MyCareNet MemberData
Cookbook
Version 1.4

This document is provided to you, free of charge, by the

eHealth platform

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1 Document management

1.1 Document history

Version	Date	Author	Description of changes / remarks
1.0	11/06/2018	eHealth platform	First version
1.1	01/10/2018	eHealth platform	Correction
1.2	21/10/2019	eHealth platform	Anonymization
1.3	21/03/2022	eHealth platform	Update §3.2 – Support desk CIN/NIC
1.4	29/07/2022	eHealth platform	§ 2.3 eHealth document references (updated) § 3.3 Support desk – contact points CIN/NIC (updated) § 5.1.4 WS-I Basic Profile (added) § 5.1.5 Tracing (added)

2 Introduction

2.1 Goal of the service

MyCareNet MemberData web service (MCN MemberData WS) allows the care providers to consult the information (insurability and derived rights) of the patient to carry out an invoice or to deliver services/products in a correct way. The care provider needs to request a SAML token from the eHealth Secure Token Service (STS) prior to calling the MemberData service.

2.2 Goal of the document

This document is not a development or a programming guide for internal applications. Instead, it provides functional and technical information and allows an organization to integrate and use the eHealth service.

However, in order to interact in a smooth, homogeneous and risk controlled way with a maximum of partners, eHealth partners must commit to comply with the requirements of specifications, data format and release processes described in this document.

Technical and business requirements must be met in order to allow the integration and validation of the eHealth service in the client application.

Detailed description of the functionality of the service, the semantics of the particular elements and other general information about the service is out of the scope of this document. This kind of information can be found in the documentation provided by MyCareNet on their Sharepoint[1].

2.3 eHealth document references

All the document references can be found on the eHealth portal[2]. These versions or any following versions can be used for the eHealth service.

ID	Title	Version	Date	Author
1	STS – Holder of Key - Cookbook	1.5	13/07/2022	eHealth platform
2	MemberData SSO	4.0	15/12/2021	eHealth platform

2.4 External document references

All the MyCareNet documentation can be found within their Sharepoint[3]. The documentation referenced in this section may evolve in time.

If some external documentation has been modified, please notify the eHealth service management[4] who manages the maintenance of this document.

[1] ***https://share.intermut.be/home/MyCareNet/Extranet***

[2] ***https://www.ehealth.fgov.be/ehealthplatform***

[3] In order to have access to the Sharepoint, you need to create an account which can be requested at : ***https://ned.mycarenet.be/contact*** or ***https://fra.mycarenet.be/contact***

[4] ***ehealth_service_management@ehealth.fgov.be***

ID	Title	Version	Last modification date	Author
1.	Web Service Security – SAML Token profile 1.1 ***http://www.oasis-open.org/committees/download.php/16768/wssv1.1-spec-os-SAMLTokenProfile.pdf***	NA	01/02/2006	OASIS
2.	GenericSync Error codes	NA	27/03/2018	CIN
3.	ImplementationGuide_For_CareProvider	NA	27/03/2018	CIN
4.	Messages definition NIPPIN MemberData	NA	23/05/2018	CIN
5.	MyCareNet Authentication Catalogue	NA	23/05/2018	CIN
6.	NIPPIN GenSync V3 (ESB 2 NIPPIN)	NA	27/03/2018	CIN
7.	Service_Catalogue_iSocial_Commons	NA	27/03/2018	CIN
8.	Service_Catalogue_iSocial_GenSync	NA	27/03/2018	CIN
9.	xsd-encryption	NA	27/03/2018	CIN
10.	BE-ADOC-MEMD-ALL Error Messages	NA	28/05/2018	CIN
11.	BE-ADOC-MEMD-ALL Member Data - Matrix by sector	NA	23/05/2018	CIN
12.	extensions	NA	12/04/2018	CIN
13.	FR-ADOC-MEMD-ALL Données du membre - Description du message	NA	05/06/2018	CIN
14.	xml-example	NA	23/05/2018	CIN

3 Support

3.1 Helpdesk eHealth platform

3.1.1 Certificates

In order to access the secured eHealth platform environment you have to obtain an eHealth platform certificate, used to identify the initiator of the request. In case you do not have one, please consult the chapter about the eHealth Certificates on the portal of the eHealth platform

- ***https://www.ehealth.fgov.be/ehealthplatform/nl/ehealth-certificaten***
- ***https://www.ehealth.fgov.be/ehealthplatform/fr/certificats-ehealth***

For technical issues regarding eHealth platform certificates

- Acceptance: ***acceptance-certificates@ehealth.fgov.be***
- Production: ***support@ehealth.fgov.be***

3.1.2 For issues in production

eHealth platform contact centre:

- Phone: 02 788 51 55 (on working days from 7 am till 8 pm)
- Mail: ***support@ehealth.fgov.be***
- *Contact Form :*
  - ***https://www.ehealth.fgov.be/ehealthplatform/nl/contact*** (Dutch)
  - ***https://www.ehealth.fgov.be/ehealthplatform/fr/contact*** (French)

3.1.3 For issues in acceptance

Integration-support@ehealth.fgov.be

3.1.4 For business issues

- regarding an existing project: the project manager in charge of the application or service
- regarding a new project or other business issues: ***info@ehealth.fgov.be***

3.2 Status

The website ***https://status.ehealth.fgov.be*** is the monitoring and information tool for the ICT functioning of the eHealth services that are partners of the Belgian eHealth system.

3.3 Support desk – contact points CIN/NIC

3.3.1 Business support

For business questions: MyCareNet Helpdesk (first line support)

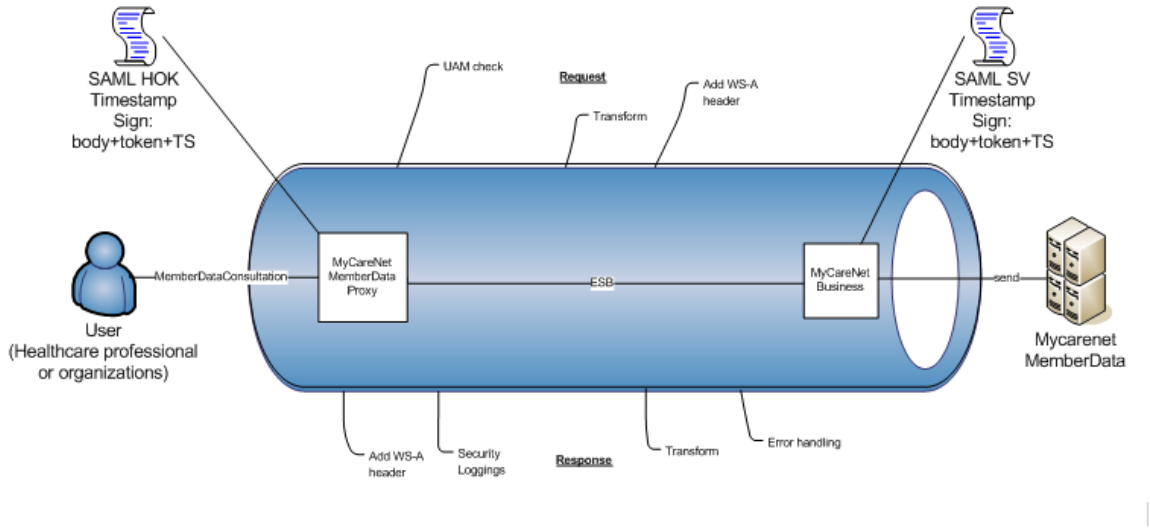
3.3.2 MyCareNet Helpdesk:

- Telephone: 02 891 72 56
- Mail: ***support@intermut.be***

3.3.3 Technical contact centre MyCareNet:

- Telephone: 02 431 47 71
- Mail: ***ServiceDesk@MyCareNet.be***

4 Global overview



The MemberData service is secured with the SAML HOK policy. Therefore, prior to calling the services, a SAML token must be obtained at the eHealth STS. The obtained token must be then included in the header of the request message. The timestamp and the body must be signed with the certificate as used in the HOK profile of the SAML token (see chapter 5 of this cookbook). The body contains the MemberData request. The eHealth Service Bus (ESB) verifies the security (authentication, authorization, etc.) and forwards the request to MyCareNet. Then, the service returns the response delivered by the MyCareNet backend.

5 Step-by-step

5.1 Technical requirements

In order to be able to test the MyCareNet MemberData service, you need to take the following steps:

1. **Create a test case:**
   If you do the testing for a real care provider, you can use the real NIHII number of this provider. Otherwise, you will first have to request the configuration of a test case at the eHealth platform (***info@ehealth.fgov.be***) with the request test case template you can find on the portal of the eHealth platform[5].
2. **Request an eHealth test certificate:** Once the test case has been configured by the eHealth platform you will receive a NIHII number according to the service called and the required profile. You can then request the test certificate through the eHealth Certificate Manager.
3. **Obtain the SAML token from the STS:** the eHealth test certificate obtained in the previous step is used for identification at the STS and as the Holder-Of-Key certificate.
4. **Call the MemberData web services**.

The rules to access the MemberData are the same in acceptation as in production.
Access rules:

- authentication with a care providers certificate (see § 3.1 for the information on the certificates, and further in this section for the information about the SAML token).
- authentication with the certificate of a mandate holder (see § 3.1 for the information on the certificates, and further in this section for the information about the SAML token).

In order to implement a WS call protected with a SAML token you can reuse the implementation as provided in the "eHealth technical connector". Nevertheless, eHealth implementations use standards and any other compatible technology (WS stack for the client implementation) can be used instead.

- ***https://www.ehealth.fgov.be/ehealthplatform/nl/service-ehealth-platform-services-connectors***
- ***https://www.ehealth.fgov.be/ehealthplatform/fr/service-ehealth-platform-services-connectors***

Alternatively, you can write your own implementation. The usage of the STS and the structure of the exchanged xml-messages are described in the eHealth STS – Holder of Key cookbook.

- ***https://www.ehealth.fgov.be/ehealthplatform/nl/service-iam-identity-access-management***
- ***https://www.ehealth.fgov.be/ehealthplatform/fr/service-iam-identity-access-management***

5.1.1 Use of the eHealth SSO solution

This section specifies how to call the STS in order to have access to the WS. You must precise several attributes in the request. The details on the identification attributes and the certification attributes can be found in the separate document MemberData SSO.

To access the MemberData WS, the response token must contain “true” for all of the ‘BOOLEAN certification attributes and a non-empty value for other certification attributes.
If you obtain “false” or empty values, contact the eHealth platform to verify that they correctly configured the requested test case.

[5] ***https://www.ehealth.fgov.be/ehealthplatform/nl/service-ehealth-certificaten*** or ***https://www.ehealth.fgov.be/ehealthplatform/fr/service-certificats-ehealth***

5.1.2 Encryption

All the information about the use of the encryption libraries and the call to the eHealth Token Key (ETK) depot are described in the End-To-End Encryption (ETEE) cookbooks on the eHealth portal.

To encrypt the request parts, you have to call the GetEtk operation to pick up the right ETK from the eHealth ETK depot. By example, the table below provides you the identifiers to use in the GetEtkRequest.

Environment	Type	Value	Application ID
Integration Test Environment	CBE	0820563481	MYCARENET
Acceptance Environment	CBE	0820563481	MYCARENET
Production Environment	CBE	0820563481	MYCARENET

5.1.3 Security policies to apply

We expect that you use SSL one way for the transport layer.

To call the MemberData WS:

- Add the business message to the soap body
- Add to the SOAP header the following elements:
  - **SAML Token**: The SAML assertion received from the eHealth STS. This assertion needs to be forwarded, exactly as received, in order to not to break the signature of the eHealth STS. The token needs to be added, accordingly to the specifications of the OASIS SAML Token Profile (HOK)).
  - **Timestamp**.
  - A **signature** that has been placed on the SOAPBody, and the timestamp with the certificate of which, the public key is mentioned in the SAML Assertion.
- The signature element (mentioned above) needs to contain:
  - SignedInfo with References to the SOAPBody and the Timestamp.
  - KeyInfo with a SecurityTokenReference pointing to the SAML Assertion.

See also the WSSP in the WSDL[6] (also included in the documentation).

5.1.4 WS-I Basic Profile 1.1

Your request must be WS-I compliant (See Chap 2.4 - External Document Ref).

5.1.5 Tracing

To use this service, the request SHOULD contain the following two http header values (see RFC

https://datatracker.ietf.org/doc/html/rfc7231#section-5.5.3):

1. User-Agent: information identifying the software product and underlying technical stack/platform. It MUST include the minimal identification information of the software such that the emergency contact (see below) can uniquely identify the component.
   a. Pattern: {minimal software information}/{version} {minimal connector information}/{connector-package-version}
   b. Regular expression for each subset (separated by a space) of the pattern: [[a-zA-Z0-9-\/]*\/[0-9azA-Z-_.]*
   c. Examples:

[6] *WSDL's can be found in the eHealth Service Registry:* ***https://portal.api.ehealth.fgov.be***

User-Agent: myProduct/62.310.4 Technical/3.19.0

User-Agent: Topaz-XXXX/123.23.X freeconnector/XXXXX.XXX

2. From: email-address that can be used for emergency contact in case of an operational problem.
   Examples:
   From: ***info@mycompany.be***

5.2 Web service

The MemberData WS has one operation available:

- MemberDataConsultation

The MemberData WS has the following endpoints:

- Pilot environment: ***https://services-acpt.ehealth.fgov.be/MyCareNet/MemberData/v1***
- Production environment: ***https://services.ehealth.fgov.be/MyCareNet/MemberData/v1***

The remainder of this section describes the structure of the request and the response messages.

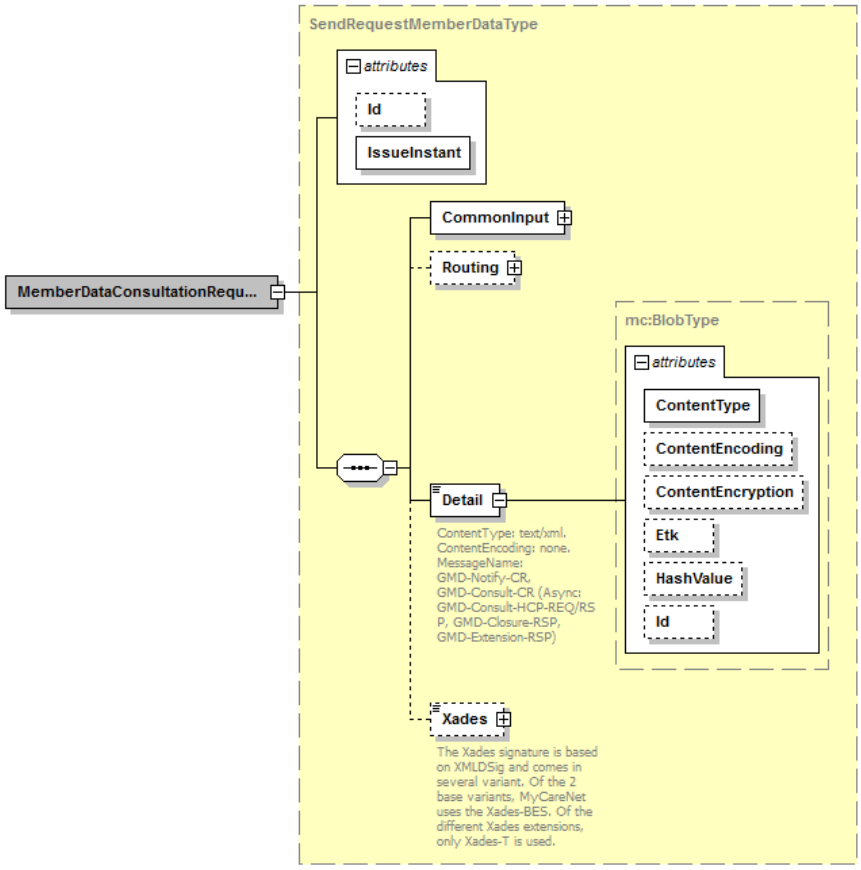
Section 5.2.1 describes the request and response messages for the *memberDataConsultation* operation.

Section 5.2.2 describes the common element types used in the structures of the request and response types.

For more details on the specific elements and the concepts behind them, see the documentation as provided by the CIN/NIC on their Sharepoint.

5.2.1 Method MemberDataConsultation

5.2.1.1 Input arguments in MemberDataConsultationRequest



Field name	Description
CommonInput	See section 5.2.2.1 : CommonInputType
Routing	This element is not mandatory in this service. If present, the backend will ignore it.

Detail	Detail of the request: the detail may be encrypted. If it not encrypted, the Detail element will contain an AttributeQuery. See the documentation 'FR-ADOC-MEMD-ALL Données du membre - Description du message' provided by the CIN/NIC for more information about the AttributeQuery. Detail attribute values : @ContentType: "text/xml" @ContentEncoding: "none" *@ContentEncryption*: attribute used to indicate if the content of the blob has been encrypted. If the blob has not been encrypted, do not set this attribute either the value should be "encryptedForKnownBED": the sender encrypted the content of the body with the public key of the CIN/NIC. @ETK the encryption token that has been used for the encryption of the body. Mentioning this information helps the recipient to identify the private key to be used for decryption. When not provided, the recipient may choose to reject the message or try to decrypt using the several existing private keys. @HashValue pre-calculated hash of the uncompressed and decoded content. Is always provided to the care provider. @Id: The ID of the blob for usage in the XAdES signature. It is an "NCName" instead of an "ID" in order to be able to have different blobs with the same (fixed) id without causing an XSD validation. Note that the attribute "MessageName" in the Detail element is not present in the interface as provided by the eHealth platform. This attribute value is then filled out by the eHealth platform, according to the called operation (for the MemberData service it is "MDA"). The content of the encrypted message should respect some standard format, to allow additional information exchange : - The identity of the Key to be used to encrypt the response. - The XAdES as probative force of the message. See the documentation provided by the CIN/NIC for more details about the structure "EncryptedKnownContent": - 'Service_Catalogue_iSocial_GenSync'
Xades	For MemberData, the Xades must be inserted in the "EncryptedKnownContent" structure. See the documentation provided by the CIN/NIC for more details about the structure "EncryptedKnownContent": - 'Service_Catalogue_iSocial_GenSync'

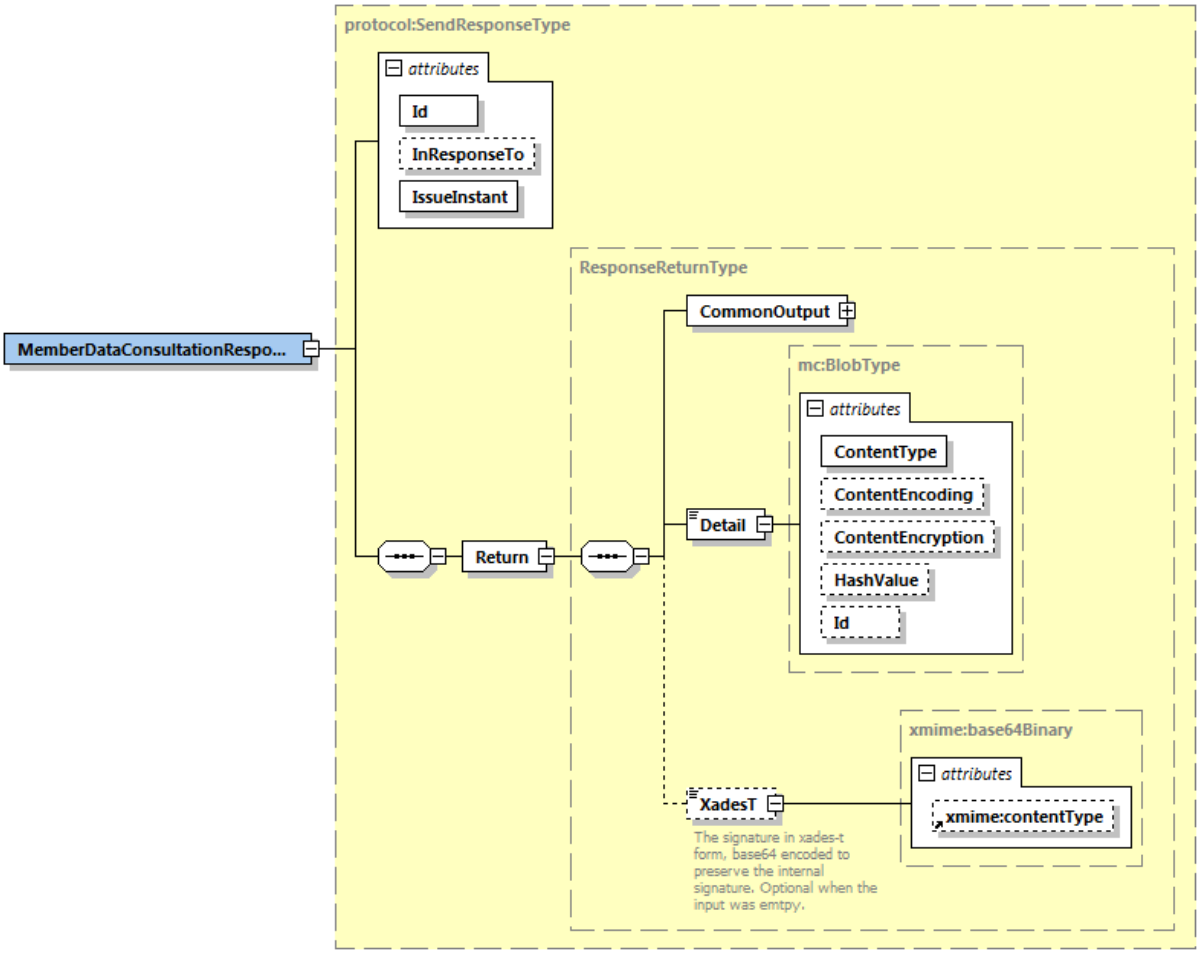
5.2.1.2 Request example

Detail element (without encryption):

```
<?xml version="1.0" encoding="UTF-8"?>
<samlp:AttributeQuery Version="2.0" IssueInstant="2017-07-11T12:00:00" ID="idvalue0" xmlns:samlp="urn:oasis:names:tc:SAML:2.0:protocol"
xmlns:saml="urn:oasis:names:tc:SAML:2.0:assertion" xmlns:p="urn:be:cin:mycarenet:esb:common:v2"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:ext="urn:be:cin:nippin:memberdata:saml:extension" xsi:schemaLocation="
urn:oasis:names:tc:SAML:2.0:protocol saml-schema-protocol-2.0.xsd
urn:be:cin:nippin:memberdata:saml:extension Extensions.xsd
">
        <saml:Issuer Format="urn:be:cin:nippin:nihii11">11530231003</saml:Issuer>
        <samlp:Extensions xsi:type="ext:ExtensionsType">
                <ext:Facet id="urn:be:cin:nippin:insurability">
                        <Dimension id="requestType">information</Dimension>
                        <Dimension id="contactType">hospitalized</Dimension>
                </ext:Facet>
                <ext:Facet id="urn:be:cin:nippin:carePath">
                        <Dimension id="carePathType">diabetes</Dimension>
                </ext:Facet>
                <ext:Facet id="urn:be:cin:nippin:chronicCondition">
```

```
                </ext:Facet>
                <ext:Facet id="urn:be:cin:nippin:referencePharmacy">
                </ext:Facet>
        </samlp:Extensions>
        <saml:Subject>
                <saml:NameID Format="urn:be:cin:nippin:careReceiver:registrationNumber@mut">880114092m65@100</saml:NameID>
                <saml:SubjectConfirmation Method="urn:be:cin:nippin:memberIdentification">
                        <saml:SubjectConfirmationData NotBefore="2017-07-11T00:00:00+02:00" NotOnOrAfter="2017-07-12T00:00:00+02:00"/>
                </saml:SubjectConfirmation>
        </saml:Subject>
</samlp:AttributeQuery>
```

5.2.1.3 Output arguments in MemberDataConsultationResponse



Field name	Description
"Response"	@Id : Unique Id for tracing @InresponseTo : 'Id' attribute of the request if available @IssueInstant : Generation response moment

Return	See the documentation provided by the CIN/NIC for more details : - 'Service_Catalogue_iSocial_GenSync' - 'FR-ADOC-MEMD-ALL Données du membre - Description du message' NB: If the attribute *@ContentEncryption* is filled, it may only have these values : encryptedForKnownRecipient encryptedForKnownBED toEncryptByBED toEncryptByIM

5.2.1.4 Response example

Return Detail element (without encryption):

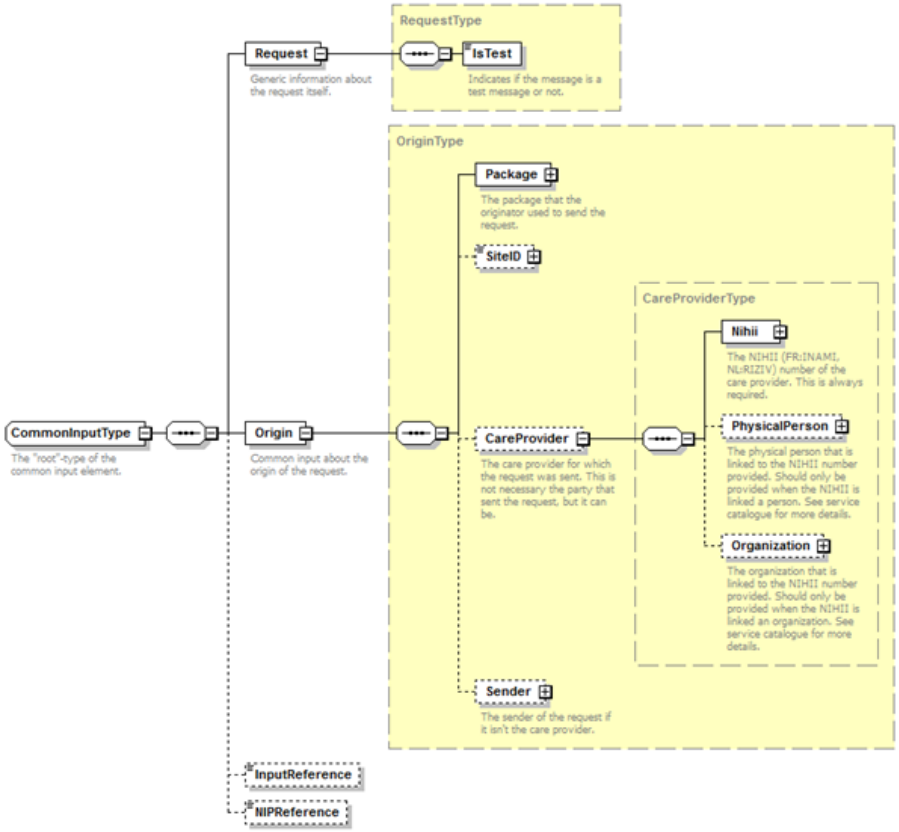
```
<?xml version="1.0" encoding="UTF-8"?>
<samlp:Response Version="2.0" IssueInstant="2017-07-11T12:00:01Z" ID="idvalue1" InResponseTo="idvalue0"
xmlns:common="urn:be:cin:mycarenet:esb:common:v2" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xenc="http://www.w3.org/2001/04/xmlenc#" xmlns:samlp="urn:oasis:names:tc:SAML:2.0:protocol"
xmlns:saml="urn:oasis:names:tc:SAML:2.0:assertion" xmlns:ds="http://www.w3.org/2000/09/xmldsig#"
xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:ext="urn:be:cin:nippin:memberdata:saml:extension" xsi:schemaLocation="
urn:oasis:names:tc:SAML:2.0:protocol saml-schema-protocol-2.0.xsd
urn:be:cin:nippin:memberdata:saml:extension Extensions.xsd
">
        <saml:Issuer>urn:be:cin:io:100</saml:Issuer>
        <samlp:Status>
                <samlp:StatusCode Value="urn:oasis:names:tc:2.0:status:Success"/>
        </samlp:Status>
        <saml:Assertion Version="2.0" IssueInstant="2017-07-11T12:00:01Z" ID="_a75adf55-01d7-40cc-929f-dbd8372ebdfc1">
                <saml:Issuer>urn:be:cin:io:100</saml:Issuer>
                <saml:Subject>
                        <saml:NameID Format="urn:be:cin:nippin:careReceiver:registrationNumber@mut">880114092m65@100</saml:NameID>
                        <saml:SubjectConfirmation Method="urn:be:cin:nippin:memberIdentification">
                                <saml:SubjectConfirmationData NotBefore="2017-07-11T00:00:00+02:00" NotOnOrAfter="2017-07-
12T00:00:00+02:00"/>
                        </saml:SubjectConfirmation>
                </saml:Subject>
                <saml:Advice xsi:type="ext:AdviceType">
                        <ext:AssertionType>urn:be:cin:nippin:insurability:patientData</ext:AssertionType>
                        <ext:Facet id="urn:be:cin:nippin:insurability">
                                <Dimension id="requestType">information</Dimension>
                                <Dimension id="contactType">hospitalized</Dimension>
                        </ext:Facet>
                </saml:Advice>
                <saml:AttributeStatement>
                        <saml:Attribute Name="urn:be:fgov:person:ssin">
                                <saml:AttributeValue xsi:type="xs:string">88011434939</saml:AttributeValue>
                        </saml:Attribute>
                        <saml:Attribute Name="urn:be:cin:nippin:careReceiver:name">
                                <saml:AttributeValue xsi:type="xs:string">Doe</saml:AttributeValue>
                        </saml:Attribute>
                        <saml:Attribute Name="urn:be:cin:nippin:careReceiver:firstName">
                                <saml:AttributeValue xsi:type="xs:string">John</saml:AttributeValue>
                        </saml:Attribute>
                        <saml:Attribute Name="urn:be:cin:nippin:careReceiver:birthDate">
                                <saml:AttributeValue xsi:type="xs:date">1988-01-14</saml:AttributeValue>
                        </saml:Attribute>
                        <saml:Attribute Name="urn:be:cin:nippin:careReceiver:gender">
                                <saml:AttributeValue xsi:type="xs:string">male</saml:AttributeValue>
                        </saml:Attribute>
                </saml:AttributeStatement>
        </saml:Assertion>
        <saml:Assertion Version="2.0" IssueInstant="2017-07-11T12:00:01Z" ID="_a75adf55-01d7-40cc-929f-dbd8372ebdfc2">
                <saml:Issuer>urn:be:cin:io:100</saml:Issuer>
                <saml:Subject>
                        <saml:NameID Format="urn:be:cin:nippin:careReceiver:registrationNumber@mut">880114092m65@100</saml:NameID>
                        <saml:SubjectConfirmation Method="urn:be:cin:nippin:memberIdentification">
                                <saml:SubjectConfirmationData NotBefore="2017-07-11T00:00:00+02:00" NotOnOrAfter="2017-07-
12T00:00:00+02:00"/>
                        </saml:SubjectConfirmation>
                </saml:Subject>
                <saml:Advice xsi:type="ext:AdviceType">
                        <ext:AssertionType>urn:be:cin:nippin:insurability:period</ext:AssertionType>
                        <ext:Facet id="urn:be:cin:nippin:insurability">
                                <Dimension id="requestType">information</Dimension>
                                <Dimension id="contactType">hospitalized</Dimension>
                        </ext:Facet>
                </saml:Advice>
                <saml:AttributeStatement>
                        <saml:Attribute Name="urn:be:cin:nippin:careReceiver:registrationNumber">
                                <saml:AttributeValue xsi:type="xs:string">880114092m65</saml:AttributeValue>
                        </saml:Attribute>
                        <saml:Attribute Name="urn:be:cin:nippin:careReceiver:mutuality">
                                <saml:AttributeValue xsi:type="xs:string">130</saml:AttributeValue>
                        </saml:Attribute>
                        <saml:Attribute Name="urn:be:cin:nippin:cb1">
                                <saml:AttributeValue xsi:type="xs:string">110</saml:AttributeValue>
                        </saml:Attribute>
                        <saml:Attribute Name="urn:be:cin:nippin:cb2">
                                <saml:AttributeValue xsi:type="xs:string">110</saml:AttributeValue>
                        </saml:Attribute>
                        <saml:Attribute Name="urn:be:cin:nippin:communicationDate">
                                <saml:AttributeValue xsi:type="xs:date">2017-07-11</saml:AttributeValue>
                        </saml:Attribute>
                </saml:AttributeStatement>
        </saml:Assertion>
        <saml:Assertion Version="2.0" IssueInstant="2017-07-11T12:00:01Z" ID="_a75adf55-01d7-40cc-929f-dbd8372ebdfc3">
                <saml:Issuer>urn:be:cin:io:100</saml:Issuer>
                <saml:Subject>
                        <saml:NameID Format="urn:be:cin:nippin:careReceiver:registrationNumber@mut">790105092m65@100</saml:NameID>
                        <saml:SubjectConfirmation Method="urn:be:cin:nippin:memberIdentification">
                                <saml:SubjectConfirmationData NotBefore="2017-07-11T00:00:00+02:00" NotOnOrAfter="2017-07-
12T00:00:00+02:00"/>
                        </saml:SubjectConfirmation>
                </saml:Subject>
                <saml:Advice xsi:type="ext:AdviceType">
```

```
                        <ext:AssertionType>urn:be:cin:nippin:insurability:payment</ext:AssertionType>
                        <ext:Facet id="urn:be:cin:nippin:insurability">
                                <Dimension id="requestType">information</Dimension>
                                <Dimension id="contactType">hospitalized</Dimension>
                        </ext:Facet>
                </saml:Advice>
                <saml:AttributeStatement>
                        <saml:Attribute Name="urn:be:cin:nippin:payment:byIO">
                                <saml:AttributeValue xsi:type="xs:boolean">true</saml:AttributeValue>
                        </saml:Attribute>
                </saml:AttributeStatement>
        </saml:Assertion>
        <saml:Assertion Version="2.0" IssueInstant="2017-07-11T12:00:01Z" ID="_a75adf55-01d7-40cc-929f-dbd8372ebdfc5">
                <saml:Issuer>urn:be:cin:io:100</saml:Issuer>
                <saml:Subject>
                        <saml:NameID Format="urn:be:cin:nippin:careReceiver:registrationNumber@mut">880114092m65@100</saml:NameID>
                        <saml:SubjectConfirmation Method="urn:be:cin:nippin:memberIdentification">
                                <saml:SubjectConfirmationData NotBefore="2017-07-11T00:00:00+02:00" NotOnOrAfter="2017-07-
12T00:00:00+02:00"/>
                        </saml:SubjectConfirmation>
                </saml:Subject>
                <saml:Advice xsi:type="ext:AdviceType">
                        <ext:AssertionType>urn:be:cin:nippin:medicalHouse</ext:AssertionType>
                        <ext:Facet id="urn:be:cin:nippin:insurability">
                                <Dimension id="requestType">information</Dimension>
                                <Dimension id="contactType">hospitalized</Dimension>
                        </ext:Facet>
                </saml:Advice>
                <saml:AttributeStatement>
                        <saml:Attribute Name="urn:be:cin:nippin:medicalHouse:type">
                                <saml:AttributeValue xsi:type="xs:string">Medical</saml:AttributeValue>
                        </saml:Attribute>
                        <saml:Attribute Name="urn:be:cin:nippin:medicalHouse:start">
                                <saml:AttributeValue xsi:type="xs:date">2016-11-01</saml:AttributeValue>
                        </saml:Attribute>
                        <saml:Attribute Name="urn:be:cin:nippin:medicalHouse:end">
                                <saml:AttributeValue xsi:type="xs:date">2017-12-31</saml:AttributeValue>
                        </saml:Attribute>
                </saml:AttributeStatement>
        </saml:Assertion>
        <saml:Assertion Version="2.0" IssueInstant="2017-07-11T12:00:01Z" ID="_a75adf55-01d7-40cc-929f-dbd8372ebdfc6">
                <saml:Issuer>urn:be:cin:io:100</saml:Issuer>
                <saml:Subject>
                        <saml:NameID Format="urn:be:cin:nippin:careReceiver:registrationNumber@mut">790105092m65@100</saml:NameID>
                        <saml:SubjectConfirmation Method="urn:be:cin:nippin:memberIdentification">
                                <saml:SubjectConfirmationData NotBefore="2017-07-11T00:00:00+02:00" NotOnOrAfter="2017-07-
12T00:00:00+02:00"/>
                        </saml:SubjectConfirmation>
                </saml:Subject>
                <saml:Advice xsi:type="ext:AdviceType">
                        <ext:AssertionType>urn:be:cin:nippin:hospitalisation</ext:AssertionType>
                        <ext:Facet id="urn:be:cin:nippin:insurability">
                                <Dimension id="requestType">information</Dimension>
                                <Dimension id="contactType">hospitalized</Dimension>
                        </ext:Facet>
                </saml:Advice>
                <saml:AttributeStatement>
                        <saml:Attribute Name="urn:be:cin:nippin:hospitalisation:hospital:nihii11">
                                <saml:AttributeValue xsi:type="xs:string">71007661000</saml:AttributeValue>
                        </saml:Attribute>
                        <saml:Attribute Name="urn:be:cin:nippin:hospitalisation:service">
                                <saml:AttributeValue xsi:type="xs:string">38</saml:AttributeValue>
                        </saml:Attribute>
                        <saml:Attribute Name="urn:be:cin:nippin:hospitalisation:admissionDate">
                                <saml:AttributeValue xsi:type="xs:date">2017-01-01</saml:AttributeValue>
                        </saml:Attribute>
                </saml:AttributeStatement>
        </saml:Assertion>
        <saml:Assertion Version="2.0" IssueInstant="2017-07-11T12:00:01Z" ID="_a75adf55-01d7-40cc-929f-dbd8372ebdfc7">
                <saml:Issuer>urn:be:cin:io:100</saml:Issuer>
                <saml:Subject>
                        <saml:NameID Format="urn:be:cin:nippin:careReceiver:registrationNumber@mut">880114092m65@100</saml:NameID>
                        <saml:SubjectConfirmation Method="urn:be:cin:nippin:memberIdentification">
                                <saml:SubjectConfirmationData NotBefore="2017-07-11T00:00:00+02:00" NotOnOrAfter="2017-07-
12T00:00:00+02:00"/>
                        </saml:SubjectConfirmation>
                </saml:Subject>
                <saml:Advice xsi:type="ext:AdviceType">
                        <ext:AssertionType>urn:be:cin:nippin:carePath</ext:AssertionType>
                        <ext:Facet id="urn:be:cin:nippin:carePath">
                                <Dimension id="carePathType">diabetes</Dimension>
                        </ext:Facet>
                </saml:Advice>
                <saml:AttributeStatement>
                        <saml:Attribute Name="urn:be:cin:nippin:carePath:type">
                                <saml:AttributeValue xsi:type="xs:string">diabetes</saml:AttributeValue>
                        </saml:Attribute>
                        <saml:Attribute Name="urn:be:cin:nippin:carePath:physician:nihii11">
                                <saml:AttributeValue xsi:type="xs:string">16567303004</saml:AttributeValue>
                        </saml:Attribute>
                        <saml:Attribute Name="urn:be:cin:nippin:carePath:specialist:nihii11">
                                <saml:AttributeValue xsi:type="xs:string">17656275583</saml:AttributeValue>
                        </saml:Attribute>
                        <saml:Attribute Name="urn:be:cin:nippin:carePath:startRightDate">
                                <saml:AttributeValue xsi:type="xs:date">2017-03-15</saml:AttributeValue>
                        </saml:Attribute>
```

```
                        <saml:Attribute Name="urn:be:cin:nippin:carePath:endContractDate">
                                <saml:AttributeValue xsi:type="xs:date">2017-12-31</saml:AttributeValue>
                        </saml:Attribute>
                        <saml:Attribute Name="urn:be:cin:nippin:carePath:endRightDate">
                                <saml:AttributeValue xsi:type="xs:date">2017-12-31</saml:AttributeValue>
                        </saml:Attribute>
                </saml:AttributeStatement>
        </saml:Assertion>
        <saml:Assertion Version="2.0" IssueInstant="2017-07-11T12:00:01Z" ID="_a75adf55-01d7-40cb-929f-dbd8372ebdfc6">
                <saml:Issuer>urn:be:cin:io:100</saml:Issuer>
                <saml:Subject>
                        <saml:NameID Format="urn:be:cin:nippin:careReceiver:registrationNumber@mut">880114092m65@100</saml:NameID>
                        <saml:SubjectConfirmation Method="urn:be:cin:nippin:memberIdentification">
                                <saml:SubjectConfirmationData NotBefore="2017-07-11T00:00:00+02:00" NotOnOrAfter="2017-07-
12T00:00:00+02:00"/>
                        </saml:SubjectConfirmation>
                </saml:Subject>
                <saml:Advice xsi:type="ext:AdviceType">
                        <ext:AssertionType>urn:be:cin:nippin:chronicCondition</ext:AssertionType>
                        <ext:Facet id="urn:be:cin:nippin:chronicCondition">
                        </ext:Facet>
                </saml:Advice>
                <saml:AttributeStatement>
                        <saml:Attribute Name="urn:be:cin:nippin:chronicCondition:year">
                                <saml:AttributeValue xsi:type="xs:string">2017</saml:AttributeValue>
                        </saml:Attribute>
                </saml:AttributeStatement>
        </saml:Assertion>
        <saml:Assertion Version="2.0" IssueInstant="2017-07-11T12:00:01Z" ID="_a75adf55-01d7-40bc-929f-dbd8372ebdfc6">
                <saml:Issuer>urn:be:cin:io:100</saml:Issuer>
                <saml:Subject>
                        <saml:NameID Format="urn:be:cin:nippin:careReceiver:registrationNumber@mut">880114092m65@100</saml:NameID>
                        <saml:SubjectConfirmation Method="urn:be:cin:nippin:memberIdentification">
                                <saml:SubjectConfirmationData NotBefore="2017-07-11T00:00:00+02:00" NotOnOrAfter="2017-07-
12T00:00:00+02:00"/>
                        </saml:SubjectConfirmation>
                </saml:Subject>
                <saml:Advice xsi:type="ext:AdviceType">
                        <ext:AssertionType>urn:be:cin:nippin:referencePharmacy</ext:AssertionType>
                        <ext:Facet id="urn:be:cin:nippin:referencePharmacy">
                        </ext:Facet>
                </saml:Advice>
                <saml:AttributeStatement>
                        <saml:Attribute Name="urn:be:cin:nippin:referencePharmacy:pharmacy:nihii8">
                                <saml:AttributeValue xsi:type="xs:string">66666417</saml:AttributeValue>
                        </saml:Attribute>
                        <saml:Attribute Name="urn:be:cin:nippin:referencePharmacy:startDate">
                                <saml:AttributeValue xsi:type="xs:string">2017-03-15</saml:AttributeValue>
                        </saml:Attribute>
                </saml:AttributeStatement>
        </saml:Assertion>
</samlp:Response>
```

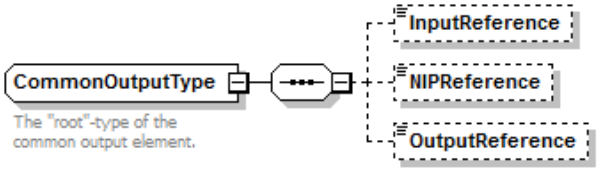
5.2.2 Used Types

5.2.2.1 CommonInputType



For the semantics of the particular elements and other information about the service, see the documentation Service_Catalogue_iSocial_Commons and MyCareNet Authentication Catalogue provided by the CIN/NIC.

5.2.2.2 CommonOutputType



For the semantics of the particular elements and other information about the service see the documentation Service_Catalogue_iSocial_Commons provided by the CIN/NIC.

6 Risks and Security

6.1 Business security

In case the development adds a use case based on an existing integration, the eHealth platform must be informed at least one month in advance. A detailed estimate of the expected load is necessary to be able to ensure an effective capacity management.

When technical issues occur on the WS, the partner can obtain support from the contact centre (see Chap 3)

If the eHealth platform should find a bug or vulnerability in its software, the partner must update his application with the latest version of the software, within ten (10) business days.

If the partner finds a bug or vulnerability in the software or web service made available by the eHealth platform, he is obliged to contact and inform us immediately. He is not allowed, under any circumstances, to publish this bug or vulnerability.

6.1.1 Web service

WS security used in this manner is in accordance with the common standards. Your call will provide:

- SSL one way
- Time-to-live of the message: one minute. Note that the time-to-live is the time difference between the Created and Expired elements in the Timestamp and is not related to the timeout setting on the eHealth ESB, etc. This means that the eHealth platform will process the message, if it is received within the time-to-live value. There is a tolerance of 5 minutes to account for the clock skew, but the actual response time may be greater than one minute in some situations.
- Signature of the timestamp and body. This will allow the eHealth platform to verify the integrity of the message and the identity of the message author.
- Encryption of the business part of the message with the MyCareNet ETK.

6.1.2 The use of username, password and token

The username, password, and token are strictly personal.
Every user takes care of his username, password and token, and he is forced to confidentiality. It is prohibited to transfer them to partners and clients. Until inactivation, every user is responsible for every use, including the use by a third party..

7 Test and release procedure

7.1 Procedure

This chapter explains the procedures for testing and releasing an application in acceptation or production.

7.1.1 Initiation

If you intend to use the eHealth service in the acceptance environment, please contact ***info@ehealth.fgov.be***. The Project department will provide you with the necessary information and mandatory documents.

7.1.2 Development and test procedure

You have to develop a client in order to connect to our WS. Most of the required integration info is published on the eHealth portal.

In some cases, the eHealth platform provides you with a test case in order for you to test your client before releasing it in the acceptance environment.

7.1.3 Release procedure

When development tests are successful, you can request to access the eHealth acceptance environment.

From this moment, you can start integration and acceptance tests. The eHealth platform suggests testing during a minimum of one month.

After successful acceptance tests, the partner sends his test results and performance results with a sample of "eHealth request" and "eHealth answer" to the eHealth point of contact by email.

Then, the eHealth platform and the partner agree on a release date. The eHealth platform prepares the connection to the production environment and provides the partner with the necessary information. During the release day, the partner gives feedback on the test and performance tests.

For further information and instructions, please contact: ***integration-support@ehealth.fgov.be***.

7.1.4 Operational follow-up

Once in production, the partner using the eHealth service for one of his applications, will always test first in the acceptance environment before releasing any adaptations of his application in production. In addition, he will inform the eHealth platform on the progress and test period.

7.2 Test cases

The eHealth platform recommends performing tests for the following case:

- MemberDataConsultation (contact NIC/CIN for test data of the patients)

In addition, the software providers should also run negative test cases.

8 Error and failure messages

There are different possible types of response:

- If there are no technical errors, responses as described in section 5 are returned.
- In the case of a technical error, a SOAP fault exception is returned (see table below).

If an error occurs, first please verify your request. The following table contains a list of common system error codes for the eHealth Service Bus.
For possible business errors, refer to the documentation 'GenericSync Error codes' and 'Service_Catalogue_iSocial_Commons', 'BE-ADOC-MEMD-ALL Error Messages' provided by the CIN/NIC.

Table 1: Description of the possible SOAP fault exceptions.

Error code	Component	Description	Solution/Explanation
SOA-00001		Service error	This is the default error sent to the consumer in case more details are unknown.
SOA-01001	Consumer	Service call not authenticated	From the security information provided; • or the consumer could not be identified • or the credentials provided are not correct
SOA-01002	Consumer	Service call not authorized	The consumer is identified and authenticated, but is not allowed to call the given service.
SOA-02001	Provider	Service not available Please contact service desk	• An unexpected error has occurred; • Retries will not work; • Service desk may help with root cause analysis.
SOA-02002	Provider	Service temporarily not available Please try later	• An unexpected error has occurred; • Retries should work; • If the problem persists service desk may help.
SOA-03001	Consumer	Malformed message	This is the default error for content related errors in case more details are unknown.
SOA-03002	Consumer	Message must be SOAP	Message does not respect the SOAP standard.
SOA-03003	Consumer	Message must contain SOAP body	Message respects the SOAP standard, but body is missing.
SOA-03004	Consumer	WS-I compliance failure	Message does not respect the WS-I standard.
SOA-03005	Consumer	WSDL compliance failure	Message is not compliant with WSDL in Registry/Repository.
SOA-03006	Consumer	XSD compliance failure	Message is not compliant with XSD in Registry/Repository.
SOA-03007	Consumer	Message content validation failure	From the message content (conform XSD): • Extended checks on the element format failed; • Cross-checks between fields failed.

If the cause is a business error, please contact Mycarenet at *ServiceDesk@MyCareNet.be*.

Business error example :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <soapenv:Fault>
      <faultcode>soapenv:Server</faultcode>
      <faultstring>INCORRECT_INSS_DOCTOR_SAML</faultstring>
      <detail>
        <urn:BusinessError Id="urn:uuid:dcdc1fe0-6458-4e38-b954-65fe4f6931dc"
xmlns:urn="urn:be:fgov:ehealth:errors:soa:v1">
          <Origin>MYCARENET</Origin>
          <Code>INCORRECT_INSS_DOCTOR_SAML</Code>
          <Message xml:lang="en">For 'doctor' the SSIN '12345678912' in the CareProvider element must correspond to the
'urn:be:fgov:person:ssin' attribute in the saml '23456789123'</Message>
          <urn:Environment>Acceptation</urn:Environment>
        </urn:BusinessError>
      </detail>
    </soapenv:Fault>
  </soapenv:Body>
</soapenv:Envelope>
```

The soap header (only when the received response is not a SOAP fault) contains a message ID, e.g.:

```
<soapenv:Header>

      <add:MessageID
xmlns:add="http://www.w3.org/2005/08/addressing">6f23cd40-09d2-4d86-b674-
b311f6bdf4a3</add:MessageID>

</soapenv:Header>
```

This message ID is important for tracking of the errors so when available, please provide it when requesting support.