eHealth platform - CCU/OCG
Architecture Workgroup Report
Hub service "getTransactionList": Functional description

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1. Document management

1.1 Document history

Version	Date	Author	Description of changes / remarks
1.0	30/07/2010	eHealth platform	First release hub – metahub system
1.1	06/12/2018	eHealth platform	Adaptation for patient access

2. Introduction

This document aims to provide the functional description of the service 'getTransactionList' that should be provided by one hub to other hubs.

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.

3. Functional description

Service name	getTransactionList
Purpose	This service should be used to get the list of recorded transactions that fulfil some given criteria in the hub. A hub performing a global document search should call this service. This service does not allow retrieving documents outside of the network covered by the target hub.

Input parameters	• a set of criteria, including at least, the INSS of the patient P,
	  and, optionally,
	  - a list of recognized transaction types T*
	  - an author A
	  - a time period [D-F].
	• search parameters
	  - the type of research: must be set either to 'external' or 'global'
	  - maximal number of allowed results (optional).
	• the sender S of the request, i.e. the hub and the healthcare party that performs the operation call
	• information about the request (id/date/time)

Output parameters	• the initial request
	• an acknowledge indicating the completion of the request
	• the patient as stored in the hub
	• the list of the recorded transactions summaries in the hub that fulfill the provided criteria :
	  - the transaction is related to P,
	    and
	  - if the corresponding search criterion is provided in the request,
	    ○ the type of the transaction is contained in T*,
	    ○ and the authors of the transaction 'matches' with A, i.e. A is a 'subset' of the healthcare parties describing the authors of the transaction
	  - and the medical date of the transaction is contained in the time period [D-F],
	  - and the transaction is available for S according to the 'transaction access rights'.
	
	Whatever the search is, the list is only composed of transactions from the target.
	
	If the maximum of number of allowed results is exceeded, the service returns the most recent transactions that fulfill the criteria.
	
	If there is no transaction that fulfills the provided criteria, the returned list is empty.

Usage Conditions (to be checked by the caller hub)	• There is a national consent for P. • There is a therapeutic link between S and P • S is allowed to perform the operation (according to the caller rules)
Post conditions	

Exceptions	• Technical error
	• Invalid data
	  Invalid request sender
	  Invalid patient identifier
	  Invalid type of transaction
	  Invalid medical error
	• Un recognized sender

Comments	• About the "**Sender**": the sender must at least identify the organization responsible of

	the caller system. For this specific operation, which is a consultation operation, it should also identify the healthcare party corresponding to the end user.

4. Message description

4.1 Syntax: XSchema

Operation name	GetTransactionList
Input data	request x select
Output data	response x acknowledge x kmehrmessage

4.2 Semantics

4.2.1 Input data

The 'request' parameter gathers the elements regarding the:

- information about the request (id, date, time),
- maximum number of allowed results,
- sender of the request.

The "select" parameter gathers the elements relative to search criteria and type of search.

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 *hcparty* elements. It must at least contain the caller hub and the healthcare party corresponding to the sender of the initial request (e.g. hospital). For this specific operation, which is a consultation operation, it must also identify the healthcare party corresponding to the end-user.		This information must be coherent with the information provided in the technical identification and authentication system (e.g. SAML token).
	date [1]	Date of request		
	time [1]	Time of request		
	maxrows [0-1]	Maximum number of results returns by the search.		If more results are found, they will be omitted.
select	patient [1]	Patient concerned by the transaction.		Contains only the identifiers of the patient and at least the INSS number. Several identifiers of the same patient are allowed.
	transaction [0-1]	cd [0-*]	Type of the transaction	

		author [0-*]	The authors of the document represented as a sequence of hcparty elements	
		begindate [0-1]		
		enddate [0-1]		
	searchtype [0-1]	Type of search : 'global' or 'external'		Not relevant.

4.2.2   Output data

The "response" parameter gathers the elements regarding the

- Information about the response (id, date, time)
- Initial request
- The sender of the response.

The "acknowledge" parameter gathers the element regarding the

- Service completion
- Errors or exceptions that occurred during the service execution

The "kmehr reader" parameter covers the

- Patient
- The summaries of the transactions matching the provided criteria

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		If the conditions were fulfilled to compute a list of results – even incomplete - iscomplete is set to 'true'; it is set to 'false' otherwise.
	error [0-*]	Indicates the error/exception descriptions		
kmehrheader	folder.patient [1]	Data about the patient as stored in the target hub		
	folder.transaction [1-*]	id [1-*]	Identifier of the transaction	At least the local identifier attributed by the system owner of the transaction (e.g. the hospital)
		cd [1-*]	Type(s) of the transaction	At least one cd from CD-TRANSACTION

		cd[0-*]	Patient access to the document should be described throughout different local codes. Those are described below.	If no information is provided, the transaction is not accessible to the patient. Currently optional but strongly recommended.
		date [1]	Date of the medical transaction	
		time [1]	Time of the medical transaction	
		author [1]	The authors of the document represented as a sequence of hcparty elements	At least one hcparty must be a physical person. The hcparty are listed by granularity. The first is the most global (i.e. hospital or hub) and the last is the most specific (i.e. physical person) **The first hcparty element must be the answering hub.**
		iscomplete [1]	Boolean to indicate that the document is complete	
		isvalidated [1]	Boolean to indicate that the document is valid	
		Recorddatetime [1]	Date/time of the recording within the system owner of the transaction	

Patient access

The access of the patient to the transaction is currently expressed throughout optional local codes.

Scheme (SL attribute of the cd element)	Meaning/possible values		Comments
PatientAccess	yes	The transaction is accessible to the patient (possibly after a delay)	Currently optional but strongly recommended. If no value is provided the transaction is not accessible to the patient.
	no	The transaction is not accessible to the patient. In some systems, this value is used to express that the author of the transaction estimates that the transaction	

		can be made accessible for the patient by a physician treating the patient	
	never	The transaction is not accessible to the patient	
PatientAccessDate	<date>	The transaction is available to the patient but only after the provided date (included)	Optional. Can only be used if the PatientAcces is 'yes'
PatientAcessDeniedReasonForPatient	<texte>	Allows one to provide a reason to explain why the document is note available for the patient.	Optional. Only to be used with the 'patientaccess' values no and never.