



FHIR API Documentation

Getting started

This documentation is intended to help you make the most of the DYNAMIC FHIR® API content. It will guide you through a series of working use-cases and help you consume your health resources.

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- Dynamic FHIR® Server API works in conjunction with ConnectEHR version 3.0.

Client Configuration

Instructions to configure the Client - Postman to consume the FHIR API

Steps:

1. Start your API client (ie, Postman v5.3.1)
2. Enter any of the example URLs at right with HTTP Request as GET
3. Click the Authorization Tab and select the "Type-Oauth 2.0" from the dropdown menu
4. Click the "Get New Access Token" button
5. Enter the configuration from the table below and click the "Request Token" Button
6. Enter the registered username and password
7. Click the "Use Token" button to use the Access Token
8. Click the "Preview Request" button after selecting Request Headers
9. A success message should be prompted
10. Click the Send Button to retrieve the requested resources

For any previous versions of Postman client, please add the Access Token manually to the URL Header

- **Key:** Authorization
- **Value:** Bearer Access Token (E.g. bearer D5jkd3adf23aERsdgy312)

Postman Configuration

NAME	DETAILS
Token Name	FHIR_Token
Grant Type	Authorization Code
Callback URL	https://www.getpostman.com/oauth2/callback
Auth URL	https://dhitweb.allmeds.com:4434/core/connect/authorize
Access Token URL	https://dhitweb.allmeds.com:4434/core/connect/token
Client Id	Sample_Client ID
Client Secret	Sample_Secret Secret
Scope	openid patient/*.read
State	Any GUID ID (Recommended)

NAME	DETAILS
Client Authorization	Send as Basic Auth Header

API URLs

The FHIR API Base URL is <https://dhitweb.allmeds.com:4435/fhir>
(<https://dhitweb.allmeds.com:4435/fhir/>)

The FHIR Authorization root URL is <https://dhitweb.allmeds.com:4434/core>
(<https://dhitweb.allmeds.com:4434/core>)

FHIR Metadata Information : <https://dhitweb.allmeds.com:4435/fhir/metadata>
(<https://dhitweb.allmeds.com:4435/fhir/metadata>)

FHIR Authorization Server Information :

<https://dhitweb.allmeds.com:4434/core/.well-known/openid-configuration>
(<https://dhitweb.allmeds.com:4434/core/.well-known/openid-configuration>)

Ports that have been setup for FHIR Server & Authorization Server are:

- **4435** : FHIR Server Production port, pointing to the FHIR Server Website
- **4434** : FHIR Authorization Server port, pointing to the FHIR Authorization Server

The root URL and port are combined with the fixed URL parameters to yield the following **Base API URL** (where 'PORT' will be either Production or Test):

You can find this API Documentation at -

<https://dhitweb.allmeds.com:4435/Home/ApiDocumentation>
(<https://dhitweb.allmeds.com:4435/Home/ApiDocumentation>)

FHIR® Mapping

This section discusses the various FHIR® Sections mapped to the Common Clinical Dataset using the FHIR® API platform.

- DYNAMIC FHIR® API allows other health IT applications to make read-only data requests for patient health information that is part of the Common Clinical Data Set.
- §170.315(g)(7), §170.315(g)(8) and §170.315(g)(9) - API interface would allow a request for "all" the patient data, or specific "by specific data category."
Available data via the API interface is limited by the data defined by the Common Clinical Data Set.
- DYNAMIC FHIR® API assumes the use of a cumulative CCDA with patient data. For filtering CCDA data by section, it will use the latest cumulative CCDA document (by the document EffectiveDateTime) per patient. When handling requests for "all patient data," it will look across all CCDAs that have been received.

DYNAMIC FHIR® API server maps FHIR® resources to Common Clinical Datasets

FHIR Base URL : <https://dhitweb.allmeds.com:4435/fhir>
 (<https://dhitweb.allmeds.com:4435/fhir/>)

FHIR Metadata Information : <https://dhitweb.allmeds.com:4435/fhir/metadata>
 (<https://dhitweb.allmeds.com:4435/fhir/metadata>)

FHIR Authorization Server Information :
<https://dhitweb.allmeds.com:4434/core/.well-known/openid-configuration>
 (<https://dhitweb.allmeds.com:4434/core/.well-known/openid-configuration>)

FHIR Server SMART-Configuration :
<https://dhitweb.allmeds.com:4435/fhir/.well-known/smart-configuration>
 (<https://dhitweb.allmeds.com:4435/fhir/.well-known/smart-configuration>)

FHIR® Mapping Table

Common Clinical Dataset	FHIR® Resource	Resource Reference Documentation
Patient Demographics including Race/Ethnicity	Patient	<p>Supported Interaction: SearchType</p> <p>Supported Search: ID</p> <p>Supported DataType: String</p> <p>Implementation Notes: Demographic search criteria which is the patient ID. Other search name and given with name are not supported</p> <p>URL Syntax:</p> <ul style="list-style-type: none"> • GET [Base_URL]/Patient/_search?Patient= • GET [Base_URL]/Patient/[id] <p>Example: [Base_URL]/Patient/_search?Patient=</p> <p>Return Type: JSON or XML</p> <p>Returned Schema:</p>



```
{
  "resourceType": "Patient",
  "id": "276017609",
  "language": "en-US",
  "extension": [
    {
      "url": "http://hl7.org/fhir/us/core/StructureDefinition/us-core-valueCodeableConcept",
      "valueCodeableConcept": {
        "coding": [
          {
            "system": "http://hl7.org/fhir/us/core/StructureDefinition/us-core-coding",
            "code": "2106-3",
            "display": "White"
          }
        ],
        "text": "White"
      }
    },
    {
      "url": "http://hl7.org/fhir/us/core/StructureDefinition/us-core-valueCoding",
      "valueCoding": {
        "system": "http://hl7.org/fhir/v3/Ethnicity",
        "code": "2186-5",
        "display": "Not Hispanic or Latino"
      }
    },
    {
      "url": "http://hl7.org/fhir/us/core/StructureDefinition/us-core-valueCodeableConcept",
      "valueCodeableConcept": {
        "coding": [
          {
            "system": "2.16.840.1.113883.6.238",
            "code": "2108-9"
          }
        ],
        "text": "White European"
      }
    },
    {
      "url": "http://hl7.org/fhir/us/core/StructureDefinition/us-core-valueString",
      "valueString": "Female"
    }
  ],
  "identifier": [
    {
      "use": "official",
      "type": {
        "coding": [
          {
            "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
            "code": "MR",
            "display": "Medical Record Number"
          }
        ],
        "text": "Medical Record Number"
      },
      "value": "g9_Amb_01"
    }
  ]
}
```

```
],
  "name": [
    {
      "use": "usual",
      "text": "Alice Jones Newman",
      "family": "Newman",
      "given": [
        "Alice Jones"
      ]
    },
    {
      "use": "official",
      "text": "Alicia Jones Newman",
      "family": "Newman",
      "given": [
        "Alicia Jones"
      ]
    }
  ],
  "telecom": [
    {
      "system": "phone",
      "value": "tel:5557771234",
      "use": "home"
    },
    {
      "system": "phone",
      "value": "tel:5557231544",
      "use": "home"
    }
  ],
  "gender": "female",
  "birthDate": "1970-05-01",
  "address": [
    {
      "use": "home",
      "line": [
        "1357, Amber Dr,"
      ],
      "city": "Beaverton",
      "state": "OR",
      "postalCode": "97006",
      "country": "USA"
    }
  ],
  "communication": [
    {
      "language": {
        "coding": [
          {
            "system": "urn:ietf:bc:47",
            "code": "en-US",
            "display": "English"
          }
        ]
      },
      "text": "English"
    }
  ]
}
```




```
{
  "resourceType": "Bundle",
  "id": "3094cc5f-4008-4f96-a4b8-f229b4a7d60d",
  "meta": {
    "lastUpdated": "2018-11-06T16:58:59-06:00"
  },
  "type": "searchset",
  "total": 5,
  "link": [
    {
      "relation": "self",
      "url": "{Base_URL}/Condition?Patient=101420"
    }
  ],
  "entry": [
    {
      "fullUrl": "{Base_URL}/Condition/10001",
      "resource": {
        "resourceType": "Condition",
        "id": "153365-id-10001",
        "clinicalStatus": "active",
        "code": {
          "coding": [
            {
              "system": "http://snomed.info/sct",
              "code": "236578006",
              "display": "Chronic rejection of renal transplant (diso
            }
          ]
        },
        "subject": {
          "reference": "{Base_URL}/patient/101420"
        },
        "onsetDateTime": "2011-12-31"
      }
    },
    {
      "fullUrl": "{Base_URL}/Condition/10002",
      "resource": {
        "resourceType": "Condition",
        "id": "153365-id-10002",
        "clinicalStatus": "resolved",
        "code": {
          "coding": [
            {
              "system": "http://snomed.info/sct",
              "code": "238131007",
              "display": "Overweight (finding)"
            }
          ]
        },
        "subject": {
          "reference": "{Base_URL}/patient/101420"
        },
        "onsetDateTime": "2006-12-31",
        "abatementDateTime": "2007-06-01"
      }
    }
  ]
}
```

]
}

For more info refer to Condition (<http://hl7.org/fhir/condition.html>) resource on HL7.o

Common Clinical Dataset	FHIR® Resource	Resource Reference Documentation
Procedures Performed	Procedure	<p>Supported Interaction: SearchType</p> <p>Supported Search: patientID</p> <p>Supported DataType: String</p> <p>Implementation Notes: Standard patient ID being passed is the patient ID. Optional search parameters are patient and date=le.</p> <p>URL Syntax:</p> <ul style="list-style-type: none"> • GET GET [Base_URL]/Procedure?patient=DD&date=leYYYY-MM-DD <p>URL Example:</p> <ul style="list-style-type: none"> • GET GET [Base_URL]/Procedure?patient=31&date=le2011-12-31 <p>Return Type: JSON or XML</p> <p>Returned Schema:</p>



```

{
  "resourceType": "Bundle",
  "id": "df854194-125c-4ae8-8481-c6f139751f1a",
  "type": "searchset",
  "total": 2,
  "link": [
    {
      "relation": "self",
      "url": "{Base_URL}/Procedure?Patient=101420"
    }
  ],
  "entry": [
    {
      "fullUrl": "{Base_URL}/Procedure/10001",
      "resource": {
        "resourceType": "Procedure",
        "id": "10001",
        "status": "completed",
        "code": {
          "coding": [
            {
              "system": "Nebulizer Therapy",
              "code": "56251003"
            }
          ],
          "text": "Nebulizer Therapy"
        },
        "subject": {
          "reference": "{Base_URL}/patient/101420"
        },
        "performedDateTime": "2015-06-22",
        "location": {
          "display": " "
        },
        "bodySite": [
          {
            "coding": [
              {
                "system": "http://snomed.info/sct",
                "code": "82094008",
                "display": "SNOMED CT"
              }
            ],
            "text": "Lower Respiratory Tract Structure"
          }
        ]
      }
    },
    {
      "fullUrl": "{Base_URL}/Procedure/10002",
      "resource": {
        "resourceType": "Procedure",
        "id": "10002",
        "status": "completed",
        "code": {
          "coding": [
            {
              "system": "Introduction of cardiac resynchronizer system"
            }
          ]
        }
      }
    }
  ]
}

```

```

        "code": "175135009"
      }
    ],
    "text": "Introduction of cardiac pacemaker system via vein"
  },
  "subject": {
    "reference": "{Base_URL}/patient/101420"
  },
  "performedDateTime": "2011-10-05",
  "location": {
    "display": " "
  },
  "bodySite": [
    {
      "coding": [
        {
          "system": "http://snomed.info/sct",
          "code": "9454009",
          "display": "SNOMED CT"
        }
      ],
      "text": "Structure of subclavian vein"
    }
  ]
}
]
}
]
}

```

For more info refer to Procedure (<http://hl7.org/fhir/procedure.html>) resource on HL7.

Common Clinical FHIR® Resource Resource Reference Documentation Dataset

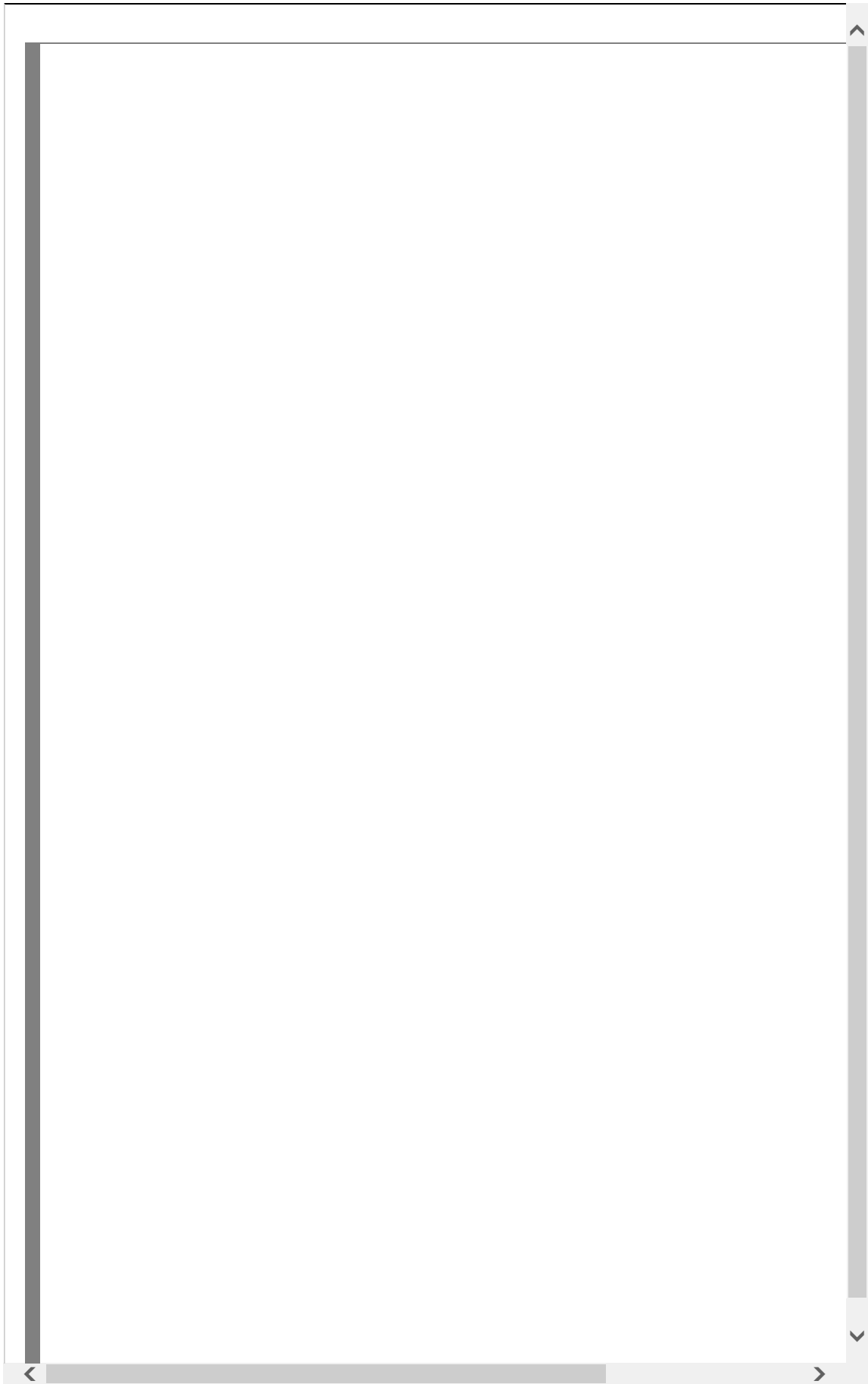
Smoking Status	Observation	<p>Supported Interaction: SearchType Supported Search: patientID Supported DataType: String Implementation Notes: Standard patient ID being passed is the patient ID. Optional search parameters are ge and date=le. URL Syntax:</p> <ul style="list-style-type: none"> GET GET [Base_URL]/Observation?patientID=history&date=geYYYY-MM-DD&date=leYYYY-MM-DD <p>URL Example:</p> <ul style="list-style-type: none"> GET GET [Base_URL]/Observation?patientID=history&date=ge2011-12-31&date=le2011-12-31 <p>Return Type: JSON or XML Returned Schema:</p>
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```
{
  "resourceType": "Bundle",
  "id": "af558cd3-d9a1-455f-81c0-947d8987b93a",
  "type": "searchset",
  "total": 11,
  "link": [
    {
      "relation": "self",
      "url": "{Base_URL}/observation?Patient=101420"
    }
  ],
  "entry": [
    {
      "fullUrl": "{Base_URL}/observation/10010",
      "resource": {
        "resourceType": "Observation",
        "status": "final",
        "code": {
          "coding": [
            {
              "system": "http://loinc.org",
              "code": "72166-2",
              "display": "Tobacco smoking status NHIS"
            }
          ],
          "text": "Tobacco smoking status NHIS"
        },
        "effectiveDateTime": "2015-06-22",
        "valueCodeableConcept": {
          "coding": [
            {
              "system": "2.16.840.1.113883.6.96",
              "code": "449868002",
              "display": "Current every day"
            }
          ],
          "text": "Current every day"
        }
      }
    }
  ]
}
```

For more info refer to Observation (<http://hl7.org/fhir/observation.html>) resource on FHIR

Common Clinical FHIR® Resource Resource Reference Documentation Dataset

<p>Vital Signs</p>	<p>Observation</p>	<p>Supported Interaction: SearchType Supported Search: patientID Supported DataType: String Implementation Notes: Standard patient ID being passed is the patient ID. Optional search parameters are ge and date=le. URL Syntax: <ul style="list-style-type: none"> • GET GET [Base_URL]/Observation?patientID={patientID}&date=geYYYY-MM-DD&date=leYYYY-MM-DD URL Example: <ul style="list-style-type: none"> • GET GET [Base_URL]/Observation?patientID={patientID}&date=ge2011-12-31&date=le2011-12-31 Return Type: JSON or XML Returned Schema:</p>
--------------------	--------------------	--



```
{
  "resourceType": "Bundle",
  "id": "af558cd3-d9a1-455f-81c0-947d8987b93a",
  "type": "searchset",
  "total": 11,
  "link": [
    {
      "relation": "self",
      "url": "{Base_URL}/observation?Patient=101420"
    }
  ],
  "entry": [
    {
      "fullUrl": "{Base_URL}/observation/10001",
      "resource": {
        "resourceType": "Observation",
        "id": "10001",
        "status": "final",
        "category": [
          {
            "coding": [
              {
                "system": "http://hl7.org/fhir/observation-category",
                "code": "vital-signs"
              }
            ]
          }
        ],
        "code": {
          "coding": [
            {
              "system": "http://loinc.org",
              "code": "8867-4",
              "display": "Heart Rate"
            }
          ],
          "text": "Heart Rate"
        },
        "subject": {
          "reference": "{Base_URL}/patient/101420"
        },
        "effectiveDateTime": "2015-06-22",
        "valueQuantity": {
          "value": 80.0,
          "unit": "beats/Min",
          "system": "http://unitsofmeasure.org/"
        },
        "interpretation": {
          "coding": [
            {
              "system": "https://www.csioz.gov.pl",
              "code": "N"
            }
          ]
        }
      }
    }
  ],
  {
```

```
"fullUrl": "{Base_URL}/observation/10002",
"resource": {
  "resourceType": "Observation",
  "id": "10002",
  "status": "final",
  "category": [
    {
      "coding": [
        {
          "system": "http://hl7.org/fhir/observation-category",
          "code": "vital-signs"
        }
      ]
    }
  ],
  "code": {
    "coding": [
      {
        "system": "http://loinc.org",
        "code": "9279-1",
        "display": "Respiratory Rate"
      }
    ],
    "text": "Respiratory Rate"
  },
  "subject": {
    "reference": "{Base_URL}/patient/101420"
  },
  "effectiveDateTime": "2015-06-22",
  "valueQuantity": {
    "value": 18.0,
    "unit": "breaths/Min",
    "system": "http://unitsofmeasure.org/"
  },
  "interpretation": {
    "coding": [
      {
        "system": "https://www.csioz.gov.pl",
        "code": "N"
      }
    ]
  }
}
```

For more info refer to Vital Signs (<http://hl7.org/fhir/Observation.html>) resource on HL

Common Clinical FHIR® Resource Resource Reference Documentation Dataset

<p>Observation</p>	<p>Observation</p>	<p>Supported Interaction: SearchType Supported Search: patientID Supported DataType: String Implementation Notes: Standard patient ID being passed is the patient ID. Optional search parameters are date=le. URL Syntax:</p> <ul style="list-style-type: none"> • GET GET [Base_URL]/Observation?patientID={patientID}&date=leYYYY-MM-DD&date=leYYYY-MM-DD • GET GET [Base_URL]/Observation?patientID={patientID}&date=leYYYY-MM-DD&date=leYYYY-MM-DD • GET GET [Base_URL]/Observation?patientID={patientID}&category=laboratory&date=leYYYY-MM-DD <p>URL Example:</p> <ul style="list-style-type: none"> • GET GET [Base_URL]/Observation?patientID=101248&category=laboratory&date=le2011-12-31 <p>Return Type: JSON or XML Returned Schema:</p>
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```
{
  "resourceType": "Bundle",
  "id": "d463296c-da08-4b0b-b140-dc5daa332599",
  "type": "searchset",
  "total": 4,
  "link": [
    {
      "relation": "self",
      "url": "{base_url}/observation?Patient=101327"
    }
  ],
  "entry": [
    {
      "fullUrl": "{base_url}/observation/10002",
      "resource": {
        "resourceType": "Observation",
        "id": "10002",
        "status": "final",
        "category": [
          {
            "coding": [
              {
                "system": "http://hl7.org/fhir/observation-category",
                "code": "vital-signs"
              }
            ]
          }
        ],
        "code": {
          "coding": [
            {
              "system": "http://loinc.org",
              "code": "8302-2",
              "display": "Height"
            }
          ],
          "text": "Height"
        },
        "subject": {
          "reference": "{base_url}/patient/101327"
        },
        "effectiveDateTime": "2015-06-22",
        "valueQuantity": {
          "value": 177.0,
          "unit": "cm",
          "system": "http://unitsofmeasure.org/"
        },
        "interpretation": {
          "coding": [
            {
              "system": "https://www.csioz.gov.pl",
              "code": "N"
            }
          ],
          "text": "Normal"
        }
      }
    }
  ]
}
```

```
{
  "fullUrl": "{base_url}/observation/153106-Laboratory-10019",
  "resource": {
    "resourceType": "Observation",
    "id": "153106-Laboratory-10019",
    "meta": {
      "versionId": "3.0"
    },
    "identifier": [
      {
        "use": "official",
        "system": "urn:ietf:rhc:3986",
        "value": "urn:uuid:a9a8eb63-24b5-4ba1-961a-b81952d200bf"
      }
    ],
    "status": "final",
    "category": [
      {
        "coding": [
          {
            "system": "http://terminology.hl7.org/CodeSystem/obse",
            "code": "laboratory",
            "display": "Laboratory"
          }
        ]
      }
    ],
    "code": {
      "coding": [
        {
          "system": "http://loinc.org",
          "code": "5778-6",
          "display": "Color of Urine"
        }
      ],
      "text": "Color of Urine"
    },
    "subject": {
      "reference": "Patient/101327"
    },
    "effectiveDateTime": "2015-06-22",
    "issued": "2015-06-21T19:00:00-05:00",
    "valueString": "YELLOW",
    "interpretation": {
      "coding": [
        {
          "system": "http://hl7.org/fhir/v2/0078",
          "code": "N",
          "display": "Normal"
        }
      ],
      "text": "Normal"
    },
    "referenceRange": [
      {
        "text": "YELLOW"
      }
    ]
  }
}
```

```
}
},
{
  "fullUrl": "{base_url}/observation/",
  "resource": {
    "resourceType": "Observation",
    "status": "final",
    "code": {
      "coding": [
        {
          "system": "http://loinc.org",
          "code": "72166-2",
          "display": "Tobacco smoking status NHIS"
        }
      ],
      "text": "Tobacco smoking status NHIS"
    },
    "effectiveDateTime": "2015-06-22",
    "valueCodeableConcept": {
      "coding": [
        {
          "system": "2.16.840.1.113883.6.96",
          "code": "449868002",
          "display": "Current every day"
        }
      ],
      "text": "Current every day"
    }
  }
},
{
  "fullUrl": "{base_url}/observation/",
  "resource": {
    "resourceType": "Observation",
    "status": "final",
    "code": {
      "coding": [
        {
          "system": "http://loinc.org",
          "code": "76689-9",
          "display": "Sex Assigned At Birth"
        }
      ],
      "text": "Sex Assigned At Birth"
    },
    "effectiveDateTime": "1970-05-01",
    "valueCodeableConcept": {
      "coding": [
        {
          "system": "2.16.840.1.113883.5.1",
          "code": "F",
          "display": "Female"
        }
      ],
      "text": "Female"
    }
  }
}
}
```


]
 }

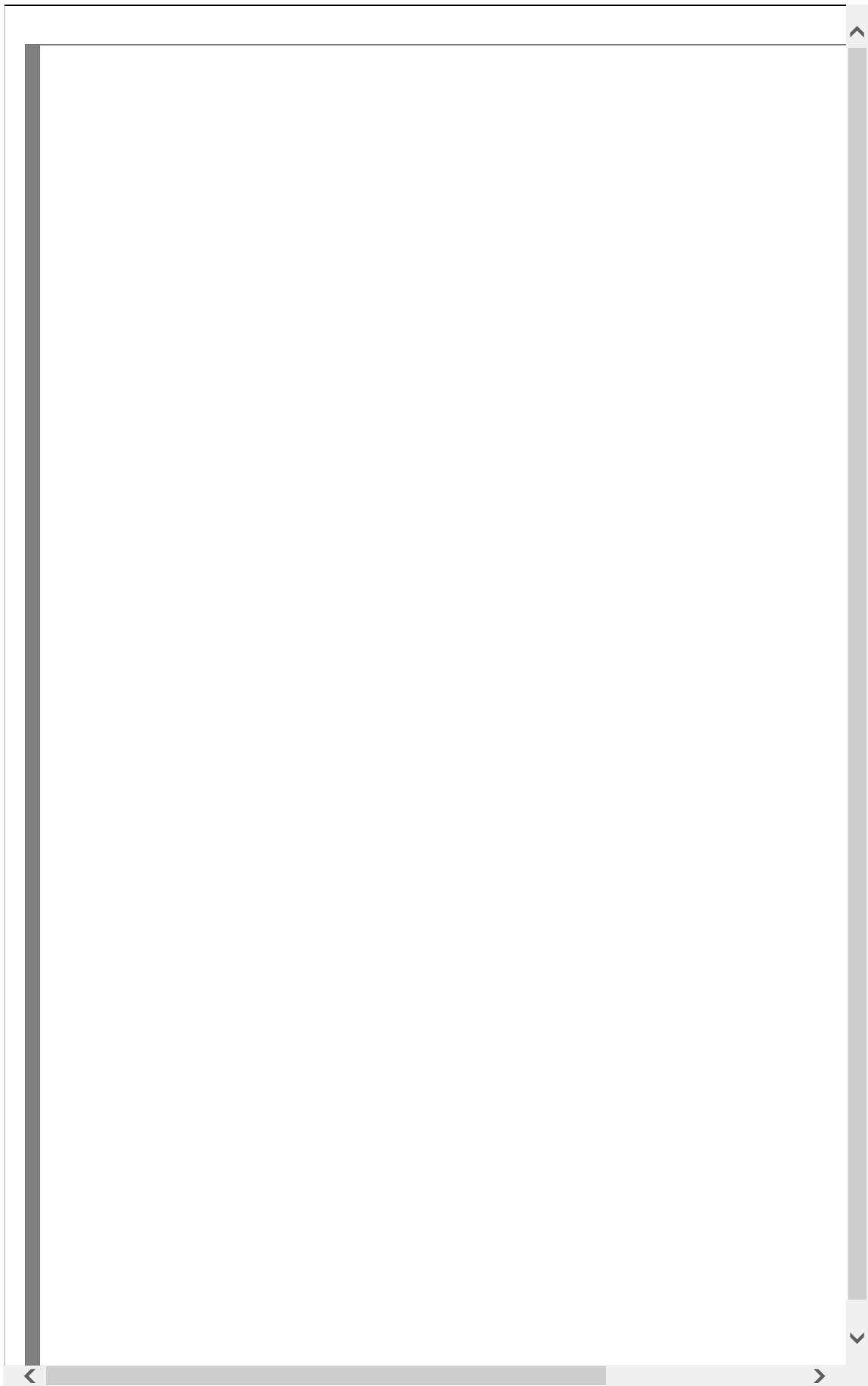
<

For more info refer to Observation (<http://hl7.org/fhir/Observation.html>) resource on I

Common Clinical Dataset	FHIR® Resource	Resource Reference Documentation
Lab Results	Diagnostic Report	<p>Supported Interaction: SearchType</p> <p>Supported Search: patientID</p> <p>Supported DataType: String</p> <p>Implementation Notes: Standard patient ID being passed is the patient ID. Optional search parameters are category and date=le.</p> <p>URL Syntax:</p> <ul style="list-style-type: none"> • GET GET [Base_URL]/DiagnosticReport?patientID={patientID}&category=LAB&date=geYYYY-MM-DD&date=leYYYY-MM-DD <p>URL Example:</p> <ul style="list-style-type: none"> • GET GET [Base_URL]/DiagnosticReport?patient=101248&category=LAB&date=ge2012-12-31&date=le2012-12-31 <p>Return Type: JSON or XML</p> <p>Returned Schema:</p>

<

>



```

{
  "resourceType": "Bundle",
  "id": "aad88fd1-e24e-4d46-8602-6ca5346e2430",
  "type": "searchset",
  "total": 8,
  "link": [
    {
      "relation": "self",
      "url": "https://api.dynamicfhir.com:44360/fhir/diagnosticreport
    ]
  ],
  "entry": [
    {
      "fullUrl": "https://api.dynamicfhir.com:44360/fhir/diagnosticre
0001",
      "resource": {
        "resourceType": "DiagnosticReport",
        "id": "153365-RESULTS-10001",
        "basedOn": [
          {
            "reference": "Observation/153365-RESULTS-10001"
          }
        ],
        "status": "final",
        "category": {
          "coding": [
            {
              "system": "http://hl7.org/fhir/DiagnosticReport-categor
              "code": "LAB",
              "display": "Laboratory"
            }
          ],
          "text": "Laboratory"
        },
        "code": {
          "coding": [
            {
              "system": "http://loinc.org",
              "code": "24357-6",
              "display": "Urinalysis macro (dipstick) panel"
            }
          ],
          "text": "Urinalysis macro (dipstick) panel"
        },
        "subject": {
          "reference": "https://api.dynamicfhir.com:44360/fhir/Patien
        },
        "effectiveDateTime": "2015-06-22",
        "issued": "2015-06-21T19:00:00-05:00",
        "performer": [
          {
            "actor": {
              "reference": "Practitioner/19c5120a-2153-4201-b49c-c414
              "display": "UNK"
            }
          }
        ],
        "result": [

```

```

    {
      "reference": "Observation/153365-RESULTS-10001"
    }
  ],
  "conclusion": "YELLOW",
  "codedDiagnosis": [
    {
      "coding": [
        {
          "system": "http://loinc.org",
          "code": "5778-6",
          "display": "Color of Urine"
        }
      ],
      "text": "Color of Urine"
    }
  ]
},
{
  "fullUrl": "https://api.dynamicfhir.com:44360/fhir/diagnosticre
0002",
  "resource": {
    "resourceType": "DiagnosticReport",
    "id": "153365-RESULTS-10002",
    "basedOn": [
      {
        "reference": "Observation/153365-RESULTS-10002"
      }
    ],
    "status": "final",
    "category": {
      "coding": [
        {
          "system": "http://hl7.org/fhir/DiagnosticReport-categor
          "code": "LAB",
          "display": "Laboratory"
        }
      ],
      "text": "Laboratory"
    },
    "code": {
      "coding": [
        {
          "system": "http://loinc.org",
          "code": "24357-6",
          "display": "Urinalysis macro (dipstick) panel"
        }
      ],
      "text": "Urinalysis macro (dipstick) panel"
    },
    "subject": {
      "reference": "https://api.dynamicfhir.com:44360/fhir/Patien
    },
    "effectiveDateTime": "2015-06-22",
    "issued": "2015-06-21T19:00:00-05:00",
    "performer": [
      {

```

```

    "actor": {
      "reference": "Practitioner/14d1fc14-7c26-4bc4-86d3-5d4e
      "display": "UNK"
    }
  ],
  "result": [
    {
      "reference": "Observation/153365-RESULTS-10002"
    }
  ],
  "conclusion": "CLEAR",
  "codedDiagnosis": [
    {
      "coding": [
        {
          "system": "http://loinc.org",
          "code": "5767-9",
          "display": "Appearance of Urine"
        }
      ],
      "text": "Appearance of Urine"
    }
  ]
}

```

For more info refer to Observation (<http://hl7.org/fhir/observation.html>) resource on FHIR

Common Clinical Dataset	FHIR® Resource	Resource Reference Documentation
Goal defined	Goal	<p>Supported Interaction: SearchType</p> <p>Supported Search: patientID</p> <p>Supported DataType: String</p> <p>Implementation Notes: Standard patient ID being passed is the patient ID. Optional search parameters are patient and date=le.</p> <p>URL Syntax:</p> <ul style="list-style-type: none"> GET GET [Base_URL]/Goal?Patient=[id]&date=leYYYY-MM-DD <p>URL Example:</p> <ul style="list-style-type: none"> GET GET [Base_URL]/Goal?Patient=1012431&date=le2011-12-31 <p>Return Type: JSON or XML</p> <p>Returned Schema:</p>



```

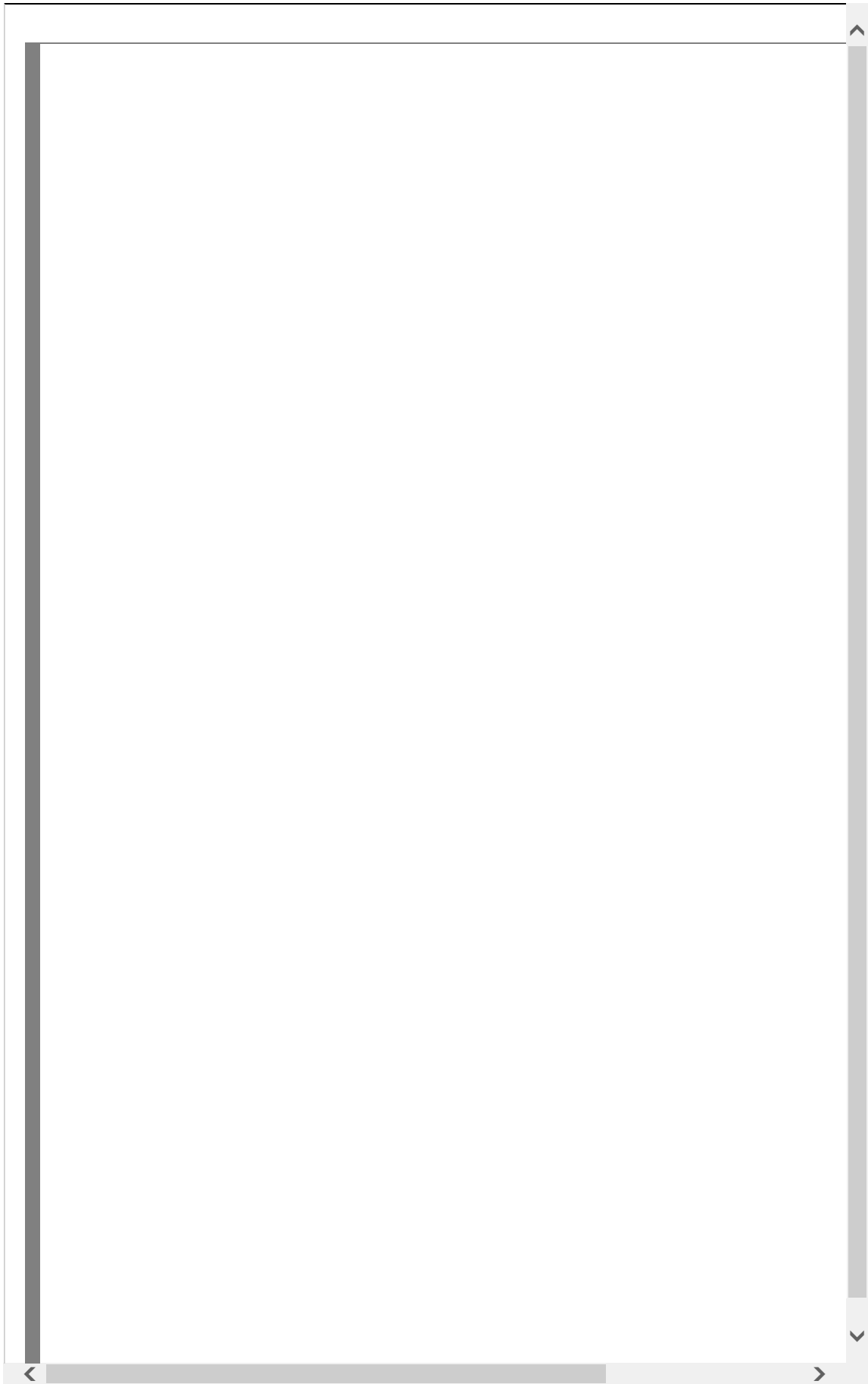
{
  "resourceType": "Bundle",
  "id": "1564ce83-d30c-452b-b8a9-ca8acfa0df2d",
  "type": "searchset",
  "total": 2,
  "link": [
    {
      "relation": "self",
      "url": "{Base_URL}/Goal?Patient=101420"
    }
  ],
  "entry": [
    {
      "fullUrl": "{Base_URL}/goal/10001",
      "resource": {
        "resourceType": "Goal",
        "id": "10001",
        "status": "in-progress",
        "description": {
          "coding": [
            {
              "system": "http://loinc.org",
              "code": "58144-7",
              "display": "Get rid of intermittent fever that is occur
"
            }
          ],
          "text": "Get rid of intermittent fever that is occurring ev
",
          "subject": {
            "reference": "{Base_URL}/Patient/101420"
          },
          "statusCode": "2015-06-22"
        }
      },
    {
      "fullUrl": "{Base_URL}/goal/10002",
      "resource": {
        "resourceType": "Goal",
        "id": "10002",
        "status": "in-progress",
        "description": {
          "coding": [
            {
              "system": "http://loinc.org",
              "code": "58144-7",
              "display": "Need to gain more energy to do regular acti
"
            }
          ],
          "text": "Need to gain more energy to do regular activities"
        },
        "subject": {
          "reference": "{Base_URL}/Patient/101420"
        },
        "statusCode": "2015-06-22"
      }
    }
  ]
}

```

}]

For more info refer to Goal (<http://hl7.org/fhir/goal.html>) resource on HL7.org

Common Clinical Dataset	FHIR® Resource	Resource Reference Documentation
Immunizations Information	Immunization	<p>Supported Interaction: SearchType</p> <p>Supported Search: patientID</p> <p>Supported DataType: String</p> <p>Implementation Notes: Standard patient ID being passed is the patient ID. Optional search parameters are date=le.</p> <p>URL Syntax:</p> <ul style="list-style-type: none"> • GET GET [Base_URL]/Immunization?patientID&date=leYYYY-MM-DD <p>URL Example:</p> <ul style="list-style-type: none"> • GET GET [Base_URL]/Immunization?patientID=12-31&date=le2011-12-31 <p>Return Type: JSON or XML</p> <p>Returned Schema:</p>



```
{
  "resourceType": "Bundle",
  "id": "fd818ffd-f5a6-4eb9-bfcb-36ad01470a40",
  "type": "searchset",
  "total": 2,
  "link": [
    {
      "relation": "self",
      "url": "{Base_URL}/immunization?Patient=101420"
    }
  ],
  "entry": [
    {
      "fullUrl": "{Base_URL}/immunization/10001",
      "resource": {
        "resourceType": "Immunization",
        "id": "10001",
        "status": "completed",
        "notGiven": false,
        "vaccineCode": {
          "coding": [
            {
              "system": "",
              "code": "106",
              "display": "Tetanus and diphtheria toxoids"
            }
          ]
        },
        "patient": {
          "reference": "{Base_URL}/patient/101420"
        },
        "date": "2012-01-04",
        "primarySource": true,
        "manufacturer": {
          "display": "Immuno Inc."
        },
        "lotNumber": "2"
      }
    },
    {
      "fullUrl": "{Base_URL}/immunization/10002",
      "resource": {
        "resourceType": "Immunization",
        "id": "10002",
        "status": "completed",
        "notGiven": true,
        "vaccineCode": {
          "coding": [
            {
              "system": "",
              "code": "166",
              "display": "Influenza, intradermal, quadrivalent, prese
            }
          ]
        },
        "patient": {
          "reference": "{Base_URL}/patient/101420"
        }
      }
    }
  ]
}
```

```

    "date": "2015-06-22",
    "primarySource": true,
    "manufacturer": {
      "display": "Immuno Inc."
    },
    "lotNumber": "UNK",
    "explanation": {
      "reasonNotGiven": [
        {
          "coding": [
            {
              "system": "2.16.840.1.113883.5.8",
              "code": "PATOBJ",
              "display": "Immunization was not given - Patient re
            }
          ],
          "text": "cancelled"
        }
      ]
    }
  ]
}

```

For more info refer to Immunization (<http://hl7.org/fhir/immunization.html>) resource

Common Clinical FHIR® Resource Dataset Resource Reference Documentation

Treatment Plan	Care Plan	
		<p>Supported Interaction: SearchType</p> <p>Supported Search: patientID</p> <p>Supported DataType: String</p> <p>Implementation Notes: Standard patient ID being passed is the patient ID. Optional search parameters are patient and date=le.</p> <p>URL Syntax:</p> <ul style="list-style-type: none"> • GET GET [Base_URL]/CarePlan?patient=[id]&date=leYYYY-MM-DD <p>URL Example:</p> <ul style="list-style-type: none"> • GET GET [Base_URL]/CarePlan?patient=123456789&date=le2011-12-31 <p>Return Type: JSON or XML</p> <p>Returned Schema:</p>



```

{
  "resourceType": "Bundle",
  "id": "7a988f5c-4604-4332-ab3b-8cf81ae6378f",
  "type": "searchset",
  "total": 5,
  "link": [
    {
      "relation": "self",
      "url": "{Base_URL}/CarePlan?Patient=101420"
    }
  ],
  "entry": [
    {
      "fullUrl": "{Base_URL}/CarePlan/10001",
      "resource": {
        "resourceType": "CarePlan",
        "id": "10001",
        "status": "active",
        "intent": "plan",
        "description": "Schedule follow on visit with Neighborhood Ph
7/1/2015",
        "subject": {
          "reference": "{Base_URL}/patient/101420"
        },
        "period": {
          "start": "2015-07-01"
        }
      }
    },
    {
      "fullUrl": "{Base_URL}/CarePlan/10002",
      "resource": {
        "resourceType": "CarePlan",
        "id": "10002",
        "status": "active",
        "intent": "plan",
        "description": "Urinalysis macro (dipstick) panel",
        "subject": {
          "reference": "{Base_URL}/patient/101420"
        },
        "period": {
          "start": "2015-06-29"
        }
      }
    },
    {
      "fullUrl": "{Base_URL}/CarePlan/10003",
      "resource": {
        "resourceType": "CarePlan",
        "id": "10003",
        "status": "active",
        "intent": "plan",
        "description": "Take Clindamycin 300mg three times a day as n
t subside",
        "subject": {
          "reference": "{Base_URL}/patient/101420"
        },
        "period": {

```

```

        "start": "2015-06-23"
      },
    ],
  }
}

```

For more info refer to CarePlan (<http://hl7.org/fhir/careplan.html>) resource on HL7.org

Common Clinical Dataset	FHIR® Resource	Resource Reference Documentation
-------------------------	----------------	----------------------------------

Treatment Team	Care Team	<p>Supported Interaction: SearchType</p> <p>Supported Search: patientID</p> <p>Supported DataType: String</p> <p>Implementation Notes: Standard patient ID being passed is the patient ID. Optional search parameters are date=le.</p> <p>URL Syntax:</p> <ul style="list-style-type: none"> • GET GET [Base_URL]/CareTeam?patient=ID&date=leYYYY-MM-DD <p>URL Example:</p> <ul style="list-style-type: none"> • GET GET [Base_URL]/CareTeam?patient=12345&date=le2011-12-31 <p>Return Type: JSON or XML</p> <p>Returned Schema:</p>
----------------	-----------	--



```

{
  "resourceType": "Bundle",
  "id": "ab35e2fe-88fb-4b08-9696-64daf4aa8adb",
  "type": "searchset",
  "total": 2,
  "link": [
    {
      "relation": "self",
      "url": "{Base_URL}/careteam?Patient=101420"
    }
  ],
  "entry": [
    {
      "fullUrl": "{Base_URL}/careteam/10001",
      "resource": {
        "resourceType": "CareTeam",
        "id": "10001",
        "contained": [
          {
            "resourceType": "Organization",
            "id": "e206786f-9e35-4efd-b07b-89d05878d472",
            "identifier": [
              {
                "system": "Neighborhood Physicians Practice",
                "value": "e206786f-9e35-4efd-b07b-89d05878d472 2.16.8"
              }
            ],
            "telecom": [
              {
                "system": "phone",
                "value": "555-555-1002",
                "use": "work"
              }
            ],
            "address": [
              {
                "text": "2472 Rocky place",
                "line": [
                  "UNK",
                  "2472 Rocky place"
                ],
                "city": "Beaverton",
                "state": "OR",
                "postalCode": "97006",
                "country": "UNK"
              }
            ]
          }
        ],
        "resourceType": "Practitioner",
        "id": "d6d13c13-21b2-43bd-9f44-77f412b3dfc2",
        "name": [
          {
            "use": "official",
            "text": "Dr Albert Davis",
            "family": "Davis",
            "given": [
              "Albert"
            ]
          }
        ]
      }
    }
  ]
}

```



```
    ],
    "prefix": [
      "Dr"
    ]
  },
  "address": [
    {
      "text": "2472, Rocky Place",
      "line": [
        "UNK",
        "2472, Rocky Place"
      ],
      "city": "Beaverton",
      "state": "OR",
      "postalCode": "97006",
      "country": "UNK"
    }
  ],
  "gender": "unknown"
},
"status": "active",
"participant": [
  {
    "role": {
      "coding": [
        {
          "system": "UNK",
          "code": "UNK",
          "display": "UNK"
        }
      ],
      "text": "UNK"
    },
    "member": {
      "reference": "#d6d13c13-21b2-43bd-9f44-77f412b3dfc2"
    },
    "onBehalfOf": {
      "reference": "#e206786f-9e35-4efd-b07b-89d05878d472"
    }
  }
],
"reasonCode": [
  {
    "coding": [
      {
        "system": "http://snomed.info/sct",
        "code": "386661006",
        "display": "SNOMED-CT"
      }
    ],
    "text": "Fever"
  }
],
"reasonReference": [
  {
    "reference": "fhir/condition/"
  }
]
```

```

    }
  ]
}

```

For more info refer to CarePlan (<http://hl7.org/fhir/careplan.html>) resource on HL7.org

Common Clinical Dataset	FHIR® Resource	Resource Reference Documentation
-------------------------	----------------	----------------------------------

Health Concerns	Condition	<p>Supported Interaction: SearchType</p> <p>Supported Search: patientID</p> <p>Supported DataType: String</p> <p>Implementation Notes: Standard patient ID being passed is the patient ID. Optional search parameters are date=ge and date=le.</p> <p>URL Syntax:</p> <ul style="list-style-type: none"> • GET GET [Base_URL]/Condition?Patient=[patientID]&date=geYYYY-MM-DD&date=leYYYY-MM-DD <p>URL Example:</p> <ul style="list-style-type: none"> • GET GET [Base_URL]/Condition?Patient=1234567890&date=ge2011-12-31&date=le2012-12-31 <p>Return Type: JSON or XML</p> <p>Returned Schema:</p>
-----------------	-----------	--

```

{
  "resourceType": "Bundle",
  "id": "61fd7305-e878-43c7-a0bb-4974f6cebfb8",
  "type": "searchset",
  "total": 1,
  "link": [
    {
      "relation": "self",
      "url": "{Base_URL}/Condition?Patient=101420&category=health-con
    ]
  ],
  "entry": [
    {
      "fullUrl": "{Base_URL}/Condition/10001",
      "resource": {
        "resourceType": "Condition",
        "id": "10001",
        "clinicalStatus": "active",
        "category": [
          {
            "coding": [
              {
                "system": "http://loinc.org",
                "code": "75310-3",
                "display": "Health Concern"
              }
            ],
            "text": "Health Concerns: a Chronic Sickness exhibited by
Concerns refer to underlying clinical facts:  i Documented HyperTen
umented HypoThyroidism problem  iii Watch Weight of patient"
          }
        ],
        "subject": {
          "reference": "{Base_URL}/Patient/101420"
        }
      }
    ]
  ]
}

```

For more info refer to Encounter (<http://hl7.org/fhir/encounter.html>) resource on HL7.

Common Clinical FHIR® Resource Resource Reference Documentation Dataset

Clinical Impression Clinical Impression

Supported Interaction: SearchType ^**Supported Search:** patientID**Supported DataType:** String**Implementation Notes:** Standard patient ID being passed is the patient ID. Optional search parameters are date=le and date=ge.**URL Syntax:**

- **GET** GET [Base_URL]/clinicalimpression?Patient={PatientID}&date=leYYYY-MM-DD

URL Example:

- **GET** GET [Base_URL]/clinicalimpression?Patient=101248&date=ge2011-12-31&date=le2011-12-31

Return Type: JSON or XML**Returned Schema:**

```
{
  "resourceType": "Bundle",
  "id": "85762a87-971d-410e-b5af-c7be1f0d70c0",
  "type": "searchset",
  "total": 1,
  "link": [
    {
      "relation": "self",
      "url": "{Base_URL}/assessment?Patient=101420"
    }
  ],
  "entry": [
    {
      "fullUrl": "/fhir/assessment/10001",
      "resource": {
        "resourceType": "ClinicalImpression",
        "id": "10001",
        "status": "completed",
        "subject": {
          "reference": "{Base_URL}/patient/101420"
        },
        "summary": "The patient was found to have fever and Dr Davis based on the patient history. So Dr Davis asked the patient to close their mouth and blood pressure and get admitted to Community Health Hospital of subsidence within a day"
      }
    }
  ]
}
```

For more info refer to Clinical Impression (<https://www.hl7.org/fhir/clinicalimpression>).

Common Clinical Dataset	FHIR® Resource	Resource Reference Documentation
Medications Information	MedicationStatement	<p>Supported Interaction: SearchType</p> <p>Supported Search: patientID</p> <p>Supported DataType: String</p> <p>Implementation Notes: Standard patient being passed is the patient ID. Optional search parameters are patient and date=le.</p> <p>URL Syntax:</p> <ul style="list-style-type: none"> • GET GET [Base_URL]/MedicationStatement?patient={patientID}&date={date}&date=leYYYY-MM-DD&date=leYYYY-MM-DD <p>URL Example:</p> <ul style="list-style-type: none"> • GET GET [Base_URL]/MedicationStatement?patient=101248&date=ge2011-12-31&date=le2011-12-31 <p>Return Type: JSON or XML</p> <p>Returned Schema:</p>



```
{
  "resourceType": "Bundle",
  "id": "d7482a08-4529-4da6-ad2d-c11c3229d5d9",
  "type": "searchset",
  "total": 3,
  "link": [
    {
      "relation": "self",
      "url": "{Base_URL}/medicationstatement?Patient=101420"
    }
  ],
  "entry": [
    {
      "fullUrl": "{Base_URL}/medicationstatement/153365-MedicationSta",
      "resource": {
        "resourceType": "MedicationStatement",
        "id": "10001",
        "status": "active",
        "medicationCodeableConcept": {
          "coding": [
            {
              "system": "http://www.nlm.nih.gov/research/umls/rxnorm",
              "code": "209459",
              "display": "RXNORM"
            }
          ],
          "text": "Tylenol 500mg"
        },
        "effectivePeriod": {
          "start": "2015-06-22",
          "end": "2015-07-02"
        },
        "subject": {
          "reference": "{Base_URL}/patient/101420"
        },
        "taken": "Y",
        "dosage": [
          {
            "text": "1 U As needed",
            "route": {
              "coding": [
                {
                  "system": "2.16.840.1.113883.3.26.1.1",
                  "code": "C38288",
                  "display": "NCI Thesaurus"
                }
              ],
              "text": "Oral"
            },
            "doseQuantity": {
              "value": 1.0,
              "unit": "U"
            }
          }
        ]
      }
    }
  ],
  "type": "searchset",
  "total": 3,
  "link": [
    {
      "relation": "self",
      "url": "{Base_URL}/medicationstatement?Patient=101420"
    }
  ]
}
```

```
"fullUrl": "{Base_URL}/medicationstatement/153365-MedicationSta
"resource": {
  "resourceType": "MedicationStatement",
  "id": "10002",
  "status": "active",
  "medicationCodeableConcept": {
    "coding": [
      {
        "system": "http://www.nlm.nih.gov/research/umls/rxnorm"
        "code": "309090",
        "display": "RXNORM"
      }
    ],
    "text": "Ceftriaxone 100 MG/ML"
  },
  "effectivePeriod": {
    "start": "2015-06-22",
    "end": "2015-06-30"
  },
  "subject": {
    "reference": "{Base_URL}/patient/101420"
  },
  "taken": "Y",
  "dosage": [
    {
      "text": "1 U Two times daily",
      "route": {
        "coding": [
          {
            "system": "2.16.840.1.113883.3.26.1.1",
            "code": "C38276",
            "display": "NCI Thesaurus"
          }
        ],
        "text": "INTRAVENOUS"
      },
      "doseQuantity": {
        "value": 1.0,
        "unit": "U"
      }
    }
  ]
},
{
  "fullUrl": "{Base_URL}/medicationstatement/153365-MedicationSta
  "resource": {
    "resourceType": "MedicationStatement",
    "id": "10003",
    "status": "active",
    "medicationCodeableConcept": {
      "coding": [
        {
          "system": "http://www.nlm.nih.gov/research/umls/rxnorm"
          "code": "731241",
          "display": "RXNORM"
        }
      ]
    }
  },
}
```



```

    "text": "Aranesp 0.5 MG/ML"
  },
  "effectivePeriod": {
    "start": "2015-06-22"
  },
  "subject": {
    "reference": "{Base_URL}/fhir/patient/101420"
  },
  "taken": "Y",
  "dosage": [
    {
      "text": "1 U Once a week",
      "route": {
        "coding": [
          {
            "system": "2.16.840.1.113883.3.26.1.1",
            "code": "C38276",
            "display": "NCI Thesaurus"
          }
        ],
        "text": "INTRAVENOUS"
      },
      "doseQuantity": {
        "value": 1.0,
        "unit": "U"
      }
    }
  ]
}

```

For more info refer to Immunization (<http://hl7.org/fhir/medicationstatement.html>) re

Common Clinical FHIR® Resource Resource Reference Documentation Dataset

<p>Allergies</p>	<p>AllergyIntolerance</p>	<p>Supported Interaction: SearchType Supported Search: patientID Supported DataType: String Implementation Notes: Standard patient ID being passed is the patient ID. Optional search parameter is date=le. URL Syntax: <ul style="list-style-type: none"> GET GET [Base_URL]/AllergyIntolerance?Patient=101248&date=leYYYY-MM-DD URL Example: <ul style="list-style-type: none"> GET GET [Base_URL]/AllergyIntolerance?Patient=101248&date=ge2011-12-31&date=le2011-12-31 Return Type: JSON or XML Returned Schema:</p>
------------------	---------------------------	---



```
{
  "resourceType": "Bundle",
  "id": "8ce02601-a718-40c5-b49a-9d559f00d017",
  "type": "searchset",
  "total": 2,
  "link": [
    {
      "relation": "self",
      "url": "{Base_URL}/AllergyIntolerance?Patient=101420"
    }
  ],
  "entry": [
    {
      "fullUrl": "{Base_URL}/AllergyIntolerance/153365-id-10001",
      "resource": {
        "resourceType": "AllergyIntolerance",
        "id": "153365-id-10001",
        "meta": {
          "versionId": "3.0"
        },
        "clinicalStatus": "active",
        "verificationStatus": "confirmed",
        "type": "allergy",
        "code": {
          "coding": [
            {
              "system": "http://www.nlm.nih.gov/research/umls/rxnorm",
              "code": "7980",
              "display": "Penicillin G"
            }
          ],
          "text": "Penicillin G"
        },
        "patient": {
          "reference": "Patient/101420"
        },
        "onsetDateTime": "1980-05-10",
        "assertedDate": "1980-05-10",
        "reaction": [
          {
            "substance": {
              "coding": [
                {
                  "system": "http://www.nlm.nih.gov/research/umls/rxnorm",
                  "code": "7980",
                  "display": "Penicillin G"
                }
              ],
              "text": "Penicillin G"
            },
            "manifestation": [
              {
                "coding": [
                  {
                    "system": "http://snomed.info/sct",
                    "code": "247472004",
                    "display": "Hives"
                  }
                ]
              }
            ]
          }
        ]
      }
    }
  ]
}
```

```
    ],
    "text": "Hives"
  }
],
"severity": "moderate"
}
]
},
{
  "fullUrl": "{Base_URL}/AllergyIntolerance/153365-id-10002",
  "resource": {
    "resourceType": "AllergyIntolerance",
    "id": "153365-id-10002",
    "meta": {
      "versionId": "3.0"
    },
    "clinicalStatus": "active",
    "verificationStatus": "confirmed",
    "type": "allergy",
    "code": {
      "coding": [
        {
          "system": "http://www.nlm.nih.gov/research/umls/rxnorm",
          "code": "733",
          "display": "Ampicillin"
        }
      ],
      "text": "Ampicillin"
    },
    "patient": {
      "reference": "Patient/101420"
    },
    "onsetDateTime": "1980-05-10",
    "assertedDate": "1980-05-10",
    "reaction": [
      {
        "substance": {
          "coding": [
            {
              "system": "http://www.nlm.nih.gov/research/umls/rxn",
              "code": "733",
              "display": "Ampicillin"
            }
          ],
          "text": "Ampicillin"
        },
        "manifestation": [
          {
            "coding": [
              {
                "system": "http://snomed.info/sct",
                "code": "247472004",
                "display": "Hives"
              }
            ],
            "text": "Hives"
          }
        ]
      }
    ]
  }
}
```

```

    ],
    "severity": "moderate"
  }
]
}

```

For more info refer to AllergyIntolerance (<http://hl7.org/fhir/allergyintolerance.html>) r

Common Clinical FHIR® Resource Resource Reference Documentation Dataset

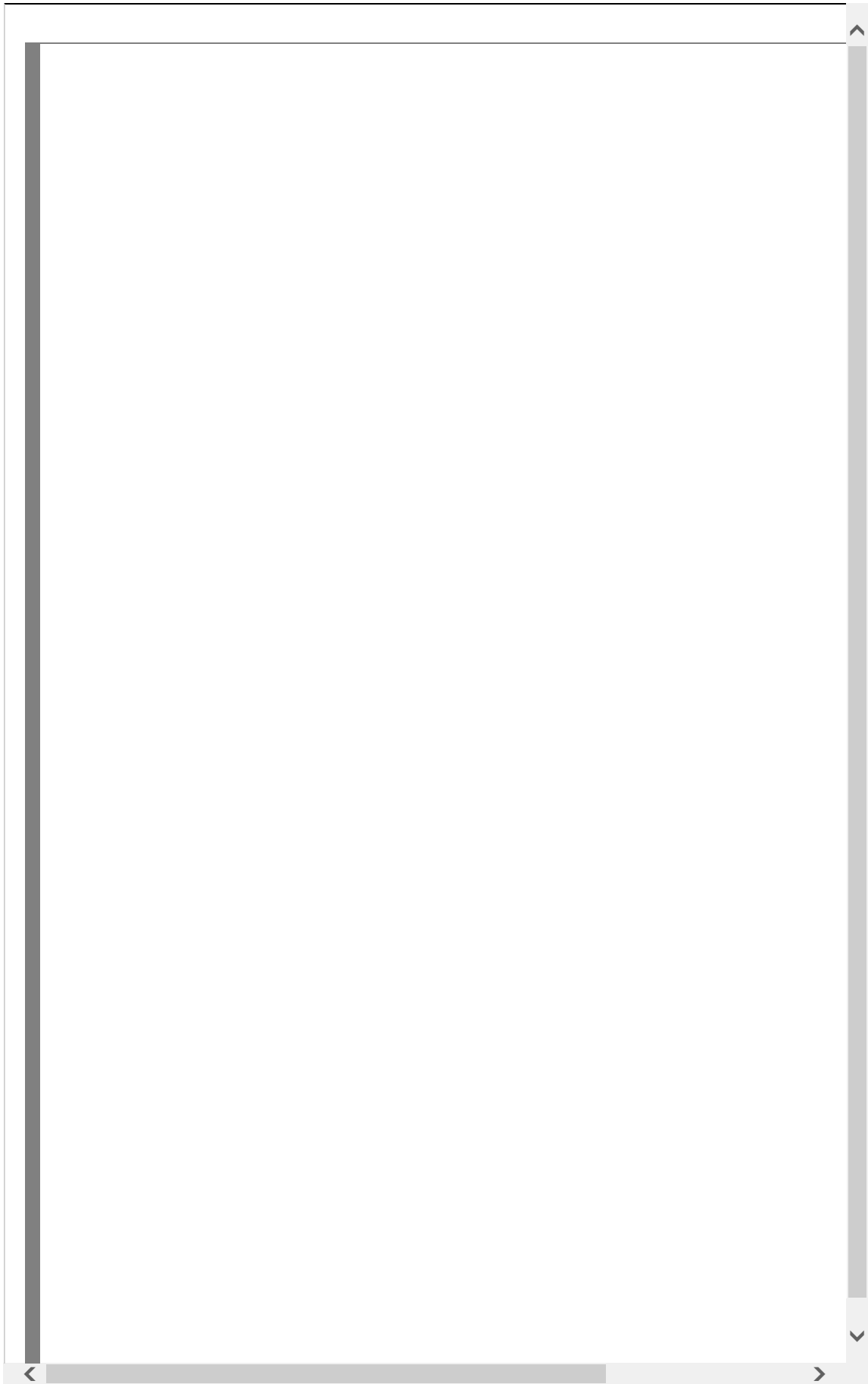
Medical Devices used by Patient	Device	<p>Supported Interaction: SearchType</p> <p>Supported Search: patientID</p> <p>Supported DataType: String</p> <p>Implementation Notes: Standard patient ID being passed is the patient ID. Optional search parameters are patient and date=le.</p> <p>URL Syntax:</p> <ul style="list-style-type: none"> • GET GET [Base_URL]/Device?patient=[id]&date=leYYYY-MM-DD <p>URL Example:</p> <ul style="list-style-type: none"> • GET GET [Base_URL]/Device?patient=10131&date=le2011-12-31 <p>Return Type: JSON or XML</p> <p>Returned Schema:</p>
---------------------------------	--------	--

```
{
  "resourceType": "Bundle",
  "id": "5ac0aa59-077e-46fd-8db5-54d54a6e46f1",
  "type": "searchset",
  "total": 1,
  "link": [
    {
      "relation": "self",
      "url": "{Base_URL}/device?Patient=101420"
    }
  ],
  "entry": [
    {
      "fullUrl": "/fhir/device/10001",
      "resource": {
        "resourceType": "Device",
        "id": "10001",
        "udi": {
          "deviceIdentifier": "(01)00643169007222(17)160128(21)BLC200",
          "jurisdiction": "FDA"
        },
        "status": "active",
        "type": {
          "coding": [
            {
              "system": "http://snomed.info/sct",
              "code": "704708004",
              "display": "Cardiac resynchronization therapy implantab"
            }
          ]
        },
        "patient": {
          "reference": "{Base_URL}/Patient/101420"
        }
      }
    }
  ]
}
```

For more info refer to Device (<http://hl7.org/fhir/device.html>) resource on HL7.org

Common Clinical FHIR® Resource Resource Reference Documentation Dataset

<p>Clinical Summary Document as C-CDA</p>	<p>DocumentReference</p>	<p>Supported Interaction: SearchType Supported Search: patientID Supported DataType: String Implementation Notes: Standard patient ID being passed is the patient ID. Optional search parameters are created=ge and date=le. URL Syntax: <ul style="list-style-type: none"> • GET GET [Base_URL]/DocumentReference?patientID={patientID}&created=geYYYY-MM-DD&created=leYYYY-MM-DD URL Example: <ul style="list-style-type: none"> • GET GET [Base_URL]/DocumentReference?patient=101248&created=ge2011-12-31&created=le2011-12-31 <p>For more info refer to Binary Search (http://hl7.org/fhir/documentreference.html)</p> <p>Returns the Document Reference representation of the data.</p> </p>
---	--------------------------	---



```

{
  "resourceType": "Bundle",
  "id": "86939636-fd02-42c2-9329-653c8685223b",
  "type": "searchset",
  "total": 2,
  "link": [
    {
      "relation": "self",
      "url": "{Base_URL}/DocumentReference?Patient=101661&_form
    ]
  ],
  "entry": [
    {
      "fullUrl": "{Base_URL}/DocumentReference/151759",
      "resource": {
        "resourceType": "DocumentReference",
        "id": "151759",
        "meta": {
          "versionId": "151759",
          "lastUpdated": "2018-09-07T15:54:56+00:00"
        },
        "status": "superseded",
        "docStatus": "final",
        "type": {
          "coding": [
            {
              "system": "http://loinc.org",
              "code": "48764-5",
              "display": "Summary purpose CCD Document (
            ]
          ],
          "text": "Summary purpose CCD Document(C-CDA R2.0)
        },
        "subject": {
          "reference": "Patient/101661",
          "display": "Newman, Alice"
        },
        "indexed": "2018-09-07T15:54:56+00:00",
        "authenticator": {
          "reference": "Practitioner/40136"
        },
        "description": "Summary purpose CCD Document(C-CDA R2
        "content": [
          {
            "attachment": {
              "contentType": "application/xml",
              "url": "{Base_URL}/Binary/151759"
            }
          ]
        ]
      }
    },
    {
      "fullUrl": "{Base_URL}/DocumentReference/151760",
      "resource": {
        "resourceType": "DocumentReference",
        "id": "151760",
        "meta": {

```

```

    "versionId": "151760",
    "lastUpdated": "2018-11-06T22:58:59+00:00"
  },
  "status": "current",
  "docStatus": "final",
  "type": {
    "coding": [
      {
        "system": "http://loinc.org",
        "code": "48764-5",
        "display": "Summary purpose CCD Document (C-
      ]
    ],
    "text": "Summary purpose CCD Document (C-CDA R2.0)"
  },
  "subject": {
    "reference": "Patient/101661",
    "display": "Newman, Alice"
  },
  "indexed": "2018-11-06T22:58:59+00:00",
  "authenticator": {
    "reference": "Practitioner/40137"
  },
  "description": "Summary purpose CCD Document (C-CDA R2.0
  "content": [
    {
      "attachment": {
        "contentType": "application/xml",
        "url": "{Base_URL}/Binary/151760"
      }
    ]
  ]
}

```

For more info refer to Device (<http://hl7.org/fhir/DocumentReference.html>) resource on

Method

Supported request type

- **HTTP GET**

Unsupported request types

- HTTP POST
- HTTP DELETE
- HTTP PUT

API Parameters

GET fhir/{type}/_search

FhirResponse (/Help/ResourceModel?modelName=FhirResponse)

Name	Description	Type	Additional information
Messages		Collection of string	None.
Request		HttpRequestMessage (https://dhitweb.allmeds.com:4435/Help/ResourceModel?modelName=HttpRequestMessage)	None.
IsValid		boolean	None.
HasBody		boolean	None.
StatusCode		HttpStatusCode (/Help/ResourceModel?modelName=HttpStatusCode)	None.
Key		IKey (/Help/ResourceModel?modelName=IKey)	None.
Resource		Resource (/Help/ResourceModel?modelName=Resource)	None.

GET fhir/{type}/{id}

FhirResponse (/Help/ResourceModel?modelName=FhirResponse)

Name	Description	Type	Additional information
Messages		Collection of string	None.
Request		HttpRequestMessage (/Help/ResourceModel?modelName=HttpRequestMessage)	None.
IsValid		boolean	None.
HasBody		boolean	None.
StatusCode		HttpStatusCode (/Help/ResourceModel?modelName=HttpStatusCode)	None.
Key		IKey (/Help/ResourceModel?modelName=IKey)	None.
Resource		Resource (/Help/ResourceModel?modelName=Resource)	None.

Responses

The FHIR API is capable of providing the responses in both JSON & XML format

Application/JSON

- https://dhitweb.allmeds.com:4435/fhir/Condition/_search?Patient=tokenID&_format=JSON
- This will provide a response in JSON format

Application/XML

- https://dhitweb.allmeds.com:4435/fhir/Observation/_search?Patient=tokenID&_format=XML
- This request will provide a response in XML format

Error & Exception Handling

FHIR Server handles the Errors & have valid Exception methods that provides a HTTP status code and a Meaningful messages in both JSON/XML format.

Forbidden Request - HTTP Status Code - 403

- A user trying to access another users profile or data will be returned with a Forbidden Request Error.
- XML/JSON response is returned from the FHIR Server for the forbidden request

Bad Request - HTTP Status Code - 400

- An invalid or a bad URL request to the server is returned with a HTTP - 400 response and message
- XML/JSON response is returned from the FHIR Server for the forbidden request

Response OK - HTTP Status Code - 200

- An valid request to the FHIR server is returned with a HTTP - 200 response and message
- XML/JSON response is returned from the FHIR Server for the forbidden request

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