

openapi: 3.0.2

info:

title: Patient Access API

version: 1.0.1

description: |-

The Patient Access API is a RESTful API that conforms to Fast Healthcare Interoperability Resources (FHIR) standards. It can be used by Ascension applications to enable Ascension patients to easily access their encounter, claim, and clinical information. Using the Patient Access API, queries can be sent to Payer Data Exchange (PDEX) and C4BB Servers to retrieve and update patient health information. In this API Specification, you will find a complete list of FHIR profiles, RESTful operations, and search parameters supported by PDEX and C4BB Servers. This list can be used to access data based on local use cases and other contextual requirements.

See the [Ascension API Developer Portal Terms of Use](<https://developer.ascension.org/terms>) policy then continue reading to learn more about the Patient Access API.

External Resources:

- See the [Creative Commons Zero v1.0 Universal](<http://spdx.org/licenses/CC0-1.0.html>) page to learn more about the license.

- See the [FHIR Capability Statement](<http://hl7.org/fhir/us/core/CapabilityStatement/pdex-server>) to learn about the expected capabilities of the PDEX server that is responsible for providing responses to queries submitted by PDEX requesters.

contact:

name: HealthShare Team

email: interoptapcsupport@ascension.org

servers:

- description: The base URL for the Production server. This URL uses live data.

url: <https://api.ascension.org/csp/healthshare/hsods/fhir/r4>

- description: The base URL for the QA or DEV server. This URL uses test data.

url: <https://test-api.ascension.org/csp/healthshare/hsods/fhir/r4/>

security:

- OAuth 2.0:

-

Dy42bGciOiJSUzI1NiJ9.eyJqdGkiOiJhM2YwNjA5ZC1lZTlxLTQ1YjAtOGQyMi04MTQ0MTYxNjNhNTMiLCJzAJpdGUiLCJhcHB3ZhbHMubWUiLCJvYXV0aC5hcHB3ZhbHMxSwiY2xpZW50X2lkjoiZWRnZWNSaSlm

paths:

/metadata:

get:

tags:

- FHIR Capability Statement

summary: Retrieve the Fast Healthcare Interoperability Resources (FHIR) server's Capability

Statement.

description: |-

Retrieves the FHIR server's Capability Statement that describes the services provided by the server.

Sample Request

The following example request retrieves the FHIR server's Capability Statement from the PDEX server:


```
GET `https://api.ascension.org/csp/healthshare/hsods/fhir/r4/metadata`<br><br>
```

Sample Response

...

```
{
  "resourceType": "CapabilityStatement",
  "id": "AHPPatientAccessFHIRAPI",
  "meta": {
    "lastUpdated": "2022-08-17T17:08:36Z",
    "versionId": "14"
  },
  "url": "https://dev-api.ascension.org/csp/healthshare/hsods/fhir/r4/metadata",
  "version": "1",
  "name": "Ascension Healthcare Patient Access FHIR Server CapabilityStatement",
  "status": "active",
  "experimental": false,
  "date": "2021-10-13",
  "publisher": "Ascension Healthcare",
  "kind": "instance",
  "software": {
    "name": "InterSystems FHIR Server",
    "version": "2021.1"
  },
  "implementation": {
    "description": "Ascension Healthcare Patient Access FHIR Server",
    "url": "https://dev-api.ascension.org/csp/healthshare/hsods/fhir/r4"
  },
  "fhirVersion": "4.0.1",
  "format": [
    "xml",
    "json"
  ],
  "rest": [{
    "mode": "server",
    "security": {
      "cors": true,
      "extension": [{
```

```
"url": "http://fhir-registry.smarthealthit.org/StructureDefinition/oauth-uris",
"extension": [{
  "url": "authorize",
  "valueUri": "https://test-api.ascension.org/smart-on-fhir/authorize"
},
{
  "url": "token",
  "valueUri": "https://test-api.ascension.org/smart-on-fhir/token"
}
]
}],
"service": [{
  "coding": [{
    "system": "http://hl7.org/fhir/restful-security-service",
    "code": "SMART-on-FHIR",
    "display": "SMART-on-FHIR"
  }]
}]
},
"resource": [{
  "type": "AllergyIntolerance",
  "profile": "http://hl7.org/fhir/us/core/StructureDefinition/us-core-allergyintolerance",
  "versioning": "versioned",
  "readHistory": false,
  "updateCreate": false,
  "conditionalCreate": false,
  "conditionalRead": "not-supported",
  "conditionalUpdate": false,
  "conditionalDelete": "not-supported",
  "interaction": [{
    "code": "read"
  },
  {
    "code": "search-type"
  }
]
},
"searchParam": [{
  "name": "asserter",
  "type": "reference"
},
{
  "name": "category",
  "type": "token"
}
```

```
},  
{  
  "name": "clinical-status",  
  "type": "token"  
},  
{  
  "name": "code",  
  "type": "token"  
},  
{  
  "name": "criticality",  
  "type": "token"  
},  
{  
  "name": "date",  
  "type": "date"  
},  
{  
  "name": "identifier",  
  "type": "token"  
},  
{  
  "name": "last-date",  
  "type": "date"  
},  
{  
  "name": "manifestation",  
  "type": "token"  
},  
{  
  "name": "onset",  
  "type": "date"  
},  
{  
  "name": "patient",  
  "type": "reference"  
},  
{  
  "name": "recorder",  
  "type": "reference"  
},  
{  
  "name": "route",
```

```
      "type": "token"
    },
    {
      "name": "severity",
      "type": "token"
    },
    {
      "name": "type",
      "type": "token"
    },
    {
      "name": "verification-status",
      "type": "token"
    }
  ],
  "searchInclude": [
    "AllergyIntolerance.asserter",
    "AllergyIntolerance.patient",
    "AllergyIntolerance.recorder"
  ],
  "searchRevInclude": [
    "ClinicalImpression.problem",
    "ActivityDefinition.composed-of",
    "ActivityDefinition.depends-on",
    "ActivityDefinition.derived-from",
    "ActivityDefinition.predecessor",
    "ActivityDefinition.successor",
    "Appointment.supporting-info",
    "AuditEvent.entity",
    "Basic.subject",
    "ClinicalImpression.supporting-info",
    "Communication.based-on",
    "Communication.part-of",
    "CommunicationRequest.based-on",
    "Composition.entry",
    "Composition.subject",
    "Condition.evidence-detail",
    "Consent.data",
    "Contract.subject",
    "DetectedIssue.implicated",
    "DeviceRequest.based-on",
    "DeviceRequest.prior-request",
    "DocumentManifest.item",
```

"DocumentManifest.related-ref",
"DocumentReference.related",
"EventDefinition.composed-of",
"EventDefinition.depends-on",
"EventDefinition.derived-from",
"EventDefinition.predecessor",
"EventDefinition.successor",
"Evidence.composed-of",
"Evidence.depends-on",
"Evidence.derived-from",
"Evidence.predecessor",
"Evidence.successor",
"EvidenceVariable.composed-of",
"EvidenceVariable.depends-on",
"EvidenceVariable.derived-from",
"EvidenceVariable.predecessor",
"EvidenceVariable.successor",
"ImmunizationRecommendation.information",
"ImplementationGuide.resource",
"Library.composed-of",
"Library.depends-on",
"Library.derived-from",
"Library.predecessor",
"Library.successor",
"Linkage.item",
"Linkage.source",
"List.item",
"Measure.composed-of",
"Measure.depends-on",
"Measure.derived-from",
"Measure.predecessor",
"Measure.successor",
"MeasureReport.evaluated-resource",
"MessageHeader.focus",
"Observation.focus",
"PaymentNotice.request",
"PaymentNotice.response",
"PlanDefinition.composed-of",
"PlanDefinition.depends-on",
"PlanDefinition.derived-from",
"PlanDefinition.predecessor",
"PlanDefinition.successor",
"Provenance.entity",

```
"Provenance.target",  
"QuestionnaireResponse.subject",  
"ResearchDefinition.composed-of",  
"ResearchDefinition.depends-on",  
"ResearchDefinition.derived-from",  
"ResearchDefinition.predecessor",  
"ResearchDefinition.successor",  
"ResearchElementDefinition.composed-of",  
"ResearchElementDefinition.depends-on",  
"ResearchElementDefinition.derived-from",  
"ResearchElementDefinition.predecessor",  
"ResearchElementDefinition.successor",  
"Task.based-on",  
"Task.focus",  
"Task.subject",  
"VerificationResult.target"
```

```
    ]  
  }  
}  
...
```

operationId: metadata

responses:

'200':

description: The capability statement

'400':

description: Bad Request, invalid or bad URL request

'403':

description: Forbidden Request, not allowable with the current permissions

'404':

description: Data Not Found, invalid or bad URL request

content:

application/json:

schema: {

}

/Condition:

get:

tags:

- All Condition Resources

summary: Retrieve all Condition resources.

description: |-

Retrieves all Condition resources that meet the parameters specified in the

request.

****Sample Request****

The following example retrieves all Condition resources that match the specified parameters:

GET

`https://test-api.ascension.org/csp/healthshare/hsods/fhir/r4/Condition?parameter=[]`

****Sample Request Body****

...

```
{
  "category": [code],
  "clinicalStatus": [code],
  "patient": John Doe,
  "onsetDate": [date],
  "code": [code],
  "search(parameters are x-www-form-urlencoded)"
}
```

...

****Sample Response****

...

```
{
  "resourceType": "Bundle",
  "id": "e2479596-cf18-11ed-8c99-0050569bdc38",
  "type": "searchset",
  "timestamp": "2023-03-30T16:35:30Z",
  "total": 2,
  "link": [{
    "relation": "self",
    "url":
```

"https://andc1lapp0301.ds.sjhs.com/csp/healthshare/hsods/fhir/r4/Patient/100008316/Condition"

```
}],
```

```
"entry": [{
```

```
  "fullUrl":
```

"https://andc1lapp0301.ds.sjhs.com/csp/healthshare/hsods/fhir/r4/Condition/524",

```
  "resource": {
```

```
    "resourceType": "Condition",
```

```
    "category": [{
```

```
      "coding": [{
```

```
        "code": "encounter-diagnosis",
```

```
        "display": "Encounter Diagnosis",
```

```
        "system": "http://terminology.hl7.org/CodeSystem/condition-category"
```

```
      ]},
```

```
      "text": "Encounter Diagnosis"
```



```
    },
    {
      "coding": [{
        "code": "secondary",
        "display": "Secondary",
        "system":
"http://hl7.org/fhir/us/carin-bb/CodeSystem/C4BBClaimDiagnosisType"
      }]
    }
  ],
  "clinicalStatus": {
    "coding": [{
      "code": "active",
      "system": "http://terminology.hl7.org/CodeSystem/condition-clinical"
    }]
  },
  "code": {
    "coding": [{
      "code": "F1020",
      "display": "F1020",
      "system": "http://hl7.org/fhir/sid/icd-10"
    }]
  },
  "encounter": {
    "reference": "Encounter/523"
  },
  "extension": [{
    "url": "http://intersystems.com/fhir/extn/sda3/lib/diagnosis-encounter-number",
    "valueString": "22202M000700"
  }],
  "subject": {
    "reference": "Patient/100008316"
  },
  "id": "524",
  "meta": {
    "lastUpdated": "2022-08-08T21:09:30Z",
    "versionId": "1"
  }
},
"search": {
  "mode": "match"
}
},
```

```
{
  "fullUrl":
  "https://andc1lapp0301.ds.sjhs.com/csp/healthshare/hsods/fhir/r4/Condition/525",
  "resource": {
    "resourceType": "Condition",
    "category": [{
      "coding": [{
        "code": "encounter-diagnosis",
        "display": "Encounter Diagnosis",
        "system": "http://terminology.hl7.org/CodeSystem/condition-category"
      }],
      "text": "Encounter Diagnosis"
    },
    {
      "coding": [{
        "code": "secondary",
        "display": "Secondary",
        "system":
"http://hl7.org/fhir/us/carin-bb/CodeSystem/C4BBClaimDiagnosisType"
      }
    ]
  }
],
  "clinicalStatus": {
    "coding": [{
      "code": "active",
      "system": "http://terminology.hl7.org/CodeSystem/condition-clinical"
    }
  ]
},
  "code": {
    "coding": [{
      "code": "I4891",
      "display": "I4891",
      "system": "http://hl7.org/fhir/sid/icd-10"
    }
  ]
},
  "encounter": {
    "reference": "Encounter/523"
  },
  "extension": [{
    "url": "http://intersystems.com/fhir/extn/sda3/lib/diagnosis-encounter-number",
    "valueString": "22202M000700"
  }
],
  "subject": {
```

```
      "reference": "Patient/100008316"  
    },  
    "id": "525",  
    "meta": {  
      "lastUpdated": "2022-08-08T21:09:30Z",  
      "versionId": "1"  
    }  
  },  
  "search": {  
    "mode": "match"  
  }  
}  
]  
}  
...
```

operationId: searchCondition

responses:

'200':

description: Valid Request

parameters:

- name: category

in: query

schema:

type: string

description: |-

The category of the condition.

****NOTE**:** This US Core SearchParameter definition extends the usage context of the
capabilitystateme
nt-expectation

extension to formally express implementer expectations for the following elements:<br
</>

- multipleAnd

- multipleOr

- modifier

- comparator

- chain

required: false

allowEmptyValue: true

- name: clinical-status

in: query

schema:

```
    type: string
  description: |-
    The clinical status of a condition.<br /><br />
    **NOTE**: This US Core SearchParameter definition extends the usage context of the
    <a
href="http://hl7.org/fhir/R4/extension-capabilitystatement-expectation.html">capabilitystatement-expectation</a>
    extension to formally express implementer expectations for the following elements:<br
/>
    - multipleAnd<br />
    - multipleOr<br />
    - modifier<br />
    - comparator<br />
    - chain<br />
  required: false
  allowEmptyValue: true

- name: patient
  in: query
  schema:
    type: string
  description: |-
    The name of the person who has the condition.<br /><br />
    **NOTE**: This US Core SearchParameter definition extends the usage context of
  the
  <a
href="http://hl7.org/fhir/R4/extension-capabilitystatement-expectation.html">capabilitystatement-expectation</a>
  extension to formally express implementer expectations for the following elements:<br
/>
  - multipleAnd<br />
  - multipleOr<br />
  - modifier<br />
  - comparator<br />
  - chain<br />
  required: false
  allowEmptyValue: true

- name: onset-date
  in: query
  schema:
    type: string
    pattern:
```

```
'([0-9]([0-9]([0-9][1-9]|1-9)0)|[1-9]00)|[1-9]000)(-(0[1-9]|1[0-2])|-(0[1-9]|1-2|[0-9]|3[0-1]))(T([01][0-9]|2[0-3]):[0-5][0-9]:([0-5][0-9]|60)(\.[0-9]+)?(Z(\+|-)(([0-9]|1[0-3]):[0-5][0-9]|14:00)))?)?)'
```

description: |-

The date of related onsets (i.e. dateTime and period).

****NOTE**:** This US Core SearchParameter definition extends the usage context of the

capabilitystatement-expectation

extension to formally express implementer expectations for the following elements:

- multipleAnd

- multipleOr

- modifier

- comparator

- chain

- name: code

in: query

schema:

type: string

description: |-

The code for the condition.

****NOTE**:** This US Core SearchParameter definition extends the usage context of the

capabilitystatement-expectation

extension to formally express implementer expectations for the following elements:

- multipleAnd

- multipleOr

- modifier

- comparator

- chain

required: false

allowEmptyValue: true

'/Condition/{rid}':

get:

tags:

- Status of Condition Resource by Resource ID

summary: Retrieves the status of a condition resource.

description: |-

Retrieves the status of the condition resource associated with the specified resource

ID.

****Sample Request****

The following example retrieves the status of the condition resource that matches the specified resource ID:

GET `https://test-api.ascension.org/csp/healthshare/hsods/fhir/r4/condition/{rid}`

****Sample Response****

...

resourceType: Condition

category:

- coding:

- code: encounter-diagnosis

display: Encounter Diagnosis

system: 'http://terminology.hl7.org/CodeSystem/condition-category'

text: Encounter Diagnosis

- coding:

- code: secondary

display: Secondary

system: 'http://hl7.org/fhir/us/caribb/CodeSystem/C4BBClaimDiagnosisType'

clinicalStatus:

coding:

- code: active

system: 'http://terminology.hl7.org/CodeSystem/condition-clinical'

code:

coding:

- code: F1020

display: F1020

system: 'http://hl7.org/fhir/sid/icd-10'

encounter:

reference: Encounter/523

extension:

- url: 'http://intersystems.com/fhir/extn/sda3/lib/diagnosis-encounter-number'

valueString: 22202M000700

subject:

reference: Patient/100008316

id: '524'

meta:

lastUpdated: '2022-08-08T21:09:30Z'

versionId: '1'

...

operationId: readCondition

responses:

'200':

description: Valid Request

content:

application/json:

```
schema: {  
  }
```

parameters:

- name: rid

in: path

description: A unique identifier for the Condition resource (Resource.id).

required: true

allowEmptyValue: false

style: simple

schema:

type: string

example: 524

/Coverage:

get:

tags:

- All Coverage Resources

summary: Retrieve coverage resources by Patient ID.

description: |-

Retrieves all coverage resources for the Patient ID specified in the request. The Coverage reference resource is returned with data that is effective as of the claim's date of service. The payer decides whether to return data that is effective as of the claim's date of service or current data for the Patient, Organization, Practitioner, and Organization Reference resources.

Sample Request

The following example request retrieves all coverage resources that match the specified Patient ID:

GET

`https://test-api.ascension.org/csp/healthshare/hsods/fhir/r4/Patient/PatientID/Coverage/`
>

Sample Response

...

```
{  
  "resourceType": "Coverage",  
  "beneficiary": {  
    "reference": "Patient/100008316"  
  },  
  "payor": [{  
    "reference": "Organization/422"  
  }],  
  "status": "active",  
  "id": "537",
```

```
"meta": {  
  "lastUpdated": "2022-08-08T21:09:31Z",  
  "versionId": "1"  
}  
}  
...
```

operationId: searchCoverage

parameters:

- name: _id

in: query

description: A unique identifier for the coverage resource.

required: false

allowEmptyValue: true

schema:

type: string

responses:

"200":

description: Valid Request

content:

application/json:

schema: {

}

'/Coverage/{rid}':

get:

tags:

- Status of Coverage Resource by Resource ID

summary: Retrieve the status of a Coverage resource by ID.

description: |-

Retrieves the status of the coverage resource for the resource ID specified in the request.

Sample Request

The following example request retrieves the status of the Coverage resource that matches the specified resource ID:

GET `https://test-api.ascension.org/csp/healthshare/hsods/fhir/r4/coverage/{rid}`

Sample Request Body

...

{

"rid": ""

}

...

Sample Response

...


```
{
  "resourceType": "Coverage",
  "beneficiary": {
    "reference": "Patient/100008316"
  },
  "payor": [{
    "reference": "Organization/422"
  }],
  "status": "active",
  "id": "537",
  "meta": {
    "lastUpdated": "2022-08-08T21:09:31Z",
    "versionId": "1"
  }
}
...
```

operationId: readCoverage

parameters:

- name: rid

in: path

description: The unique identifier for the coverage resource (Resource.id).

required: true

allowEmptyValue: false

style: simple

schema:

type: string

example: 537

responses:

'200':

description: Valid Request

content:

application/json:

schema: {

}

'/Encounter':

get:

responses:

'200':

description: Valid Request

content:

application/json:

schema: {

```
    }  
tags:  
  - All Encounter Resources by Patient ID  
summary: Retrieve encounter resources by Patient ID.  
description: |-  
  Retrieves all encounter resources for the Patient ID specified in the request.<br><br>  
  **Sample Request**<br><br>  
  The following example request retrieves all encounter resources that match the specified  
Patient ID:<br><br>  
  GET  
`https://test-api.ascension.org/csp/healthshare/hsods/fhir/r4/Patient/PatientID/encounter/<br>  
><br>  
  **Sample Response**<br><br>  
  ...  
  {  
    "resourceType": "Bundle",  
    "id": "ade72eb0-cf18-11ed-9bf2-0050569bdc38",  
    "type": "searchset",  
    "timestamp": "2023-03-30T16:34:02Z",  
    "total": 2,  
    "link": [{  
      "relation": "self",  
      "url":  
"https://andc1lapp0301.ds.sjhs.com/csp/healthshare/hsods/fhir/r4/Patient/100008316/Encou  
nter"  
    }],  
    "entry": [{  
      "fullUrl":  
"https://andc1lapp0301.ds.sjhs.com/csp/healthshare/hsods/fhir/r4/Encounter/521",  
      "resource": {  
        "resourceType": "Encounter",  
        "class": {  
          "code": "AMB",  
          "system": "http://terminology.hl7.org/CodeSystem/v3-ActCode"  
        },  
        "extension": [{  
          "url": "http://intersystems.com/fhir/extn/sda3/lib/encounter-encounter-m-r-n",  
          "valueString": "77014148400"  
        }],  
      },  
    }],  
  },  
}
```

```
{
  "url": "http://intersystems.com/fhir/extn/sda3/lib/encounter-encounter-m-r-n-a-a",
  "valueString": "ACHP"
},
{
  "url": "http://intersystems.com/fhir/extn/sda3/lib/encounter-to-time",
  "valueDateTime": "2022-01-20T00:00:00-05:00"
}
],
"identifier": [{
  "type": {
    "text": "EncounterNumber"
  },
  "use": "official",
  "value": "22203M000100"
}],
"period": {
  "end": "2022-01-20T00:00:00-05:00",
  "start": "2022-01-20T00:00:00-05:00"
},
"serviceProvider": {
  "reference": "Organization/491"
},
"status": "finished",
"subject": {
  "reference": "Patient/100008316"
},
"meta": {
  "lastUpdated": "2022-08-08T21:09:30Z",
  "versionId": "1"
}
},
"search": {
```

```
    "mode": "match"
  }
},
{
  "fullUrl":
"http://andc1lapp0301.ds.sjhs.com/csp/healthshare/hsods/fhir/r4/Encounter/522",
  "resource": {
    "resourceType": "Encounter",
    "class": {
      "code": "AMB",
      "system": "http://terminology.hl7.org/CodeSystem/v3-ActCode"
    },
    "extension": [{
      "url": "http://intersystems.com/fhir/extn/sda3/lib/encounter-encounter-m-r-n",
      "valueString": "77014148400"
    },
    {
      "url": "http://intersystems.com/fhir/extn/sda3/lib/encounter-encounter-m-r-n-a-a",
      "valueString": "ACHP"
    },
    {
      "url": "http://intersystems.com/fhir/extn/sda3/lib/encounter-to-time",
      "valueDateTime": "2022-06-20T00:00:00-04:00"
    }
  ],
  "identifier": [{
    "type": {
      "text": "EncounterNumber"
    },
    "use": "official",
    "value": "22178M000200"
  }
],
  "period": {
    "end": "2022-06-20T00:00:00-04:00",
    "start": "2022-06-20T00:00:00-04:00"
  }
}
```

```
    },  
    "serviceProvider": {  
      "reference": "Organization/491"  
    },  
    },  
    "status": "finished",  
    "subject": {  
      "reference": "Patient/100008316"  
    },  
    },  
    "id": "522",  
    "meta": {  
      "lastUpdated": "2022-08-08T21:09:30Z",  
      "versionId": "1"  
    },  
  }  
  
  },  
  "search": {  
    "mode": "match"  
  }  
  
  }  
  ]  
  }  
  ...
```

operationId: searchEncounter

parameters:

- name: id

in: query

description: |-

A unique identifier for an encounter resource.

****NOTE**:** This US Core SearchParameter definition extends the usage context of the
capabilitystatement-expectation

extension to formally express implementer expectations for the following elements:

- multipleAnd

- multipleOr

- modifier

- comparator

- chain

required: false

allowEmptyValue: true

schema:

- type: string

- name: class

- in: query

- description: |-

- The classification of an encounter resource.

- **NOTE**:** This US Core SearchParameter definition extends the usage context of the capabilitystatement-expectation extension to formally express implementer expectations for the following elements:

- multipleAnd

- multipleOr

- modifier

- comparator

- chain

required: false

allowEmptyValue: true

schema:

- type: string

example: current

- name: date

- in: query

- description: |-

- A date within the time frame of the encounter.

- **NOTE**:** This US Core SearchParameter definition extends the usage context of the capabilitystatement-expectation extension to formally express implementer expectations for the following elements:

- multipleAnd

- multipleOr

- modifier

- comparator

- chain

required: false

allowEmptyValue: true

schema:

- type: string

pattern:

```
'([0-9]([0-9]([0-9][1-9]|[1-9]0)|[1-9]00)|[1-9]000)(-(0[1-9]|1[0-2])|-(0[1-9]|1[1-2][0-9]|3[0-1]))(T([01][0-9]|2[0-3]):[0-5][0-9]:([0-5][0-9]|60)(\.[0-9]+)?(Z|(\+|-)((0[0-9]|1[0-3]):[0-5][0-9]|14:00)))?)?)?'
```

- name: identifier

in: query

description: |

Unique identifiers for the encounter.

****NOTE**:** This US Core SearchParameter definition extends the usage context of capabilitystatement-expectation extension to formally express implementer expectations for the following elements:

- multipleAnd

- multipleOr

- modifier

- comparator

- chain

required: false

allowEmptyValue: true

schema:

type: string

- name: patient

in: query

description: |-

The name of the person or group that was present during the encounter.

****NOTE**:** This US Core SearchParameter definition extends the usage context of the capabilitystatement-expectation extension to formally express implementer expectations for the following elements:

- multipleAnd

- multipleOr

- modifier

- comparator

- chain

required: false

allowEmptyValue: true

schema:

type: string

example: Jane Doe

- name: status

in: query

description: |-

The status of an encounter.

****NOTE****: This US Core SearchParameter definition extends the usage context of capabilitystatement-expectation extension to formally express implementer expectations for the following elements:

- multipleAnd

- multipleOr

- modifier

- comparator

- chain

required: false

allowEmptyValue: true

schema:

type: string

enum:

- planned
- In-progress
- onhold
- completed
- cancelled
- entered-in-error
- unknown

example: planned

- name: type

in: query

description: |-

The kind of encounter.

****NOTE****: This US Core SearchParameter definition extends the usage context of the capabilitystatement-expectation extension to formally express implementer expectations for the following elements:

- multipleAnd

- multipleOr

- modifier

- comparator

- chain

required: false

allowEmptyValue: true

schema:

type: string

- name: summary

in: query

description: Requests a designated subset of an encounter resource.

required: false

allowEmptyValue: true

style: form

schema:

type: string

enum:

- true

- text

- data

- count

- false

example: true

- name: format

in: query

description: Specifies the alternative response formats by their MIME-types. If a client is having access issues, the header is accepted.

required: false

allowEmptyValue: true

style: form

schema:

type: string

format: mime-type

- name: pretty

in: query

description: Requested format for responses from the server. The pretty format ensures that responses are readable by users.

required: false

allowEmptyValue: true

style: form

schema:

type: boolean

enum:

- true

- false

example: true

- name: elements

in: query

description: Requests a collection of elements for an encounter resource.
required: false
allowEmptyValue: true
style: form
explode: false
schema:
 type: array
 format: string
 items:
 format: string
example: true

'/Encounter/{rid}':

get:

tags:

- Status of Encounter Resource by Resource ID

summary: Retrieve the status of an encounter resource by Resource ID.

description: |-

Retrieves the status of an encounter resource for the Resource ID specified in the request.

Sample Request

The following example request retrieves the status of the encounter resource that matches the specified Resource ID:

GET

`https://test-api.ascension.org/csp/healthshare/hsods/fhir/r4/encounter/{rid}`

Sample Response

The following Sample Response includes as many variabilities as possible such as the number of items that can be included in the response:

...

```
{  
  "resourceType": "Encounter",  
  "class": {  
    "code": "AMB",  
    "system": "http://terminology.hl7.org/CodeSystem/v3-ActionCode"
```

```
},
```

```
"extension": [{  
  "url": "http://intersystems.com/fhir/extn/sda3/lib/encounter-encounter-m-r-n",  
  "valueString": "77014148400"
```

```
},
```

```
{  
  "url": "http://intersystems.com/fhir/extn/sda3/lib/encounter-encounter-m-r-n-a-a",
```

```
"valueString": "ACHP"

},
{
  "url": "http://intersystems.com/fhir/extn/sda3/lib/encounter-to-time",
  "valueDateTime": "2022-06-20T00:00:00-04:00"

}
],
"identifier": [{
  "type": {
    "text": "EncounterNumber"

  },
  "use": "official",
  "value": "22202M000700"

}],
"period": {
  "end": "2022-06-20T00:00:00-04:00",
  "start": "2022-06-20T00:00:00-04:00"

},
"serviceProvider": {
  "reference": "Organization/491"

},
"status": "finished",
"subject": {
  "reference": "Patient/100008316"

},

},
"id": "523",
"meta": {
  "lastUpdated": "2022-08-08T21:09:30Z",
  "versionId": "1"

}

}
}
...
```

operationId: readEncounter

parameters:

- name: rid

in: path
description: A unique identifier for an encounter resource (Resource.id).

required: true
allowEmptyValue: false
style: simple
schema:
 type: string
example: 523

responses:

'200':

description: Valid Request

headers:

ETag:

description: Version from Resource.meta.version as a weak ETag.

schema:

 type: string

content:

 application/json:

 schema: {

 }

/ExplanationOfBenefit:

get:

responses:

'200':

description: Valid Request

content:

 application/json:

 schema: {

 }

tags:

- All Explanation of Benefit Resources by Patient ID

summary: Retrieve all Explanation of Benefit resources by Patient ID.

description: |-

Retrieves all Explanation of Benefit resources for the Patient ID specified in the request. The Explanation of Benefits resource is the focal Consumer-Directed Payer Data Exchange (CDPDE) Resource. The following reference resources are defined directly and indirectly in the Explanation of Benefits:

- Coverage

- Patient

- Organization (Payer ID)

- Practitioner
- Organization (Facility)

****NOTE****: All reference resources within the Explanation of Benefits require the meta.lastUpdated flag be supported. Payers provide the most recent modification or creation date (whichever comes last) for data in their system of record. Applications are required to use meta.lastUpdated values to determine if the data being returned is current or effective as of the claim's date of service.

****Sample Request****

The following example request retrieves all Explanation of Benefit resources that match the specified Patient ID:

GET

`https://test-api.ascension.org/csp/healthshare/hsods/fhir/r4/Patient/PatientID/explanationofbenefit`

****Sample Request Body****

...

```
{  
  "id": "[EOB ID]",  
  "patient": "[PatientID]",  
  "lastUpdated": "[Date of Choice]",  
  "type": "[Code for type]",  
  "identifier": "[Code for identifier]",  
  "service - date": "[Date of Choice]"  
}
```

...

****Sample Response****

...

```
{  
  "resourceType": "Bundle",  
  "id": "77943c66-cf1a-11ed-91a3-0050569bdc38",  
  "type": "searchset",  
  "timestamp": "2023-03-30T16:46:50Z",  
  "total": 2,  
  "link": [{  
    "relation": "self",  
    "url":
```

"https://andc1lapp0301.ds.sjhs.com/csp/healthshare/hsods/fhir/r4/Patient/100008316/ExplanationOfBenefit"

```
  },
```

```
  "entry": [{  
    "fullUrl":
```

"https://andc1lapp0301.ds.sjhs.com/csp/healthshare/hsods/fhir/r4/ExplanationOfBenefit/531",

```
"resource": {
  "resourceType": "ExplanationOfBenefit",
  "billablePeriod": {
    "end": "2022-06-20T00:00:00-04:00",
    "start": "2022-06-20T00:00:00-04:00"
  },
  "careTeam": [{
    "provider": {
      "reference": "Practitioner/528"
    },
    "role": {
      "coding": [{
        "code": "performing",
        "display": "Performing provider",
        "system": "http://hl7.org/fhir/us/carin-bb/CodeSystem/C4BBClaimCareTeamRole"
      }]
    }
  },
  "sequence": 1
},
{
  "provider": {
    "reference": "Practitioner/529"
  },
  "role": {
    "coding": [{
      "code": "performing",
      "display": "Performing provider",
      "system": "http://hl7.org/fhir/us/carin-bb/CodeSystem/C4BBClaimCareTeamRole"
    }]
  },
  "sequence": 2
}
],
"created": "2022-07-26T00:00:00-04:00",
```

```
"diagnosis": [{
  "diagnosisCodeableConcept": {
    "coding": [{
      "code": "R609",
      "display": "R609",
      "system": "http://hl7.org/fhir/sid/icd-10"
    }
  ]
},
  "sequence": 1,
  "type": [{
    "coding": [{
      "code": "principal",
      "display": "Principal Diagnosis",
      "system": "http://terminology.hl7.org/2.1.0/CodeSystem-ex-diagnosistype"
    }
  ]
}
],
{
  "diagnosisCodeableConcept": {
    "coding": [{
      "code": "F1020",
      "display": "F1020",
      "system": "http://hl7.org/fhir/sid/icd-10"
    }
  ]
},
  "sequence": 2,
  "type": [{
    "coding": [{
      "code": "secondary",
      "display": "Secondary",
      "system": "http://hl7.org/fhir/us/carin-bb/CodeSystem/C4BBClaimDiagnosisType"
    }
  ]
}
}
```

```
  },
  {
    "diagnosisCodeableConcept": {
      "coding": [{
        "code": "I4891",
        "display": "I4891",
        "system": "http://hl7.org/fhir/sid/icd-10"
      }]
    },
    "sequence": 3,
    "type": [{
      "coding": [{
        "code": "secondary",
        "display": "Secondary",
        "system": "http://hl7.org/fhir/us/caribb/CodeSystem/C4BBClaimDiagnosisType"
      }]
    }]
  }
},
{
  "diagnosisCodeableConcept": {
    "coding": [{
      "code": "Z720",
      "display": "Z720",
      "system": "http://hl7.org/fhir/sid/icd-10"
    }]
  },
  "sequence": 4,
  "type": [{
    "coding": [{
      "code": "secondary",
      "display": "Secondary",
      "system": "http://hl7.org/fhir/us/caribb/CodeSystem/C4BBClaimDiagnosisType"
    }]
  }]
}
```



```
    }
  ],
  "extension": [{
    "url":
"http://intersystems.com/fhir/extn/sda3/lib/medical-explanation-of-benefit-context",
    "valueString": "professional-nonclinician"

  },
  {
    "url":
"http://intersystems.com/fhir/extn/sda3/lib/medical-explanation-of-benefit-encounter-number",
    "valueString": "22202M000700"

  },
  {
    "url":
"http://intersystems.com/fhir/extn/sda3/lib/medical-explanation-of-benefit-entered-on",
    "valueDateTime": "2022-06-27T00:00:00-04:00"

  }
],
  "identifier": [{
    "type": {
      "coding": [{
        "code": "uc",
        "display": " Unique Claim ID",
        "system": "http://hl7.org/fhir/us/carin-bb/CodeSystem/C4BBIdentifierType"

      }],
      "text": " Unique Claim ID"

    },
    "value": "22202M000700"

  }],
  "insurance": [{
    "coverage": {
      "reference": "Coverage/538"

    }

  }
],
  "focal": true
```

```
    },  
    "insurer": {  
      "reference": "Organization/416"  
    },  
  },  
  "item": [{  
    "adjudication": [{  
      "amount": {  
        "value": 50  
      },  
      "category": {  
        "coding": [{  
          "code": "submitted",  
          "display": "Submitted Amount",  
          "system": "http://terminology.hl7.org/CodeSystem/adjudication"  
        }]  
      }  
    }  
  }],  
  },  
  {  
    "amount": {  
      "value": 11.93  
    },  
    "category": {  
      "coding": [{  
        "code": "eligible",  
        "display": "Eligible Amount",  
        "system": "http://terminology.hl7.org/CodeSystem/adjudication"  
      }]  
    }  
  }  
],  
  {  
    "amount": {  
      "value": 0  
    },  
  },  
}
```

```
"category": {
  "coding": [{
    "code": "copay",
    "display": "CoPay",
    "system": "http://terminology.hl7.org/CodeSystem/adjudication"
  ]
}

},
{
  "amount": {
    "value": 0
  },
  "category": {
    "coding": [{
      "code": "coinsurance",
      "display": "Co-insurance",
      "system": "http://hl7.org/fhir/us/caribb/CodeSystem/C4BBAjudication"
    ]
  }
}

},
{
  "amount": {
    "value": 0
  },
  "category": {
    "coding": [{
      "code": "deductible",
      "display": "Deductible",
      "system": "http://terminology.hl7.org/CodeSystem/adjudication"
    ]
  }
}

},
```

```
{
  "amount": {
    "value": 38.07
  },
  "category": {
    "coding": [{
      "code": "noncovered",
      "display": "Non covered Amount",
      "system": "http://hl7.org/fhir/us/carin-bb/CodeSystem/C4BBAjudication"
    }]
  }
},
{
  "amount": {
    "value": 0
  },
  "category": {
    "coding": [{
      "code": "memberliability",
      "display": "Member Liability Amount",
      "system": "http://hl7.org/fhir/us/carin-bb/CodeSystem/C4BBAjudication"
    }]
  }
},
{
  "amount": {
    "value": 11.93
  },
  "category": {
    "coding": [{
      "code": "benefit",
      "display": "Benefit Amount",
      "system": "http://terminology.hl7.org/CodeSystem/adjudication"
    }]
  }
}
```

```
    }  
  }  
}  
],  
"locationCodeableConcept": {  
  "coding": [{  
    "code": "11",  
    "display": "Office",  
    "extension": [{  
      "url":  
"http://intersystems.com/fhir/extn/sda3/lib/code-table-translated-s-d-a-coding-standard",  
      "valueString": "PlaceOfService"  
    }]  
    }]  
  }  
}  
}  
}  
}  
}  
}  
}  
}  
}
```

operationId: searchExplanationOfBenefit

parameters:

- name: _id

in: query

description: A unique identifier for an Explanation of Benefit resource.

required: false

allowEmptyValue: true

schema:

type: string

- name: patient

in: query

description: The name of the person who the Explanation of Benefits is for.

required: false

allowEmptyValue: true

schema:

```
    type: string
    example: Jane Doe
  - name: _lastUpdated
    in: query
    description: When the resource version last changed.<br>
    required: false
    allowEmptyValue: true
    schema:
      type: string
      pattern:
'([0-9]([0-9]([0-9][1-9]|[1-9]0)|[1-9]00)|[1-9]000)(-(0[1-9]|1[0-2])-(0[1-9]|[1-2][0-9]|3[0-1]))(T([01][0-9]|
2[0-3]):[0-5][0-9]:([0-5][0-9]|60)(\.[0-9]+)?(Z|(\+|-)((0[0-9]|1[0-3]):[0-5][0-9]|14:00)))?)?)?'
  - name: type
    in: query
    description: The type of Explanation of Benefit.<br>
    required: false
    allowEmptyValue: true
    schema:
      type: string
  - name: identifier
    in: query
    description: The business/claim identifier for the Explanation of Benefit.
    required: false
    allowEmptyValue: true
    schema:
      type: string
  - name: service-date
    in: query
    description: |-
      The date of the service included in the Explanation of Benefit. The service-date parameter
      simplifies the search. To search for inpatient and outpatient institutional Explanation of Benefit
      dates, use **billablePeriod.period.start**. To search for pharmacy Explanation of Benefit dates,
      use **item.servicedDate**. To search for professional and non-clinician Explanation of Benefit
      dates, use **item.servicedPeriod.period.start**.
    required: false
    allowEmptyValue: true
    schema:
      type: string
      pattern:
'([0-9]([0-9]([0-9][1-9]|[1-9]0)|[1-9]00)|[1-9]000)(-(0[1-9]|1[0-2])-(0[1-9]|[1-2][0-9]|3[0-1]))(T([01][0-9]|
2[0-3]):[0-5][0-9]:([0-5][0-9]|60)(\.[0-9]+)?(Z|(\+|-)((0[0-9]|1[0-3]):[0-5][0-9]|14:00)))?)?)?'
  '/ExplanationOfBenefit/{rid}':
    get:
```

responses:

'200':

description: Valid Request

headers:

ETag:

description: The version from Resource.meta.version as a weak ETag.

schema:

type: string

content:

application/json:

schema: {

}

tags:

- Status of Explanation of Benefit Resources by Resource ID

summary: Retrieve the status of an Explanation of Benefit resource.

description: |-

Retrieves the status of an Explanation of Benefit resource that matches the Resource ID specified in the request.

Sample Request

The following example request retrieves the status of the Explanation of Benefit resource that matches the specified Resource ID:

GET

`https://test-api.ascension.org/csp/healthshare/hsods/fhir/r4/explanationofbenefit/{rid}`

Sample Response

...

{

"resourceType": "ExplanationOfBenefit",

"billablePeriod": {

"end": "2022-06-20T00:00:00-04:00",

"start": "2022-06-20T00:00:00-04:00"

},

"careTeam": [{

"provider": {

"reference": "Practitioner/528"

},

"role": {

"coding": [{

"code": "performing",

"display": "Performing provider",

```
    "system": "http://hl7.org/fhir/us/carin-bb/CodeSystem/C4BBClaimCareTeamRole"
  }
},
"sequence": 1
},
{
  "provider": {
    "reference": "Practitioner/529"
  },
  "role": {
    "coding": [{
      "code": "performing",
      "display": "Performing provider",
      "system": "http://hl7.org/fhir/us/carin-bb/CodeSystem/C4BBClaimCareTeamRole"
    }]
  },
  "sequence": 2
}
],
"created": "2022-07-26T00:00:00-04:00",
"diagnosis": [{
  "diagnosisCodeableConcept": {
    "coding": [{
      "code": "R609",
      "display": "R609",
      "system": "http://hl7.org/fhir/sid/icd-10"
    }]
  },
  "sequence": 1,
  "type": {
    "coding": [{
      "code": "principal",
      "display": "Principal Diagnosis",
      "system": "http://terminology.hl7.org/2.1.0/CodeSystem-ex-diagnostistype"
    }]
  }
}
```



```
    }  
  }  
},  
{  
  "diagnosisCodeableConcept": {  
    "coding": [{  
      "code": "F1020",  
      "display": "F1020",  
      "system": "http://hl7.org/fhir/sid/icd-10"  
    }]  
  },  
  "sequence": 2,  
  "type": {  
    "coding": [{  
      "code": "secondary",  
      "display": "Secondary",  
      "system": "http://hl7.org/fhir/us/caribb/CodeSystem/C4BBClaimDiagnosisType"  
    }]  
  }  
}  
},  
{  
  "diagnosisCodeableConcept": {  
    "coding": [{  
      "code": "I4891",  
      "display": "I4891",  
      "system": "http://hl7.org/fhir/sid/icd-10"  
    }]  
  },  
  "sequence": 3,  
  "type": {  
    "coding": [{  
      "code": "secondary",  
      "display": "Secondary",
```

```
    "system": "http://hl7.org/fhir/us/carin-bb/CodeSystem/C4BBClaimDiagnosisType"
  }
}
},
{
  "diagnosisCodeableConcept": {
    "coding": [{
      "code": "Z720",
      "display": "Z720",
      "system": "http://hl7.org/fhir/sid/icd-10"
    }]
  },
  "sequence": 4,
  "type": [{
    "coding": [{
      "code": "secondary",
      "display": "Secondary",
      "system": "http://hl7.org/fhir/us/carin-bb/CodeSystem/C4BBClaimDiagnosisType"
    }]
  }]
}
],
"extension": [{
  "url": "http://intersystems.com/fhir/extn/sda3/lib/medical-explanation-of-benefit-context",
  "valueString": "professional-nonclinician"
}],
{
  "url":
"http://intersystems.com/fhir/extn/sda3/lib/medical-explanation-of-benefit-encounter-number",
  "valueString": "22202M000700"
},
{
  "url":
```

```
"http://intersystems.com/fhir/extn/sda3/lib/medical-explanation-of-benefit-entered-on",
  "valueDateTime": "2022-06-27T00:00:00-04:00"
}
],
"identifier": [{
  "type": {
    "coding": [{
      "code": "uc",
      "display": " Unique Claim ID",
      "system": "http://hl7.org/fhir/us/carin-bb/CodeSystem/C4BBIdentifierType"
    }],
    "text": " Unique Claim ID"
  }
}],
"value": "22202M000700"
}],
"insurance": [{
  "coverage": {
    "reference": "Coverage/538"
  }
}],
"focal": true
}],
"insurer": {
  "reference": "Organization/416"
}
},
"item": [{
  "adjudication": [{
    "amount": {
      "value": 50
    }
  }
}],
"category": {
  "coding": [{
    "code": "submitted",
    "display": "Submitted Amount",
    "system": "http://terminology.hl7.org/CodeSystem/adjudication"
```

```
    }  
  }  
},  
{  
  "amount": {  
    "value": 11.93  
  },  
  "category": {  
    "coding": [{  
      "code": "eligible",  
      "display": "Eligible Amount",  
      "system": "http://terminology.hl7.org/CodeSystem/adjudication"  
    }]  
  }  
},  
{  
  "amount": {  
    "value": 0  
  },  
  "category": {  
    "coding": [{  
      "code": "copay",  
      "display": "CoPay",  
      "system": "http://terminology.hl7.org/CodeSystem/adjudication"  
    }]  
  }  
},  
{  
  "amount": {  
    "value": 0  
  },  
  "category": {
```

```
"coding": [{
  "code": "coinsurance",
  "display": "Co-insurance",
  "system": "http://hl7.org/fhir/us/carin-bb/CodeSystem/C4BBAjudication"
}]
}
},
{
  "amount": {
    "value": 0
  },
  "category": {
    "coding": [{
      "code": "deductible",
      "display": "Deductible",
      "system": "http://terminology.hl7.org/CodeSystem/adjudication"
    }]
  }
}
},
{
  "amount": {
    "value": 38.07
  },
  "category": {
    "coding": [{
      "code": "noncovered",
      "display": "Non covered Amount",
      "system": "http://hl7.org/fhir/us/carin-bb/CodeSystem/C4BBAjudication"
    }]
  }
}
},
{
```

```
"amount": {
  "value": 0
},
"category": {
  "coding": [{
    "code": "memberliability",
    "display": "Member Liability Amount",
    "system": "http://hl7.org/fhir/us/carin-bb/CodeSystem/C4BBAjudication"
  }]
}
},
{
  "amount": {
    "value": 11.93
  },
  "category": {
    "coding": [{
      "code": "benefit",
      "display": "Benefit Amount",
      "system": "http://terminology.hl7.org/CodeSystem/adjudication"
    }]
  }
}
]
}]
}
```

operationId: readExplanationOfBenefit

parameters:

- name: rid

in: path

description: A unique identifier for an Explanation of Benefit resource (Resource.id).

required: true

allowEmptyValue: false

style: simple
schema:
type: string
example: 531

/Organization:

get:

responses:

'200':

description: Valid Request

content:

application/json:

schema: {

}

tags:

- All Organization Resources

summary: Retrieve all organization resources.

description: |-

Retrieves all organization resources that meet the parameters specified in the request.

Sample Request

The following example request retrieves all organization resources that match the specified parameters:

GET

`https://test-api.ascension.org/csp/healthshare/hsods/fhir/r4/organization/id?parameter=string`

Sample Response

...

{

"resourceType": "Organization",

"identifier": [{

"value": "ACHP"

}],

"meta": {

"profile": [

"http://hl7.org/fhir/us/caribb/StructureDefinition/C4BB-Organization"

],

"lastUpdated": "2022-07-20T15:05:13Z",

"versionId": "1"

},

```
"name": "Acme Children's Health Plan",  
"id": "411"  
}  
...
```

operationId: searchOrganization

parameters:

- name: name

in: query

description: |-

A portion of an organization's name or alias.

****NOTE**:** This US Core SearchParameter definition extends the usage context of the capabilitystatement-expectation extension to formally express implementer expectations for the following elements:

- multipleAnd

- multipleOr

- modifier

- comparator

- chain

required: false

allowEmptyValue: true

schema:

type: string

example: Acme Children's Health Plan

- name: address

in: query

description: |-

A server defined search that may match any of the string fields in the address, such as line, city, district, state, country, postalCode, and/or text.

****NOTE**:** This US Core SearchParameter definition extends the usage context of the capabilitystatement-expectation extension to formally express implementer expectations for the following elements:

- multipleAnd

- multipleOr

- modifier

- comparator

- chain

required: false

allowEmptyValue: true

schema:

type: string

example: address-city=KYLE


```
'/Organization/{rid}':
  get:
    responses:
      '200':
        description: Valid Request
        headers:
          ETag:
            description: The version from Resource.meta.version as a weak ETag.
            schema:
              type: string
        tags:
          - Status of Organization Resources by Resource ID
        summary: Retrieve the status of an organization resource by Resource ID.
        description: |-
          Retrieves the status of an organization resource that matches the resource ID specified in
          the request.<br><br>
          **Sample Request**<br><br>
          The following example request retrieves the status of an organization resource that
          matches the specified Resource ID:<br><br>
          GET
          `https://test-api.ascension.org/csp/healthshare/hsods/fhir/r4/organization/{rid}`<br><br>
          **Sample Response**<br><br>
          ...
          {
            "resourceType": "Organization",
            "identifier": [{
              "value": "ACHP"

            }],
            "meta": {
              "profile": [
                "http://hl7.org/fhir/us/carin-bb/StructureDefinition/C4BB-Organization"
              ],
              "lastUpdated": "2022-07-20T15:05:13Z",
              "versionId": "1"

            },
            "name": "Acme Children's Health Plan",
            "id": "411"
          }
          ...
    operationId: readOrganization
```

parameters:

- name: rid
- in: path
- description: A unique identifier for an organization resource (Resource.id).
- required: true
- allowEmptyValue: false
- style: simple
- schema:
 - type: string
 - example: 411

/Patient:

get:

responses:

'200':

description: Valid Request

content:

application/json:

schema: {

}

tags:

- All Patient Resources

summary: Retrieve all patient resources.

description: |-

Retrieves all patient resources that meet the parameters specified in the request.

Sample Request

The following example request retrieves all patient resources that match the specified

parameters:

GET `https://test-api.ascension.org/csp/healthshare/hsods/fhir/r4/patient/[id]`

Sample Request Body

...

{

"id": "[token]",

"birthdate": "[date]",

"family": "[string]",

"gender": "[token]",

"given": "[string]",

"identifier": "[token]",

"name": "[string]"

}

...

Sample Response


```
...
{
  "resourceType": "Patient",
  "address": [{
    "city": "HOUSTON",
    "line": [
      "215 E LAKEVIEW DRIVE"
    ],
    "postalCode": "77054",
    "state": "TX"
  ]},
  "birthDate": "2019-11-27",
  "deceasedBoolean": false,
  "extension": [{
    "url": "http://intersystems.com/fhir/extn/sda3/lib/patient-entered-on",
    "valueDateTime": "2022-08-08T14:41:04-04:00"
  }],
  "gender": "female",
  "identifier": [{
    "assigner": {
      "reference": "Organization/411"
    }
  }],
  "extension": [{
    "url":
"http://intersystems.com/fhir/extn/sda3/lib/patient-number-i-s-o-assigning-authority",
    "valueString": "ACHP"
  }],
  "type": {
    "coding": [{
      "code": "MR",
      "system": "http://terminology.hl7.org/CodeSystem/v2-0203"
    }],
    "text": "MRN"
  }
},
"value": "77014148400"
},
```

```
{
  "assigner": {
    "reference": "Organization/193"

  },
  "extension": [{
    "url":
"http://intersystems.com/fhir/extn/sda3/lib/patient-number-i-s-o-assigning-authority",
    "valueString": "TXCHIP"

  }],
  "type": {
    "coding": [{
      "code": "MA"

    }],
    "text": "MA"

  },
  "value": "614862656"

}
],
"meta": {
  "profile": [
    "http://hl7.org/fhir/us/carin-bb/StructureDefinition/C4BB-Patient"
  ],
  "lastUpdated": "2022-08-08T21:09:30Z",
  "versionId": "1"

},
"name": [{
  "family": "JONES",
  "given": [
    "RACHEL"
  ],
  "text": "RACHEL JONES",
  "use": "official"

}],
"id": "100008316"
}
...
```

operationId: searchPatient

parameters:

- name: _id

in: query

description: |-

A unique identifier for a patient resource.

****NOTE**:** This US Core SearchParameter definition extends the usage context of the capabilitystatement-expectation extension to formally express implementer expectations for the following elements:

- multipleAnd

- multipleOr

- modifier

- comparator

- chain

required: false

allowEmptyValue: true

schema:

type: string

example: 100008316

- name: birthdate

in: query

description: |-

A patient's date of birth.

****NOTE**:** This US Core SearchParameter definition extends the usage context of the capabilitystatement-expectation extension to formally express implementer expectations for the following elements:

- multipleAnd

- multipleOr

- modifier

- comparator

- chain

required: false

allowEmptyValue: true

schema:

type: string

pattern:

'([0-9]([0-9]([0-9][1-9]|[1-9]0)|[1-9]00)|[1-9]000)(-(0[1-9]|1[0-2])-(0[1-9]|1[1-2][0-9]|3[0-1]))(T([01][0-9]|2[0-3]):[0-5][0-9]:([0-5][0-9]60)(\.[0-9]+)?(Z|(\+|-(0[0-9]|1[0-3]):[0-5][0-9]|14:00)))?)?)?'

example: 2019-11-27

- name: family

in: query

description: |-

A portion of a patient's family name.

****NOTE**:** This US Core SearchParameter definition extends the usage context of the capabilitystatement-expectation extension to formally express implementer expectations for the following elements:

- multipleAnd

- multipleOr

- modifier

- comparator

- chain

required: false

allowEmptyValue: true

schema:

type: string

example: Ander

- name: gender

in: query

description: |-

The gender of a patient.

****NOTE**:** This US Core SearchParameter definition extends the usage context of the capabilitystatement-expectation extension to formally express implementer expectations for the following elements:

- multipleAnd

- multipleOr

- modifier

- comparator

- chain

required: false

allowEmptyValue: true

schema:

type: string

example: female

- name: given

in: query

description: |-

A portion of a patient's first name.

****NOTE**:** This US Core SearchParameter definition extends the usage context of the <a

<http://hl7.org/fhir/R4/extension-capabilitystatement-expectation.html>>capabilitystatement-expectation extension to formally express implementer expectations for the following elements:

- multipleAnd

- multipleOr

- modifier

- comparator

- chain

required: false

allowEmptyValue: true

schema:

type: string

example: Jan

- name: identifier

in: query

description: |-

A unique identifier for a patient. This can be EHR identifiers like Medical Record Numbers or national identifiers like Social Security Numbers. They are identifiers assigned by the data sources. The `_id` mentioned above identifies the Patient resource in the FHIR database/repository.

****NOTE**:** This US Core SearchParameter definition extends the usage context of the <http://hl7.org/fhir/R4/extension-capabilitystatement-expectation.html>>capabilitystatement-expectation extension to formally express implementer expectations for the following elements:

- multipleAnd

- multipleOr

- modifier

- comparator

- chain

required: false

allowEmptyValue: true

schema:

type: string

example: 77014148400

- name: name

in: query

description: |-

A server defined search that may match any of the string fields in the HumanName, such as family, given, prefix, suffix, and/or text. HumanName is an object in the API.

****NOTE**:** This US Core SearchParameter definition extends the usage context of the <http://hl7.org/fhir/R4/extension-capabilitystatement-expectation.html>>capabilitystatement-expectation extension to formally express implementer expectations for the following elements:

nt-expectation extension to formally express implementer expectations for the following elements:

- multipleAnd
- multipleOr
- modifier
- comparator
- chain

required: false

allowEmptyValue: true

schema:

type: string

example: Jane

'/Patient/{rid}':

get:

responses:

'200':

description: Valid Request

headers:

ETag:

description: The version from Resource.meta.version as a weak ETag.

schema:

type: string

content:

application/json:

schema: {

}

tags:

- Patient Resources by Resource ID

summary: Retrieve a patient resource by Resource ID.

description: |-

Retrieves the patient resource that matches the Resource ID specified in the request.

Sample Request

The following example request retrieves the status of a patient resource that matches the specified Resource ID:

GET `https://test-api.ascension.org/csp/healthshare/hsods/fhir/r4/patient/{rid}`

Sample Response

...

{

"resourceType": "Patient",

"address": [{


```
"city": "HOUSTON",
"line": [
  "215 E LAKEVIEW DRIVE"
],
"postalCode": "77054",
"state": "TX"

}],
"birthDate": "2019-11-27",
"deceasedBoolean": false,
"extension": [{
  "url": "http://intersystems.com/fhir/extn/sda3/lib/patient-entered-on",
  "valueDateTime": "2022-08-08T14:41:04-04:00"

}],
"gender": "female",
"identifier": [{
  "assigner": {
    "reference": "Organization/411"

  },
  "extension": [{
    "url":
"http://intersystems.com/fhir/extn/sda3/lib/patient-number-i-s-o-assigning-authority",
    "valueString": "ACHP"

  }

}],
"type": {
  "coding": [{
    "code": "MR",
    "system": "http://terminology.hl7.org/CodeSystem/v2-0203"

  }

}],
"text": "MRN"

},
"value": "77014148400"

},
{
  "assigner": {
    "reference": "Organization/193"
```

```
    },  
    "extension": [{  
      "url":  
"http://intersystems.com/fhir/extn/sda3/lib/patient-number-i-s-o-assigning-authority",  
      "valueString": "TXCHIP"  
    }],  
    "type": {  
      "coding": [{  
        "code": "MA"  
      }],  
      "text": "MA"  
    },  
    "value": "614862656"  
  }  
],  
"meta": {  
  "profile": [  
    "http://hl7.org/fhir/us/caribb/StructureDefinition/C4BB-Patient"  
  ],  
  "lastUpdated": "2022-08-08T21:09:30Z",  
  "versionId": "1"  
},  
"name": {  
  "family": "Doe",  
  "given": [  
    "Jane"  
  ],  
  "text": "Jane Doe",  
  "use": "official"  
},  
}],  
"id": "100008316"  
}  
...
```

operationId: readPatient

parameters:

- name: rid

in: path

description: A unique identifier for a patient resource (Resource.id).
required: true
allowEmptyValue: false
style: simple
schema:
 type: string
 example: 100008316

/Practitioner:

get:

responses:

'200':

 description: Valid Request

 content:

 application/json:

 schema: {

 }

 tags:

 - All Practitioner Resources

 summary: Retrieve all practitioner resources.

 description: |-

 Retrieves all practitioner resources who meet the parameters specified in the request.

Sample Request

 The following example request retrieves all practitioner resources that match the specified parameters:

 GET

 `https://test-api.ascension.org/csp/healthshare/hsods/fhir/r4/practitioner?parameter=[]`

Sample Request Body

 ...

 {

 "name": "",

 "identifier": ""

 }

 ...

Sample Response

 ...

 {

 "resourceType": "Practitioner",

 "address": [{

 "city": "AUSTIN",

```
"line": [
  "4515 SETON CENTER PKWY"
],
"postalCode": "78759",
"state": "TX"
}],
"extension": [{
  "url":
"http://intersystems.com/fhir/extn/sda3/lib/code-table-detail-care-provider-care-provider-type",
  "valueCodeableConcept": {
    "coding": [{
      "code": "PHYS",
      "display": "PHYSICIAN (MD, DO)"
    }]
  }
}]
},
{
  "url":
"http://intersystems.com/fhir/extn/sda3/lib/code-table-detail-care-provider-description",
  "valueString": "1912913260"
}
],
"identifier": [{
  "system": "http://hl7.org/fhir/sid/us-npi",
  "value": "1912913260"
}],
"meta": {
  "profile": [
    "http://hl7.org/fhir/us/carin-bb/StructureDefinition/C4BB-Practitioner"
  ],
  "lastUpdated": "2022-08-08T21:09:30Z",
  "versionId": "1"
},
"name": [{
  "family": "KRAVITZ",
  "given": [
```

```
"LARRY"  
],  
"text": "LARRY KRAVITZ"  
  
}],  
"id": "528"  
}  
...
```

operationId: searchPractitioner

parameters:

- name: name

in: query

description: |-

A server defined search that may match any of the string fields in the HumanName, including family, given, prefix, suffix, and/or text.

****NOTE****: This US Core SearchParameter definition extends the usage context of the capabilitystatement-expectation extension to formally express implementer expectations for the following elements:

- multipleAnd

- multipleOr

- modifier

- comparator

- chain

required: false

allowEmptyValue: true

schema:

type: string

- name: identifier

in: query

description: |-

A unique identifier for a practitioner.

****NOTE****: This US Core SearchParameter definition extends the usage context of the capabilitystatement-expectation extension to formally express implementer expectations for the following elements:

- multipleAnd

- multipleOr

- modifier

- comparator

- chain

required: false

```
allowEmptyValue: true  
schema:  
  type: string
```

'/Practitioner/{rid}':

get:

responses:

'200':

description: Valid Request

headers:

ETag:

description: The version from Resource.meta.version as a weak ETag.

schema:

type: string

content:

application/json:

schema: {

}

tags:

- Practitioner Resources by Resource ID

summary: Retrieve a practitioner resource.

description: |-

Retrieves the practitioner resource that matches the Resource ID specified in the request.

Sample Request

The following example request retrieves the practitioner resource that matches the specified Resource ID:

GET `https://test-api.ascension.org/csp/healthshare/hsods/fhir/r4/practitioner/{rid}`

Sample Response

...

{

"resourceType": "Practitioner",

"address": [{

"city": "AUSTIN",

"line": [

"4515 SETON CENTER PKWY"

],

"postalCode": "78759",

"state": "TX"

}],

"extension": [{

```
    "url":  
    "http://intersystems.com/fhir/extn/sda3/lib/code-table-detail-care-provider-care-provider-type",  
    "valueCodeableConcept": {  
      "coding": [{  
        "code": "PHYS",  
        "display": "PHYSICIAN (MD, DO)"  
      }]  
    }  
  },  
  {  
    "url":  
    "http://intersystems.com/fhir/extn/sda3/lib/code-table-detail-care-provider-description",  
    "valueString": "1912913260"  
  }  
],  
"identifier": [{  
  "system": "http://hl7.org/fhir/sid/us-npi",  
  "value": "1912913260"  
}],  
"meta": {  
  "profile": [  
    "http://hl7.org/fhir/us/carin-bb/StructureDefinition/C4BB-Practitioner"  
  ],  
  "lastUpdated": "2022-08-08T21:09:30Z",  
  "versionId": "1"  
},  
"name": [{  
  "family": "KRAVITZ",  
  "given": [  
    "LARRY"  
  ],  
  "text": "LARRY KRAVITZ"  
}],  
"id": "528"  
}  
...
```

operationId: readPractitioner

parameters:

- name: rid

in: path

description: A unique identifier for a practitioner resource (Resource.id).

required: true

allowEmptyValue: false

style: simple

schema:

type: string

'/Provenance/{rid}/_history':

get:

responses:

'200':

description: Valid Request

content:

application/json:

schema: {

}

tags:

- All Provenance Resources by Resource ID

summary: Retrieve the past versions of a provenance resource.

description: |-

Retrieves the previous versions of a provenance resource that matches the Resource ID specified in the request.

Sample Request

The following example request retrieves the previous versions of a provenance resource that matches the specified Resource ID:

GET

`https://test-api.ascension.org/csp/healthshare/hsods/fhir/r4/provenance/{rid}/_history`

Sample Request Body

...

{

"rid": "",

"summary": "true",

"format": "mime-type",

"pretty": "true",

"elements": "",

"count": "10",

"since": "0-9",


```
"at": "0-9",  
"list": ""  
}  
...
```

operationId: histinstProvenance

parameters:

- name: rid

in: path

description: A unique identifier for a provenance resource (Resource.id).

required: true

allowEmptyValue: false

style: simple

schema:

type: string

- name: summary

in: query

description: A designated subset of a provenance resource.

required: false

allowEmptyValue: true

style: form

schema:

type: string

enum:

- true

- text

- data

- count

- false

example: true

- name: format

in: query

description: Specifies the alternative response formats by their MIME-types. If a client is having access issues, the header is accepted.

required: true

schema:

type: string

- name: pretty

in: query

description: Requested format for responses from the server. The pretty format ensures that responses are readable by users.

required: false

allowEmptyValue: true

style: form

schema:

type: boolean

enum:

- true

- false

example: true

- name: elements

in: query

description: Requests a collection of elements for a provenance resource.

required: false

allowEmptyValue: true

schema:

type: array

items:

format: string

- name: count

in: query

description: The maximum number of search results that the server can return in a response. The server is not required to return the number of search results requested and is not allowed to return more than the maximum number specified.

required: false

allowEmptyValue: true

schema:

type: number

example: 10

- name: since

in: query

description: Requests versions of a provenance resource that were created during or after the time specified in the request.

required: false

allowEmptyValue: true

schema:

type: string

pattern:

'([0-9]([0-9]([0-9][1-9]|[1-9]0)|[1-9]00)|[1-9]000)(-(0[1-9]|1[0-2])(-(0[1-9]|[1-2][0-9]|3[0-1]))(T([01][0-9]|2[0-3]):[0-5][0-9]:([0-5][0-9]|60)(\.[0-9]+)?(Z|(\+|-)((0[0-9]|1[0-3]):[0-5][0-9]|14:00)))?)?)'

- name: at

in: query

description: Requests versions of a provenance resource that are current during the time specified in the date time value. See the Search notes on date searching for more information.

required: false

allowEmptyValue: true

schema:

type: string

pattern:

```
'([0-9]([0-9]([0-9][1-9]|[1-9]0)|[1-9]00)|[1-9]000)(-(0[1-9]|1[0-2])-(0[1-9]|1[1-2][0-9]|3[0-1]))(T([01][0-9]|2[0-3]):[0-5][0-9]:([0-5][0-9]|60)(\.[0-9]+)?(Z|(\+|-)((0[0-9]|1[0-3]):[0-5][0-9]|14:00)))?)?)?'
```

- name: list

in: query

description: Requests the versions of a provenance resource that are referenced in the list specified in the request.

required: false

allowEmptyValue: true

schema:

type: string