Cookbook

Consultrn

Manage Inscription
Version 1.1

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eHealth platform

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Table of Content

1 Document management

1.1 Document history

| Version	Date	Author	Description of changes / remarks
1.0	26/05/2014	eHealth	Initial version
1.1	02/12/2016	eHealth	Add new list of error codes Update examples Update description of xml elements

2 Introduction

2.1 Goal of the document

This document provides technical information on calling the web service ManageInscription, as provided by the eHealth-platform. This web service will allow our partners in the Health sector to query the National Register of Belgian citizen data, directly from their own applications.

The service ManageInscription subscribes (or unsubscribe) a person for a period for the initiator of the request in the *ManageInscription* service of the eHealth platform as well as in the CBSS reference repository[1] if the inscription does not yet exist. This inscription is required to call **PersonHistory** and to obtain mutation from the *MutationSender* service. The mutationSender service allows obtaining information about the mutations on the person data (as for mutation of the NISS, Name, address, etc.)
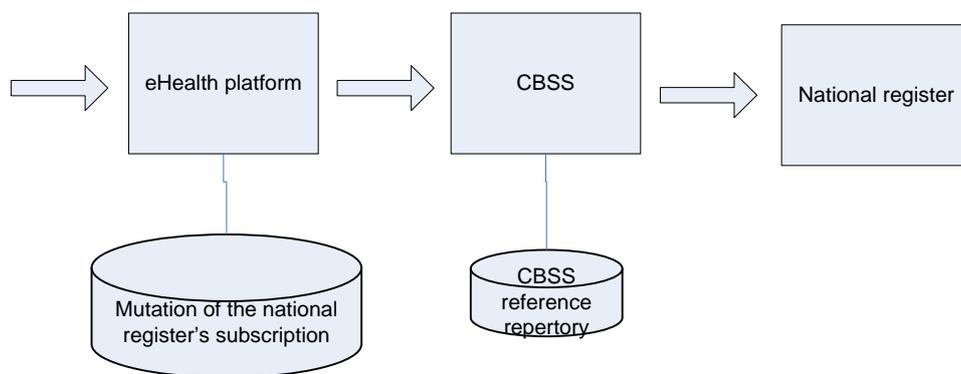
For a **proper management of mutation & history of SSIN** within their different applications and their different patient files, and according to their respective sectoral committee authorizations, health organisations are advised to consult the recommendations published in the FAQ's of the technical library.

2.2 Goal of the document

In this cookbook, we explain the structure and content aspects of the possible requests and the replies of the eHealth web service. An example illustrates each of those messages. Also, a list of possible errors can be found in the document.

This information should allow (the IT department of) an organization to develop and use the web service call.

Some technical and legal requirements must be satisfied in order to allow the integration of the eHealth web services in client applications; this document was written in order to provide you with an overview of requirements which have to be met in order to integrate correctly with the web services offered by eHealth.

This document is not a development or a programming guide for internal applications; eHealth partners always keep a total freedom within those fields. Nevertheless, in order to interact in a smooth, homogeneous and risk controlled way with a maximum of partners, eHealth partners must commit to comply with specifications, data format, and release processes described within this document. In addition, our partners in the health sector

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[1] To indicate that eHealth has a file for this person

must also comply with the business rules of validation and integration of data within their own applications in order to minimize errors and incidents.

2.3 Document references

Most of documents can be found in the technical library on the eHealth portal.

ID	Title	Version	Date	Author
1.	List of relationship codes			eHealth
2.	List of nis codes			BCSS
3.	Cookbook IdentifyPerson			eHealth
4.	Cookbook Mutation Sender			eHealth
5.	Cookbook Person History			eHealth
6.	List of supported organisations			eHealth

3 Technical, business and privacy requirements

- The call to the manage inscription webservice is conditioned to the authorization of the sectoral committee and the compliance with the integration procedure. By applying this procedure, the eHealth platform will provide you with your applicationID. The is used by eHealth to grant specific rights:

  o Dutch version:
    https://www.ehealth.fgov.be/nl/basisdiensten/consultrr/meer-weten

  o French version:
    https://www.ehealth.fgov.be/fr/services-de-base/consultrn/en-savoir-plus

- An eHealth certificate which is used to identify the initiator of the request. If you do not have one, see:

  o Dutch version:
    https://www.ehealth.fgov.be/nl/support/basisdiensten/ehealth-certificaten

  o French version:
    https://www.ehealth.fgov.be/fr/support/services-de-base/certificats-ehealth

- Time synchronisation: eHealth servers are synchronized to a pool of global servers using NTP protocol. Partner clock cannot be offsetted by more than 60 seconds against eHealth's, the request will otherwise be discarded.

4 Release and test processes

4.1 Request to integrate the service (acceptation environment first)

Integration procedures for the different type of authorized actor are described on the portal.

See:

https://www.ehealth.fgov.be/nl/basisdiensten/consultrr/meer-weten (Dutch version)

https://www.ehealth.fgov.be/fr/services-de-base/consultrn/en-savoir-plus (French version)

First the users will need to request an agreement from the sectoral committee (*secretary@socsec.committee.belgium.be*). They will receive *a*n approval letter from the sectoral committee and "application ID". The "integration team" will support the rest of the integration.

4.2 Development and Test procedures

- The consult RN test consists of a set of test scenarios that cover the integration of the set of web services (Identify person, Phonetic search, manage inscription, person history and mutation sender).

- The test scenarios are available in the technical library.

- In order to get your production application ID, you should first prove in the acceptance environment that you've correctly implemented the call to the services. Therefore, you'll need to complete the test scenario form" and send it to the integration team

4.3 Maintenance, support and monitoring of the service

Once in production, the partner in the health sector who is using the web service for one of his applications will always test firstly in acceptance before releasing any adaptions of its application. In addition, the partner will inform eHealth on the changes and test period.

In case of technical issues on the web service, the technician of the partner in the health sector may obtain support from eHealth contact center. (See section 3)

4.4 Request for release into production

If acceptance tests are successful, the partner in the health sector sends his test results, test performance results, with a sample of "request" and "eHealth answer" to the eHealth point of contact.

If everything is in order, eHealth and the partner agree on a release date. eHealth should prepare the connection to the production environment and provides to the partner with the URL of our production environment.

During the release day, the partner in the Health sector provides feed-back to eHealth contact on the release tests result.

4.5 Maintenance, support and monitoring of the service

Once in production, the partner in the health sector who is using the web service for one of his applications will always test firstly in acceptance before releasing any adaptation of his application. In addition, the partner will inform eHealth on the changes and test period.
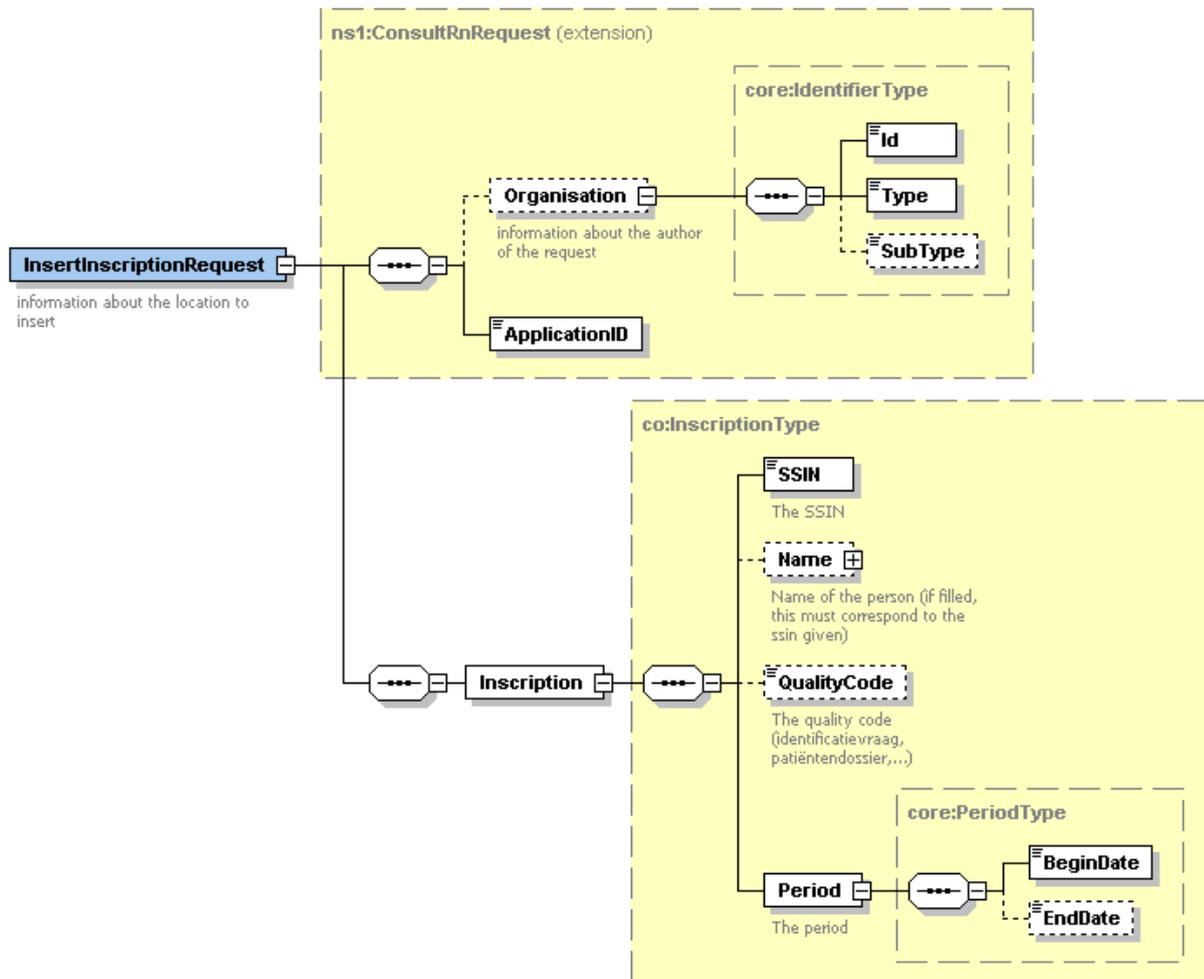
In case of technical issues on the web service, the technician of the partner in the health sector may obtain support from eHealth contact center. (See section 3)
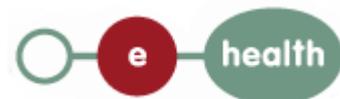
5   Method insertInscription

5.1   Formulating a Request

We discuss below the request which must be sent to have an inscription created in the mutation of the national register's subscription.

The first part, common to all web services consulting the National Register, contains:
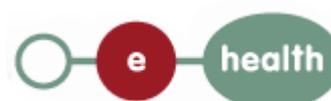
Field name	Descriptions
Organisation	The organization block contains information about the organisation having mandated the end user to make the request. *Now, mandates are not allowed. So if this information is mentioned,* it must be the same information as the information existing in the certificate. (see section 6).
ApplicationID	The ApplicationID contains a number given by eHealth identifying the organization and the authorization given for a certain purpose to this organization. (same format as an SSIN)

The second part (Inscription) contains data for the inscription of this person in order to be able to retrieve his information latter with the mutation sender service.

Field name	Descriptions
SSIN	The SSIN field contains the INSS number of the individual to be registered (patient...)
Name **(not used)**	Name containing the last name, the first name and the middle name of the individual. If known it must match the SSIN
QualityCode	A position code is shown in QualityCode. The possible values have been defined by eHealth. As for now, the only possible value is 1 (= identification). If not known, eHealth assumed it must be 1.
Period	The period indicates for how long the inscription is valid. In principle, this corresponds to the period during which the organization keeps an active file about the individual. While the start date (BeginDate) is always mandatory, the end date (EndDate) is optional. If no end date is provided, the inscription lasts indefinitely (or until a deleteInscription request). **The period must contain today**. *Remark:* If you have an active inscription for an individual where the "*end date*" is null, you cannot create a new inscription with an "*end date*" not null, you must first make a deletion of the inscription with end date null (more information see method deleteInscription).

Example:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:urn="urn:be:fgov:ehealth:consultRN:1_0:protocol">
  <soapenv:Header/>
  <soapenv:Body>
    <urn:InsertInscriptionRequest>
      <Organisation>
          <Id>71099911</Id>
          <Type>NIHII</Type>
          <SubType>HOSPITAL</SubType>
      </Organisation>
      <ApplicationID>xxxxxxxxxx</ApplicationID>
      <Inscription>
        <SSIN>12345678910</SSIN>
        <QualityCode>001</QualityCode>
        <Period>
          <BeginDate>2016-02-01</BeginDate>
          <EndDate>2016-12-31</EndDate>
        </Period>
      </Inscription>
    </urn:InsertInscriptionRequest>
```
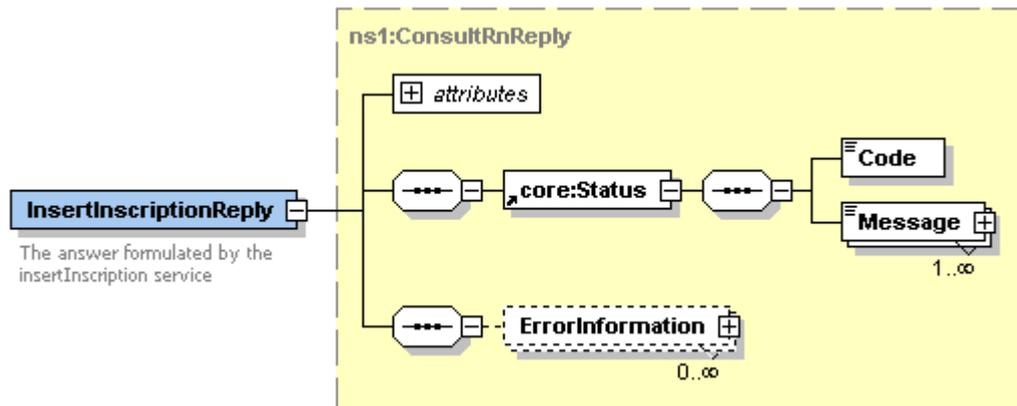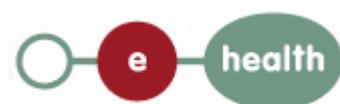
```
        </soapenv:Body>

    </soapenv:Envelope>
```

5.2 Interpretation of the Reply

The parts of the reply sent back in response to a request for inscription are discussed below.

Field name	Descriptions
@Id	The number attributed to the request/reply by the eHealth platform.
Status	The *Status* block will contain a code and a message. If no error has occurred during the transaction, the *Code* will be '100' and the *Message* 'SUCCESS'. Otherwise: - The Code will be an error code which unequivocally identifies the problem (see section 8 for the possible values). A problem can be related to the infrastructure (availability of the web service ...) or content of the request. - The *Message* will be a description of the error.
Error Information **(not used)**	This indicates more information about the reason of the failure (if known).

Example:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns3:InsertInscriptionReply Id="CRN000000000056C" xmlns:ns2="urn:be:fgov:ehealth:commons:1_0:core"
xmlns:ns3="urn:be:fgov:ehealth:consultRN:1_0:protocol">
      <ns2:Status>
        <Code>100</Code>
        <Message Lang="EN">Service successful</Message>
      </ns2:Status>
    </ns3:InsertInscriptionReply>
  </S:Body>
        </S:Envelope>
```
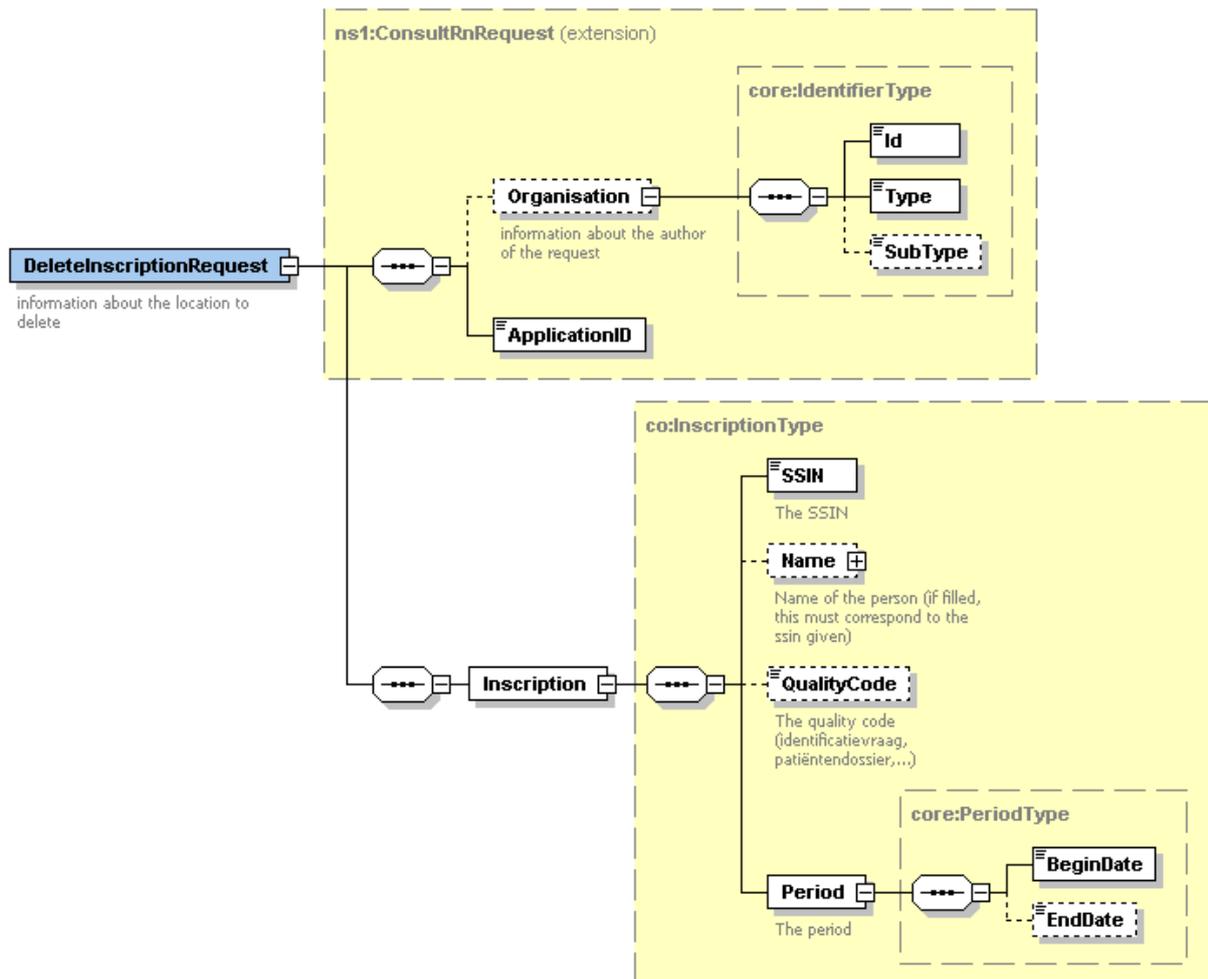
6 Method deleteInscription

This service allows unsubscribing a person for a given period.

6.1 Formulating a Request

A request to delete an existing inscription looks as follows:

The first part, common to all web services consulting the National Register, contains:
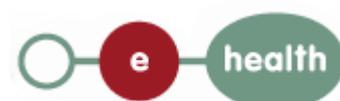
Field name	Descriptions
Organisation	The organization block contains information about the organisation having mandated the end user to make the request. *Now, mandates are not allowed. So if this information is mentioned,* it must be the same information as the information existing in the certificate (see section 6).
ApplicationID	The ApplicationID contains a number given by eHealth identifying the organization and the authorization given for a certain purpose to this organization. (same format as an SSIN)

The second part (Inscription) contains data about the person to look for, but also information about the link between the patient and the organization.

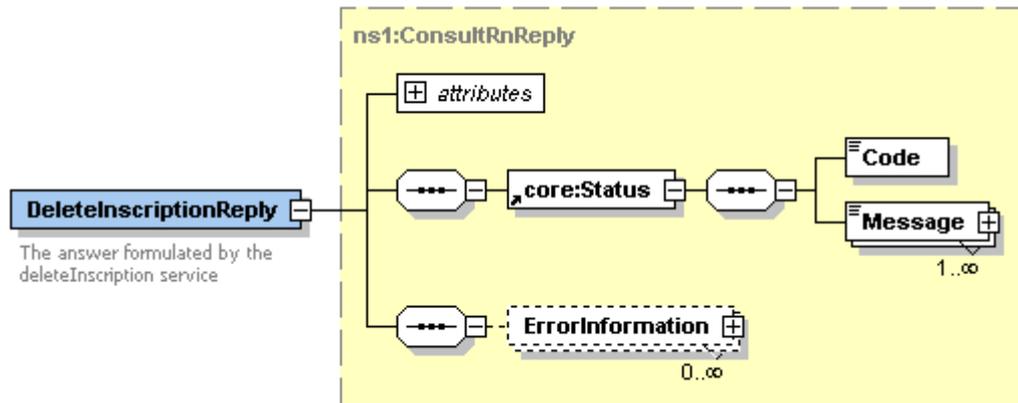| Field name	Descriptions
SSIN	The SSIN field contains the INSS number of the individual to be registered (patient. ...)
Name **(not used)**	Name containing the last name, the first name and the middle name of the individual. If known it must match the SSIN. Not used actually.
QualityCode	A position code is shown in QualityCode. The possible values have been defined by eHealth and this value must be 1 (= identification). If not known, eHealth assumed it must be 1
Period	The period indicates how long the inscription has to be deleted. While the start date (BeginDate) is always mandatory, the end date (EndDate) is optional. If a DeleteInscriptionRequest shows a period (Period) which does not completely correspond to the period in the existing inscription(s), only the overlapping part of the period will be deleted.

Example:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:urn="urn:be:fgov:ehealth:consultRN:1_0:protocol">
  <soapenv:Header/>
  <soapenv:Body>
    <urn:DeleteInscriptionRequest>
      Organisation>
          <Id>71099911</Id>
          <Type>NIHII</Type>
          <SubType>HOSPITAL</SubType>
      </Organisation>
      <ApplicationID>xxxxxxxxxxx</ApplicationID>
      <Inscription>
        <SSIN>12345678910</SSIN>
        <QualityCode>001</QualityCode>
        <Period>
          <BeginDate>2016-02-01</BeginDate>
                  <EndDate>2016-12-31</EndDate>
        </Period>
      </Inscription>
    </urn:DeleteInscriptionRequest>
  </soapenv:Body>
        </soapenv:Envelope>
```

6.2 Interpretation of the Reply

The response to a deletion of an inscription (DeleteInscriptionReply) is the same as to a creation of an inscription:

Field name	Descriptions
@Id	The number attributed to the request/reply by the eHealth platform.
Status	The *Status* block will contain a code and a message. If no error has occurred during the transaction, the *Code* will be '100' and the *Message* 'SUCCESS'. Otherwise: • The *Code* will be an error code which unequivocally identifies the problem (see section 8 for the possible values). A problem can be related to the infrastructure (availability of the webservice ...) or content of the request. • The *Message* will be a description of the error.
Error Information **(not used)**	This indicated more information about the reason of the failure (if known).

For example:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns3:DeleteInscriptionReply Id="CRN000000000056D" xmlns:ns2="urn:be:fgov:ehealth:commons:1_0:core"
xmlns:ns3="urn:be:fgov:ehealth:consultRN:1_0:protocol">
      <ns2:Status>
        <Code>100</Code>
        <Message Lang="EN">Service successful</Message>
      </ns2:Status>
    </ns3:DeleteInscriptionReply>
  </S:Body>
</S:Envelope>
```
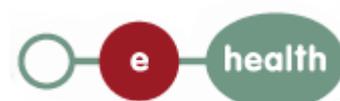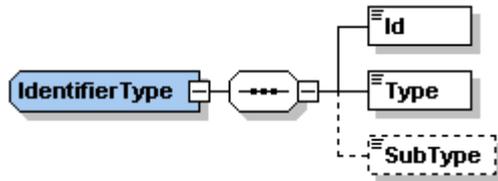
7 General Structure

7.1 Identifier

An identifier is schematized as follows:

Field name	Descriptions
Id	Number identifying the organization
Type	The Type field identifies the organization type: • RIZIV-INAMI number, use type NIHII • Enterprise number, use type "CBE" • EHP number, use type "EHP"
Subtype	The Subtype field provides further specification on the organization type. For example, a hospital is identified with the type NIHII and the subtype HOSPITAL. The list of supported organizations can be found on the eHealth portal : *https://www.ehealth.fgov.be/fr/support/services-de-base/webservices-consultrn-bulk-consultrn* *https://www.ehealth.fgov.be/nl/support/webservices-consultrr-bulk-consultrr*

8   Overview of error codes

Each error message returned by the web service will have the following structure:

InsertInscription:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns3:InsertInscriptionReply Id="CRN000000000056G" xmlns:ns2="urn:be:fgov:ehealth:commons:1_0:core"
xmlns:ns3="urn:be:fgov:ehealth:consultRN:1_0:protocol">
      <ns2:Status>
        <Code> Error code </Code>
        <Message>Error type</Message>
        <Message>Error description</Message>
      </ns2:Status>
    </ns3:InsertInscriptionReply>
  </S:Body>

</S:Envelope>
```

DeleteInscription

```xml
<?xml version="1.0" encoding="UTF-8"?>
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns3:DeleteInscriptionReply Id="CRN000000000056F" xmlns:ns2="urn:be:fgov:ehealth:commons:1_0:core"
xmlns:ns3="urn:be:fgov:ehealth:consultRN:1_0:protocol">
      <ns2:Status>
        <Code> Error code </Code>
        <Message>Error type</Message>
        <Message>Error description</Message>
      </ns2:Status>
    </ns3:DeleteInscriptionReply>
  </S:Body>
        </S:Envelope>
```

The following table describes the error code and action point for business problem

Error code	Error type	Error description	Action
0	Business problem : invalid author	HCP Identifier is not in database	CBE, NIHII or EHP identifier is not configured in database. Please take contact with contact center. (See section 3)
1	Business problem : invalid author	Application not in database	The application id is not configured in the database. Please take contact with contact center. (See section 3)
2	Business problem : invalid author	No granted right found for application	The application id is not allowed to call the web service. Please take contact with contact center. (See section 3)
4	Business problem : invalid author	Bad application ID (malformed)	The application Id is not valid. Please use a correct application Id in your request.
8	Business problem : invalid author	The applicationId is not linked to the organisation	Please contact the contact center. (See section 3)
11 - 40	Technical error	Technical Error: While Delegating To Subsystem (CBSS webservice)	Please contact the contact center. (See section 3)
41 – 59	Technical error	Technical Error: Problem With System (eHealth)	Please take contact the contact center. (See section 3)
60	Business error: invalid request	SSIN malformed	Please check that INSS in your request is valid.
61	Business error: invalid request	Required field missing	An required field is missing in your request
62	Business error: invalid request	Condition not satisfied	Please check in your request that StartDate != EndDate and StartDate >= currentDate
80	Business error : unknown quality	Unknown quality (request or database)	Please check that you use a valid quality code in your request.
81	Business error : unknown SSIN	Unknown ssin	Please use a valid SSIN.
85	Business problem	Period is invalid	The period in your request doesn't match the inscription period for the individual. Please check the period in your request.

9 Security

Web service security used in this manner is following the common standards. Your call will provide:

➢ SSL one way

➢ An X.509 certificate which contains the identifiers of the caller: NIHII number or enterprise number. More information on the contents of the certificate, see section 7. More information on how to obtain such a certificate:
   https://www.ehealth.fgov.be/fr/page_menu/website/home/platform/basicservices/certificates.html

➢ Time to live of the message: one minute.

➢ Signature of the timestamp, body and binary security token. This will allow eHealth to verify the integrity of the message and the identity of the message author.

➢ No encryption on the message.