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# API Documentation

## OneTouch EMR Version 3

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## INTRODUCTION

This guide is intended to be used by third party developers, including patients, who are developing software applications for accessing Protected Health Information (PHI). Please refer to the “Terms and Conditions” section for the terms of use of this API.

This API allows access to electronic health information including all data elements of a patient’s electronic health record to the extent permissible under applicable privacy laws.

## IMPLEMENTATION INSTRUCTIONS

The OneTouch EMR APIs are read-only RESTful APIs which permits users, developers and other health IT applications to request data for patient health information that is part of the requirements of U.S. Core Data for Interoperability (USCDI) v1.

In order to interact with the OneTouch EMR API an application must be capable of sending and receiving requests over secure HTTP. Any software or library capable of using a secure HTTP (SSL) can use these APIs i.e. OpenSSL, CURL and WGET etc. Application should also be able to generate custom headers and retrieve headers.

It is also recommended that an interacting application be capable of parsing XML and JSON encoded data. No specific configuration is required other than general recommendations below.

- The Root/Base URL for all API requests is `https://{ClientID}.onetouchemr.com/fhir/r4/` where ClientID is the unique identifier of the client using OneTouch EMR 3.
- Server Capabilities URL is: `{baseURL}/metadata`. Here {baseURL} can be found in the csv file as mentioned above.
- SMART Configuration Metadata URL is: `{baseURL}/well-known/smart-configuration`
- SMART Style URL: `{baseURL}/smart-style`
- OpenID Connect Discovery Metadata URL is: `{baseURL}/well-known/openid-configuration`
- JWK (JSON Web Key) URL is: `{baseURL}/well-known/jwk`
- OAuth Authorization Endpoint URL is: `{baseURL}/oauth/authorization`
- OAuth Token Endpoint URL is: `{baseURL}/oauth/token`
- OAuth Bulk-Access Token Endpoint URL is: `{baseURL}/oauth/bulk-token`
- Input parameters to the API's do not require a particular order however they are case sensitive and should be provided all in lowercase.
- All the returned data is in JSON format and is of type string.
- Supported Encryption method for Bulk Data Export is **RS384**

## REQUIREMENTS FOR REGISTRATION

You are required to be an existing client of OneTouch EMR in order to use these APIs OR an existing client gives you credentials to access OneTouch APIs.

## SUPPORTED PROFILES/CAPABILITIES

Currently the API supports the required capabilities as listed in the [US Core Server Capability Statement](#), which support the following profiles/resources:

FHIR Resources	US Core Profiles
<a href="#">AllergyIntolerance</a>	US Core AllergyIntolerance Profile
<a href="#">CarePlan</a>	US Core CarePlan Profile
<a href="#">CareTeam</a>	US Core CareTeam Profile
<a href="#">Condition</a>	US Core Condition Profile
<a href="#">Device</a>	US Core Implantable Device Profile
<a href="#">DiagnosticReport</a>	US Core DiagnosticReport Profile for Report and Note exchange, US Core DiagnosticReport Profile for Laboratory Results Reporting
<a href="#">DocumentReference</a>	US Core DocumentReference Profile
<a href="#">Encounter</a>	US Core Encounter Profile
<a href="#">Goal</a>	US Core Goal Profile
<a href="#">Immunization</a>	US Core Immunization Profile
<a href="#">Location</a>	US Core Location Profile
<a href="#">MedicationRequest</a>	US Core MedicationRequest Profile
<a href="#">Observation</a>	US Core Smoking Status Observation Profile, US Core Pediatric Weight for Height Observation Profile, US Core Laboratory Result Observation Profile, US Core Pediatric BMI for Age Observation Profile, US Core Pulse Oximetry Profile, US Core Pediatric Head Occipital-frontal Circumference Percentile Profile
<a href="#">Organization</a>	US Core Organization Profile
<a href="#">Patient</a>	US Core Patient Profile

<a href="#">Practitioner</a>	US Core Practitioner Profile
<a href="#">Procedure</a>	US Core Procedure Profile
<a href="#">Provenance</a>	US Core Provenance Profile

## AllergyIntolerance

The FHIR AllergyIntolerance resource defines potential risk to an individual or patient's allergic response to a substance. Substances include, but are not limited to: a therapeutic substance administered correctly at an appropriate dosage for the individual; food; material derived from plants or animals; or venom from insect stings.

**FHIR Resource:** AllergyIntolerance <https://www.hl7.org/fhir/allergyintolerance.html>

**Endpoint URI:** [https://\[ClientID\].onetouchemr.com/fhir/r4/AllergyIntolerance](https://[ClientID].onetouchemr.com/fhir/r4/AllergyIntolerance)

The following attributes are supported:

Name	Comments
code	US Core Common substances for allergy and intolerance documentation including refutations (SNOMED CT and RXNORM) (USCDI v1 AllergyIntolerance Substance Medication and Drug Class Data Elements)
patient	Patient reference / Who is this sensitivity for
clinicalStatus	Allergy status (active, inactive, or resolved)
verificationStatus	Verification status (unconfirmed, confirmed, refuted, entered-in-error)
category	Allergy/Intolerance Category (food, medication, environment, or biologic)
reaction	Adverse Reaction Events linked to exposure to substance (USCDI v1 AllergyIntolerance Reaction Data Element)
reaction.manifestation	Clinical symptoms/signs associated with the Event (SNOMED CT)
reaction.severity	Allergy/Intolerance reaction severity (mild, moderate, or severe)

## FHIR Operations

OneTouch EMR APIs currently support the following FHIR Operations.

## Read

HTTP Request	Method	Action
/AllergyIntolerance/{ID}	GET	Retrieve allergy resource by ID

## Search

HTTP Request	Method	Action
/AllergyIntolerance/?[parameter={value}]	GET	Retrieve allergies by the specified search criteria.
/AllergyIntolerance/?_search	POST	

## Search Parameters:

Key	Type	Description
patient	Reference	Patient Identifier
_id	Identifier	Record identifier

**\_revinclude:** Reverse include resources that refer to the record in the result. Currently, only Provenance:target is supported.

## Examples:

Read AllergyIntolerance resource with ID 1:

```
GET https://api.onetouchemr.com/fhir/r4/AllergyIntolerance/1/
```

## Example Response:

```
HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "AllergyIntolerance",
  "id": "1",
  "meta": {
    "lastUpdated": "2022-08-11T01:12:51+00:00",
    "profile": [
      "http://hl7.org/fhir/us/core/StructureDefinition/us-core-allergyintolerance
```



```

"
  ]
  },
  "category": [
    "medication"
  ],
  "clinicalStatus": {
    "coding": [
      {
        "code": "active",
        "system":
"http://terminology.hl7.org/CodeSystem/allergyintolerance-clinical"
      }
    ]
  },
  "code": {
    "coding": [
      {
        "code": "7980",
        "display": "Penicillin G",
        "system": "http://www.nlm.nih.gov/research/umls/rxnorm"
      }
    ]
  },
  "text": "Penicillin G"
  },
  "patient": {
    "reference": "Patient/1"
  },
  "reaction": [
    {
      "manifestation": [
        {
          "coding": [
            {
              "code": "247472004",
              "display": "Weal",
              "system": "http://snomed.info/sct"
            }
          ],
          "text": "hives"
        }
      ],
      "severity": "moderate"
    }
  ]
}

```

```

    ],
    "verificationStatus": {
      "coding": [
        {
          "code": "confirmed",
          "system":
"http://terminology.hl7.org/CodeSystem/allergyintolerance-verification"
        }
      ]
    }
  }
}

```

Search AllergyIntolerance belonging to patient ID 1 using GET method:

```
GET https://api.onetouchemr.com/fhir/r4/AllergyIntolerance?patient=1
```

Or using the POST method:

```
POST https://api.onetouchemr.com/fhir/r4/AllergyIntolerance/_search
Content-Type: application/x-www-form-urlencoded
```

```
patient=1
```

Example Response:

```

HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "Bundle",
  "meta": {
    "lastUpdated": "2022-10-01T09:29:42+00:00"
  },
  "entry": [
    {
      "fullUrl":
"http://api.onetouchemr.com/fhir/r4/AllergyIntolerance/1",
      "resource": {
        "resourceType": "AllergyIntolerance",
        "id": "1",
        "meta": {
          "lastUpdated": "2022-08-11T01:12:51+00:00",
          "profile": [
"http://hl7.org/fhir/us/core/StructureDefinition/us-core-allergyintolerance

```

```

"
    ]
  },
  "category": [
    "medication"
  ],
  "clinicalStatus": {
    "coding": [
      {
        "code": "active",
        "system":
"http://terminology.hl7.org/CodeSystem/allergyintolerance-clinical"
      }
    ]
  },
  "code": {
    "coding": [
      {
        "code": "7980",
        "display": "Penicillin G",
        "system":
"http://www.nlm.nih.gov/research/umls/rxnorm"
      }
    ],
    "text": "Penicillin G"
  },
  "patient": {
    "reference": "Patient/1"
  },
  "reaction": [
    {
      "manifestation": [
        {
          "coding": [
            {
              "code": "247472004",
              "display": "Weal",
              "system": "http://snomed.info/sct"
            }
          ],
          "text": "hives"
        }
      ],
      "severity": "moderate"
    }
  ]
}

```

```

    }
  ],
  "verificationStatus": {
    "coding": [
      {
        "code": "confirmed",
        "system":
"http://terminology.hl7.org/CodeSystem/allergyintolerance-verification"
      }
    ]
  }
},
"search": {
  "mode": "match"
}
},
{
  "fullUrl":
"https://api.onetouchemr.com/fhir/r4/AllergyIntolerance/2",
  "resource": {
    "resourceType": "AllergyIntolerance",
    "id": "2",
    "meta": {
      "lastUpdated": "2022-08-11T01:12:51+00:00",
      "profile": [
"http://hl7.org/fhir/us/core/StructureDefinition/us-core-allergyintolerance"
      ]
    },
    "category": [
      "medication"
    ],
    "clinicalStatus": {
      "coding": [
        {
          "code": "active",
          "system":
"http://terminology.hl7.org/CodeSystem/allergyintolerance-clinical"
        }
      ]
    },
    "code": {
      "coding": [

```

```

        {
            "code": "733",
            "display": "Ampicillin",
            "system":
"http://www.nlm.nih.gov/research/umls/rxnorm"
        }
    ],
    "text": "Ampicillin"
},
"patient": {
"reference": "Patient/1"
},
"reaction": [
{
    "manifestation": [
        {
            "coding": [
                {
                    "code": "247472004",
                    "display": "Weal",
                    "system": "http://snomed.info/sct"
                }
            ],
            "text": "hives"
        }
    ],
    "severity": "moderate"
}
],
"verificationStatus": {
"coding": [
    {
        "code": "confirmed",
        "system":
"http://terminology.hl7.org/CodeSystem/allergyintolerance-verification"
    }
]
}
},
"search": {
    "mode": "match"
}
}
],

```

```

    "link": [
      {
        "relation": "self",
        "url":
"https://api.onetouchemr.com/fhir/r4/AllergyIntolerance?patient=1"
      }
    ],
    "total": 2,
    "type": "searchset"
  }

```

Combination of multiple search parameters is supported.

```

GET
https://api.onetouchemr.com/fhir/r4/AllergyIntolerance?_id=2&patient=1&_rev
include=Provenance:target

```

or

```

POST https://api.onetouchemr.com/fhir/r4/AllergyIntolerance/_search
Content-Type: application/x-www-form-urlencoded

_id=2&patient=1&_revinclude=Provenance:target

```

Example Response:

```

HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "Bundle",
  "meta": {
    "lastUpdated": "2022-10-01T09:36:14+00:00"
  },
  "entry": [
    {
      "fullUrl":
"https://api.onetouchemr.com/fhir/r4/AllergyIntolerance/2",
      "resource": {
        "resourceType": "AllergyIntolerance",
        "id": "2",
        "meta": {
          "lastUpdated": "2022-08-11T01:12:51+00:00",
          "profile": [
"http://hl7.org/fhir/us/core/StructureDefinition/us-core-allergyintolerance
"

```

```

]
},
"category": [
  "medication"
],
"clinicalStatus": {
  "coding": [
    {
      "code": "active",
      "system":
"http://terminology.hl7.org/CodeSystem/allergyintolerance-clinical"
    }
  ]
},
"code": {
  "coding": [
    {
      "code": "733",
      "display": "Ampicillin",
      "system":
"http://www.nlm.nih.gov/research/umls/rxnorm"
    }
  ],
  "text": "Ampicillin"
},
"patient": {
  "reference": "Patient/1"
},
"reaction": [
  {
    "manifestation": [
      {
        "coding": [
          {
            "code": "247472004",
            "display": "Weal",
            "system": "http://snomed.info/sct"
          }
        ],
        "text": "hives"
      }
    ],
    "severity": "moderate"
  }
]
}

```

```

    ],
    "verificationStatus": {
      "coding": [
        {
          "code": "confirmed",
          "system":
"http://terminology.hl7.org/CodeSystem/allergyintolerance-verification"
        }
      ]
    },
    "search": {
      "mode": "match"
    }
  },
  {
    "fullUrl":
"https://api.onetouchemr.com/fhir/r4/Provenance/allergy-2",
    "resource": {
      "resourceType": "Provenance",
      "id": "allergy-2",
      "meta": {
        "lastUpdated": "2022-08-11T01:12:51+00:00",
        "profile": [

"http://hl7.org/fhir/us/core/StructureDefinition/us-core-provenance"
        ]
      },
      "agent": [
        {
          "onBehalfOf": {
            "display": "Personal Physician Care",
            "reference": "Organization/1"
          },
          "type": {
            "coding": [
              {
                "code": "author",
                "display": "Author",
                "system":
"http://terminology.hl7.org/CodeSystem/provenance-participant-type"
              }
            ],
            "text": "Author"
          }
        }
      ]
    }
  }

```



```

    },
    "who": {
      "reference": "Practitioner/1"
    }
  },
  {
    "type": {
      "coding": [
        {
          "code": "transmitter",
          "display": "Transmitter",
          "system":
"http://hl7.org/fhir/us/core/CodeSystem/us-core-provenance-participant-type"
        }
      ],
      "text": "Transmitter"
    },
    "who": {
      "reference": "Patient/1"
    }
  }
],
"recorded": "2022-08-11T01:12:51+00:00",
"target": [
  {
    "reference": "AllergyIntolerance/2"
  }
]
},
"search": {
  "mode": "include"
}
}
],
"link": [
  {
    "relation": "self",
    "url":
"https://api.onetouchemr.com/fhir/r4/AllergyIntolerance?_id=2&patient=1&re
vinclude=Provenance%3Atarget"
  }
]
"total": 1,

```

```
"type": "searchset"
}
```

To list all AllergyIntolerance resources accessible to the current API user, do not include search parameters:

```
GET https://api.onetouchemr.com/fhir/r4/AllergyIntolerance
```

or

```
POST https://api.onetouchemr.com/fhir/r4/AllergyIntolerance/_search
Content-Type: application/x-www-form-urlencoded
```

## CarePlan

The FHIR CarePlan resource defines the intention of how one or more practitioners intend to deliver care for a particular patient, group or community for a period of time, possibly limited to care for a specific condition or set of conditions.

**FHIR Resource:** CarePlan <http://hl7.org/fhir/careplan.html>

**Endpoint URI:** <https://{ClientID}.onetouchemr.com/fhir/r4/CarePlan>

The following attributes are supported:

Name	Comments
text	Text narrative/summary
text.status	Text narrative status (additional or generated)
status	Care plan request status (active, completed, or on-hold)
intent	Care plan intent (proposal, plan, order, or option)
category	Category (assess-plan) (USCDI v1 Assessment and Plan of Treatment Data Class)
subject	Patient reference, who the care plan is for

## FHIR Operations

OneTouch EMR APIs currently support the following FHIR Operations.

## Read

HTTP Request	Method	Action
/CarePlan/{ID}/	GET	Retrieve CarePlan resource by ID

## Search

HTTP Request	Method	Action
/CarePlan/?[parameter={value}]	GET	Retrieve CarePlan by the specified search criteria.
/CarePlan/?_search	POST	

## Search Parameters:

Key	Type	Description
patient	Reference	Patient Identifier
_id	Identifier	Record identifier
category		Category coding system and/or code. [system] is the category coding system: Supported values: <a href="http://hl7.org/fhir/us/core/CodeSystem/careplan-category">http://hl7.org/fhir/us/core/CodeSystem/careplan-category</a> [code] is the category code to lookup. Supported values: assess-plan If the system is not specified, the API will lookup the code from all the supported category coding systems.
patient+category		

**\_revinclude:** Reverse include resources that refer to the record in the result. Currently, only Provenance:target is supported.

## Examples:

Read CarePlan resource with plan ID: plab-4:

<https://api.onetouchemr.com/fhir/r4/CarePlan/plab-4>

HTTP/1.1 200 OK

Content-Type: application/fhir+json; charset=utf-8

```
{
  "resourceType": "CarePlan",
  "id": "plab-4",
  "meta": {
    "lastUpdated": "2022-08-23T05:42:01+00:00",
    "profile": [
      "http://hl7.org/fhir/us/core/StructureDefinition/us-core-careplan"
    ]
  },
  "text": {
    "div": "<div xmlns=\"http://www.w3.org/1999/xhtml\">EKG
(Electrocardiogram (ECG or</div>",
    "status": "generated"
  },
  "category": [
    {
      "coding": [
        {
          "code": "assess-plan",
          "display": "Assessment and Plan of Treatment",
          "system":
            "http://hl7.org/fhir/us/core/CodeSystem/careplan-category"
        }
      ]
    }
  ],
  "intent": "order",
  "status": "active",
  "subject": {
    "reference": "Patient/4"
  }
}
```

Search CarePlan Resources belonging to Patient ID 3

GET <https://api.onetouchemr.com/fhir/r4/CarePlan?patient=3>

or

GET <https://api.onetouchemr.com/fhir/r4/CarePlan?patient=3>

or

POST [https://api.onetouchemr.com/fhir/r4/CarePlan/\\_search](https://api.onetouchemr.com/fhir/r4/CarePlan/_search)

Content-Type: application/x-www-form-urlencoded

patient=Patient/3

Example Response:

HTTP/1.1 200 OK

Content-Type: application/fhir+json; charset=utf-8

```
{
  "resourceType": "Bundle",
  "meta": {
    "lastUpdated": "2022-10-02T02:35:40+00:00"
  },
  "entry": [
    {
      "fullUrl":
"https://api.onetouchemr.com/fhir/r4/CarePlan/ptxt-3",
      "resource": {
        "resourceType": "CarePlan",
        "id": "ptxt-3",
        "meta": {
          "lastUpdated": "2022-08-22T13:10:24+00:00",
          "profile": [
            "http://hl7.org/fhir/us/core/StructureDefinition/us-core-careplan"
          ]
        },
        "text": {
          "div": "<div xmlns=\"http://www.w3.org/1999/xhtml\">The
patient was found to be healthy and advised to follow his current routine
of exercise, work, sleep and quality of life.</div>",
          "status": "additional"
        },
        "category": [
          {
            "coding": [
              {
                "code": "assess-plan",
                "display": "Assessment and Plan of
Treatment",
                "system":
"http://hl7.org/fhir/us/core/CodeSystem/careplan-category"
              }
            ]
          }
        ]
      }
    }
  ]
}
```

```

    ],
    "intent": "plan",
    "status": "completed",
    "subject": {
      "reference": "Patient/3"
    }
  },
  "search": {
    "mode": "match"
  }
},
{
  "fullUrl":
"https://api.onetouchemr.com/fhir/r4/CarePlan/pfup-3",
  "resource": {
    "resourceType": "CarePlan",
    "id": "pfup-3",
    "meta": {
      "lastUpdated": "2022-08-22T18:15:42+00:00",
      "profile": [
"http://hl7.org/fhir/us/core/StructureDefinition/us-core-careplan"
      ]
    },
    "text": {
      "div": "<div
xmlns=\<a href='http://www.w3.org/1999/xhtml'>Return for Follow-up visit 1 year(s)
after July 22, 2015</div>",
      "status": "additional"
    },
    "category": [
      {
        "coding": [
          {
            "code": "assess-plan",
            "display": "Assessment and Plan of
Treatment",
            "system":
"http://hl7.org/fhir/us/core/CodeSystem/careplan-category"
          }
        ]
      }
    ]
  },
  "intent": "plan",

```

```

        "status": "active",
        "subject": {
          "reference": "Patient/3"
        }
      },
      "search": {
        "mode": "match"
      }
    }
  ],
  "link": [
    {
      "relation": "self",
      "url":
"https://api.onetouchemr.com/fhir/r4/CarePlan?patient=Patient%2F3"
    }
  ],
  "total": 2,
  "type": "searchset"
}

```

Search for care plan with assessment plan category:

```

GET
https://api.onetouchemr.com/fhir/r4/CarePlan?category=http://hl7.org/fhir/us/core/CodeSystem/careplan-category|assess-plan

```

or

```

POST https://api.onetouchemr.com/fhir/r4/CarePlan/_search
Content-Type: application/x-www-form-urlencoded

category=http://hl7.org/fhir/us/core/CodeSystem/careplan-category|assess-plan

```

Example Response:

```

HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "Bundle",
  "meta": {
    "lastUpdated": "2022-10-02T02:40:58+00:00"
  }
}

```

```

    },
    "entry": [
      {
        "fullUrl":
"https://api.onetouchemr.com/fhir/r4/CarePlan/ptxt-3",
        "resource": {
          "resourceType": "CarePlan",
          "id": "ptxt-3",
          "meta": {
            "lastUpdated": "2022-08-22T13:10:24+00:00",
            "profile": [
"http://hl7.org/fhir/us/core/StructureDefinition/us-core-careplan"
            ]
          },
          "text": {
            "div": "<div xmlns=\\"http://www.w3.org/1999/xhtml\">The
patient was found to be healthy and advised to follow his current routine
of exercise, work, sleep and quality of life.</div>",
            "status": "additional"
          },
          "category": [
            {
              "coding": [
                {
                  "code": "assess-plan",
                  "display": "Assessment and Plan of
Treatment",
                  "system":
"http://hl7.org/fhir/us/core/CodeSystem/careplan-category"
                }
              ]
            }
          ],
          "intent": "plan",
          "status": "completed",
          "subject": {
            "reference": "Patient/3"
          }
        },
        "search": {
          "mode": "match"
        }
      }
    ],
  },

```



```

    {
      "fullUrl":
"https://api.onetouchemr.com/fhir/r4/CarePlan/pfup-3",
      "resource": {
        "resourceType": "CarePlan",
        "id": "pfup-3",
        "meta": {
          "lastUpdated": "2022-08-22T18:15:42+00:00",
          "profile": [

"http://hl7.org/fhir/us/core/StructureDefinition/us-core-careplan"
          ]
        },
        "text": {
          "div": "<div
xmlns=\"http://www.w3.org/1999/xhtml\">Return for Follow-up visit 1 year(s)
after July 22, 2015</div>",
          "status": "additional"
        },
        "category": [
          {
            "coding": [
              {
                "code": "assess-plan",
                "display": "Assessment and Plan of
Treatment",
                "system":
"http://hl7.org/fhir/us/core/CodeSystem/careplan-category"
              }
            ]
          }
        ],
        "intent": "plan",
        "status": "active",
        "subject": {
          "reference": "Patient/3"
        }
      },
      "search": {
        "mode": "match"
      }
    }
  ],
  "link": [

```

```

    {
      "relation": "self",
      "url":
"https://api.onetouchemr.com/fhir/r4/CarePlan?patient=Patient%2F3&category=
http%3A%2F%2Fhl7.org%2Ffhir%2Fus%2Fcore%2FCodeSystem%2Fcareplan-category%7C
assess-plan"
    }
  ],
  "total": 2,
  "type": "searchset"
}

```

Combination of multiple search parameters is supported.

```

GET
https://api.onetouchemr.com/fhir/r4/CarePlan?_id=pfup-3&patient=Patient/3&c
ategory=http://hl7.org/fhir/us/core/CodeSystem/careplan-category|assess-pla
n&_revinclude=Provenance:target

```

or

```

POST https://api.onetouchemr.com/fhir/r4/CarePlan/_search
Content-Type: application/x-www-form-urlencoded

_id=pfup-3&patient=Patient/3&category=http://hl7.org/fhir/us/core/CodeSyste
m/careplan-category|assess-plan&_revinclude=Provenance:target

```

Example Response:

```

HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "Bundle",
  "meta": {
    "lastUpdated": "2022-10-02T02:50:05+00:00"
  },
  "entry": [
    {
      "fullUrl":
"https://api.onetouchemr.com/fhir/r4/CarePlan/pfup-3",
      "resource": {
        "resourceType": "CarePlan",
        "id": "pfup-3",
        "meta": {
          "lastUpdated": "2022-08-22T18:15:42+00:00",
          "profile": [

```

```

"http://hl7.org/fhir/us/core/StructureDefinition/us-core-careplan"
  ]
  },
  "text": {
    "div": "<div
xmlns=\"http://www.w3.org/1999/xhtml\">Return for Follow-up visit 1 year(s)
after July 22, 2015</div>",
    "status": "additional"
  },
  "category": [
    {
      "coding": [
        {
          "code": "assess-plan",
          "display": "Assessment and Plan of
Treatment",
          "system":
"http://hl7.org/fhir/us/core/CodeSystem/careplan-category"
        }
      ]
    }
  ],
  "intent": "plan",
  "status": "active",
  "subject": {
    "reference": "Patient/3"
  }
},
"search": {
  "mode": "match"
}
},
{
  "fullUrl":
"http://api.onetouchemr.com/fhir/r4/Provenance/pfup-3",
  "resource": {
    "resourceType": "Provenance",
    "id": "pfup-3",
    "meta": {
      "lastUpdated": "2022-08-22T18:15:42+00:00",
      "profile": [
"http://hl7.org/fhir/us/core/StructureDefinition/us-core-provenance"

```

```

    ]
  },
  "agent": [
    {
      "onBehalfOf": {
        "display": "Personal Physician Care",
        "reference": "Organization/1"
      },
      "type": {
        "coding": [
          {
            "code": "author",
            "display": "Author",
            "system":
"http://terminology.hl7.org/CodeSystem/provenance-participant-type"
          }
        ],
        "text": "Author"
      },
      "who": {
        "reference": "Practitioner/1"
      }
    }
  ],
  "recorded": "2022-08-22T18:15:42+00:00",
  "target": [
    {
      "reference": "CarePlan/pfup-3"
    }
  ]
},
"search": {
  "mode": "include"
}
}
],
"link": [
{
  "relation": "self",
  "url":
"http://api.onetouchemr.com/fhir/r4/CarePlan?_id=pfup-3&patient=Patient%2F3&category=http%3A%2F%2Fhl7.org%2Ffhir%2Fus%2Fcore%2FCodeSystem%2Fcareplan-category%7Cassess-plan&_revinclude=Provenance%3Atarget"
}
]

```

```
  ],
  "total": 1,
  "type": "searchset"
}
```

To list all CarePlan resources accessible to the current API user, do not include search parameters:

```
GET https://api.onetouchemr.com/fhir/r4/CarePlan
```

or

```
POST https://api.onetouchemr.com/fhir/r4/CarePlan/_search
Content-Type: application/x-www-form-urlencoded
```

## CareTeam

The FHIR CareTeam resource defines Care Team members associated with a patient. The CareTeam includes all the people, teams, and organizations who plan to participate in the coordination and delivery of care for a single patient or a group. Corresponds to USCDI v1 CareTeam Data Class.

**FHIR Resource:** CareTeam <http://hl7.org/fhir/careteam.html>

**Endpoint URI:** <https://{ClientID}.onetouchemr.com/fhir/r4/CareTeam>

The following attributes are supported:

Name	Comments
status	Care Team Status (active or inactive)
subject	Patient reference, who the care team is for
encounter	Encounter reference that the Care Team took part of
period	Time period that Care team covers
participant	Members of the Care Team
managingOrganization	Organization Responsible for the Care Team

## Read

HTTP Request	Method	Action
/CareTeam/[ID]/	GET	Retrieve CareTeam resource by ID

## Search

HTTP Request	Method	Action
/CareTeam/?[parameter={value}]	GET	Retrieve CareTeam by the specified search criteria.
/CareTeam/?_search	POST	

## Search Parameters:

Key	Type	Description
patient	Reference	Patient Identifier
_id	Identifier	Record identifier
status		Valid values are 'proposed', 'active', 'suspended', 'inactive', 'entered-in-error'

**\_revinclude:** Reverse include resources that refer to the record in the result. Currently, only Provenance:target is supported.

## Examples:

Read CareTeam resource with ID 1:

```
GET https://api.onetouchemr.com/fhir/r4/CareTeam/1
```

## Example Response:

```
HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "CareTeam",
  "id": "1",
  "meta": {
    "lastUpdated": "2022-08-17T08:38:34+00:00",
    "profile": [
```

```

"http://hl7.org/fhir/us/core/StructureDefinition/us-core-careteam"
]
},
"encounter": {
"reference": "Encounter/1"
},
"managingOrganization": [
{
"display": "Personal Physician Care",
"reference": "Organization/1"
}
],
"participant": [
{
"member": {
"display": "Alice Newman",
"reference": "Patient/1"
},
"role": [
{
"coding": [
{
"code": "116154003",
"display": "Patient",
"system": "http://snomed.info/sct"
}
],
"text": "Patient"
}
]
},
{
"member": {
"display": "Dr. Albert Davis",
"reference": "Practitioner/1"
},
"role": [
{
"coding": [
{
"code": "223366009",
"display": "Healthcare professional
(occupation)",

```

```

        "system": "http://snomed.info/sct"
      }
    ],
    "text": "Healthcare professional (occupation)"
  }
]
},
{
  "member": {
    "display": "Personal Physician Care",
    "reference": "Organization/1"
  },
  "role": [
    {
      "coding": [
        {
          "code": "223366009",
          "display": "Healthcare professional
(occupation)",
          "system": "http://snomed.info/sct"
        }
      ],
      "text": "Healthcare professional (occupation)"
    }
  ]
}
],
"period": {
  "end": "2015-06-22T10:30:00-05:00",
  "start": "2015-06-22T10:00:00-05:00"
},
"status": "inactive",
"subject": {
  "reference": "Patient/1"
}
}
}

```

Search CareTeam resource by Patient ID or patient reference:

```
GET https://api.onetouchemr.com/fhir/r4/CareTeam?patient=3
```

or



```
GET https://api.onetouchemr.com/fhir/r4/CareTeam?patient=Patient/3
```

or

```
POST https://api.onetouchemr.com/fhir/r4/CareTeam/_search
```

```
Content-Type: application/x-www-form-urlencoded
```

```
patient=Patient/3
```

Example Response:

```
HTTP/1.1 200 OK
```

```
Content-Type: application/fhir+json; charset=utf-8
```

```
{
  "resourceType": "Bundle",
  "meta": {
    "lastUpdated": "2022-10-02T04:04:29+00:00"
  },
  "entry": [
    {
      "fullUrl": "https://api.onetouchemr.com/fhir/r4/CareTeam/3",
      "resource": {
        "resourceType": "CareTeam",
        "id": "3",
        "meta": {
          "lastUpdated": "2022-08-22T18:15:42+00:00",
          "profile": [
            "http://hl7.org/fhir/us/core/StructureDefinition/us-core-careteam"
          ]
        },
        "encounter": {
          "reference": "Encounter/3"
        },
        "managingOrganization": [
          {
            "display": "Personal Physician Care",
            "reference": "Organization/1"
          }
        ],
        "participant": [
          {
            "member": {
              "display": "Jeremy Bates",
              "reference": "Patient/3"
            }
          }
        ]
      }
    }
  ]
}
```

```

        "role": [
            {
                "coding": [
                    {
                        "code": "116154003",
                        "display": "Patient",
                        "system": "http://snomed.info/sct"
                    }
                ],
                "text": "Patient"
            }
        ],
    },
    {
        "member": {
            "display": "Dr. Albert Davis",
            "reference": "Practitioner/1"
        },
        "role": [
            {
                "coding": [
                    {
                        "code": "223366009",
                        "display": "Healthcare
professional (occupation)",
                        "system": "http://snomed.info/sct"
                    }
                ],
                "text": "Healthcare professional
(occupation)"
            }
        ],
    },
    {
        "member": {
            "display": "Personal Physician Care",
            "reference": "Organization/1"
        },
        "role": [
            {
                "coding": [
                    {
                        "code": "223366009",
                        "display": "Healthcare

```

```

professional (occupation)",
                                "system": "http://snomed.info/sct"
                                }
                                ],
                                "text": "Healthcare professional
(occupation)"
                                }
                                ]
                                }
                                ],
                                "period": {
                                "end": "2015-07-22T14:30:00-05:00",
                                "start": "2015-07-22T14:00:00-05:00"
                                },
                                "status": "inactive",
                                "subject": {
                                "reference": "Patient/3"
                                }
                                },
                                "search": {
                                "mode": "match"
                                }
                                }
                                ],
                                "link": [
                                {
                                "relation": "self",
                                "url":
                                "https://api.onetouchemr.com/fhir/r4/CareTeam?patient=Patient%2F3"
                                }
                                ],
                                "total": 1,
                                "type": "searchset"
                                }

```

Combination of multiple search parameters is supported.

```

GET
https://api.onetouchemr.com/fhir/r4/CareTeam?_id=5&patient=Patient/2&_revin
clude=Provenance:target

```

or

```

POST https://api.onetouchemr.com/fhir/r4/CareTeam/_search

```

Content-Type: application/x-www-form-urlencoded

\_id=5&patient=Patient/2&\_revinclude=Provenance:target

Example Response:

HTTP/1.1 200 OK

Content-Type: application/fhir+json; charset=utf-8

```
{
  "resourceType": "Bundle",
  "meta": {
    "lastUpdated": "2022-10-02T04:10:40+00:00"
  },
  "entry": [
    {
      "fullUrl": "https://api.onetouchemr.com/fhir/r4/CareTeam/5",
      "resource": {
        "resourceType": "CareTeam",
        "id": "5",
        "meta": {
          "lastUpdated": "2022-08-26T08:59:25+00:00",
          "profile": [
            "http://hl7.org/fhir/us/core/StructureDefinition/us-core-careteam"
          ]
        },
        "encounter": {
          "reference": "Encounter/5"
        },
        "managingOrganization": [
          {
            "display": "Personal Physician Care",
            "reference": "Organization/1"
          }
        ],
        "participant": [
          {
            "member": {
              "display": "John Doe",
              "reference": "Patient/2"
            },
            "role": [
              {
                "coding": [
                  {

```

```

        "code": "116154003",
        "display": "Patient",
        "system": "http://snomed.info/sct"
    }
  ],
  "text": "Patient"
}
],
},
{
  "member": {
    "display": "Dr. Robert Chase",
    "reference": "Practitioner/3"
  },
  "role": [
    {
      "coding": [
        {
          "code": "223366009",
          "display": "Healthcare
professional (occupation)",
          "system": "http://snomed.info/sct"
        }
      ],
      "text": "Healthcare professional
(occupation)"
    }
  ]
},
{
  "member": {
    "display": "Personal Physician Care",
    "reference": "Organization/1"
  },
  "role": [
    {
      "coding": [
        {
          "code": "223366009",
          "display": "Healthcare
professional (occupation)",
          "system": "http://snomed.info/sct"
        }
      ],
    }
  ],
}

```

```

                "text": "Healthcare professional
(occupation)"
            }
        ]
    }
    ],
    "period": {
        "end": "2020-01-06T10:30:00-06:00",
        "start": "2020-01-06T10:00:00-06:00"
    },
    "status": "inactive",
    "subject": {
        "reference": "Patient/2"
    }
},
"search": {
    "mode": "match"
}
},
{
    "fullUrl":
"https://api.onetouchemr.com/fhir/r4/Provenance/careteam-5",
    "resource": {
        "resourceType": "Provenance",
        "id": "careteam-5",
        "meta": {
            "lastUpdated": "2022-08-26T08:59:25+00:00",
            "profile": [

"http://hl7.org/fhir/us/core/StructureDefinition/us-core-provenance"
        ]
    },
    "agent": [
    {
        "onBehalfOf": {
            "display": "Personal Physician Care",
            "reference": "Organization/1"
        },
        "type": {
            "coding": [
            {
                "code": "author",
                "display": "Author",
                "system":

```

```

"http://terminology.hl7.org/CodeSystem/provenance-participant-type"
    }
    ],
    "text": "Author"
  },
  "who": {
    "reference": "Practitioner/3"
  }
}
],
"recorded": "2022-08-26T08:59:25+00:00",
"target": [
  {
    "reference": "CareTeam/5"
  }
]
},
"search": {
  "mode": "include"
}
}
],
"link": [
  {
    "relation": "self",
    "url":
"http://api.onetouchemr.com/fhir/r4/CareTeam?_id=5&patient=Patient%2F2&_re
vinclude=Provenance%3Atarget"
  }
],
"total": 1,
"type": "searchset"
}

```

To list all CareTeam resources accessible to the current API user, do not include search parameters:

```
GET https://api.onetouchemr.com/fhir/r4/CareTeam
```

or

```
POST https://api.onetouchemr.com/fhir/r4/CareTeam/_search
Content-Type: application/x-www-form-urlencoded
```

## Condition

The FHIR 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.

A condition resource can fall into three types of categories:

- Problem List Item (USCDI v1 Problem Data Class)
- Encounter Diagnosis
- Health Concerns (USCDI v1 Health Concern Data Class)

**FHIR Resource:** Condition <http://hl7.org/fhir/condition.html>

**Endpoint URI:** <https://{ClientID}.onetouchemr.com/fhir/r4/Condition>

The following attributes are supported:

Name	Comments
clinicalStatus	Condition status (active, inactive, or resolved)
verificationStatus	Condition verification status (confirmed)
category	Condition category (problem-list-item, encounter-diagnosis, or health-concern)
encounter	Encounter reference
code	Condition Code (SNOMED CT or ICD-10)
subject	Patient reference

### Read

HTTP Request	Method	Action
/Condition/{ID}/	GET	Retrieve Condition resource by ID

### Search

HTTP Request	Method	Action
/Condition/?[parameter={value}]	GET	Retrieve Condition by the specified search criteria.



/Condition/?_search	POST	
---------------------	------	--

Search Parameters:

Key	Type	Description
patient	Reference	Patient Identifier
_id	Identifier	Record identifier

**\_revinclude:** Reverse include resources that refer to the record in the result. Currently, only Provenance:target is supported.

Examples:

Read Condition Resource with Record ID pl-6:

```
GET https://api.onetouchemr.com/fhir/r4/Condition/pl-6
```

Example Response:

```
HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "Condition",
  "id": "pl-6",
  "meta": {
    "lastUpdated": "2022-08-21T10:27:26+00:00",
    "profile": [
      "http://hl7.org/fhir/us/core/StructureDefinition/us-core-condition"
    ]
  },
  "category": [
    {
      "coding": [
        {
          "code": "problem-list-item",
          "display": "Problem List Item",
          "system": "http://terminology.hl7.org/CodeSystem/condition-category"
        }
      ]
    }
  ],
  "clinicalStatus": {
```

```

    "coding": [
      {
        "code": "active",
        "system":
"http://terminology.hl7.org/CodeSystem/condition-clinical"
      }
    ],
    "code": {
      "coding": [
        {
          "code": "R07.89",
          "display": "Other chest pain [R07.89]",
          "system": "http://hl7.org/fhir/sid/icd-10-cm"
        }
      ],
      "text": "Other chest pain [R07.89]"
    },
    "subject": {
      "reference": "Patient/2"
    },
    "verificationStatus": {
      "coding": [
        {
          "code": "confirmed",
          "system":
"http://terminology.hl7.org/CodeSystem/condition-ver-status"
        }
      ]
    }
  }
}

```

Search Condition by Patient ID or patient reference

```
GET https://api.onetouchemr.com/fhir/r4/Condition?patient=2
```

or

```
GET https://api.onetouchemr.com/fhir/r4/Condition?patient=Patient/2
```

or

```
POST https://api.onetouchemr.com/fhir/r4/Condition/_search
Content-Type: application/x-www-form-urlencoded
```

patient=Patient/2

Example Response:

HTTP/1.1 200 OK

Content-Type: application/fhir+json; charset=utf-8

```
{
  "resourceType": "Bundle",
  "meta": {
    "lastUpdated": "2022-10-02T05:21:54+00:00"
  },
  "entry": [
    {
      "fullUrl":
"https://api.onetouchemr.com/fhir/r4/Condition/pl-6",
      "resource": {
        "resourceType": "Condition",
        "id": "pl-6",
        "meta": {
          "lastUpdated": "2022-08-21T10:27:26+00:00",
          "profile": [
"http://hl7.org/fhir/us/core/StructureDefinition/us-core-condition"
          ]
        },
        "category": [
          {
            "coding": [
              {
                "code": "problem-list-item",
                "display": "Problem List Item",
                "system":
"http://terminology.hl7.org/CodeSystem/condition-category"
              }
            ]
          }
        ],
        "clinicalStatus": {
          "coding": [
            {
              "code": "active",
              "system":
"http://terminology.hl7.org/CodeSystem/condition-clinical"
            }
          ]
        }
      }
    }
  ]
}
```

```

    ]
  },
  "code": {
    "coding": [
      {
        "code": "R07.89",
        "display": "Other chest pain [R07.89]",
        "system": "http://hl7.org/fhir/sid/icd-10-cm"
      }
    ],
    "text": "Other chest pain [R07.89]"
  },
  "subject": {
    "reference": "Patient/2"
  },
  "verificationStatus": {
    "coding": [
      {
        "code": "confirmed",
        "system":
"http://terminology.hl7.org/CodeSystem/condition-ver-status"
      }
    ]
  }
},
"search": {
  "mode": "match"
}
},
{
  "fullUrl":
"https://api.onetouchemr.com/fhir/r4/Condition/ed-2",
  "resource": {
    "resourceType": "Condition",
    "id": "ed-2",
    "meta": {
      "lastUpdated": "2022-08-21T10:27:26+00:00",
      "profile": [
"http://hl7.org/fhir/us/core/StructureDefinition/us-core-condition"
      ]
    },
    "category": [
    {

```

```

        "coding": [
            {
                "code": "encounter-diagnosis",
                "display": "Encounter Diagnosis",
                "system":
"http://terminology.hl7.org/CodeSystem/condition-category"
            }
        ]
    },
    "clinicalStatus": {
        "coding": [
            {
                "code": "inactive",
                "system":
"http://terminology.hl7.org/CodeSystem/condition-clinical"
            }
        ]
    },
    "code": {
        "coding": [
            {
                "code": "R07.89",
                "display": "Other chest pain [R07.89]",
                "system": "http://hl7.org/fhir/sid/icd-10-cm"
            }
        ]
    },
    "text": "Other chest pain [R07.89]"
},
"encounter": {
    "reference": "Encounter/2"
},
"subject": {
    "reference": "Patient/2"
},
"verificationStatus": {
    "coding": [
        {
            "code": "confirmed",
            "system":
"http://terminology.hl7.org/CodeSystem/condition-ver-status"
        }
    ]
}
}

```

```

    },
    "search": {
      "mode": "match"
    }
  },
  {
    "fullUrl":
"https://api.onetouchemr.com/fhir/r4/Condition/ed-5",
    "resource": {
      "resourceType": "Condition",
      "id": "ed-5",
      "meta": {
        "lastUpdated": "2022-08-26T02:33:13+00:00",
        "profile": [
"http://hl7.org/fhir/us/core/StructureDefinition/us-core-condition"
        ]
      },
      "category": [
        {
          "coding": [
            {
              "code": "encounter-diagnosis",
              "display": "Encounter Diagnosis",
              "system":
"http://terminology.hl7.org/CodeSystem/condition-category"
            }
          ]
        }
      ],
      "clinicalStatus": {
        "coding": [
          {
            "code": "inactive",
            "system":
"http://terminology.hl7.org/CodeSystem/condition-clinical"
          }
        ]
      },
      "code": {
        "coding": [
          {
            "code": "Z00.00",
            "display": "Encounter for general adult

```

```

medical examination without abnormal findings [Z00.00]",
      "system": "http://hl7.org/fhir/sid/icd-10-cm"
    }
  ],
  "text": "Encounter for general adult medical examination
without abnormal findings [Z00.00]"
},
"encounter": {
  "reference": "Encounter/5"
},
"subject": {
  "reference": "Patient/2"
},
"verificationStatus": {
  "coding": [
    {
      "code": "confirmed",
      "system":
"http://terminology.hl7.org/CodeSystem/condition-ver-status"
    }
  ]
}
},
"search": {
  "mode": "match"
}
}
],
"link": [
{
  "relation": "self",
  "url":
"https://api.onetouchemr.com/fhir/r4/Condition?patient=Patient%2F2"
}
],
"total": 3,
"type": "searchset"
}

```

Search Condition resources for patient problems:

GET

<https://api.onetouchemr.com/fhir/r4/Condition?category=problem-list-item>

or

```
POST https://api.onetouchemr.com/fhir/r4/Condition/_search
Content-Type: application/x-www-form-urlencoded
```

```
category=problem-list-item
```

Search Condition resource for Encounter Diagnosis:

```
GET https://api.onetouchemr.com/fhir/r4/Condition?category=encounter-diagnosis
```

or

```
POST https://api.onetouchemr.com/fhir/r4/Condition/_search
Content-Type: application/x-www-form-urlencoded
```

```
category=encounter-diagnosis
```

Search Condition resource for Health Concerns:

```
GET https://api.onetouchemr.com/fhir/r4/Condition?category=health-concern
```

or

```
POST https://api.onetouchemr.com/fhir/r4/Condition/_search
Content-Type: application/x-www-form-urlencoded
```

```
category=health-concern
```

Combination of multiple search parameters is supported.

```
GET https://api.onetouchemr.com/fhir/r4/Condition?_id=ed-2&patient=2&_revinclude=Provenance:target
```

or

```
POST https://api.onetouchemr.com/fhir/r4/Condition/_search
Content-Type: application/x-www-form-urlencoded
```

```
_id=ed-2&patient=2&_revinclude=Provenance:target
```

Example Response:

```
HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "Bundle",
  "meta": {
    "lastUpdated": "2022-10-02T05:26:34+00:00"
```



```

    },
    "entry": [
      {
        "fullUrl":
"https://api.onetouchemr.com/fhir/r4/Condition/ed-2",
        "resource": {
          "resourceType": "Condition",
          "id": "ed-2",
          "meta": {
            "lastUpdated": "2022-08-21T10:27:26+00:00",
            "profile": [
"http://hl7.org/fhir/us/core/StructureDefinition/us-core-condition"
            ]
          },
          "category": [
            {
              "coding": [
                {
                  "code": "encounter-diagnosis",
                  "display": "Encounter Diagnosis",
                  "system":
"http://terminology.hl7.org/CodeSystem/condition-category"
                }
              ]
            }
          ],
          "clinicalStatus": {
            "coding": [
              {
                "code": "inactive",
                "system":
"http://terminology.hl7.org/CodeSystem/condition-clinical"
              }
            ]
          },
          "code": {
            "coding": [
              {
                "code": "R07.89",
                "display": "Other chest pain [R07.89]",
                "system": "http://hl7.org/fhir/sid/icd-10-cm"
              }
            ]
          }
        }
      ],

```

```

        "text": "Other chest pain [R07.89]"
      },
      "encounter": {
        "reference": "Encounter/2"
      },
      "subject": {
        "reference": "Patient/2"
      },
      "verificationStatus": {
        "coding": [
          {
            "code": "confirmed",
            "system":
"http://terminology.hl7.org/CodeSystem/condition-ver-status"
          }
        ]
      },
      "search": {
        "mode": "match"
      }
    },
    {
      "fullUrl":
"https://api.onetouchemr.com/fhir/r4/Provenance/ed-2",
      "resource": {
        "resourceType": "Provenance",
        "id": "ed-2",
        "meta": {
          "lastUpdated": "2022-08-21T10:27:26+00:00",
          "profile": [
"http://hl7.org/fhir/us/core/StructureDefinition/us-core-provenance"
          ]
        },
        "agent": [
          {
            "onBehalfOf": {
              "display": "Personal Physician Care",
              "reference": "Organization/1"
            },
            "type": {
              "coding": [

```

```

        "code": "author",
        "display": "Author",
        "system":
"http://terminology.hl7.org/CodeSystem/provenance-participant-type"
    }
  ],
  "text": "Author"
},
"who": {
  "reference": "Practitioner/3"
}
}
],
"recorded": "2022-08-21T10:27:26+00:00",
"target": [
  {
    "reference": "Condition/ed-2"
  }
]
},
"search": {
  "mode": "include"
}
}
],
"link": [
  {
    "relation": "self",
    "url":
"https://api.onetouchemr.com/fhir/r4/Condition?_id=ed-2&patient=2&_revinclud
e=Provenance%3Atarget"
  }
],
"total": 1,
"type": "searchset"
}

```

To list all CareTeam resources accessible to the current API user, do not include search parameters:

```
GET https://api.onetouchemr.com/fhir/r4/Condition
```

or

```
POST https://api.onetouchemr.com/fhir/r4/Condition/_search
```

Content-Type: application/x-www-form-urlencoded

## Device

The FHIR Device resource tracks individual instances of a device and their location. It is referenced by other resources for recording which device performed an action such as a procedure or an observation, referenced when prescribing and dispensing devices for patient use or for ordering supplies, and used to record and transmit Unique Device Identifier (UDI) information about a device such as a patient's implant. Corresponds to USCDI v1 Unique Device Identifier(s) for a Patient's Implantable Device(s) Data Class.

**FHIR Resource:** Device <http://hl7.org/fhir/device.html>

**Endpoint URI:** <https://{ClientID}.onetouchemr.com/fhir/r4/Device>

The following attributes are supported:

Name	Comments
udiCarrier	Unique Device Identifier (UDI) Barcode string
status	Device status (active or inactive)
distinctIdentifier	The distinct identification string
deviceName	The name of the device as given by the manufacturer
type	Code for the kind or type of device (SNOMED CT)
patient	Patient Reference, to whom Device is affixed
manufactureDate	Date when the device was made
expirationDate	Date and time of expiry of this device (if applicable)
lotNumber	Lot number of manufacture
serialNumber	Serial number assigned by the manufacturer

### Read

HTTP Request	Method	Action
--------------	--------	--------

/Device/[ID]/	GET	Retrieve Device resource by ID
---------------	-----	--------------------------------

## Search

HTTP Request	Method	Action
/Device/?[parameter={value}]	GET	Retrieve Condition by the specified search criteria.
/Device/?_search	POST	

## Search Parameters:

Key	Type	Description
patient	Reference	Patient Identifier
_id	Identifier	Record identifier

**\_revinclude:** Reverse include resources that refer to the record in the result. Currently, only Provenance:target is supported.

## Examples:

Read Device resource with ID 1:

```
GET https://api.onetouchemr.com/fhir/r4/Device/1
```

## Example Response:

```
HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "Device",
  "id": "1",
  "meta": {
    "lastUpdated": "2022-07-31T02:47:48+00:00",
    "profile": [
      "http://hl7.org/fhir/us/core/StructureDefinition/us-core-implantable-device"
    ]
  },
}
```

```

    "deviceName": [
      {
        "name": "Cardiac resynchronization therapy implantable
pacemaker",
        "type": "user-friendly-name"
      }
    ],
    "distinctIdentifier": "00643169007222",
    "expirationDate": "2016-01-28T00:00:00-06:00",
    "patient": {
      "reference": "Patient/1"
    },
    "serialNumber": "BLC200461H",
    "status": "active",
    "type": {
      "coding": [
        {
          "code": "704708004",
          "display": "Implantable defibrillator, device (physical
object)",
          "system": "http://snomed.info/sct"
        }
      ],
      "text": "Cardiac resynchronization therapy implantable pacemaker"
    },
    "udiCarrier": [
      {
        "carrierHRF": "(01)00643169007222(17)160128(21)BLC200461H",
        "deviceIdentifier": "00643169007222"
      }
    ]
  }

```

Search Device resource Patient ID or patient reference

```
GET https://api.onetouchemr.com/fhir/r4/Device?patient=2
```

or

```
GET https://api.onetouchemr.com/fhir/r4/Device?patient=Patient/2
```

or

```
POST https://api.onetouchemr.com/fhir/r4/Device/_search
Content-Type: application/x-www-form-urlencoded
```

patient=2

Example Response:

```
HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "Bundle",
  "meta": {
    "lastUpdated": "2022-10-02T07:31:33+00:00"
  },
  "entry": [
    {
      "fullUrl": "https://api.onetouchemr.com/fhir/r4/Device/2",
      "resource": {
        "resourceType": "Device",
        "id": "2",
        "meta": {
          "lastUpdated": "2022-08-17T03:32:41+00:00",
          "profile": [
            "http://hl7.org/fhir/us/core/StructureDefinition/us-core-implantable-device"
          ]
        },
        "deviceName": [
          {
            "name": "Knee joint prosthesis",
            "type": "user-friendly-name"
          }
        ],
        "distinctIdentifier": "987979879879",
        "expirationDate": "2022-01-01T00:00:00-06:00",
        "lotNumber": "M320",
        "manufactureDate": "2019-10-15T00:00:00-05:00",
        "patient": {
          "reference": "Patient/2"
        },
        "serialNumber": "AC221",
        "status": "active",
        "type": {
          "coding": [
            {
              "code": "109228008",
              "display": "Implantable defibrillator, device"
            }
          ]
        }
      }
    }
  ]
}
```

```

(physical object)",
    "system": "http://snomed.info/sct"
  }
],
"text": "Knee joint prosthesis"
},
"udiCarrier": [
  {
    "carrierHRF":
"(01)987979879879(11)191015(17)220101(10)M320(21)AC221",
    "deviceIdentifier": "987979879879"
  }
],
"search": {
  "mode": "match"
}
}
],
"link": [
  {
    "relation": "self",
    "url": "https://api.onetouchemr.com/fhir/r4/Device?patient=2"
  }
],
"total": 1,
"type": "searchset"
}

```

Combination of multiple search parameters is supported.

```

GET
https://api.onetouchemr.com/fhir/r4/Device?_id=1&patient=1&_revinclude=Provenance:target

```

or

```

POST https://api.onetouchemr.com/fhir/r4/Device/_search
Content-Type: application/x-www-form-urlencoded

_id=1&patient=1&_revinclude=Provenance:target

```

Example Response:

```

HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8

```



```

{
  "resourceType": "Bundle",
  "meta": {
    "lastUpdated": "2022-10-02T07:34:55+00:00"
  },
  "entry": [
    {
      "fullUrl": "https://api.onetouchemr.com/fhir/r4/Device/1",
      "resource": {
        "resourceType": "Device",
        "id": "1",
        "meta": {
          "lastUpdated": "2022-07-31T02:47:48+00:00",
          "profile": [
            "http://hl7.org/fhir/us/core/StructureDefinition/us-core-implantable-device"
          ]
        },
        "deviceName": [
          {
            "name": "Cardiac resynchronization therapy
implantable pacemaker",
            "type": "user-friendly-name"
          }
        ],
        "distinctIdentifier": "00643169007222",
        "expirationDate": "2016-01-28T00:00:00-06:00",
        "patient": {
          "reference": "Patient/1"
        },
        "serialNumber": "BLC200461H",
        "status": "active",
        "type": {
          "coding": [
            {
              "code": "704708004",
              "display": "Implantable defibrillator, device
(physical object)",
              "system": "http://snomed.info/sct"
            }
          ]
        },
        "text": "Cardiac resynchronization therapy implantable
pacemaker"
      }
    }
  ]
}

```

```

    },
    "udiCarrier": [
      {
        "carrierHRF":
"(01)00643169007222(17)160128(21)BLC200461H",
        "deviceIdentifier": "00643169007222"
      }
    ]
  },
  "search": {
    "mode": "match"
  }
},
{
  "fullUrl":
"http://api.onetouchemr.com/fhir/r4/Provenance/device-1",
  "resource": {
    "resourceType": "Provenance",
    "id": "device-1",
    "meta": {
      "lastUpdated": "2022-07-31T02:47:48+00:00",
      "profile": [
"http://hl7.org/fhir/us/core/StructureDefinition/us-core-provenance"
      ]
    },
    "agent": [
      {
        "onBehalfOf": {
          "display": "Personal Physician Care",
          "reference": "Organization/1"
        },
        "type": {
          "coding": [
            {
              "code": "author",
              "display": "Author",
              "system":
"http://terminology.hl7.org/CodeSystem/provenance-participant-type"
            }
          ],
          "text": "Author"
        }
      },
      "who": {

```

```

        "reference": "Practitioner/1"
      }
    ],
    "recorded": "2022-07-31T02:47:48+00:00",
    "target": [
      {
        "reference": "Device/1"
      }
    ],
    "search": {
      "mode": "include"
    }
  }
],
"link": [
  {
    "relation": "self",
    "url":
"https://api.onetouchemr.com/fhir/r4/Device?_id=1&patient=1&_revinclude=Pro
venance%3Atarget"
  }
],
"total": 1,
"type": "searchset"
}

```

To list all Device resources accessible to the current API user, do not include search parameters:

```
GET https://api.onetouchemr.com/fhir/r4/Device
```

or

```
POST https://api.onetouchemr.com/fhir/r4/Device/_search
Content-Type: application/x-www-form-urlencoded
```

## DiagnosticReport

A diagnostic report is the set of information that is typically provided by a diagnostic service when investigations are complete. The information includes a mix of atomic results, text reports,

images, and codes. The mix varies depending on the nature of the diagnostic procedure, and sometimes on the nature of the outcomes for a particular investigation. In FHIR, the report can be conveyed in a variety of ways including a Document, RESTful API, or Messaging framework. Included within each of these, would be the DiagnosticReport resource itself.

**FHIR Resource:** Device <http://hl7.org/fhir/diagnosticreport.html>

**Endpoint URI:** <https://{ClientID}.onetouchemr.com/fhir/r4/DiagnosticReport>

The following attributes are supported:

Name	Comments
encounter	Encounter reference, Health care event when test ordered
category	Diagnostic Report Category <ul style="list-style-type: none"> <li>● LP29684-5 for Radiology (USCDI Clinical Notes Imaging Narrative Data Element)</li> <li>● LP29708-2 for Cardiology</li> <li>● LP7839-6 for Pathology Report (USCDI v1 Clinical Notes Pathology Report Narrative Data Element)</li> <li>● LP29693-6 for Laboratory Note (USCDI v1 Clinical Notes Laboratory Report Narrative)</li> <li>● LAB for Laboratory Order Report/result)</li> </ul>
status	Report status (partial, preliminary, final, corrected, or unknown)
code	DiagnosticReport code (LOINC)
subject	Patient reference, the subject of the report
performer	Responsible Diagnostic Service
effectiveDateTime	Time of the report or note
issued	Date and time the report version was made
result	Lab result/observations
presentedForm	Entire report as issued

### Read

HTTP Request	Method	Action
/DiagnosticReport/[ID]/	GET	Retrieve DiagnosticReport resource by ID

## Search

HTTP Request	Method	Action
/DiagnosticReport/?[parameter={value}]	GET	Retrieve DiagnosticReport by the specified search criteria.
/DiagnosticReport/?_search	POST	

## Search Parameters:

Key	Type	Description
patient	Reference	Patient Identifier
_id	Identifier	Record identifier
date		Effective date in YYYY-MM-DD format
category		<p>Category coding system and/or code. Where: [system] is the category coding system: Supported values: <a href="http://terminology.hl7.org/CodeSystem/v2-0074">http://terminology.hl7.org/CodeSystem/v2-0074</a> <a href="http://loinc.org">http://loinc.org</a></p> <p>[code] is the category code to lookup. Supported values: LAB (only supported for <a href="http://terminology.hl7.org/CodeSystem/v2-0074">http://terminology.hl7.org/CodeSystem/v2-0074</a> system) LP29684-5 (for Radiology) LP29708-2 (for Cardiology) LP7839-6 (for Pathology)</p> <p>If the system is not specified, the API will lookup the code from all the supported category coding systems.</p>
code		<p>Report coding system and/or code. Where: [system] is the report coding system: Supported value: <a href="http://loinc.org">http://loinc.org</a></p>

		<p>[code] is the LOINC code values of the report.</p> <p>If the system is not specified, the API will use <a href="http://loinc.org">http://loinc.org</a>.</p>
--	--	--

**\_revinclude:** Reverse include resources that refer to the record in the result. Currently, only Provenance:target is supported.

Examples:

Read DiagnosticReport resource with record ID rptnote-13:

```
GET https://api.onetouchemr.com/fhir/r4/DiagnosticReport/rptnote-13
```

Example Response:

```
HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "DiagnosticReport",
  "id": "rptnote-13",
  "meta": {
    "lastUpdated": "2022-03-10T16:56:00+00:00",
    "profile": [
      "http://hl7.org/fhir/us/core/StructureDefinition/us-core-diagnosticreport-note"
    ]
  },
  "category": [
    {
      "coding": [
        {
          "code": "LP29684-5",
          "display": "Radiology",
          "system": "http://loinc.org"
        }
      ],
      "text": "Radiology"
    }
  ],
  "code": {
    "coding": [
      {
```

```

        "code": "42272-5",
        "display": "Chest X-ray PA and lateral",
        "system": "http://loinc.org"
    }
]
},
"effectiveDateTime": "2022-03-10T10:30:00-06:00",
"encounter": {
  "reference": "Encounter/2"
},
"issued": "2022-03-10T10:30:00-06:00",
"performer": [
  {
    "reference": "Practitioner/3"
  }
],
"presentedForm": [
  {
    "contentType": "application/pdf",
    "url":
"http://local.onetouchemr.com/encounters/in_house_work_labs_data/encounter_
id:2/task:download_file/point_of_care_id:13"
  }
],
"status": "unknown",
"subject": {
  "reference": "Patient/2"
}
}

```

Retrieve data by Patient ID or patient reference or date:

```
GET https://api.onetouchemr.com/fhir/r4/DiagnosticReport?patient=2
```

```
GET https://api.onetouchemr.com/fhir/r4/DiagnosticReport?patient=Patient/2
```

```
GET https://api.onetouchemr.com/fhir/r4/DiagnosticReport?date=2022-04-04
```

Search for DiagnosticReport belonging to LAB category:

```
GET
https://api.onetouchemr.com/fhir/r4/DiagnosticReport?category=http://terminology.hl7.org/CodeSystem/v2-0074|LAB
```

or

```
POST https://api.onetouchemr.com/fhir/r4/DiagnosticReport/_search
Content-Type: application/x-www-form-urlencoded

category=http://terminology.hl7.org/CodeSystem/v2-0074|LAB
```

Search for DiagnosticReport belonging to Radiology category:

```
GET
https://api.onetouchemr.com/fhir/r4/DiagnosticReport?category=http://loinc.org|LP29684-5
```

Search for "Glucose [Mass/volume] in Urine by Test strip" Report LOINC code DiagnosticReport:

```
GET
https://api.onetouchemr.com/fhir/r4//DiagnosticReport?code=http://loinc.org|5792-7
```

Combination of multiple search parameters is supported.

```
GET
https://api.onetouchemr.com/fhir/r4/DiagnosticReport?_id=rptlab-5&patient=1&_revinclude=Provenance:target
```

or

```
POST https://api.onetouchemr.com/fhir/r4/DiagnosticReport/_search
Content-Type: application/x-www-form-urlencoded

_id=rptlab-5&patient=1&_revinclude=Provenance:target
```

Example Response:

```
HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "Bundle",
  "meta": {
    "lastUpdated": "2022-10-02T08:44:12+00:00"
```



```

    },
    "entry": [
      {
        "fullUrl":
"https://api.onetouchemr.com/fhir/r4/DiagnosticReport/rptlab-5",
        "resource": {
          "resourceType": "DiagnosticReport",
          "id": "rptlab-5",
          "meta": {
            "lastUpdated": "2015-06-22T15:30:38+00:00",
            "profile": [
"http://hl7.org/fhir/us/core/StructureDefinition/us-core-diagnosticreport-lab"
            ]
          },
          "category": [
            {
              "coding": [
                {
                  "code": "LAB",
                  "display": "Laboratory",
                  "system":
"http://terminology.hl7.org/CodeSystem/v2-0074"
                }
              ]
            }
          ],
          "code": {
            "coding": [
              {
                "code": "5778-6",
                "display": "Color of Urine",
                "system": "http://loinc.org"
              }
            ]
          },
          "effectiveDateTime": "2015-06-22T09:43:00-05:00",
          "encounter": {
            "reference": "Encounter/1"
          },
          "issued": "2015-06-22T09:43:00-05:00",
          "performer": [
            {

```

```

        "reference": "Practitioner/1"
      }
    ],
    "result": [
      {
        "reference": "Observation/labresult-5"
      }
    ],
    "status": "final",
    "subject": {
      "reference": "Patient/1"
    }
  },
  "search": {
    "mode": "match"
  }
},
"link": [
  {
    "relation": "self",
    "url":
"https://api.onetouchemr.com/fhir/r4/DiagnosticReport?_id=rptlab-5&patient=
1"
  }
],
"total": 1,
"type": "searchset"
}

```

To list all DiagnosticReport resources accessible to the current API user, do not include search parameters:

```
GET https://api.onetouchemr.com/fhir/r4/DiagnosticReport
```

or

```
POST https://api.onetouchemr.com/fhir/r4/DiagnosticReport/_search
Content-Type: application/x-www-form-urlencoded
```

## DocumentReference

The FHIR DocumentReference resource is used to index a document, clinical note, and other binary objects to make them available to a healthcare system. A document is some sequence of

bytes that is identifiable, establishes its own context (e.g., what subject, author, etc. can be displayed to the user), and has defined update management.

**FHIR Resource:** DocumentReference <http://hl7.org/fhir/documentreference.html>

**Endpoint URI:** [https://\[ClientID\].onetouchemr.com/fhir/r4/DocumentReference](https://[ClientID].onetouchemr.com/fhir/r4/DocumentReference)

The following attributes are supported:

Name	Comments
identifier	Other identifiers for the document
status	Status (current, superseded or entered-in-error)
type	US Core DocumentReference Type LOINC <ul style="list-style-type: none"> <li>● 18842-5 for Discharge summary (USCDI v1 Clinical Notes Discharge Summary Note Data Element)</li> <li>● 11488-4 for Consult note (USCDI v1 Clinical Notes Consultation Note Data Element)</li> <li>● 34117-2 for History and physical note (USCDI v1 Clinical Notes History &amp; Physical Note Data Element)</li> <li>● 11506-3 for Progress note (USCDI v1 Clinical Notes Progress Note Data Element)</li> <li>● 28570-0 for Procedure note (USCDI v1 Clinical Notes Procedure Note Data Element)</li> <li>● 11502-2 for Laboratory report</li> <li>● 18748-4 for Diagnostic Imaging Study</li> </ul>
category	US Core DocumentReference Category (clinical-note)
subject	Patient reference
date	Date when document reference was created
author	Practitioner, Patient, or Organization Reference, the author of the document
custodian	Organization Reference, Organization which maintains the document
context	Clinical context of document, encounter
content	Actual Document referenced

Read

HTTP Request	Method	Action
--------------	--------	--------

/DocumentReference/{ID}/	GET	Retrieve DocumentReference resource by ID
--------------------------	-----	---

### Search

HTTP Request	Method	Action
/DocumentReference/?[parameter={value}]	GET	Retrieve Condition by the specified search criteria.
/DocumentReference/?_search	POST	

### Search Parameters:

Key	Type	Description
patient	Reference	Patient Identifier
_id	Identifier	Record identifier
date	Date	Encounter date in YYYY-MM-DD format
category		<p>Category: coding system and/or code.            [system] is the category coding system:            Supported values:  <a href="http://hl7.org/fhir/us/core/CodeSystem/us-core-documentreference-category">http://hl7.org/fhir/us/core/CodeSystem/us-core-documentreference-category</a>            [code] is the intent code to lookup. Supported values: clinical-note</p> <p>If the system is not specified, the API will lookup the code from all the supported category coding systems.</p>
type		<p>Type: coding system and/or code.</p> <p>[system] is the type coding system: Supported values: <a href="http://loinc.org">http://loinc.org</a></p> <p>[code] is the LOINC code values of the Clinical Note types. Valid values:            18842-5 for Discharge summary            11488-4 for Consultation note            34117-2 for History and physical note</p>

		11506-3 for Progress note 28570-0 for Procedure note 11502-2 for Laboratory report 18748-4 for Diagnostic Imaging Study  If the system is not specified, the API will lookup the code from all the supported type coding systems.
--	--	--

**\_revinclude:** Reverse include resources that refer to the record in the result. Currently, only Provenance:target is supported.

### Examples:

Read DocumentReference resource with ID pocf-12:

```
GET https://api.onetouchemr.com/fhir/r4/DocumentReference/pocf-12
```

Example Response:

```
HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "DocumentReference",
  "id": "pocf-12",
  "meta": {
    "lastUpdated": "2022-03-10T16:56:00+00:00",
    "profile": [
      "http://hl7.org/fhir/us/core/StructureDefinition/us-core-documentreference"
    ]
  },
  "author": [
    {
      "reference": "Practitioner/3"
    }
  ],
  "category": [
    {
      "coding": [
        {
          "code": "clinical-note",
          "display": "Clinical Note",
          "system":
            "http://hl7.org/fhir/us/core/CodeSystem/us-core-documentreference-category"
        }
      ]
    }
  ]
}
```

```

    ]
  },
  "content": [
    {
      "attachment": {
        "contentType": "application/pdf",
        "url":
"https://api.onetouchemr.com/encounters/in\_house\_work\_labs\_data/encounter\_id:2/task:download\_file/point\_of\_care\_id:12"
      },
      "format": {
        "code": "urn:ihe:iti:xds:2017:mimeTypeSufficient",
        "display": "mimeType Sufficient",
        "system":
"http://ihe.net/fhir/ValueSet/IHE.FormatCode.codesystem"
      }
    }
  ],
  "context": {
    "encounter": [
      {
        "reference": "Encounter/2"
      }
    ]
  },
  "period": {
    "end": "2022-03-10T11:00:00-06:00",
    "start": "2022-03-10T10:00:00-06:00"
  },
  "custodian": {
    "reference": "Organization/1"
  },
  "date": "2022-03-10T10:30:00-06:00",
  "identifier": [
    {
      "system": "https://api.onetouchemr.com",
      "value": "pocf-12"
    }
  ],
  "status": "current",
  "subject": {
    "reference": "Patient/2"
  },
},

```

```
"type": {
  "coding": [
    {
      "code": "11502-2",
      "display": "Laboratory report",
      "system": "http://loinc.org"
    }
  ],
  "text": "Laboratory report"
}
```

Retrieve data by Patient ID or patient reference

```
GET https://api.onetouchemr.com/fhir/r4/DocumentReference?patient=3
```

or

```
GET https://api.onetouchemr.com/fhir/r4/DocumentReference?patient=Patient/3
```

or

```
POST https://api.onetouchemr.com/fhir/r4/DocumentReference/_search
Content-Type: application/x-www-form-urlencoded
```

```
patient=3
```

Retrieve data by Encounter Date

```
GET https://api.onetouchemr.com/fhir/r4/DocumentReference?date=2015-06-22
```

Retrieve data with Consultation Note type (11488-4):

```
GET
https://api.onetouchemr.com/fhir/r4/DocumentReference?type=http://loinc.org|11488-4
```

Combination of multiple search parameters is supported.

```
GET
https://api.onetouchemr.com/fhir/r4/DocumentReference?_id=pcn-3&patient=3&_
revinclude=Provenance:target
```

To list all DocumentReference resources accessible to the current API user, do not include search parameters:

```
GET https://api.onetouchemr.com/fhir/r4/DocumentReference
```

or

```
POST https://api.onetouchemr.com/fhir/r4/DocumentReference/_search
Content-Type: application/x-www-form-urlencoded
```

## Encounter

Encounter is an interaction between a patient and healthcare provider(s) for the purpose of providing healthcare service(s) or assessing the health status of a patient. Encounter encompasses the lifecycle from pre-admission, the actual encounter (for ambulatory encounters), and admission, stay and discharge (for inpatient encounters). During the encounter the patient may move from practitioner to practitioner and location to location.

**FHIR Resource:** Encounter <http://hl7.org/fhir/encounter.html>

**Endpoint URI:** [https://\[ClientID\].onetouchemr.com/fhir/r4/Encounter](https://[ClientID].onetouchemr.com/fhir/r4/Encounter)

The following attributes are supported:

Name	Comments
identifier	Identifier(s) by which this encounter is known
status	Encounter Status
class	Classification of patient encounter. This is always set to AMB for ambulatory
type	Encounter Type Code (SNOMED CT or CPT)
subject	Patient Reference
period	The start and end time of the encounter
participant	List of participants involved in the encounter
location	List of locations where the patient has been
serviceProvider	The organization (facility) responsible for this encounter
reasonCode	Coded reason the encounter takes place
hospitalization	Details about the admission to a healthcare service



## Read

HTTP Request	Method	Action
/Encounter/{ID}/	GET	Retrieve DocumentReference resource by ID

## Search

HTTP Request	Method	Action
/Encounter/?[parameter={value}]	GET	Retrieve Condition by the specified search criteria.
/Encounter/?_search	POST	

## Search Parameters:

Key	Type	Description
patient	Reference	Patient Identifier
_id	Identifier	Record identifier
date	Date	Encounter date in YYYY-MM-DD format

**\_revinclude:** Reverse include resources that refer to the record in the result. Currently, only Provenance:target is supported.

## Examples:

Read Encounter resource with record ID 1:

```
GET https://api.onetouchemr.com/fhir/r4/Encounter/1
```

## Example Response:

```
HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "Encounter",
  "id": "1",
  "meta": {
    "lastUpdated": "2022-08-17T08:38:34+00:00",
    "profile": [
```

```

"http://hl7.org/fhir/us/core/StructureDefinition/us-core-encounter"
]
},
"class": {
"code": "AMB",
"system": "http://terminology.hl7.org/CodeSystem/v3-ActCode"
},
"hospitalization": {
"dischargeDisposition": {
"coding": [
{
"code": "unknown",
"display": "Unknown",
"system":
"http://terminology.hl7.org/CodeSystem/data-absent-reason"
}
],
"text": "unknown"
}
},
"identifier": [
{
"system": "https://api.onetouchemr.com",
"value": "1"
}
],
"location": [
{
"location": {
"display": "Neighborhood Physicians Practice",
"reference": "Location/1"
}
}
],
"participant": [
{
"individual": {
"display": "Dr. Albert Davis",
"reference": "Practitioner/1"
},
"period": {
"end": "2015-06-22T10:30:00-05:00",
"start": "2015-06-22T10:00:00-05:00"
}
},

```

```
    "type": [
      {
        "coding": [
          {
            "code": "PPRF",
            "display": "primary performer",
            "system":
"http://terminology.hl7.org/CodeSystem/v3-ParticipationType"
          }
        ],
        "text": "primary performer"
      }
    ]
  },
  "period": {
    "end": "2015-06-22T10:30:00-05:00",
    "start": "2015-06-22T10:00:00-05:00"
  },
  "reasonCode": [
    {
      "text": "Fever"
    }
  ],
  "serviceProvider": {
    "display": "Personal Physician Care",
    "reference": "Organization/1"
  },
  "status": "finished",
  "subject": {
    "display": "Alice Newman",
    "reference": "Patient/1"
  },
  "type": [
    {
      "coding": [
        {
          "code": "453701000124103",
          "display": "In-person encounter",
          "system": "http://snomed.info/sct"
        }
      ],
      "text": "In-person encounter"
    }
  ]
}
```

```
]
}
```

Retrieve data by Patient ID or patient reference

```
GET https://api.onetouchemr.com/fhir/r4/Encounter?patient=3
```

or

```
GET https://api.onetouchemr.com/fhir/r4/Encounter?patient=Patient/3
```

or

```
POST https://api.onetouchemr.com/fhir/r4/Encounter/_search
```

```
Content-Type: application/x-www-form-urlencoded
```

```
patient=3
```

Example Response:

```
HTTP/1.1 200 OK
```

```
Content-Type: application/fhir+json; charset=utf-8
```

```
{
  "resourceType": "Bundle",
  "meta": {
    "lastUpdated": "2022-10-02T10:41:21+00:00"
  },
  "entry": [
    {
      "fullUrl": "https://api.onetouchemr.com/fhir/r4/Encounter/3",
      "resource": {
        "resourceType": "Encounter",
        "id": "3",
        "meta": {
          "lastUpdated": "2022-08-22T18:15:42+00:00",
          "profile": [
            "http://hl7.org/fhir/us/core/StructureDefinition/us-core-encounter"
          ]
        },
        "class": {
          "code": "AMB",
          "system": "http://terminology.hl7.org/CodeSystem/v3-ActCode"
        },
        "hospitalization": {
          "dischargeDisposition": {
```

```

        "coding": [
            {
                "code": "unknown",
                "display": "Unknown",
                "system":
"http://terminology.hl7.org/CodeSystem/data-absent-reason"
            }
        ],
        "text": "unknown"
    }
},
"identifier": [
    {
        "system": "https://api.onetouchemr.com",
        "value": "3"
    }
],
"location": [
    {
        "location": {
            "display": "Neighborhood Physicians
Practice",
            "reference": "Location/1"
        }
    }
],
"participant": [
    {
        "individual": {
            "display": "Dr. Albert Davis",
            "reference": "Practitioner/1"
        },
        "period": {
            "end": "2015-07-22T14:30:00-05:00",
            "start": "2015-07-22T14:00:00-05:00"
        },
        "type": [
            {
                "coding": [
                    {
                        "code": "PPRF",
                        "display": "primary performer",
                        "system":
"http://terminology.hl7.org/CodeSystem/v3-ParticipationType"
                    }
                ]
            }
        ]
    }
]

```

```

        ],
        "text": "primary performer"
    }
]
}
],
"period": {
"end": "2015-07-22T14:30:00-05:00",
"start": "2015-07-22T14:00:00-05:00"
},
"reasonCode": [
{
"text": "Routine Physical"
}
],
"serviceProvider": {
"display": "Personal Physician Care",
"reference": "Organization/1"
},
"status": "finished",
"subject": {
"display": "Jeremy Bates",
"reference": "Patient/3"
},
"type": [
{
"coding": [
{
"code": "453701000124103",
"display": "In-person encounter",
"system": "http://snomed.info/sct"
}
],
"text": "In-person encounter"
}
]
},
"search": {
"mode": "match"
}
}
],
"link": [

```

```
{
  "relation": "self",
  "url":
  "https://api.onetouchemr.com/fhir/r4/Encounter?patient=3"
},
"total": 1,
"type": "searchset"
}
```

Retrieve data by Encounter Date

```
GET https://api.onetouchemr.com/fhir/r4/Encounter?date=2015-06-22
```

Combination of multiple search parameters is supported.

```
GET
https://api.onetouchemr.com/fhir/r4/Encounter?_id=214&patient=123&_revinclud
e=Provenance:target
```

```
GET
https://api.onetouchemr.com/fhir/r4/Encounter?date=2015-06-22&patient=123&_
revinclude=Provenance:target
```

To list all Encounter resources accessible to the current API user, do not include search parameters:

```
GET https://api.onetouchemr.com/fhir/r4/Encounter
```

or

```
POST https://api.onetouchemr.com/fhir/r4/Encounter/_search
Content-Type: application/x-www-form-urlencoded
```

## Goal

A Goal is generally an expressed desired health state to be achieved by a subject of care (or family/group) over a period or at a specific point of time. This desired target health state may be

achieved as a result of health care intervention(s) or resulting from natural recovery over time. Goals may address the prevention of illness, cure or mitigation of a condition, prolongation of life, or mitigation of pain and discomfort. Corresponds to USCDI v1 Goals Data class

**FHIR Resource:** Goal <https://www.hl7.org/fhir/goal.html>

**Endpoint URI:** [https://\[ClientID\].onetouchemr.com/fhir/r4/Goal](https://[ClientID].onetouchemr.com/fhir/r4/Goal)

The following attributes are supported:

Name	Comments
lifecycleStatus	Goal Life cycle status (active, completed, on-hold, or cancelled)
description	Code or text describing goal (USCDI v1 Goals Patient Goals Data Element)
subject	Patient reference who this goal is intended for
target	Target outcome for the goal

## FHIR Operations

OneTouch EMR APIs currently support the following FHIR Operations.

### Read

HTTP Request	Method	Action
/Goal/[ID]	GET	Retrieve goal resource by ID

### Search

HTTP Request	Method	Action
/Goal/?[parameter={value}]	GET	Retrieve goals by the specified search criteria.
/Goal/_search	POST	

Search Parameters:

Key	Type	Description
patient	Reference	Patient Identifier



_id	Identifier	Record identifier
-----	------------	-------------------

**\_revinclude:** Reverse include resources that refer to the record in the result. Currently, only Provenance:target is supported.

### Examples:

Read Goal resource with record ID 1:

```
GET https://api.onetouchemr.com/fhir/r4/Goal/1
```

Example Response:

```
HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "Goal",
  "id": "1",
  "meta": {
    "lastUpdated": "2022-07-31T02:28:49+00:00",
    "profile": [
      "http://hl7.org/fhir/us/core/StructureDefinition/us-core-goal"
    ]
  },
  "description": {
    "text": "Get rid of intermittent fever that is occurring every few weeks."
  },
  "lifecycleStatus": "active",
  "subject": {
    "reference": "Patient/1"
  },
  "target": [
    {
      "dueDate": "2015-06-22"
    }
  ]
}
```

Search Goals by patient:

```
GET https://api.onetouchemr.com/fhir/r4/Goal?patient=4
```

or

```
POST https://api.onetouchemr.com/fhir/r4/Goal/_search
Content-Type: application/x-www-form-urlencoded
```

```
patient=4
```

Example Response:

```
HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "Bundle",
  "meta": {
    "lastUpdated": "2022-10-02T10:55:51+00:00"
  },
  "entry": [
    {
      "fullUrl": "https://api.onetouchemr.com/fhir/r4/Goal/3",
      "resource": {
        "resourceType": "Goal",
        "id": "3",
        "meta": {
          "lastUpdated": "2022-08-23T05:48:32+00:00",
          "profile": [
            "http://hl7.org/fhir/us/core/StructureDefinition/us-core-goal"
          ]
        },
        "description": {
          "text": "Chronic Sickness exhibited by patient"
        },
        "lifecycleStatus": "active",
        "subject": {
          "reference": "Patient/4"
        },
        "target": [
          {
            "dueDate": "2020-06-22"
          }
        ]
      },
      "search": {
        "mode": "match"
      }
    },
    {

```

```

    "fullUrl": "https://api.onetouchemr.com/fhir/r4/Goal/4",
    "resource": {
      "resourceType": "Goal",
      "id": "4",
      "meta": {
        "lastUpdated": "2022-08-23T05:49:05+00:00",
        "profile": [
          "http://hl7.org/fhir/us/core/StructureDefinition/us-core-goal"
        ]
      },
      "description": {
        "text": "Need to gain more energy to do regular
activities"
      },
      "lifecycleStatus": "active",
      "subject": {
        "reference": "Patient/4"
      },
      "target": [
        {
          "dueDate": "2020-06-22"
        }
      ]
    },
    "search": {
      "mode": "match"
    }
  }
],
"link": [
  {
    "relation": "self",
    "url": "https://api.onetouchemr.com/fhir/r4/Goal?patient=4"
  }
],
"total": 2,
"type": "searchset"
}

```

Combination of multiple search parameters is supported.

GET

[https://api.onetouchemr.com/fhir/r4/Goal?\\_id=3&patient=3&\\_revinclude=Proven](https://api.onetouchemr.com/fhir/r4/Goal?_id=3&patient=3&_revinclude=Proven)

ance:target

To list all Goal resources accessible to the current API user, do not include search parameters:

```
GET https://api.onetouchemr.com/fhir/r4/Goal
```

or

```
POST https://api.onetouchemr.com/fhir/r4/Goal/_search
Content-Type: application/x-www-form-urlencoded
```

## 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 includes immunization of both humans and animals but does not include the administration of non-vaccine agents, even those that may have or claim to have immunological effects. While the terms "immunization" and "vaccination" are not clinically identical, for the purposes of the FHIR resources, the terms are used synonymously. Corresponds to USCDI v1 Immunizations Data Class.

**FHIR Resource:** Immunization <https://www.hl7.org/fhir/immunization.html>

**Endpoint URI:** [https://\[ClientID\].onetouchemr.com/fhir/r4/Immunization](https://[ClientID].onetouchemr.com/fhir/r4/Immunization)

The following attributes are supported:

Name	Comments
status	Status (completed or not-done)
occurrenceDateTime	Vaccine administration date
vaccineCode	Vaccine administered code (CVX)
patient	Patient reference, who was immunized
primarySource	Indicates context the data was recorded in
encounter	Encounter immunization was part of

## FHIR Operations

OneTouch EMR APIs currently support the following FHIR Operations.

## Read

HTTP Request	Method	Action
/Immunization/{ID}	GET	Retrieve Immunization resource by ID

## Search

HTTP Request	Method	Action
/Immunization/?[parameter={value}]	GET	Retrieve Immunizations by the specified search criteria.
/Immunization/_search	POST	

## Search Parameters:

Key	Type	Description
patient	Reference	Patient Identifier
_id	Identifier	Record identifier

**\_revinclude:** Reverse include resources that refer to the record in the result. Currently, only Provenance:target is supported.

## Examples:

Read Immunization resource with record ID 1:

```
GET https://api.onetouchemr.com/fhir/r4/Immunization/1
```

## Example Response:

```
HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "Immunization",
  "id": "1",
  "meta": {
    "lastUpdated": "2015-06-22T15:30:38+00:00",
    "profile": [
      "http://hl7.org/fhir/us/core/StructureDefinition/us-core-immunization"
    ]
  }
}
```

```

]
},
"occurrenceDateTime": "2012-01-04T00:00:00-06:00",
"patient": {
"reference": "Patient/1"
},
"primarySource": false,
"status": "completed",
"vaccineCode": {
"coding": [
{
"code": "106",
"display": "diphtheria, tetanus toxoids and acellular
pertussis vaccine, 5 pertussis antigens",
"system": "http://hl7.org/fhir/sid/cvx"
}
],
"text": "Tetanus and diphtheria toxoids [106]"
}
}

```

Search Immunizations by patient:

```
GET https://api.onetouchemr.com/fhir/r4/Immunization?patient=1
```

or

```
POST https://api.onetouchemr.com/fhir/r4/Immunization/_search
Content-Type: application/x-www-form-urlencoded
```

```
patient=1
```

Example Response:

```

HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "Bundle",
  "meta": {
    "lastUpdated": "2022-10-02T11:13:07+00:00"
  },
  "entry": [
    {
      "fullUrl":
"https://api.onetouchemr.com/fhir/r4/Immunization/1",

```

```

    "resource": {
      "resourceType": "Immunization",
      "id": "1",
      "meta": {
        "lastUpdated": "2015-06-22T15:30:38+00:00",
        "profile": [
          "http://hl7.org/fhir/us/core/StructureDefinition/us-core-immunization"
        ]
      },
      "occurrenceDateTime": "2012-01-04T00:00:00-06:00",
      "patient": {
        "reference": "Patient/1"
      },
      "primarySource": false,
      "status": "completed",
      "vaccineCode": {
        "coding": [
          {
            "code": "106",
            "display": "diphtheria, tetanus toxoids and
            acellular pertussis vaccine, 5 pertussis antigens",
            "system": "http://hl7.org/fhir/sid/cvx"
          }
        ],
        "text": "Tetanus and diphtheria toxoids [106]"
      }
    },
    "search": {
      "mode": "match"
    }
  },
  {
    "fullUrl":
    "https://api.onetouchemr.com/fhir/r4/Immunization/2",
    "resource": {
      "resourceType": "Immunization",
      "id": "2",
      "meta": {
        "lastUpdated": "2015-06-22T15:30:38+00:00",
        "profile": [
          "http://hl7.org/fhir/us/core/StructureDefinition/us-core-immunization"
        ]
      }
    }
  }

```

```

    },
    "occurrenceDateTime": "2015-06-22T00:00:00-05:00",
    "patient": {
      "reference": "Patient/1"
    },
    },
    "primarySource": false,
    "status": "not-done",
    "statusReason": {
      "coding": [
        {
          "code": "PATOBJ",
          "display": "patient objection",
          "system":
"http://terminology.hl7.org/CodeSystem/v3-ActReason"
        }
      ],
      "text": "patient objection"
    },
    "vaccineCode": {
      "coding": [
        {
          "code": "166",
          "display": "influenza, intradermal,
quadrivalent, preservative free, injectable",
          "system": "http://hl7.org/fhir/sid/cvx"
        }
      ],
      "text": "influenza, intradermal, quadrivalent,
preservative free [166]"
    }
  },
  "search": {
    "mode": "match"
  }
}
],
"link": [
{
  "relation": "self",
  "url":
"http://api.onetouchemr.com/fhir/r4/Immunization?patient=1"
}
],
"total": 2,

```



```
"type": "searchset"
}
```

Combination of multiple search parameters is supported.

```
GET
https://api.onetouchemr.com/fhir/r4/Immunization?_id=2&patient=1&_revinclud
e=Provenance:target
```

To list all Immunization resources accessible to the current API user, do not include search parameters:

```
GET https://api.onetouchemr.com/fhir/r4/Immunization
```

or

```
POST https://api.onetouchemr.com/fhir/r4/Immunization/_search
Content-Type: application/x-www-form-urlencoded
```

## Location

A Location includes both incidental locations (a place which is used for healthcare without prior designation or authorization) and dedicated, formally appointed locations. Locations may be private, public, mobile or fixed and scale from small freezers to full hospital buildings or parking garages.

**FHIR Resource:** Location <https://www.hl7.org/fhir/location.html>

**Endpoint URI:** [https://\[ClientID\].onetouchemr.com/fhir/r4/Location](https://[ClientID].onetouchemr.com/fhir/r4/Location)

The following attributes are supported:

Name	Comments
identifier	Unique code or number identifying the location to its users
status	Status (active, inactive, or suspended)
name	Location name
telecom	Contact details of the location
address	Physical location
managingOrganization	Organization responsible for provisioning and upkeep

## FHIR Operations

OneTouch EMR APIs currently support the following FHIR Operations.

### Read

HTTP Request	Method	Action
/Location/[ID]	GET	Retrieve Location resource by ID

### Search

HTTP Request	Method	Action
/Location/?[parameter={value}]	GET	Retrieve Locations by the specified search criteria.
/Location/_search	POST	

Search Parameters:

Key	Type	Description
_id	Identifier	Record identifier
name		
address		

**\_revinclude:** Reverse include resources that refer to the record in the result. Currently, only Provenance:target is supported.

### Examples:

Read Location resource with record ID 1:

```
GET https://api.onetouchemr.com/fhir/r4/Location/1
```

Example Response:

```
HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "Location",
  "id": "1",
  "meta": {
```

```
"lastUpdated": "2022-08-17T07:33:26+00:00",
"profile": [
  "http://hl7.org/fhir/us/core/StructureDefinition/us-core-location"
],
"address": {
  "city": "Beaverton,",
  "country": "US",
  "line": [
    "2472, Rocky place"
  ],
  "postalCode": "97006",
  "state": "OR"
},
"identifier": [
  {
    "system": "https://api.onetouchemr.com",
    "value": "1"
  }
],
"managingOrganization": {
  "display": "Personal Physician Care"
},
"name": "Neighborhood Physicians Practice",
"telecom": [
  {
    "system": "phone",
    "value": "555-555-1002"
  }
]
}
```

Search Locations by name or address:

```
GET https://api.onetouchemr.com/fhir/r4/Location?name=Community
```

```
GET https://api.onetouchemr.com/fhir/r4/Location?address=Beaverton
```

Combination of multiple search parameters is supported.

```
GET
https://api.onetouchemr.com/fhir/r4/Location?name=Community&address=1st%20S
```

treet

To list all Location resources, do not include search parameters:

```
GET https://api.onetouchemr.com/fhir/r4/Location
```

## MedicationRequest

This resource covers all types of orders for medications for a patient. This includes inpatient medication orders as well as community orders (whether filled by the prescriber or by a pharmacy). It also includes orders for over-the-counter medications (e.g. Aspirin), total parenteral nutrition and diet/ vitamin supplements. It may be used to support the order of medication-related devices.

**FHIR Resource:** MedicationRequest <https://www.hl7.org/fhir/medicationrequest.html>

**Endpoint URI:** [https://\[ClientID\].onetouchemr.com/fhir/r4/MedicationRequest](https://[ClientID].onetouchemr.com/fhir/r4/MedicationRequest)

The following attributes are supported:

Name	Comments
status	Status (active, on-hold, cancelled, completed, or stopped)
intent	Request intent (proposal, plan, order, original-order, reflex-order, filler-order, instance-order, or option)
reportedBoolean	Reported rather than primary record
contained	Medication to be taken. Corresponds to USCDI v1 Medications Data Class
subject	Patient reference
authoredOn	When request was initially authored
requester	Who/What requested the Request
dosageInstruction	How the medication should be taken
encounter	Encounter created as part of encounter/admission/stay

## FHIR Operations

OneTouch EMR APIs currently support the following FHIR Operations.

## Read

HTTP Request	Method	Action
/MedicationRequest/{ID}	GET	Retrieve MedicationRequest resource by ID

## Search

HTTP Request	Method	Action
/MedicationRequest/?[parameter={value}]	GET	Retrieve MedicationRequest by the specified search criteria.
/MedicationRequest/_search	POST	

## Search Parameters:

Key	Type	Description
_id	Identifier	Record identifier
patient	Identifier	Patient Identifier
intent		<p>Intent: coding system and/or code. [system] Supported values: <a href="http://hl7.org/fhir/CodeSystem/medicationrequest-intent">http://hl7.org/fhir/CodeSystem/medicationrequest-intent</a></p> <p>[code] is the intent code to lookup. Supported values are:</p> <ul style="list-style-type: none"><li>proposal</li><li>plan</li><li>order</li><li>original-order</li><li>reflex-order</li><li>filler-order</li><li>instance-order</li><li>option</li></ul> <p>If the system is not specified, the API will lookup the code from all the supported intent coding systems. Multiple intents can be specified by separating each one with a comma (,).</p>

status		<p>Status Code: Supported values are:</p> <ul style="list-style-type: none"> <li>active</li> <li>on-hold</li> <li>cancelled</li> <li>completed</li> <li>entered-in-error</li> <li>stopped</li> <li>draft</li> <li>unknown</li> </ul> <p>Multiple statuses can be specified by separating each one with a comma (,).</p>
--------	--	---

**\_revinclude:** Reverse include resources that refer to the record in the result. Currently, only Provenance:target is supported.

### Examples:

Read MedicationRequest resource with record ID 4:

```
GET https://api.onetouchemr.com/fhir/r4/MedicationRequest/4
```

Example Response:

```
HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "MedicationRequest",
  "id": "4",
  "meta": {
    "lastUpdated": "2022-08-11T01:12:51+00:00",
    "profile": [
      "http://hl7.org/fhir/us/core/StructureDefinition/us-core-medicationrequest"
    ]
  },
  "contained": [
    {
      "resourceType": "Medication",
      "id": "med-4",
      "code": {
        "coding": [
          {
            "code": "284215",
            "display": "Clindamycin 300 MG Oral Capsule",
            "system":
              "http://www.nlm.nih.gov/research/umls/rxnorm"
```

```

        }
        ],
        "text": "Clindamycin 300 MG Oral Capsule"
    }
}
],
"authoredOn": "2022-07-30T21:17:12-05:00",
"dosageInstruction": [
{
    "sequence": 1,
    "text": "three times a day as needed if pain does not subside"
}
],
"encounter": {
"reference": "Encounter/1"
},
"intent": "plan",
"medicationReference": {
"display": "Clindamycin 300 MG Oral Capsule",
"reference": "#med-4"
},
"reportedBoolean": false,
"requester": {
"reference": "Practitioner/1"
},
"status": "active",
"subject": {
"reference": "Patient/1"
}
}
}

```

Search by Intent:

```
GET https://api.onetouchemr.com/fhir/r4/MedicationRequest?intent=plan
```

or

```
POST https://api.onetouchemr.com/fhir/r4/Immunization/_search
Content-Type: application/x-www-form-urlencoded
```

```
intent=plan
```

Example Response:

```
HTTP/1.1 200 OK
```

Content-Type: application/fhir+json; charset=utf-8

```
{
  "resourceType": "Bundle",
  "meta": {
    "lastUpdated": "2022-10-02T11:51:24+00:00"
  },
  "entry": [
    {
      "fullUrl":
"https://api.onetouchemr.com/fhir/r4/MedicationRequest/4",
      "resource": {
        "resourceType": "MedicationRequest",
        "id": "4",
        "meta": {
          "lastUpdated": "2022-08-11T01:12:51+00:00",
          "profile": [
"http://hl7.org/fhir/us/core/StructureDefinition/us-core-medicationrequest"
          ]
        },
        "contained": [
          {
            "resourceType": "Medication",
            "id": "med-4",
            "code": {
              "coding": [
                {
                  "code": "284215",
                  "display": "Clindamycin 300 MG Oral
Capsule",
                  "system":
"http://www.nlm.nih.gov/research/umls/rxnorm"
                }
              ],
              "text": "Clindamycin 300 MG Oral Capsule"
            }
          }
        ],
        "authoredOn": "2022-07-30T21:17:12-05:00",
        "dosageInstruction": [
          {
            "sequence": 1,
            "text": "three times a day as needed if pain does
not subside"
          }
        ]
      }
    }
  ]
}
```



```

    }
  ],
  "encounter": {
    "reference": "Encounter/1"
  },
  "intent": "plan",
  "medicationReference": {
    "display": "Clindamycin 300 MG Oral Capsule",
    "reference": "#med-4"
  },
  "reportedBoolean": false,
  "requester": {
    "reference": "Practitioner/1"
  },
  "status": "active",
  "subject": {
    "reference": "Patient/1"
  }
},
"search": {
  "mode": "match"
}
},
{
  "fullUrl":
  "https://api.onetouchemr.com/fhir/r4/MedicationRequest/5",
  "resource": {
    "resourceType": "MedicationRequest",
    "id": "5",
    "meta": {
      "lastUpdated": "2022-03-10T16:58:00+00:00",
      "profile": [
        "http://hl7.org/fhir/us/core/StructureDefinition/us-core-medicationrequest"
      ]
    },
    "contained": [
      {
        "resourceType": "Medication",
        "id": "med-5",
        "code": {
          "coding": [
            {
              "code": "312013",

```

```

        "display": "Nitroglycerin 2.5 MG
Extended Release Capsule",
        "system":
"http://www.nlm.nih.gov/research/umls/rxnorm"
    },
    "text": "Nitroglycerin 2.5 MG Extended
Release Capsule"
}
},
"authoredOn": "2022-03-10T10:00:00-06:00",
"dosageInstruction": [
{
    "sequence": 1,
    "text": "1 Capsule PO With Food"
}
],
"encounter": {
"reference": "Encounter/2"
},
"intent": "plan",
"medicationReference": {
"display": "Nitroglycerin 2.5 MG Extended Release
Capsule",
"reference": "#med-5"
},
"reportedBoolean": false,
"requester": {
"reference": "Practitioner/3"
},
"status": "completed",
"subject": {
"reference": "Patient/2"
}
},
"search": {
    "mode": "match"
}
},
{
    "fullUrl":
"https://api.onetouchemr.com/fhir/r4/MedicationRequest/6",
    "resource": {

```

```

    "resourceType": "MedicationRequest",
    "id": "6",
    "meta": {
      "lastUpdated": "2022-08-23T05:45:00+00:00",
      "profile": [
        "http://hl7.org/fhir/us/core/StructureDefinition/us-core-medicationrequest"
      ]
    },
    "contained": [
      {
        "resourceType": "Medication",
        "id": "med-6",
        "code": {
          "coding": [
            {
              "code": "284215",
              "display": "Clindamycin 300 MG Oral Capsule",
              "system": "http://www.nlm.nih.gov/research/umls/rxnorm"
            }
          ],
          "text": "Clindamycin 300 MG Oral Capsule"
        }
      }
    ],
    "authoredOn": "2022-08-23T00:43:46-05:00",
    "dosageInstruction": [
      {
        "sequence": 1,
        "text": "1 Capsule PO TID PRN"
      }
    ],
    "encounter": {
      "reference": "Encounter/4"
    },
    "intent": "plan",
    "medicationReference": {
      "display": "Clindamycin 300 MG Oral Capsule",
      "reference": "#med-6"
    },
    "reportedBoolean": false,
    "requester": {

```

```

        "reference": "Practitioner/1"
      },
      "status": "active",
      "subject": {
        "reference": "Patient/4"
      }
    },
    "search": {
      "mode": "match"
    }
  }
],
"link": [
  {
    "relation": "self",
    "url":
"https://api.onetouchemr.com/fhir/r4/MedicationRequest?intent=plan"
  }
],
"total": 3,
"type": "searchset"
}

```

Search for medication request with active status:

```
GET https://api.onetouchemr.com/fhir/r4/MedicationRequest?status=active
```

Search for medication request with any of the three statuses: cancelled, stopped, on-hold:

```
GET
https://api.onetouchemr.com/fhir/r4/MedicationRequest?status=on-hold,cancel
led,stopped
```

To list all MedicationRequest resources accessible to the current API user, do not include search parameters:

```
GET https://api.onetouchemr.com/fhir/r4/MedicationRequest
```

or

```
POST https://api.onetouchemr.com/fhir/r4/MedicationRequest/_search
Content-Type: application/x-www-form-urlencoded
```

## Observation

Measurements and simple assertions made about a patient, device or other subject. These are a central element in healthcare, used to support diagnosis, monitor progress, determine baselines and patterns and even capture demographic characteristics. Most observations are simple name/value pair assertions with some metadata, but some observations group other observations together logically, or even are multi-component observations. Note that the DiagnosticReport resource provides a clinical or workflow context for a set of observations and the Observation resource is referenced by DiagnosticReport to represent laboratory, imaging, and other clinical and diagnostic data to form a complete report.

Observation resources in OneTouch EMR are categorized into the following:

- Social History - Smoking Status (USCDI v1 Data Class)
- Laboratory Results (USCDI v1 Data Class, Laboratory Tests and Values/Results Data Elements)
- Vital Signs (USCDI v1 Data class)
  - Diastolic Blood Pressure (LOINC 8462-4) (*USCDI v1 Vital Signs Data Class Element*)
  - Systolic Blood Pressure (LOINC 8480-6) (*USCDI v1 Vital Signs Data Class Element*)
  - Body Height (LOINC 8302-2) (*USCDI v1 Vital Signs Data Class Element*)
  - Body Weight (LOINC 29463-7) (*USCDI v1 Vital Signs Data Class Element*)
  - Heart Rate (LOINC 8867-4) (*USCDI v1 Vital Signs Data Class Element*)
  - Respiratory Rate (LOINC 9279-1) (*USCDI v1 Vital Signs Data Class Element*)
  - Body Temperature (LOINC 8310-5) (*USCDI v1 Vital Signs Data Class Element*)
  - Pulse Oximetry (LOINC 59408-5)
    - Inhaled Oxygen Flow Rate (LOINC 3151-8)
    - Inhaled Oxygen Concentration (LOINC 3150-0) (*USCDI v1 Vital Signs Data Class Element*)
  - Pediatric Weight for Height (LOINC 77606-2) (*USCDI v1 Vital Signs Data Class Element*)
  - Pediatric BMI for Age (LOINC 59576-9) (*USCDI v1 Vital Signs Data Class Element*)
  - Pediatric Head Occipital Frontal Circumference Percentile (LOINC 8289-1) (*USCDI v1 Vital Signs Data Class Element*)

**FHIR Resource:** Organization <https://www.hl7.org/fhir/observation.html>

**Endpoint URI:** [https://\[ClientID\].onetouchemr.com/fhir/r4/Observation](https://[ClientID].onetouchemr.com/fhir/r4/Observation)

The following attributes are supported:

Name	Comments
category	Classification of type of observation (social-history, vital-signs, or laboratory)
subject	Who and/or what the observation is about
code	Observation code
encounter	Encounter reference
status	Observation status (preliminary, final, or corrected)
issued	Date/Time this version was made available
effectiveDateTime	Clinically relevant time/time-period for observation
valueCodeableConcept	Result value

## FHIR Operations

OneTouch EMR APIs currently support the following FHIR Operations.

### Read

HTTP Request	Method	Action
/Observation/[ID]	GET	Retrieve Observation resource by ID

### Search

HTTP Request	Method	Action
/Observation/?[parameter={value}]	GET	Retrieve Organizations by the specified search criteria.
/Observation/_search	POST	

Search Parameters:

Key	Type	Description
_id	Identifier	Record identifier
patient		
date	Date	Observation date in YYYY-MM-DD format

category		<p>Category coding system and/or code. Where: [system] is the category coding system: Supported values:</p> <p><a href="http://terminology.hl7.org/CodeSystem/observation-category">http://terminology.hl7.org/CodeSystem/observation-category</a></p> <p>[code] is the category code to lookup. Supported values: laboratory</p> <p>If the system is not specified, the API will use <a href="http://loinc.org">http://loinc.org</a>.</p>
code		<p>Observation coding system and/or code. Where: [system] is the report coding system: Supported value: <a href="http://loinc.org">http://loinc.org</a></p> <p>[code] is the LOINC code values of the report.</p> <p>If the system is not specified, the API will use <a href="http://loinc.org">http://loinc.org</a>.</p>

**\_revinclude:** Reverse include resources that refer to the record in the result. Currently, only Provenance:target is supported.

Examples:

Read Observation resource with record ID labresult-14:

```
GET https://api.onetouchemr.com/fhir/r4/Observation/labresult-14
```

Example Response:

```
HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "Observation",
  "id": "labresult-14",
  "meta": {
    "lastUpdated": "2020-01-06T17:00:00+00:00",
    "profile": [
      "http://hl7.org/fhir/us/core/StructureDefinition/us-core-observation-lab"
```

```

]
},
"category": [
{
  "coding": [
    {
      "code": "laboratory",
      "display": "Laboratory",
      "system":
"http://terminology.hl7.org/CodeSystem/observation-category"
    }
  ],
  "text": "Laboratory"
}
],
"code": {
"coding": [
  {
    "code": "2857-1",
    "system": "http://loinc.org"
  }
]
},
"effectiveDateTime": "2020-01-06T10:14:00-06:00",
"encounter": {
"reference": "Encounter/5"
},
"issued": "2020-01-06T10:14:00-06:00",
"status": "final",
"subject": {
"reference": "Patient/2"
},
"valueQuantity": {
"code": "ng/mL",
"system": "http://unitsofmeasure.org",
"unit": "ng/mL",
"value": 2
}
}

```

Search all Smoking status observations:

GET

<https://api.onetouchemr.com/fhir/r4/Observation?code=http://loinc.org|72166>



-2

or

```
POST https://api.onetouchemr.com/fhir/r4/Observation/_search
```

```
Content-Type: application/x-www-form-urlencoded
```

```
code=http://loinc.org|72166-2
```

Example Response:

```
HTTP/1.1 200 OK
```

```
Content-Type: application/fhir+json; charset=utf-8
```

```
{
  "resourceType": "Bundle",
  "meta": {
    "lastUpdated": "2022-10-03T09:59:17+00:00"
  },
  "entry": [
    {
      "fullUrl":
      "https://api.onetouchemr.com/fhir/r4/Observation/smoking-2",
      "resource": {
        "resourceType": "Observation",
        "id": "smoking-2",
        "meta": {
          "lastUpdated": "2022-08-17T07:33:26+00:00",
          "profile": [
            "http://hl7.org/fhir/us/core/StructureDefinition/us-core-smokingstatus"
          ]
        },
        "category": [
          {
            "coding": [
              {
                "code": "social-history",
                "display": "Social History",
                "system":
                "http://terminology.hl7.org/CodeSystem/observation-category"
              }
            ],
            "text": "Social History"
          }
        ],
        "code": {
```

```

        "coding": [
            {
                "code": "72166-2",
                "system": "http://loinc.org"
            }
        ],
        "issued": "2022-08-17T02:33:26-05:00",
        "status": "final",
        "subject": {
            "reference": "Patient/1"
        },
        "valueCodeableConcept": {
            "coding": [
                {
                    "code": "449868002",
                    "system": "http://snomed.info/sct"
                }
            ]
        }
    },
    "search": {
        "mode": "match"
    }
},
{
    "fullUrl":
"https://api.onetouchemr.com/fhir/r4/Observation/smoking-4",
    "resource": {
        "resourceType": "Observation",
        "id": "smoking-4",
        "meta": {
            "lastUpdated": "2022-08-22T12:56:58+00:00",
            "profile": [
"http://hl7.org/fhir/us/core/StructureDefinition/us-core-smokingstatus"
            ]
        },
        "category": [
            {
                "coding": [
                    {
                        "code": "social-history",
                        "display": "Social History",

```

```

        "system":
"http://terminology.hl7.org/CodeSystem/observation-category"
        }
    ],
    "text": "Social History"
}
],
"code": {
"coding": [
    {
        "code": "72166-2",
        "system": "http://loinc.org"
    }
]
},
"issued": "2022-08-22T07:56:58-05:00",
"status": "final",
"subject": {
"reference": "Patient/3"
},
"valueCodeableConcept": {
"coding": [
    {
        "code": "449868002",
        "system": "http://snomed.info/sct"
    }
]
}
},
"search": {
    "mode": "match"
}
}
],
"link": [
    {
        "relation": "self",
        "url":
"https://api.onetouchemr.com/fhir/r4/Observation?code=http%3A%2F%2Floinc.org%7C72166-2"
    }
],
"total": 2,
"type": "searchset"

```

```
}
```

Search all Vital Sign observations:

```
GET https://api.onetouchemr.com/fhir/r4/Observation?category=vital-signs
```

or

```
POST https://api.onetouchemr.com/fhir/r4/Observation/_search  
Content-Type: application/x-www-form-urlencoded
```

```
category=vital-signs
```

Search all Laboratory Result observations:

```
GET https://api.onetouchemr.com/fhir/r4/Observation?category=laboratory
```

or

```
POST https://api.onetouchemr.com/fhir/r4/Observation/_search  
Content-Type: application/x-www-form-urlencoded
```

```
category=laboratory
```

## Organization

The Organization resource is used for collections of people that have come together to achieve an objective. The Group resource is used to identify a collection of people (or animals, devices, etc.) that are gathered for the purpose of analysis or acting upon, but are not expected to act themselves.

**FHIR Resource:** Organization <https://www.hl7.org/fhir/organization.html>

**Endpoint URI:** [https://\[ClientID\].onetouchemr.com/fhir/r4/Organization](https://[ClientID].onetouchemr.com/fhir/r4/Organization)

The following attributes are supported:

Name	Comments
identifier	Identifies this organization across multiple systems
active	Whether the organization's record is still in active use
name	Name used for the organization
type	Organization Type (always set to Healthcare Provider)

address	Address for the organization
telecom	Contact detail for the organization

## FHIR Operations

OneTouch EMR APIs currently support the following FHIR Operations.

### Read

HTTP Request	Method	Action
/Organization/{ID}	GET	Retrieve Organization resource by ID

### Search

HTTP Request	Method	Action
/Organization/?[parameter={value}]	GET	Retrieve Organizations by the specified search criteria.
/Organization/_search	POST	

Search Parameters:

Key	Type	Description
_id	Identifier	Record identifier
name		
address		

**\_revinclude:** Reverse include resources that refer to the record in the result. Currently, only Provenance:target is supported.

### Examples:

Retrieve data by Record ID:

```
GET https://api.onetouchemr.com/fhir/r4/Organization/1
```

Example Response:

```
HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8
```

```
{
  "resourceType": "Organization",
  "id": "1",
  "meta": {
    "lastUpdated": "2012-06-15T03:19:51+00:00",
    "profile": [
      "http://hl7.org/fhir/us/core/StructureDefinition/us-core-organization"
    ]
  },
  "active": true,
  "address": [
    {
      "city": "Beaverton,",
      "country": "US",
      "line": [
        "2472, Rocky place"
      ],
      "postalCode": "97006",
      "state": "OR"
    }
  ],
  "identifier": [
    {
      "system": "https://api.onetouchemr.com",
      "value": "1"
    },
    {
      "system": "http://hl7.org/fhir/sid/us-npi",
      "value": "9876543210"
    },
    {
      "system": "urn:oid:2.16.840.1.113883.4.7",
      "value": "9876543210"
    }
  ],
  "name": "Personal Physician Care",
  "telecom": [
    {
      "system": "phone",
      "value": "555-555-1002"
    }
  ],
  "type": [
```

```
{
  "coding": [
    {
      "code": "prov",
      "display": "Healthcare Provider",
      "system":
"http://terminology.hl7.org/CodeSystem/organization-type"
    }
  ],
  "text": "Healthcare Provider"
}
]
```

Search Organizations by name or address:

```
GET https://api.onetouchemr.com/fhir/r4/Organization?name=Princeton
```

```
GET https://api.onetouchemr.com/fhir/r4/Organization?address=Beaverton
```

Combination of multiple search parameters is supported.

```
GET
https://api.onetouchemr.com/fhir/r4/Organization?name=Princeton&address=1st
%20Street
```

To list all Organization resources, do not include search parameters:

```
GET https://api.onetouchemr.com/fhir/r4/Organization
```

## Patient

This Resource covers data about patients and animals involved in a wide range of health-related activities, including:

- Curative activities
- Psychiatric care
- Social services
- Pregnancy care
- Nursing and assisted living
- Dietary services

- Tracking of personal health and exercise data

The data in the Resource covers the "who" information about the patient: its attributes are focused on the demographic information necessary to support the administrative, financial and logistic procedures. A Patient record is generally created and maintained by each organization providing care for a patient. A patient or animal receiving care at multiple organizations may therefore have its information present in multiple Patient Resources. Corresponds to USCDI v1 Patient Demographics element.

**FHIR Resource:** Organization <https://www.hl7.org/fhir/patient.html>

**Endpoint URI:** [https://\[ClientID\].onetouchemr.com/fhir/r4/Patient](https://[ClientID].onetouchemr.com/fhir/r4/Patient)

The following attributes are supported:

Name	Comments
identifier	Identifier for this patient
name	Patient name (USCDI v1 Patient Demographics First Name, Last Name, Previous Name, Middle Name, and Suffix Data Elements)
telecom	Patient's contact info (USCDI v1 Patient Demographics Phone Number, Phone Number Type, and Email Address Data Elements)
gender	Gender
birthdate	Date of birth (USCDI v1 Patient Demographics Date of Birth Data Element)
address	Patient's address (USCDI v1 Patient Demographics Current Address, and Previous Address Data Elements)
maritalStatus	Marital status
communication	Preferred language (USCDI v1 Patient Demographics Preferred Data Element)
us-core-race extension	Race (USCDI v1 Patient Demographics Race Data Element)
us-core-ethnicity extension	Ethnicity (USCDI v1 Patient Demographics Ethnicity Data Element)
us-core-birthsex extension	Birth sex (USCDI v1 Patient Demographics Birth Sex Data Element)

## FHIR Operations



OneTouch EMR APIs currently support the following FHIR Operations.

### Read

HTTP Request	Method	Action
/Patient/[ID]	GET	Retrieve Patient resource by ID

### Search

HTTP Request	Method	Action
/Patient/?[parameter={value}]	GET	Retrieve Patients by the specified search criteria.
/Patient/_search	POST	

Search Parameters:

Key	Type	Description
_id	Identifier	Record identifier
date		Patient's birth date in YYYY-MM-DD format
gender		
name		
identifier		<p>[system][code] Where:                      [system] is the identifier system. Supported Identifier systems are:</p> <p>https://[PRACTICE_ID].onetouchemr.com for MRN                      http://hl7.org/fhir/sid/us-ssn for SSN or Social Security Number</p> <p>[code] is the identifier code to lookup</p> <p><i>If system is not specified, the API will lookup the code from all the supported identifier</i></p>

**\_revinclude:** Reverse include resources that refer to the record in the result. Currently, only Provenance:target is supported.

## Examples:

Read Patient resource with record ID 1:

```
GET https://api.onetouchemr.com/fhir/r4/Patient/1
```

Example Response:

```
HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "Patient",
  "id": "1",
  "meta": {
    "lastUpdated": "2022-07-31T01:30:30+00:00",
    "profile": [
      "http://hl7.org/fhir/us/core/StructureDefinition/us-core-patient"
    ]
  },
  "extension": [
    {
      "extension": [
        {
          "url": "ombCategory",
          "valueCoding": {
            "code": "2106-3",
            "display": "White",
            "system": "urn:oid:2.16.840.1.113883.6.238"
          }
        },
        {
          "url": "text",
          "valueString": "White"
        }
      ]
    },
    {
      "url": "http://hl7.org/fhir/us/core/StructureDefinition/us-core-race"
    }
  ],
  {
    "extension": [
      {
        "url": "ombCategory",
        "valueCoding": {
          "code": "2186-5",
          "display": "Not Hispanic or Latino",

```

```

        "system": "urn:oid:2.16.840.1.113883.6.238"
      }
    },
    {
      "url": "text",
      "valueString": "Not Hispanic or Latino"
    }
  ],
  "url":
"http://hl7.org/fhir/us/core/StructureDefinition/us-core-ethnicity"
},
{
  "url":
"http://hl7.org/fhir/us/core/StructureDefinition/us-core-birthsex",
  "valueCode": "F"
}
],
"address": [
{
  "city": "Beaverton",
  "country": "US",
  "line": [
    "1357, Amber Dr"
  ],
  "period": {
    "start": "1970-05-01"
  },
  "postalCode": "97006",
  "state": "OR"
}
],
"birthDate": "1970-05-01",
"communication": [
{
  "language": {
    "coding": [
      {
        "code": "en",
        "display": "English",
        "system": "urn:ietf:bc:47"
      }
    ],
    "text": "English"
  }
}
]
}

```

```

}
],
"gender": "female",
"identifier": [
{
  "system": "https://api.onetouchemr.com",
  "type": {
    "coding": [
      {
        "code": "MR",
        "display": "Medical Record Number",
        "system":
"http://terminology.hl7.org/CodeSystem/v2-0203"
      }
    ]
  },
  "value": "1"
},
{
  "system": "http://hl7.org/fhir/sid/us-ssn",
  "type": {
    "coding": [
      {
        "code": "SS",
        "display": "Social Security Number",
        "system":
"http://terminology.hl7.org/CodeSystem/v2-0203"
      }
    ]
  },
  "value": "574-04-8638"
}
],
"maritalStatus": {
  "coding": [
    {
      "code": "M",
      "display": "Married",
      "system":
"http://terminology.hl7.org/CodeSystem/v3-MaritalStatus"
    }
  ],
  "text": "Married"
},

```

```

"name": [
  {
    "family": "Newman",
    "given": [
      "Alicia",
      "Jones"
    ],
    "period": {
      "end": "1970-05-01",
      "start": "1970-05-01"
    }
  },
  {
    "family": "Newman",
    "given": [
      "Alice",
      "Jones"
    ],
    "use": "official"
  }
],
"telecom": [
  {
    "system": "phone",
    "use": "home",
    "value": "555-723-1544"
  },
  {
    "system": "phone",
    "use": "mobile",
    "value": "555-777-1234"
  }
]
}

```

Search Patients by name (first, middle, or last) or gender or date of birth:

```
GET https://api.onetouchemr.com/fhir/r4/Patient?name=Doe
```

or

```
POST https://api.onetouchemr.com/fhir/r4/Patient/_search
```

```
Content-Type: application/x-www-form-urlencoded
```

```
name=Doe
```

```
GET https://api.onetouchemr.com/fhir/r4/Patient?gender=male
```

or

```
POST https://api.onetouchemr.com/fhir/r4/Patient/_search
```

```
Content-Type: application/x-www-form-urlencoded
```

```
gender=male
```

```
GET https://api.onetouchemr.com/fhir/r4/Patient?birthdate=2018-06-01
```

or

```
POST https://api.onetouchemr.com/fhir/r4/Patient/_search
```

```
Content-Type: application/x-www-form-urlencoded
```

```
date=2018-06-01
```

Combination of multiple search parameters is supported.

```
GET
```

```
https://api.onetouchemr.com/fhir/r4/Patient?gender=male&_revinclude=Provenance:target
```

or

```
POST https://api.onetouchemr.com/fhir/r4/Patient/_search
```

```
Content-Type: application/x-www-form-urlencoded
```

```
gender=male&_revinclude=Provenance:target
```

Example Response:

```
HTTP/1.1 200 OK
```

```
Content-Type: application/fhir+json; charset=utf-8
```

```
{
  "resourceType": "Bundle",
  "meta": {
    "lastUpdated": "2022-10-02T23:20:40+00:00"
  },
  "entry": [
```

```

{
  "fullUrl": "https://api.onetouchemr.com/fhir/r4/Patient/3",
  "resource": {
    "resourceType": "Patient",
    "id": "3",
    "meta": {
      "lastUpdated": "2022-08-22T13:01:09+00:00",
      "profile": [
        "http://hl7.org/fhir/us/core/StructureDefinition/us-core-patient"
      ]
    },
    "extension": [
      {
        "url": "http://hl7.org/fhir/us/core/StructureDefinition/us-core-birthsex",
        "valueCode": "M"
      }
    ],
    "address": [
      {
        "city": "Beaverton",
        "country": "US",
        "line": [
          "1357, Amber Dr"
        ],
        "period": {
          "start": "1980-08-01"
        },
        "postalCode": "97006",
        "state": "OR"
      }
    ],
    "birthDate": "1980-08-01",
    "communication": [
      {
        "language": {
          "coding": [
            {
              "code": "en",
              "display": "English",
              "system": "urn:ietf:bcp:47"
            }
          ]
        }
      }
    ]
  }
}

```

```
        "text": "English"
      }
    ],
    "gender": "male",
    "identifier": [
      {
        "system": "https://api.onetouchemr.com",
        "type": {
          "coding": [
            {
              "code": "MR",
              "display": "Medical Record Number",
              "system":
"http://terminology.hl7.org/CodeSystem/v2-0203"
            }
          ]
        },
        "value": "3"
      }
    ],
    "maritalStatus": {
      "coding": [
        {
          "code": "M",
          "display": "Married",
          "system":
"http://terminology.hl7.org/CodeSystem/v3-MaritalStatus"
        }
      ],
      "text": "Married"
    },
    "name": [
      {
        "family": "Bates",
        "given": [
          "Jeremy",
          "V"
        ],
        "suffix": [
          "Jr"
        ],
        "use": "official"
      }
    ]
  }
}
```



```

    ],
    "telecom": [
      {
        "system": "phone",
        "use": "home",
        "value": "555-723-1544"
      },
      {
        "system": "phone",
        "use": "mobile",
        "value": "555-777-1234"
      }
    ]
  },
  "search": {
    "mode": "match"
  }
},
{
  "fullUrl":
"https://api.onetouchemr.com/fhir/r4/Provenance/patient-3",
  "resource": {
    "resourceType": "Provenance",
    "id": "patient-3",
    "meta": {
      "lastUpdated": "2022-08-22T13:01:09+00:00",
      "profile": [
"http://hl7.org/fhir/us/core/StructureDefinition/us-core-provenance"
      ]
    },
    "agent": [
      {
        "onBehalfOf": {
          "display": "Personal Physician Care",
          "reference": "Organization/1"
        },
        "type": {
          "coding": [
            {
              "code": "author",
              "display": "Author",
              "system":
"http://terminology.hl7.org/CodeSystem/provenance-participant-type"

```

```

        }
      ],
      "text": "Author"
    },
    "who": {
      "reference": "Practitioner/1"
    }
  },
  {
    "type": {
      "coding": [
        {
          "code": "transmitter",
          "display": "Transmitter",
          "system":
"http://hl7.org/fhir/us/core/CodeSystem/us-core-provenance-participant-type"
        }
      ],
      "text": "Transmitter"
    },
    "who": {
      "reference": "Patient/3"
    }
  }
],
"recorded": "2022-08-22T13:01:09+00:00",
"target": [
  {
    "reference": "Patient/3"
  }
]
},
"search": {
  "mode": "include"
}
},
{
  "fullUrl": "https://api.onetouchemr.com/fhir/r4/Patient/2",
  "resource": {
    "resourceType": "Patient",
    "id": "2",
    "meta": {
      "lastUpdated": "2022-08-26T02:28:23+00:00",

```

```
    "profile": [
      "http://hl7.org/fhir/us/core/StructureDefinition/us-core-patient"
    ],
    "extension": [
      {
        "extension": [
          {
            "url": "ombCategory",
            "valueCoding": {
              "code": "2106-3",
              "display": "White",
              "system":
                "urn:oid:2.16.840.1.113883.6.238"
            }
          },
          {
            "url": "text",
            "valueString": "White"
          }
        ],
        "url":
          "http://hl7.org/fhir/us/core/StructureDefinition/us-core-race"
      },
      {
        "extension": [
          {
            "url": "ombCategory",
            "valueCoding": {
              "code": "2186-5",
              "display": "Not Hispanic or Latino",
              "system":
                "urn:oid:2.16.840.1.113883.6.238"
            }
          },
          {
            "url": "text",
            "valueString": "Not Hispanic or Latino"
          }
        ],
        "url":
          "http://hl7.org/fhir/us/core/StructureDefinition/us-core-ethnicity"
      }
    ],
  },
}
```

```
{
  "url":
"http://hl7.org/fhir/us/core/StructureDefinition/us-core-birthsex",
  "valueCode": "M"
},
"address": [
{
  "city": "Beaverton",
  "country": "US",
  "line": [
    "12 Oak Street"
  ],
  "period": {
    "start": "1980-07-08"
  },
  "postalCode": "97006",
  "state": "OR"
},
"birthDate": "1980-07-08",
"communication": [
{
  "language": {
    "coding": [
      {
        "code": "en",
        "display": "English",
        "system": "urn:ietf:bcp:47"
      }
    ],
    "text": "English"
  }
},
"gender": "male",
"identifier": [
{
  "system": "https://api.onetouchemr.com",
  "type": {
    "coding": [
      {
        "code": "MR",
        "display": "Medical Record Number",

```

```

        "system":
"http://terminology.hl7.org/CodeSystem/v2-0203"
        }
    ]
},
"value": "2"
},
{
    "system": "http://hl7.org/fhir/sid/us-ssn",
    "type": {
        "coding": [
            {
                "code": "SS",
                "display": "Social Security Number",
                "system":
"http://terminology.hl7.org/CodeSystem/v2-0203"
            }
        ]
    },
    "value": "253-26-4531"
}
],
"name": [
{
    "family": "Doe",
    "given": [
        "John"
    ],
    "use": "official"
}
],
"telecom": [
{
    "extension": [
        {
            "url":
"http://hl7.org/fhir/StructureDefinition/data-absent-reason",
            "valueCode": "unknown"
        }
    ],
    "system": "phone",
    "value": "unknown"
}
]

```

```

    },
    "search": {
      "mode": "match"
    }
  },
  {
    "fullUrl":
"https://api.onetouchemr.com/fhir/r4/Provenance/patient-2",
    "resource": {
      "resourceType": "Provenance",
      "id": "patient-2",
      "meta": {
        "lastUpdated": "2022-08-26T02:28:23+00:00",
        "profile": [
"http://hl7.org/fhir/us/core/StructureDefinition/us-core-provenance"
        ]
      },
      "agent": [
        {
          "onBehalfOf": {
            "display": "Personal Physician Care",
            "reference": "Organization/1"
          },
          "type": {
            "coding": [
              {
                "code": "author",
                "display": "Author",
                "system":
"http://terminology.hl7.org/CodeSystem/provenance-participant-type"
              }
            ],
            "text": "Author"
          },
          "who": {
            "reference": "Practitioner/3"
          }
        }
      ],
      "type": {
        "coding": [
          {
            "code": "transmitter",

```

```

        "display": "Transmitter",
        "system":
"http://hl7.org/fhir/us/core/CodeSystem/us-core-provenance-participant-type
"
    }
    ],
    "text": "Transmitter"
  },
  "who": {
    "reference": "Patient/2"
  }
}
],
"recorded": "2022-08-26T02:28:23+00:00",
"target": [
{
  "reference": "Patient/2"
}
]
},
"search": {
  "mode": "include"
}
}
],
"link": [
{
  "relation": "self",
  "url":
"https://api.onetouchemr.com/fhir/r4/Patient?gender=male&_revinclude=Proven
ance%3Atarget"
}
],
"total": 2,
"type": "searchset"
}

```

Search for patient with MRN 10001

GET

<https://api.onetouchemr.com/fhir/r4/Patient?identifier=https://api.onetouchemr.com|10001>

Search for patient with SSN 050587061

GET

<https://api.onetouchemr.com/fhir/r4/Patient?identifier=http://hl7.org/fhir/sid/us-ssn|050587061>

Search for patient with MRN or SSN equal to 123456

GET <https://api.onetouchemr.com/fhir/r4/Patient?identifier=123456>

To list all Patient resources, do not include search parameters:

GET <https://api.onetouchemr.com/fhir/r4/Patient>

## Practitioner

Practitioner covers all individuals who are engaged in the healthcare process and healthcare-related services as part of their formal responsibilities and this Resource is used for attribution of activities and responsibilities to these individuals.

**FHIR Resource:** Practitioner <https://www.hl7.org/fhir/practitioner.html>

**Endpoint URI:** [https://\[ClientID\].onetouchemr.com/fhir/r4/Practitioner](https://[ClientID].onetouchemr.com/fhir/r4/Practitioner)

The following attributes are supported:

Name	Comments
identifier	An identifier for the person
active	Whether this practitioner's record is in active use
name	The name(s) associated with the practitioner

## FHIR Operations

OneTouch EMR APIs currently support the following FHIR Operations.

### Read

HTTP Request	Method	Action
/Practitioner/[ID]	GET	Retrieve Practitioner resource by ID

### Search

HTTP Request	Method	Action
--------------	--------	--------



/Practitioner/?[parameter={value}]	GET	Retrieve Practitioners by the specified search criteria.
/Practitioner/_search	POST	

Search Parameters:

Key	Type	Description
_id	Identifier	Record identifier
name		
identifier		<p>Identifier system and/or code. Where: [system] is the identifier system. Supported Identifier systems are:</p> <p>https://[PRACTICE_ID].onetouchemr.com for User ID http://hl7.org.fhir/sid/us-npi for NPI or National Provider Identifier</p> <p>[code] is the identifier code to lookup</p> <p>If the system is not specified, the API will lookup the code from all the supported identifier systems.</p>

**\_revinclude:** Reverse include resources that refer to the record in the result. Currently, only Provenance:target is supported.

Examples:

Read Practitioner resource with record ID 1:

```
GET https://api.onetouchemr.com/fhir/r4/Practitioner/1
```

Example Response:

```
HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "Practitioner",
  "id": "2",
```

```
"active": true,
"identifier": [
  {
    "system": "https://api.onetouchemr.com",
    "value": "2"
  }
],
"name": [
  {
    "family": "Davis",
    "given": [
      "Tracy"
    ]
  }
]
}
```

Search Practitioners by name:

```
GET https://api.onetouchemr.com/fhir/r4/Practitioner?name=Davis
```

or

```
POST https://api.onetouchemr.com/fhir/r4/Practitioner/_search
Content-Type: application/x-www-form-urlencoded

name=Davis
```

Example Response:

```
HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "Bundle",
  "meta": {
    "lastUpdated": "2022-10-03T00:09:42+00:00"
  },
  "entry": [
    {
      "fullUrl":
```

```
"https://api.onetouchemr.com/fhir/r4/Practitioner/1",
  "resource": {
    "resourceType": "Practitioner",
    "id": "1",
    "active": true,
    "identifier": [
      {
        "system": "https://api.onetouchemr.com",
        "value": "1"
      },
      {
        "system": "http://hl7.org/fhir/sid/us-npi",
        "value": "999999999"
      }
    ],
    "name": [
      {
        "family": "Davis",
        "given": [
          "Albert"
        ],
        "prefix": [
          "Dr."
        ]
      }
    ]
  },
  "search": {
    "mode": "match"
  }
},
{
  "fullUrl":
  "https://api.onetouchemr.com/fhir/r4/Practitioner/2",
  "resource": {
    "resourceType": "Practitioner",
    "id": "2",
    "active": true,
    "identifier": [
      {
        "system": "https://api.onetouchemr.com",
        "value": "2"
      }
    ]
  },
}
```

```

        "name": [
          {
            "family": "Davis",
            "given": [
              "Tracy"
            ]
          }
        ],
        "search": {
          "mode": "match"
        }
      }
    ],
    "link": [
      {
        "relation": "self",
        "url":
"https://api.onetouchemr.com/fhir/r4/Practitioner?name=Davis"
      }
    ],
    "total": 2,
    "type": "searchset"
  }

```

Search for Practitioner with User ID 21

```

GET
https://api.onetouchemr.com/fhir/r4//Practitioner?identifier=https://api.on
etouchemr.com|21

```

Search for Practitioner with NPI 1245319599

```

GET
https://api.onetouchemr.com/fhir/r4//Practitioner?identifier=http://hl7.org
.fhir/sid/us-npi|1245319599

```

Combination of multiple search parameters is supported.

```

GET
https://api.onetouchemr.com/fhir/r4/Practitioner?/Practitioner?identifier=1
23456&name=Albert

```

To list all Practitioner resources, do not include search parameters:

GET <https://api.onetouchemr.com/fhir/r4/Practitioner>

## Procedure

This resource is used to record the details of current and historical procedures performed on or for a patient. A procedure is an activity that is performed on, with, or for a patient as part of the provision of care. Examples include surgical procedures, diagnostic procedures, endoscopic procedures, biopsies, counseling, physiotherapy, personal support services, adult day care services, non-emergency transportation, home modification, exercise, etc. Procedures may be performed by a healthcare professional, a service provider, a friend or relative or in some cases by the patient themselves. Corresponds to USCDI v1 Procedures Data Class

**FHIR Resource:** Organization <https://www.hl7.org/fhir/procedure.html>

**Endpoint URI:** [https://\[ClientID\].onetouchemr.com/fhir/r4/Procedure](https://[ClientID].onetouchemr.com/fhir/r4/Procedure)

The following attributes are supported:

Name	Comments
status	Procedure status (unknown, preparation, or completed)
code	Procedure codes (SNOMED CT, CPT)
performedDateTime	When the procedure was performed
encounter	Encounter context when the procedure was performed

## FHIR Operations

OneTouch EMR APIs currently support the following FHIR Operations.

### Read

HTTP Request	Method	Action
/Procedure/[ID]	GET	Retrieve Procedure resource by ID

### Search

HTTP Request	Method	Action
/Procedure/?[parameter={value}]	GET	Retrieve Procedures by the specified search criteria.

/Procedure/_search	POST	
--------------------	------	--

Search Parameters:

Key	Type	Description
_id	Identifier	Record identifier
date		Procedure date in YYYY-MM-DD format
patient		Patient ID or patient reference

**\_revinclude:** Reverse include resources that refer to the record in the result. Currently, only Provenance:target is supported.

### Examples:

Read Procedure resource with Record ID 3:

```
GET https://api.onetouchemr.com/fhir/r4/Procedure/3
```

Example Response:

```
HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "Procedure",
  "id": "3",
  "meta": {
    "lastUpdated": "2015-06-22T15:30:38+00:00",
    "profile": [
      "http://hl7.org/fhir/us/core/StructureDefinition/us-core-procedure"
    ]
  },
  "code": {
    "coding": [
      {
        "code": "56251003",
        "display": "Nebulizer therapy",

```

```

        "system": "http://snomed.info/sct"
      }
    ],
    "text": "Nebulizer therapy"
  },
  "encounter": {
    "reference": "Encounter/1"
  },
  "performedDateTime": "2015-06-22T20:35:00-05:00",
  "status": "completed",
  "subject": {
    "reference": "Patient/1"
  }
}

```

Search Procedures by date:

```
GET https://api.onetouchemr.com/fhir/r4/Procedure?date=2015
```

or

```
POST https://api.onetouchemr.com/fhir/r4/Procedure/_search
Content-Type: application/x-www-form-urlencoded

date=2015
```

Example Response:

```

HTTP/1.1 200 OK
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "Bundle",
  "meta": {
    "lastUpdated": "2022-10-03T08:48:30+00:00"
  },
  "entry": [
    {
      "fullUrl": "https://api.onetouchemr.com/fhir/r4/Procedure/3",
      "resource": {
        "resourceType": "Procedure",
        "id": "3",
        "meta": {
          "lastUpdated": "2015-06-22T15:30:38+00:00",
          "profile": [

```

```

"http://hl7.org/fhir/us/core/StructureDefinition/us-core-procedure"
  ]
},
"code": {
  "coding": [
    {
      "code": "56251003",
      "display": "Nebulizer therapy",
      "system": "http://snomed.info/sct"
    }
  ],
  "text": "Nebulizer therapy"
},
"encounter": {
  "reference": "Encounter/1"
},
"performedDateTime": "2015-06-22T20:35:00-05:00",
"status": "completed",
"subject": {
  "reference": "Patient/1"
}
},
"search": {
  "mode": "match"
}
}
],
"link": [
  {
    "relation": "self",
    "url":
"http://api.onetouchemr.com/fhir/r4/Procedure?date=2015"
  }
],
"total": 1,
"type": "searchset"
}

```

Combination of multiple search parameters is supported.

GET

<https://api.onetouchemr.com/fhir/r4/Procedure?date=2015-06-22&patient=1&revinclude=Provenance:target>



To list all Procedure resources accessible to the current API user, do not include search parameters:

```
GET https://api.onetouchemr.com/fhir/r4/Procedure
```

or

```
POST https://api.onetouchemr.com/fhir/r4/Procedure/_search
Content-Type: application/x-www-form-urlencoded
```

## Provenance

The Provenance resource tracks information about the activity that created, revised, deleted, or signed a version of a resource, describing the entities and agents involved. This information can be used to form assessments about its quality, reliability, trustworthiness, or to provide pointers for where to go to further investigate the origins of the resource and the information in it. Corresponds to USCDI v1 Provenance Data Class.

**FHIR Resource:** Organization <https://www.hl7.org/fhir/provenance.html>

**Endpoint URI:** [https://\[ClientID\].onetouchemr.com/fhir/r4/Provenance](https://[ClientID].onetouchemr.com/fhir/r4/Provenance)

The following attributes are supported:

Name	Comments
target	The Resource this Provenance record supports
recorded	Timestamp when the activity was recorded / updated (USCDI v1 Author Time Stamp Data Element)
agent	Actor involved (USCDI Author Organization Data Element)

## FHIR Operations

OneTouch EMR APIs currently support the following FHIR Operations.

### Read

HTTP Request	Method	Action
/Provenance/{ID}	GET	Retrieve Procedure resource by ID

## Examples:

```
GET https://api.onetouchemr.com/fhir/r4/Provenance/allergy-1
```

### Example Response:

```
HTTP/1.1 200 OK
```

```
Content-Type: application/fhir+json; charset=utf-8
```

```
{
  "resourceType": "Provenance",
  "id": "allergy-1",
  "meta": {
    "lastUpdated": "2022-08-11T01:12:51+00:00",
    "profile": [
      "http://hl7.org/fhir/us/core/StructureDefinition/us-core-provenance"
    ]
  },
  "agent": [
    {
      "onBehalfOf": {
        "display": "Personal Physician Care",
        "reference": "Organization/1"
      },
      "type": {
        "coding": [
          {
            "code": "author",
            "display": "Author",
            "system": "http://terminology.hl7.org/CodeSystem/provenance-participant-type"
          }
        ],
        "text": "Author"
      },
      "who": {
        "reference": "Practitioner/1"
      }
    }
  ],
  {
    "type": {
      "coding": [
        {
          "code": "transmitter",
          "display": "Transmitter",

```

```

        "system":
        "http://hl7.org/fhir/us/core/CodeSystem/us-core-provenance-participant-type
        "
        }
        ],
        "text": "Transmitter"
    },
    "who": {
        "reference": "Patient/1"
    }
}
],
"recorded": "2022-08-11T01:12:51+00:00",
"target": [
{
    "reference": "AllergyIntolerance/1"
}
]
}

```

## FHIR API ERROR RESPONSES

### Resource Not Found

Resource READ operation fails when no resource with the given ID is found

```

HTTP/1.1 404 Not Found
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "OperationOutcome",
  "issue": [
    {
      "code": "processing",
      "diagnostics": "{RESOURCE_NAME} with id {RECORD_ID} was not
found.",
      "severity": "error"
    }
  ]
}

```

### Invalid Search Parameter Value

Resource SEARCH operation fails when an invalid/unsupported value for a parameter is encountered

HTTP/1.1 403 Forbidden

Content-Type: application/fhir+json; charset=utf-8

```
{
  "resourceType": "Bundle",
  "meta": {
    "lastUpdated": "{CURRENT_TIME}"
  },
  "entry": [
    {
      "resource": {
        "resourceType": "OperationOutcome",
        "issue": [
          {
            "code": "invalid",
            "diagnostics": "{MESSAGE}",
            "severity": "error"
          }
        ]
      },
      "search": {
        "mode": "outcome"
      }
    }
  ],
  "link": [
    {
      "relation": "self",
      "url": "{CURRENT_SEARCH_URL_USED}"
    }
  ],
  "total": 0,
  "type": "searchset"
}
```

## Unsupported/Invalid Resource

Any operation on unsupported or unrecognized resource fails

HTTP/1.1 400 Bad Request

Content-Type: application/fhir+json; charset=utf-8

```
{
  "resourceType": "OperationOutcome",
  "issue": [
    {
      "code": "not-supported",
```

```
        "diagnostics": "Invalid Request. Unable to handle operation.",
        "severity": "error"
    }
]
}
```

## Invalid HTTP Method Used

Resource READ Operation should use HTTP GET method. Resource SEARCH operation supports either HTTP GET or HTTP POST.

```
HTTP/1.1 400 Bad Request
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "OperationOutcome",
  "issue": [
    {
      "code": "not-supported",
      "diagnostics": "Invalid Request. Unable to handle operation.",
      "severity": "error"
    }
  ]
}
```

## Unauthorized Access

Any resource operations with missing or invalid access token fails

```
HTTP/1.1 401 Unauthorized
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "OperationOutcome",
  "issue": [
    {
      "code": "security",
      "diagnostics": "Invalid or missing access token.",
      "severity": "fatal"
    }
  ]
}
```

## Insufficient Access Permissions

Any resource operation fails if the scopes/permissions granted do not satisfy the required scopes/permissions by the operation

```
HTTP/1.1 401 Unauthorized
Content-Type: application/fhir+json; charset=utf-8
{
  "resourceType": "OperationOutcome",
  "issue": [
    {
      "code": "security",
      "diagnostics": "Insufficient access permissions.",
      "severity": "fatal"
    }
  ]
}
```

## SECURITY AND IDENTITY VERIFICATION

### OAuth 2.0 Authorization Code Flow

#### Requesting Authorization

For Standalone Patient Apps, EHR Launch Apps, and Public Client Apps, the OAuth2 Authorization Code web flow is used to authorize access to the API.

At launch time, the registered app constructs an authorization request to OneTouch EMR's OAuth2 Authorization Endpoint (*{baseURL}/oauth/authorization*) with containing the following parameters:

Name	Description
response_type	Has a fixed value: code
client_id	The client_id assigned to the client during registration
redirect_uri	The URI where the user will get redirected to after authorization. This must match the redirect_uri registered to the client
launch	For EHR Launch apps, this value must match the launch value received from the OneTouch EMR during launch
scope	Describes the access that the app is requesting, including clinical data scopes and either a "launch" value or "launch/{context}" value. See OAuth2 Access Scopes section for supported scopes

state	An opaque value used by the client to maintain state between the request and callback. The authorization server includes this value when redirecting the user-agent back to the client. This must be an unguessable random string, used to protect against request forgery attacks.
aud	The {baseUrl} for OneTouch EMRs API service

While logged in, the user will approve a selection of permissions/scopes and submit the form to authorize the request. OneTouch EMR's authorization endpoint will then redirect the user to the redirect\_uri containing following parameters:

Name	Description
state	The exact value received from the client in the authorization link
code	The authorization code generated by the server

## Requesting Access Token

After receiving the authorization code, the client app can exchange the authorization code for an access token by sending a POST request to OneTouch EMR's OAuth2 Token Endpoint (*{baseUrl}/oauth/token*).

The POST request from Standalone and EHR Launch clients require an Authorization header using HTTP Basic authentication, where the username is the app's client\_id and the password is the app's client\_secret provided in the registration. Public clients do not require an Authorization header.

The access token request will contain the following application/x-www-form-urlencoded data:

Name	Description
grant_type	Has a fixed value: authorization_code
code	Code that the app received from the authorization server
redirect_uri	Same redirect_uri used in the initial authorization request. This must match

	the redirect_uri registered to the client
client_id	Only required for public clients.

Upon successful verification of the submitted access token request, the token endpoint will return a JSON object with a structure containing the following elements:

Name	Description
access_token	The access token issued by the authorization server
token_type	Fixed value: Bearer
scope	Scope of access authorized by the user
id_token	Optional. Authenticated patient identity and user details if requested using openid scope
refresh_token	Token that can be used to obtain a new access token, using the same or a subset of the original authorization grants
patient	If patient context is present and/or requested, this will contain the patient id

## Using Access Token for FHIR API Calls

The app can now issue FHIR API calls by including an Authorization header containing the access token received as Bearer token.

Example Authorization header using access\_token received  
(5a20e14bc31542540541de3c085f413983303e8c):

```
GET https://api.onetouchemr.com/fhir/r4/Patient/1
Authorization: Bearer 5a20e14bc31542540541de3c085f413983303e8c
```

## OAuth 2.0 Client Credentials Grant Flow

For Multi-patient/Bulk Data clients, the Client Credentials Grant Flow using JSON Web Token (JWT) is used to authorize access.

Before a client can request an access token, it must generate a one-time-use JSON Web Token (JWT) that will be used to authenticate the client to the OneTouch EMR's bulk-access token endpoint (**{baseURL}/oauth/bulk-token**). The authentication JWT must include the following claims, and must be signed with the client's private key (which should use an **RS384** signature):



### Authentication JWT Header values

Name	Description
alg	The JWA algorithm used for signing the authentication JWT. OneTouch EMR currently supports <b>RS384</b> only.
kid	The identifier of the key-pair used to sign this JWT. This identifier SHALL be unique within the client's JWK Set.
type	Fixed value: JWT
jku	Optional. The TLS-protected URL to the JWK Set containing the public key(s) accessible without authentication or authorization. When present, this should match a value that the client supplied to the OneTouch EMR at client registration time. When absent, the server will fall back on the JWK Set URL or the JWK Set supplied at registration time.

### Authentication JWT Claims

Name	Description
iss	Issuer of the JWT -- the client's client_id, as determined during registration. Same value as sub claim
sub	The service's client_id. Same value as iss claim
aud	OneTouch EMR's Bulk Token URL ( <b>{baseURL}/oauth/bulk-token</b> ) where the authentication JWT will be posted
exp	Expiration time integer for this authentication JWT, expressed in seconds since the "Epoch" (1970-01-01T00:00:00Z UTC). This time must be no more than five minutes in the future.
jti	A nonce string value that uniquely identifies this authentication JWT.

The generated authentication JWT will be then included in a HTTP POST request, using application/x-www-form-urlencoded content-type. The request will contain the following parameters:

Name	Description
scope	The scopes of access requested
grant_type	Fixed value: client_credentials
client_assertion_type	Fixed value: urn:ietf:params:oauth:client-assertion-type:jwt-bearer
client_assertion	The signed authentication JWT

After the client sends the request, OneTouch EMR's Bulk Token endpoint will verify the signature using keys from the jku header (if present) or the JWK set URL provided during client registration. Upon success, the server will issue an access token response in JSON format with the following properties:

Name	Description
access_token	The access token issued by the authorization server.
token_type	Fixed value: bearer
expires_in	The lifetime in seconds of the access token. OneTouchEMR issues tokens with a five-minute lifetime
scope	Scope of access authorized.

The issued access token can then be used to make FHIR Bulk Data API calls.

## OAuth 2.0 Access Scopes

The following scopes are supported:

- Read-only Clinical Scopes
  - Patient-specific scope in the format **patient/:resourceType.read** (e.g. *patient/Condition.read*). This allows access to specific data about a single patient.
  - User-level in the format **user/:resourceType.read** (e.g. *user/Patient.read*). This allows access to specific data that a user has access to.
  - System-level in the format **system/:resourceType.read** (e.g. *system/Location.read*). Used for Bulk Data access, these scopes are associated with permissions assigned to an authorized software client rather than to a human end-user
  - Wildcard scopes are supported (*patient/\*.read*, *patient/\*.\**, *user/\*.read* and so on) but they system will automatically restrict the scope to read-only access
- Scope for requesting context data
  - *launch/patient* : for cases where the client needs the patient context at launch time.
- Scopes for requesting identity data
  - *openid fhirUser* : When the system receives this OpenID connect scope pair, the client app will receive an id\_token that contain information about the current clinical end-user
- Scopes for requesting a refresh token
  - *online\_access* : Requests a refresh\_token that can be used to obtain a new access token to replace an expired one, and that will be usable for as long as the end-user remains online.

- *offline\_access* : Requests a refresh\_token that can be used to obtain a new access token to replace an expired token, and that will remain usable for as long as the authorization server and end-user will allow, regardless of whether the end-user is online.

## TERMS AND CONDITIONS

OT EMR, Inc. offers some of its data from OneTouch EMR 3 in machine readable format through an Application Programming Interface (API). This service is offered subject to your acceptance of the terms and conditions (Agreement) contained herein.

All of the content, documentation, code, and related materials made available to you through the API are subject to these terms. Access to use the API or its content constitutes acceptance of this Agreement.

Using this API does not require pre registration with OT EMR, Inc., instead a username/password is required from the registered client. You may use any of the OT EMR, Inc. API's to develop a service or services to search, display, analyze, retrieve, view, and otherwise "get" information from OT EMR, Inc.

This API is provided "AS IS", without warranty of any kind, express or implied, including but not limited to the warranties of merchantability, fitness for a particular purpose and non-infringement. In no event shall the authors or copyright holders be liable for any claim, damages or other liability, whether in an action of contract, tort or otherwise, arising from, out of or in connection with the API or the use or other dealings in the Software.

Only OT EMR, Inc. may modify the terms of this Agreement. Company may modify the terms of this Agreement without written notice by posting the modified Agreement on our Company website.

### **You hereby warrant that:**

- (1) Your use of the API will be in strict accordance with the OT EMR, Inc. Privacy Policy, this Agreement, and all applicable laws and regulations; and
- (2) Your use of the API will not infringe or misappropriate the intellectual property rights of any third party.

## **Fees**

Currently thi API is available free of charge to the registered clients who are already paying fees i.e. the clients who are on paid plans.

Free Plan/Freemium tier clients have to pay a monthly fee that interacts with OneTouch APIs, and can request a quote by contacting [sales@onetouchemr.com](mailto:sales@onetouchemr.com).

## Restrictions & Limitations

**Restrictions and Limitations:** Developer(s) shall implement the APIs in accordance with the OneTouch EMR API Documentation. Developer(s) shall not: (i) modify, reverse engineer, decompile, or otherwise alter or attempt to gain access to the APIs or the OneTouch EMR in a manner not in accordance with this Agreement, (ii) use or enable its customers to use the APIs for the purposes of testing or comparison of OneTouch EMR or for any purpose competitive with OneTouch EMR, or (iii) perform bulk operations with APIs that are designed for single contact operations or perform single contact operations with APIs that are designed for performing bulk operations. Developer(s) agrees to protect the security and confidentiality of any credentials and API keys disclosed by OneTouch hereunder.

**Ownership; No Other Licenses.** The APIs contained in the Offering shall remain the sole and exclusive intellectual property of OneTouch EMR and the Developer shall reasonably assist OneTouch EMR in protecting such ownership. No other licenses or rights in any of OneTouch EMR's intellectual property rights are granted hereunder.

## Obligations

None. This API is optional.

## Registration Process Requirements

Contact our sales department at [sales@onetouchemr.com](mailto:sales@onetouchemr.com) to initiate any requests to set up for a client.