

FHIR API Documentation

§170.315(g)(10)



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Overview

CureMD has implemented HL7 Fast Healthcare Interoperability Resources (FHIR) Standard for the smooth and uniform exchange of health records/data.

This Documentation provides the necessary API collection to facilitate the Health IT developers to build an integrated solution with CureMD, that meets requirements of ONC's (g)(10) certification criterion 'Standardized API for Patient and Population Services'.

Client Registration

To access the CureMD's FHIR Resources, Application Developers need to register their apps.

To register 3rd party applications, Application Developers are required to provide the following information to CureMD via an email:

Email: support@curemd.com

1. Application Name
2. App Homepage URL
3. URL to the App's Privacy Policy
4. URL to the App's Terms of Service
5. OAuth Redirect URL(s)
6. Web App Launch URL
7. Application Type (Provider facing or Patient facing)
8. SMART Scopes *e.g. patient/Condition.read, patient/Patient.read,etc.*
9. Supported Operating System
 - a. Web
 - b. iOS
 - c. Android
10. App Descriptions
 - a. App Icon
 - b. Short App Description
 - c. Long App Description
11. Select Categories that apply to your App
 - a. Audience Category
 - i. Provider
 - ii. Patient
 - iii. Developer
 - b. App Use Category
 - i. Health and Therapy Management
 - ii. Provider Care Coordination



- iii. Clinical Applications
 - iv. Research
 - v. Data Monitoring Analysis
 - c. Confidentiality
 - i. Confidential
 - ii. Public
 - d. Privacy & Security Compliance
 - i. HIPAA
 - ii. ONC Model Privacy Notice
12. Attestation *e.g. Clients wanting to register as Confidential Clients must attest that they are capable of storing a client secret, or any other attestation applicable.*

Upon successful client registration, CureMD's support team will share required credentials with the Application Developers, after which they can access data for required practice/patient.

Authorization Flow

CureMD uses the SMART on FHIR 1.0.0 framework for authentication and authorization. For Standalone Apps, the OAuth2 Authorization Code flow is followed. Following are the steps that a registered app must follow to authorize with CureMD's FHIR Authorization Server.

1. Retrieve Server Metadata

- The app discovers the EHRs FHIR server metadata, including OAuth authorization_endpoint and token_endpoint URLs.

2. Obtain authorization code

- The app sends a request to the authorization endpoint with the following parameters:

GET

```
https://fhirsmartauth.curemd.net/oauth/authorize?response_type=code&client_id=[client_id]&state=abc123&scope=launch%2Fpatient%20offline_access%20patient%2FPatient.read%20openid%20fhirUse&redirect_uri=[redirect_uri]
```



Parameters	Description
response_type	This must be set to “code” for the authorization code flow
scope	Requested Scopes
client_id	Unique identifier for the given client
state	Random string to prevent replay attack
aud	The URL of the resource server from which the app wishes to retrieve FHIR data from
redirect_uri	The URI (belonging to the Client application) where the user will be redirected when the flow completes

- If the app needs to authenticate the identity of or retrieve information about the end-user, it should include two OpenID Connect scopes: openid and fhirUser. (When these scopes are requested and the request is granted, the app will receive an id_token along with the access token).
- The decision to either accept (returns authorization code) or reject (return error message) the authorization code request lies with the EHR authorization server.
 - The authorization codes are short lived (usually around 1 minute)

3. Obtain access token

- After obtaining the authorization code, the app exchanges the code with an access token.
- The access token response contains the patient launch context, id_token and granted scopes.

4. Access FHIR Resources

- The app sends a request (FHIR API call) containing the access token value to the FHIR endpoint on the EHR Resource Server to fetch the required data

5. Refresh Access Token

- Refresh tokens are issued to enable the sessions to last longer than the validity period of an access tokens.
- Apps can request a refresh token via the 'offline_access' SMART scope during authorization.
- After an access token expires, the app can request a new access token by providing the refresh token to the EHR's token endpoint.
- Refresh tokens can be issued to both public and confidential clients but are not supported for Bulk Export operations.



Errors and Exceptions

The following are the four possible types of client exceptions and errors on all API calls

Error Code	Response	Description
200	Success	The request is successfully executed
400	Bad Request	Invalid request header/parameter.
401	Access Denied	The request lacks valid authentication credentials for the requested resource.
403	Forbidden	User is not authorized for the requested operation. The user does not have the access permission/valid scope

Components and Configurations

- **Confidential Clients:** To be registered as a confidential client, the client must be capable of storing a client secret.
- **Public Clients:** Clients that are not capable of securely storing a client secret will be registered as public clients.
- **Bulk Export:** Clients using the Bulk Export API must support authorization using the Client Credentials Flow with JWT Credential
- **Standalone Launch:** Standalone Launch is currently supported for patient-facing 3rd-party applications. These Apps must support the Authorization Code Flow as outlined in the SMART App Launch IG 1.0.0.
- **EHR Launch:** EHR Launch is currently supported for provider-facing applications that are integrated with the EHR. These Apps must support the Authorization Code Flow as outlined in the SMART App Launch IG 1.0.0.



Resources

All the resources are compliant with FHIR version R4 and US Core version 3.1.1.

Patient

The Patient resource provides basic demographic information about a patient. This resource conforms to USCDIV1. Read or Search Interactions can be used to retrieve FHIR Patient resources in JSON format.

Method	Endpoint	Interaction
GET	[base url]/Patient/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/Patient/18864

Example Response

```
{
  "resourceType": "Patient",
  "id": "18864",
  "meta": {
    "versionId": "5",
    "lastUpdated": "2023-10-12T09:31:50.037+00:00",
    "source": "#PUjBhyF72hbckt9b",
    "profile": [ "http://hl7.org/fhir/us/core/StructureDefinition/us-core-patient" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
  "extension": [ {
    "url": "http://hl7.org/fhir/us/core/StructureDefinition/us-core-race",
    "extension": [ {
      "url": "ombCategory",

```




```
"valueCoding": {
  "system": "urn:oid:2.16.840.1.113883.6.238",
  "code": "1002-5",
  "display": "American Indian or Alaska Native"
}
}, {
  "url": "ombCategory",
  "valueCoding": {
    "system": "urn:oid:2.16.840.1.113883.6.238",
    "code": "2054-5",
    "display": "Black or African American"
  }
}, {
  "url": "ombCategory",
  "valueCoding": {
    "system": "urn:oid:2.16.840.1.113883.6.238",
    "code": "2106-3",
    "display": "White"
  }
}, {
  "url": "text",
  "valueString": "Abenaki, Ak-Chin, Ambler, Cheyenne, White, Zairean"
}, {
  "url": "detailed",
  "valueCoding": {
    "system": "urn:oid:2.16.840.1.113883.6.238",
    "code": "1006-6",
    "display": "Abenaki"
  }
}, {
  "url": "detailed",
  "valueCoding": {
    "system": "urn:oid:2.16.840.1.113883.6.238",
    "code": "1654-3",
    "display": "Ak-Chin"
  }
}, {
  "url": "detailed",
  "valueCoding": {
    "system": "urn:oid:2.16.840.1.113883.6.238",
    "code": "1845-7",
    "display": "Ambler"
  }
}, {
  "url": "detailed",
  "valueCoding": {
    "system": "urn:oid:2.16.840.1.113883.6.238",
    "code": "1102-3",
    "display": "Cheyenne"
  }
}, {
```



```

    "url": "detailed",
    "valueCoding": {
      "system": "urn:oid:2.16.840.1.113883.6.238",
      "code": "2066-9",
      "display": "Zairean"
    }
  }
}
}, {
  "url": "http://hl7.org/fhir/us/core/StructureDefinition/us-core-ethnicity",
  "extension": [ {
    "url": "ombCategory",
    "valueCoding": {
      "system": "urn:oid:2.16.840.1.113883.6.238",
      "code": "2135-2",
      "display": "Hispanic or Latino"
    }
  }
], {
  "url": "text",
  "valueString": "Hispanic or Latino"
}
}, {
  "url": "http://hl7.org/fhir/us/core/StructureDefinition/us-core-birthsex",
  "valueCode": "M"
}, {
  "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
  "valueDecimal": 1697103050113
}],
"identifier": [ {
  "system": "https://www.curemd.com/system-identifier/CMDGO",
  "value": "Patient-494"
}
],
"active": true,
"name": [ {
  "use": "official",
  "text": "Mr. Isaac Clarke",
  "family": "Clarke",
  "given": [ "Isaac" ],
  "prefix": [ "Mr." ]
}, {
  "use": "old",
  "family": "Morgan",
  "given": [ "Arthur" ]
}
],
"telecom": [ {
  "system": "phone",
  "value": "5558426013"
}, {
  "system": "phone",
  "value": "5558426014",
  "use": "mobile",
  "rank": 1
}

```



```

}, {
  "system": "fax",
  "value": "5558426012",
  "use": "work"
}, {
  "system": "phone",
  "value": "5558426010",
  "use": "work"
}, {
  "system": "other",
  "value": "5558426011"
}, {
  "system": "pager",
  "value": "5558426015"
}, {
  "system": "phone",
  "value": "5558426017"
}, {
  "system": "email",
  "value": "isaacclarke@xyz.com"
}],
"gender": "male",
"birthDate": "2021-01-01",
"deceasedBoolean": false,
"address": [ {
  "text": "72289 El Paso Drive TWENTYNINE PALMS CA 92277 US",
  "line": [ "72289", "El Paso Drive" ],
  "city": "TWENTYNINE PALMS",
  "state": "CA",
  "postalCode": "92277",
  "country": "US"
}],
"maritalStatus": {
  "coding": [ {
    "system": "http://terminology.hl7.org/CodeSystem/v3-MaritalStatus",
    "code": "S",
    "display": "Never Married"
  } ]
},
"contact": [ {
  "relationship": [ {
    "text": "Father"
  } ],
  "name": {
    "text": "Mr Father of Isaac",
    "family": "of Isaac",
    "given": [ "Father" ],
    "prefix": [ "Mr" ]
  }
},
"telecom": [ {
  "system": "phone",

```



```

"value": "5558426020",
"use": "home"
}, {
  "system": "phone",
  "value": "5558426021",
  "use": "mobile"
}, {
  "system": "email",
  "value": "fisaac@gmail.com"
}],
"address": {
  "text": "72279 El Paso Dr Twentynine Palms CA 92277 US",
  "line": [ "72279", "El Paso Dr" ],
  "city": "Twentynine Palms",
  "state": "CA",
  "postalCode": "92277",
  "country": "US"
},
"period": {
  "start": "1994-03-18T12:00:00Z",
  "end": "2017-03-17T12:00:00Z"
}
}, {
  "relationship": [ {
    "text": "Mother"
  } ],
  "name": {
    "text": "Mrs Mother of Isaac",
    "family": "of Isaac",
    "given": [ "Mother" ],
    "prefix": [ "Mrs" ]
  },
  "telecom": [ {
    "system": "phone",
    "value": "5558426025",
    "use": "home"
  } ],
  "address": {
    "text": "US",
    "country": "US"
  }
}],
"communication": [ {
  "language": {
    "coding": [ {
      "system": "urn:oid:2.16.840.1.113883.4.642.3.20",
      "code": "en",
      "display": "English"
    } ]
  }
} ],
"preferred": true

```



```

}, {
  "language": {
    "coding": [ {
      "system": "urn:oid:2.16.840.1.113883.4.642.3.20",
      "code": "es",
      "display": "Spanish"
    } ]
  },
  "preferred": true
}],
"managingOrganization": {
  "reference": "Organization/18852"
}
}

```

Method	Endpoint	Interaction
GET	[base url]/Patient?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
id (string)	Required
identifier (code)	Required
name (string)	Required
birthdate (date) and name (date)	Required
gender (code) and name (string)	Required
birthdate (date) and family (string)	Optional
family (string) and gender (code)	Optional

Example Request

Search by id:

GET: [base url]/Patient?id=18864

Search by identifier:

GET: [base url]/Patient?identifier=CMDGO

Search by name:

GET: [base url]/Patient?name=Isaac

Search by birthdate and name:



GET: [base url]/Patient?birthdate=2021-01-01&name=Isaac

Search by gender and name:

GET: [base url]/Patient?gender=male&name=Isaac

Search by birthdate and family

GET: [base url]/Patient?birthdate=2021-01-01&family=Clarke

Search by family and gender

GET: [base url]/Patient?family=Clarke&gender=male

Observation

The Observation resource provides proclamations and measurements about a patient. Observations play a vital role in measuring the patients progress, supporting the providers diagnosis and setting the healthcare trends. This resource conforms to USCDIV1.

Observation resource includes:

- Lab Results
- Vitals
- Social History
- Pediatric BMI for Age Observation Profile
- Pediatric Head Occipital-frontal Circumference Percentile Profile
- Pediatric Weight for Height Observation Profile

Read or Search Interactions can be used to retrieve FHIR Observation resources in JSON format.

Method	Endpoint	Interaction
GET	[base url]/Observation/Parameter	Read

Parameters

Parameter	Required
id (string)	Required



Body Height

Method	Endpoint	Interaction
GET	[base url]/Observation/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/Observation/20384

Example Response

```
{
  "resourceType": "Observation",
  "id": "20384",
  "meta": {
    "versionId": "1",
    "lastUpdated": "2023-10-12T09:50:28.212+00:00",
    "source": "#6l6faZAp0eBMvXhU",
    "profile": [ "http://hl7.org/fhir/StructureDefinition/bodyheight" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
  "extension": [ {
    "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
    "valueDecimal": 1697104168203
  } ],
  "identifier": [ {
    "system": "https://www.curemd.com/system-identifier/CMDGO",
    "value": "BodyHeight-166"
  } ],
  "status": "final",
  "category": [ {
    "coding": [ {
      "system": "http://terminology.hl7.org/CodeSystem/observation-category",
      "code": "vital-signs"
    } ]
  } ],
  "code": {
    "coding": [ {
```



```

    "system": "http://loinc.org",
    "code": "8302-2"
  }]
},
"subject": {
  "reference": "Patient/18864"
},
"encounter": {
  "reference": "Encounter/20379"
},
"effectiveDateTime": "2023-10-12T05:47:00Z",
"issued": "2023-10-12T05:47:00Z",
"performer": [ {
  "reference": "Practitioner/18858"
}],
"valueQuantity": {
  "value": 38,
  "unit": "in_i",
  "system": "http://unitsofmeasure.org",
  "code": "[in_i]"
}
}
}

```

Method	Endpoint	Interaction
GET	[base url]/Observation?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
patient (reference) and category (uri)	Required
patient (reference) and code (code)	Required
patient (reference) and category (uri) and date (date)	Required

Example Request

Search by patient and category:

GET: [base url]/Observation?patient=18864&category=vital-signs

Search by patient and code:

GET: [base url]/Observation?patient=18864&code=8302-2

Search by patient and category and date:

GET: [base url]/Observation?patient=18864&category=vital-signs&date=2023-10-12T05:47:00Z



Body Weight

Method	Endpoint	Interaction
GET	[base url]/Observation/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/Observation/20381

Example Response

```
{
  "resourceType": "Observation",
  "id": "20381",
  "meta": {
    "versionId": "1",
    "lastUpdated": "2023-10-12T09:50:27.835+00:00",
    "source": "#qL3ATE7LRuQ6vCKj",
    "profile": [ "http://hl7.org/fhir/StructureDefinition/bodyweight" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
  "extension": [ {
    "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
    "valueDecimal": 1697104168197
  } ],
  "identifier": [ {
    "system": "https://www.curemd.com/system-identifier/CMDGO",
    "value": "BodyWeight-166"
  } ],
  "status": "final",
  "category": [ {
    "coding": [ {
      "system": "http://terminology.hl7.org/CodeSystem/observation-category",
      "code": "vital-signs"
    } ]
  } ],
  "code": {
    "coding": [ {
      "system": "http://loinc.org",
```



```

    "code": "29463-7"
  }]
},
"subject": {
  "reference": "Patient/18864"
},
"encounter": {
  "reference": "Encounter/20379"
},
"effectiveDateTime": "2023-10-12T05:47:00Z",
"issued": "2023-10-12T05:47:00Z",
"performer": [ {
  "reference": "Practitioner/18858"
}],
"valueQuantity": {
  "value": 35,
  "unit": "lb_av",
  "system": "http://unitsofmeasure.org",
  "code": "[lb_av]"
}
}

```

Method	Endpoint	Interaction
GET	[base url]/Observation?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
patient (reference) and category (uri)	Required
patient (reference) and code (code)	Required
patient (reference) and category (uri) and date (date)	Required

Example Request

Search by patient and category:

GET: [base url]/Observation?patient=18864&category=vital-signs

Search by patient and code:

GET: [base url]/Observation?patient=18864&code=29463-7

Search by patient and category and date:

GET: [base url]/Observation?patient=18864&category=vital-signs&date=2023-10-12T05:47:00Z



Body Temperature

Method	Endpoint	Interaction
GET	[base url]/Observation/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/Observation/20394

Example Response

```
{
  "resourceType": "Observation",
  "id": "20394",
  "meta": {
    "versionId": "1",
    "lastUpdated": "2023-10-12T09:50:29.984+00:00",
    "source": "#6NHgZiejkbp4u4fv",
    "profile": [ "http://hl7.org/fhir/StructureDefinition/bodytemp" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
  "extension": [ {
    "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
    "valueDecimal": 1697104169280
  } ],
  "identifier": [ {
    "system": "https://www.curemd.com/system-identifier/CMDGO",
    "value": "BodyTemperature-176"
  } ],
  "status": "final",
  "category": [ {
    "coding": [ {
      "system": "http://terminology.hl7.org/CodeSystem/observation-category",
      "code": "vital-signs",
      "display": "Vital Signs"
    } ]
  } ],
  "code": {
    "coding": [ {
```



```

    "system": "http://loinc.org",
    "code": "8310-5",
    "display": "Body temperature"
  }]
},
"subject": {
  "reference": "Patient/18864"
},
"encounter": {
  "reference": "Encounter/20379"
},
"effectiveDateTime": "2023-10-12T05:49:28Z",
"issued": "2023-10-12T05:49:28Z",
"performer": [ {
  "reference": "Practitioner/18858"
}],
"valueQuantity": {
  "value": 98,
  "unit": "degF",
  "system": "http://unitsofmeasure.org",
  "code": "[degF]"
}
}

```

Method	Endpoint	Interaction
GET	[base url]/Observation?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
patient (reference) and category (uri)	Required
patient (reference) and code (code)	Required
patient (reference) and category (uri) and date (date)	Required

Example Request

Search by patient and category:

GET: [base url]/Observation?patient=18864&category=vital-signs

Search by patient and code:

GET: [base url]/Observation?patient=18864&code=8310-5

Search by patient and category and date:

GET: [base url]/Observation?patient=18864&category=vital-signs&date=2023-10-12T05:49:28Z



Blood Pressure

Method	Endpoint	Interaction
GET	[base url]/Observation/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/Observation/20395

Example Response

```
{
  "resourceType": "Observation",
  "id": "20395",
  "meta": {
    "versionId": "1",
    "lastUpdated": "2023-10-12T09:50:30.141+00:00",
    "source": "#PIZtF8d7B6rX5LKo",
    "profile": [ "http://hl7.org/fhir/StructureDefinition/bp" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
  "extension": [ {
    "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
    "valueDecimal": 1697104169333
  } ],
  "identifier": [ {
    "system": "https://www.curemd.com/system-identifier/CMDGO",
    "value": "BloodPressure-196"
  } ],
  "status": "final",
  "category": [ {
    "coding": [ {
      "system": "http://terminology.hl7.org/CodeSystem/observation-category",
      "code": "vital-signs"
    } ]
  } ],
  "code": {
    "coding": [ {
      "system": "http://loinc.org",
```



```

    "code": "85354-9"
  }]
},
"subject": {
  "reference": "Patient/18864"
},
"encounter": {
  "reference": "Encounter/20379"
},
"effectiveDateTime": "2023-10-12T05:49:28Z",
"issued": "2023-10-12T05:49:28Z",
"performer": [ {
  "reference": "Practitioner/18858"
}],
"component": [ {
  "code": {
    "coding": [ {
      "system": "http://loinc.org",
      "code": "8480-6"
    } ]
  }
},
"valueQuantity": {
  "value": 110,
  "unit": "mmHg",
  "system": "http://unitsofmeasure.org",
  "code": "mm[Hg]"
}
}, {
  "code": {
    "coding": [ {
      "system": "http://loinc.org",
      "code": "8462-4"
    } ]
  }
},
"valueQuantity": {
  "value": 75,
  "unit": "mmHg",
  "system": "http://unitsofmeasure.org",
  "code": "mm[Hg]"
}
}
}
}

```

Method	Endpoint	Interaction
GET	[base url]/Observation?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
patient (reference) and category (uri)	Required
patient (reference) and code (code)	Required



patient (reference) and category (uri) and date (date)	Required
--	----------

Example Request

Search by patient and category:

GET: [base url]/Observation?patient=18864&category=vital-signs

Search by patient and code:

GET: [base url]/Observation?patient=18864&code=85354-9

Search by patient and category and date:

GET: [base url]/Observation?patient=18864&category=vital-signs&date=2023-10-12T05:49:28Z

Observation Heart Rate

Method	Endpoint	Interaction
GET	[base url]/Observation/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/Observation/20385

Example Response

```
{
  "resourceType": "Observation",
  "id": "20385",
  "meta": {
    "versionId": "1",
    "lastUpdated": "2023-10-12T09:50:28.617+00:00",
    "source": "#xqTJ3AjHDNyP30eb",
    "profile": [ "http://hl7.org/fhir/StructureDefinition/hearttrate" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  }
},
```



```

"extension": [ {
  "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
  "valueDecimal": 1697104169297
}],
"identifier": [ {
  "system": "https://www.curemd.com/system-identifier/CMDGO",
  "value": "HeartRate-175"
}],
"status": "final",
"category": [ {
  "coding": [ {
    "system": "http://terminology.hl7.org/CodeSystem/observation-category",
    "code": "vital-signs",
    "display": "Vital Signs"
  } ]
}],
"code": {
  "coding": [ {
    "system": "http://loinc.org",
    "code": "8867-4",
    "display": "Heart rate"
  } ]
},
"subject": {
  "reference": "Patient/18864"
},
"encounter": {
  "reference": "Encounter/20379"
},
"effectiveDateTime": "2023-10-12T05:49:28Z",
"issued": "2023-10-12T05:49:28Z",
"performer": [ {
  "reference": "Practitioner/18858"
}],
"valueQuantity": {
  "value": 78,
  "unit": "bpm",
  "system": "http://unitsofmeasure.org",
  "code": "/min"
}
}

```

Method	Endpoint	Interaction
GET	[base url]/Observation?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
patient (reference) and category (uri)	Required
patient (reference) and code (code)	Required
patient (reference) and category (uri) and date (date)	Required



Example Request

Search by patient and category:

GET: [base url]/Observation?patient=18864&category=vital-signs

Search by patient and code:

GET: [base url]/Observation?patient=18864&code=8867-4

Search by patient and category and date:

GET: [base url]/Observation?patient=18864&category=vital-signs&date=2023-10-12T05:49:28Z

Respiratory Rate

Method	Endpoint	Interaction
GET	[base url]/Observation/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/Observation/20390

Example Response

```
{
  "resourceType": "Observation",
  "id": "20390",
  "meta": {
    "versionId": "1",
    "lastUpdated": "2023-10-12T09:50:29.331+00:00",
    "source": "#g5LPqZNd779FuFVb",
    "profile": [ "http://hl7.org/fhir/StructureDefinition/resprate" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
  "extension": [ {
    "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
    "valueDecimal": 1697104169313
  } ],
}
```



```

"identifier": [ {
  "system": "https://www.curemd.com/system-identifier/CMDGO",
  "value": "RespiratoryRate-130"
}],
"status": "final",
"category": [ {
  "coding": [ {
    "system": "http://terminology.hl7.org/CodeSystem/observation-category",
    "code": "vital-signs",
    "display": "Vital Signs"
  } ]
}],
"code": {
  "coding": [ {
    "system": "http://loinc.org",
    "code": "9279-1",
    "display": "Respiratory rate"
  } ]
},
"subject": {
  "reference": "Patient/18864"
},
"encounter": {
  "reference": "Encounter/20379"
},
"effectiveDateTime": "2023-10-12T05:49:28Z",
"issued": "2023-10-12T05:49:28Z",
"performer": [ {
  "reference": "Practitioner/18858"
}],
"valueQuantity": {
  "value": 19,
  "unit": "breaths per minute",
  "system": "http://unitsofmeasure.org",
  "code": "/min"
}
}

```

Method	Endpoint	Interaction
GET	[base url]/Observation?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
patient (reference) and category (uri)	Required
patient (reference) and code (code)	Required
patient (reference) and category (uri) and date (date)	Required



Example Request

Search by patient and category:

GET: [base url]/Observation?patient=18864&category=vital-signs

Search by patient and code:

GET: [base url]/Observation?patient=18864&code=9279-1

Search by patient and category and date:

GET: [base url]/Observation?patient=18864&category=vital-signs&date=2023-10-12T05:49:28Z

Smoking Status

Method	Endpoint	Interaction
GET	[base url]/Observation/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/Observation/20401

Example Response

```
{
  "resourceType": "Observation",
  "id": "20401",
  "meta": {
    "versionId": "1",
    "lastUpdated": "2023-10-12T09:53:07.679+00:00",
    "source": "#zPa81B0wuWh5fSsF",
    "profile": [ "http://hl7.org/fhir/us/core/StructureDefinition/us-core-smokingstatus" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
}
```



```

"extension": [ {
  "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
  "valueDecimal": 1697104327963
}],
"identifier": [ {
  "system": "https://www.curemd.com/system-identifier/CMDGO",
  "value": "SmokingStatus-229"
}],
"status": "final",
"category": [ {
  "coding": [ {
    "system": "http://terminology.hl7.org/CodeSystem/observation-category",
    "code": "social-history",
    "display": "Social History"
  } ]
}],
"code": {
  "coding": [ {
    "system": "http://loinc.org",
    "code": "72166-2",
    "display": "Tobacco smoking status"
  } ]
},
"subject": {
  "reference": "Patient/18864"
},
"encounter": {
  "reference": "Encounter/20379"
},
"effectiveDateTime": "2023-10-12T05:52:07Z",
"issued": "2023-10-12T05:52:07Z",
"performer": [ {
  "reference": "Practitioner/18858"
}],
"valueCodeableConcept": {
  "coding": [ {
    "system": "urn:oid:2.16.840.1.113883.11.20.9.38",
    "code": "449868002",
    "display": "Current, Every day smoker"
  } ],
  "text": "Current, Every day smoker"
}
}

```



Method	Endpoint	Interaction
GET	[base url]/Observation?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
patient (reference) and code (code)	Required

Example Request

Search by patient and code:

GET: [base url]/Observation?patient=18864&code=72166-2

Pulse Oximetry

Method	Endpoint	Interaction
GET	[base url]/Observation/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/Observation/20386

Example Response

```
{
  "resourceType": "Observation",
  "id": "20386",
  "meta": {
    "versionId": "1",
    "lastUpdated": "2023-10-12T09:50:28.793+00:00",
    "source": "#D0liYCwq7mXuBNV",
    "profile": [ "http://hl7.org/fhir/us/core/StructureDefinition/us-core-pulse-oximetry" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  }
},
```



```

"extension": [ {
  "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
  "valueDecimal": 1697104169347
}],
"identifier": [ {
  "system": "https://www.curemd.com/system-identifier/CMDGO",
  "value": "PulseOximetry-151"
}],
"status": "final",
"category": [ {
  "coding": [ {
    "system": "http://terminology.hl7.org/CodeSystem/observation-category",
    "code": "vital-signs",
    "display": "Vital Signs"
  } ]
}],
"code": {
  "coding": [ {
    "system": "http://loinc.org",
    "code": "2708-6",
    "display": "Oxygen saturation in Arterial blood"
  }, {
    "system": "http://loinc.org",
    "code": "59408-5",
    "display": "Oxygen saturation in Arterial blood by Pulse oximetry"
  } ]
},
"subject": {
  "reference": "Patient/18864"
},
"encounter": {
  "reference": "Encounter/20379"
},
"effectiveDateTime": "2023-10-12T05:49:28Z",
"issued": "2023-10-12T05:49:28Z",
"performer": [ {
  "reference": "Practitioner/18858"
}],
"valueQuantity": {
  "value": 98,
  "unit": "%",
  "system": "http://unitsofmeasure.org",
  "code": "%"
},
"component": [ {
  "code": {
    "coding": [ {
      "system": "http://loinc.org",
      "code": "3151-8",
      "display": "Inhaled oxygen flow rate"
    } ]
  }
}],
"valueQuantity": {
  "value": 510,
  "unit": "L/min",

```



```

    "system": "http://unitsofmeasure.org",
    "code": "L/min"
  }
}, {
  "code": {
    "coding": [ {
      "system": "http://loinc.org",
      "code": "3150-0",
      "display": "Inhaled oxygen concentration"
    } ]
  },
  "valueQuantity": {
    "value": 21,
    "unit": "%",
    "system": "http://unitsofmeasure.org",
    "code": "%"
  }
}
}
}

```

Method	Endpoint	Interaction
GET	[base url]/Observation?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
patient (reference) and category (uri)	Required
patient (reference) and code (code)	Required
patient (reference) and category (uri) and date (date)	Required

Example Request

Search by patient and category:

GET: [base url]/Observation?patient=18864&category=vital-signs

Search by patient and code:

GET: [base url]/Observation?patient=18864&code=2708-6

Search by patient and category and date:

GET: [base url]/Observation?patient=18864&category=vital-signs&date=2023-10-12T05:49:28Z



Pediatric BMI for Age Observation

Method	Endpoint	Interaction
GET	[base url]/Observation/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/Observation/20387

Example Response

```
{
  "resourceType": "Observation",
  "id": "20387",
  "meta": {
    "versionId": "2",
    "lastUpdated": "2023-10-12T09:50:29.753+00:00",
    "source": "#Pb0yPV52r3onnNYM",
    "profile": [ "http://hl7.org/fhir/us/core/StructureDefinition/pediatric-bmi-for-age" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
  "extension": [ {
    "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
    "valueDecimal": 1697104168190
  } ],
  "identifier": [ {
    "system": "https://www.curemd.com/system-identifier/CMDGO",
    "value": "PediametricBmiAgeObservation-166"
  } ],
  "status": "final",
  "category": [ {
    "coding": [ {
      "system": "http://terminology.hl7.org/CodeSystem/observation-category",
      "code": "vital-signs",
      "display": "Vital Signs"
    } ]
  } ],
  "code": {
    "coding": [ {
```




```

"system": "http://loinc.org",
"code": "59576-9",
"display": "Body mass index (BMI) [Percentile] Per age and sex"
}]
},
"subject": {
"reference": "Patient/18864"
},
"effectiveDateTime": "2023-10-12T05:47:00Z",
"issued": "2023-10-12T05:47:00Z",
"performer": [ {
"reference": "Practitioner/18858"
}],
"valueQuantity": {
"value": 75.65387831185598,
"unit": "%",
"system": "http://unitsofmeasure.org",
"code": "%"
},
"note": [ {
"text": "CDC Males, 2-20 years Chart"
}]
}

```

Method	Endpoint	Interaction
GET	[base url]/Observation?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
patient (reference) and category (uri)	Required
patient (reference) and code (code)	Required
patient (reference) and category (uri) and date (date)	Required

Example Request

Search by patient and category:

GET: [base url]/Observation?patient=18864&category=vital-signs

Search by patient and code:

GET: [base url]/Observation?patient=18864&code=59576-9

Search by patient and category and date:

GET: [base url]/Observation?patient=18864&category=vital-signs&date=2023-10-12T05:47:00Z



Pediatric Head Occipital-frontal Circumference Percentile

Method	Endpoint	Interaction
GET	[base url]/Observation/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/Observation/20409

Example Response

```
{
  "resourceType": "Observation",
  "id": "20409",
  "meta": {
    "versionId": "1",
    "lastUpdated": "2023-10-12T10:04:58.867+00:00",
    "source": "#yTWKwpAlkItvENSO",
    "profile": [ "http://hl7.org/fhir/us/core/StructureDefinition/head-occipital-frontal-circumference-percentile" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
  "extension": [ {
    "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
    "valueDecimal": 1697105037983
  } ],
  "identifier": [ {
    "system": "https://www.curemd.com/system-identifier/CMDGO",
    "value": "OccipitalFrontalHeadCircumference-166"
  } ],
  "status": "final",
  "category": [ {
    "coding": [ {
      "system": "http://terminology.hl7.org/CodeSystem/observation-category",
      "code": "vital-signs",
      "display": "Vital Signs"
    } ]
  } ],
  "code": {
    "coding": [ {
      "system": "http://loinc.org",
      "code": "8289-1",

```



```

    "display": "Head Occipital-frontal circumference Percentile"
  }]
},
"subject": {
  "reference": "Patient/18864"
},
"effectiveDateTime": "2023-10-12T05:47:00Z",
"issued": "2023-10-12T05:47:00Z",
"performer": [{
  "reference": "Practitioner/18858"
}],
"valueQuantity": {
  "value": 79.79874764074401,
  "unit": "%",
  "system": "http://unitsofmeasure.org",
  "code": "%"
},
"note": [{
  "text": "CDC Males, 0-36 months Chart"
}]
}

```

Method	Endpoint	Interaction
GET	[base url]/Observation?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
patient (reference) and category (uri)	Required
patient (reference) and code (code)	Required
patient (reference) and category (uri) and date (date)	Required

Example Requests

Search by patient and category:

GET: [base url]/Observation?patient=18864&category=vital-signs

Search by patient and code:

GET: [base url]/Observation?patient=18864&code= 8289-1

Search by patient and category and date:

GET: [base url]/Observation?patient=18864&category=vital-signs&date=2023-10-12T05:47:00Z



Pediatric Weight for Height Observation Profile

Method	Endpoint	Interaction
GET	[base url]/Observation/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/Observation/20389

Example Response

```
{
  "resourceType": "Observation",
  "id": "20389",
  "meta": {
    "versionId": "2",
    "lastUpdated": "2023-10-12T09:50:29.643+00:00",
    "source": "#hsul25L1GVf8dZho",
    "profile": [ "http://hl7.org/fhir/us/core/StructureDefinition/pediatric-weight-for-height" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
  "extension": [ {
    "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
    "valueDecimal": 1697104168177
  } ],
  "identifier": [ {
    "system": "https://www.curemd.com/system-identifier/CMDGO",
    "value": "WeightForLengthPercentile-166"
  } ],
  "status": "final",
  "category": [ {
    "coding": [ {
      "system": "http://terminology.hl7.org/CodeSystem/observation-category",
      "code": "vital-signs",
      "display": "Vital Signs"
    } ]
  } ],
  "code": {
    "coding": [ {
      "system": "http://loinc.org",
      "code": "77606-2",
      "display": "Weight-for-length Per age and sex"
    } ]
  }
}
```



```

    ]]
  },
  "subject": {
    "reference": "Patient/18864"
  },
  "effectiveDateTime": "2023-10-12T05:47:00Z",
  "issued": "2023-10-12T05:47:00Z",
  "performer": [ {
    "reference": "Practitioner/18858"
  } ],
  "valueQuantity": {
    "value": 84.9991847671568,
    "unit": "%",
    "system": "http://unitsofmeasure.org",
    "code": "%"
  },
  "note": [ {
    "text": "CDC Males, 0-36 months Chart"
  } ]
}

```

Method	Endpoint	Interaction
GET	[base url]/Observation?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
patient (reference) and category (uri)	Required
patient (reference) and code (code)	Required
patient (reference) and category (uri) and date (date)	Required

Example Request

Search by patient and category:

GET: [base url]/Observation?patient=18864&category=vital-signs

Search by patient and code:

GET: [base url]/Observation?patient=18864&code= 77606-2

Search by patient and category and date:

GET: [base url]/Observation?patient=18864&category=vital-signs&date=2023-10-12T05:47:00Z



Laboratory Result Observation

Method	Endpoint	Interaction
GET	[base url]/Observation/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/Observation/20424

Example Response

```
{
  "resourceType": "Observation",
  "id": "20424",
  "meta": {
    "versionId": "2",
    "lastUpdated": "2023-10-12T11:02:44.569+00:00",
    "source": "#pIJ1jNZolGNWM5pu",
    "profile": [ "http://hl7.org/fhir/us/core/StructureDefinition/us-core-observation-lab" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
  "extension": [ {
    "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
    "valueDecimal": 1697108504480
  } ],
  "identifier": [ {
    "system": "https://www.curemd.com/system-identifier/CMDGO",
    "value": "LabObservation-518"
  } ],
  "status": "final",
  "category": [ {
    "coding": [ {
      "system": "http://terminology.hl7.org/CodeSystem/observation-category",
      "code": "laboratory"
    } ]
  } ],
  "code": {
    "coding": [ {
      "system": "urn:oid:2.16.840.1.113883.3.669.101.123.1",

```



```

    "code": "001149"
  }, {
    "system": "http://loinc.org",
    "code": "3026-2"
  }],
  "text": "Thyroxine (T4)"
},
"subject": {
  "reference": "Patient/18864"
},
"effectiveDateTime": "2023-10-12T06:58:00Z",
"issued": "2023-10-12T06:58:00Z",
"valueQuantity": {
  "value": 7.5,
  "unit": "ug/dL"
},
"interpretation": [ {
  "coding": [ {
    "system": "https://terminology.hl7.org/3.1.0/CodeSystem-v3-ObservationInterpretation",
    "code": "N",
    "display": "Normal"
  } ]
} ]
} ]
}

```

Method	Endpoint	Interaction
GET	[base url]/Observation?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
patient (reference) and category (uri)	Required
patient (reference) and code (code)	Required
patient (reference) and category (uri) and date (date)	Required
patient (reference) and category (uri) and status (code)	Optional
patient (reference) and code (code) and date (date)	Optional

Example Request

Search by patient and category:

GET: [base url]/Observation?patient=18864&category=laboratory

Search by patient and code:

GET: [base url]/Observation?patient=18864&&code=3026-2

Search by patient and category and date:



GET: [base url]/Observation?patient=18864&&category=laboratory&date=2023-10-12T06:58:00Z

Search by patient and category and status:

GET: [base url]/Observation?patient=18864&category=laboratory&status=final

Search by patient and code and date:

GET: [base url]/Observation?patient=18864&code=3026-2&date=2023-10-12T06:58:00Z

Occupation

Method	Endpoint	Interaction
GET	[base url]/Observation/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/Observation/20424

Example Response

```
{
  "resourceType": "Observation",
  "id": "20424",
  "meta": {
    "versionId": "1",
    "lastUpdated": "2024-04-15T12:45:08.021+00:00",
    "source": "#FcjvGHEXmeQBAOSY",
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
  "extension": [ {
    "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
    "valueDecimal": 1713185034810
  } ],
  "identifier": [ {
    "system": "https://www.curemd.com/system-identifier/CMDGO",
```




```

"value": "Occupation-343"
}],
"status": "final",
"category": [ {
  "coding": [ {
    "system": "http://terminology.hl7.org/CodeSystem/observation-category",
    "code": "social-history",
    "display": "Social History"
  } ]
}],
"code": {
  "coding": [ {
    "system": "http://loinc.org",
    "code": "11295-3",
    "display": "Current employment - Reported"
  } ]
},
"subject": {
  "reference": "Patient/24651"
},
"effectivePeriod": {
  "start": "2023-12-12T08:43:00Z"
},
"issued": "2024-04-15T08:43:54Z",
"performer": [ {
  "reference": "Practitioner/18863"
}],
"valueCodeableConcept": {
  "text": "Actors"
},
"component": [ {
  "code": {
    "coding": [ {
      "system": "http://loinc.org",
      "code": "86188-0",
      "display": "History of Occupation industry"
    } ]
  }
},
"valueCodeableConcept": {
  "text": "Administration of economic programs and space research"
}
}
}

```

Method	Endpoint	Interaction
GET	[base url]/Observation?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
patient (reference) and category (uri)	Required



patient (reference) and code (code)	Required
patient (reference) and category (uri) and date (date)	Required
patient (reference) and category (uri) and status (code)	Optional
patient (reference) and code (code) and date (date)	Optional

Example Request

Search by patient and category:

GET: [base]/Observation?patient=24651&category=social-history

Search by patient and code:

GET: [base]/Observation?patient=24651&code=http://loinc.org|11295-3

Search by patient and category and date:

GET: [base]Observation?patient=24651&category=social-history&date=ge2023-12-12T00:00:00Z

Search by patient and category and status:

GET: [base]/Observation?patient=24651&category=social-history&status=final

Search by patient and code and date:

GET: [base]Observation?patient=24651&code=http://loinc.org|11295-3&date= ge2023-12-12T00:00:00Z

Travel History

Method	Endpoint	Interaction
GET	[base url]/Observation/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/Observation/24625



Example Response

```
{
  "resourceType": "Observation",
  "id": "24625",
  "meta": {
    "versionId": "1",
    "lastUpdated": "2024-04-15T11:22:14.112+00:00",
    "source": "#bRQYghBSx69X4LaS",
    "profile": [ "http://hl7.org/fhir/us/ecr/StructureDefinition/us-ph-travel-history" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
  "extension": [ {
    "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
    "valueDecimal": 1713180059377
  } ],
  "identifier": [ {
    "system": "https://www.curemd.com/system-identifier/CMDGO",
    "value": "TravelHistory-255"
  } ],
  "status": "final",
  "category": [ {
    "coding": [ {
      "system": "http://terminology.hl7.org/CodeSystem/observation-category",
      "code": "social-history",
      "display": "Social History"
    } ]
  } ],
  "code": {
    "coding": [ {
      "system": "http://snomed.info/sct",
      "code": "420008001",
      "display": "Travel"
    } ],
    "text": "Travel History"
  },
  "subject": {
    "reference": "Patient/24610"
  },
  "effectivePeriod": {
    "start": "2024-01-01T00:00:00Z",
    "end": "2024-01-05T00:00:00Z"
  },
  "performer": [ {
    "reference": "Practitioner/18863"
  } ],
  "component": [ {
    "code": {
      "coding": [ {
        "system": "http://terminology.hl7.org/CodeSystem/v3-ParticipationType",
        "code": "LOC",

```



```

    "display": "Location"
  }
},
"valueCodeableConcept": {
  "coding": [ {
    "system": "urn:oid:1.0.3166.1",
    "code": "IND",
    "display": "INDIA (Country)"
  } ],
  "text": "Travel Notes"
}
}, {
  "code": {
    "coding": [ {
      "system": "http://snomed.info/sct",
      "code": "280147009",
      "display": "Type of activity (attribute)"
    } ]
  },
  "valueCodeableConcept": {
    "coding": [ {
      "system": "urn:oid:2.16.840.1.114222.4.5.274",
      "code": "PHC386",
      "display": "Business"
    } ]
  }
}
}
}
}

```

Method	Endpoint	Interaction
GET	[base url]/Observation?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
patient (reference) and category (uri)	Required
patient (reference) and code (code)	Required
patient (reference) and category (uri) and date (date)	Required
patient (reference) and category (uri) and status (code)	Optional
patient (reference) and code (code) and date (date)	Optional

Example Request

Search by patient and category:

GET: [base]/Observation?patient=24610&category=social-history



Search by patient and code:

GET: [base]/Observation?patient=24610&code= http://snomed.info/sct|420008001

Search by patient and category and date:

GET: [base]Observation?patient=24610&category=social-history&date=ge2023-12-12T00:00:00Z

Search by patient and category and status:

GET: [base]/Observation?patient=24610&category=social-history&status=final

Search by patient and code and date:

GET: [base]Observation?patient=24610&code= http://snomed.info/sct|420008001&date= ge2023-12-12T00:00:00Z

Practitioner

The Practitioner resource provides basic demographic and other administrative information about a practitioner. This resource conforms to USCDiv1. Read or Search Interactions can be used to retrieve FHIR Practitioner resources in JSON format.

Method	Endpoint	Interaction
GET	[base url]/Practitioner/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/Practitioner/18858

Example Response

```
{
  "resourceType": "Practitioner",
  "id": "18858",
  "meta": {
```



```

"versionId": "2",
"lastUpdated": "2023-10-12T09:32:33.081+00:00",
"source": "#pQtofABdH7UoxN4H",
"profile": [ "http://hl7.org/fhir/us/core/StructureDefinition/us-core-practitioner" ],
"tag": [ {
  "system": "https://www.curemd.com/tenant",
  "code": "CMDGO"
} ]
},
"extension": [ {
  "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
  "valueDecimal": 1697103093360
} ],
"identifier": [ {
  "system": "https://www.curemd.com/system-identifier/CMDGO",
  "value": "Practitioner-72"
} ], {
  "system": "http://hl7.org/fhir/sid/us-npi",
  "value": "5265467386"
} ],
"active": true,
"name": [ {
  "text": "Dr Laura Crawley",
  "family": "Crawley",
  "given": [ "Laura" ],
  "prefix": [ "Dr" ]
} ],
"telecom": [ {
  "system": "phone",
  "value": "5558426098"
} ], {
  "system": "fax",
  "value": "5558426098"
} ], {
  "system": "email",
  "value": "lauracrawley@gmail.com"
} ],
"address": [ {
  "text": "647 Tara Rd NJ WASHINGTON NORTH KINGSTOWN US",
  "line": [ "647 Tara Rd" ],
  "city": "NORTH KINGSTOWN",
  "district": "WASHINGTON",
  "state": "NJ",
  "postalCode": "02852",
  "country": "US"
} ],
"gender": "female",
"birthDate": "1994-09-12"
}

```

Method	Endpoint	Interaction
GET	[base url]/Practitioner?Parameter	Search



Parameters

Parameter Combinations	Support as per US Core
name (string)	Required
identifier (string)	Required

Example Request

Search by name:

GET: [base url]/Practitioner?name=Laura

Search by identifier:

GET: [base url]/Practitioner?identifier=http://hl7.org/fhir/sid/us-npi|5265467386

AllergyIntolerance

The AllergyIntolerance resource provides data about the allergies/intolerance to a specific substance (food/medication/environment etc.) associated with a patient. This resource conforms to USCDiv1. Read or Search Interactions can be used to retrieve FHIR AllergyIntolerance resources in JSON format.

Method	Endpoint	Interaction
GET	[base url]/AllergyIntolerance/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/AllergyIntolerance/20412

Example Response

```
{
  "resourceType": "AllergyIntolerance",
  "id": "20412",
  "meta": {
    "versionId": "1",
    "lastUpdated": "2023-10-12T10:16:09.121+00:00",
    "source": "#VSQZqoZ8OHPTbUN",
  }
}
```



```

"profile": [ "http://hl7.org/fhir/us/core/StructureDefinition/us-core-allergyintolerance" ],
"tag": [ {
  "system": "https://www.curemd.com/tenant",
  "code": "CMDGO"
} ]
},
"extension": [ {
  "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
  "valueDecimal": 1697105708460
} ],
"identifier": [ {
  "system": "https://www.curemd.com/system-identifier/CMDGO",
  "value": "AllergyIntolerance-343"
} ],
"clinicalStatus": {
  "coding": [ {
    "system": "http://terminology.hl7.org/CodeSystem/allergyintolerance-clinical",
    "code": "active",
    "display": "Active"
  } ]
},
"verificationStatus": {
  "coding": [ {
    "system": "http://terminology.hl7.org/CodeSystem/allergyintolerance-verification",
    "code": "confirmed",
    "display": "Confirmed"
  } ]
},
"category": [ "medication" ],
"code": {
  "text": "Accupril"
},
"patient": {
  "reference": "Patient/18864"
},
"onsetDateTime": "2023-10-12T06:15:08Z",
"recordedDate": "2023-10-12T06:15:08Z",
"recorder": {
  "reference": "Practitioner/18858"
},
"reaction": [ {
  "manifestation": [ {
    "coding": [ {
      "system": "http://www.snomed.org/",
      "code": "39579001",
      "display": "Anaphylaxis"
    } ],
    "text": "Anaphylaxis"
  } ],
  "severity": "mild"
} ],
"manifestation": [ {
  "coding": [ {
    "system": "http://www.snomed.org/",
    "code": "164139008",

```




```

    "display": "Anemia"
  },
  "text": "Anemia"
},
"severity": "mild"
}]
}

```

Method	Endpoint	Interaction
GET	[base url]/AllergyIntolerance?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
patient (reference)	Required
clinical-status (code)	Required

Example Request

Search by patient:

GET: [base url]/AllergyIntolerance?patient=18864

Search by clinical-status:

GET: [base url]/AllergyIntolerance? patient=18864&clinical-status=http://terminology.hl7.org/CodeSystem/allergyintolerance-clinical|active

Procedure

The Procedure resource provides a record of all the procedures (current and historical) associated with a patient. This resource conforms to USCDiv1. Read or Search Interactions can be used to retrieve FHIR Procedure resources in JSON format.

Method	Endpoint	Interaction
GET	[base url]/ Procedure/Parameter	Read

Parameters

Parameter	Required
id (string)	Required



Example Request

GET: [base url]/ Procedure/20438

Example Response

```
{
  "resourceType": "Procedure",
  "id": "20438",
  "meta": {
    "versionId": "1",
    "lastUpdated": "2023-10-12T11:17:29.751+00:00",
    "source": "#tXUUEAGO1hP15piR",
    "profile": [ "http://hl7.org/fhir/us/core/StructureDefinition/us-core-procedure" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
  "extension": [ {
    "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
    "valueDecimal": 1697109389660
  } ],
  "identifier": [ {
    "system": "https://www.curemd.com/system-identifier/CMDGO",
    "value": "Procedure-761"
  } ],
  "status": "completed",
  "code": {
    "coding": [ {
      "system": "http://www.ama-assn.org/go/cpt",
      "code": "28190",
      "display": "REMOVAL FOREIGN BODY FOOT SUBCUTANEOUS"
    } ],
    "text": "REMOVAL FOREIGN BODY FOOT SUBCUTANEOUS"
  },
  "subject": {
    "reference": "Patient/18864"
  },
  "performedDateTime": "2023-08-31T07:16:29Z",
  "recorder": {
    "reference": "Practitioner/18858"
  },
  "performer": [ {
    "actor": {
      "reference": "Practitioner/18857"
    }
  } ],
  "onBehalfOf": {
    "reference": "Organization/18852",

```



```

    "display": "Neighborhood Physicians"
  }
}],
"location": {
  "reference": "Location/18854",
  "display": "Pandora"
},
"outcome": {
  "text": "Successfully removed metal fragment from left foot."
}
}

```

Method	Endpoint	Interaction
GET	[base url]/Procedure?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
patient (reference)	Required
patient (reference) and date (date)	Required
patient (reference) and status (code)	Optional
patient (reference) and code (code) and date (date)	Optional

Example Request

Search by patient:

GET: [base url]/ Procedure?patient=18864

Search by patient and date:

GET: [base url]/Procedure?patient=18864&date=2023-08-31T07:16:29Z

Search by patient and status:

GET: [base url]/Procedure?patient=18864&status=completed

Search by patient and code and date:

GET: [base url]/Procedure?patient=18864&date= 2023-08-31T07:16:29Z &code=28190



Encounter

The Encounter resource incorporates the basic encounter information for an individual patient. It records the interaction between a healthcare provider and a patient for the purpose of either accessing the patient's health status or for providing healthcare service. This resource conforms to USCDiv1. Read or Search Interactions can be used to retrieve FHIR Encounter resources in JSON format.

Method	Endpoint	Interaction
GET	[base url]/Encounter/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/Encounter/20379

Example Response

```
{
  "resourceType": "Encounter",
  "id": "20379",
  "meta": {
    "versionId": "1",
    "lastUpdated": "2023-10-12T09:48:02.743+00:00",
    "source": "#OJ2BumpREHAez3KN",
    "profile": [ "http://hl7.org/fhir/us/core/StructureDefinition/us-core-encounter" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
  "extension": [ {
    "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
    "valueDecimal": 1697104022030
  } ],
  "identifier": [ {
    "system": "https://www.curemd.com/system-identifier/CMDGO",
```



```

"value": "Encounter-609"
}],
"status": "in-progress",
"class": {
  "system": "http://terminology.hl7.org/CodeSystem/v3-ActCode",
  "code": "AMB",
  "display": "ambulatory"
},
"type": [ {
  "text": "Progress Note"
}],
"subject": {
  "reference": "Patient/18864"
},
"participant": [ {
  "type": [ {
    "coding": [ {
      "system": "http://terminology.hl7.org/CodeSystem/v3-ParticipationType",
      "code": "PPRF",
      "display": "primary performer"
    } ]
  } ]
},
"period": {
  "start": "2023-10-12T05:46:00Z"
},
"individual": {
  "reference": "Practitioner/18858"
}
}],
"period": {
  "start": "2023-10-12T05:46:00Z"
},
"reasonCode": [ {
  "text": "Consultation"
}],
"location": [ {
  "location": {
    "reference": "Location/18856"
  }
}],
"serviceProvider": {
  "reference": "Organization/18852"
}
}

```

Method	Endpoint	Interaction
GET	[base url]/Encounter?Parameter	Search



Parameters

Parameter Combinations	Support as per US Core
id (string)	Required
patient (reference)	Required
date (date) and patient (reference)	Required
identifier (code)	Optional
patient (reference) and class (code)	Optional
patient (reference) and status (code)	Optional

Example Request

Search by id:

GET: [base url]/Encounter?_id=20379

Search by patient:

GET: [base url]/Encounter?patient=18864

Search by date and patient:

GET: [base url]/Encounter?patient=18864&date=2023-10-12T05:46:00Z

Search by identifier:

GET: [base url]/Encounter?identifier=CMDGO

Search by patient and class:

GET: [base url]/Encounter?patient=18864&class= http://terminology.hl7.org/CodeSystem/v3-ActCode|AMB

Search by patient and status:

GET: [base url]/Encounter?patient=18864&status=in-progress

CarePlan

The CarePlan resource incorporates the planned delivery of care by the practitioners to the concerned patients possibly for a specific condition(s). This resource conforms to USCDiv1. Read or Search Interactions can be used to retrieve FHIR CarePlan resources in JSON format.

Method	Endpoint	Interaction
GET	[base url]/CarePlan/Parameter	Read



Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/CarePlan/20444

Example Response

```
{
  "resourceType": "CarePlan",
  "id": "20444",
  "meta": {
    "versionId": "1",
    "lastUpdated": "2023-10-12T11:48:10.190+00:00",
    "source": "#qjiqJe0c3eP3cnaw",
    "profile": [ "http://hl7.org/fhir/us/core/StructureDefinition/us-core-careplan" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
  "text": {
    "status": "additional",
    "div": "<div xmlns='http://www.w3.org/1999/xhtml'><ul><li>Stop alcohol consumption</li><li>Stop smoking</li><li>Reduce weight by 15 kg</li><li>Reduce cholesterol levels</li></ul></div>"
  },
  "extension": [ {
    "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
    "valueDecimal": 1697111230167
  } ],
  "identifier": [ {
    "system": "https://www.curemd.com/system-identifier/CMDGO",
    "value": "CarePlan-1"
  } ],
  "status": "active",
  "intent": "plan",
  "category": [ {
    "coding": [ {
      "system": "http://hl7.org/fhir/us/core/CodeSystem/careplan-category",
      "code": "assess-plan"
    } ]
  } ],
  "subject": {
    "reference": "Patient/18864"
  }
}
```



```
"created": "2022-03-31T06:07:07Z",
"author": {
  "reference": "Practitioner/18859"
},
"goal": [ {
  "reference": "Goal/20442"
}, {
  "reference": "Goal/20440"
}, {
  "reference": "Goal/20443"
} ]
}
```

Method	Endpoint	Interaction
GET	[base url]/CarePlan?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
patient (reference) and category (code)	Required
patient (reference) and category (code) and date (date)	Optional
patient (reference) and category (code) and status (code)	Optional
patient (reference) and category (code) and status (code) and date (date)	Optional

Example Request

Search by patient and category:

GET: [base url]/CarePlan?patient=18864&category=
http://hl7.org/fhir/us/core/CodeSystem/careplan-category|assess-plan

Search by patient and category and date:

GET: [base url]/CarePlan?patient=18864&category=
http://hl7.org/fhir/us/core/CodeSystem/careplan-category|assess-plan&date=2022-03-31T06:07:07Z

Search by patient and category and status:

GET: [base url]/CarePlan?patient=18864&category=
http://hl7.org/fhir/us/core/CodeSystem/careplan-category|assess-plan&status=active

Search by patient and category and status and date:

GET: [base url]/CarePlan?patient=18864&category=
http://hl7.org/fhir/us/core/CodeSystem/careplan-category|assess-plan&status=active&date=2022-03-31T06:07:07Z



Organization

The Organization resource incorporates the basic information of the organization associated with a provider or a patient. This resource conforms to USCDiv1. Read or Search Interactions can be used to retrieve FHIR Organization resources in JSON format.

Method	Endpoint	Interaction
GET	[base url]/Organization/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/Organization/18852

Example Response

```
{
  "resourceType": "Organization",
  "id": "18852",
  "meta": {
    "versionId": "2",
    "lastUpdated": "2023-10-12T09:29:23.970+00:00",
    "source": "#xsJqPj7OEeMiiPDM",
    "profile": [ "http://hl7.org/fhir/us/core/StructureDefinition/us-core-organization" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
  "extension": [ {
    "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
    "valueDecimal": 1697102904090
  } ],
  "identifier": [ {
    "system": "https://www.curemd.com/system-identifier/CMDGO",
    "value": "Organization-2"
  }, {
    "system": "http://hl7.org/fhir/sid/us-npi",
    "value": "1245319599"
  } ],
}
```



```

"active": true,
"type": [ {
  "coding": [ {
    "system": "http://terminology.hl7.org/CodeSystem/organization-type",
    "code": "prov",
    "display": "Healthcare Provider"
  } ]
},
],
"name": "Neighborhood Physicians",
"telecom": [ {
  "system": "phone",
  "value": "5555551003"
}, {
  "system": "fax",
  "value": "1232441234"
}, {
  "system": "email",
  "value": "mark@curemd.com"
}, {
  "system": "url",
  "value": "mark.com"
} ],
"address": [ {
  "text": "24751 BEAVERTON CRAVEN OR 97006 US",
  "line": [ "24751"],
  "city": "BEAVERTON",
  "district": "CRAVEN",
  "state": "OR",
  "postalCode": "97006",
  "country": "US"
} ]
}

```

Method	Endpoint	Interaction
GET	[base url]/Organization?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
name (string)	Required
address (string)	Required

Example Request

Search by name:

GET: [base url]/Organization?name=Neighborhood Physicians



Search by address:

GET: [base url]/Organization?address=24751 BEAVERTON CRAVEN OR 97006 US

Device

The Device resource records the information of all the current and old implantable devices associated with a patient. This resource conforms to USCDiv1. Read or Search Interactions can be used to retrieve FHIR Device resources in JSON format.

Method	Endpoint	Interaction
GET	[base url]/Device/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/Device/20445

Example Response

```
{
  "resourceType": "Device",
  "id": "20445",
  "meta": {
    "versionId": "2",
    "lastUpdated": "2023-10-12T12:38:46.685+00:00",
    "source": "#L43XDFpenGzoda1z",
    "profile": [ "http://hl7.org/fhir/us/core/StructureDefinition/us-core-implantable-device" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
  "extension": [ {
    "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
    "valueDecimal": 1697114267183
  } ],
  "identifier": [ {
```



```

"system": "https://www.curemd.com/system-identifier/CMDGO",
"value": "Device-14"
}],
"udiCarrier": [ {
  "deviceIdentifier": "W4146EB0003T0475",
  "carrierHRF": "=/W4146EB0003T0475=,000025=A99971312345600=>014032=}013032&,1000000000000XYZ123",
  "entryType": "manual"
}],
"status": "active",
"distinctIdentifier": "A99971312345600",
"manufacturer": "Vivorte, Inc",
"manufactureDate": "2013-02-01T12:00:00Z",
"expirationDate": "2014-02-01T12:00:00Z",
"lotNumber": "000000000000XYZ123",
"serialNumber": "000025",
"deviceName": [ {
  "name": "Calcium compound bone void filler with DBM (3 cc), previously sold under Trabexus® EB brand name.",
  "type": "manufacturer-name"
}],
"modelName": "3 cc",
"type": {
  "coding": [ {
    "system": "http://www.snomed.org/",
    "code": "701668008",
    "display": "Cadaveric-donor/synthetic mineral bone graft (physical object)"
  } ]
},
"version": [ {
  "value": "3 cc"
}],
"patient": {
  "reference": "Patient/18864"
}
}

```

Method	Endpoint	Interaction
GET	[base url]/Device?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
patient (reference)	Required
patient (reference) and type (code)	Support



Example Request

Search by patient:

GET: [base url]/Device?patient=18864

Search by patient and type:

GET: [base url]/Device?patient=18864&type=701668008

Goal

The Goal resource describes a specific health state of a patient that needs to be achieved over a certain period of time. This resource conforms to USCDiv1. Read or Search Interactions can be used to retrieve FHIR Goal resources in JSON format.

Method	Endpoint	Interaction
GET	[base url]/Goal/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/Goal/20442

Example Response

```
{
  "resourceType": "Goal",
  "id": "20442",
  "meta": {
    "versionId": "1",
    "lastUpdated": "2023-10-12T11:45:07.272+00:00",
    "source": "#G4qUml649ND7gVdT",
    "profile": [ "http://hl7.org/fhir/us/core/StructureDefinition/us-core-goal" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
  "extension": [ {
```



```

"url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
"valueDecimal": 1697111046960
}],
"identifier": [ {
  "system": "https://www.curemd.com/system-identifier/CMDGO",
  "value": "Goal-1"
}],
"lifecycleStatus": "completed",
"description": {
  "text": "Decrease Smoking"
},
"subject": {
  "reference": "Patient/18864"
},
"target": [ {
  "measure": {
    "text": "Patient has to reduce their smoking habit to a maximum of 2 cigarettes per day"
  },
  "dueDate": "2022-12-31"
}],
"statusDate": "2022-04-25"
}

```

Method	Endpoint	Interaction
GET	[base url]/Goal?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
patient	Required
patient and lifecycle-status	Optional
patient and target-date	Optional

Example Request

Search by patient:

GET: [base url]/Goal?patient=18864

Search by patient and lifecycle-status:

GET: [base url]/Goal?patient=18864&lifecycle-status=completed

Search by patient and target-date:

GET: [base url]/Goal?patient=18864&target-date=2022-12-31



Provenance

Provenance resources are a record-keeping assertion that gathers information about the context in which the information in a resource was obtained. Provenance is available for all Resources listed in the US Core 3.1.1 Provenance implementation guidance. This resource conforms to USCDiv1. Read or Search Interactions can be used to retrieve FHIR Provenance resources in JSON format.

Method	Endpoint	Interaction
GET	[base url]/Provenance/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/Provenance/20402

Example Response

```
{
  "resourceType": "Provenance",
  "id": "20402",
  "meta": {
    "versionId": "1",
    "lastUpdated": "2023-10-12T09:53:08.191+00:00",
    "source": "#Zt9x0CvrEmQIk9v7",
    "profile": [ "http://hl7.org/fhir/us/core/StructureDefinition/us-core-provenance" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
  "extension": [ {
    "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
    "valueDecimal": 1697104327963
  } ],
  "target": [ {
```



```

    "reference": "Observation/20401"
  },
  "recorded": "2023-10-12T05:52:07Z",
  "agent": [ {
    "type": {
      "coding": [ {
        "system": "http://terminology.hl7.org/CodeSystem/provenance-participant-type",
        "code": "author",
        "display": "Author"
      } ]
    }
  },
  "who": {
    "reference": "Practitioner/18858"
  },
  "onBehalfOf": {
    "reference": "Organization/18852"
  }
} ]
}

```

Method	Endpoint	Interaction
GET	[base url]/[Resource]?Parameters	Search

Parameters

Parameter Combinations	Support as per US Core
patient id (string) and <code>_revinclude=Provenance:target</code>	Required
id of [Resource] (string) and <code>_revinclude=Provenance:target</code>	Required

Example Request

Search by patient id and `_revinclude=Provenance:target`:

GET: [base url]/Immunization?patient=18864&_revinclude=Provenance:target

Search by id of [Resource] and `_revinclude=Provenance:target`:

GET: [base url]/Observation?_id=20401&_revinclude=Provenance:target



Document Reference

A DocumentReference resource is used to index a document, clinical note, and other binary objects to make them available to a healthcare system. This resource conforms to USCDiv1. Read or Search Interactions can be used to retrieve FHIR DocumentReference resources in JSON format.

Method	Endpoint	Interaction
GET	[base url]/DocumentReference/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/DocumentReference/20400

Example Response

```
{
  "resourceType": "DocumentReference",
  "id": "20400",
  "meta": {
    "versionId": "1",
    "lastUpdated": "2023-10-12T09:53:03.770+00:00",
    "source": "#DPJYwoM3PCZqpyznz",
    "profile": [
      "http://hl7.org/fhir/us/core/StructureDefinition/us-core-documentreference"
    ],
    "tag": [
      {
        "system": "https://www.curemd.com/tenant",
        "code": "CMDGO"
      }
    ]
  },
  "extension": [
    {
      "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
      "valueDecimal": 1697104022037
    }
  ],
}
```




Example Request

Search by patient:

GET: [base url]/DocumentReference?patient=18864

Search by patient and category:

GET: [base url]/DocumentReference?patient=18864&category=http://hl7.org/fhir/us/core/CodeSystem/us-core-documentreference-category|clinical-note

Search by patient and category and date:

GET: [base url]/DocumentReference?patient=18864&category=http://hl7.org/fhir/us/core/CodeSystem/us-core-documentreference-category|clinical-note&date=ge2023

Search by patient and type:

GET: [base url]/DocumentReference?patient=18864&type=http://loinc.org|11506-3

Search by patient and status:

GET: [base url]/DocumentReference?patient=18864&status=current

Search by patient and type and period:

GET: [base url]/DocumentReference?patient=18864&type=http://loinc.org|11506-3&period=ge2023

Location

Details and position information for a physical place where healthcare services are provided. This resource conforms to USCDIV1. Read or Search Interactions can be used to retrieve FHIR Location resources in JSON format.

Method	Endpoint	Interaction
GET	[base url]/Location/Parameter	Read

Parameters

Parameter	Required
id (string)	Required



Example Request

GET: [base url]/Location/18856

Example Response

```
{
  "resourceType": "Location",
  "id": "18856",
  "meta": {
    "versionId": "2",
    "lastUpdated": "2023-10-12T09:30:56.711+00:00",
    "source": "#bfNRGKUeD6FBWKdn",
    "profile": [ "http://hl7.org/fhir/us/core/StructureDefinition/us-core-location" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
  "extension": [ {
    "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
    "valueDecimal": 1697102997327
  } ],
  "identifier": [ {
    "system": "https://www.curemd.com/system-identifier/CMDGO",
    "value": "Location-15"
  } ],
  "status": "active",
  "name": "Sunset Family Practice",
  "description": "12345670",
  "mode": "instance",
  "telecom": [ {
    "system": "phone",
    "value": "543555-244"
  } ],
  "address": {
    "text": "108 River Side Boulevard AZ Any Town US",
    "line": [ "108 River Side Boulevard" ],
    "city": "Any Town",
    "state": "AZ",
    "postalCode": "87020",
    "country": "US"
  },
  "managingOrganization": {
    "reference": "Organization/18852"
  }
}
```



Method	Endpoint	Interaction
GET	[base url]/Location?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
name (string)	Required
address (string)	Required
address-city (string)	Optional
address-state (string)	Optional
address-postalcode (string)	Optional

Example Request

Search by name:

GET: [base url]/Location?name=Sunset Family Practice

Search by address:

GET: [base url]/Location?address=108 River Side Boulevard Lake City AZ 87020 US

Search by address-city:

GET: [base url]/Location?address-city=Lake City

Search by address-city:

GET: [base url]/Location?address-state=AZ

Search by address-city:

GET: [base url]/Location?address-postalcode=87020

Diagnostic Report

A Diagnostic Report is the set of information that is typically provided by a diagnostic service when investigations are complete. This resource conforms to USCDiv1. The following two profiles are supported for this Resource:

- DiagnosticReport Profile for Laboratory Results Reporting
- DiagnosticReport Profile for Report and Note exchange

Read or Search Interactions can be used to retrieve FHIR DiagnosticReport resources in JSON format.



Diagnostic Report for Laboratory Results Reporting

Method	Endpoint	Interaction
GET	[base url]/DiagnosticReport/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/DiagnosticReport/20427

Example Response

```
{
  "resourceType": "DiagnosticReport",
  "id": "20427",
  "meta": {
    "versionId": "2",
    "lastUpdated": "2023-10-12T11:05:48.407+00:00",
    "source": "#D9IMn8mWJD3IBM19",
    "profile": [ "http://hl7.org/fhir/us/core/StructureDefinition/us-core-diagnosticreport-lab" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
  "extension": [ {
    "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
    "valueDecimal": 1697108300543
  } ],
  "identifier": [ {
    "system": "https://www.curemd.com/system-identifier/CMDGO",
    "value": "DiagnosticReportForLabResults-824"
  } ],
  "status": "final",
  "category": [ {
    "coding": [ {
      "system": "http://terminology.hl7.org/CodeSystem/v2-0074",
      "code": "LAB",
      "display": "Laboratory"
    } ]
  } ],
  "code": {
```



```

"coding": [ {
  "system": "http://loinc.org",
  "code": "90224-7"
}, {
  "system": "urn:oid:2.16.840.1.113883.3.669.101.123.1",
  "code": "000455",
  "display": "Thyroid Panel"
}],
"text": "Thyroid Panel"
},
"subject": {
  "reference": "Patient/18864"
},
"effectiveDateTime": "2023-10-12T06:58:00Z",
"issued": "2023-10-12T06:58:20Z",
"performer": [ {
  "reference": "Practitioner/18860"
}],
"result": [ {
  "reference": "Observation/20425"
}, {
  "reference": "Observation/20424"
}, {
  "reference": "Observation/20422"
}, {
  "reference": "Observation/20420"
} ]
}

```

Method	Endpoint	Interaction
GET	[base url]/DiagnosticReport?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
patient (reference)	Required
patient (reference) and category (uri)	Required
patient (reference) and code (code)	Required
patient (reference) and category (uri) and date (date)	Required
patient (reference) status (string)	Optional
patient (reference) and code (code) and date(date)	Optional

Example Request

Search by patient:

GET: [base url]/DiagnosticReport?patient=18864

Search by patient and category:



GET: [base url]/DiagnosticReport?patient=18864
&category=http://terminology.hl7.org/CodeSystem/v2-0074|LAB

Search by patient and code:

GET: [base url]/DiagnosticReport?patient=18864&code=http://loinc.org|90224-7

Search by patient and category and date:

GET: [base url]/DiagnosticReport?patient=18864
&category=http://terminology.hl7.org/CodeSystem/v2-0074|LAB&date=2023-10-12T06:58:00Z

Search by patient and status:

GET: [base url]/DiagnosticReport?patient=18864&status=final

Search by patient and code and date:

GET: [base url]/DiagnosticReport?patient=18864&code=http://loinc.org|90224-7&date=2023-10-12T06:58:00Z

Diagnostic Report for Report & Note Exchange

Method	Endpoint	Interaction
GET	[base url]/DiagnosticReport/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/DiagnosticReport/20419

Example Response

```
{
  "resourceType": "DiagnosticReport",
  "id": "20419",
  "meta": {
    "versionId": "4",
    "lastUpdated": "2023-10-16T07:19:11.444+00:00",
    "source": "#DY1gVcOf8J7fEnAN",
  }
}
```



```

"profile": [ "http://hl7.org/fhir/us/core/StructureDefinition/us-core-diagnosticreport-note" ],
"tag": [ {
  "system": "https://www.curemd.com/tenant",
  "code": "CMDGO"
} ]
},
"extension": [ {
  "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
  "valueDecimal": 1697440693480
} ],
"identifier": [ {
  "system": "https://www.curemd.com/system-identifier/CMDGO",
  "value": "DiagnosticReportForNoteExchange-824"
} ],
"status": "final",
"category": [ {
  "coding": [ {
    "system": "http://loinc.org",
    "code": "LP7839-6",
    "display": "Pathology"
  } ]
} ],
"code": {
  "coding": [ {
    "system": "http://loinc.org",
    "code": "90224-7",
    "display": "Thyroid Panel"
  } ],
  {
    "system": "urn:oid:2.16.840.1.113883.3.669.101.123.1",
    "code": "000455",
    "display": "Thyroid Panel"
  } ],
  "text": "Thyroid Panel"
},
"subject": {
  "reference": "Patient/18864"
},
"effectiveDateTime": "2023-10-12T06:58:00Z",
"issued": "2023-10-12T06:58:00Z",
"performer": [ {
  "reference": "Practitioner/18860"
} ],
"presentedForm": [ {
  "contentType": "image/jpeg",
  "data":
  "iVBORw0KGgoAAAANSUUhEUgAAASwAAAEsCAYAAAB5fY51AAAABmJLR0QA/wD/AP+gvaeTAABIA0IEQVR42u29aZNkx3UI
  eK77WyoZvtSGqsJSWAgCEBeRLYmi1K1Rqxf19JjNh/nUf3LMeszaJLXULY7EVrdEDSmKC0i...",
  "title": "lovepik-small-planet-png-image_401595389_wh300"
} ]
}

```



Method	Endpoint	Interaction
GET	[base url]/DiagnsoticReport?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
patient (reference)	Required
patient (reference) and category (uri)	Required
patient (reference) and code (code)	Required
patient (reference) and category (uri) and date (date)	Required
patient (reference) status (string)	Optional
patient (reference) and code (code) and date(date)	Optional

Example Request

Search by patient:

GET: [base url]/DiagnosticReport?patient=18864

Search by patient and category:

GET: [base url]/DiagnosticReport?patient=18864 &category=http://loinc.org|LP7839-6

Search by patient and code:

GET: [base url]/DiagnosticReport?patient=18864&code=http://loinc.org|90224-7

Search by patient and category and date:

GET: [base url]/DiagnosticReport?patient=18864 &category=http://loinc.org|LP7839-6&date=2023-10-12T06:58:00Z

Search by patient and status:

GET: [base url]/DiagnosticReport?patient=18864&status=final

Search by patient and code and date:

GET: [base url]/DiagnosticReport?patient=18864&code=http://loinc.org|90224-7&date=2023-10-12T06:58:00Z



Care Team

The Care Team includes all the people and organizations who plan to participate in the coordination and delivery of care for a patient. This resource conforms to USCDiv1. Read or Search Interactions can be used to retrieve FHIR CareTeam resources in JSON format.

Method	Endpoint	Interaction
GET	[base url]/CareTeam/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/CareTeam/20441

Example Response

```
{
  "resourceType": "CareTeam",
  "id": "20441",
  "meta": {
    "versionId": "1",
    "lastUpdated": "2023-10-12T11:37:43.031+00:00",
    "source": "#3Gk17IQGpDwXUJGP",
    "profile": [ "http://hl7.org/fhir/us/core/StructureDefinition/us-core-careteam" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
  "extension": [ {
    "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
    "valueDecimal": 1697110603157
  } ],
  "identifier": [ {
    "system": "https://www.curemd.com/system-identifier/CMDGO",
    "value": "CareTeam-494"
  } ],
  "status": "active",
  "category": [ {
    "coding": [ {
      "system": "http://loinc.org",
      "code": "LA28865-6",

```



```

    "display": "Longitudinal care-coordination focused care team"
  }],
  "text": "Longitudinal care-coordination focused care team"
}],
"subject": {
  "reference": "Patient/18864"
},
"participant": [ {
  "role": [ {
    "text": "Primary Care Provider"
  } ],
  "member": {
    "reference": "Practitioner/18858"
  }
}, {
  "role": [ {
    "text": "Rendering Provider"
  } ],
  "member": {
    "reference": "Practitioner/18860"
  }
}, {
  "role": [ {
    "text": "Managing Organization"
  } ],
  "member": {
    "reference": "Organization/18852"
  }
}
}
}
}

```

Method	Endpoint	Interaction
GET	[base url]/CareTeam?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
patient (reference) and status (code)	Required

Example Request

Search by patient and status:

GET: [base url]/CareTeam?patient=18864&status=active



Condition

The Condition resource is used to record detailed information about a condition, problem, diagnosis, or other event, situation, issue, or clinical concept that has risen to a level of concern. Often times, a condition is about a clinician's assessment and assertion of a particular aspect of a patient's state of health. This resource conforms to USCDiv1. Read or Search Interactions can be used to retrieve FHIR Condition resources in JSON format.

Method	Endpoint	Interaction
GET	[base url]/Condition/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/Condition/20418

Example Response

```
{
  "resourceType": "Condition",
  "id": "20418",
  "meta": {
    "versionId": "1",
    "lastUpdated": "2023-10-12T10:19:08.083+00:00",
    "source": "#9RERqjx8SlolSY6F",
    "profile": [ "http://hl7.org/fhir/us/core/StructureDefinition/us-core-condition" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
  "text": {
    "status": "generated",
    "div": "<div xmlns='http://www.w3.org/1999/xhtml'><p><b>Generated Narrative</b></p><p><b>Diagnosis</b>: Classical cholera</p><p><b>Clinical Status</b>: Active</p><p><b>Verification Status</b>: Confirmed</p><p><b>Category</b>: Problem List Item</p><p><b>Onset</b>: 2-Oct-2023</p><p><b>Severity</b>: Mild</p><p><b>Recorded Date</b>: 2023-10-02T06:58:47Z</p></div>"
  },
  "extension": [ {
    "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
    "valueDecimal": 1697105888373
  } ],
}
```



```

"identifier": [ {
  "system": "https://www.curemd.com/system-identifier/CMDGO",
  "value": "Condition-1090"
}],
"clinicalStatus": {
  "coding": [ {
    "system": "http://terminology.hl7.org/CodeSystem/condition-clinical",
    "code": "active",
    "display": "Active"
  } ]
},
"verificationStatus": {
  "coding": [ {
    "system": "http://terminology.hl7.org/CodeSystem/condition-ver-status",
    "code": "confirmed",
    "display": "Confirmed"
  } ]
},
"category": [ {
  "coding": [ {
    "system": "http://terminology.hl7.org/CodeSystem/condition-category",
    "code": "problem-list-item",
    "display": "Problem List Item"
  } ]
}],
"severity": {
  "coding": [ {
    "system": "http://www.snomed.org/",
    "code": "255604002",
    "display": "Mild"
  } ],
  "text": "Mild"
},
"code": {
  "coding": [ {
    "system": "http://hl7.org/fhir/sid/icd-10-cm",
    "code": "A00.0",
    "display": "Classical cholera"
  } ],
  "text": "Classical cholera"
},
"subject": {
  "reference": "Patient/18864"
},
"onsetString": "2-Oct-2023",
"recordedDate": "2023-10-02T06:58:47Z",
"recorder": {
  "reference": "Practitioner/18863"
}
}

```

Method	Endpoint	Interaction
GET	[base url]/Condition?Parameter	Search



Parameters

Parameter Combinations	Support as per US Core
patient (reference)	Required
patient (reference) and clinical-status (code)	Optional
patient (reference) and category (code)	Optional
patient (reference) and code (code)	Optional
patient (reference) and onset (code)	Optional

Example Request

Search by patient:

GET: [base url]/Condition?patient=18864

Search by patient and clinical-status:

GET: [base url]/Condition? patient=18864&clinical-status=http://terminology.hl7.org/CodeSystem/condition-clinical|active

Search by patient and category:

GET: [base url]/Condition?patient=18864&category=http://terminology.hl7.org/CodeSystem/condition-category|problem-list-item

Search by patient and code:

GET: [base url]/Condition?patient=18864&code=http://hl7.org/fhir/sid/icd-10-cm|A00.0

Pregnancy Status

Method	Endpoint	Interaction
GET	[base url]/Condition/Parameter	Read

Parameters

Parameter	Required
id (string)	Required



Example Request

GET: [base url]/Condition/21251

Example Response

```
{
  "resourceType": "Condition",
  "id": "21251",
  "meta": {
    "versionId": "1",
    "lastUpdated": "2023-11-08T18:42:36.409+00:00",
    "source": "#guMv331pdPfl9NAy",
    "profile": [ "http://hl7.org/fhir/us/core/StructureDefinition/us-core-condition" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
  "text": {
    "status": "generated",
    "div": "<div xmlns=\"http://www.w3.org/1999/xhtml\"><p><b>Generated Narrative</b></p><p><b>Diagnosis</b>:
Pregnancy summary</p><p><b>Clinical Status</b>: Active</p><p><b>Verification Status</b>:
Confirmed</p><p><b>Category</b>: Problem List Item</p><p><b>Onset</b>: 08/09/2023</p><p><b>Recorded
Date</b>: 2023-11-08T09:57:25Z</p></div>"
  },
  "extension": [ {
    "url": "https://fhir.curemd.com:3000/extensions/ResourceInputTime",
    "valueDecimal": 1696859845217
  } ],
  "identifier": [ {
    "system": "https://www.curemd.com/system-identifier/CMDGO",
    "value": "PregnancyStatus-54"
  } ],
  "clinicalStatus": {
    "coding": [ {
      "system": "http://terminology.hl7.org/CodeSystem/condition-clinical",
      "code": "active",
      "display": "Active"
    } ]
  },
  "verificationStatus": {
    "coding": [ {
      "system": "http://terminology.hl7.org/CodeSystem/condition-ver-status",
      "code": "confirmed",
      "display": "Confirmed"
    } ]
  },
  "category": [ {
    "coding": [ {
```



```

    "system": "http://terminology.hl7.org/CodeSystem/condition-category",
    "code": "problem-list-item",
    "display": "Problem List Item"
  }
},
"code": {
  "coding": [ {
    "system": "http://loinc.org",
    "code": "90767-5",
    "display": "Pregnancy summary Document"
  }
],
"subject": {
  "reference": "Patient/21234"
},
"onsetDateTime": "2023-08-09T12:00:00Z",
"recordedDate": "2023-11-08T09:57:25Z",
"recorder": {
  "reference": "Practitioner/18863"
}
}
}

```

Method	Endpoint	Interaction
GET	[base url]/Condition?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
patient (reference)	Required
patient (reference) and clinical-status (code)	Optional
patient (reference) and category (code)	Optional
patient (reference) and code (code)	Optional
patient (reference) and onset (code)	Optional

Example Request

Search by patient:

GET: [base url]/Condition?patient=21234

Search by patient and clinical-status:

GET: [base url]/Condition? patient=21234&clinical-status=http://terminology.hl7.org/CodeSystem/condition-clinical|active

Search by patient and category:



GET: [base url]/Condition?patient=21234&category=http://terminology.hl7.org/CodeSystem/condition-category|problem-list-item

Search by patient and code:

GET: [base url]/Condition?patient=21234&code=http://loinc.org|90767-5

Immunization

The Immunization resource is intended to cover the recording of current and historical administration of vaccines to patients across all healthcare disciplines in all care settings and all regions. This resource conforms to USCDIv1. Read or Search Interactions can be used to retrieve FHIR Immunization resources in JSON format.

Method	Endpoint	Interaction
GET	[base url]/Immunization/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/Immunization/20439

Example Response

```
{
  "resourceType": "Immunization",
  "id": "20439",
  "meta": {
    "versionId": "2",
    "lastUpdated": "2023-10-12T11:27:27.332+00:00",
    "source": "#J44TfWpjZiyIWnVs",
    "profile": [ "http://hl7.org/fhir/us/core/StructureDefinition/us-core-immunization" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  }
},
```



```

"extension": [ {
  "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
  "valueDecimal": 1697109986900
}],
"identifier": [ {
  "system": "https://www.curemd.com/system-identifier/CMDGO",
  "value": "Immunization-121"
}],
"status": "completed",
"vaccineCode": {
  "coding": [ {
    "system": "http://hl7.org/fhir/sid/cvx",
    "code": "207",
    "display": "COVID-19, mRNA, LNP-S, PF, 100 mcg/0.5mL dose or 50 mcg/0.25mL dose"
  }, {
    "system": "http://hl7.org/fhir/sid/ndc",
    "code": "80777-0273-10"
  } ],
  "text": "Spikevax"
},
"patient": {
  "reference": "Patient/18864"
},
"occurrenceDateTime": "2022-05-24T01:30:00Z",
"recorded": "2022-05-24T01:30:57Z",
"primarySource": true,
"lotNumber": "123",
"expirationDate": "2023-02-02",
"site": {
  "text": "Right Arm"
},
"route": {
  "text": "Intramuscular"
},
"doseQuantity": {
  "value": 0.5,
  "unit": "ml"
},
"performer": [ {
  "function": {
    "coding": [ {
      "system": "http://terminology.hl7.org/CodeSystem/v2-0443",
      "code": "OP",
      "display": "Ordering Provider"
    } ]
  }
} ],
"actor": {
  "reference": "Practitioner/18858"
},
{
  "function": {
    "coding": [ {
      "system": "http://terminology.hl7.org/CodeSystem/v2-0443",
      "code": "AP",
      "display": "Administering Provider"
    } ]
  }
}

```



```

    }]
  },
  "actor": {
    "reference": "Practitioner/18858"
  }
}],
"note": [ {
  "authorReference": {
    "reference": "Practitioner/18858"
  },
  "time": "2022-05-24T01:30:57Z",
  "text": "1st Dose of Janssen administered to patient on 5/24/2022"
}],
"education": [ {
  "documentType": "COVID-19 Moderna Vaccine EUA Recipient-Caregiver Adult Fact Sheet",
  "publicationDate": "2022-12-08T12:00:00Z",
  "presentationDate": "2022-05-24T12:00:00Z"
}]
}

```

Method	Endpoint	Interaction
GET	[base url]/Immunization?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
patient (reference)	Required
patient (reference) and date (date)	Optional
patient (reference) and status (code)	Optional

Example Request

Search by patient:

GET: [base url]/Immunization?patient=18864

Search by patient and date:

GET: [base url]/Immunization?patient=18864&date=2022-05-24T01:30:00Z

Search by patient and status:

GET: [base url]/Immunization?patient=18864& status=completed



Medication

The Medication resource is primarily used for the identification and definition of a medication for the purposes of prescribing, dispensing, and administering a medication as well as for making statements about medication use. This resource conforms to USCDIv1. Read or Search Interactions can be used to retrieve FHIR Medication resources in JSON format.

Method	Endpoint	Interaction
GET	[base url]/Medication/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/Medication/20397

Example Response

```
{
  "resourceType": "Medication",
  "id": "20397",
  "meta": {
    "versionId": "1",
    "lastUpdated": "2023-10-12T09:51:51.817+00:00",
    "source": "#Msj7ha0deDkmSVpy",
    "profile": [ "http://hl7.org/fhir/us/core/StructureDefinition/us-core-medication" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
  "extension": [ {
    "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
    "valueDecimal": 1697104252070
  } ],
  "identifier": [ {
    "system": "https://www.curemd.com/system-identifier/CMDGO",
    "value": "Medication-86006"
  } ],
  "code": {
    "coding": [ {
```



```

"system": "http://hl7.org/fhir/sid/ndc",
"code": "50458029004",
"display": "Sporanox Oral Capsule 100 MG"
}],
"text": "Sporanox 100 MG Oral Capsule"
}
}

```

Medication Request

An order or request for both supply of the medication and the instructions for administration of the medication to a patient. This resource conforms to USCDiv1. Read or Search Interactions can be used to retrieve FHIR MedicationRequest resources in JSON format.

Method	Endpoint	Interaction
GET	[base url]/MedicationRequest/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/MedicationRequest/20398

Example Response

```

{
  "resourceType": "MedicationRequest",
  "id": "20398",
  "meta": {
    "versionId": "1",
    "lastUpdated": "2023-10-12T09:51:51.988+00:00",
    "source": "#a6VaVKwXKcaVSCDD",
    "profile": [ "http://hl7.org/fhir/us/core/StructureDefinition/us-core-medicationrequest" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
  "extension": [ {
    "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
    "valueDecimal": 1697104252063
  } ],
}

```



```

"identifier": [ {
  "system": "https://www.curemd.com/system-identifier/CMDGO",
  "value": "MedicationRequest-638"
}],
"status": "active",
"intent": "order",
"category": [ {
  "coding": [ {
    "system": "http://terminology.hl7.org/CodeSystem/medicationrequest-category",
    "code": "outpatient",
    "display": "Outpatient"
  } ],
  "text": "Outpatient"
}],
"reportedBoolean": false,
"medicationReference": {
  "reference": "Medication/20397"
},
"subject": {
  "reference": "Patient/18864"
},
"encounter": {
  "reference": "Encounter/20379"
},
"authoredOn": "2023-10-12T05:50:51Z",
"requester": {
  "reference": "Practitioner/18858"
},
"recorder": {
  "reference": "Practitioner/18858"
},
"dosageInstruction": [ {
  "timing": {
    "repeat": {
      "boundsPeriod": {
        "start": "2023-10-12T05:50:51Z",
        "end": "2023-10-27T05:50:51Z"
      }
    }
  },
  "code": {
    "text": "daily"
  }
},
"route": {
  "text": "Oral"
},
"doseAndRate": [ {
  "type": {
    "coding": [ {
      "system": "http://terminology.hl7.org/CodeSystem/dose-rate-type",
      "code": "ordered",
      "display": "Ordered"
    } ],
    "text": "Ordered"
  }
},

```




```

"doseQuantity": {
  "value": 2,
  "unit": "Capsule(s)"
},
"rateRatio": {
  "numerator": {
    "value": 2,
    "unit": "Capsule(s)"
  },
  "denominator": {
    "value": 1,
    "unit": "day",
    "system": "http://unitsofmeasure.org",
    "code": "d"
  }
}
}]
}],
"dispenseRequest": {
  "initialFill": {
    "quantity": {
      "value": 30,
      "unit": "Capsule(s)"
    },
    "duration": {
      "value": 15,
      "unit": "Day(s)",
      "system": "http://unitsofmeasure.org",
      "code": "Day(s)"
    }
  },
  "numberOfRepeatsAllowed": 0,
  "quantity": {
    "value": 30,
    "unit": "Capsule(s)"
  },
  "expectedSupplyDuration": {
    "value": 15,
    "unit": "Day(s)"
  }
}
}
}

```

Method	Endpoint	Interaction
GET	[base url]/MedicationRequest?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
patient (reference) and intent (code)	Required
patient (reference) and intent (code) and status (reference)	Required



patient (reference) and intent (code) and encounter (code)	Optional
patient (reference) and intent (code) and authoredon (date)	Optional

Example Request

Search by patient and intent:

GET: [base url]/MedicationRequest?patient=18864&intent=order

Search by patient and intent and status:

GET: [base url]/MedicationRequest?patient=18864&intent=proposal&status=active

Search by patient and intent and encounter:

GET: [base url]/MedicationRequest?patient=18864&intent=order&encounter=20379

Search by patient and intent and authoredon:

GET: [base url]/MedicationRequest?patient=18864&intent=order&authoredon=2023-10-12T05:50:51Z

Service Request

An order or request for a service to be performed, encompassing orders for diagnostic or therapeutic procedures provided by healthcare professionals. This resource conforms to USCDiv2. Read or Search Interactions can be used to retrieve FHIR ServiceRequest resources in JSON format.

Method	Endpoint	Interaction
GET	[base url]/ ServiceRequest/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/ServiceRequest/24666

Example Response



```
{
  "resourceType": "ServiceRequest",
  "id": "24666",
  "meta": {
    "versionId": "2",
    "lastUpdated": "2024-04-15T12:48:01.014+00:00",
    "source": "#OJfIBgtjt6yWsRe",
    "profile": [ "http://hl7.org/fhir/us/core/StructureDefinition/us-core-servicerequest" ],
    "tag": [ {
      "system": "https://www.curemd.com/tenant",
      "code": "CMDGO"
    } ]
  },
  "extension": [ {
    "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
    "valueDecimal": 1713185207310
  } ],
  "identifier": [ {
    "system": "https://www.curemd.com/system-identifier/CMDGO",
    "value": "ServiceRequest-1007"
  } ],
  "status": "completed",
  "intent": "order",
  "category": [ {
    "coding": [ {
      "system": "http://snomed.info/sct",
      "code": "108252007",
      "display": "Laboratory procedure"
    } ]
  } ],
  "code": {
    "coding": [ {
      "system": "http://loinc.org",
      "code": "82179-3"
    } ],
    {
      "system": "urn:oid:2.16.840.1.113883.3.669.101.123.1",
      "code": "82179-3",
      "display": "Bordetella pertussis.pertussis toxin promoter region [Presence] in Nasopharynx by NAA with non-probe"
    }
  ],
  "text": "Bordetella pertussis.pertussis toxin promoter region [Presence] in Nasopharynx by NAA with non-probe"
},
  "subject": {
    "reference": "Patient/24651"
  },
  "occurrencePeriod": {
    "start": "2024-04-15T08:45:00Z"
  },
  "authoredOn": "2024-04-15T08:46:34Z",
  "requester": {
    "reference": "Practitioner/18863"
  },
  "locationReference": [ {
    "reference": "Location/20475"
  } ]
}
```



Method	Endpoint	Interaction
GET	[base url]/ ServiceRequest?Parameter	Search

Parameters

Parameter Combinations	Support as per US Core
patient (reference)	Required
id (id) and _id (id)	Required
patient (reference) and category (uri)	Required
patient (reference) and code (code)	Required
patient (reference) and category (uri) and authored (date)	Required
patient (reference) and status (code)	Optional
patient (reference) and code (code) and authored (date)	Optional

Example Request

Search by patient:

GET: [base url]/ServiceRequest?patient=24651

Search by id AND _id:

GET: [base url]/ServiceRequest/24666

Or

GET: [base url]/ServiceRequest/?_id=24666

Search by patient and category:

GET: [base url]/ServiceRequest?patient=24651&category=http://snomed.info/sct|108252007

Search by patient and code:

GET: [base url]/ServiceRequest?patient=24651&code=http://loinc.org|82179-3

Search by patient and category and authored:

GET: [base url]/ServiceRequest?patient=24651&category=http://snomed.info/sct|108252007
&date=ge2010-01-14T00:00:00Z

Search by patient and status:

GET: [base url]/ServiceRequest?patient=24651&status=completed



Search by patient and code and authored:

GET: [base url]/ServiceRequest?patient=24651& code=http://loinc.org|82179-3date=ge2010-01-14T00:00:00Z

Appointment

Appointment Resources provide information about a planned meeting that may be in the future or past. This Resource conforms to the FHIR R4 specification. Read or Search Interactions can be used to retrieve FHIR Appointment resources in JSON format.

Method	Endpoint	Interaction
GET	[base url]/Appointment/Parameter	Read

Parameters

Parameter	Required
id (string)	Required

Example Request

GET: [base url]/Appointment/24666

Example Response

```
{
  "resourceType": "Appointment",
  "id": "26155",
  "meta": {
    "versionId": "1",
    "lastUpdated": "2024-04-09T06:57:13.083+00:00",
    "source": "#8mDedLMNPp2Yqn0B",
    "tag": [
      {
        "system": "https://www.curemd.com/tenant",
        "code": "CMDGO"
      }
    ]
  },
  "extension": [
```



```

    {
      "url": "https://fhirjson.curemd.net/extensions/ResourceInputTime",
      "valueDecimal": 1713185207310
    }
  ],
  "identifier": [
    {
      "system": "https://www.curemd.com/system-identifier/CMDGO",
      "value": "Appointment-1362"
    }
  ],
  "status": "booked",
  "specialty": [
    {
      "coding": [
        {
          "system": "urn:oid:2.16.840.1.114222.4.11.1066",
          "code": "208000000X",
          "display": "Pediatrics"
        }
      ],
      "text": "Pediatrics"
    }
  ],
  "reasonCode": [
    {
      "text": "Consultation"
    }
  ],
  "start": "2024-04-10T08:00:00Z",
  "end": "2024-04-10T09:00:00Z",
  "minutesDuration": 60,
  "created": "2024-05-21T02:56:09Z",
  "participant": [
    {
      "type": [
        {
          "coding": [
            {
              "system": "http://terminology.hl7.org/CodeSystem/v3-ParticipationType",
              "code": "PPRF",
              "display": "Primary Performer"
            }
          ],
          "text": "Primary Performer"
        }
      ],
      "actor": {
        "reference": "Practitioner/18857"
      },
      "status": "accepted"
    },
    {
      "actor": {
        "reference": "Patient/18864"
      }
    }
  ]
}

```



```

    },
    "status": "accepted"
  },
  {
    "actor": {
      "reference": "Location/18856"
    },
    "status": "accepted"
  }
]
}

```

Method	Endpoint	Interaction
GET	[base url]/Appointment?Parameter	Search

Parameters

Parameter Combinations	Support
patient (reference)	Optional
id (id) and _id (id)	Optional

Example Request

Search by patient:

GET: [base url]/Appointment?patient=18864

Search by id AND _id:

GET: [base url]/Appointment/26155

Or

GET: [base url]/ Appointment /?_id=26155