



FHIR[®] API DOCUMENTATION

Althea Version 3.0

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Introduction

FHIR® is a standard for health care data exchange, published by HL7®

This document provides an overview of FHIR® APIs available in Althea, a certified Electronic Health Record.

This document is intended for third party applications acting on behalf of a patient/provider who want to access information about the patient from Althea using a FHIR based API.

Standards

Standards are as defined by US Core 3.1.1 / USCDI v1, SMART App

Registration

Developers/3rd party applications wishing to integrate with Althea FHIR® APIs need to contact the provider using Althea as their EHR. Once Provider and Althea EHR authorize the developer a registration is required with all agreed terms and conditions.

Althea uses SMART on FHIR® to provide secure access to patient data.

Developers/3rd party applications will be registered as an “Confidential” or “Public” app depending on their environment.

A `redirect_uri` is mandatory for registration

On successful registration, the Client ID, secret and tokens are generated for secure access.

Developers/3rd party applications can also be registered for bulk patient export access.

Prerequisites

The integration with Althea FHIR API can work only if the receiving application is able to parse all FHIR standard JSON responses and is hosted in TLS secured servers

The application must be registered with Althea for FHIR connectivity.

FHIR Resources

Below sections list the supported FHIR resources

Patient

For more information on Patient profile, visit link [US Core Patient Profile](#)

Type	Example Request with parameters
get	https://altheafhir.mdsynergy.com/Patient?_id=129665
get	https://altheafhir.mdsynergy.com/Patient/_search
get	https://altheafhir.mdsynergy.com/Patient?identifier=129665
get	https://altheafhir.mdsynergy.com/Patient?identifier=urn:oid:1.2.36.146.595.217.0.1%7C129665
get	https://altheafhir.mdsynergy.com/Patient?name=Newman
get	https://altheafhir.mdsynergy.com/Patient?birthdate=1970-05-01&name=Newman
get	https://altheafhir.mdsynergy.com/Patient?gender=female&name=Newman
get	https://altheafhir.mdsynergy.com/Patient/129665
get	https://altheafhir.mdsynergy.com/Patient?_id=129665&_revinclude=Provenance:target

Example Response:

```
{
  "resourceType": "Bundle",
  "type": "searchset",
  "timestamp": "2022-09-21T12:37:50.953696-07:00",
  "entry": [
    {
      "link": [
        {
          "url": "https://altheafhir.mdsynergy.com/Patient/129665"
        }
      ],
      "resource": {
        "resourceType": "Patient",
        "id": "129665",

```

```

"extension": [
  {
    "extension": [
      {
        "url": "detailed",
        "valueCoding": {
          "code": "2106-3",
          "display": "White"
        }
      },
      {
        "url": "text",
        "valueString": "Mixed"
      }
    ],
    "url": "http://hl7.org/fhir/us/core/StructureDefinition/us-core-race"
  },
  {
    "extension": [
      {
        "url": "detailed",
        "valueCoding": {
          "code": "2186-5",
          "display": "Not Hispanic or Latino"
        }
      },
      {
        "url": "text",
        "valueString": "Mixed"
      }
    ],
    "url": "http://hl7.org/fhir/us/core/StructureDefinition/us-core-ethnicity"
  },
  {
    "url": "http://hl7.org/fhir/us/core/StructureDefinition/us-core-birthsex",
    "valueCode": "F"
  }
],
"identifier": [
  {
    "system": "urn:oid:1.2.36.146.595.217.0.1",
    "value": "129665"
  }
],

```

```
"active": true,
"name": [
  {
    "use": "official",
    "family": "Newman",
    "given": [
      "Alice"
    ]
  }
],
"telecom": [
  {
    "system": "phone",
    "value": "555-723-1544",
    "use": "home",
    "rank": 1
  },
  {
    "system": "phone",
    "value": "603-305-6667",
    "use": "mobile",
    "rank": 2
  }
],
"gender": "female",
"birthDate": "1970-05-01",
"deceasedBoolean": false,
"address": [
  {
    "use": "home",
    "type": "both",
    "text": "1357, Amber Dr Beaverton, OR, 97006",
    "line": [
      "1357, Amber Dr"
    ],
    "city": "Beaverton",
    "state": "OR",
    "postalCode": "97006",
    "country": "US",
    "period": {
      "start": "2022-09-06",
      "end": "2022-09-21"
    }
  }
]
```

```
],
"maritalStatus": {
  "coding": [
    {
      "code": "UNK",
      "display": "unknown"
    }
  ]
},
"multipleBirthBoolean": false,
"contact": [
  {
    "relationship": [
      {
        "coding": [
          {
            "code": "E",
            "display": "Employer"
          }
        ]
      }
    ]
  }
],
"name": {
  "use": "official"
},
"address": {
  "use": "home",
  "type": "both",
  "text": ", ,"
}
],
"communication": [
  {
    "language": {
      "coding": [
        {
          "code": "EN",
          "display": "English"
        }
      ]
    }
  }
]
]
```



```

    }
  }
]
}

```

Allergies and Intolerances

For more information on Allergy intolerance profile, visit link [US Core Allergies Profile](#)

Type	Example Request with parameters
get	https://altheafhir.mdsynergy.com/AllergyIntolerance?patient=129665
post	https://altheafhir.mdsynergy.com/AllergyIntolerance/_search
get	https://altheafhir.mdsynergy.com/AllergyIntolerance?patient=Patient/129665
get	https://altheafhir.mdsynergy.com/AllergyIntolerance/120328
get	https://altheafhir.mdsynergy.com/AllergyIntolerance?_revinclude=Provenance:target&patient=129665

Example Response:

```

{
  "resourceType": "AllergyIntolerance",
  "id": "120328",
  "identifier": [
    {
      "value": "120328"
    }
  ],
  "clinicalStatus": {
    "coding": [
      {
        "system": "http://terminology.hl7.org/CodeSystem/allergyintolerance-clinical",
        "code": "active",
        "display": "active"
      }
    ]
  },
  "verificationStatus": {
    "coding": [
      {

```

```

    "system": "http://terminology.hl7.org/CodeSystem/allergyintolerance-verification",
    "code": "confirmed",
    "display": "confirmed"
  }
]
},
"type": "allergy",
"category": [
  "biologic"
],
"criticality": "low",
"code": {
  "coding": [
    {
      "system": "http://snomed.info/sct",
      "code": "733",
      "display": "Ampicillin"
    }
  ]
},
"patient": {
  "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
  "identifier": {
    "value": "129665"
  },
  "display": "Newman, Alice"
},
"onsetDateTime": "1980-05-10",
"recordedDate": "2022-09-07",
"recorder": {
  "display": "Davis, Albert"
},
"reaction": [
  {
    "substance": {
      "coding": [
        {
          "code": "733",
          "display": "733"
        }
      ]
    }
  }
],
"manifestation": [
  {

```

```

    "coding": [
      {
        "system": "http://terminology.hl7.org/CodeSystem/data-absent-reason",
        "code": "unknown",
        "display": "unknown"
      }
    ]
  },
  "severity": "moderate"
}
]
}

```

Care Plan

For more information on Care Plan profile, visit link [US Core CarePlan Profile](#)

Type	Example Request with parameters
get	https://altheafhir.mdsynergy.com/CarePlan/_search
get	https://altheafhir.mdsynergy.com/CarePlan?category=assess-plan&patient=129665
get	https://altheafhir.mdsynergy.com/CarePlan?category=http://hl7.org/fhir/us/core/CodeSystem/careplan-category%7Cassess-plan&patient=129665
get	https://altheafhir.mdsynergy.com/CarePlan?category=assess-plan&patient=Patient/129665
get	https://altheafhir.mdsynergy.com/CarePlan/10023
get	https://altheafhir.mdsynergy.com/CarePlan?_revinclude=Provenance:target&category=assess-plan&patient=129665

Example Response:

```

{
  "resourceType": "Bundle",
  "type": "searchset",
  "timestamp": "2022-09-21T12:37:55.0874439-07:00",
  "entry": [
    {
      "link": [
        {

```

```

    "url": "https://altheafhir.mdsynergy.com/CarePlan/10023"
  }
],
"resource": {
  "resourceType": "CarePlan",
  "id": "10023",
  "text": {
    "status": "generated",
    "div": "<div xmlns=\\"http://www.w3.org/1999/xhtml\"> , </div>"
  },
  "identifier": [
    {
      "value": "10023"
    }
  ],
  "status": "active",
  "intent": "plan",
  "category": [
    {
      "coding": [
        {
          "system": "http://hl7.org/fhir/us/core/CodeSystem/careplan-category",
          "code": "assess-plan",
          "display": "Assessment and Plan of Treatment"
        }
      ]
    }
  ]
},
"subject": {
  "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
  "identifier": {
    "value": "129665"
  },
  "display": "Newman, Alice"
},
"period": {
  "start": "2022-09-07T00:00:00-07:00",
  "end": "2022-09-07T00:00:00-07:00"
},
"created": "2022-09-07T19:44:21-07:00",
"author": {
  "identifier": {
    "value": "Davis, Albert"
  },
}

```

```

    "display": "Davis, Albert"
  },
  "addresses": [
    {
      "identifier": {
        "value": "R50.9"
      },
      "display": "Fever"
    }
  ]
},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/CarePlan/10023"
    }
  ],
  "resource": {
    "resourceType": "CarePlan",
    "id": "10023",
    "text": {
      "status": "generated",
      "div": "<div xmlns=\\"http://www.w3.org/1999/xhtml\"> , </div>"
    },
    "identifier": [
      {
        "value": "10023"
      }
    ],
    "status": "active",
    "intent": "plan",
    "category": [
      {
        "coding": [
          {
            "system": "http://hl7.org/fhir/us/core/CodeSystem/careplan-category",
            "code": "assess-plan",
            "display": "Assessment and Plan of Treatment"
          }
        ]
      }
    ]
  },
  "subject": {

```

```

"reference": "https://altheafhir.mdsynergy.com/Patient/129665",
"identifier": {
  "value": "129665"
},
"display": "Newman, Alice"
},
"period": {
  "start": "2022-09-07T00:00:00-07:00",
  "end": "2022-09-07T00:00:00-07:00"
},
"created": "2022-09-07T19:44:35-07:00",
"author": {
  "identifier": {
    "value": "Davis, Albert"
  },
  "display": "Davis, Albert"
},
"addresses": [
  {
    "identifier": {
      "value": "I10"
    },
    "display": "Primary hypertension"
  }
]
},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/CarePlan/10023"
    }
  ],
  "resource": {
    "resourceType": "CarePlan",
    "id": "10023",
    "text": {
      "status": "generated",
      "div": "<div xmlns='http://www.w3.org/1999/xhtml'> , </div>"
    },
    "identifier": [
      {
        "value": "10023"
      }
    ]
  }
}

```

```

],
"status": "active",
"intent": "plan",
"category": [
  {
    "coding": [
      {
        "system": "http://hl7.org/fhir/us/core/CodeSystem/careplan-category",
        "code": "assess-plan",
        "display": "Assessment and Plan of Treatment"
      }
    ]
  }
],
"subject": {
  "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
  "identifier": {
    "value": "129665"
  },
  "display": "Newman, Alice"
},
"period": {
  "start": "2022-09-07T00:00:00-07:00",
  "end": "2022-09-07T00:00:00-07:00"
},
"created": "2022-09-07T19:44:41-07:00",
"author": {
  "identifier": {
    "value": "Davis, Albert"
  },
  "display": "Davis, Albert"
},
"addresses": [
  {
    "identifier": {
      "value": "E03.9"
    },
    "display": "Severe hypothyroidism"
  }
]
},
{
  "link": [

```

```

{
  "url": "https://altheafhir.mdsynergy.com/CarePlan/10023"
}
],
"resource": {
  "resourceType": "CarePlan",
  "id": "10023",
  "text": {
    "status": "generated",
    "div": "<div xmlns=\\"http://www.w3.org/1999/xhtml\\"> , </div>"
  },
  "identifier": [
    {
      "value": "10023"
    }
  ],
  "status": "active",
  "intent": "plan",
  "category": [
    {
      "coding": [
        {
          "system": "http://hl7.org/fhir/us/core/CodeSystem/careplan-category",
          "code": "assess-plan",
          "display": "Assessment and Plan of Treatment"
        }
      ]
    }
  ]
},
"subject": {
  "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
  "identifier": {
    "value": "129665"
  },
  "display": "Newman, Alice"
},
"period": {
  "start": "2022-09-07T00:00:00-07:00",
  "end": "2022-09-07T00:00:00-07:00"
},
"created": "2022-09-07T19:44:45-07:00",
"author": {
  "identifier": {
    "value": "Davis, Albert"
  }
}

```



```

    },
    "display": "Davis, Albert"
  },
  "addresses": [
    {
      "identifier": {
        "value": "Z78.9"
      },
      "display": "Weight above 97th percentile"
    }
  ]
}
]
}
]
}

```

Care Team

For more information on Care Team profile, visit link [US Core CareTeam Profile](#)

Type	Example Request with parameters
get	https://altheafhir.mdsynergy.com/CareTeam?patient=Patient/129665&status=active
get	https://altheafhir.mdsynergy.com/CareTeam?patient=129665&status=inactive
get	https://altheafhir.mdsynergy.com/CareTeam?patient=129665&status=proposed,active,suspended,inactive,entered-in-error
get	<a href="https://altheafhir.mdsynergy.com/CareTeam?patient=129665&status=<any individual status as shown above>">https://altheafhir.mdsynergy.com/CareTeam?patient=129665&status=<any individual status as shown above>
get	https://altheafhir.mdsynergy.com/CareTeam/_search
get	https://altheafhir.mdsynergy.com/CareTeam/10023
get	https://altheafhir.mdsynergy.com/CareTeam?_revinclude=Provenance:target&patient=129665&status=proposed

Example Response:

```

{
  "resourceType": "Bundle",
  "type": "searchset",
  "timestamp": "2022-09-21T12:37:56.7060044-07:00",
  "entry": [

```

```

{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/CareTeam/10023"
    }
  ],
  "resource": {
    "resourceType": "CareTeam",
    "id": "10023",
    "identifier": [
      {
        "value": "10023"
      }
    ],
    "status": "active",
    "subject": {
      "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
      "identifier": {
        "value": "129665"
      },
      "display": "Newman, Alice"
    },
    "participant": [
      {
        "role": [
          {
            "coding": [
              {
                "code": "116154003",
                "display": "Patient"
              }
            ]
          }
        ]
      }
    ],
    "member": {
      "reference": "Patient/129665",
      "display": "Newman, Alice"
    }
  },
  {
    "role": [
      {
        "coding": [
          {

```

```
        "code": "223366009",
        "display": "Healthcare professional (occupation)"
      }
    ]
  },
  "member": {
    "display": "ALBERT, DAVIS"
  }
}
]
}
]
}
```

Condition

For more information on profile, visit link [US Core Condition Profile](#)

Type	Example Request with parameters
get	https://altheafhir.mdsynergy.com/Condition?patient=129665
post	https://altheafhir.mdsynergy.com/Condition/_search
get	https://altheafhir.mdsynergy.com/Condition?patient=Patient/129665
get	https://altheafhir.mdsynergy.com/Condition/130809
get	https://altheafhir.mdsynergy.com/Condition?_revinclude=Provenance:target&patient=129665

Example Response:

```
{
  "resourceType": "Bundle",
  "type": "searchset",
  "timestamp": "2022-09-21T12:37:59.934317-07:00",
  "entry": [
    {
      "link": [
        {
          "url": "https://altheafhir.mdsynergy.com/Condition/130809"
        }
      ]
    }
  ]
}
```

```

],
"resource": {
  "resourceType": "Condition",
  "id": "130809",
  "identifier": [
    {
      "value": "130809"
    }
  ],
  "clinicalStatus": {
    "coding": [
      {
        "system": "http://terminology.hl7.org/CodeSystem/condition-clinical",
        "code": "active",
        "display": "active"
      }
    ]
  },
  "verificationStatus": {
    "coding": [
      {
        "system": "http://terminology.hl7.org/CodeSystem/condition-ver-status",
        "code": "confirmed",
        "display": "confirmed"
      }
    ]
  },
  "category": [
    {
      "coding": [
        {
          "code": "problem-list-item",
          "display": "problem-list-item"
        }
      ]
    }
  ],
  "code": {
    "coding": [
      {
        "system": "http://snomed.info/sct",
        "code": "236578006",
        "display": "Chronic rejection of renal transplant"
      }
    ]
  }
}

```

```

]
},
"subject": {
  "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
  "identifier": {
    "value": "129665"
  },
  "display": "Newman, Alice"
},
"onsetDateTime": "2011-12-31T16:49:00-08:00"
}
},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/Condition/130807"
    }
  ],
  "resource": {
    "resourceType": "Condition",
    "id": "130807",
    "identifier": [
      {
        "value": "130807"
      }
    ],
    "clinicalStatus": {
      "coding": [
        {
          "system": "http://terminology.hl7.org/CodeSystem/condition-clinical",
          "code": "active",
          "display": "active"
        }
      ]
    },
    "verificationStatus": {
      "coding": [
        {
          "system": "http://terminology.hl7.org/CodeSystem/condition-ver-status",
          "code": "confirmed",
          "display": "confirmed"
        }
      ]
    }
  }
},
]
},

```

```

"category": [
  {
    "coding": [
      {
        "code": "problem-list-item",
        "display": "problem-list-item"
      }
    ]
  }
],
"code": {
  "coding": [
    {
      "system": "http://snomed.info/sct",
      "code": "59621000",
      "display": "Essential hypertension"
    }
  ]
},
"subject": {
  "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
  "identifier": {
    "value": "129665"
  },
  "display": "Newman, Alice"
},
"onsetDateTime": "2011-10-05T16:48:00-07:00"
},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/Condition/130808"
    }
  ],
  "resource": {
    "resourceType": "Condition",
    "id": "130808",
    "identifier": [
      {
        "value": "130808"
      }
    ],
    "clinicalStatus": {

```

```

"coding": [
  {
    "system": "http://terminology.hl7.org/CodeSystem/condition-clinical",
    "code": "active",
    "display": "active"
  }
],
"verificationStatus": {
  "coding": [
    {
      "system": "http://terminology.hl7.org/CodeSystem/condition-ver-status",
      "code": "confirmed",
      "display": "confirmed"
    }
  ]
},
"category": [
  {
    "coding": [
      {
        "code": "problem-list-item",
        "display": "problem-list-item"
      }
    ]
  }
],
"code": {
  "coding": [
    {
      "system": "http://snomed.info/sct",
      "code": "83986005",
      "display": "Severe hypothyroidism"
    }
  ]
},
"subject": {
  "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
  "identifier": {
    "value": "129665"
  },
  "display": "Newman, Alice"
},
"onsetDateTime": "2006-12-31T16:48:00-08:00"

```

```

}
},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/Condition/130811"
    }
  ],
  "resource": {
    "resourceType": "Condition",
    "id": "130811",
    "identifier": [
      {
        "value": "130811"
      }
    ],
    "clinicalStatus": {
      "coding": [
        {
          "system": "http://terminology.hl7.org/CodeSystem/condition-clinical",
          "code": "active",
          "display": "active"
        }
      ]
    },
    "verificationStatus": {
      "coding": [
        {
          "system": "http://terminology.hl7.org/CodeSystem/condition-ver-status",
          "code": "confirmed",
          "display": "confirmed"
        }
      ]
    }
  },
  "category": [
    {
      "coding": [
        {
          "code": "problem-list-item",
          "display": "problem-list-item"
        }
      ]
    }
  ]
},
],

```



```

"code": {
  "coding": [
    {
      "system": "http://snomed.info/sct",
      "code": "238131007",
      "display": "Overweight"
    }
  ]
},
"subject": {
  "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
  "identifier": {
    "value": "129665"
  },
  "display": "Newman, Alice"
},
"onsetDateTime": "2006-12-31T00:00:00-08:00"
},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/Condition/130810"
    }
  ],
  "resource": {
    "resourceType": "Condition",
    "id": "130810",
    "identifier": [
      {
        "value": "130810"
      }
    ],
    "clinicalStatus": {
      "coding": [
        {
          "system": "http://terminology.hl7.org/CodeSystem/condition-clinical",
          "code": "active",
          "display": "active"
        }
      ]
    },
    "verificationStatus": {
      "coding": [

```

```

    {
      "system": "http://terminology.hl7.org/CodeSystem/condition-ver-status",
      "code": "confirmed",
      "display": "confirmed"
    }
  ],
  "category": [
    {
      "extension": [
        {
          "url": "http://hl7.org/fhir/StructureDefinition/data-absent-reason",
          "valueCode": "unknown"
        }
      ]
    }
  ],
  "code": {
    "coding": [
      {
        "system": "http://snomed.info/sct",
        "code": "386661006",
        "display": "Fever"
      }
    ]
  },
  "subject": {
    "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
    "identifier": {
      "value": "129665"
    },
    "display": "Newman, Alice"
  },
  "onsetDateTime": "2015-06-22T16:49:00-07:00"
}
]
}

```

Health Concern

For more information on profile, visit link [US Core Condition Profile](#)

Type	Example Request with parameters
get	https://altheafhir.mdsynergy.com/Condition?patient=129665&category=healthconcern

Example Response:

```
{
  "resourceType": "Bundle",
  "type": "searchset",
  "timestamp": "2022-09-21T12:37:59.934317-07:00",
  "entry": [
    {
      "link": [
        {
          "url": "https://altheafhir.mdsynergy.com/Condition/10043"
        }
      ],
      "resource": {
        "resourceType": "Condition",
        "id": "130809",
        "identifier": [
          {
            "value": "10043"
          }
        ],
        "clinicalStatus": {
          "coding": [
            {
              "system": "http://terminology.hl7.org/CodeSystem/condition-clinical",
              "code": "active",
              "display": "active"
            }
          ]
        },
        "verificationStatus": {
          "coding": [
            {
              "system": "http://terminology.hl7.org/CodeSystem/condition-ver-status",
              "code": "confirmed",
              "display": "confirmed"
            }
          ]
        }
      }
    }
  ],
}
```

```

"category": [
  {
    "coding": [
      {
        "code": "healthconcern",
        "display": "healthconcern"
      }
    ]
  }
],
"code": {
  "coding": [
    {
      "system": "http://snomed.info/sct",
      "code": "386661006",
      "display": "Fever"
    }
  ]
},
"subject": {
  "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
  "identifier": {
    "value": "129665"
  },
  "display": "Newman, Alice"
},
"onsetDateTime": "2011-12-31T16:49:00-08:00"
}
}
]
}

```

Implantable Device

For more information on Implantable Device profile, visit link [US Core Implantable Device Profile](#)

Type	Example Request with parameters
post	https://altheafhir.mdsynergy.com/Device/_search
get	https://altheafhir.mdsynergy.com/Device?patient=Patient/129665

get	https://altheafhir.mdsynergy.com/Device?patient=129665
get	https://altheafhir.mdsynergy.com/Device/10030
get	https://altheafhir.mdsynergy.com/Device?_revinclude=Provenance:target&patient=129665

Example Response:

```
{
  "resourceType": "Bundle",
  "type": "searchset",
  "timestamp": "2022-09-21T12:38:01.182726-07:00",
  "entry": [
    {
      "link": [
        {
          "url": "https://altheafhir.mdsynergy.com/Device/10030"
        }
      ],
      "resource": {
        "resourceType": "Device",
        "id": "10030",
        "identifier": [
          {
            "value": "10030"
          }
        ],
        "definition": {
          "identifier": {
            "value":
"/B064XM23575551=,000025=A99971312345600=>014032=}013032&,1000000000000XYZ1
23"
          }
        },
        "udiCarrier": [
          {
            "deviceIdentifier": "10030",
            "issuer": "XENCOMEDICALLLC",
            "carrierHRF":
"/B064XM23575551=,000025=A99971312345600=>014032=}013032&,1000000000000XYZ1
23"
          }
        ],
        "status": "active",
        "distinctIdentifier": "B064XM23575551",

```

```

"manufacturer": "XENCO MEDICAL LLC",
"manufactureDate": "2013-01-01T00:00:00-08:00",
"expirationDate": "2014-01-01T00:00:00-08:00",
"lotNumber": "000000000000XYZ123",
"serialNumber": "000025",
"deviceName": [
  {
    "name": "Device1",
    "type": "user-friendly-name"
  }
],
"modelName": "XM-235-7555",
"type": {
  "coding": [
    {
      "code": "711621009",
      "display": "Bone-screw internal spinal fixation system, sterile (physical object)"
    }
  ]
},
"patient": {
  "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
  "identifier": {
    "value": "129665"
  },
  "display": "Newman, Alice"
},
"location": {
  "display": "Anterior"
}
}
]
}

```

Diagnostic Report

For more information on Diagnostic Report profile, visit link [US Core Diagnostic Report Note Profile](#) and [US Core Diagnostic Report Lab Profile](#)

Type	Example Request with parameters
post	https://altheafhir.mdsynergy.com/DiagnosticReport/_search

get	https://altheafhir.mdsynergy.com/DiagnosticReport?category=LP7839-6&patient=129665
get	https://altheafhir.mdsynergy.com/DiagnosticReport?category=LP29684-5&patient=Patient/129665
get	https://altheafhir.mdsynergy.com/DiagnosticReport?category=LP29708-2&patient=129665
get	https://altheafhir.mdsynergy.com/DiagnosticReport?category=LP29684-5&patient=129665
get	https://altheafhir.mdsynergy.com/DiagnosticReport?patient=129665
get	https://uat-fhir.mdsynergy.com/DiagnosticReport?category=LP29684-5&date=2022-09-13T17:39:05-07:00&patient=129665
get	https://altheafhir.mdsynergy.com/DiagnosticReport?code=30746-2&patient=129665
get	https://altheafhir.mdsynergy.com/DiagnosticReport/D3716
get	https://altheafhir.mdsynergy.com/DiagnosticReport?_revinclude=Provenance:target&category=LP29708-2&patient=129665
get	https://altheafhir.mdsynergy.com/DiagnosticReport?category=LAB&patient=129665
get	https://altheafhir.mdsynergy.com/DiagnosticReport?category=LAB&patient=Patient/129665
get	https://altheafhir.mdsynergy.com/DiagnosticReport?category=LAB&date=ge2022-09-06T15:34:23-07:00&patient=129665
get	https://altheafhir.mdsynergy.com/DiagnosticReport/RES-9434
get	https://altheafhir.mdsynergy.com/DiagnosticReport?_revinclude=Provenance:target&category=LAB&patient=129665

Example Response:

```
{
  "resourceType": "Bundle",
  "type": "collection",
  "timestamp": "2022-09-21T12:38:03.3214173-07:00",
  "entry": [
    {
      "link": [
        {
          "url": "https://altheafhir.mdsynergy.com/DiagnosticReport/D3716"
        }
      ],
      "resource": {
        "resourceType": "DiagnosticReport",
        "id": "D3716",
        "identifier": [

```

```

    {
      "value": "D3716"
    }
  ],
  "status": "final",
  "category": [
    {
      "coding": [
        {
          "system": "http://loinc.org",
          "code": "LP29684-5",
          "display": "Radiology"
        }
      ],
      "text": "Radiology"
    }
  ],
  "code": {
    "coding": [
      {
        "system": "http://loinc.org",
        "code": "30746-2",
        "display": "Portable XR Chest Views"
      }
    ],
    "text": "Portable XR Chest Views"
  },
  "subject": {
    "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
    "identifier": {
      "value": "129665"
    },
    "display": "Newman, Alice"
  },
  "encounter": {
    "reference": "https://altheafhir.mdsynergy.com/Encounter/445673",
    "identifier": {
      "value": "445673"
    },
    "display": "Encounter"
  },
  "effectiveDateTime": "2022-09-13T17:39:05-07:00",
  "issued": "2022-09-13T17:39:05-07:00",
  "performer": [

```



```

{
  "reference": "https://altheafhir.mdsynergy.com/Practitioner/12",
  "identifier": {
    "value": "12"
  },
  "display": "ALBERT, DAVIS"
}
],
"result": [
  {
    "reference": "Observation/D3716",
    "identifier": {
      "value": "D3716"
    },
    "display": "Observation"
  }
],
"presentedForm": [
  {
    "contentType": "text/plain",
    "data":
"JVBERi0xLjQKJeLjz9MKMiAwlG9iago8PC9MZW5ndGggMjQ5NC9GaWx0ZXIvRmxhdGVEZW
NvZGU+PnN0cmVhbQp4nO1dS2/cNhC+61foXMA23xSBoDt2AV6KBDYQA9FD0XStAjoGkP/f
uVLGmXmk8UZVvk0rtOgNg70ZLDmeG8RV.....(truncated for documentation)"
  }
]
}
]
}
]
}

```

Document Reference

For more information on Document Reference profile, visit link [US Core Document Reference Profile](#)

Type	Example Request with parameters
get	https://altheafhir.mdsynergy.com/DocumentReference/_search
get	https://altheafhir.mdsynergy.com/DocumentReference?patient=129665
get	https://altheafhir.mdsynergy.com/DocumentReference?patient=Patient/129665

get	https://altheafhir.mdsynergy.com/DocumentReference?_id=120347
get	https://altheafhir.mdsynergy.com/DocumentReference?patient=129665&type=18842-5
get	https://altheafhir.mdsynergy.com/DocumentReference?category=AFTERVISIT&date=gt2022-09-13T15:28:03-07:00&patient=129665
get	https://altheafhir.mdsynergy.com/DocumentReference?category=AFTERVISIT&patient=129665
get	https://altheafhir.mdsynergy.com/DocumentReference/120347
get	https://altheafhir.mdsynergy.com/DocumentReference?_revinclude=Provenance:target&patient=129665

Example Response:

```
{
  "resourceType": "Bundle",
  "type": "transaction",
  "timestamp": "2022-09-21T12:38:16.3570185-07:00",
  "entry": [
    {
      "link": [
        {
          "url": "https://altheafhir.mdsynergy.com/DocumentReference/120347"
        }
      ],
      "resource": {
        "resourceType": "DocumentReference",
        "id": "120347",
        "meta": {
          "lastUpdated": "2022-09-14T15:28:03-07:00"
        },
        "masterIdentifier": {
          "value": "120347"
        },
        "identifier": [
          {
            "value": "120347"
          }
        ],
        "status": "current",
        "type": {
          "coding": [
            {
              "code": "18842-5",

```

```

      "display": "AFTERSVISIT"
    }
  ]
},
"category": [
  {
    "coding": [
      {
        "code": "AFTERSVISIT",
        "display": "AFTERSVISIT"
      }
    ]
  }
],
"subject": {
  "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
  "identifier": {
    "value": "129665"
  },
  "display": "Newman, Alice"
},
"date": "2022-09-14T15:28:03-07:00",
"author": [
  {
    "reference": "https://altheafhir.mdsynergy.com/Practitioner/12",
    "identifier": {
      "value": "12"
    },
    "display": "DAVIS ALBERT"
  }
],
"custodian": {
  "reference": "https://altheafhir.mdsynergy.com/Organization/24",
  "identifier": {
    "value": "24"
  },
  "display": "ORG24"
},
"content": [
  {
    "attachment": {
      "contentType": "text/plain",
      "language": "en-US",

```

```

    "data":
    "JVBERi0xLjQKMSAwIG9iago8PAovVGI0bGUgKP7/KQovQ3JIYXRvciAo/v8AdwBrAGgAdABtA
    GwAdABvAHAAZABmACAAMAAuADEAMgAuADQpCi9Qcm9kdWNlciAo/v8AUQB0ACAANAA
    uADgALgA3KQovQ3JIYXRpb25EYXRlIChEOjIwMjIwOTE0MDY1NzAyLTA3JzAwJykKPj4KZW5
    kb2JqCjMgMCBvYmoKPDwKL1R5cGUgL0V4dEdTdGF0ZQovU0EgdHJ1ZQovU00gMC4wMgo
    vY2EgMS4wCi9DQSAxLjAKL0FJUyBmYWxzZQovU01hc2sgL05vbmU+PgplbmRvYmoKNCAwL
    G9iagpbL1BhdHRlcm4gL0RldmljZVJHQT0KZW5kb2JqCjggMCBvYmoKWzAgL1hZWIAzNS4yN
    TAwMDAwICAKNzYxLjI1MDAwMCAgMF0KZW5kb2JqCjkgMCBvYmoKWzAgL1hZWIAzMy43N
    TAwMDAwICAKNjc2LjUwMDAwMCAgMF0KZW5kb2JqCjUgMCBvYmoKPDwKL1R5cGUgL1Bh
    Z2UKL1BhcmVudCAyIDAgUgovQ29udGVudHMgMTIgMCBSCi9SZXNvdXJjZXMgMTQgMCBS
    Ci9Bbm5vdHMgMTUgMCBSCi9NZWRpYUJveCBbMCAwIDYxMiA3OTJdCj4+CmVuZG9iagoxN
    CAwIG9iago8PAovQ29sb3JTcGFjZSA8PAovUENTcCA0IDAgUgovQ1NwIC9EZXXpY2VSR0IKL
    0NTcGcgL0RldmljZUdyYXkKPj4KL0V4dEdTdGF0ZSA8PAovR1NhIDMgMCBSCj4+Cj9QYXR0Z
    XJulDw8Cj4+Cj9Gb250IDw8Ci9GNiA2IDAgUgovRjcgNyAwIFIKL0YxMCAxMCAwIFIKL0YxMCA
    xMSAwIFIKPj4KL1hPYmplY3QgPDwKPj4KPj4KZW5kb2JqCjE1IDAgb2JqCjsgXQplbmRvYmoK
    truncated for documentation",
    "title": "AFTERVISIT",
    "creation": "2022-09-14T15:28:03-07:00"
  },
  "format": {
    "system": "http://ihe.net/fhir/ValueSet/IHE.FormatCode.codesystem",
    "code": "urn:ihe:iti:xds:2017:mimeTypeSufficient",
    "display": "mimeType Sufficient"
  }
},
"context": {
  "encounter": [
    {
      "reference": "https://altheafhir.mdsynergy.com/Encounter/435649",
      "identifier": {
        "value": "435649"
      },
      "display": "Encounter"
    }
  ],
  "period": {
    "start": "2022-09-14T15:28:03-07:00",
    "end": "2022-09-15T15:28:03-07:00"
  }
}
}
},
{

```

```

"link": [
  {
    "url": "https://altheafhir.mdsynergy.com/DocumentReference/282950"
  }
],
"resource": {
  "resourceType": "DocumentReference",
  "id": "282950",
  "meta": {
    "lastUpdated": "2022-09-14T13:50:22-07:00"
  },
  "masterIdentifier": {
    "value": "282950"
  },
  "identifier": [
    {
      "value": "282950"
    }
  ],
  "status": "current",
  "type": {
    "coding": [
      {
        "code": "28570-0",
        "display": "Echocardiographic Report"
      }
    ]
  },
  "category": [
    {
      "coding": [
        {
          "code": "Specialty Procedures Changed",
          "display": "Specialty Procedures Changed"
        }
      ]
    }
  ],
  "subject": {
    "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
    "identifier": {
      "value": "129665"
    },
    "display": "Newman, Alice"
  }
}

```

```
},
"date": "2022-09-14T13:50:22-07:00",
"author": [
  {
    "reference": "https://altheafhir.mdsynergy.com/Practitioner/12",
    "identifier": {
      "value": "12"
    },
    "display": "ALBERT, DAVIS"
  }
],
```

```
"custodian": {
  "reference": "https://altheafhir.mdsynergy.com/Organization/24",
  "identifier": {
    "value": "24"
  },
  "display": "ORG24"
},
```

```
"content": [
  {
```

```
    "attachment": {
      "contentType": "text/plain",
      "language": "en-US",
      "data":
```

```
"JVBERi0xLjQKMSAwIG9iago8PAovVGI0bGUgKP7/KQovQ3JIYXRvciAo/v8AdwBrAGgAdABtA
GwAdABvAHAZABmACAAMAAuADEAMgAuADQpCi9Qcm9kdWNlciAo/v8AUQB0ACAANAA
uADgALgA3KQovQ3JIYXRpb25EYXRlIChEOjIwMjIyMDY1MDIyLTA3JzAwJykKpj4KZW5
kb2JqCjMgMCBvYmoKPDwKL1R5cGUGL0V4dEdTdGF0ZQovU0EgdHJ1ZQovU00gMC4wMGo
vY2EgMS4wCi9DQSAxLjAKL0FJUyBmYWxzZQovU01hc2sgL05vbmU+PgplbmRvYmoKNCAwI
G9iagpbL1BhdHRlcm4gL0RldmJZVJHCl0KZW5kb2JqCjkgMCBvYmoKwZAgL1hZWwAzNS4yN
TAwMDAwICAKNzYxLj1MDAwMCAgMF0KZW5kb2JqCjEwIDAga2JqCjEswIC9YwVogMzMuNz
UwMDAwMCAgCjY3NS43NTAwMDAwIG9iagp1dLQU5DSE9SXzQgMTAgMCBSCj4+CmVuZG9iagoxNCaWlG9iag08PC
9UaXRzZSAo/v8ARQBYAE8AUwBUAEEAUgAgAEQARQBACAAQBVAEQASQBUKQogIC9
QYXJlbnQgMTMgMCBSCiAgL0Rlc3QgL19fV0tBTkNIT1JfMgogIC9Db3VudCAwCiAgL05leHQg
MTUgMCBSCj4+CmVuZG9iagoxNSaWlG9iag08PC9UaXRzZSAo/v8ARQBjAGgAbwBjAGEAcg
BkAGkAbwBnAHIAyQBWAGgAAQBjACAAUgBlAHAAbwByAHQpCiAgL1BhcmVudCAwMyAwIFI
KICAvRGVzdCAvX19XS0FOQ0hPUi80CiAgL0NvdW50IDAKICAvUHJldiAxNCAwIFIKPj4KZW5
kb2JqCjE2IDAga2JqCjw8L1R5cGUGL091dGxpbmVzIC9GaXJzdCAwNCAwIFIKL0xhc3QgMTUg
MCBSPj4KZW5kb2JqCjE2IDAga2JqCjw8Ci9UeXBIC9DYXRhbG9nCi9QYWdlcyAyIDAgUgovT
3V0bGluZXMgMTMgMCBSCi9QYWdlTW9kZSAvVXNIT3V0bGluZXMKL0Rlc3RzIDIEyIDAgUgo
+PgplbmRvYmoKN5aWlG9iag08PAovVHlwZSAvUGFnZQovUGFyZW50IDIgMCBSCi9Db250Z
W50cyAxNyAwIFIKL1Jlc291cmNlcyAxOSAwIFIKL0Fubm90cyAyMCAwIFIKL01lZGlhQm94IFsw
IDAgNjEyIDc5MI0Kpj4KZW5kb2JqCjE5IDAga2JqCjw8Ci9Db2xvciNwYWwNIDw8Ci9QQ1NwIDQ
```

```

gMCBSCi9DU3AgL0RldmljZVJHQgovQ1NwZyAvRGV2aWNIR3JheQo+PgovRXh0R1N0YXRlI
Dw8Ci9HU2EgMyAwIFIKPj4KL1BhdHRlcm4gPDwKPj4KL0ZvbnQgPDwKL0Y2IDYgMCBSCi9G
NyA3IDAgUgovRjggOCAwIFIKL0YxMSAxMS truncated for documentation",
  "title": "Echocardiographic Report",
  "creation": "2022-09-14T13:50:22-07:00"
},
"format": {
  "system": "http://ihe.net/fhir/ValueSet/IHE.FormatCode.codesystem",
  "code": "urn:ihe:iti:xds:2017:mimeTypeSufficient",
  "display": "mimeType Sufficient"
}
},
],
"context": {
  "encounter": [
    {
      "reference": "https://altheafhir.mdsynergy.com/Encounter/445673",
      "identifier": {
        "value": "445673"
      },
      "display": "Encounter"
    }
  ],
  "period": {
    "start": "2022-09-14T13:50:22-07:00",
    "end": "2022-09-15T13:50:22-07:00"
  }
}
},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/DocumentReference/435649"
    }
  ],
  "resource": {
    "resourceType": "DocumentReference",
    "id": "435649",
    "meta": {
      "lastUpdated": "2022-09-14T15:28:03-07:00"
    },
    "masterIdentifier": {
      "value": "435649"
    }
  }
}

```

```

},
"identifier": [
  {
    "value": "435649"
  }
],
"status": "current",
"type": {
  "coding": [
    {
      "code": "11488-4",
      "display": "Progress note"
    }
  ]
},
"category": [
  {
    "coding": [
      {
        "code": "Progress note",
        "display": "Progress note"
      }
    ]
  }
],
"subject": {
  "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
  "identifier": {
    "value": "129665"
  },
  "display": "Newman, Alice"
},
"date": "2022-09-14T15:28:03-07:00",
"author": [
  {
    "reference": "https://altheafhir.mdsynergy.com/Practitioner/12",
    "identifier": {
      "value": "12"
    },
    "display": "DAVIS ALBERT"
  }
],
"custodian": {
  "reference": "https://altheafhir.mdsynergy.com/Organization/24",

```



```

"identifier": {
  "value": "24"
},
"display": "ORG24"
},
"content": [
  {
    "attachment": {
      "contentType": "text/plain",
      "language": "en-US",
      "data":
"JVBERi0xLjQKMSAwIG9iago8PAovVGI0bGUgKP7/KQovQ3JIYXRvciAo/v8AdwBrAGgAdABtA
GwAdABvAHAAZABmACAAMAAuADEAMgAuADQpCi9Qcm9kdWNlciAo/v8AUQB0ACAANAA
uADgALgA3KQovQ3JIYXRpb25EYXRlChEOjIwMjUwOTU0MDgyODA2LTA3JzAwJykKPj4KZW5
kb2JqCjMgMCBvYmoKPDwKL1R5cGUgL0V4dEdTdGF0ZQovU0EgdHJ1ZQovU00gMC4wMGo
vY2EgMS4wCi9DQSAXLjAKL0FJUyBmYWxzZQovU01hc2sgL05vbmU+PgplbmRvYmoKNCAwL
G9iagpbL1BhdHRlcm4gL0RldmljZVJHCl0KZW5kb2truncated for documentation",
      "title": "Progress note",
      "creation": "2022-09-14T15:28:03-07:00"
    },
    "format": {
      "system": "http://ihe.net/fhir/ValueSet/IHE.FormatCode.codesystem",
      "code": "urn:ihe:iti:xds:2017:mimeTypeSufficient",
      "display": "mimeType Sufficient"
    }
  }
],
"context": {
  "encounter": [
    {
      "reference": "https://altheafhir.mdsynergy.com/Encounter/435649",
      "identifier": {
        "value": "435649"
      },
      "display": "Encounter"
    }
  ],
  "period": {
    "start": "2022-09-14T15:28:03-07:00",
    "end": "2022-09-15T15:28:03-07:00"
  }
}
},

```

```

{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/DocumentReference/435649"
    }
  ],
  "resource": {
    "resourceType": "DocumentReference",
    "id": "435649",
    "meta": {
      "lastUpdated": "2022-09-14T15:28:03-07:00"
    },
    "masterIdentifier": {
      "value": "435649"
    },
    "identifier": [
      {
        "value": "435649"
      }
    ],
    "status": "current",
    "type": {
      "coding": [
        {
          "code": "11506-3",
          "display": "Progress note"
        }
      ]
    },
    "category": [
      {
        "coding": [
          {
            "code": "Progress note",
            "display": "Progress note"
          }
        ]
      }
    ],
    "subject": {
      "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
      "identifier": {
        "value": "129665"
      },

```

```

    "display": "Newman, Alice"
  },
  "date": "2022-09-14T15:28:03-07:00",
  "author": [
    {
      "reference": "https://altheafhir.mdsynergy.com/Practitioner/12",
      "identifier": {
        "value": "12"
      },
      "display": "DAVIS ALBERT"
    }
  ],
  "custodian": {
    "reference": "https://altheafhir.mdsynergy.com/Organization/24",
    "identifier": {
      "value": "24"
    },
    "display": "ORG24"
  },
  "content": [
    {
      "attachment": {
        "contentType": "text/plain",
        "language": "en-US",
        "data":
"JVBERi0xLjQKMSAwIG9iago8PAovVGI0bGUgKP7/KQovQ3JIYXRvciAo/v8AdwBrAGgAdABtA
GwAdABvAHAAZABmACAAMAAuADEAMgAuADQpCi9Qcm9kdWNlciAo/v8AUQB0ACAANAA
uADgALgA3KQovQ3JIYXRpb25EYXRlChEOjIwMjIwOTU0MDgyODA2LTA3JzAwJykKPj4KZW5
kb2JqCjMgMCBvYmoKPDwKL1R5cGUgL0V4dEdTdGF0ZQovU0EgdHJ1ZQovU00gMC4wMgo
vY2EgMS4wCi9DQSAxLjAKL0FJUyBmYWxtruncated for documentation",
        "title": "Progress note",
        "creation": "2022-09-14T15:28:03-07:00"
      },
      "format": {
        "system": "http://ihe.net/fhir/ValueSet/IHE.FormatCode.codesystem",
        "code": "urn:ihe:iti:xds:2017:mimeTypeSufficient",
        "display": "mimeType Sufficient"
      }
    }
  ],
  "context": {
    "encounter": [
      {
        "reference": "https://altheafhir.mdsynergy.com/Encounter/435649",

```

```

    "identifier": {
      "value": "435649"
    },
    "display": "Encounter"
  }
],
"period": {
  "start": "2022-09-14T15:28:03-07:00",
  "end": "2022-09-15T15:28:03-07:00"
}
}
},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/DocumentReference/435649"
    }
  ],
  "resource": {
    "resourceType": "DocumentReference",
    "id": "435649",
    "meta": {
      "lastUpdated": "2022-09-14T15:28:03-07:00"
    },
    "masterIdentifier": {
      "value": "435649"
    },
    "identifier": [
      {
        "value": "435649"
      }
    ],
    "status": "current",
    "type": {
      "coding": [
        {
          "code": "34117-2",
          "display": "Progress note"
        }
      ]
    }
  },
  "category": [
    {

```

```

    "coding": [
      {
        "code": "Progress note",
        "display": "Progress note"
      }
    ]
  },
  "subject": {
    "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
    "identifier": {
      "value": "129665"
    },
    "display": "Newman, Alice"
  },
  "date": "2022-09-14T15:28:03-07:00",
  "author": [
    {
      "reference": "https://altheafhir.mdsynergy.com/Practitioner/12",
      "identifier": {
        "value": "12"
      },
      "display": "DAVIS ALBERT"
    }
  ],
  "custodian": {
    "reference": "https://altheafhir.mdsynergy.com/Organization/24",
    "identifier": {
      "value": "24"
    },
    "display": "ORG24"
  },
  "content": [
    {
      "attachment": {
        "contentType": "text/plain",
        "language": "en-US",
        "data":
"JVBERi0xLjQKMSAwIG9iago8PAovVGI0bGUgKP7/KQovQ3JIYXRvciAo/v8AdwBrAGgAdABtA
GwAdABvAHAAZABmACAAMAAuADEAMgAuADQpCi9Qcm9kdWNlciAo/v8AUQB0ACAANAA
uADgALgA3KQovQ3JIYXRpb25EYXRlIChEOjIwMjIwOTE0MDgyODA2LTA3JzAwJykKPj4KZW5
kb2JqCjMgMCBvYmoKPDwKL1R5cGUgL0V4dEdTdGF0ZQovU0EgdHJ1ZQovU00gMC4wMGo
vY2EgMS4wCi9DQSAxLjAKL0FJUyBmYWxzZQ....truncated for documentation",
        "title": "Progress note",

```

```

    "creation": "2022-09-14T15:28:03-07:00"
  },
  "format": {
    "system": "http://ihe.net/fhir/ValueSet/IHE.FormatCode.codesystem",
    "code": "urn:ihe:iti:xds:2017:mimeTypeSufficient",
    "display": "mimeType Sufficient"
  }
},
"context": {
  "encounter": [
    {
      "reference": "https://altheafhir.mdsynergy.com/Encounter/435649",
      "identifier": {
        "value": "435649"
      },
      "display": "Encounter"
    }
  ],
  "period": {
    "start": "2022-09-14T15:28:03-07:00",
    "end": "2022-09-15T15:28:03-07:00"
  }
}
]
}

```

Goal

For more information on Goal profile, visit link [US Core Goal Profile](#)

Type	Example Request with parameters
get	https://altheafhir.mdsynergy.com/Goal?patient=129665
post	https://altheafhir.mdsynergy.com/Goal/_search
get	https://altheafhir.mdsynergy.com/Goal?patient=Patient/129665
get	https://altheafhir.mdsynergy.com/Goal/33
get	https://altheafhir.mdsynergy.com/Goal?_revinclude=Provenance.target&patient=129665

Example Response:

```
{
  "resourceType": "Bundle",
  "type": "searchset",
  "timestamp": "2022-09-21T12:38:22.8708017-07:00",
  "entry": [
    {
      "link": [
        {
          "url": "https://altheafhir.mdsynergy.com/Goal/33"
        }
      ],
      "resource": {
        "resourceType": "Goal",
        "id": "33",
        "text": {
          "status": "generated",
          "div": "<div xmlns=\"http://www.w3.org/1999/xhtml\"> Care plan text</div>"
        },
        "identifier": [
          {
            "value": "33"
          }
        ],
        "lifecycleStatus": "active",
        "achievementStatus": {
          "coding": [
            {
              "code": "in-progress",
              "display": "in-progress"
            }
          ]
        },
        "description": {
          "coding": [
            {
              "code": "Get rid of intermittent fever that is occurring every few weeks.",
              "display": "Get rid of intermittent fever that is occurring every few weeks."
            }
          ]
        },
        "subject": {
          "reference": "https://altheafhir.mdsynergy.com/Patient/129665",

```

```

    "identifier": {
      "value": "129665"
    },
    "display": "Newman, Alice"
  },
  "target": [
    {
      "dueDate": "2022-09-07"
    }
  ],
  "statusDate": "2022-09-07"
}
},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/Goal/34"
    }
  ],
  "resource": {
    "resourceType": "Goal",
    "id": "34",
    "text": {
      "status": "generated",
      "div": "<div xmlns=\\"http://www.w3.org/1999/xhtml\"> Care plan text</div>"
    },
    "identifier": [
      {
        "value": "34"
      }
    ],
    "lifecycleStatus": "active",
    "achievementStatus": {
      "coding": [
        {
          "code": "in-progress",
          "display": "in-progress"
        }
      ]
    },
    "description": {
      "coding": [
        {
          "code": "Need to gain more energy to do regular activities",

```



```

        "display": "Need to gain more energy to do regular activities"
      }
    ]
  },
  "subject": {
    "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
    "identifier": {
      "value": "129665"
    },
    "display": "Newman, Alice"
  },
  "target": [
    {
      "dueDate": "2022-09-07"
    }
  ],
  "statusDate": "2022-09-07"
}
}
]
}

```

Immunization

For more information on Immunization profile, visit link [US Core Immunization Profile](#)

Type	Example Request with parameters
get	https://altheafhir.mdsynergy.com/Immunization/_search
get	https://altheafhir.mdsynergy.com/Immunization?patient=Patient/129665
get	https://altheafhir.mdsynergy.com/Immunization?patient=129665
get	https://altheafhir.mdsynergy.com/Immunization/90616
get	https://altheafhir.mdsynergy.com/Immunization?_revinclude=Provenance:target&patient=129665

Example Response:

```

{
  "resourceType": "Bundle",
  "type": "searchset",
  "timestamp": "2022-09-21T12:38:24.8329813-07:00",

```

```

"entry": [
  {
    "link": [
      {
        "url": "https://altheafhir.mdsynergy.com/Immunization/90616"
      }
    ],
    "resource": {
      "resourceType": "Immunization",
      "id": "90616",
      "identifier": [
        {
          "value": "90616"
        }
      ],
      "status": "not-done",
      "statusReason": {
        "coding": [
          {
            "code": "PATOBJ",
            "display": "patient objection"
          }
        ]
      },
      "vaccineCode": {
        "coding": [
          {
            "code": "166",
            "display": "influenza, intradermal, quadrivalent, preservative free"
          }
        ],
        "text": "influenza, intradermal, quadrivalent, preservative free"
      },
      "patient": {
        "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
        "identifier": {
          "value": "129665"
        },
        "display": "Newman, Alice"
      },
      "occurrenceDateTime": "2022-09-12T14:18:00-07:00",
      "primarySource": true,
      "lotNumber": "0",
      "doseQuantity": {

```

```

    "value": 0.5
  }
}
},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/Immunization/90613"
    }
  ],
  "resource": {
    "resourceType": "Immunization",
    "id": "90613",
    "identifier": [
      {
        "value": "90613"
      }
    ],
    "status": "entered-in-error",
    "statusReason": {
      "coding": [
        {
          "code": "UnKnown",
          "display": "UnKnown"
        }
      ]
    },
    "vaccineCode": {
      "coding": [
        {
          "display": "MMR"
        }
      ],
      "text": "MMR"
    },
    "patient": {
      "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
      "identifier": {
        "value": "129665"
      },
      "display": "Newman, Alice"
    },
    "occurrenceDateTime": "2022-09-06T20:51:00-07:00",
    "primarySource": true,

```

```

"lotNumber": "0",
"site": {
  "coding": [
    {
      "code": "LH",
      "display": "Left Hand"
    }
  ]
},
"route": {
  "coding": [
    {
      "code": "C38288",
      "display": "Oral"
    }
  ],
  "text": "Oral"
},
"doseQuantity": {
  "value": 1
}
},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/Immunization/90614"
    }
  ],
  "resource": {
    "resourceType": "Immunization",
    "id": "90614",
    "identifier": [
      {
        "value": "90614"
      }
    ],
    "status": "entered-in-error",
    "statusReason": {
      "coding": [
        {
          "code": "UnKnown",
          "display": "UnKnown"
        }
      ]
    }
  }
}

```

```

    ]
  },
  "vaccineCode": {
    "coding": [
      {
        "code": "25",
        "display": "typhoid, oral"
      }
    ],
    "text": "typhoid, oral"
  },
  "patient": {
    "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
    "identifier": {
      "value": "129665"
    },
    "display": "Newman, Alice"
  },
  "occurrenceDateTime": "2022-09-06T20:51:00-07:00",
  "primarySource": true,
  "lotNumber": "0",
  "doseQuantity": {
    "value": 1
  }
},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/Immunization/90615"
    }
  ],
  "resource": {
    "resourceType": "Immunization",
    "id": "90615",
    "identifier": [
      {
        "value": "90615"
      }
    ],
    "status": "completed",
    "statusReason": {
      "coding": [
        {

```

```

      "code": "UnKnown",
      "display": "UnKnown"
    }
  ]
},
"vaccineCode": {
  "coding": [
    {
      "code": "106",
      "display": "DTaP, 5 pertussis antigens"
    }
  ],
  "text": "DTaP, 5 pertussis antigens"
},
"patient": {
  "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
  "identifier": {
    "value": "129665"
  },
  "display": "Newman, Alice"
},
"occurrenceDateTime": "2012-01-04T00:00:00-08:00",
"primarySource": true,
"lotNumber": "134",
"doseQuantity": {
  "value": 0.5
}
}
}
]
}

```

Medication Request

For more information on Medication Request profile, visit link [US Core Medication Request Profile](#)

Type	Example Request with parameters
get	https://altheafhir.mdsynergy.com/MedicationRequest?intent=proposal&patient=129665
get	https://altheafhir.mdsynergy.com/MedicationRequest?intent=reflex-order&patient=129665

get	https://altheafhir.mdsynergy.com/MedicationRequest?intent=plan&patient=129665
post	https://altheafhir.mdsynergy.com/MedicationRequest/_search
get	https://altheafhir.mdsynergy.com/MedicationRequest?intent=original-order&patient=129665
get	https://altheafhir.mdsynergy.com/MedicationRequest?intent=instance-order&patient=129665
get	https://altheafhir.mdsynergy.com/MedicationRequest?intent=order&patient=Patient/129665
get	https://altheafhir.mdsynergy.com/MedicationRequest?intent=proposal,plan,order,original-order,reflex-order,filler-order,instance-order,option&patient=129665
get	https://altheafhir.mdsynergy.com/MedicationRequest?intent=order&patient=129665
get	https://altheafhir.mdsynergy.com/MedicationRequest?intent=filler-order&patient=129665
get	https://altheafhir.mdsynergy.com/MedicationRequest?intent=option&patient=129665
get	https://altheafhir.mdsynergy.com/MedicationRequest?intent=order&patient=129665&status=entered-in-error
get	https://altheafhir.mdsynergy.com/MedicationRequest?_revinclude=Provenance:target&intent=plan&patient=129665

Example Response:

```
{
  "resourceType": "Bundle",
  "type": "searchset",
  "timestamp": "2022-09-21T12:38:26.5327902-07:00",
  "entry": [
    {
      "link": [
        {
          "url": "https://altheafhir.mdsynergy.com/Medication/GetMedicationRequest/1122839"
        }
      ],
      "resource": {
        "resourceType": "MedicationRequest",
        "id": "1122839",
        "contained": [
          {
            "resourceType": "Medication",
            "id": "1122839",
            "identifier": [
```

```

    {
      "value": "1122839"
    }
  ],
  "code": {
    "coding": [
      {
        "system": "http://www.nlm.nih.gov/research/umls/rxnorm",
        "code": "00045048790",
        "display": "Tylenol 325 MG Oral Capsule"
      }
    ],
    "text": "Tylenol 325 MG Oral Capsule"
  },
  "status": "entered-in-error"
}
],
"identifier": [
  {
    "value": "1122839"
  }
],
"status": "entered-in-error",
"intent": "order",
"reportedBoolean": false,
"medicationReference": {
  "reference": "#1122839",
  "identifier": {
    "value": "1122839"
  },
  "display": "Tylenol 325 MG Oral Capsule"
},
"subject": {
  "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
  "identifier": {
    "value": "129665"
  },
  "display": "Newman, Alice"
},
"encounter": {
  "reference": "https://altheafhir.mdsynergy.com/Encounter/435649",
  "identifier": {
    "value": "435649"
  },

```



```

      "display": "encounter that leads to this prescription"
    },
    "authoredOn": "2022-09-13T16:42:49-07:00",
    "requester": {
      "reference": "https://altheafhir.mdsynergy.com/Practitioner/12",
      "identifier": {
        "value": "12"
      }
    },
    "display": "ALBERT, DAVIS"
  },
  "dosageInstruction": [
    {
      "text": "entered-in-error"
    }
  ]
}
]
}
}
]
}
}

```

Smoking Status Observation

For more information on Smoking Status Observation profile, visit link [US Core Smoking Status Observation Profile](#)

Type	Example Request with parameters
get	https://altheafhir.mdsynergy.com/Observation?code=72166-2&patient=129665
get	https://altheafhir.mdsynergy.com/Observation?code=72166-2&patient=Patient/129665
get	https://altheafhir.mdsynergy.com/Observation/_search
get	https://altheafhir.mdsynergy.com/Observation/SOC181891
get	https://altheafhir.mdsynergy.com/Observation?_revinclude=Provenance:target&code=72166-2&patient=129665

Example Response:

```

{
  "resourceType": "Bundle",
  "type": "searchset",
  "timestamp": "2022-09-21T12:38:32.2809062-07:00",

```

```

"entry": [
  {
    "link": [
      {
        "url": "https://altheafhir.mdsynergy.com/Observation/SOC181891"
      }
    ],
    "resource": {
      "resourceType": "Observation",
      "id": "SOC181891",
      "identifier": [
        {
          "value": "SOC181891"
        }
      ],
      "status": "final",
      "code": {
        "coding": [
          {
            "code": "72166-2",
            "display": "Measurement"
          }
        ]
      },
      "subject": {
        "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
        "identifier": {
          "value": "129665"
        },
        "display": "Newman, Alice"
      },
      "effectiveDateTime": "2022-09-14T09:49:59-07:00",
      "issued": "2022-09-14T09:49:59-07:00",
      "valueCodeableConcept": {
        "coding": [
          {
            "system": "http://snomed.info/sct",
            "code": "266919005",
            "display": ",LV EDD^^67^^78"
          }
        ],
        "text": ",LV EDD^^67^^78"
      }
    }
  }
]

```

```

},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/Observation/SOC181892"
    }
  ],
  "resource": {
    "resourceType": "Observation",
    "id": "SOC181892",
    "identifier": [
      {
        "value": "SOC181892"
      }
    ],
    "status": "final",
    "code": {
      "coding": [
        {
          "code": "72166-2",
          "display": "Mitral Annulus"
        }
      ]
    },
  },
  "subject": {
    "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
    "identifier": {
      "value": "129665"
    },
    "display": "Newman, Alice"
  },
  "effectiveDateTime": "2022-09-14T09:49:59-07:00",
  "issued": "2022-09-14T09:49:59-07:00",
  "valueCodeableConcept": {
    "coding": [
      {
        "system": "http://snomed.info/sct",
        "code": "266919005",
        "display": "Normal"
      }
    ],
    "text": "Normal"
  }
}

```

```

},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/Observation/SOC181893"
    }
  ],
  "resource": {
    "resourceType": "Observation",
    "id": "SOC181893",
    "identifier": [
      {
        "value": "SOC181893"
      }
    ],
    "status": "final",
    "code": {
      "coding": [
        {
          "code": "72166-2",
          "display": "Left Ventricular Hypertrophy"
        }
      ]
    },
  },
  "subject": {
    "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
    "identifier": {
      "value": "129665"
    },
    "display": "Newman, Alice"
  },
  "effectiveDateTime": "2022-09-14T09:49:59-07:00",
  "issued": "2022-09-14T09:49:59-07:00",
  "valueCodeableConcept": {
    "coding": [
      {
        "system": "http://snomed.info/sct",
        "code": "266919005",
        "display": "Not Present"
      }
    ],
  },
  "text": "Not Present"
}
}

```

```

},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/Observation/SOC181894"
    }
  ],
  "resource": {
    "resourceType": "Observation",
    "id": "SOC181894",
    "identifier": [
      {
        "value": "SOC181894"
      }
    ],
    "status": "final",
    "code": {
      "coding": [
        {
          "code": "72166-2",
          "display": "Aortic Root Size"
        }
      ]
    },
  },
  "subject": {
    "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
    "identifier": {
      "value": "129665"
    },
    "display": "Newman, Alice"
  },
  "effectiveDateTime": "2022-09-14T09:49:59-07:00",
  "issued": "2022-09-14T09:49:59-07:00",
  "valueCodeableConcept": {
    "coding": [
      {
        "system": "http://snomed.info/sct",
        "code": "266919005",
        "display": "Normal"
      }
    ],
    "text": "Normal"
  }
}

```

```

},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/Observation/SOC181895"
    }
  ],
  "resource": {
    "resourceType": "Observation",
    "id": "SOC181895",
    "identifier": [
      {
        "value": "SOC181895"
      }
    ],
    "status": "final",
    "code": {
      "coding": [
        {
          "code": "72166-2",
          "display": "Aortic Valve Value"
        }
      ]
    },
  },
  "subject": {
    "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
    "identifier": {
      "value": "129665"
    },
    "display": "Newman, Alice"
  },
  "effectiveDateTime": "2022-09-14T09:49:59-07:00",
  "issued": "2022-09-14T09:49:59-07:00",
  "valueCodeableConcept": {
    "coding": [
      {
        "system": "http://snomed.info/sct",
        "code": "266919005",
        "display": ",AG2^^78^^,AG4^^78^^"
      }
    ],
    "text": ",AG2^^78^^,AG4^^78^^"
  }
}

```

```

},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/Observation/SOC161822"
    }
  ],
  "resource": {
    "resourceType": "Observation",
    "id": "SOC161822",
    "identifier": [
      {
        "value": "SOC161822"
      }
    ],
    "status": "final",
    "code": {
      "coding": [
        {
          "code": "72166-2",
          "display": "Smoking Status (MU)"
        }
      ]
    },
  },
  "subject": {
    "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
    "identifier": {
      "value": "129665"
    },
    "display": "Newman, Alice"
  },
  "effectiveDateTime": "2022-09-06T16:59:25-07:00",
  "issued": "2022-09-06T16:59:25-07:00",
  "valueCodeableConcept": {
    "coding": [
      {
        "system": "http://snomed.info/sct",
        "code": "266919005",
        "display": "Current every day smoker"
      }
    ],
    "text": "Current every day smoker"
  }
}

```

```

},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/Observation/SOC171813"
    }
  ],
  "resource": {
    "resourceType": "Observation",
    "id": "SOC171813",
    "identifier": [
      {
        "value": "SOC171813"
      }
    ],
    "status": "final",
    "code": {
      "coding": [
        {
          "code": "72166-2",
          "display": "Amnesia"
        }
      ]
    },
  },
  "subject": {
    "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
    "identifier": {
      "value": "129665"
    },
    "display": "Newman, Alice"
  },
  "effectiveDateTime": "2022-09-07T10:07:24-07:00",
  "issued": "2022-09-07T10:07:24-07:00",
  "valueCodeableConcept": {
    "coding": [
      {
        "system": "http://snomed.info/sct",
        "code": "266919005",
        "display": "Yes"
      }
    ],
    "text": "Yes"
  }
}

```



```

},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/Observation/SOC171814"
    }
  ],
  "resource": {
    "resourceType": "Observation",
    "id": "SOC171814",
    "identifier": [
      {
        "value": "SOC171814"
      }
    ],
    "status": "final",
    "code": {
      "coding": [
        {
          "code": "72166-2",
          "display": "Dependence on cane"
        }
      ]
    },
  },
  "subject": {
    "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
    "identifier": {
      "value": "129665"
    },
    "display": "Newman, Alice"
  },
  "effectiveDateTime": "2022-09-07T10:10:27-07:00",
  "issued": "2022-09-07T10:10:27-07:00",
  "valueCodeableConcept": {
    "coding": [
      {
        "system": "http://snomed.info/sct",
        "code": "266919005",
        "display": "Yes"
      }
    ],
    "text": "Yes"
  }
}

```

```

}
]
}

```

Pediatric Weight for Height Observation Tests

For more information on profile, visit link [US Core Profile](#)

Type	Example Request with parameters
post	https://altheafhir.mdsynergy.com/Observation/_search
get	https://altheafhir.mdsynergy.com/Observation?code=77606-2&patient=129665
get	https://altheafhir.mdsynergy.com/Observation?code=77606-2&patient=Patient/129665
get	https://altheafhir.mdsynergy.com/Observation?code=http://loinc.org%7C77606-2&patient=129665
get	https://altheafhir.mdsynergy.com/Observation?category=vital-signs&date=2022-09-13T21:05:02-07:00&patient=129665
get	https://altheafhir.mdsynergy.com/Observation?category=vital-signs&patient=129665
get	https://altheafhir.mdsynergy.com/Observation/VIT181823
get	https://altheafhir.mdsynergy.com/Observation?_revinclude=Provenance:target&code=77606-2&patient=129665

Example Response:

```

{
  "resourceType": "Bundle",
  "type": "searchset",
  "timestamp": "2022-09-21T12:38:36.7031785-07:00",
  "entry": [
    {
      "link": [
        {
          "url": "https://altheafhir.mdsynergy.com/Observation/VIT161815"
        }
      ],
      "resource": {
        "resourceType": "Observation",
        "id": "VIT161815",
        "identifier": [
          {

```

```

    "system": "https://altheafhir.mdsynergy.com/Identifier/Observation",
    "value": "VIT161815"
  }
],
"status": "final",
"category": [
  {
    "coding": [
      {
        "system": "http://terminology.hl7.org/CodeSystem/observation-category",
        "code": "vital-signs",
        "display": "Vital Signs"
      }
    ],
    "text": "Vital Signs"
  }
],
"code": {
  "coding": [
    {
      "system": "http://loinc.org",
      "code": "39156-5",
      "display": "BMI"
    }
  ],
  "text": "BMI"
},
"subject": {
  "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
  "identifier": {
    "value": "129665"
  },
  "display": "Newman, Alice"
},
"effectiveDateTime": "2022-09-06T20:55:55-07:00",
"issued": "2022-09-06T20:55:55-07:00",
"valueQuantity": {
  "value": 2,
  "unit": "NA",
  "system": "http://unitsofmeasure.org",
  "code": "NA"
}
}
},

```

```

{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/Observation/VIT161816"
    }
  ],
  "resource": {
    "resourceType": "Observation",
    "id": "VIT161816",
    "identifier": [
      {
        "system": "https://altheafhir.mdsynergy.com/Identifier/Observation",
        "value": "VIT161816"
      }
    ],
    "status": "final",
    "category": [
      {
        "coding": [
          {
            "system": "http://terminology.hl7.org/CodeSystem/observation-category",
            "code": "vital-signs",
            "display": "Vital Signs"
          }
        ],
        "text": "Vital Signs"
      }
    ],
    "code": {
      "coding": [
        {
          "system": "http://loinc.org",
          "code": "85354-9",
          "display": "BP"
        }
      ],
      "text": "BP"
    },
    "subject": {
      "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
      "identifier": {
        "value": "129665"
      },
      "display": "Newman, Alice"
    }
  }
}

```

```

},
"effectiveDateTime": "2022-09-06T20:56:26-07:00",
"issued": "2022-09-06T20:56:26-07:00",
"component": [
  {
    "code": {
      "coding": [
        {
          "system": "http://loinc.org",
          "code": "8462-4",
          "display": "Diastolic Blood Pressure"
        }
      ],
      "text": "Diastolic Blood Pressure"
    },
    "valueQuantity": {
      "value": 88,
      "unit": "mm[Hg]",
      "system": "http://unitsofmeasure.org",
      "code": "mm[Hg]"
    }
  },
  {
    "code": {
      "coding": [
        {
          "system": "http://loinc.org",
          "code": "8480-6",
          "display": "Systolic Blood Pressure"
        }
      ],
      "text": "Systolic Blood Pressure"
    },
    "valueQuantity": {
      "value": 145,
      "unit": "mm[Hg]",
      "system": "http://unitsofmeasure.org",
      "code": "mm[Hg]"
    }
  }
]
}
},
{

```

```

"link": [
  {
    "url": "https://altheafhir.mdsynergy.com/Observation/VIT161817"
  }
],
"resource": {
  "resourceType": "Observation",
  "id": "VIT161817",
  "identifier": [
    {
      "system": "https://altheafhir.mdsynergy.com/Identifier/Observation",
      "value": "VIT161817"
    }
  ],
  "status": "final",
  "category": [
    {
      "coding": [
        {
          "system": "http://terminology.hl7.org/CodeSystem/observation-category",
          "code": "vital-signs",
          "display": "Vital Signs"
        }
      ],
      "text": "Vital Signs"
    }
  ],
  "code": {
    "coding": [
      {
        "system": "http://loinc.org",
        "code": "8867-4",
        "display": "Heart Rate/Pulse"
      }
    ],
    "text": "Heart Rate/Pulse"
  },
  "subject": {
    "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
    "identifier": {
      "value": "129665"
    },
    "display": "Newman, Alice"
  },
},

```

```

"effectiveDateTime": "2022-09-06T20:56:51-07:00",
"issued": "2022-09-06T20:56:51-07:00",
"valueQuantity": {
  "value": 80,
  "unit": "/min",
  "system": "http://unitsofmeasure.org",
  "code": "/min"
}
},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/Observation/VIT161813"
    }
  ],
  "resource": {
    "resourceType": "Observation",
    "id": "VIT161813",
    "identifier": [
      {
        "system": "https://altheafhir.mdsynergy.com/Identifier/Observation",
        "value": "VIT161813"
      }
    ],
    "status": "final",
    "category": [
      {
        "coding": [
          {
            "system": "http://terminology.hl7.org/CodeSystem/observation-category",
            "code": "vital-signs",
            "display": "Vital Signs"
          }
        ],
        "text": "Vital Signs"
      }
    ],
    "code": {
      "coding": [
        {
          "system": "http://loinc.org",
          "code": "8302-2",
          "display": "Height"
        }
      ]
    }
  }
}

```

```

    }
  ],
  "text": "Height"
},
"subject": {
  "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
  "identifier": {
    "value": "129665"
  },
  "display": "Newman, Alice"
},
"effectiveDateTime": "2022-09-06T20:55:32-07:00",
"issued": "2022-09-06T20:55:32-07:00",
"valueQuantity": {
  "value": 449.58,
  "unit": "cm",
  "system": "http://unitsofmeasure.org",
  "code": "cm"
}
}
},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/Observation/VIT161819"
    }
  ],
  "resource": {
    "resourceType": "Observation",
    "id": "VIT161819",
    "identifier": [
      {
        "system": "https://altheafhir.mdsynergy.com/Identifier/Observation",
        "value": "VIT161819"
      }
    ],
    "status": "final",
    "category": [
      {
        "coding": [
          {
            "system": "http://terminology.hl7.org/CodeSystem/observation-category",
            "code": "vital-signs",
            "display": "Vital Signs"
          }
        ]
      }
    ]
  }
}

```



```

    }
  ],
  "text": "Vital Signs"
}
],
"code": {
  "coding": [
    {
      "system": "http://loinc.org",
      "code": "3150-0",
      "display": "Inhaled Oxygen Concentration"
    }
  ],
  "text": "Inhaled Oxygen Concentration"
},
"subject": {
  "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
  "identifier": {
    "value": "129665"
  },
  "display": "Newman, Alice"
},
"effectiveDateTime": "2022-09-06T20:57:25-07:00",
"issued": "2022-09-06T20:57:25-07:00",
"valueQuantity": {
  "value": 36,
  "unit": "%",
  "system": "http://unitsofmeasure.org",
  "code": "%"
}
},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/Observation/VIT181822"
    }
  ],
  "resource": {
    "resourceType": "Observation",
    "id": "VIT181822",
    "identifier": [
      {
        "system": "https://altheafhir.mdsynergy.com/Identifier/Observation",

```

```

    "value": "VIT181822"
  }
],
"status": "final",
"category": [
  {
    "coding": [
      {
        "system": "http://terminology.hl7.org/CodeSystem/observation-category",
        "code": "vital-signs",
        "display": "Vital Signs"
      }
    ],
    "text": "Vital Signs"
  }
],
"code": {
  "coding": [
    {
      "system": "http://loinc.org",
      "code": "3150-0",
      "display": "Inhaled Oxygen Concentration"
    }
  ],
  "text": "Inhaled Oxygen Concentration"
},
"subject": {
  "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
  "identifier": {
    "value": "129665"
  },
  "display": "Newman, Alice"
},
"effectiveDateTime": "2022-09-13T20:42:08-07:00",
"issued": "2022-09-13T20:42:08-07:00",
"valueQuantity": {
  "value": 100,
  "unit": "%",
  "system": "http://unitsofmeasure.org",
  "code": "%"
}
}
},
{

```

```

"link": [
  {
    "url": "https://altheafhir.mdsynergy.com/Observation/VIT161818"
  }
],
"resource": {
  "resourceType": "Observation",
  "id": "VIT161818",
  "identifier": [
    {
      "system": "https://altheafhir.mdsynergy.com/Identifier/Observation",
      "value": "VIT161818"
    }
  ],
  "status": "final",
  "category": [
    {
      "coding": [
        {
          "system": "http://terminology.hl7.org/CodeSystem/observation-category",
          "code": "vital-signs",
          "display": "Vital Signs"
        }
      ],
      "text": "Vital Signs"
    }
  ],
  "code": {
    "coding": [
      {
        "system": "http://loinc.org",
        "code": "59408-5",
        "display": "O2 % BldC Oximetry"
      },
      {
        "system": "http://loinc.org",
        "code": "2708-6",
        "display": "Oxygen saturation in Arterial blood"
      }
    ],
    "text": "O2 % BldC Oximetry"
  },
  "subject": {
    "reference": "https://altheafhir.mdsynergy.com/Patient/129665",

```

```

"identifier": {
  "value": "129665"
},
"display": "Newman, Alice"
},
"effectiveDateTime": "2022-09-06T20:57:06-07:00",
"issued": "2022-09-06T20:57:06-07:00",
"valueQuantity": {
  "value": 95,
  "unit": "%",
  "system": "http://unitsofmeasure.org",
  "code": "%"
},
"component": [
  {
    "code": {
      "coding": [
        {
          "system": "http://loinc.org",
          "code": "3151-8",
          "display": "Inhaled oxygen flow rate"
        }
      ],
      "text": "Inhaled oxygen flow rate"
    },
    "valueQuantity": {
      "value": 10,
      "unit": "L/min",
      "system": "http://unitsofmeasure.org",
      "code": "L/min"
    }
  },
  {
    "code": {
      "coding": [
        {
          "system": "http://loinc.org",
          "code": "3150-0",
          "display": "Inhaled oxygen concentration"
        }
      ],
      "text": "Inhaled oxygen concentration"
    },
    "valueQuantity": {

```

```

    "value": 36,
    "unit": "%",
    "system": "http://unitsofmeasure.org",
    "code": "%"
  }
}
],
},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/Observation/VIT161821"
    }
  ],
  "resource": {
    "resourceType": "Observation",
    "id": "VIT161821",
    "identifier": [
      {
        "system": "https://altheafhir.mdsynergy.com/Identifier/Observation",
        "value": "VIT161821"
      }
    ],
    "status": "final",
    "category": [
      {
        "coding": [
          {
            "system": "http://terminology.hl7.org/CodeSystem/observation-category",
            "code": "vital-signs",
            "display": "Vital Signs"
          }
        ],
        "text": "Vital Signs"
      }
    ],
    "code": {
      "coding": [
        {
          "system": "http://loinc.org",
          "code": "9279-1",
          "display": "Respiratory Rate"
        }
      ]
    }
  }
}

```

```

    ],
    "text": "Respiratory Rate"
  },
  "subject": {
    "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
    "identifier": {
      "value": "129665"
    },
    "display": "Newman, Alice"
  },
  "effectiveDateTime": "2022-09-06T20:58:03-07:00",
  "issued": "2022-09-06T20:58:03-07:00",
  "valueQuantity": {
    "value": 18,
    "unit": "/min",
    "system": "http://unitsofmeasure.org",
    "code": "/min"
  }
}
},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/Observation/VIT161820"
    }
  ],
  "resource": {
    "resourceType": "Observation",
    "id": "VIT161820",
    "identifier": [
      {
        "system": "https://altheafhir.mdsynergy.com/Identifier/Observation",
        "value": "VIT161820"
      }
    ],
    "status": "final",
    "category": [
      {
        "coding": [
          {
            "system": "http://terminology.hl7.org/CodeSystem/observation-category",
            "code": "vital-signs",
            "display": "Vital Signs"
          }
        ]
      }
    ]
  }
}

```

```

    ],
    "text": "Vital Signs"
  }
],
"code": {
  "coding": [
    {
      "system": "http://loinc.org",
      "code": "8310-5",
      "display": "Temperature"
    }
  ],
  "text": "Temperature"
},
"subject": {
  "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
  "identifier": {
    "value": "129665"
  },
  "display": "Newman, Alice"
},
"effectiveDateTime": "2022-09-06T20:57:52-07:00",
"issued": "2022-09-06T20:57:52-07:00",
"valueQuantity": {
  "value": 38,
  "unit": "Cel",
  "system": "http://unitsofmeasure.org",
  "code": "Cel"
}
}
},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/Observation/VIT161814"
    }
  ],
  "resource": {
    "resourceType": "Observation",
    "id": "VIT161814",
    "identifier": [
      {
        "system": "https://altheafhir.mdsynergy.com/Identifier/Observation",
        "value": "VIT161814"
      }
    ]
  }
}

```

```

    }
  ],
  "status": "final",
  "category": [
    {
      "coding": [
        {
          "system": "http://terminology.hl7.org/CodeSystem/observation-category",
          "code": "vital-signs",
          "display": "Vital Signs"
        }
      ],
      "text": "Vital Signs"
    }
  ],
  "code": {
    "coding": [
      {
        "system": "http://loinc.org",
        "code": "29463-7",
        "display": "Weight"
      }
    ],
    "text": "Weight"
  },
  "subject": {
    "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
    "identifier": {
      "value": "129665"
    },
    "display": "Newman, Alice"
  },
  "effectiveDateTime": "2022-09-06T20:55:55-07:00",
  "issued": "2022-09-06T20:55:55-07:00",
  "valueQuantity": {
    "value": 39.916096,
    "unit": "kg",
    "system": "http://unitsofmeasure.org",
    "code": "kg"
  }
}
},
{
  "link": [

```



```

{
  "url": "https://altheafhir.mdsynergy.com/Observation/VIT181821"
}
],
"resource": {
  "resourceType": "Observation",
  "id": "VIT181821",
  "identifier": [
    {
      "system": "https://altheafhir.mdsynergy.com/Identifier/Observation",
      "value": "VIT181821"
    }
  ],
  "status": "final",
  "category": [
    {
      "coding": [
        {
          "system": "http://terminology.hl7.org/CodeSystem/observation-category",
          "code": "vital-signs",
          "display": "Vital Signs"
        }
      ],
      "text": "Vital Signs"
    }
  ],
  "code": {
    "coding": [
      {
        "system": "http://loinc.org",
        "code": "59576-9",
        "display": "Body mass index (BMI) [Percentile] Per age and sex"
      }
    ],
    "text": "Body mass index (BMI) [Percentile] Per age and sex"
  },
  "subject": {
    "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
    "identifier": {
      "value": "129665"
    },
    "display": "Newman, Alice"
  },
  "effectiveDateTime": "2022-09-13T20:41:48-07:00",

```

```

"issued": "2022-09-13T20:41:48-07:00",
"valueQuantity": {
  "value": 100,
  "unit": "%",
  "system": "http://unitsofmeasure.org",
  "code": "%"
}
},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/Observation/VIT181819"
    }
  ],
  "resource": {
    "resourceType": "Observation",
    "id": "VIT181819",
    "identifier": [
      {
        "system": "https://altheafhir.mdsynergy.com/Identifier/Observation",
        "value": "VIT181819"
      }
    ],
    "status": "final",
    "category": [
      {
        "coding": [
          {
            "system": "http://terminology.hl7.org/CodeSystem/observation-category",
            "code": "vital-signs",
            "display": "Vital Signs"
          }
        ],
        "text": "Vital Signs"
      }
    ],
    "code": {
      "coding": [
        {
          "system": "http://loinc.org",
          "code": "8289-1",
          "display": "Head Occipital-frontal circumference Percentile"
        }
      ]
    }
  }
}

```

```

    ],
    "text": "Head Occipital-frontal circumference Percentile"
  },
  "subject": {
    "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
    "identifier": {
      "value": "129665"
    },
    "display": "Newman, Alice"
  },
  "effectiveDateTime": "2022-09-13T20:36:10-07:00",
  "issued": "2022-09-13T20:36:10-07:00",
  "valueQuantity": {
    "value": 90,
    "unit": "%",
    "system": "http://unitsofmeasure.org",
    "code": "%"
  }
}
},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/Observation/VIT181820"
    }
  ],
  "resource": {
    "resourceType": "Observation",
    "id": "VIT181820",
    "identifier": [
      {
        "system": "https://altheafhir.mdsynergy.com/Identifier/Observation",
        "value": "VIT181820"
      }
    ],
    "status": "final",
    "category": [
      {
        "coding": [
          {
            "system": "http://terminology.hl7.org/CodeSystem/observation-category",
            "code": "vital-signs",
            "display": "Vital Signs"
          }
        ]
      }
    ]
  }
}

```

```

    ],
    "text": "Vital Signs"
  }
],
"code": {
  "coding": [
    {
      "system": "http://loinc.org",
      "code": "3151-8",
      "display": "Inhaled oxygen flow rate"
    }
  ],
  "text": "Inhaled oxygen flow rate"
},
"subject": {
  "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
  "identifier": {
    "value": "129665"
  },
  "display": "Newman, Alice"
},
"effectiveDateTime": "2022-09-13T20:41:37-07:00",
"issued": "2022-09-13T20:41:37-07:00",
"valueQuantity": {
  "value": 10,
  "unit": "L/min",
  "system": "http://unitsofmeasure.org",
  "code": "L/min"
}
}
},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/Observation/VIT181823"
    }
  ],
  "resource": {
    "resourceType": "Observation",
    "id": "VIT181823",
    "identifier": [
      {
        "system": "https://altheafhir.mdsynergy.com/Identifier/Observation",
        "value": "VIT181823"
      }
    ]
  }
}

```

```

    }
  ],
  "status": "final",
  "category": [
    {
      "coding": [
        {
          "system": "http://terminology.hl7.org/CodeSystem/observation-category",
          "code": "vital-signs",
          "display": "Vital Signs"
        }
      ],
      "text": "Vital Signs"
    }
  ],
  "code": {
    "coding": [
      {
        "system": "http://loinc.org",
        "code": "77606-2",
        "display": "Weight-for-length Per age and sex"
      }
    ],
    "text": "Weight-for-length Per age and sex"
  },
  "subject": {
    "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
    "identifier": {
      "value": "129665"
    },
    "display": "Newman, Alice"
  },
  "effectiveDateTime": "2022-09-13T21:05:02-07:00",
  "issued": "2022-09-13T21:05:02-07:00",
  "valueQuantity": {
    "value": 100,
    "unit": "%",
    "system": "http://unitsofmeasure.org",
    "code": "%"
  }
}
]
}

```

Laboratory Result Observation

For more information on profile, visit link [US Core Profile](#)

Type	Example Request with parameters
get	https://altheafhir.mdsynergy.com/Observation?category=laboratory&patient=129665
get	https://altheafhir.mdsynergy.com/Observation/_search
	https://altheafhir.mdsynergy.com/Observation?category=laboratory&patient=Patient/129665
	https://altheafhir.mdsynergy.com/Observation?category=laboratory&date=2022-09-07T15:34:23-07:00&patient=129665
	https://altheafhir.mdsynergy.com/Observation?code=http://loinc.org%7C5778-6&patient=129665
	https://altheafhir.mdsynergy.com/Observation?code=5778-6&patient=129665
	https://altheafhir.mdsynergy.com/Observation/RES3709
	https://altheafhir.mdsynergy.com/Observation?_revinclude=Provenance:target&category=laboratory&patient=129665

Example Response:

```
{
  "resourceType": "Observation",
  "id": "RES3709",
  "identifier": [
    {
      "system": "https://altheafhir.mdsynergy.com/Identifier/Observation",
      "value": "RES3709"
    }
  ],
  "status": "final",
  "category": [
    {
      "coding": [
        {
          "system": "http://terminology.hl7.org/CodeSystem/observation-category",
          "code": "laboratory",
          "display": "Laboratory"
        }
      ]
    }
  ],
  "text": "Laboratory"
```

```

    }
  ],
  "code": {
    "coding": [
      {
        "system": "http://loinc.org",
        "code": "5778-6",
        "display": "Color Of Urine"
      }
    ],
    "text": "Color Of Urine"
  },
  "subject": {
    "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
    "identifier": {
      "value": "129665"
    },
    "display": "Newman, Alice"
  },
  "encounter": {
    "display": "Encounter"
  },
  "effectiveDateTime": "2022-09-07T15:34:23-07:00",
  "issued": "2022-09-07T15:34:23-07:00",
  "performer": [
    {
      "identifier": {
        "value": "24"
      },
      "display": "Organization"
    },
    {
      "display": "Practitioner"
    }
  ],
  "valueQuantity": {
    "value": 0,
    "unit": "UNK",
    "system": "http://unitsofmeasure.org",
    "code": "UNK"
  },
  "referenceRange": [
    {
      "text": "YELLOW -"
    }
  ]

```

```

}
]
}

```

Pediatric BMI for Age Observation

For more information on profile, visit link [US Core Profile](#)

Type	Example Request with parameters
	https://altheafhir.mdsynergy.com/Observation?code=59576-9&patient=Patient/129665
	https://altheafhir.mdsynergy.com/Observation?code=59576-9&patient=129665
	https://altheafhir.mdsynergy.com/Observation/_search
	https://altheafhir.mdsynergy.com/Observation?code=http://loinc.org%7C59576-9&patient=129665
	https://altheafhir.mdsynergy.com/Observation?category=vital-signs&date=2022-09-13T20:41:48-07:00&patient=129665
	https://altheafhir.mdsynergy.com/Observation?category=vital-signs&patient=129665
	https://altheafhir.mdsynergy.com/Observation/VIT181821
	https://altheafhir.mdsynergy.com/Observation?_revinclude=Provenance:target&code=59576-9&patient=129665

Example Response:

```

{
  "resourceType": "Bundle",
  "type": "searchset",
  "timestamp": "2022-09-21T12:38:41.1381501-07:00",
  "entry": [
    {
      "link": [
        {
          "url": "https://altheafhir.mdsynergy.com/Observation/VIT181821"
        }
      ],
      "resource": {

```



```

"resourceType": "Observation",
"id": "VIT181821",
"identifier": [
  {
    "system": "https://altheafhir.mdsynergy.com/Identifier/Observation",
    "value": "VIT181821"
  }
],
"status": "final",
"category": [
  {
    "coding": [
      {
        "system": "http://terminology.hl7.org/CodeSystem/observation-category",
        "code": "vital-signs",
        "display": "Vital Signs"
      }
    ],
    "text": "Vital Signs"
  }
],
"code": {
  "coding": [
    {
      "system": "http://loinc.org",
      "code": "59576-9",
      "display": "Body mass index (BMI) [Percentile] Per age and sex"
    }
  ],
  "text": "Body mass index (BMI) [Percentile] Per age and sex"
},
"subject": {
  "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
  "identifier": {
    "value": "129665"
  },
  "display": "Newman, Alice"
},
"effectiveDateTime": "2022-09-13T20:41:48-07:00",
"issued": "2022-09-13T20:41:48-07:00",
"valueQuantity": {
  "value": 100,
  "unit": "%",
  "system": "http://unitsofmeasure.org",

```

```

    "code": "%
  }
}
]
}

```

Pulse Oximetry Tests

For more information on profile, visit link [US Core Profile](#)

Type	Example Request with parameters
	https://altheafhir.mdsynergy.com/Observation?code=2708-6&patient=129665
	https://altheafhir.mdsynergy.com/Observation/_search
	https://altheafhir.mdsynergy.com/Observation?code=59408-5&patient=Patient/129665
	https://altheafhir.mdsynergy.com/Observation?code=http://loinc.org%7C59408-5&patient=129665
	https://altheafhir.mdsynergy.com/Observation?code=59408-5&patient=129665
	https://altheafhir.mdsynergy.com/Observation?category=vital-signs&date=lt2022-09-07T20:57:06-07:00&patient=129665
	https://altheafhir.mdsynergy.com/Observation?category=vital-signs&patient=129665
	https://altheafhir.mdsynergy.com/Observation/VIT161818
	https://altheafhir.mdsynergy.com/Observation?_revinclude=Provenance:target&code=59408-5&patient=129665

Example Response:

```

{
  "resourceType": "Bundle",
  "type": "searchset",
  "timestamp": "2022-09-21T12:38:44.2388032-07:00",
  "entry": [
    {
      "link": [
        {
          "url": "https://altheafhir.mdsynergy.com/Observation/VIT161818"
        }
      ]
    }
  ],

```

```

"resource": {
  "resourceType": "Observation",
  "id": "VIT161818",
  "identifier": [
    {
      "system": "https://altheafhir.mdsynergy.com/Identifier/Observation",
      "value": "VIT161818"
    }
  ],
  "status": "final",
  "category": [
    {
      "coding": [
        {
          "system": "http://terminology.hl7.org/CodeSystem/observation-category",
          "code": "vital-signs",
          "display": "Vital Signs"
        }
      ],
      "text": "Vital Signs"
    }
  ],
  "code": {
    "coding": [
      {
        "system": "http://loinc.org",
        "code": "59408-5",
        "display": "O2 % BldC Oximetry"
      },
      {
        "system": "http://loinc.org",
        "code": "2708-6",
        "display": "Oxygen saturation in Arterial blood"
      }
    ],
    "text": "O2 % BldC Oximetry"
  },
  "subject": {
    "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
    "identifier": {
      "value": "129665"
    },
    "display": "Newman, Alice"
  },
},

```

```

"effectiveDateTime": "2022-09-06T20:57:06-07:00",
"issued": "2022-09-06T20:57:06-07:00",
"valueQuantity": {
  "value": 95,
  "unit": "%",
  "system": "http://unitsofmeasure.org",
  "code": "%"
},
"component": [
  {
    "code": {
      "coding": [
        {
          "system": "http://loinc.org",
          "code": "3151-8",
          "display": "Inhaled oxygen flow rate"
        }
      ],
      "text": "Inhaled oxygen flow rate"
    },
    "valueQuantity": {
      "value": 10,
      "unit": "L/min",
      "system": "http://unitsofmeasure.org",
      "code": "L/min"
    }
  },
  {
    "code": {
      "coding": [
        {
          "system": "http://loinc.org",
          "code": "3150-0",
          "display": "Inhaled oxygen concentration"
        }
      ],
      "text": "Inhaled oxygen concentration"
    },
    "valueQuantity": {
      "value": 36,
      "unit": "%",
      "system": "http://unitsofmeasure.org",
      "code": "%"
    }
  }
]

```

```

    }
  ]
}
]
}

```

Pediatric Head Occipital-frontal Circumference Percentile

For more information on Pediatric Head Occipital-frontal Circumference Percentile profile, visit link [US Core Pediatric Head Occipital-frontal Circumference Percentile Profile](#)

Type	Example Request with parameters
	https://altheafhir.mdsynergy.com/Observation?code=8289-1&patient=129665
	https://altheafhir.mdsynergy.com/Observation/_search
	https://altheafhir.mdsynergy.com/Observation?code=http://loinc.org%7C8289-1&patient=129665
	https://altheafhir.mdsynergy.com/Observation?code=8289-1&patient=Patient/129665
	https://altheafhir.mdsynergy.com/Observation?category=vital-signs&date=2022-09-13T20:36:10-07:00&patient=129665
	https://altheafhir.mdsynergy.com/Observation?category=vital-signs&patient=129665
	https://altheafhir.mdsynergy.com/Observation/VIT181819
	https://altheafhir.mdsynergy.com/Observation?_revinclude=Provenance:target&code=8289-1&patient=129665

Example Response:

```

{
  "resourceType": "Bundle",
  "type": "searchset",
  "timestamp": "2022-09-21T12:38:47.5372486-07:00",
  "entry": [
    {
      "link": [
        {
          "url": "https://altheafhir.mdsynergy.com/Observation/VIT181819"
        }
      ],
      "resource": {

```

```

"resourceType": "Observation",
"id": "VIT181819",
"identifier": [
  {
    "system": "https://altheafhir.mdsynergy.com/Identifier/Observation",
    "value": "VIT181819"
  }
],
"status": "final",
"category": [
  {
    "coding": [
      {
        "system": "http://terminology.hl7.org/CodeSystem/observation-category",
        "code": "vital-signs",
        "display": "Vital Signs"
      }
    ],
    "text": "Vital Signs"
  }
],
"code": {
  "coding": [
    {
      "system": "http://loinc.org",
      "code": "8289-1",
      "display": "Head Occipital-frontal circumference Percentile"
    }
  ],
  "text": "Head Occipital-frontal circumference Percentile"
},
"subject": {
  "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
  "identifier": {
    "value": "129665"
  },
  "display": "Newman, Alice"
},
"effectiveDateTime": "2022-09-13T20:36:10-07:00",
"issued": "2022-09-13T20:36:10-07:00",
"valueQuantity": {
  "value": 90,
  "unit": "%",
  "system": "http://unitsofmeasure.org",

```

```

    "code": "%
  }
}
]
}

```

Observation Body Height

For more information on Observation Body Height profile, visit link [US Core Observation Body Height Profile](#)

Type	Example Request with parameters
get	https://altheafhir.mdsynergy.com/Observation/_search
get	https://altheafhir.mdsynergy.com/Observation?code=8302-2&patient=Patient/129665
get	https://altheafhir.mdsynergy.com/Observation?category=vital-signs&date=2022-09-06T20:55:32-07:00&patient=129665
get	https://altheafhir.mdsynergy.com/Observation?category=vital-signs&patient=129665
get	https://altheafhir.mdsynergy.com/Observation/VIT161813
get	https://altheafhir.mdsynergy.com/Observation?_revinclude=Provenance:target&code=8302-2&patient=129665

Example Response:

```

{
  "resourceType": "Bundle",
  "type": "searchset",
  "timestamp": "2022-09-21T12:38:50.9241996-07:00",
  "entry": [
    {
      "link": [
        {
          "url": "https://altheafhir.mdsynergy.com/Observation/VIT161813"
        }
      ],
      "resource": {
        "resourceType": "Observation",
        "id": "VIT161813",
        "identifier": [
          {

```

```

    "system": "https://altheafhir.mdsynergy.com/Identifier/Observation",
    "value": "VIT161813"
  }
],
"status": "final",
"category": [
  {
    "coding": [
      {
        "system": "http://terminology.hl7.org/CodeSystem/observation-category",
        "code": "vital-signs",
        "display": "Vital Signs"
      }
    ],
    "text": "Vital Signs"
  }
],
"code": {
  "coding": [
    {
      "system": "http://loinc.org",
      "code": "8302-2",
      "display": "Height"
    }
  ],
  "text": "Height"
},
"subject": {
  "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
  "identifier": {
    "value": "129665"
  },
  "display": "Newman, Alice"
},
"effectiveDateTime": "2022-09-06T20:55:32-07:00",
"issued": "2022-09-06T20:55:32-07:00",
"valueQuantity": {
  "value": 449.58,
  "unit": "cm",
  "system": "http://unitsofmeasure.org",
  "code": "cm"
}
}
}

```


]
}

Observation Body Temperature

For more information on Observation Body Temperature profile, visit link [US Core Observation Body Temperature Profile](#)

Type	Example Request with parameters
get	https://altheafhir.mdsynergy.com/Observation?code=8310-5&patient=Patient/129665
get	https://altheafhir.mdsynergy.com/Observation/_search
get	https://altheafhir.mdsynergy.com/Observation?code=http://loinc.org%7C8310-5&patient=129665
get	https://altheafhir.mdsynergy.com/Observation?code=8310-5&patient=129665
get	https://altheafhir.mdsynergy.com/Observation?category=vital-signs&date=2022-09-06T20:57:52-07:00&patient=129665
get	https://altheafhir.mdsynergy.com/Observation?category=vital-signs&patient=129665
get	https://altheafhir.mdsynergy.com/Observation/VIT161820
get	https://altheafhir.mdsynergy.com/Observation?_revinclude=Provenance:target&code=8310-5&patient=129665

Example Response:

Observation Blood Pressure

For more information on Observation Blood Pressure profile, visit link [US Core Observation Blood Pressure Profile](#)

Type	Example Request with parameters
get	https://altheafhir.mdsynergy.com/Observation/_search
get	https://altheafhir.mdsynergy.com/Observation?code=http://loinc.org%7C85354-9&patient=129665
get	https://altheafhir.mdsynergy.com/Observation?code=85354-9&patient=129665

get	https://altheafhir.mdsynergy.com/Observation?code=85354-9&patient=Patient/129665
get	https://altheafhir.mdsynergy.com/Observation?category=vital-signs&date=gt2022-09-05T20:56:26-07:00&patient=129665
get	https://altheafhir.mdsynergy.com/Observation?category=vital-signs&patient=129665
get	https://altheafhir.mdsynergy.com/Observation/VIT161816
get	https://altheafhir.mdsynergy.com/Observation?_revinclude=Provenance:target&code=85354-9&patient=129665

Example Response:

```
{
  "resourceType": "Bundle",
  "type": "searchset",
  "timestamp": "2022-09-21T12:38:57.5263227-07:00",
  "entry": [
    {
      "link": [
        {
          "url": "https://altheafhir.mdsynergy.com/Observation/VIT161816"
        }
      ],
      "resource": {
        "resourceType": "Observation",
        "id": "VIT161816",
        "identifier": [
          {
            "system": "https://altheafhir.mdsynergy.com/Identifier/Observation",
            "value": "VIT161816"
          }
        ],
        "status": "final",
        "category": [
          {
            "coding": [
              {
                "system": "http://terminology.hl7.org/CodeSystem/observation-category",
                "code": "vital-signs",
                "display": "Vital Signs"
              }
            ]
          }
        ],
        "text": "Vital Signs"
      }
    }
  ]
}
```

```

    }
  ],
  "code": {
    "coding": [
      {
        "system": "http://loinc.org",
        "code": "85354-9",
        "display": "BP"
      }
    ],
    "text": "BP"
  },
  "subject": {
    "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
    "identifier": {
      "value": "129665"
    },
    "display": "Newman, Alice"
  },
  "effectiveDateTime": "2022-09-06T20:56:26-07:00",
  "issued": "2022-09-06T20:56:26-07:00",
  "component": [
    {
      "code": {
        "coding": [
          {
            "system": "http://loinc.org",
            "code": "8462-4",
            "display": "Diastolic Blood Pressure"
          }
        ],
        "text": "Diastolic Blood Pressure"
      },
      "valueQuantity": {
        "value": 88,
        "unit": "mm[Hg]",
        "system": "http://unitsofmeasure.org",
        "code": "mm[Hg]"
      }
    }
  ],
  {
    "code": {
      "coding": [
        {

```

```

      "system": "http://loinc.org",
      "code": "8480-6",
      "display": "Systolic Blood Pressure"
    }
  ],
  "text": "Systolic Blood Pressure"
},
"valueQuantity": {
  "value": 145,
  "unit": "mm[Hg]",
  "system": "http://unitsofmeasure.org",
  "code": "mm[Hg]"
}
}
]
}
]
}
}

```

Observation Body Weight

For more information on Body Weight profile, visit link [US Core Body Weight Profile](#)

Type	Example Request with parameters
get	https://altheafhir.mdsynergy.com/Observation?code=29463-7&patient=Patient/129665
get	https://altheafhir.mdsynergy.com/Observation?code=29463-7&patient=129665
get	https://altheafhir.mdsynergy.com/Observation/_search
get	https://altheafhir.mdsynergy.com/Observation?code=http://loinc.org%7C29463-7&patient=129665
get	https://altheafhir.mdsynergy.com/Observation?category=vital-signs&date=gt2022-09-05T20:55:55-07:00&patient=129665
get	https://altheafhir.mdsynergy.com/Observation?category=vital-signs&patient=129665
get	https://altheafhir.mdsynergy.com/Observation/VIT161814
get	https://altheafhir.mdsynergy.com/Observation?_revinclude=Provenance:target&code=29463-7&patient=129665

Example Response:

Observation Heart Rate

For more information on Heart Rate profile, visit link [US Core Heart Rate Profile](#)

Type	Example Request with parameters
get	https://altheafhir.mdsynergy.com/Observation/_search
get	https://altheafhir.mdsynergy.com/Observation?code=http://loinc.org%7C8867-4&patient=129665
get	https://altheafhir.mdsynergy.com/Observation?code=8867-4&patient=Patient/129665
get	https://altheafhir.mdsynergy.com/Observation?code=8867-4&patient=129665
get	https://altheafhir.mdsynergy.com/Observation?category=vital-signs&date=gt2022-09-05T20:56:51-07:00&patient=129665
get	https://altheafhir.mdsynergy.com/Observation?category=vital-signs&patient=129665
get	https://altheafhir.mdsynergy.com/Observation/VIT161817
get	https://altheafhir.mdsynergy.com/Observation?_revinclude=Provenance:target&code=8867-4&patient=129665

Example Response:

```
{
  "resourceType": "Bundle",
  "type": "searchset",
  "timestamp": "2022-09-21T12:39:05.5945721-07:00",
  "entry": [
    {
      "link": [
        {
          "url": "https://altheafhir.mdsynergy.com/Observation/VIT161817"
        }
      ],
      "resource": {
        "resourceType": "Observation",
        "id": "VIT161817",
        "identifier": [
          {
            "system": "https://altheafhir.mdsynergy.com/Identifier/Observation",
            "value": "VIT161817"
          }
        ]
      }
    }
  ],
}
```

```

"status": "final",
"category": [
  {
    "coding": [
      {
        "system": "http://terminology.hl7.org/CodeSystem/observation-category",
        "code": "vital-signs",
        "display": "Vital Signs"
      }
    ],
    "text": "Vital Signs"
  }
],
"code": {
  "coding": [
    {
      "system": "http://loinc.org",
      "code": "8867-4",
      "display": "Heart Rate/Pulse"
    }
  ],
  "text": "Heart Rate/Pulse"
},
"subject": {
  "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
  "identifier": {
    "value": "129665"
  },
  "display": "Newman, Alice"
},
"effectiveDateTime": "2022-09-06T20:56:51-07:00",
"issued": "2022-09-06T20:56:51-07:00",
"valueQuantity": {
  "value": 80,
  "unit": "/min",
  "system": "http://unitsofmeasure.org",
  "code": "/min"
}
}
]
}

```

Observation Respiratory Rate

For more information on Observation Respiratory Rate profile, visit link [US Core Observation Respiratory Rate Profile](#)

Type	Example Request with parameters
get	https://altheafhir.mdsynergy.com/Observation?code=9279-1&patient=129665
get	https://altheafhir.mdsynergy.com/Observation?code=9279-1&patient=Patient/129665
get	https://altheafhir.mdsynergy.com/Observation/_search
get	https://altheafhir.mdsynergy.com/Observation?code=http://loinc.org%7C9279-1&patient=129665
get	https://altheafhir.mdsynergy.com/Observation?category=vital-signs&date=ge2022-09-05T20:58:03-07:00&patient=129665
get	https://altheafhir.mdsynergy.com/Observation?category=http://terminology.hl7.org/CodeSystem/observation-category%7Cvital-signs&patient=129665
get	https://altheafhir.mdsynergy.com/Observation?category=vital-signs&patient=129665
get	https://altheafhir.mdsynergy.com/Observation/VIT161821
get	https://altheafhir.mdsynergy.com/Observation?_revinclude=Provenance:target&code=9279-1&patient=129665

Example Response:

```
{
  "resourceType": "Bundle",
  "type": "searchset",
  "timestamp": "2022-09-21T12:39:08.6708717-07:00",
  "entry": [
    {
      "link": [
        {
          "url": "https://altheafhir.mdsynergy.com/Observation/VIT161821"
        }
      ],
      "resource": {
        "resourceType": "Observation",
        "id": "VIT161821",
        "identifier": [
          {
```

```

    "system": "https://altheafhir.mdsynergy.com/Identifier/Observation",
    "value": "VIT161821"
  }
],
"status": "final",
"category": [
  {
    "coding": [
      {
        "system": "http://terminology.hl7.org/CodeSystem/observation-category",
        "code": "vital-signs",
        "display": "Vital Signs"
      }
    ],
    "text": "Vital Signs"
  }
],
"code": {
  "coding": [
    {
      "system": "http://loinc.org",
      "code": "9279-1",
      "display": "Respiratory Rate"
    }
  ],
  "text": "Respiratory Rate"
},
"subject": {
  "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
  "identifier": {
    "value": "129665"
  },
  "display": "Newman, Alice"
},
"effectiveDateTime": "2022-09-06T20:58:03-07:00",
"issued": "2022-09-06T20:58:03-07:00",
"valueQuantity": {
  "value": 18,
  "unit": "/min",
  "system": "http://unitsofmeasure.org",
  "code": "/min"
}
}
}

```



```
]
}
```

Procedure

For more information on Procedure profile, visit link [US Core Procedure Profile](#)

Type	Example Request with parameters
get	https://altheafhir.mdsynergy.com/Procedure?patient=129665
get	https://altheafhir.mdsynergy.com/Procedure?patient=Patient/129665
post	https://altheafhir.mdsynergy.com/Procedure/_search
get	https://altheafhir.mdsynergy.com/Procedure?date=gt2022-08-31T00:00:00-07:00&patient=129665
get	https://altheafhir.mdsynergy.com/Procedure/162496
get	https://altheafhir.mdsynergy.com/Procedure?_revinclude=Provenance:target&patient=129665

Example Response:

```
{
  "resourceType": "Bundle",
  "type": "searchset",
  "timestamp": "2022-09-21T12:39:11.9507609-07:00",
  "entry": [
    {
      "link": [
        {
          "url": "https://altheafhir.mdsynergy.com/Procedure/162496"
        }
      ],
      "resource": {
        "resourceType": "Procedure",
        "id": "162496",
        "identifier": [
          {
            "value": "162496"
          }
        ],
        "status": "completed",
        "code": {
          "coding": [
```

```

    {
      "code": "E0585",
      "display": "Nebulizer w/ compressor & he"
    }
  ]
},
"subject": {
  "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
  "identifier": {
    "value": "129665"
  },
  "display": "Newman, Alice"
},
"encounter": {
  "reference": "https://altheafhir.mdsynergy.com/Encounter/435649",
  "identifier": {
    "value": "435649"
  },
  "display": "Encounter"
},
"performedPeriod": {
  "start": "2022-09-01T00:00:00-07:00",
  "end": "2022-09-02T00:00:00-07:00"
},
"recorder": {
  "identifier": {
    "value": "Doctor, Test"
  },
  "display": "Doctor, Test"
},
"performer": [
  {
    "actor": {
      "display": "Dr A"
    }
  }
],
"location": {
  "identifier": {
    "value": "Hos A"
  },
  "display": "Hos A"
},
"note": [

```

```

    {
      "text": "Test"
    }
  ]
}
},
{
  "link": [
    {
      "url": "https://altheafhir.mdsynergy.com/Procedure/162497"
    }
  ],
  "resource": {
    "resourceType": "Procedure",
    "id": "162497",
    "identifier": [
      {
        "value": "162497"
      }
    ],
    "status": "completed",
    "code": {
      "coding": [
        {
          "code": "E0615",
          "display": "Pacemaker monitr digital/vis"
        }
      ]
    },
  },
  "subject": {
    "reference": "https://altheafhir.mdsynergy.com/Patient/129665",
    "identifier": {
      "value": "129665"
    },
    "display": "Newman, Alice"
  },
  "encounter": {
    "reference": "https://altheafhir.mdsynergy.com/Encounter/435649",
    "identifier": {
      "value": "435649"
    },
    "display": "Encounter"
  },
  "performedPeriod": {

```

```

    "start": "2022-09-01T00:00:00-07:00",
    "end": "2022-09-02T00:00:00-07:00"
  },
  "recorder": {
    "identifier": {
      "value": "Doctor, Test"
    },
    "display": "Doctor, Test"
  },
  "performer": [
    {
      "actor": {
        "display": "Doc b"
      }
    }
  ],
  "location": {
    "identifier": {
      "value": "Hob B"
    },
    "display": "Hob B"
  },
  "note": [
    {
      "text": "Test 2"
    }
  ]
}
]
}
}

```

Provenance

For more information on Provenance profile, visit link [US Core Provenance Profile](#)

Type	Example Request with parameters
get	https://altheafhir.mdsynergy.com/Provenance/24
get	https://altheafhir.mdsynergy.com/Organization/24

get	https://altheafhir.mdsynergy.com/Provenance/1
-----	---

Example Response:

Export CCD with specific patient and specific date

URL : <https://altheaservices.mdsynergy.com/CCD/ExportCCDWithSpecificDateAndSpecificPatient>

Method : POST

Request Parameter :

Export CCD is depends upon the below request/search parameters

Parameter Name	Data Type	Mandatory	Length	Comments
PatientId	numeric	yes		
SpecificDate	string	yes	20	

Example:

Request URL: <https://Uat-mdsipad.mdsynergy.com/CCD/ExportCCDWithSpecificDateAndSpecificPatient>

Request Body:

```
{
  "PatientId": 9258,
  "SpecificDate": "9/12/2019",
}
```

Response Parameter:

Parameter Name	Data Type	Always Available in Response	Length
CCDXMLFileName	string	Yes	100
CCDXMLText	string	No	Max
CCDXMLUrl	string	Yes	500

CCDHTMLFileName	string	Yes	100
CCDHTMLText	string	No	Max
CCDHTMLUrl	string	Yes	500
CCDExportZipUrl	string	Yes	1000

Example:

Request URL:<https://Uat-mdsipad.mdsynergy.com/CCD/ExportCCDWithSpecificDateAndSpecificPatient>

Response JSON:

```
{
  "Result": true,
  "Message": null,
  "aaData": {
    "CCDExportZipUrl":
"https://repositorystoragemds.blob.core.windows.net/uat-container/MessageAttachment/MessageFiles/20191112T034426_9707.zip",
    "CCDExportList":
    [
      {
        "CCDXMLFileName": "1002_6620_20191031125317.xml",
        "CCDXMLText": "<?xml version=\"1.0\"
encoding=\"UTF-8\"?>\n<ClinicalDocument
xmlns:voc=\"urn:hl7-org:v3/voc\" \n .....
"ccdHtml": "<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01//EN\"
\"http://www.w3.org/TR/html4/loose.dtd\">..... ,
"CCDXMLUrl": "https://repositorystoragemds.blob.core.windows.net/uat-container/MessageAttachment/MessageFiles/1002_6620_20191031125317.xml",
"CCDHTMLFileName": "1002_6620_20191031125317.html",
"CCDHTMLText": "",
"CCDHTMLUrl":
"https://repositorystoragemds.blob.core.windows.net/uat-container/MessageAttachment/MessageFiles/1002_6620_20191031125317.html"
      }
    ],
    "ErrorCode": 0,
    "Severity": null,
    "iTotalRecords": 0,
    "iTotalDisplayRecords": 0,
    "InnerException": null
  }
}
```

Export CCD with date range and specific patient

URL : <https://Uat-mdsipad.mdsynergy.com/CCD/ExportCCDWithDateRangeWithPatient>

Method : POST

Request Parameter :

Export CCD is depends upon the below request/search parameters

Parameter Name	Data Type	Mandatory	Length	Comments
PatientId	numeric	Yes		
FromDate	string	Yes	20	
ToDate	string	Yes	20	

Example:

Request URL: <https://altheaservices.mdsynergy.com/CCD/ExportCCDWithDateRangeWithPatient>

Request Body:

```
{
  "PatientId": 9258,
  "FromDate": "10/28/2015",
  "ToDate": "10/1/2019"
}
```

Response Parameter:

Parameter Name	Data Type	Always Available in Response	Length
CCDXMLFileName	string	Yes	100
CCDXMLText	string	No	Max

CCDXMLUrl	string	Yes	1000
CCDHTMLFileName	string	Yes	100
CCDHTMLText	string	No	Max
CCDHTMLUrl	string	Yes	1000
CCDExportZipUrl	string	Yes	1000

Example:

Request URL: <https://uat-mdsipad.mdsynergy.com/CCD/ExportCCDWithDateRangeWithPatient>

Response JSON:

```
{
  "Result": true,
  "Message": null,
  "aaData": {
    "CCDExportZipUrl":
    "https://repositorystoragemds.blob.core.windows.net/uat-container/MessageAttachment/MessageFiles/20191112T034426_9707.zip",
    "CCDExportList":
    [
      {
        "CCDXMLFileName": "1002_6620_20191031125317.xml",
        "CCDXMLText": "<?xml version=\"1.0\"
encoding=\"UTF-8\"?>\n<ClinicalDocument
xmlns:voc=\"urn:h17-org:v3/voc\" \n .....
\"ccdHtml\": \"<!DOCTYPE html PUBLIC \"-//W3C//DTD HTML 4.01//EN\"
\"http://www.w3.org/TR/html4/loose.dtd\">..... ,
\"CCDXMLUrl\": \"https://repositorystoragemds.blob.core.windows.net/uat-container/MessageAttachment/MessageFiles/1002_6620_20191031125317.xml\",
\"CCDHTMLFileName\": \"1002_6620_20191031125317.html\",
\"CCDHTMLText\": \"\",
\"CCDHTMLUrl\":
\"https://repositorystoragemds.blob.core.windows.net/uat-container/MessageAttachment/MessageFiles/1002_6620_20191031125317.html\"
      }
    ],
    "ErrorCode": 0,
    "Severity": null,
    "iTotalRecords": 0,
    "iTotalDisplayRecords": 0,
  }
}
```



```

    "InnerException": null
}

```

Export CCD with date range

URL : <https://altheaservices.mdsynergy.com/CCD/ExportCCDByWithDateRange>

Method : POST

Request Parameter :

Export CCD is depends upon the below request/search parameters

Parameter Name	Data Type	Mandatory	Length	Comments
FromDate	string	Yes	20	
ToDate	string	Yes	20	

Example:

Request URL: <https://altheaservices.mdsynergy.com/CCD/ExportCCDByWithDateRange>

Request Body:

```

{
  "FromDate":"10/28/2013",
  "ToDate":"10/1/2015"
}

```

Response Parameter:

Parameter Name	Data Type	Always Available in Response	Length
CCDXMLFileName	string	Yes	100
CCDXMLText	string	No	Max

CCDXMLUrl	string	Yes	1000
CCDHTMLFileName	string	Yes	100
CCDHTMLText	string	No	Max
CCDHTMLUrl	string	Yes	1000
CCDExportZipUrl	string	Yes	1000

Example:

Request URL: <https://uat-mdsipad.mdsynergy.com/CCD/ExportCCDByWithDateRange>

Response JSON:

```
{
  "Result": true,
  "Message": null,
  "aaData": {
    "CCDExportZipUrl":
    "https://repositorystoragemds.blob.core.windows.net/uat-container/MessageAttachment/MessageFiles/20191112T034426_9707.zip",
    "CCDExportList":
    [
      {
        "CCDXMLFileName": "1002_6620_20191031125317.xml",
        "CCDXMLText": "<?xml version=\"1.0\"
encoding=\"UTF-8\"?>\n<ClinicalDocument
xmlns:voc=\"urn:h17-org:v3/voc\" \n .....
\"ccdHtml\": \"<!DOCTYPE html PUBLIC \"-//W3C//DTD HTML 4.01//EN\"
\"http://www.w3.org/TR/html4/loose.dtd\">..... ,
\"CCDXMLUrl\": \"https://repositorystoragemds.blob.core.windows.net/uat-container/MessageAttachment/MessageFiles/1002_6620_20191031125317.xml\",
\"CCDHTMLFileName\": \"1002_6620_20191031125317.html\",
\"CCDHTMLText\": \"\",
\"CCDHTMLUrl\":
\"https://repositorystoragemds.blob.core.windows.net/uat-container/MessageAttachment/MessageFiles/1002_6620_20191031125317.html\"
      }
    ],
    "ErrorCode": 0,
    "Severity": null,
    "iTotalRecords": 0,
    "iTotalDisplayRecords": 0,
  }
}
```

```

    "InnerException": null
}

```

Export CCD with specific date

URL: <https://altheaservices.mdsynergy.com/ExportCCDWithSpecificDate>

Method : POST

Request Parameter :

Export CCD is depends upon the below request/search parameters

Parameter Name	Data Type	Mandatory	Length	Comments
SpecificDate	string	Yes	20	

Example:

Request URL: <https://Uat-mdsipad.mdsynergy.com/CCD/ExportCCDWithSpecificDate>

Request Body:

```

{
  "SpecificDate": "10/28/2013",
}

```

Response Parameter:

Parameter Name	Data Type	Always Available in Response	Length
CCDXMLFileName	string	Yes	100
CCDXMLText	string	No	Max
CCDXMLUrl	string	Yes	1000

CCDHTMLFileName	string	Yes	100
CCDHTMLText	string	No	Max
CCDHTMLUrl	string	Yes	1000
CCDExportZipUrl	string	Yes	1000

Example:

Request URL: <https://Uat-mdsipad.mdsynergy.com/CCD/ExportCCDWithSpecificDate>

Response JSON:

```
{
  "Result": true,
  "Message": null,
  "aaData": {
    "CCDExportZipUrl":
"https://repositorystoragemds.blob.core.windows.net/uat-container/MessageAttachment/MessageFiles/20191112T034426_9707.zip",
    "CCDExportList":
[
  {
    "CCDXMLFileName": "1002_6620_20191031125317.xml",
    "CCDXMLText": "<?xml version=\"1.0\"
encoding=\"UTF-8\"?>\n<ClinicalDocument
xmlns:voc=\"urn:hl7-org:v3/voc\" \n .....
"ccdHtml": "<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01//EN\"
\"http://www.w3.org/TR/html4/loose.dtd\">..... ,
"CCDXMLUrl": "https://repositorystoragemds.blob.core.windows.net/uat-conta
iner/MessageAttachment/MessageFiles/1002_6620_20191031125317.xml" ,
"CCDHTMLFileName": "1002_6620_20191031125317.html" ,
"CCDHTMLText": "",
"CCDHTMLUrl":
"https://repositorystoragemds.blob.core.windows.net/uat-container/MessageAttachment/MessageFiles/1002_6620_20191031125317.html"
}
],
"ErrorCode": 0,
"Severity": null,
"iTotalRecords": 0,
"iTotalDisplayRecords": 0,
"InnerException": null
}
```

Export Current CCD

URL: <https://altheaservices.mdsynergy.com/CCD/ExportCurrentCCD>

Method : POST

Request Parameter :

Export CCD is depends upon the below request/search parameters

Parameter Name	Data Type	Mandatory	Length	Comments
PatientId	Numeric	Yes		

Example:

Request URL:<https://Uat-mdsipad.mdsynergy.com/CCD/ExportCurrentCCD>

Request Body:

```
{  
    "PatientId":9258  
}
```

Response Parameter:

Parameter Name	Data Type	Always Available in Response	Length
CCDXMLFileName	string	Yes	100
CCDXMLText	string	No	Max
CCDXMLUrl	string	Yes	1000
CCDHTMLFileName	string	Yes	100
CCDHTMLText	string	No	Max

CCDHTMLUrl	string	Yes	1000
CCDEExportZipUrl	string	Yes	1000

Response JSON:

```
{
  "Result": true,
  "Message": null,
  "aaData": {
    "CCDEExportZipUrl":
"https://repositorystoragemds.blob.core.windows.net/uat-container/MessageAttachment/MessageFiles/20191112T034426_9707.zip",
    "CCDEExportList":
[
  {
    "CCDXMLFileName": "1002_6620_20191031125317.xml",
    "CCDXMLText": "<?xml version=\"1.0\"
encoding=\"UTF-8\"?>\n<ClinicalDocument
  xmlns:voc=\"urn:hl7-org:v3/voc\" \n .....
  "ccdHtml": "<!DOCTYPE html PUBLIC \"-//W3C//DTD HTML 4.01//EN\"
\"http://www.w3.org/TR/html4/loose.dtd\">..... ,
    "CCDXMLUrl": "https://repositorystoragemds.blob.core.windows.net/uat-container/MessageAttachment/MessageFiles/1002_6620_20191031125317.xml",
    "CCDHTMLFileName": "1002_6620_20191031125317.html",
    "CCDHTMLText": "",
    "CCDHTMLUrl":
"https://repositorystoragemds.blob.core.windows.net/uat-container/MessageAttachment/MessageFiles/1002_6620_20191031125317.html"
  }
],
  "ErrorCode": 0,
  "Severity": null,
  "iTotalRecords": 0,
  "iTotalDisplayRecords": 0,
  "InnerException": null
}
```

Error codes

HTTP Status Code	Description
200	Valid request
202	Accepted request
403	Bad or invalid request
403	Access Denied
404	Bad or invalid request

Terms and conditions

By accessing or using our APIs, you are agreeing to the Terms of Use (“TOU”) below. If there is a conflict between these terms and additional terms applicable to a given API, the additional terms will control for that conflict. If you use the APIs as an interface to, or in conjunction with, other MD Synergy Solutions, LLC (MDSS) products or services, then the terms for those other products or services also apply. However, these TOU do not alter the terms or conditions of any other agreement you may have with MDSS

SECTION 1: ACCOUNT AND REGISTRATION

a. Accepting the TOU. You may not use the APIs and may not accept the TOU if:

1. (a) you are not of legal age to form a binding contract with MDSS;
2. (b) you are a person barred from using or receiving the APIs under the applicable laws of the United States or other countries including the country in which you are resident or from which you use the APIs;
3. (c) You and/or any of your affiliates and/or personnel are under or subject to a “Corporate Integrity Agreement” or any other restriction or investigation by any payer, government agency or industry self-regulating organization;
4. (d) either you or any of your affiliates, directors or personnel are (i) listed on the General Services Administration’s Excluded Parties List System or (ii) suspended or excluded from participation in any Government Payer Programs;

5. (e) You are not authorized by the entity on whose behalf you will be using the APIs to bind them to these TOU; or

6. (f) there are pending or threatened governmental investigations against You or any of Your affiliates, directors or personnel that may lead to suspension or exclusion from Government Payer Programs or may be cause for listing on the General Services Administration's Excluded Parties List System.

b. Access Sign-up. In order to access certain APIs you may be required to provide certain information (such as identification or contact details) as part of the registration process for the APIs, or as part of your continued use of the APIs. You agree to keep all registration information accurate and current. Only the person registering or the Entity for whom he/she is registering may access and use the APIs.

SECTION 2: USING OUR APIS

a. Users of the APIs. Any party using the APIs (including but not limited to developers) must comply with these TOU.

b. Compliance with Law, Third Party Rights, and Other MDSS TOU of Service. You will comply with all applicable law, regulation, and third party rights (including without limitation laws regarding the import or export of data or software, privacy, and local laws). You will not use the APIs to encourage or promote illegal activity, violation of third party rights, nor to violate any other license and/or use rights with MDSS (or its affiliates).

c. Permitted Access. You will only access (or attempt to access) an API by the means described in the documentation of that API. MDSS may issue a unique client identifier for each App you submit to keep track of which Apps use MDSS APIs. You will not misrepresent or mask either your identity or your API Client's identity when using the APIs or developer accounts.

Suspension and/or revocation of an App's client identifier may be required if there are issues, concerns, or things are otherwise not going well with one of your Apps. If this happens, your App will not be able to communicate with other systems until the concern is resolved and the suspended client identifier is restored. Contact MDSS in question to work on resolving the problem that led to the App's client identifier being suspended. Because it is possible that your app will be suspended, you will clearly inform users of your app that it might not always be available to them and that they should not rely on it in an emergency.

Direct access to MDSS application is not required to develop or test your products. Use of the APIs does not grant you permission to access any MDSS technology nor the MDSS technology used by our customers. And, receipt of direct permission from a licensed MDSS customer to test against their system without the specific, written permission of MDSS, shall be deemed a violation of these TOU.

d. API Limitations. MDSS sets and enforces limits on your use of the APIs (e.g. limiting the number of API requests that you may make or the number of users you may serve), in our sole discretion. You agree to, and will not attempt to circumvent,

such limitations documented with each API. If you would like to use any API beyond these limits, you must obtain MDSS express, written consent (and MDSS may decline such request or condition acceptance on your agreement to additional terms and/or charges for that use).

e. Intellectual Property No transfer or grant of rights under any MDSS Intellectual Property is made or is to be implied by any provision of these Term of Service. You agree not to infringe upon such rights or decompile, reverse engineer, or disassemble any of MDSS products or processes.

f. On-going Communication/Feedback. We may send you certain communications about your use of the APIs. Please review the applicable API documentation for information about opting out of certain types of communication. If you provide feedback or suggestions about our APIs, then we (and those we allow) may use such information without obligation to you.

g. Non-Exclusivity. The TOU are non-exclusive. You acknowledge that MDSS may develop products or services that may compete with the API Clients or any other products or services.

SECTION 3: YOUR API CLIENTS

a. API Clients and Monitoring. THE APIS ARE DESIGNED TO HELP YOU ENHANCE YOUR WEBSITES AND APPLICATIONS ("API CLIENT(S)"). YOU AGREE THAT MDSS MAY MONITOR USE OF THE APIS TO ENSURE QUALITY, IMPROVE MDSS PRODUCTS AND SERVICES, AND VERIFY YOUR COMPLIANCE WITH THE TERMS. MDSS may suspend access to the APIs by you or your API Client without notice if we reasonably believe that you are in violation of the TOU.

b. Security. You will use commercially reasonable efforts to protect user information and/or any other HIPAA related data collected and/or used by your API Client, including Individually Identifiable Health Information ("IIHI"), from unauthorized access or use and will promptly report to your users any unauthorized access or use of such information to the extent required by applicable law, including HIPAA, HITECH and applicable State security regulations associated with patient data.

Your App must not pose a direct risk or otherwise increase the risk of a security breach in any system it connects to. Data exchange between your API Client and MDSS APIs and between your API Client and any other third-party system must be secured with industry standard encryption while in transit, and use authentication and authorization protocols. Your API Client must secure all data on an end-user's device, and enforce inactivity time-outs. You and your API Client must not introduce any code of a destructive nature into any system you or your API Client connect to. Your API Client's client identifier is given to you for your use only for a single API Client. You agree to keep your API Client's client identifier confidential, and will not disclose it to any third party, or use it for any other purpose.

c. Ownership. By using our APIs, you do not acquire ownership of any rights in our APIs or the content that is accessed through our APIs.

d. User Privacy and API Clients. Your API Client must not circumvent the display of any authentication or consent mechanisms from MDSS nor violate applicable federal, state or local law, including HIPAA, HITECH and applicable State privacy regulations, associated with patient and personal data. You will provide and adhere to a privacy policy for your API Client that clearly and accurately describes to users of your API Client, what user information you collect, and how you use and share such information with MDSS and third parties.

e. Sharing. You may not share the data collected by your API Client with any third party without the explicit consent of the user of the API Client and the patient whose data is being shared.

SECTION 4. INDEMNIFICATION, DISCLAIMER OF WARRANTIES, LIMITATIONS ON LIABILITY.

a. Indemnification. You agree to indemnify, hold harmless and defend MDSS, its subsidiaries, their affiliates, and all the employees, officers, directors, contractors and other personnel of any of them from and against any liabilities, damages, losses, costs, fees (including legal fees), and expenses relating to any allegation or third-party legal proceeding to the extent arising from: (i) your misuse or your end user's misuse of the APIs; (ii) your violation or your end user's violation of the TOU; or (iii) any content or data routed into or used with the APIs by you, those acting on your behalf, or your end users.

B. DISCLAIMER OF WARRANTIES. YOUR USE OF ANY API AND/OR PORTAL FROM WHICH MDSS MAKES THE API AVAILABLE IS AT YOUR OWN RISK. THE PORTAL AND ANY API THEREIN, INCLUDING ANY AND ALL INFORMATION, MATERIAL, DATA, GRAPHICS, SERVICES AND CONTENT THEREIN, IS PROVIDED TO YOU ON AN "AS IS", "AS AVAILABLE", AND

"WITH ALL FAULTS" BASIS. MDSS DISCLAIMS ALL EXPRESS AND IMPLIED CONDITIONS, REPRESENTATIONS, AND WARRANTIES OF ANY KIND, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, TITLE, SATISFACTORY QUALITY, FITNESS FOR A PARTICULAR PURPOSE, OR NONINFRINGEMENT. MDSS MAKES NO REPRESENTATIONS, WARRANTIES, CONDITIONS OR GUARANTEES AS TO THE USEFULNESS, QUALITY, SUITABILITY, TRUTH, ACCURACY, RELIABILITY, OR COMPLETENESS OF ITS APIS AND/OR THE PORTAL.

MDS MAKES NO REPRESENTATION, WARRANTY, OR GUARANTEE THAT: (A) THE PORTAL AND ANY API OBTAINED THEREFROM WILL BE UNINTERRUPTED, TIMELY, SECURE, VIRUS OR ERROR FREE; (B) THE CONTENT, MATERIAL, DATA, INFORMATION,

RESULTS, ANSWERS OR RESPONSES THAT MAY BE OBTAINED FROM THE USE OF THE PORTAL WILL BE ACCURATE OR RELIABLE; (C) ANY ERRORS IN THE PORTAL WILL BE CORRECTED OR FIXED; OR (D) THE QUALITY OF ANY INFORMATION, CONTENT OR OTHER MATERIAL OBTAINED FROM THE PORTAL WILL MEET YOUR EXPECTATIONS OR REQUIREMENTS.

YOU ASSUME ALL RISK FROM ANY DAMAGE TO YOUR COMPUTING SYSTEM OR LOSS OF DATA RESULTING FROM USING THE PORTAL AND/OR ANY API PROVIDED BY MDSS, INCLUDING, WITHOUT LIMITATION, ANY DAMAGES RESULTING FROM COMPUTER VIRUSES.

C. LIMITATION OF LIABILITY. TO THE FULLEST EXTENT PERMITTED BY LAW, MDSS (AND ITS AFFILIATES, OFFICERS, DIRECTORS, EMPLOYEES, AGENTS, REPRESENTATIVES, PORTAL SITE OWNER AND PUBLISHER) WILL NOT BE LIABLE FOR ANY DAMAGES WHATSOEVER, INCLUDING, WITHOUT LIMITATION, DIRECT, INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES, OR DAMAGES RESULTING IN LOSS OF BUSINESS, REVENUE, PROFITS, GOODWILL, USE, DATA, ELECTRONIC SUBMISSIONS, OR OTHER ECONOMIC ADVANTAGE, ARISING OUT OF OR IN CONNECTION WITH THE PORTAL AND/OR API, EVEN IF MDSS HAS PREVIOUSLY BEEN ADVISED OF, OR REASONABLY COULD HAVE FORESEEN, THE POSSIBILITY OF SUCH DAMAGES, HOWEVER THEY ARISE, WHETHER IN BREACH OF CONTRACT, OR IN TORT (INCLUDING NEGLIGENCE), OR ANY OTHER LEGAL THEORY, INCLUDING, WITHOUT LIMITATION, DAMAGES DUE TO: (A) THE USE OF OR INABILITY TO USE THE PORTAL AND/OR API; (B) STATEMENTS OR CONDUCT OF ANY THIRD PARTY OR USER ON THE PORTAL, INCLUDING, WITHOUT LIMITATION, ANY DEFAMATORY, OFFENSIVE OR ILLEGAL CONDUCT, OR UNAUTHORIZED ACCESS TO OR ALTERATION OF TRANSMISSION OR DATA, MALICIOUS OR CRIMINAL BEHAVIOR, OR FALSE OR FRAUDULENT TRANSACTIONS; OR © MATERIAL, CONTENT OR INFORMATION YOU MAY OBTAIN, USE, MODIFY, OR DISTRIBUTE.

SECTION 5. HEALTHCARE CONSIDERATIONS.

As an API Client developer operating in the healthcare industry, you are obligated to be familiar with principles for responsible healthcare App development and usage.

Section 6. GENERAL

a. Governing Law and Venue. Except as set forth below: (i) the laws of California, U.S.A., excluding California's conflict of laws rules, will apply to any disputes arising out of or related to the TOU or the APIs and (ii) ALL CLAIMS ARISING OUT OF OR RELATING TO THE TERMS OR THE APIS WILL BE LITIGATED EXCLUSIVELY IN THE FEDERAL OR STATE COURTS OF ORANGE COUNTY, CALIFORNIA, USA, AND YOU AND MDSS CONSENT TO PERSONAL JURISDICTION IN THOSE COURTS. If you are accepting the TOU on behalf of a United States federal government entity, then the following applies instead of the paragraph

above: the laws of the United States of America, excluding its conflict of laws rules, will apply to any disputes arising out of or related to the TOU or the APIs. Solely to the extent permitted by United States Federal law: (i) the laws of the State of California (excluding California's conflict of laws rules) will apply in the absence of applicable federal law; and (ii) If you are accepting the TOU on behalf of a United States city, county, or state government entity, then the following applies instead of the paragraph above: the parties agree to remain silent regarding governing law and venue.

b. Captions. The captions of the paragraphs in these TOU of Service are included only for your convenience and shall not affect the meaning, construction, or effect hereof.

c. Survival. Rights and obligations under these TOU of Service which by their nature should survive will remain in full force and effect after termination or expiration.

d. Waiver. Any waiver or failure of MDSS to exercise promptly any right under these TOU of Use will not create a continuing waiver or any expectation of non-enforcement.

e. Severability. If any provision, clause or part, or the application of a provision, clause or part of these TOU of Service is held by a court of competent jurisdiction to be invalid, illegal, or unenforceable, such provision, clause or part, may be reduced in scope by the court to the extent it deems necessary to render it reasonable and enforceable. The remainder of these TOU of Service shall not be affected.

f. Contact Information. You can send e-mail to MDSS with any questions relating to these TOU of Use at info@mdsynergy.com

g. Modification We may modify the TOU or any portion to, for example, reflect changes to the law or changes to our APIs. You should look at the TOU regularly. We'll post notice of modifications to the TOU within the documentation of each applicable API, to this website, and/or in the MDSS developer's site. Changes will not apply retroactively and will become effective no sooner than 30 days after they are posted. But changes addressing new functions for an API or changes made for legal reasons will be effective immediately. If you do not agree to the modified TOU for an API, you should discontinue your use of that API. Your continued use of the API constitutes your acceptance of the modified TOU.

Bulk Export

Developers that want to bulk export data using the FHIR API will need to be registered. A JWT Token will be generated during registration. Clients can create different groups of selected patients. The bulk export can export data based on selected groups

- URL to poll status:

- <https://altheafhir.mdsynergy.com/bulkstatus/ea55b8a9-e21a-41a3-92e2-3f268c68a8>
14

- FHIR Data download

```
{
"transactionTime": "0001-01-01T00:00:00",
"request": null,
"requiresAccessToken": true,
"output": [
{
"type": "AllergyIntolerance",
"count": 2,
"url": "https://uat-fhir.mdsynergy.com/bulkfile/1.AllergyIntolerance.ndjson"
},
{
"type": "Patient",
"count": 2,
"url": "https://uat-fhir.mdsynergy.com/bulkfile/1.Patient.ndjson"
},
{
"type": "CarePlan",
"count": 4,
"url": "https://uat-fhir.mdsynergy.com/bulkfile/1.CarePlan.ndjson"
},
{
"type": "CareTeam",
"count": 1,
"url": "https://uat-fhir.mdsynergy.com/bulkfile/1.CareTeam.ndjson"
},
{
"type": "Condition",
"count": 5,
"url": "https://uat-fhir.mdsynergy.com/bulkfile/1.Condition.ndjson"
},
{
"type": "Device",
"count": 1,
"url": "https://uat-fhir.mdsynergy.com/bulkfile/1.Device.ndjson"
},
{
"type": "DiagnosticReport",
"count": 17,
"url": "https://uat-fhir.mdsynergy.com/bulkfile/1.DiagnosticReport.ndjson"
},
{

```

```
"type": "DocumentReference",
"count": 10,
"url": "https://uat-fhir.mdsynergy.com/bulkfile/1.DocumentReference.ndjson"
},
{
"type": "Goal",
"count": 2,
"url": "https://uat-fhir.mdsynergy.com/bulkfile/1.Goal.ndjson"
},
{
"type": "Immunization",
"count": 4,
"url": "https://uat-fhir.mdsynergy.com/bulkfile/1.Immunization.ndjson"
},
{
"type": "MedicationRequest",
"count": 9,
"url": "https://uat-fhir.mdsynergy.com/bulkfile/1.MedicationRequest.ndjson"
},
{
"type": "Observation",
"count": 28,
"url": "https://uat-fhir.mdsynergy.com/bulkfile/1.Observation.ndjson"
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{
"type": "Procedure",
"count": 2,
"url": "https://uat-fhir.mdsynergy.com/bulkfile/1.Procedure.ndjson"
},
{
"type": "Encounter",
"count": 4,
"url": "https://uat-fhir.mdsynergy.com/bulkfile/1.Encounter.ndjson"
},
{
"type": "Organization",
"count": 2,
"url": "https://uat-fhir.mdsynergy.com/bulkfile/1.Organization.ndjson"
},
{
"type": "Practitioner",
"count": 4,
"url": "https://uat-fhir.mdsynergy.com/bulkfile/1.Practitioner.ndjson"
},
}
```

```
{
  "type": "Provenance",
  "count": 4,
  "url": "https://uat-fhir.mdsynergy.com/bulkfile/1.Provenance.ndjson"
},
{
  "type": "Location",
  "count": 2,
  "url": "https://uat-fhir.mdsynergy.com/bulkfile/1.Location.ndjson"
},
{
  "type": "Medication",
  "count": 9,
  "url": "https://uat-fhir.mdsynergy.com/bulkfile/1.Medication.ndjson"
}
],
"deleted": null,
"error": null
}
```

Contact Information

If you need any further assistance on integrating the FHIR API please email us at altheasupport@mdsynergy.com