checked="" type="radio"/> No	
Social History:	
Drinker:	<input type="text" value="Unknown"/>
Smoker:*	<input type="text" value="Current smoker"/> Number of Cigarettes: <input type="text"/> per day, Years of Smoking: <input type="text"/>
General History:	
History of Present Illness:	<input type="text"/>
History of Past Illness:	<input type="text"/>
History of Surgical Procedures:	<input type="text"/>
History of Allergies:	<input type="text"/>
History of Family Member Diseases:	<input type="text"/>
Current Medication:	
Patient on Anticoagulants	<input type="text" value="Yes"/>
Patient on Aspirin	<input type="text" value="Yes"/> Details: (Dosage & Frequency) <input type="text"/>
Patient on Plavix	<input type="text" value="No"/> Details: (Dosage & Frequency) <input type="text"/>
Patient on Warfarin	<input type="text" value="No"/> Details: (Dosage & Frequency) <input type="text"/>
Current Medication:	<input type="text"/>
Comments:	
<input type="text"/>	
<input type="button" value="Back"/> <input type="button" value="Next"/>	

3.4 Lung Cancer Referral Form User Interface field details

The vendor interface for referrals will require the relevant forms and corresponding fields, listed in the table below, are made available for input and selection. The table indicates the fields to be displayed, how they are populated, their default values if any, and whether or not they are mandatory. To obtain code table data call WS method GetCodeTablesData and pass in code table name specified in column Comment. More information on the Web Service can be found in the document “WS HealthlinkOnline Tech GP Vendor.doc”.

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<i>Form</i>	<i>Field</i>	<i>Mand</i>	<i>Value</i>	<i>Comment</i>
<i>Hospital & Referral</i>	Hospital	Y	Populated via WS	Default: Blank WS method: GetAvailableServices
	Referral	Y	Populated via WS	Default: Blank WS method: GetAvailableServices
<i>Patient Search</i>	Family Name		Text. Max. Length 50 chars	
	First Name		Text. Max. Length 50 chars	
	DOB		Date (dd/mm/yyyy)	
<i>Patient Demographics</i>	Family Name	Y	Text. Max. Length 50 chars	
	First Name	Y	Text. Max. Length 50 chars	
	Title		Populated via WS	WS code table: Title
	DOB	Y	Date (dd/mm/yyyy)	
	Gender	Y	<i>Populated via WS</i>	WS code table: Sex
	Pregnancy Status		Populated via WS	WS code table: PregnancyStatus
	First Language	Y	Table ISO-639	Download it from the Internet.
	Interpreter Required	Y	Populated via WS	WS code table: YesNo
	Wheelchair Assistance	Y	Populated via WS	WS code table: YesNo
	Public/Private		Populated via WS	WS code table: FinancialClass
	Email		Text. Max. Length 50 chars	Valid characters: .@0123456789abcdefghijklmnopqrstuvwxyz
	Street Address	Y	Text. Max. Length 100 chars	
	Address Line 2	Y	Text. Max. Length 50 chars	
	Address Line 3		Text. Max. Length 50 chars	
	Address Line 4		Text. Max. Length 50 chars	
	Phone	Y	Text. Max. Length 50 chars	Either Phone or Mobile required, not both. Valid characters: 0123456789
	Mobile			
<i>Referral</i>	Referral Indicator Text	Y	Label	See screenshot3.3 for Referral Indicator Text
	<i>Referral Guidelines</i>		Link	Link to Lung Cancer Referral Guidelines.pdf

	Symptom / Reason for Referral	Y	Checkbox. Populated via WS	Multiple symptoms can be selected WS code table: Symptom
	Other Persistent Unexplained Symptoms	N	Text-area. Max. Length 10,000 chars	Mandatory when symptom listed is not selected
	Clinical Examination	Y	Checkbox. Populated via WS	Multiple Clinical Examination can be selected WS code table: ClinicalExamination
	Other Clinical Findings	N	Text. Max Length 1,000 chars	Mandatory when Clinical Examination is not selected
	Specify Chest Signs	N	Text. Max Length 1,000 chars	Display when Clinical Examination is 'Chest signs'
	Laboratory Investigation	N	Text. Max Length 1,000 chars	
	Radiology Investigation	Y	Populated via WS	Default: Not done . WS code table: InvestigationRad

<p>When Radiology Investigation is 'Chest X-Ray' then display:</p> <ul style="list-style-type: none"> Hospital Name – Text; Max. Length 1,000 chars; respective OBX.3 codes to compose a message can be found in the WS code table: InvestigationRadLocationCode Date - Date (DD/MM/YYYY or MM/YYYY or YYYY); respective OBX.3 codes to compose a message can be found in the WS code table: InvestigationRadDateCode Result – Populated by WS. Default: Blank; WS code table: InvestigationRadResult. Respective OBX.3 codes to compose a message can be found in the WS code table: InvestigationRadResultCode <p>When 'Result' is 'Abnormal' display:</p> <ul style="list-style-type: none"> Comment – Text; Max. Length 1,000 chars; respective OBX.3 codes to compose a message can be found in the WS code table: InvestigationRadCommentCode <p>When Radiology Investigation is 'CT scan' then display:</p> <ul style="list-style-type: none"> Hospital Name – Text. Max. Length 1,000 chars; respective OBX.3 codes to compose a message can be found in the WS code table: InvestigationRadLocationCode Date - Date (DD/MM/YYYY or MM/YYYY or YYYY); respective OBX.3 codes to compose a message can be found in the WS code table: InvestigationRadDateCode Result – Populated by WS. Default: Blank; WS code table: InvestigationRadResult. Respective OBX.3 codes to compose a message can be found in the WS code table: InvestigationRadResultCode <p>When 'Result' is 'Abnormal' display:</p> <ul style="list-style-type: none"> Comment – Text; Max. Length 1,000 chars; respective OBX.3 codes to compose a message can be found in the WS code table: InvestigationRadCommentCode 			
Other Radiology Investigation		Text. Max. Length 1000 chars	
Information for Contrast CT		Checkbox. Populated via WS	Multiple Information for Contrast CT can be selected WS code table: MedicalHistory
Has patient been advised of possible diagnosis of lung cancer?		Radio	Default 'No' is selected
Social History:			
Drinker		Populated via WS	Default: Unknown WS code table: YesNoUnknown

	Units of Alcohol per week		Text. Max. Length 3 chars	Display when Drinker is 'Yes'. Range: 1 – 300
	Smoker	Y	Populated via WS	Default: Blank WS code table: SmokerLung
	Number of Cigarettes per day		Text. Max. Length 3 chars	Display when Smoker is 'Current Smoker'. Range: 1 - 100
	Years of Smoking		Text. Max. Length 2 chars	Display when Smoker is 'Yes'. Range: 1 – 90
History General:				
	History of Present illness		Text-area. Max. Length 10000 chars	
	History of Past illness		Text-area. Max. Length 10000 chars	
	History of Surgical Procedures		Text-area. Max. Length 10000 chars	
	History of Allergies		Text-area. Max. Length 10000 chars	
	History of Family Member Diseases		Text-area. Max. Length 10000 chars	
Current Medication:				
	Patient on Anticoagulants		Populated via WS	Default: Blank WS code table: YesNo
	Patient on Aspirin	Y	Populated via WS	Mandatory when 'Anticoagulants' is 'Yes'. WS code table: YesNo
	Patient on Plavix			
	Patient on Warfarin			
	Details (Dosage, Frequency)	Y	Text. Max. Length 1000 chars	Displays for each drug and mandatory when drug is selected
	Current Medication		Text-area. Max. Length 10000 chars	
	Comments		Text-area. Max. Length 10000 chars	

4. Lung Cancer Referral Message Construction Guidelines

When submitting the referral to Healthlink the data will need to be processed into HL7 XML format. Please refer to '**Generic_Ref_Message_Construction_Guide.pdf**' and '**Message_Construction_Lung.pdf**' for Lung Cancer referral message implementation.

5. Lung Cancer Referral Acknowledgement Message Construction Guidelines

When the referral form has been completed and verified on the vendor system, the referral should be submitted securely to Healthlink via Healthlink web service API. Healthlink will acknowledge the submitted request. Please refer '**Message_Construction_ACK.pdf**' for Acknowledge message implementation

6. Lung Cancer Referral Response Message

When the consultant responds to the referral, a RRI_I12 message will be sent back through Healthlink via the Web Service to the vendor system. Please refer to the '**Response_Message.pdf**', the RRI_I12 schema and the response XSLT provided within the documentation set to the vendors. The RRI schema is identical to an REF schema aside from the top node.