

**Therapeutic Exclusion WS - REST
Cookbook
Version 1.1**

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eHealth platform

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1. Document management

1.1 Document history

Version	Date	Author	Description of changes / remarks
1.0	06/06/2023	eHealth platform	Initial version
1.1	23/04/2024	eHealth platform	Add new HCParty : <ul style="list-style-type: none">• Optometrist• OT mobility improvement• OT bandages orthosiology• OT prosthesiology• OT shoe technology

2. Introduction

2.1 Goal of the service

The existence of an active *'therapeutic exclusion'* is a fundamental prerequisite for the citizen to prevent healthcare providers from accessing his medical data. Therefore, the eHealth platform makes available to the citizen a new web service (WS) called Therapeutic Exclusion.

Technically, we identify the following attributes for a therapeutic exclusion:

- If the excluded healthcare party is a **practitioner**
 - The identification number of the Belgian National Register (**INSS**) of the patient
 - The **INSS** of the practitioner

Therefore, if the practitioner has multiple healthcare professions i.e. multiple NIHI, multiple professional categories, and is being excluded for one profession, the practitioner is considered as excluded for other professions as well.

- If the excluded healthcare party is an **organization**
 - The **INSS** of the patient;
 - The **NIHI** (Number assigned by the National Institute for Health and Invalidity Insurance) of the organization.

A citizen can exclude one or more healthcare parties and one or more citizens can exclude one healthcare party.

According to the current business rules, for the purpose of the therapeutic exclusion:

- 'Citizen' means any patient, parent and mandatary of the concerned patient managing therapeutic exclusion through the Therapeutic Exclusion WS.
- Only following HC Parties can be excluded by citizen:
 - As practitioner: **Physician, Nurse, Dentist, Midwife, Audician, Physiotherapist, Occupational therapist, Practical nurse, Dietician, Audiologist, Podologist, Truss maker, Logopedist, Orthoptist, Lab technologist, Imaging technologist, clinical orthopedic pedagogue, clinical psychologist, dental hygienist, Optometrist, OT mobility improvement, OT bandages orthosiology, OT prosthesiology, OT shoe technology.**

Here is the list of KMEHR codes to specify (CD-HCPARTY) according to the profession of the HC Party :

Profession	KMEHR code
Physician	persphysician
Nurse	persnurse
Dentist	persdentist
Midwife	persmidwife
Audician	persaudician
Audiologist	persaudiologist
Lab technologist	persbiologist
Dietician	persdietician
Logopedist	perslogopedist
Occupational therapist	persoccupationaltherapist
Orthoptist	persorthoptist
Optometrist	persoptometrist

Physiotherapist	persphysiotherapist
Podologist	perspodologist
Practical nurse	perspracticalnurse
Imaging technologist	perstechnician
Truss maker	perstrussmaker
Clinical orthopedic pedagogue	persclinicalorthopedagogue
Clinical psychologist	persclinicalpsychologist
Dental Hygienist	persordentalhygienist
OT mobility improvement	persmobilityimprover
OT bandages orthosiology	persbandagistorthosiologist
OT prosthesiology	persprosthesiologist
OT shoe technology	persshoetechnologist

- As organization: **Pharmacy**

Profession	KMEHR code
Pharmacy	orgpharmacy

The following operations will support the management of ‘therapeutic exclusion’:

POST /therapeuticExclusions	Allows an end-user to declare a therapeutic exclusion.
DELETE /therapeuticExclusions	Allows the end-user to revoke of an active therapeutic exclusion
GET /therapeuticExclusions/{patientSsin}	Allows the end-user to consult the active therapeutic exclusion(s)
GET /histories/{patientSsin}	Allows an end-user to consult the therapeutic exclusion management history.

2.2 Goal of the document

This document describes the management of the ‘*therapeutic exclusion*’ service as provided by the eHealth platform. In this cookbook, we explain the structure, the content, and the aspects of the possible requests and the replies of Therapeutic Exclusion WS. An example illustrates each of those messages. In addition, you will find a list of possible errors in this document.

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

Some technical and legal requirements must be met in order to allow the integration of the eHealth WS in client applications.

This document is neither a development nor 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 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 eHealth document references

All the document references can be found on the eHealth platform portal¹. These versions or any following versions can be used for the eHealth platform service.

ID	Title	Version	Date	Author
1	eHealth Services – Web Access	2.0	12/07/2018	eHealth platform
2	I.AM Connect - Mobile integration - Technical specifications	1.8	09/08/2023	eHealth platform
3	I.AM Connect – HealthCare Client Registration	1.2	28/06/2021	eHealth platform
4	I.AM Connect – M2M Client registration	1.1	07/07/2021	eHealth platform
5	SOA – Error guide	1.0	10/06/2021	eHealth platform
6	Request test case template	3.0	22/02/2018	eHealth platform
7	IAM Connect Claim mappers	1.0	28/05/2021	eHealth platform

¹ <https://www.ehealth.fgov.be/ehealthplatform>

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 I.AM Connect

In order to use the Therapeutic Exclusion REST service you have to obtain an “Access token” which is delivered through I.AM Connect. You can find more information about I.AM Connect and how to register a client in I.AM Connect on the I.AM eHealth portal page:

Dutch version:

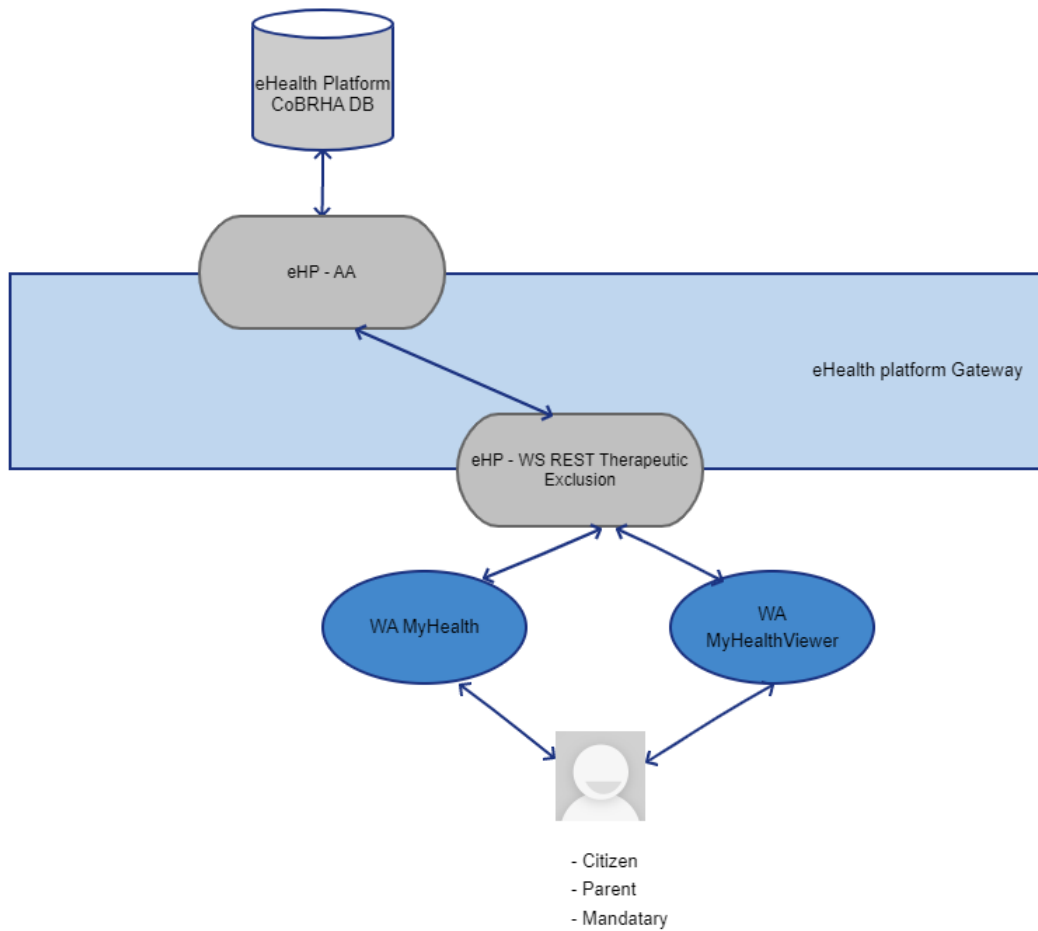
<https://www.ehealth.fgov.be/ehealthplatform/nl/service-iam-identity-access-management>

French version:

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



4. Global overview



This schema represents an overview of the management of the therapeutic exclusion.

The MyHealth WA and MyHealthViewer WA will allow patients (incl. patient's parents or mandataries) to manage the therapeutic exclusion (declaration, revocation, and consultation) by calling the eHealth Therapeutic Exclusion WS (REST).

5. Step-by-step

5.1 Technical requirements

5.1.1 eHealth platform Authentication

As explained previously, to use the Therapeutic Exclusion Rest service, you must have an access token delivered through IAM Connect.

Several roles and profiles are defined for the use of the Therapeutic Exclusion Rest service.

Possible roles :

- REST-access : This role must be present in the access token for an end-user in order to apply the POST, GET and DELETE methods of the service.
- monitoring : This role must be present in the access token in order to use the monitoring methods (/health) of the service.

Presentation of the roles and profiles in the access token:

```
"resource_access":
{
  "ehealth-exclusion-backend":
  {
    "roles":
    [
      "rest-access"
    ]
  }
}
```

The rest-access role can only be assigned to profiles authorized to handle the WS Therapeutic Exclusion REST, namely:

- Citizen
- Parent
- Mandatary (only for mandate type "medicaldatamanagement")

For more information on how to get an access token or information on access token structure (profile), please refer to section 3.3 of this cookbook.

5.2 The Therapeutic Exclusion REST Service

The REST interface is described with a JSON/ Swagger API available on the eHealth portal page:

Dutch version:

<https://www.ehealth.fgov.be/ehealthplatform/nl/service-beheer-van-de-therapeutische-uitsluitingen-van-zorgverleners>

French version:

<https://www.ehealth.fgov.be/ehealthplatform/fr/service-service-dedicace-a-la-gestion-des-exclusions-therapeutiques>



The Therapeutic Exclusion WS has the following endpoints :

- Acceptance environment: <https://api-acpt.ehealth.fgov.be/therapeuticExclusion/v2>
- Production environment: <https://api.ehealth.fgov.be/therapeuticExclusion/v2>

5.3 POST /therapeuticExclusions

This method allows to create a therapeutic exclusion.

Request

Element	Description
hcParty (mandatory)	<p>Identification of the HC party concerned by the therapeutic exclusion.</p> <p>The HC Party can be a HC professional or an organization.</p> <p>The identification data if the HC party is a HC professional :</p> <ul style="list-style-type: none"> - The SSIN number - The NIHII number - The first name and the family name - The qualification code <p>The SSIN is mandatory. In that case, the element <i>'identifiers.type'</i> must be <i>'ssin'</i>.</p> <p>The NIHII is optional and should not be used. If specified, the element <i>'identifiers.type'</i> must be <i>'nihii'</i>.</p> <p>The elements <i>'firstname'</i> and <i>'name'</i> are optional and should not be used. In any case, these elements are enriched by the values published in the authentic source CoBRHa.</p> <p>The qualification code is mandatory and refers to a value of KMEHR table (refer to section 2.1)</p> <p>The identification data if the HC party is an organization :</p> <ul style="list-style-type: none"> - The organization identifier : a NIHII number (8 digits) - The organization name - The qualification code <p>The organization NIHII number is mandatory. The element <i>'identifiers.type'</i> must be <i>'nihii'</i>.</p>

	<p>The element '<i>name</i>' is optional and should not be used. In any case, this element is enriched by the value published in the authentic source CoBRHa.</p> <p>The qualification code is mandatory and refers to a value of KMEHR table (refer to section 2.1).</p>
patient (mandatory)	<p>Identification of the patient concerned by the therapeutic exclusion.</p> <p>The identification data of the concerned patient :</p> <ul style="list-style-type: none"> - The SSIN <p>The SSIN is mandatory. The element '<i>identifiers.type</i>' must be '<i>ssin</i>'.</p>

Examples:

- Creation of a therapeutic exclusion between a patient and a HC professional (physician)

POST /therapeuticExclusions

```
{
  "patient": {
    "identifier": [
      {
        "type": "ssin",
        "value": "9xxxxxxxxxx2"
      }
    ]
  },
  "hcParty": {
    "identifier": [
      {
        "type": "ssin",
        "value": "8xxxxxxxxxx3"
      }
    ],
    "qualificationCode": "persphysician"
  }
}
```

- Creation of a therapeutic exclusion between a patient and a HC organization (pharmacy)

POST /therapeuticExclusions

```
{
  "patient": {
    "identifier": [
      {
```



```

        "type": "ssin",
        "value": "9xxxxxxxxx2"
    }
  ],
  "hcParty": {
    "identifier": [
      {
        "type": "nihii",
        "value": "6xxxxxxxx7"
      }
    ],
    "qualificationCode": "orgpharmacy"
  }
}

```

Response

Success:

HTTP code 201 (Success) returned in case of success for the creation of the therapeutic exclusion.

Error:

HTTP code 409 (Conflict) returned in case of a therapeutic exclusion already existing.

Failures:

For failure description please refer to section 8 of this cookbook.

5.4 DELETE /therapeuticExclusions

This method allows to revoke a therapeutic exclusion.

Request

queryParameter	Description
patientSsin (mandatory)	Social Security Identification Number (SSIN) of the patient concerned by the therapeutic exclusion.
hcPartySsin (optional)	Social Security Identification Number (SSIN) of the HC party professional concerned by the therapeutic exclusion.
hcPartyNihii (optional)	The NIHII number of the HC party organization concerned by the therapeutic exclusion.

Examples:

- Revocation of a therapeutic exclusion between a patient and a HC professional (physician)

```

DELETE /therapeuticExclusion/v2/therapeuticExclusions?patientSsin=9xxxxxxxxx2
&hcPartySsin=8xxxxxxxxx3

```

- Revocation of a therapeutic exclusion between a patient and a HC organization (pharmacy)



```
DELETE /therapeuticExclusion/v2/therapeuticExclusions?patientSsin=9xxxxxxxxx2
&hcPartyNihii=6xxxxxxxxx7
```

Response

Success:

HTTP code 204 (No Content) returned in case of success for the revocation of the therapeutic exclusion.

Error:

HTTP code 404 (Not Found) returned in case of no existing therapeutic exclusion matching the given arguments.

Failures:

For failure description please refer to section 8 of this cookbook.

5.5 GET /therapeuticExclusions/{patientSsin}

The requests of type "GET" allows the user to retrieve the list of active therapeutic exclusions, depending on the specified arguments.

Request

pathParameter	Description
patientSsin (mandatory)	Social Security Identification Number (SSIN) of the patient concerned by the therapeutic exclusion.

queryParameter	Description
hcPartySsin (optional)	Social Security Identification Number (SSIN) of the HC party professional concerned by the therapeutic exclusion.
hcPartyNihii (optional)	The NIHI number of the HC party organization concerned by the therapeutic exclusion.

Note : If only the patient's SSIN is provided, then all active therapeutic exclusions are returned in the response.

Examples:

- Consultation of a therapeutic exclusion between a patient and a HC professional

```
GET /therapeuticExclusion/v2/therapeuticExclusions/patientSsin=9xxxxxxxxx2
?hcPartySsin=8xxxxxxxxx3
```

- Consultation of a therapeutic exclusion between a patient and a HC organization (pharmacy)

```
GET /therapeuticExclusion/v2/therapeuticExclusions/patientSsin=9xxxxxxxxx2
?hcPartyNihii=6xxxxxxxxx7
```

- Consultation of all therapeutics exclusions for a patient

```
GET /therapeuticExclusion/v2/therapeuticExclusions/patientSsin=9xxxxxxxxx2
```



Response

Success:

HTTP code 200 (OK) returned in case of a non-empty list of therapeutic exclusions found.

In this case, the body contains an array of therapeutic exclusion objects :

Examples :

- Therapeutic exclusion between a patient and a HC professional (physician)

```
[{
  "patient": {"identifier": [ {
    "type": "ssin",
    "value": "9xxxxxxxxx2"
  } ]},
  "hcParty": {
    "identifier": [ {
      "type": "ssin",
      "value": "8xxxxxxxxx3"
    } ],
    "name": "hCPLastName",
    "firstName": "hCPFfirstname",
    "qualificationCode": "persphysician"
  }
}]
```

- Therapeutic exclusion between a patient and a HC organization (pharmacy)

```
[{
  "patient": {"identifier": [ {
    "type": "ssin",
    "value": "9xxxxxxxxx2"
  } ]},
  "hcParty": {
    "identifier": [ {
      "type": "nihii",
      "value": "6xxxxxxxxx7"
    } ],
    "name": "pharmacy's name",
    "firstName": null,
    "qualificationCode": "orgpharmacy"
  }
}]
```

Error:

HTTP code 404 (Not Found) returned in case of no therapeutic exclusion information matching the given arguments.

Failures:

For failure description please refer to section 8 of this cookbook.



5.6 GET /histories/{patientSsin}

The requests of type "GET" on path /histories allow the user to consult the therapeutic exclusion management history i.e. the list of information relating to changes in therapeutic exclusions.

For each status change, information about the author, about the HC party, about the patient, about the date and time as well as about the operation are returned.

Request

pathParameter	Description
patientSsin (mandatory)	Social Security Identification Number (SSIN) of the patient concerned by the therapeutic exclusion.

queryParameter	Description
pageSize (optional)	The parameter allowing to limit the number of entries in the history. The entries are organized in descending chronological order and if the 'pageSize' parameter is not specified then all therapeutic exclusion status changes are returned (limited to a maximum of 1500 entries).

Example:

```
GET /therapeuticExclusion/v2/histories/9xxxxxxxxx2?pageSize=2
```

Response

Success:

HTTP code 200 (OK) returned in case of success for the consultation of the therapeutic exclusion management history.

In this case, at least one entry is found and the body contains the list of all entries found (limited by the 'pageSize' parameter if specified).

Each entry contains the following therapeutic exclusion information:

- The author responsible for the status change represented by a sequence of 'identifier' elements.
- The HC party concerned by the therapeutic exclusion.
- The date and time of the change.
- The operation (REVOKE_EXCLUSION / DECLARE_EXCLUSION).

Examples :

- Consult the history with pageSize limited to 2 entries

```
[
  {
    "author": [
      {
        "identifier": [
          {
            "type": "local",
            "value": "profile-nicolas-citizen"
          }
        ]
      }
    ]
  }
],
```



```

        "name": "profile-nicolas-citizen",
        "firstName": null,
        "qualificationCode": "application"
    },
    {
        "identifier": [
            {
                "type": "ssin",
                "value": "9xxxxxxxxx2"
            }
        ],
        "name": null,
        "firstName": null,
        "qualificationCode": "patient"
    }
],
"target": {
    "identifier": [
        {
            "type": "nihii",
            "value": "6xxxxxx7"
        }
    ],
    "name": "pharmacy's name",
    "firstName": null,
    "qualificationCode": "orgpharmacy"
},
"timestamp": "2023-06-07T16:03:14+00:00",
"operation": "REVOKE_EXCLUSION"
},
{
    "author": [
        {
            "identifier": [
                {
                    "type": "local",
                    "value": "profile-nicolas-citizen"
                }
            ],
            "name": "profile-nicolas-citizen",
            "firstName": null,
            "qualificationCode": "application"
        }
    ],
    {
        "identifier": [
            {
                "type": "ssin",
                "value": "9xxxxxxxxx2"
            }
        ],
        "name": null,
        "firstName": null,
        "qualificationCode": "patient"
    }
],
"target": {
    "identifier": [
        {
            "type": "nihii",
            "value": "6xxxxxx7"
        }
    ],

```



```
    "name": "pharmacy's name",
    "firstName": null,
    "qualificationCode": "orgpharmacy"
  },
  "timestamp": "2023-06-07T16:01:18+00:00",
  "operation": "DECLARE_EXCLUSION"
}
]
```

Errors:

HTTP code 404 (Not Found) returned in case of no therapeutic exclusion history information matching the given arguments.

Failures:

For failure description please refer to section 8 of this cookbook.



6. Risks and security

6.1 Risks & safety

6.2 Security

6.2.1 Business security

In case the development adds an additional use case based on an existing integration, the eHealth platform must be informed at least one month in advance with a detailed estimate of the expected load. This will ensure an effective capacity management.

When technical issues occur on the WS, the partner can obtain support from the contact center (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.

6.2.2 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 of it. 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. Implementation aspects

7.1 Procedure

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

7.1.1 Initiation

If you intend to use the eHealth platform service, 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 information needed to integrate is published on the portal of the eHealth platform.

Upon request, the eHealth platform provides you with test cases (see *Request Test Case template*) 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 acceptance environment of the eHealth platform. From this moment, you start the integration and acceptance tests. The eHealth platform suggests testing during minimum one month.

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

Once a release date has been agreed on, the eHealth platform prepares the connection to the production environment and provides the partner with the necessary information. During the release day, the partner provides the eHealth platform with 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 platform service for one of his applications will always test in the acceptance environment first, 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

eHealth recommends performing tests for all of the following cases:

- POST /therapeuticExclusions : successful declaration of a therapeutic exclusion
- DELETE /therapeuticExclusions : successful revocation of a therapeutic exclusion
- GET /therapeuticExclusions/{patientSsin} : successful consultation of therapeutic exclusions
- GET /histories/{patientSsin} : successful consultation history
- In addition, you should also run negative test cases.

8. Error and failure messages

8.1 HTTP codes

8.1.1 HTTP 2xx

The meaning of 2xx HTTP codes is described in each operation in section 5 of this document.

8.1.2 HTTP 500

This code means that an internal technical error occurred during the processing of the request.

This does not necessarily mean that the error is not due to a wrong input in the request.

Please double-check that your request is correct before reaching to the helpdesk.

8.1.3 HTTP 400

This code means that the request could not be performed due to a validation error.

The body returned explains what went wrong in your request.

Example:

```
[
  {
    "code": "VAL006",
    "message": "Cannot specify both the inss and the nihii"
  }
]
```

Here are the possible values that you can get in the body for the "400" errors:

BIZ001	"Resource already exists"
BIZ002	"Resource not found"
BIZ003	"Patient id is different than patient id in token"
VAL001	"Missing patientId"
VAL002	"Invalid inss"
VAL005	"Missing hcparty id"
VAL006	"Cannot specify both the inss and the nihii"
VAL006	"Invalid hcparty id"
VAL008	"Invalid hcparty type (hcPartyQualificationCode)"