

NHS New Medicines Service (NMS)

Developer Guide to the NHS Business Services Authority API for NMS claims

ChangeLog

Version Control	Date	Purpose
0.1	03 Nov 2022	Initial Draft
1.0	27 Feb 2023	Removed Matter Identified,Onward_Referral_Reason. Added Referrer Case Reference,Professional Role. Made Not_Using_Medicine_Reason as optional
1.1	08 Mar 2023	Add regex and length validation to Referrer Case Reference
1.2	13 Mar 2023	Change CONSULT_METHOD to mandatory,Seperate two FTF option and typo in PATIENT_REQ_ADDITIONAL_FOLL_UP desciption
1.3	16 Mar 2023	Remove additional follow up stage and related fields

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NHS Community Pharmacy NMS Service

Use this service to claim payment for the provision of the NHS Community Pharmacy NMS Service.

Document Background

This document is intended to provide pharmacy clinical service platform providers with the information necessary to submit details of service provisions to the NHS Business Services Authority (NHS BSA), to pre-populate claims to be made by community pharmacy providers.

API Connectivity

Connection to the NHS BSA API has the following criteria, as patient data is present and being transmitted:

- Over HTTPS on port 443
- Using TLSv1.2 only
- Authentication
 - IP whitelisting

Current test endpoints are:

POST https://stg.api.nms.pharmacy.mys.nhsbsa.nhs.uk/v1/claim

GET https://stg.api.nms.pharmacy.mys.nhsbsa.nhs.uk/v1/claim/{{lD}}

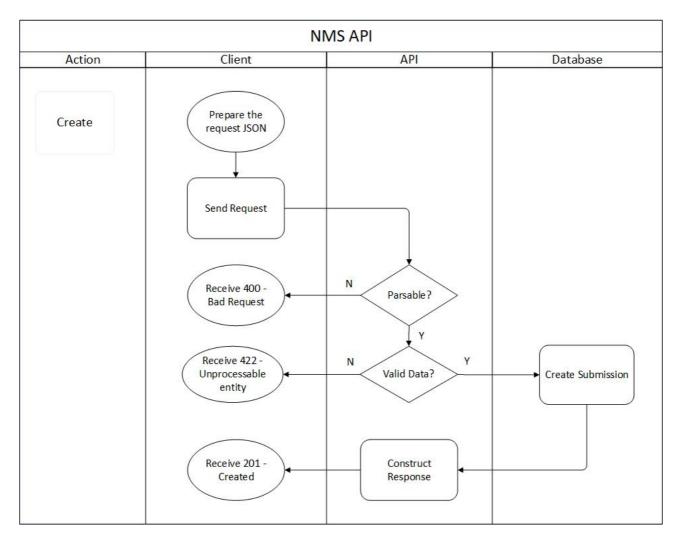
PUT https://stg.api.nms.pharmacy.mys.nhsbsa.nhs.uk/v1/claim/{{ID}}

DELETE https://stg.api.nms.pharmacy.mys.nhsbsa.nhs.uk/v1/claim/{{\D}}

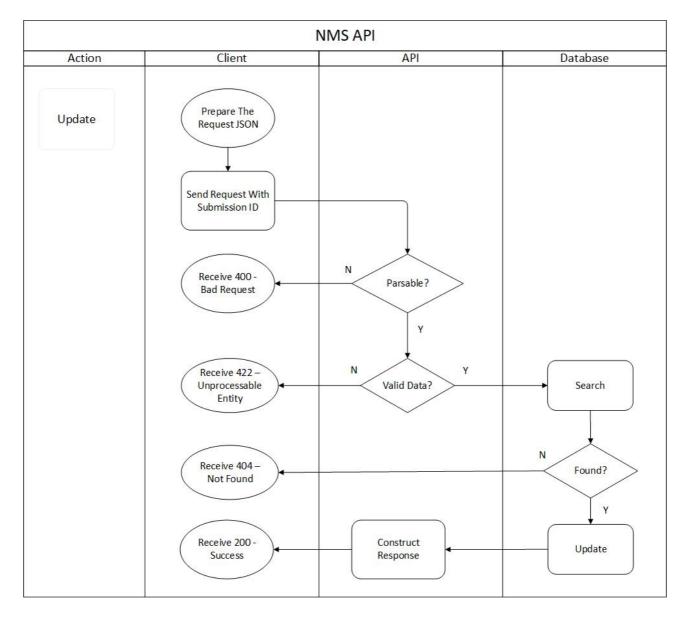
[DN: These are subject to many changes going forward – just a placeholder really]

API Access Process Flow

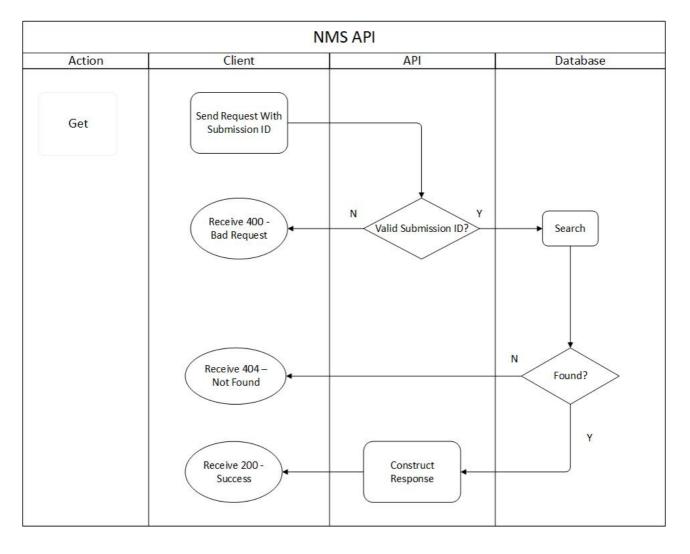
Create Process Flow



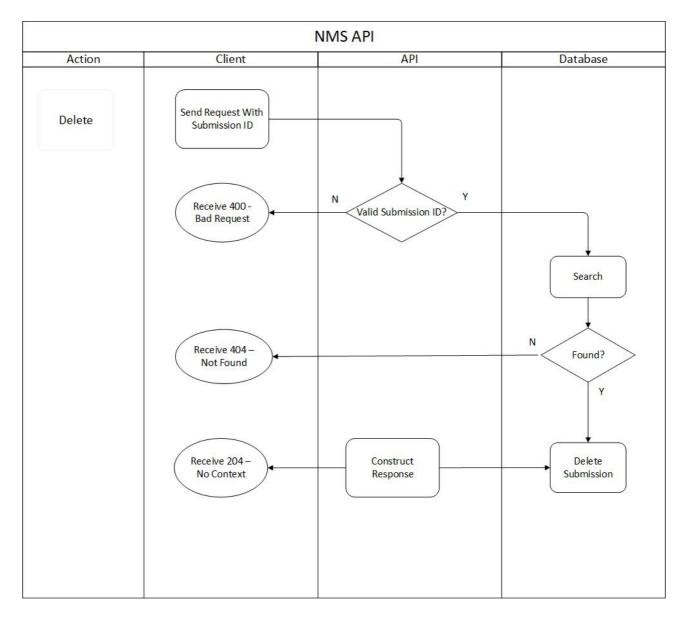
Update Process Flow



Get Process Flow



Delete Process Flow



Developer Guide to set up NMS Claim

Below JSON contains a NMS claim object with all the fields and their corresponding given options. Based on which you can build your claim object in the create (POST) or update (PUT) request.

```
{
    "platformDepositId":"{{PLATFORM_DEPOSIT_ID}}",
    "patient": {
        "nhsNumber":"{{PATIENT_NHSNO}}",
        "gpOdsCode":"{{PATIENT_GPODS}}"
   },
   "orgOdsCode":"{{CLAIMANT_ODS}}",
   "yearMonth":"{{CLAIM_YEAR_MONTH}}",
   "referralDate": "{{REFERRAL_DATE}}",
   "referrerOrgType": "{{REFERRER_ORG_TYPE}}",
    "referrerOrgOdsCode": "{{REFERRER_ORG_ODS}}",
   "referrerCaseReference": "{{REFERRER_CASE_REFERENCE}}",
   "assessmentDate":"{{ASSESSMENT_DATE}}",
   "professionalRole":"{{PROFESSIONAL_ROLE}}",
   "prescriptionDate":"{{PRESCRIPTION_DATE}}",
   "serviceType": "{{SERVICE_TYPE}}",
   "nonProvisionOfServiceReason": "{{NON_PROVISION_OF_SERVICE_REASON}}",
    "conditions": ["{{CONDITION}}","{{CONDITION}}"],
   "notUsingPrescribeMedicineReason" : ["{{NOT_USING_MEDICINE_REASON}}","{{NOT_USING_MEDICINE_REASON}}"],
   "consultationMethod": "{{CONSULT_METHOD}}",
   "consultationOutcome": "{{CONSULT_OUTCOME}}",
    "products": ["{{NMS_PRODUCT}}","{{NMS_PRODUCT}}"],
   "signpostedTo":"{{SIGNPOSTED_TO}}",
   "signpostedToOther":"{{SIGNPOSTED_TO_OTHER_VALUE}}",
   "referredOrgOds":"{{REFERRED_ORG_ODS}}"
```

}

Developer Guide to Create NMS claim for a new submission

Step 1: Gather your materials

You will need the following to follow through this walkthrough:

Field	Mandatory / Optional	Туре	Description
PLATFORM_DEPOSIT_ID	Μ	String	A string that uniquely identifies this claim. Each platform will be provided with a pattern to use. For example, PharmOutcomes uses the pattern PEM- nnnnnnnn and Sonar uses the pattern SON- nnnnnnnn to uniquely identify this deposit in audits and CRUD operations. Max. size 255. For example XXX-000000012334
PATIENT_GP_ODS	Μ	String	The ODS code of the patient's GP surgery. This can be the ODS code of the practice and not of the branch surgery.Use dummy code X99999 when ODS code is not known/unavailable. Size max. 10.
PATIENT_NHS_NUMBER	Μ	String	The patient's NHS Number (not non-England national identifiers). If the NHS Number is not provided, provide one of the values mentioned in <u>Annex: NHS Number</u> Size must be 10.
CLAIMANT_ODS	Μ	String	The Organisational Data Service (ODS) code of the pharmacy provider who provided the service and is therefore making the claim. Regex for format [A-Za-z0-9]{1,10}. For example FXXXX
CLAIM_YEAR_MONTH	М	String	Year and month for which this submission belongs to in yyyy-MM format. For example 2021-06.
REFERRAL_DATE	М	String	The date of referral, Standardised format yyyy-MM-dd (e.g. 2021-08-27)
REFERRER_ORG_TYPE	Μ	string	The details of the referrer that is making the referral. With one of the values in <u>Annex: Referrer</u> organisation type
REFERRER_ORG_ODS	Μ	String	The ODS code, of the referrer organisation. Use dummy code X99999 when ODS code is not known/unavailable.
REFERRER_CASE_REFERENCE	0	String	The case reference number from the referring organisation.Format defined by referring organisation. Regex for format [A-Za-z0-9/-]{60}
ASSESSMENT_DATE	М	String	The date of assessment in yyyy-MM-dd format (e.g. 2021-08-27)
PROFESSIONAL_ROLE	Μ	String	The role of the person providing the service.With one of the value mentioned in <u>Annex: Professional</u> <u>Role</u>
PRESCRIPTION_DATE	М	String	The date on which the medication or medical device was prescribed. In yyyy-MM-dd format (e.g. 2021-08-27)

SERVICE_TYPE	М	String	The service that was provided. With one of the value mentioned in <u>Annex: Service type</u>
NON_PROVISION_OF_SERVICE_REASON	0	String	Reason the patient was not provided with the service. With one of the value mentioned in <u>Annex:</u> <u>Non Provision Of Service Reason</u>
CONDITION	М	Array	Array of strings of condition / reason for medication being prescribed. With one of the value mentioned in <u>Annex: Condition</u>
NOT_USING_MEDICINE_REASON	0	String	Reason why patient reports not using the medicine as prescribed. With one of the value mentioned in <u>Annex: Not Using Medicine Reason</u>
CONSULT_METHOD	М	String	The type of consultation conducted. With one of the value mentioned in <u>Annex: Consultation method</u>
CONSULT_OUTCOME	O(M If the SERVICE_TYPE is 'Follow up')	String	The final outcome of NMS to Community Pharmacy. If the SERVICE_TYPE is 'Follow up' then choose of the values in <u>Annex: Follow Up Consultation</u> <u>Outcome</u>
NMS_PRODUCT	М	Array	Consist (NMS) product details. Example mentioned in <u>Annex: Array of NMS product</u>
SNOMED_CODE	Μ	String	Unique code identifier for the product
MEDICATION_NAME	М	String	Name of the medication used. Generic name or brand name.
SIGNPOSTED_TO	0	String	Details of where patient has been signposted to. With one of the values in <u>Annex: Signposted to</u>
SIGNPOSTED_TO_OTHER_VALUE	O (M if SIGNPOSTED_TO is OTHER)	String	Free text value for other signposted to details. Max 250 chars
REFERRED_ORG_ODS	O(M if SIGNPOSTED_TO present)	String	The ODS code, of the organisation being signposted to.

Step 2: Prepare the request JSON

The message containing the NMS Service Details i.e claim information should follow json schema distributed by email.

The message must be utf-8 encoded. No XML messages are accepted.

```
{
   "platformDepositId":"SUP-nnnnnnnn",
   "patient": {
       "nhsNumber":"000000000",
        "gpOdsCode":"GPXXX"
  },
   "orgOdsCode":"FXXXX",
   "yearMonth":"2022-04",
   "referralDate": "2021-08-02",
   "referrerOrgType": "GPP",
  "referrerOrgOdsCode": "YXXXX",
  "referrerCaseReference" : "AA4G-BB23-HH78",
   "assessmentDate":"2021-08-02",
   "professionalRole" : "PHARMACIST",
  "prescriptionDate":"2021-08-02",
   "serviceType": "FOLLOW_UP",
   "nonProvisionOfServiceReason": "ONWARD_REFERAL",
   "conditions": ["00","03"],
   "notUsingPrescribeMedicineReason" : ["PATIENT_NOT_STARTED_MEDICINE"],
   "consultationMethod": "TELEPHONE",
   "consultationOutcome": "NO_ACTION",
   "products": [
    {
      "snomedCode":"xxxxx",
      "medicationName":"Test Product2"
    }
   ],
   "signpostedTo":"OTHER",
   "signpostedToOther":"other reference",
  "referredOrgOds":"FXXXX"
}
```

Step 3: Send the create request message

You can now prepare and make a POST call to the NHSBSA API with the following pattern.

Type Description	
URL	https://stg.api.nms.pharmacy.mys.nhsbsa.nhs.uk/v1/claim
Http Headers Content-Type: application/json, Accept: application/json, Cache-Control: no-ca	
Body	JSON representation prepared in Step 2 above

Step 4: Receive your response

A successful response will be sent synchronously within 30 seconds [DN: To check] with an http code 201 (Created) and contain a JSON representation of an object in the body of the response, containing the claim ID.

Response Headers:

Туре	Description
Status	201 Created
Location	Location of the newly created resource. For example: https://stg.api.nms.pharmacy.mys.nhsbsa.nhs.uk/v1/claim/123e4567-e89b-12d3-a456-426614174000

Response Body:

```
{
   "id" : "123e4567-e89b-12d3-a456-426614174000",
  "platformDepositId":"SUP-nnnnnnnn",
   "patient": {
        "nhsNumber":"000000000",
        "gpOdsCode":"GPXXX"
  },
   "orgOdsCode":"FXXXX",
   "yearMonth":"2022-04",
  "referralDate": "2021-08-02",
  "referrerOrgType": "GPP",
   "referrerOrgOdsCode": "YXXXX",
   "referrerCaseReference" : "AA4G-BB23-HH78",
  "assessmentDate":"2021-08-02",
   "professionalRole" : "PHARMACIST",
   "prescriptionDate":"2021-08-02",
   "serviceType": "FOLLOW_UP",
   "nonProvisionOfServiceReason": "ONWARD_REFERAL",
   "conditions": ["00","03"],
   "notUsingPrescribeMedicineReason" : ["PATIENT_NOT_STARTED_MEDICINE"],
   "consultationMethod": "TELEPHONE",
   "consultationOutcome": "NO_ACTION",
   "products": [
    {
      "snomedCode":"xxxxx",
      "medicationName":"Test Product2"
    }
   ],
   "signpostedTo":"OTHER",
   "signpostedToOther":"other reference",
```

```
"referredOrgOds":"FXXXX"
```

}

Other potential responses:

403: Forbidden

Contains a JSON representation of the error response:

Scenarios:

• User is not allowed to perform certain operations or don't have access to certain resources.

```
{
   "message": "string",
   "details": [
     "string"
 ]
}
```

500: Unexpected error

Contains a JSON representation of the error response:

```
{
   "message": "string",
   "details": [
     "string"
]
}
```

400: Bad Request

Contains a JSON representation of the error response:

Scenarios:

• Invalid request body, field names or field values

```
{
   "message": "string",
   "details": [
     "string"
  ]
}
```

Developer Guide to Update existing NMS submission

Step 1: Gather your materials

You will need the data described in section Developer Guide to NMS Claim Create.

```
Apart from that the additional data needed:
```

Property	Description
ID	Id of the Claim. Generated when the record is saved. Included in the response of POST (create).

Step 2: Prepare the request JSON

In the example below, we changed few details in the existing Claim Response record with given ID.

```
{
   "platformDepositId":"SUP-nnnnnnnn",
   "patient": {
        "nhsNumber":"000000000",
        "gpOdsCode": "GPXXX"
  },
   "orgOdsCode":"FXXXX",
   "yearMonth":"2022-04",
   "referralDate": "2021-08-02",
   "referrerOrgType": "GPP",
   "referrerOrgOdsCode": "YXXXX",
   "referrerCaseReference" : "AA4G-BB23-HH78",
   "assessmentDate":"2021-08-02",
   "professionalRole" : "PHARMACIST",
   "prescriptionDate":"2021-08-02",
   "serviceType": "FOLLOW_UP",
   "nonProvisionOfServiceReason": "ONWARD_REFERAL",
   "conditions": ["00","03"],
   "notUsingPrescribeMedicineReason" : ["PATIENT_NOT_STARTED_MEDICINE"],
   "consultationMethod": "TELEPHONE",
   "consultationOutcome": "NO_ACTION",
   "products": [
    {
       "snomedCode":"xxxxx",
       "medicationName":"Test Product2"
    }
   ],
   "signpostedTo":"OTHER",
  "signpostedToOther":"other reference",
   "referredOrgOds":"FXXXX"
}
```

Step 3: Send the update request message

You can now prepare and make a PUT call to the NHSBSA API with the following pattern.

Туре	Description
URL	https://stg.api.nms.pharmacy.mys.nhsbsa.nhs.uk/v1/claim/{{ID}}
Http Headers	Content-Type: application/json, Accept: application/json, Cache-Control: no-cache
Body	JSON representation prepared in Step 2 above

Step 4: Receive your response

A successful response will be sent synchronously within 30 seconds [DN: To check] with an http code 200 (OK) and contain a JSON representation of the updated object in the body of the

response:

```
{
   "id" : "123e4567-e89b-12d3-a456-426614174000",
   "platformDepositId":"SUP-nnnnnnnn",
   "patient": {
        "nhsNumber":"000000000",
        "gpOdsCode": "GPXXX"
  },
   "orgOdsCode":"FXXXX",
   "yearMonth":"2022-04",
   "referralDate": "2021-08-02",
   "referrerOrgType": "GPP",
   "referrerOrgOdsCode": "YXXXX",
   "referrerCaseReference" : "AA4G-BB23-HH78",
   "assessmentDate":"2021-08-02",
   "professionalRole" : "PHARMACIST",
   "prescriptionDate":"2021-08-02",
   "serviceType": "FOLLOW_UP",
   "nonProvisionOfServiceReason": "ONWARD_REFERAL",
   "conditions": ["00","03"],
   "notUsingPrescribeMedicineReason" : ["PATIENT_NOT_STARTED_MEDICINE"],
   "consultationMethod": "TELEPHONE",
   "consultationOutcome": "NO_ACTION",
   "products": [
    {
       "snomedCode":"xxxxx",
       "medicationName":"Test Product2"
    }
   ],
   "signpostedTo":"OTHER",
  "signpostedToOther":"other reference",
   "referredOrgOds":"FXXXX"
}
```

Other potential responses:

403: Forbidden

Contains a JSON representation of the error response:

Scenarios:

User is not allowed to perform certain operations or dont have access to certain resources.

```
{
   "message": "string",
   "details": [
    "string"
  ]
}
```

500: Unexpected error

Contains a JSON representation of the error response:

```
{
   "message": "string",
   "details": [
     "string"
  ]
}
```

400: Bad Request

Contains a JSON representation of the error response:

Scenarios:

• Invalid request body, field names or field values

```
{
    "message": "string",
    "details": [
        "string"
    ]
}
```

422: Unprocessable Entity (json parseable but not conformant)

Contains a JSON representation of the error response.

Scenarios:

- if the CLAIMANT_ODS is not registered for NMS claims.
- if the monthly submission is already declared.
- Cannot change the CLAIMANT_ODS
- Cannot change the PLATFORM_DEPOSIT_ID
- Cannot change the CLAIM_YEAR_MONTH

```
{
   "message": "string",
   "details": [
     "string"
  ]
}
```

404: Not Found

Contains a JSON representation of the error response:

Scenarios:

ClaimResponse record not found with given ID

```
{
    "message": "string",
    "details": [
        "string"
    ]
}
```

Developer Guide To Delete NMS Submission

Step 1: Gather your materials

data needed:

Property	Description	1
ID	Id of the Claim Response. Generated when the record is saved. Included in the response of POST (create).	

Step 2: Send the delete request message

You can now prepare and make a DELETE call to the NHSBSA API with the following pattern.

Туре	Description
URL	https://stg.api.nms.pharmacy.mys.nhsbsa.nhs.uk/v1/claim/{{ID}}
Http Headers	Content-Type: application/json, Accept: application/json, Cache-Control: no-cache
Body	N/A

Step 3: Receive your response

A successful response will be sent synchronously within 30 seconds [DN: To check] with an http code 204 (No Content) and not contain a response body.

Other potential responses:

403: Forbidden

Contains a JSON representation of the error response:

Scenarios:

• User is not allowed to perform certain operations or dont have access to certain resources.

```
{
   "message": "string",
   "details": [
     "string"
  ]
}
```

500: Unexpected error

Contains a JSON representation of the error response:

```
{
   "message": "string",
   "details": [
     "string"
 ]
}
```

404: Not Found

Contains a JSON representation of the error response:

Scenarios:

• Submission record not found with given ID

```
{
    "message": "string",
    "details": [
        "string"
    ]
}
```

Developer Guide to Get a NMS submission

Step 1: Gather your materials

You will need:

Property	Description	
ID	Id of the NMS submission. Generated when the record is saved. Included in the response of POST (create).	

Step 2: Send the Get Submission Message

You can now prepare and make a GET call to the NHSBSA API with the following pattern.

Туре	Description
URL	https://stg.api.nms.pharmacy.mys.nhsbsa.nhs.uk/v1/claim/{{ID}}
Http Headers	Content-Type: application/json, Accept: application/json, Cache-Control: no-cache
Body	N/A

Step 3: Receive your response

A successful response will be sent synchronously within 30 seconds with an http code 200 (OK) with a response body.

```
{
   "id" : "123e4567-e89b-12d3-a456-426614174000",
  "platformDepositId":"SUP-nnnnnnnn",
   "patient": {
        "nhsNumber":"000000000",
        "gpOdsCode": "GPXXX"
  },
   "orgOdsCode":"FXXXX",
   "yearMonth":"2022-04",
   "referralDate": "2021-08-02",
  "referrerOrgType": "GPP",
   "referrerOrgOdsCode": "YXXXX",
   "referrerCaseReference" : "AA4G-BB23-HH78",
   "assessmentDate":"2021-08-02",
   "professionalRole" : "PHARMACIST",
   "prescriptionDate":"2021-08-02",
   "serviceType": "FOLLOW_UP",
  "nonProvisionOfServiceReason": "ONWARD_REFERAL",
   "conditions": ["00","03"],
   "notUsingPrescribeMedicineReason" : ["PATIENT_NOT_STARTED_MEDICINE"],
   "consultationMethod": "TELEPHONE",
   "consultationOutcome": "NO_ACTION",
   "products": [
    {
       "snomedCode":"xxxxx",
      "medicationName":"Test Product2"
    }
   ],
   "signpostedTo":"OTHER",
   "signpostedToOther":"other reference",
   "referredOrgOds":"FXXXX"
}
```

Other potential responses:

403: Forbidden

Contains a JSON representation of the error response:

Scenarios:

User is not allowed to perform certain operations or dont have access to certain resources.

```
{
   "message": "string",
   "details": [
     "string"
  ]
}
```

500: Unexpected error

Contains a JSON representation of the error response:

```
{
   "message": "string",
   "details": [
     "string"
 ]
}
```

404: Not Found

Contains a JSON representation of the error response:

Scenarios:

ClaimResponse record not found with given ID

```
{
    "message": "string",
    "details": [
        "string"
    ]
}
```

Annex: NHS Number

Code	Display
1111111111	Non-registered UK resident
2222222222	Non UK resident
3333333333	Data sharing consent not given
444444444	NHS number not found

Annex: Service Type

Code	Display
ENGAGEMENT	Engagement
INTERVENTION	Intervention
FOLLOW_UP	Follow up

Annex: Referrer Organisation Type

Code	Display
GPP	GP Practice
HOS	Hospital
OHP	Other health professional
PIP	Patient identified in the pharmacy

Annex: Non Provision Of Service Reason

Code	Display
DECLINED	Declined
DID_NOT_ATTEND	Did not attend

Annex: Not Using Medicine Reason

Code	Display
PATIENT_NOT_STARTED_MEDICINE	Patient has not started using the medicine
PRESCRIBER_STOP_NEW_MEDICINE	Prescriber has stopped new medicine
PATIENT_MEDICINE_NOT_IN_LINE	Patient is not using the medicine in line with the directions of the prescriber

Annex: Consultation method

Code	Display
FTF_PHARMACY	Face to face in the pharmacy
FTF_PATIENT_HOME	Face to face in the patient's home
TELEPHONE	Telephone
TELEMEDICINE	Telemedicine

Annex: Follow Up Consultation Outcome

Code	Display
NO_ACTION	No action needed
PHARMACIST_PATIENT_AGREE	Pharmacist and patient agree solution
REFFERAL_TO_GP	Referral to GP practice for review
REFFERAL_TO_OTHER_PRESC_ORG	Referral to other prescribing organisation

Annex: Professional Role

Code	Display
PHARMACIST	Pharmacist
PHARMACY_TECHNICIAN	Pharmacy Technician

Annex: Condition

Code	Display
00	Asthma
01	Chronic Obstructive Pulmonary Disease
02	Diabetes (Type 2)
03	Hypertension
04	Hypercholesterolaemia
05	Osteoporosis
06	Gout
07	Glaucoma
08	Epilepsy
09	Parkinson's disease
10	Urinary incontinence/retention
11	Heart failure
12	Acute coronary syndromes
13	Atrial fibrillation
14	Long term risks of venous thromboembolism/embolism
15	Stroke / transient ischemic attack
16	Coronary heart disease
17	Depression

Annex: Array of NMS Product

NMS_PRODUCT should consist of array of following object

```
{
    "snomedCode":"{{SNOMED_CODE}}",
    "medicationName":"{{MEDICATION_NAME}}"
}
```

Annex: Signposted to

Code	Display
GP	GP Practice
OTHER	Other