

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:

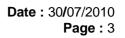
- We first provide a 'functional description' of the service (purpose, input and output parameters independently of their XML representation ...).
- We then translate this functional description into a KMEHR service (i.e. we describe the excepted input and output messages)

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 | - 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 | - the initial request | |
| parameters | - an acknowledge indicating the completion of the request | |
| | - the patient as stored in the hub after the call | |
| Post-condition | - 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 | - Technical error | |
| exceptions | - Invalid data : | |
| | 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 | - 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. | | |
| patient | 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 monotonic | |
| | familyname [1] | Family name of the patient. | - but not mandatory. | |
| | 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 | | |



| | 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 |
| | error [0-*] | Indicates the error/exception descriptions | has been correctly stored within the hub. |
| 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 |
| | familyname [1] | Family name of the patient. | allowed but not mandatory. |
| | id [1-*] Identifier of the patient. Several identifiers of the same patient are allowed. | | |
| | birthdate [1] | | |
| | sex [1] | Administrative sex of the patient (administrative) | |
| | nationality [1] | Nationality of the patient | |



| | recorddatetime [1] | Date/time within the hu | | | 0 | | |
|--|--------------------|----------------------------|--|--|---|--|--|
|--|--------------------|----------------------------|--|--|---|--|--|