

Medtech FHIR® API (ALEX)

Authorisation Details, Search Requests & Error Messages

Version: 1.2



Document Control

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Revision History

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|  |  |  |  |

References

| Title | Source | Version |
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Abbreviations and Terminology

|  |  |
| --- | --- |
| Abbreviation | Definition |
| MT32 | Medtech32 |
| PMS | Practice Management Software |
| FHIR® | Fast Healthcare Interoperability Resources |

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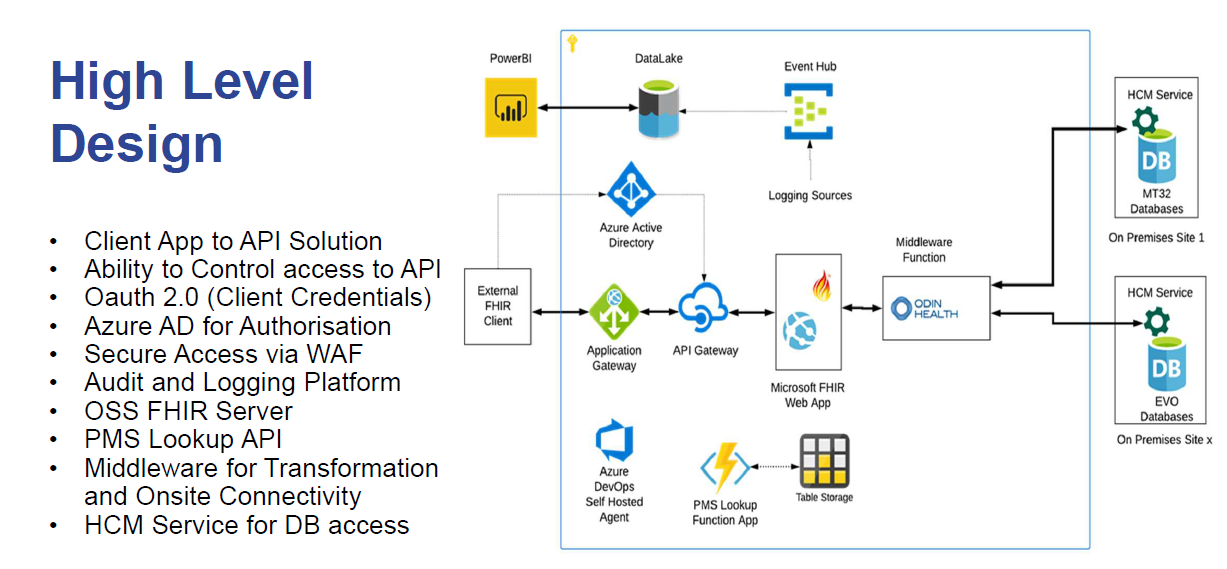
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Context

Introduction

This document covers the Authentication process, Request Message details and Error Messages that will be required to integrate with Medtech’s FHIR® API Solution (ALEX).

High Level Design for Medtech FHIR® API (ALEX)



The solution is made up of the following components: -

1. **Application Gateway** – this provides web traffic load balancing that enables the management of traffic to the FHIR® web application. It also provides a Web Application Firewall that helps protect web applications by filtering and monitoring HTTPS traffic between a web application and the Internet. It typically protects web applications from attacks such as cross-site forgery, cross-site-scripting (XSS), file inclusion, and SQL injection, among others.
2. **Azure Active Directory** – this will provide an authorisation service for access to application and services, provides OAuth2.0 client credential authorisation.
3. **API Gateway** – this provides a platform to publish and control access to the FHIR® API, also can provide access to future API’s.
4. **FHIR® Server** – Microsoft Open Source FHIR® implementation running as a .Net Web Application, it will NOT contain a persistence store (SQL or Cosmos), instead will get all data on the fly from the on-premises databases.
5. **Middleware** – this provides the hosting for the Core application microservices that transform the on-premises database schema to provide FHIR® resource data. This will be built using an Azure Kubernetes Service.
6. **Azure Relay** - The Azure Relay service enables secure exposure of services that run in the on-premises network to the public cloud.
7. **On-Premises Service** - this provides connectivity to the Azure Relay and transforms requests from web calls into native database queries.
8. **Event HUB** – this provides a mechanism of collecting events from the API Gateway, FHIR® Server or Functions and storing in the data lake.
9. **Data Lake** – provides storage for events, Data sent to an event hub can be transformed and stored by using any real-time analytics provider or batching/storage adapters.
10. **Table Storage** – this will contain a lookup table containing HPI Facility Code to Azure Relay Endpoint, this will also include any Health Status information about the PMS
11. **Self-Hosted DevOps Agent** – as the deployment of application code will be to the FHIR® Server and Function apps and as these will be VNet integrated and will not be accessible via there Public IP Address, we will need a Azure DevOps deployment agent within the VNet to allow access to the resources.

Integration Connectivity for UAT Testing

Integration testing will take place via a Sandbox which is the Medtech’s UAT environment. Medtech would connect the UAT environment to a counterpart test server at a Third Party Vendor partner integrating with ALEX.

Medtech would like to have the integration testing to be fairly close to a production use-case (therefore an external Vendor partner server is preferable to a dedicated resource within the Medtech’s Azure tenancy).

At present Medtech expects that the UAT environment will connect through to known test instances of various Medtech PMS versions that would be hosted within Medtech’s Azure tenancy.

However, Medtech are investigating the possibility of making vendor partners test instances of Medtech PMS’s available under UAT environment of ALEX, this will allow vendors to do true “end-to-end” testing with their own PMS instances.

Requirements for Integration Connectivity to Test Server

The vendor partner test server connection would involve (at least) the following: -

* Setting up an ALEX Azure AD account for vendor partner-Test.
* This is a “per-service” account so if vendor partner has various services that need access to Medtech with different access-right requirements then Medtech will set up multiple accounts. Similarly, it is important that there is a distinct “Vendor Partner” account (or accounts) that are distinct from other connections to ALEX from the same vendor.
* Assigning the appropriate API scopes (permissions) to that AAD account.
* Assigning an Application ID – associated with the AAD account - that vendor partner will pass with a token on every API request.

**Please Note:** The token is obtained through an authentication call to AAD using a shared secret.

* Allow-listing the vendor partner server IP address on the UAT ALEX API endpoints.
* Approving the vendor partner Application ID for access to the test instances of Medtech (i.e. simulating practice consenting).

Vendor Partner Authentication Process while Connecting to ALEX

Overview

In order for a vendor application to make requests to the Medtech FHIR® API, a valid access token must be included in the requests. To obtain an access token, an authentication request is made to the identity provider service and the returned access token is then included in the headers of subsequent requests to the Medtech FHIR® API.

Request for an Access Token

To obtain an access token an authentication request is sent to the identity provider.

Medtech uses the following Microsoft Azure AD identity provider:  
https://login.microsoftonline.com/8a024e99-aba3-4b25-b875-28b0c0ca6096/oauth2/v2.0/token

Note: The unique identifier above is relative to the particular Azure Tenant. In the case of Medtech, this is always as above, regardless of environment.

Example Request

curl --request POST 'https://login.microsoftonline.com/8a024e99-aba3-4b25-b875-28b0c0ca6096/oauth2/v2.0/token'\

--form 'Client\_id="589b9e7f-443d-4a29-a984-8f9e98c766b3"' \

--form 'Client\_secret="xxxxxxxxxxxxxxxxxxxxxxxxxxxxx"' \

--form 'Grant\_type="client\_credentials"' \

--form 'Scope="api://bf0c0db0-08e7-4ed8-bb85-8d5676869424/.default"'

Request Details

|  |  |  |
| --- | --- | --- |
| Form value | Example | Description |
| client\_id | 589b9e7f-443d-4a29-a984-8f9e98c766b3 | Unique identifier of the **vendor application**. Provided to the vendor by Medtech. |
| client\_secret | xxxxxxxxxxxxxxxxxxxxxxxxxxxxx | Secret associated with above unique identifier. Provided to the vendor by Medtech. |
| Scope | api://bf0c0db0-08e7-4ed8-bb85-8d5676869424/.default | Unique identifier of the **Medtech FHIR® API**. Provided to the vendor by Medtech. |
| Grant\_type | client\_credentials | Always this value. |

Example Response

If the request was accepted, the identity provider will provide a response containing the access token. The access token can now be used to make requests to the Medtech FHIR® API.

{

"token\_type": "Bearer",

"expires\_in": 3599,

"ext\_expires\_in": 3599,

"access\_token": "eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzI1NiIsIng1dCI6IjVPZjlQNUY5Z0NDd0NtRjJCT0hIeEREUS1EayIsImtpZCI6IjVPZjlQNUY5Z0NDd0NtRjJCT0hIeEREUS1EayJ9..PeymJWgxMJFhqFzjqQjz89kblMUhAqLs0x996w3CukzTZEUb6W2gvXa0zIP-1\_WayIsvQzGPrWH77BwLAMwr\_xA3UuLVIcx34wHlCscCHfwpFWWiLkISAD6W6yal8SjAQSb5YLIt37HOyj4lBMviEN5W\_GtGPXfBsW35XZzNwIiXU\_xqxEAZ9HXp1kVyHZgJAirNxOhWveGsj2zCM56LKW-eZvl- LzlJquWOaR6W3EsRvd2aeuqVhHmSG2PXwvivUeD9LxVb \_voI9B0Bymunc1BaK50AcvAg Wl5ULVFvaJ6UljsAUl22e97izWZ-fDNk8SzrBOjvI4U6JLfUeNQaoQ"

}

**Please Note:** The access token has an expiry time (**1 hour** by default currently). Once this has elapsed, a new access token needs to be requested from the identity provider.

Subsequent Requests to Medtech FHIR® API (ALEX) Post Authorisation

Overview

The access token which was obtained from the identity provider can now be used to make authenticated requests to the Medtech FHIR® API. Depending on which environment is being accessed e.g. UAT / PRODUCTION, the host name will vary.

The Authorization header should now be added to every request, with the value of the access token prefixed by **"Bearer "**.

The second call is to the APIM and should contain the access token and facility id as request headers. The APIM will validate the access token and generate a correlation ID request header. It will then forward the request to the FHIR® Server. The FHIR® Server will also validate the access token, verify the scopes, extract the scopes from the access token (into a new request header) and then forward the request to the NeXT endpoint.

UAT & Production End Points

|  |  |  |
| --- | --- | --- |
| Environment | Audience | API Endpoint URL |
| UAT (Sandbox) | Vendors for Development and Test | [alexapiuat.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/) |
| Production | Vendors for Production use | [alexapi.medtechglobal.com/FHIR](http://alexapi.medtechglobal.com/) |

Request Header Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Request header | Example | Added by | Consumed by | Description |
| Authorization | Bearer xxxxxxxxxxx | Vendor | APIM, FHIR® Server | **(Required)** JWT, issued by AAD, required for every request |
| mt-facilityid | 12345678 | Vendor | NeXT | Facility ID for which the request is intended |
| mt-correlationid | d28e3c6e-5f9a-4527-b567-faae0f8e9c46 | APIM (Azure API Management) | Multiple | Random GUID value |

Example

**UAT** - curl --request GET 'https://[alexapiuat.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)/Patient/1'\

**Production** - curl --request GET 'https://[alexapi.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)/Patient/1'\

--header 'Authorization: Bearer eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzI1NiIsIng1dCI6IjVPZjlQNUY5Z0NDd0NtRjJCT0hIeEREUS1EayIsImtpZCI6IjVPZjlQNUY5Z0NDd0NtRjJCT0hIeEREUS1EayJ9..PeymJWgxMJFhqFzjqQjz89kblMUhAqLs0x996w3CukzTZEUb6W2gvXa0zIP-1\_WayIsvQzGPrWH77BwLAMwr\_xA3UuLVIcx34wHlCscCHfwpFWWiLkISAD6W6yal8SjAQSb5YLIt37HOyj4lBMviEN5W\_GtGPXfBsW35XZzNwIiXU\_xqxEAZ9HXp1kVyHZgJAirNxOhWveGsj2zCM56LKW-eZvl-LzlJquWOaR6W3EsRvd2aeuqVhHmSG2PXwvivUeD9LxVb\_voI9B0Bymunc1BaK50AcvAgWl5ULVFvaJ6UljsAUl22e97izWZ-fDNk8SzrBOjvI4U6JLfUeNQaoQ'

**An invalid token will result in a HTTPS 401 error**

{

"statusCode": 401,

"message": "Unauthorized. Access token is missing or invalid."

}

Search Request Query Strings for Retrieving Data from Medtech FHIR® API (ALEX)

Retrieval of entire Patient Health Summary

Search Parameters

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| NHI | [token](https://www.hl7.org/fhir/search.html#token) | **(Mandatory)** The NHI Number of the patient for whom the Health Summary is requested for |

**Please Note**- The request header details to be used for the search requests have been provided under section **1.5.2.1** above.

Request Examples

Please replace [base] with appropriate endpoints for UAT or Production as provided below-

**UAT** - [alexapiuat.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Production** - [alexapi.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Retrieve Patients Health Summary by providing the NHI Number as a Patient Identifier**

GET https://[base]/Patient/$summary?identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345

This retrieval query will upload the following resources by default-

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S.No | Resources | Long Term Record Included | Confidential Record Included | Inactive Record Included | Data Content |
| 1 | Patient | N/A | N/A | N/A | All Patient Demographics |
| 2 | Condition | Yes | No | No | All Conditions |
| 3 | MedicationStatement | Yes | No | No | Long Term Medications only |
| 4 | Observation (Screening) | N/A | No | No | All screenings |
| 5 | AllergyIntolerance | N/A | N/A | No | All Medical Warnings |
| 6 | Immunisation | N/A | N/A | No | All Immunisation |
| 7 | DiagnosticReport | N/A | No | No | All Lab Results & Radiology Results |
| 8 | DocumentReference | N/A | No | No | All Consultation Notes  All Discharge Summaries  All Referrals  All Specialist Report |

**Please Note** –

1. The HPI Facility Number of the practice, where the patient’s Health Summary is being requested for must be part of the Request Header.
2. If specific data have to be retrieved, then the query request to retrieve these must be sent separately, for example to retrieve all long-term Classifications a separate request can be sent.
3. Confidential data is not supplied as default, if a third party integration vendor must require confidential record then they would have to provide a separate Search Request for individual resources to retrieve the confidential data.
4. The PDF attachments will not be included in the DocumentReference resource in the first instance for Discharge Summaries, Referrals & Specialist Report. Instead the BLOBKey will be passed on, if the PDF Attachment binary is required, a separate request must be made with the BLOBKey as the ID and to retrieve the attachment binary data.

## Retrieval of only Classification Data (Condition FHIR® Resource)

Search Parameters

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| identifier | [token](https://www.hl7.org/fhir/search.html#token) | **(Mandatory)** The NHI Number of the patient for whom the Classification is requested for |
| long-term-condition | string | The response will include only those classifications that have been marked long term. The long term flag has been included as an extension under the Condition resource, hence the full URL must be passed in the search request-  [http://hl7.org.nz/FHIR®/StructureDefinition/long-term-condition](http://hl7.org.nz/fhir/StructureDefinition/long-term-condition)|True |
| clinical-status | string | The clinical status of the classification, if this is active or inactive |
| ID | reference | The unique resource ID |
| Patients ID | reference | The unique ID for the patient |
| confidential | string | Confidential flag |

**Please Note**- The request header details to be used for the search requests have been provided under section **1.5.2.1** above.

Request Examples

Please replace [base] with appropriate endpoints for UAT or Production as provided below-

**UAT** - [alexapiuat.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Production** - [alexapi.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Retrieve All Classifications based on patients NHI number**

GET  [https://[base]/Condition?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345](%20http://%5bbase%5d/Condition?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345)

**Retrieve All Classifications based on patients ID**

GET  [https://[base]/Condition?patient.\_id](%20https://%5bbase%5d/Condition?patient._id)=XXXXXXX

**Retrieve All Classifications based on Classification Resource ID**

GET  [https://[base]/Condition?\_id=](file:///C:\Users\pkoval\Documents\Medtech%20API%20Integration%20Project\%20http:\%5bbase%5d\Condition%3f_id=)XXXXXXXXXX

**Retrieve Classifications that have been marked as Long Term**

GET  [https://[base]/Condition?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345](%20https://%5bbase%5d/Condition?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345)&[long-term-condition](http://hl7.org.nz/fhir/StructureDefinition/long-term-condition)=true

**Retrieve classifications that have been marked inactive**

GET  [https://[base]/Condition?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345](%20https://%5bbase%5d/Condition?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345)&clinicalStatus=inactive

**Retrieve Classifications that have been marked as Confidential**

GET <https://[base]/Condition?patient.identifier=ABC2356&_security=http://terminology.hl7.org/CodeSystem/v3-Confidentiality|>R

## Retrieval of only Medication Data (Medication Request FHIR® Resource)

Search Parameters

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| identifier | [token](https://www.hl7.org/fhir/search.html#token) | **(Mandatory)** The NHI Number of the patient for whom the Medication data is requested for |
| long-term-medication | string | The response will include only those classifications that have been marked long term.  This is included as an extension, hence the full URL must be provided in the search –  Extension=https://StructureDefinition/FHIR®ProfileLongTerm|True |
| clinical-status | string | The clinical status of the classification, if this is active or inactive |
| ID | reference | The unique resource id |
| Patients ID | reference | The unique ID for the patient |
| confidential | string | Confidential flag |

**Please Note**- The request header details to be used for the search requests have been provided under section **1.5.2.1** above.

Request Examples

Please replace [base] with appropriate endpoints for UAT or Production as provided below-

**UAT** - [alexapiuat.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Production** - [alexapi.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Retrieve All Medications based on Patients NHI Number**

GET  [https://[base]/MedicationRequest?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345](%20http://%5bbase%5d/MedicationRequest?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345)

**Retrieve All Medications based on Patients ID**

GET  [https://[base]/MedicationRequest?patient.\_id](%20https://%5bbase%5d/MedicationRequest?patient._id)=XXXXXXXX

**Retrieve All Medications based on Resource ID**

GET  [https://[base]/MedicationRequest?\_id](file:///C:\Users\pkoval\Documents\Medtech%20API%20Integration%20Project\%20http:\%5bbase%5d\MedicationRequest%3f_id)=XXXXXXXX

**Retrieve Medications that have been marked as Long Term**

GET  [https://[base]/MedicationRequest?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345](%20https://%5bbase%5d/MedicationRequest?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345)&[long-term-condition](http://hl7.org.nz/fhir/StructureDefinition/long-term-condition)=true

**Retrieve Medications that have been marked as Confidential**

GET <https://[base]/MedicationRequest?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345&_security=http://terminology.hl7.org/CodeSystem/v3-Confidentiality|>R

**Retrieve Medications that have been marked inactive**

GET  [https://[base]/MedicationRequest?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345](%20http://%5bbase%5d/MedicationRequest?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345)&clinicalStatus=inactive

## Retrieval of only Screening Data (Observation FHIR® Resource)

Search Parameters

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| identifier | [token](https://www.hl7.org/fhir/search.html#token) | **(Mandatory)** The NHI Number of the patient for whom the screening data is requested for |
| ID | reference | The unique resource ID |
| Patients ID | reference | The unique ID for the patient |
| confidential | string | Confidential flag, part of security tag |

**Please Note**- The request header details to be used for the search requests have been provided under section **1.5.2.1** above.

Request Examples

Please replace [base] with appropriate endpoints for UAT or Production as provided below-

**UAT** - [alexapiuat.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Production** - [alexapi.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Retrieve All Screenings based on Patients NHI Number**

GET  [https://[base]/Observation?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345](%20http://%5bbase%5d/Observation?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345)

**Retrieve All Screenings based on Patients ID**

GET  [https://[base]/Observation?patient.\_id](%20https://%5bbase%5d/Observation?patient._id)=XXXXXXXXXX

**Retrieve All Screenings based on Resource ID**

GET  [https://[base]/Observation?\_id](file:///C:\Users\pkoval\Documents\Medtech%20API%20Integration%20Project\%20http:\%5bbase%5d\Observation%3f_id)=XXXXXXXXXX

**Retrieve Screenings that have been marked as Confidential**

[GET https://[base]/Observation?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345](GET%20https://%5bbase%5d/Observation?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345)&\_security=<http://terminology.hl7.org/>CodeSystem/v3-Confidentiality|R

## Retrieval of only Consultation Data (DocumentReference FHIR® Resource)

Search Parameters

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| identifier | [token](https://www.hl7.org/fhir/search.html#token) | **(Mandatory)** The NHI Number of the patient for whom the Consultation data is requested for |
| ID | reference | The unique resource ID |
| Patients ID | reference | The unique Patient ID |
| confidential | string | Confidential flag, part of security tag |

**Please Note**- The request header details to be used for the search requests have been provided under section **1.5.2.1** above.

Request Examples

Please replace [base] with appropriate endpoints for UAT or Production as provided below-

**UAT** - [alexapiuat.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Production** - [alexapi.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Retrieve All Consultation Notes for a Patient based on their NHI number**

GET  [https://[base]/DocumentReference?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345](%20http://%5bbase%5d/DocumentReference?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345)&type=http://loinc.org|11488-4

**Retrieve All Consultation Notes for a Patient based on Resource ID**

GET  [https://[base]/DocumentReference?](file:///C:\Users\pkoval\Documents\Medtech%20API%20Integration%20Project\%20http:\%5bbase%5d\DocumentReference%3f)\_id=XXXXXXXXX

**Retrieve All Consultation Notes for a Patient based on Patient’s ID**

GET  [https://[base]/DocumentReference?](file:///C:\Users\pkoval\Documents\Medtech%20API%20Integration%20Project\%20http:\%5bbase%5d\DocumentReference%3f)patient.\_id=XXXXXX&type=http://loinc.org|11488-4

**Retrieve Consultation Notes that have been marked as Confidential**

[GET https://[base]/DocumentReference?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345](file:///C:\Users\pkoval\Documents\Medtech%20API%20Integration%20Project\GET%20http:\%5bbase%5d\DocumentReference%3fpatient.identifier=https:\standards.digital.health.nz\ns\nhi-id|ABC2345)&type=http://loinc.org|11488-4&\_security= https://terminology.hl7.org/CodeSystem/v3-Confidentiality|R

## Retrieval of only Immunisation Data (Immunization FHIR® Resource)

Search Parameters

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| identifier | [token](https://www.hl7.org/fhir/search.html#token) | **(Mandatory)** The NHI Number of the patient for whom the Immunisation data is requested for |
| ID | reference | The Unique resource ID |
| Patients ID | reference | The Patients unique ID |

**Please Note**- The request header details to be used for the search requests have been provided under section **1.5.2.1** above.

Request Examples

Please replace [base] with appropriate endpoints for UAT or Production as provided below-

**UAT** - [alexapiuat.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Production** - [alexapi.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Retrieve All Immunisations based on Patients NHI Number**

GET  [https://[base]/Immunization?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345](%20http://%5bbase%5d/Immunization?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345)

**Retrieve All Immunisations based on Patients ID**

GET  [https://[base]/Immunization?patient.\_id](%20https://%5bbase%5d/Immunization?patient._id)=XXXXXXXXX

**Retrieve All Immunisations based on Resource ID**

GET  [https://[base]/Immunization?\_id](file:///C:\Users\pkoval\Documents\Medtech%20API%20Integration%20Project\%20http:\%5bbase%5d\Immunization%3f_id)=XXXXXXXXX

## Retrieval of only Laboratory Results Data (Diagnostic Report FHIR® Resource)

Search Parameters

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| identifier | [token](https://www.hl7.org/fhir/search.html#token) | **(Mandatory)** The NHI Number of the patient for whom the Laboratory Results data is requested for |
| ID | reference | The unique Resource ID |
| Patients ID | reference | The Patients unique ID |

**Please Note**- The request header details to be used for the search requests have been provided under section **1.5.2.1** above.

Request Examples

Please replace [base] with appropriate endpoints for UAT or Production as provided below-

**UAT** - [alexapiuat.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Production** - [alexapi.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Retrieve All Lab Results based on Patients NHI Number**

GET  [https://[base]/DiagnosticReport?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345](%20http://%5bbase%5d/DiagnosticReport?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345)

**Retrieve All Lab Results based on Patients ID**

GET  [https://[base]/DiagnosticReport?patient.\_id=](%20https://%5bbase%5d/DiagnosticReport?patient._id=)XXXXXXXX

**Retrieve All Lab Results based on Resource ID**

GET  [https://[base]/DiagnosticReport?\_id=](file:///C:\Users\pkoval\Documents\Medtech%20API%20Integration%20Project\%20http:\%5bbase%5d\DiagnosticReport%3f_id=)XXXXXXXX

**Retrieve All Lab Results that have been marked as Confidential**

[GEThttps://[base]/DiagnosticReport?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345](file:///C:\Users\pkoval\Documents\Medtech%20API%20Integration%20Project\GET%20http:\%5bbase%5d\DocumentReference%3fpatient.identifier=https:\standards.digital.health.nz\ns\nhi-id|ABC2345)&\_security=https://terminology.hl7.org/CodeSystem/v3-Confidentiality|R

## Retrieval of only Medical Warning Data (Allergy Intolerance FHIR® Resource)

Search Parameters

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| identifier | [token](https://www.hl7.org/fhir/search.html#token) | **(Mandatory)** The NHI Number of the patient for whom the Medication data is requested for |
| ID | reference | The Unique Resource ID |
| Patients ID | reference | The Patients unique ID |

**Please Note**- The request header details to be used for the search requests have been provided under section **1.5.2.1** above.

Request Examples

Please replace [base] with appropriate endpoints for UAT or Production as provided below-

**UAT** - [alexapiuat.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Production** - [alexapi.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Retrieve All Medical Warnings based on Patients NHI Number**

GET  [https://[base]/AllergyIntolerance?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345](%20http://%5bbase%5d/AllergyIntolerance?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345)

**Retrieve All Medical Warnings based on Patients ID**

GET  [https://[base]/ AllergyIntolerance?patient.\_id=](%20https://%5bbase%5d/DiagnosticReport?patient._id=)XXXXXXXX

**Retrieve All Medical Warnings based on Resource ID**

GET  [https://[base]/ AllergyIntolerance?\_id=](file:///C:\Users\pkoval\Documents\Medtech%20API%20Integration%20Project\%20http:\%5bbase%5d\DiagnosticReport%3f_id=)XXXXXXXX

## Retrieval of RSD Messages (Discharge Summaries, Referrals, Specialist Report) from Inbox (DocumentReference FHIR® Resource)

Search Parameters

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| identifier | [token](https://www.hl7.org/fhir/search.html#token) | **(Mandatory)** The NHI Number of the patient for whom the Consultation data is requested for |
| ID | reference | The unique resource ID |
| Patients ID | reference | The unique Patient ID |
| confidential | string | Confidential flag, part of security tag |

**Please Note**- The request header details to be used for the search requests have been provided under section **1.5.2.1** above.

Request Examples to Retrieve RDS Messages

Please replace [base] with appropriate endpoints for UAT or Production as provided below-

**UAT** - [alexapiuat.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Production** - [alexapi.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Retrieve All Inbox Messages (RSD Records) for a Patient based on their NHI number**

GET  [https://[base]/DocumentReference?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345](%20http://%5bbase%5d/DocumentReference?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345)&type=http://loinc.org|34109-9

**Retrieve All Inbox Messages (RSD Records) for a Patient based on Resource ID**

GET  [https://[base]/DocumentReference?](file:///C:\Users\pkoval\Documents\Medtech%20API%20Integration%20Project\%20http:\%5bbase%5d\DocumentReference%3f)\_id=XXXXXXXXX

**Retrieve All Inbox Messages (RSD Records) for a Patient based on Patient’s ID**

GET  [https://[base]/DocumentReference?](file:///C:\Users\pkoval\Documents\Medtech%20API%20Integration%20Project\%20http:\%5bbase%5d\DocumentReference%3f)patient.\_id=XXXXXX&type=http://loinc.org|34109-9

**Retrieve Inbox Messages (RSD Records) that have been marked as Confidential**

[GET https://[base]/DocumentReference?patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345](file:///C:\Users\pkoval\Documents\Medtech%20API%20Integration%20Project\GET%20http:\%5bbase%5d\DocumentReference%3fpatient.identifier=https:\standards.digital.health.nz\ns\nhi-id|ABC2345)&type=http://loinc.org|34109-9&\_security= https://terminology.hl7.org/CodeSystem/v3-Confidentiality|R

Request Examples to Retrieve Attachment data from RDS Messages

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| identifier | [token](https://www.hl7.org/fhir/search.html#token) | The NHI Number of the patient for whom the Laboratory Results data is requested for |
| id | reference | The unique resource id |
| Patient’s id | reference | The unique id for the patient |

Please replace [base] with appropriate endpoints for UAT or Production as provided below-

**UAT** - [alexapiuat.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Production** - [alexapi.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Retrieve Attachment data from Inbox Message (RSD Record) for a Patient based on the BlobKey**

GET <http://[base]/Binary/BlobKey>

## Retrieval of Appointment Slot for a Provider (Slot FHIR® Resource)

Search Parameters

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| HPICPN/NZMC | reference | **(Mandatory)** The Identifier (HPICPN/NZMC) of the actor in this case the Provider |
| start | date | **(Mandatory)** The response will include 1 week of slots subsequent to the start date (If the end date is not provided, by default 1 weeks data will be extracted) |
| status | token | The free/busy status of the slot |

**Please Note**- The request header details to be used for the search requests have been provided under section **1.5.2.1** above.

Request Examples

Please replace [base] with appropriate endpoints for UAT or Production as provided below-

**UAT** - [alexapiuat.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Production** - [alexapi.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Retrieve Appointment Slot for a Provider based on the HPI CPN number & Start date/time provided- to retrieve default 1 weeks slots for a provider**

GET  [https://[base]/Slot?schedule.actor.identifier=](%20http://%5bbase%5d/Slot?schedule.actor.identifier=)<https://standards.digital.health.nz/ns/hpi-person-id>|HPICPNXXXX&start=ge2020-01-21T11:00:00Z

**Retrieve Appointment Slot for a Provider based on the HPI CPN number and start & end date/time provided – for example to retrieve 1 days slots for a provider**

GET  [https://[base]/Slot?schedule.actor.identifier=](file:///C:\Users\pkoval\Documents\Medtech%20API%20Integration%20Project\%20http:\%5bbase%5d\Slot%3fschedule.actor.identifier=)<https://standards.digital.health.nz/ns/hpi-person-id>|HPICPNXXXX&start=ge2020-01-21T11:00:00Z&start=le2020-01-21T18:00:00Z

**Retrieve Appointment Slot for a Provider based on the HPI CPN number, start date/time provided and slot status of Free- to retrieve only free slots for a week**

GET  [https://[base]/Slot?schedule.actor.identifier=](file:///C:\Users\pkoval\Documents\Medtech%20API%20Integration%20Project\%20http:\%5bbase%5d\Slot%3fschedule.actor.identifier=)<https://standards.digital.health.nz/ns/hpi-person-id>|HPICPNXXXX&start=ge2020-01-21T11:00:00Z&status=free

## Retrieval of Current Appointment Booking details for a Provider (Appointment FHIR® Resource)

Search Parameters

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| slot | reference | The Slot Identifier obtained as part of the Slot resource must be used to obtain the current appointment status for a Provider. |
| date | date | The date parameter is given with ge & le prefixes to denote the appointment start/end dates. |
| ID | token | Unique reference number provided to the booked Appointment |
| practitioner | reference | The provider under whom the appointment has been booked |
| patient | reference | The patient for whom an appointment has been booked |

**Please Note**- The request header details to be used for the search requests have been provided under section **1.5.2.1** above.

**Either of the Patient or Practitioner Identifier is mandatory to retrieve current bookings**

Request Examples

Please replace [base] with appropriate endpoints for UAT or Production as provided below-

**UAT** - [alexapiuat.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Production** - [alexapi.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Retrieve Appointment Booking details based on the Slot reference number**

GET  [https://[base]/Appointment?slot.\_id=](C:\\Users\\pkoval\\Documents\\Medtech API Integration Project\\ http:\\[base]\\Appointment?slot._id=)456XXX

**Retrieve Appointment Booking details based on the Appointment Reference number (Appointment ID) (if known)**

GET  [https://[base]/Appointment?\_id=](%20http://%5bbase%5d/Appointment?_id=)897XXX

**Retrieve Appointment Booking details based on the Slot reference number and start date/time provided – retrieves 1 week of Appointments if no end date is provided**

GET  [https://[base]/Appointment?slot.\_id=](%20http://%5bbase%5d/Appointment?slot._id=)456XXX&date=2020-12-08T09:00:00Z

**Retrieve Appointment Booking details based on the Slot reference number and start & end date/time provided – retrieves Appointments within the time frame provided**

GET[https://[base]/Appointment?slot.\_id=](http://[base]/Appointment?slot._id=)456XXX&date=ge2020-12-08T09:00:00Z &date=le2020-12-08T18:00:00Z

**Retrieve Appointment Booking details based on start & end date/time provided and Provider Identifier**

GET  [https://[base]/Appointment?](%20http://%5bbase%5d/Appointment?)practitioner.identifier=<https://standards.digital.health.nz/ns/hpi-person-id>|HPICPNXXXX&date=ge2020-01-21T11:00:00Z&date=le2020-01-21T18:00:00Z

**Retrieve Appointment Booking details based on start & end date/time provided and Patient Identifier**

GET  [https://[base]/Appointment?](%20http://%5bbase%5d/Appointment?)patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345&date=ge2020-01-21T11:00:00Z&date=le2020-01-21T18:00:00Z

**Retrieve Appointment Booking details based on start & end date/time, Patient Identifier & Booking Status**

GET  [https://[base]/Appointment?](%20http://%5bbase%5d/Appointment?)patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345&date=ge2020-01-21T11:00:00Z&date=le2020-01-21T18:00:00Z&status=booked

## Creating a new Patient Appointment for a Provider (Appointment FHIR® Resource)

The request payload must be passed under the standard FHIR Appointment resource.

The following URL must be called to pass this payload-

POST  [https://[base]/Appointment](%20http://%5bbase%5d/Appointment?)/

**Vendor systems:**

* SHALL send an Appointment resource that conforms to the FHIR Appointment profile.
* SHALL include the base URI for ALEX UAT or Production.
* The HPI Facility of the Location where the appointment has be booked must be provided under the Request header.

**The following data elements are mandatory (that is, data MUST be present):**

* a GUID reference number for the Appointment (ID)
* The ID of the patient participant of the appointment (you must obtain this before booking the appointment)
* The ID of the Practitioner of the appointment (you must obtain this before booking the appointment)
* the start and end of the appointment.
* the status identifying the appointment as “booked”.
* the slot details of one or more free slots to be booked.

## Changing Appointment status to “Arrived” for a Patient (Appointment FHIR® Resource)

The request payload must be passed under the standard FHIR Appointment resource.

The following URL must be called to pass this payload-

PUT

[https://[base]/Appointment](http://[base]/Appointment)?\_id=XXXXXXXXX&patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345

**Vendor systems:**

* SHALL send an Appointment resource that conforms to the FHIR Appointment profile.
* SHALL include the base URI for ALEX UAT or Production.
* The HPI Facility of the Location where the appointment has been booked and now the status is being changed to “arrived” must be provided under the Request header.

**The following data elements are mandatory (that is, data MUST be present):**

* a GUID reference number for the Appointment (ID)
* The patient’s NHI Number as an identifier (provided under the Search Request)
* The patients ID available under the Payload.
* the status identifying the appointment as “arrived”.

**The following data elements are optional:**

* a Practitioner of the appointment.
* the start and end of the appointment.
* the status identifying the appointment as “arrived”.
* the slot details of the appointment being arrived.

## Cancelling an Appointment for a Patient

The following URL must be called to cancel an appointment-

DELETE  [https://[base]/Appointment](%20http://%5bbase%5d/Appointment?)?\_id=XXXXXX&patient.identifier=https://standards.digital.health.nz/ns/nhi-id|ABC2345

**Vendor systems:**

* SHALL include the base URI for ALEX UAT or Production.
* The HPI Facility of the Location where the appointment is being cancelled at must be provided under the Request header.

## Retrieval of Service Provider Details at a Practice (Practitioner FHIR® Resource)

Search Parameters

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| identifier | token | **(Mandatory)** The practitioner’s identifier number – it can be any one of HPI CPN or NZMC Number. |
| family | string | A portion of the practitioners family name |
| name | string | A server defined search that may match any of the string fields in the HumanName, including family, give, prefix, suffix, suffix, and/or text |
| ID | reference | The Unique Resource ID |

**Please Note**- The request header details to be used for the search requests have been provided under section **1.5.2.1** above.

Request Examples

Please replace [base] with appropriate endpoints for UAT or Production as provided below-

**UAT** - [alexapiuat.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Production** - [alexapi.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Retrieve the entire list of Providers (Practitioner) at a practice**

GET https://[base]/Practitioner/

*Please note: the HPI Facility number of the Location from where the Provider list is being retrieved must be specified under the Header of the request.*

**Retrieve details of a Provider (Practitioner) at a practice based on the NZMC Number**

GET  [https://[base]/Practitioner?identifier=](%20http://%5bbase%5d/Practitioner?identifier=)https://standards.digital.health.nz/ns/medical-council-id|ABCXXXX

**Retrieve details of a Provider (Practitioner) at a practice based on the HPI CPN**

GET  [https://[base]/Practitioner?identifier=](%20http://%5bbase%5d/Practitioner?identifier=)<https://standards.digital.health.nz/ns/hpi-person-id>|HPICPNXXXX

**Retrieve details of a Provider (Practitioner) at a practice based on their Name**

GET  [https://[base]/Practitioner?name=](%20http://%5bbase%5d/Practitioner?name=)SamEaves

**Retrieve details of a Provider (Practitioner) at a practice based on the Resource ID**

[GET https://[base]/Practitioner?](file:///C:\Users\pkoval\Documents\Medtech%20API%20Integration%20Project\GET%20http:\%5bbase%5d\Practitioner%3f)\_id=XXXXXXXXXXX

## Retrieval of Location Details for a Practice (Location FHIR® Resource)

Search Parameters

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| identifier | token | **(Mandatory)** The Locations identifier number – it will be the **HPI Facility Number** |
| name | string | A portion of the Locations name |
| ID | reference | The Unique Resource ID |

**Please Note**- The request header details to be used for the search requests have been provided under section **1.5.2.1** above.

Request Examples

Please replace [base] with appropriate endpoints for UAT or Production as provided below-

**UAT** - [alexapiuat.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Production** - [alexapi.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Retrieve the single Location details at a practice**

GET https://[base]/Location/

*Please note: the HPI Facility number of the Location from where the Location details is being retrieved must be specified under the Header of the request.*

## Retrieval of Patient Details at a Practice (Location FHIR® Resource)

Search Parameters

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| identifier | token | **(Mandatory)** The patients NHI Number |
| name | string | A server defined search that may match any of the string fields in the HumanName, including family, give, prefix, suffix, suffix, and/or text |
| family | string | A portion of the family name of the patient |
| birthdate | date | The patient's date of birth |
| ID | reference | The unique Resource ID |

**Please Note**- The request header details to be used for the search requests have been provided under section **1.5.2.1** above.

Request Examples

Please replace [base] with appropriate endpoints for UAT or Production as provided below-

**UAT** - [alexapiuat.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Production** - [alexapi.medtechglobal.com/FHIR](http://alexapiuat.medtechglobal.com/)

**Retrieve details of a Patient at a practice based on the patients NHI Number**

GET  [https://[base]/Patient?identifier=](%20http://%5bbase%5d/Patient?identifier=)https://standards.digital.health.nz/ns/nhi-id|ABC2345

**Retrieve details of a Patient at a practice based on their Name & NHI Number**

GET  [https://[base]/Patient?identifier=](%20http://%5bbase%5d/Patient?identifier=)https://standards.digital.health.nz/ns/nhi-id|ABC2345&name=Test Patient

**Retrieve details of a Patient at a practice based on their Family Name & NHI Number**

GET  [https://[base]/Patient?identifier=](%20http://%5bbase%5d/Patient?identifier=)https://standards.digital.health.nz/ns/nhi-id|ABC2345&family=TestFamily

**Retrieve details of a Patient at a practice based on their Date of Birth & NHI Number**

GET  [https://[base]/Patient?identifier=](%20http://%5bbase%5d/Patient?identifier=)https://standards.digital.health.nz/ns/nhi-id|ABC2345&birthdate=1998-09-09

**Retrieve details of a Patient at a practice based on the Resource ID**

GET  [https://[base]/Patient?\_id](file:///C:\Users\pkoval\Documents\Medtech%20API%20Integration%20Project\%20http:\%5bbase%5d\Patient%3f_id)=XXXXXXXX

Error Messages

Given below are the error messages that will be displayed if there are issues with the Search Requests-

| Code | Issue Type | Message Text | Area | Reason(s) |
| --- | --- | --- | --- | --- |
| 01 | informational | Request processed successfully. | General | The request is valid and response is successful |
| 02 | invalid | Request is invalid. | General | The request does not follow the correct construct |
| 03 | not-supported | Request is not supported. | General | The request is not supported |
| 04 | not-found | Practice Facility not found. | General | Practice HPI Facility ID not found in Resolution Table |
| 05 | not-found | Patient not found. | General | Patient NHI is not found in the PMS of Practice Facility |
| 06 | exception | PMS unreachable or unavailable. | General | PMS is not connected or is not responding to request |
| 07 | timeout | PMS did not respond to request or has timed out. | General | PMS timed out or ran out of access licenses for the request |
| 08 | not-found | Resource ID not found. | Patient Summary | The Resource ID resolves to Native Keys that can’t be located in the PMS |
| 09 | not-found | No information related to Resource ID found. | Patient Summary | The Resource ID resolves to Native Keys found in PMS but did not return any data/content |
| 10 | not-supported | Request for Confidential data is not supported. | Patient Summary | The request for Confidential data is not supported for user or resource. |
| 11 | not-found | No Confidential records found for the Patient | Patient Summary | The patient does not have any Confidential marked records under Classification, Medication, Screening, Consultation & Inbox. |
| 12 | invalid | Requested Appointment Schedule date range is invalid. | Appointment Schedule | The requested date range does not conform to allowable values |
| 13 | not-found | Service Provider not found. | Appointment Schedule | Service Provider HPI Number is not found in the PMS of Practice Facility |
| 14 | not-found | No available Appointment Schedule found for the Service Provider. | Appointment Schedule | There is no appointment schedule available in the PMS for the Service Provider |
| 15 | not-found | No available Appointment Slot found for the Service Provider. | Appointment Slot | There is no appointment slot available in the PMS for the Service Provider |
| 16 | not-found | No available free Appointment Slot found for the Service Provider. | Appointment Slot | There is no free appointment slot available in the PMS for the Service Provider |
| 17 | not-found | No Appointment Slot available for booking. | Appointment Booking | When there is no slot for the requested date/time |
| 18 | processing | Appointment Slot is already booked, unable to process the request. | Appointment Booking | When the slot for the date time passed in the request is already booked for another patient |
| 19 | not-found | No Appointment Slot available for cancellation. | Appointment Cancellation | When there is no slot for the date time passed in the request |
| 20 | processing | Appointment Slot is booked for another Patient, unable to process the request. | Appointment Cancellation | When the slot is booked for a different patient and not the patient for whom the cancellation is requested |
| 21 | not-supported | Request for Confidential data is not supported. | Classification | The vendor does not have permission/scope for accessing confidential classifications – This error message will be handled by FHIR® Server. |
| 22 | processing | No Confidential Classifications found for the Patient. | Classification | The request is for retrieval of confidential classifications, but the patient does not have any confidential classifications |
| 23 | not-found | No Long Term Classifications found for the Patient. | Classification | The request is for retrieval of Long Term classifications, but the patient does not have any Long Term classifications |
| 24 | not-found | No Inactive Classifications found for the Patient. | Classification | The request is for retrieval of inactive classifications, but the patient does not have any inactive classifications |
| 25 | not-found | No Classifications found for the period requested. | Classification | There are no classifications available for retrieval within the time frame provided |
| 26 | not-found | No Classification records found for the Patient | Classification | The patient does not have any classification records available in the Medtech PMS |
| 27 | not-supported | Request for Confidential data is not supported. | Medication | The vendor does not have permission/scope for accessing confidential Medications – This error message will be handled by FHIR® Server. |
| 28 | not-found | No Confidential Medications found for the Patient. | Medication | The request is for retrieval of confidential Medications, but the patient does not have any confidential Medications |
| 29 | not-found | No Long Term Medications found for the Patient. | Medication | The request is for retrieval of Long Term Medications, but the patient does not have any Long Term Medications |
| 30 | not-found | No Inactive Medications found for the Patient. | Medication | The request is for retrieval of inactive Medications, but the patient does not have any inactive Medications |
| 31 | not-found | No Medications found for the period requested. | Medication | There are no Medications available for retrieval within the time frame provided |
| 32 | not-found | No Medication records found for the Patient. | Medication | The patient does not have any Medication records available in the Medtech PMS |
| 33 | not-supported | Request for Confidential data is not supported. | Screening | The vendor does not have permission/scope for accessing confidential screening details – This error message will be handled by FHIR® Server. |
| 34 | not-found | No Confidential Screening records found for the Patient. | Screening | The request is for retrieval of confidential screening, but the patient does not have any confidential screening details |
| 35 | not-found | No Screening records found for the period requested. | Screening | There are no screening records available for retrieval within the time frame provided |
| 36 | not-found | No Screening records found for the Patient | Screening | The patient does not have any Screening records available in the Medtech PMS |
| 37 |  |  |  |  |
| 38 | not-supported | Request for Confidential Encounters is not supported. | Encounter | The vendor does not have permission/scope for accessing confidential Encounters/Consultation details – This error message will be handled by FHIR® Server. |
| 39 | not-found | No Confidential Encounters found for the Patient. | Encounter | The request is for retrieval of confidential Encounters, but the patient does not have any confidential Encounters/Consultation details |
| 40 | not-found | No Encounter records found period requested. | Encounter | There are no Encounters/Consultation details records available for retrieval within the time frame provided |
| 41 | not-found | No Encounter records found for the patient | Encounter | The patient does not have any Encounters/Consultation details records available in the Medtech PMS |
| 42 | not-found | No Immunisation records found for period requested | Immunisation | There are no Immunisation records available for retrieval within the time frame provided |
| 43 | not-found | No Immunisation records found for the Patient | Immunisation | The patient does not have any Immunisation records available in the Medtech PMS |
| 44 | not-found | No Medical Warning records found for the period requested | Medical Warnings/ Allergy Intolerance | There are no Medical Warning records available for retrieval within the time frame provided |
| 45 | not-found | No Medical Warning records found for the Patient | Medical Warnings/ Allergy Intolerance | The patient does not have any Medical Warning records available in the Medtech PMS |
| 46 | not-found | No Inactive Medical Warning records found for the Patient | Medical Warnings/ Allergy Intolerance | The request is for retrieval of inactive Medical Warning records, but the patient does not have any inactive Medical Warning records |
| 47 | not-supported | Request for Confidential data is not supported | Lab Results/ Diagnostic Reports | The vendor does not have permission/scope for accessing confidential Lab Results – This error message will be handled by FHIR® Server. |
| 48 | not-found | No Confidential Lab Results found for the Patient | Lab Results/ Diagnostic Reports | The request is for retrieval of confidential Lab Results, but the patient does not have any confidential Lab Results |
| 49 | not-found | No Lab Results found for the period requested | Lab Results/ Diagnostic Reports | There are no Lab Results available for retrieval within the time frame provided |
| 50 | not-found | No Lab Results found for the Patient | Lab Results/ Diagnostic Reports | The patient does not have any Lab Results available in the Medtech PMS |