
eHealth platform – G19 report

Hub service “putPatient” : functional description

Version	Date	Description
1.0	30/07/2010	First release hub – metahub system.

Introduction

This document aims to provide the *functional description* of the service ‘putPatient’ that should be provided by each hub to its clients (hospitals, GP server, etc.).

The description is limited to functional elements: purpose, business XML messages. Pragmatic considerations such as security and WSDL descriptions are out-of-scope of this document. The description does not include the overall usage conditions that have to be implemented by the hubs (e.g. regarding the legal aspects).

This document is a part of KMEHR specification. (<https://www.ehealth.fgov.be/standards/kmehr/>)

The document is structured as follows:

- We first provide a ‘functional description’ of the service (purpose, input and output parameters independently of their XML representation ...).
- We then translate this functional description into a KMEHR service (i.e. we describe the expected input and output messages)

This document does not contain any XML example. Those examples are available on the kmehr site.

1 Functional description

Service name	putPatient
Purpose	This service should be used to create a patient within a hub. It can also be used to update the information about a patient.
Input parameters	<ul style="list-style-type: none"> - a patient P with at least the identifier, the name, the first name, the sex (administrative), the birth date (administrative) and the nationality. - the date and time DT of recording within the caller system - the sender S of the request, i.e. the healthcare party that performs the operation call - information about the transaction (id/date/time)
Output parameters	<ul style="list-style-type: none"> - the initial request - an acknowledge indicating the completion of the request - the patient as stored in the hub after the call
Post-condition	<ul style="list-style-type: none"> - If there is no patient with the same identifier, the patient is created - If there is patient with the same identifier with a record time anterior to DT, the data are updated. More precisely the provided fields replace the old ones but the optional fields, that are empty in the request, are kept within the hub.
Possible exceptions	<ul style="list-style-type: none"> - Technical error - Invalid data : <ul style="list-style-type: none"> • Invalid sender (according to the rules of the hub) • Invalid patient identifier • Minimal information missing about patient - S is not accredited within the hub - S is not allowed to perform the operation according to the hub rules - A more recent update has been performed
Comments	<ul style="list-style-type: none"> - About the “Sender”: the sender must at least identify the organization responsible of the caller system. According to the hub rules (e.g. regarding logging and access management), it could also identify the healthcare party corresponding to the end-user - Identification of patient: we strongly recommend the use of the INSS number. However, at the request of some hubs, each hub may make the choice to use a local identification system for this service. Let us recall that all interhub exchanges will exclusively rely on the INSS number. Ideally, the INSS identifier should be validated previously by a consultation of the RN/Bis registers.. - Update of patient: this method should be used carefully when performing updates, because a call with wrong data can erase correct but less recent information.

2 Message description

2.1 Syntax: XSchema

Operation name	PutPatient
Input data	request x patient
Output data	response x acknowledge x patient

2.2 Semantics: rules and interpretation

2.2.1 Input data

The 'request' parameter gathers the elements relative to the

- information about the request (id, date, time),
- sender of the request.

The 'patient' parameter covers the

- patient data,
- date/time of recording.

Parameter	Attributes		Comments
request	id [1]	Identification of the request within the caller system.	
	author [1]	The sender of the request represented as a sequence of <i>hcparty</i> elements. It must at least contain the healthcare party corresponding to the organization responsible of the system.	This information must be coherent with the information provided in the technical identification and authentication system (eg certificate).
	date [1]	Date of request	
	time [1]	Time of request	
patient	id [1-*]	Identifier of the patient. Several identifiers of the same patient are allowed.	We only describe the required attributes. The other attributes are allowed but not mandatory.
	familyname [1]	Family name of the patient.	
	firstname [1-*]	First names of the patient.	
	birthdate [1]	Administrative birth date of the patient	
	sex [1]	Administrative sex of the patient	
	nationality [1]	Nationality of the patient	

	recorddatetime [1]	Date/time of the recording within the caller system	
--	--------------------	---	--

2.2.2 Output data

The 'response' parameter gathers the elements relative to the

- information about the response (id, date, time),
- initial request,
- sender of the response.

The 'acknowledge' parameter gathers the element relative to the

- service completion,
- errors or exceptions that occurred during the service execution.

The 'patient' parameter covers the

- patient data as stored within the hub,
- date/time of recording.

Parameter	Attributes		Comments
response	id [1]	Id of the response within the target hub	
	author [1]	Sender of the response : the target hub	
	date [1]	Date of response	
	time [1]	Time of response	
	request [1]	Initial request	
acknowledge	iscomplete [1]	Indicates if the execution has been successfully completed	The execution is successful if the patient has been correctly stored within the hub.
	error [0-*	Indicates the error/exception descriptions	
patient	id [1-*	Identifier of the patient. Several identifiers of the same patient are allowed.	We only describe the required attributes. The other attributes are allowed but not mandatory.
	familyname [1]	Family name of the patient.	
	firstname [1-*	First names of the patient.	
	birthdate [1]	Administrative birth date of the patient.	
	sex [1]	Administrative sex of the patient (administrative)	
	nationality [1]	Nationality of the patient	

	recorddatetime [1]	Date/time of the recording within the hub system	
--	--------------------	--	--