

EchoVantage FHIR API Documentation

Base URLs

Apps registered to EchoVantage are granted OAuth 2.0 client credentials. These credentials are environment-specific and valid to that environment only. In the Base URLs below, (agencylookup) is replaced with the specific environment lookup key.

Auth Request use:

`https://(agencylookup).echoehr.com/auth`

FHIR API request use

`https://(agencylookup).echoehr.com/fhir/r4`

Schema

- All API Access is over HTTPS
- All data is sent and received as JSON or XML
- Blank fields are omitted

Supported FHIR Resources

- [Allergy Intolerance](#)
- [Appointment](#)
- [CarePlan](#)
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Allergy Intolerance

Documentation: <http://hl7.org/fhir/us/core/STU4/StructureDefinition-us-core-allergyintolerance.html>

Supported actions:

- Read
- Search

Search Parameters:

- patient

FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
AllergyIntolerance	dbo.ClientAllergies
patient	dbo.ClientAllergies.Client
clinicalStatus <ul style="list-style-type: none"> • active • inactive • resolved 	dbo.ClientAllergies.Status (translated Valueset code) <ul style="list-style-type: none"> • Active, Suspended • Aborted, Suspended • Completed

Search examples:

- GET <http://localhost:8091/fhir/r4/AllergyIntolerance?patient=<clientid>>

Appointment

Documentation: <https://www.hl7.org/fhir/appointment.html>

Supported actions:

- Create
- Read
- Update
- Search

Search Parameters:

- date
- patient
- practitioner

FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
Appointment	dbo.Events
date	dbo.Events.StartDate
patient	dbo.Events.Client
practitioner	dbo.Events.Staff

date parameter:

- Supported operators:
 - equal - default
 - ex: <http://localhost:8000/fhir/Appointment?date=2022-01-01>
 - greater than - gt
 - ex: <http://localhost:8000/fhir/Appointment?date=gt2022-01-01>
 - greater than or equals - ge
 - ex: <http://localhost:8000/fhir/Appointment?date=ge2022-01-01>
 - less than - lt
 - ex: <http://localhost:8000/fhir/Appointment?date=lt2022-01-01>
 - less than or equals - le
 - ex: <http://localhost:8000/fhir/Appointment?date=le2022-01-01>

CarePlan

Documentation: <http://hl7.org/fhir/us/core/STU4/StructureDefinition-us-core-careplan.html>

Supported actions:

- Read
- Search

Search Parameters:

- patient
- category
- date
- status

FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
CarePlan	dbo.CarePlans dbo.CarePlanAssessments.Assessment* dbo.CarePlanTreatments.Treatment*
patient	dbo.CarePlans.Client
category	assess-plan (hard-coded)
date	dbo.CarePlanAssessments.AssessmentDate or dbo.CarePlanTreatments.TreatmentDate
status	active (hard-coded)

*Data is returned for each Client record in dbo.CarePlanAssessments or dbo.CarePlanTreatmentPlans provided it satisfies the search criteria (if any).

Search examples:

- GET [base]/CarePlan?patient=<client id>&category=assess-plan
- GET [base]/CarePlan/?patient=<client id>&category=assess-plan&date=ge2022-08-08
- A composite *AND* search on date (e.g., date=ge2022-08-00&date=le2022-08-31) is **NOT** supported.

date parameter:

- Supported operators:
 - equal - default
 - ex: <http://localhost:8000/fhir/CarePlan?patient=<client id>&date=2022-01-01>

- greater than - gt
 - ex: [http://localhost:8000/fhir/ CarePlan?patient=<client id>&date=gt2022-01-01](http://localhost:8000/fhir/CarePlan?patient=<client id>&date=gt2022-01-01)
- greater than or equals - ge
 - ex: [http://localhost:8000/fhir/ CarePlan?patient=<client id>&date=ge2022-01-01](http://localhost:8000/fhir/CarePlan?patient=<client id>&date=ge2022-01-01)
- less than - lt
 - ex: [http://localhost:8000/fhir/ CarePlan?patient=<client id>&date=lt2022-01-01](http://localhost:8000/fhir/CarePlan?patient=<client id>&date=lt2022-01-01)
- less than or equals - le
 - ex: [http://localhost:8000/fhir/ CarePlan?patient=<client id>&date=le2022-01-01](http://localhost:8000/fhir/CarePlan?patient=<client id>&date=le2022-01-01)

CareTeam

Documentation: <https://hl7.org/fhir/us/core/STU4/StructureDefinition-us-core-careteam.html>

Supported actions:

- Read
- Search

Search Parameters:

- patient
- status

FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
CareTeam	dbo.Episodes dbo.EpisodeStaff
patient	dbo.Episodes.Client
status	active OR inactive based on <ul style="list-style-type: none"> • dbo.Episodes.StartDate and dbo.Episodes.EndDate • dbo.EpisodeStaff.StartDate and dbo.EpisodeStaff.EndDate

participant.role	dbo.EpisodeStaff, dbo.StaffRoles, dbo.ReportingDataMappings
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Search examples:

- GET [base]/CareTeam?patient=<client id>&status=active

Condition

Documentation: <https://hl7.org/fhir/us/core/STU4/StructureDefinition-us-core-condition.html>

Supported actions:

- Read
- Search

Search Parameters:

- patient
- category
- clinical-status
- code
- onset-date

FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
Condition	dbo.ClientDiagnoses (Client Diagnosis) dbo.ServiceDiagnoses* (Other Diagnosis)
patient	dbo.ClientDiagnoses.Client or dbo.Services.Client
category	problem-list-item (Client Diagnosis) or encounter-diagnosis (Other Diagnosis) or health-concern (Vital Health Concern)

clinical-status	active OR inactive on a given date compare to dbo.ClientDiagnoses.StartDate (Client Diagnosis) or dbo.Services.StartDate (Other Diagnosis)
code	dbo.ClientDiagnoses.Icd10 (Client Diagnosis) or dbo.ServiceDiagnoses.Code (Other Diagnosis) or dbo.Codes.ConceptCode(Vital Health concern code)
onset-date	dbo.ClientDiagnoses.StartDate (Client Diagnosis) or dbo.Services.StartDate (Other Diagnosis) or dbo.VitalHealthConcerns.HealthConcernDate

*Client's Other Diagnosis that is tied to an Encounter Service and must meet the following criteria:

- Diagnosis has Other Diagnosis type (dbo.ServiceDiagnoses.ClientDiagnosis = 'N').
- Diagnosis is tied to an Encounter service. Encounter service is a service with service definition with Encounter Service Type (dbo.ServiceDefinitions.ServiceType = '0').
- The Encounter Service Definition must have at least one reporting code system (CPT, HCPCS, LOINC or SNOMED) - (dbo.ServiceDefinitions.ReportingCodeSystem)
- The Encounter Service Definition must have at least one valid value for the selected reporting code system (dbo.ServiceDefinitions.CPT, dbo.ServiceDefinitions.HCPCS, dbo.ServiceDefinitions.Loinc or dbo.ServiceDefinitions.Snomed)

Search examples:

- GET [base]/Condition?patient=<client id>
- GET [base]/Condition?patient=<client id>&category=problem-list-item
- GET [base]/Condition?patient=<client id>&category=health-concern

- GET [base]/Condition?patient=<client id>&clinical-status=active
- GET [base]/Condition?patient=<client id>&code=F33.2
- GET [base]/Condition?patient=<client id>&onset-date=2022-01-01
- A composite *AND* search on date (e.g., date=ge2022-08-00&date=le2022-08-31) is **NOT** supported.

onset-date parameter:

- Supported operators:
 - equal - default
 - ex: <http://localhost:8000/fhir/Condition?patient=<client id>&onset-date=2022-01-01>
 - greater than - gt
 - ex: <http://localhost:8000/fhir/Condition?patient=<client id>&onset-date=gt2022-01-01>
 - greater than or equals - ge
 - ex: <http://localhost:8000/fhir/Condition?patient=<client id>&onset-date=ge2022-01-01>
 - less than - lt
 - ex: <http://localhost:8000/fhir/Condition?patient=<client id>&onset-date=lt2022-01-01>
 - less than or equals - le
 - ex: <http://localhost:8000/fhir/Condition?patient=<client id>&onset-date=le2022-01-01>

Coverage

Documentation: [HL7.FHIR.US.CORE\US Core CoverageProfile - FHIR v4.0.1](#)

Supported actions:

- Read
- Search

Search Parameters:

- patient
- status

FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
Coverage	dbo.ClientPayers
patient	dbo.ClientPayers .Client

status	active or cancelled Compare to <code>dbo.ClientPayerEffectiveDates.StartDate</code> & <code>dbo.ClientPayerEffectiveDates.EndDate</code>
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*Status will be derived from ClientPayerEffectiveDates' 'StartDate' and 'EndDate'.

Active Scenarios

- Both null
- StartDate ≤ today, EndDate = NULL
- StartDate ≤ today, EndDate ≥ today
- StartDate = NULL, EndDate ≥ today

Cancelled Scenarios

- StartDate > today (future start)
- EndDate < today (already expired)
- Both dates present but exclude today

Note: This resource uses **RelatedPerson** as a reference.

```
Example: "payor": [
{
"reference": "RelatedPerson/2021072902173098008FFE3E000714053B19",
"type": "RelatedPerson",
"identifier": {
"value": "2021072902173098008FFE3E000714053B19"
}
}
]
```

Search examples:

- GET [base]/Coverage?patient=<client id>
- GET [base]/Coverage?patient=<client id>&status=active
- GET [base]/Coverage?patient=<client id>&status=cancelled

Device

Documentation: <http://hl7.org/fhir/us/core/STU4/StructureDefinition-us-core-implantable-device.html>

Supported actions:

- Read
- Search

Search Parameters:

- patient (Required)
- type

FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
Device	dbo.ImplantableDevices
patient	dbo.ImplantableDevices.Client
type	Only supports SNOMED 49062001 - Device

Search examples:

- GET [base]/Device?patient=<client id>
- GET [base]/Device?patient=<client id>&type=http://snomed.info/sct|49062001

DiagnosticReport

Documentation: <http://hl7.org/fhir/us/core/STU4/StructureDefinition-us-core-diagnosticreport-lab.html>

Supported actions:

- Read
- Search

Search Parameters:

- category
- code
- date
- patient (Required)
- status

FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
DiagnosticReport	dbo.LabResults

patient	dbo.LabResults.Client
category	LAB
code	dbo.LabOrders.TestCode
date	dbo.LabResults.TestDate
status	dbo.LabResults.Status

Search examples:

- GET [base]/DiagnosticReport?patient=<client id>
- GET [base]/DiagnosticReport?patient=<client id>&category=LAB
- GET [base]/DiagnosticReport?patient=<client id>&code=123
- GET [base]/DiagnosticReport?patient=<client id>&date=2022-01-01
- GET [base]/DiagnosticReport?patient=<client id>&status=final
- A composite *AND* search on date (e.g., date=ge2022-08-00&date=le2022-08-31) is **NOT** supported.

date parameter:

- Supported operators:
 - equal - default
 - ex: <http://localhost:8000/fhir/DiagnosticReport?patient=<client id>&date=2022-01-01>
 - greater than - gt
 - ex: <http://localhost:8000/fhir/DiagnosticReport?patient=<client id>&date=gt2022-01-01>
 - greater than or equals - ge
 - ex: <http://localhost:8000/fhir/DiagnosticReport?patient=<client id>&date=ge2022-01-01>
 - less than - lt
 - ex: <http://localhost:8000/fhir/DiagnosticReport?patient=<client id>&date=lt2022-01-01>
 - less than or equals - le
 - ex: <http://localhost:8000/fhir/DiagnosticReport?patient=<client id>&date=le2022-01-01>

DocumentReference

Documentation: <http://hl7.org/fhir/us/core/STU4/StructureDefinition-us-core-documentreference.html>

Supported actions:

- Read
- Search

Search Parameters:

- _id (Required if patient parameter is not provided)
- patient (Required if _id parameter is not provided)
- date
- category
- period
- status
- type

FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
DocumentReference	dbo.ClinicalNotes
_id	dbo.ClinicalNotes.id
patient	dbo.ClinicalNotes.Client
date	dbo.ClinicalNotes.CreateDate
category	clinical-note
period	dbo.Services.StartDate dbo.Services.StartTime dbo.Services.ClientDuration
status	current
type	dbo.Codes.ConceptCode linked to dbo.ClinicalNotes.NoteType

Search examples:

- GET http://localhost:8091/fhir/r4/DocumentReference?_id=<clinical note id>
- GET <http://localhost:8091/fhir/r4/DocumentReference?patient=<client id>&category=clinical-note>
- GET <http://localhost:8091/fhir/r4/DocumentReference?patient=<client id>&type=34819-3>
- GET <http://localhost:8091/fhir/r4/DocumentReference?patient=<client id>&status=current>

- GET <http://localhost:8091/fhir/r4/DocumentReference?patient=<client id>&period=gt2022-01-01&period=le2022-02-02>
- GET <http://localhost:8091/fhir/r4/DocumentReference?patient=<client id>&date=2022-01-01>
- A composite *AND* search on date (e.g., `date=ge2022-08-00&date=le2022-08-31`) is **NOT** supported for date parameter

date parameter:

- Supported operators:
 - equal - default
 - ex: <http://localhost:8091/fhir/r4/DocumentReference?patient=<client id>&date=2022-01-01>
 - greater than - gt
 - ex: <http://localhost:8091/fhir/r4/DocumentReference?patient=<client id>&date=gt2022-01-01>
 - greater than or equals - ge
 - ex: <http://localhost:8091/fhir/r4/DocumentReference?patient=<client id>&date=ge2022-01-01>
 - less than - lt
 - ex: <http://localhost:8091/fhir/r4/DocumentReference?patient=<client id>&date=lt2022-01-01>
 - less than or equals - le
 - ex: <http://localhost:8091/fhir/r4/DocumentReference?patient=<client id>&date=le2022-01-01>

Encounter

Documentation: <http://hl7.org/fhir/us/core/STU4/StructureDefinition-us-core-encounter.html>

Supported actions:

- Read
- Search

Search Parameters:

- class
- date
- patient (Required)
- status
- type

FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
Encounter	dbo.Services
patient	dbo.Services.Client
class	AMB
date	dbo.Services.StartDate
status	finished
type	dbo.ServiceDefinitions.CPT dbo.ServiceDefinitions.Snomed

Search examples:

- GET [base]/Encounter/<service id>
- GET [base]/Encounter?patient=<client id>
- GET [base]/Encounter?patient=<client id>&class=AMB
- GET [base]/Encounter?patient=<client id>&date=2022-01-01
- GET [base]/Encounter?patient=<client id>&status=finished
- GET [base]/Encounter?patient=<client id>&type=http://www.ama-assn.org/go/cpt|12345
- GET [base]/Encounter?patient=<client id>&type=http://snomed.info/sct|67890
- A composite *AND* search on date (e.g., date=ge2022-08-00&date=le2022-08-31) is **NOT** supported.

date parameter:

- Supported operators:
 - equal - default
 - ex: <http://localhost:8000/fhir/Encounter?patient=<client id>&date=2022-01-01>
 - greater than - gt
 - ex: <http://localhost:8000/fhir/Encounter?patient=<client id>&date=gt2022-01-01>
 - greater than or equals - ge
 - ex: <http://localhost:8000/fhir/Encounter?patient=<client id>&date=ge2022-01-01>
 - less than - lt
 - ex: <http://localhost:8000/fhir/Encounter?patient=<client id>&date=lt2022-01-01>
 - less than or equals - le

- ex: <http://localhost:8000/fhir/Encounter?patient=<client id>&date=le2022-01-01>

Goal

Documentation: <http://hl7.org/fhir/us/core/STU4/StructureDefinition-us-core-goal.html>

Supported actions:

- Read
- Search

Search Parameters:

- patient (Required)
- lifecycle-status
- target-date

FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
Goal	dbo.CarePlanGoals
patient	dbo.CarePlans.Client
lifecycle-status	dbo.CarePlanGoals.GoalType planned → Order completed → Performed proposed → Recommend, Referred
target-date	dbo.CarePlanGoals.DueDate

Search examples:

- GET [base]/Goal?patient=<client id>
- GET [base]/Goal?patient=<client id>&lifecycle-status=planned
- GET [base]/Goal?patient=<client id>&target-date=2022-01-01

date parameter:

- Supported operators:
 - equal - default

- ex: <http://localhost:8091/fhir/r4/Goal?patient=<client id>&target-date=2022-01-01>
- greater than - gt
 - ex: <http://localhost:8091/fhir/r4/Goal?patient=<client id>&target-date=gt2022-01-01>
- greater than or equals - ge
 - ex: <http://localhost:8091/fhir/r4/Goal?patient=<client id>&target-date=ge2022-01-01>
- less than - lt
 - ex: <http://localhost:8091/fhir/r4/Goal?patient=<client id>&target-date=lt2022-01-01>
- less than or equals - le
 - ex: <http://localhost:8091/fhir/r4/Goal?patient=<client id>&target-date=le2022-01-01>

Immunization

Documentation: <http://hl7.org/fhir/us/core/STU4/StructureDefinition-us-core-immunization.html>

Supported actions:

- Read
- Search

Search Parameters:

- date
- status
- patient (required)

FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
Immunization	dbo.ClientImmunizations
status	dbo.ClientImmunizations.CompletionStatus
date	dbo.ClientImmunizations.VaccineStartDate

Search examples:

- GET [base]/Immunization?patient=<client id>
- GET [base]/Immunization?patient=<client id>&status=completed
- GET [base]/Immunization?patient=<client id>&date=2022-01-01

date parameter:

- Supported operators:
 - equal - default
 - ex: <http://localhost:8000/fhir/Immunization?patient=<client id>&date=2022-01-01>
 - greater than - gt
 - ex: <http://localhost:8000/fhir/Immunization?patient=<client id>&date=gt2022-01-01>
 - greater than or equals - ge
 - ex: <http://localhost:8000/fhir/Immunization?patient=<client id>&date=ge2022-01-01>
 - less than - lt
 - ex: <http://localhost:8000/fhir/Immunization?patient=<client id>&date=lt2022-01-01>
 - less than or equals - le
 - ex: <http://localhost:8000/fhir/Immunization?patient=<client id>&date=le2022-01-01>

Location

Documentation: <http://hl7.org/fhir/us/core/STU4/StructureDefinition-us-core-location.html>

Supported actions:

- Read
- Search

Search Parameters:

- name
- address
- address-city
- address-state
- address-postalcode

FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
Location	dbo.Organizations
name	dbo.Organizations.Name
address	dbo.Organizations.Address1
	dbo.Organizations.Address2

address-city	dbo.Organizations.City
address-state	dbo.Organizations.State
address-postalcode	dbo.Organizations.Zip

Search examples:

- GET [base]/Location?name=abc
- GET [base]/Location?address=xyz
- GET [base]/Location?address-city=SomeCity
- GET [base]/Location?address-state=NH
- GET [base]/Location?address-postalcode=12345

Medication

Documentation: <http://hl7.org/fhir/us/core/STU4/StructureDefinition-us-core-medication.html>

Supported actions:

- Read
 - ex: <http://localhost:8000/fhir/Medication/123>

FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
Medication	dbo.ClientMedications.id

MedicationRequest

Documentation: <http://hl7.org/fhir/us/core/STU4/StructureDefinition-us-core-medicationrequest.html>

Supported actions:

- Read
- Search

Search Parameters:

- patient (Required)
- intent (Required)
- status
- encounter
- authoredon

FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
MedicationRequest	dbo.ClientMedications
patient	dbo.ClientMedications.Client
intent	order
status	dbo.ClientMedications.EndDate dbo.ClientMedications.StopReason active → future end date or end date is null completed → end dated and stop reason = Completion of Therapy stopped → end dated and other stop reason
encounter	dbo.Services.id (Encounter service on the same medication create date)
authoredon	dbo.ClientMedications.CreateDate

Search examples:

- GET [base]/MedicationRequest?patient=123&intent=order
- GET [base]/MedicationRequest?patient=123&intent=order&status=active
- GET [base]/MedicationRequest?patient=123&intent=order&encounter=345
- GET [base]/MedicationRequest?patient=123&intent=order&authoredon=01/01/2020

date parameter:

- Supported operators:
 - equal - default
 - ex:
 - <http://localhost:8000/fhir/MedicationRequest?patient=123&intent=order&authoredon=01/01/2020>
 - greater than - gt
 - ex:
 - <http://localhost:8000/fhir/MedicationRequest?patient=123&intent=order&authoredon=gt01/01/2020>
 - greater than or equals - ge

- ex: <http://localhost:8000/fhir/MedicationRequest?patient=123&intent=order&authoredon=ge01/01/2020>
- less than - lt
 - ex: <http://localhost:8000/fhir/MedicationRequest?patient=123&intent=order&authoredon=lt01/01/2020>
- less than or equals - le
 - ex: <http://localhost:8000/fhir/MedicationRequest?patient=123&intent=order&authoredon=le01/01/2020>

MedicationAdministration

Documentation: <https://www.hl7.org/fhir/medicationadministration.html>

Supported actions:

- Create
- Read
- Update

FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
MedicationAdministration	dbo.MedicationAdministrations

Observation

Documentation: <https://www.hl7.org/fhir/observation.html>

Supported actions:

- Read
- Search

Search Parameters:

- category
- code (supports multiple codes separated by comma)
- date
- patient (Required)

FHIR Resource/Category/Search Parameters	EchoVantage Resource/Category/Search Parameters
Observation	dbo.VitalSigns, dbo.LabResultItems
category = laboratory	
Values in dbo.LabResultItems.NameCode	dbo.LabResultItems
category = social-history	
72166-2	dbo.VitalSigns.SmokingStatus
76690-7	dbo.Clients.SexualOrientation
11341-5	dbo.ClientEmployments.OccupationCode
86188-0	dbo.ClientEmployments.OccupationIndustryCode
82810-3	dbo.VitalSigns.ClientPregnancyStatus (DisplayName: 'Pregnancy status') (version: 'http://snomed.info/sct#77386006')
86645-9	dbo.VitalSigns.ClientPregnancyIntent (DisplayName: 'Pregnancy intention in the next year - Reported') (version: 'http://snomed.info/sct/731000124108')
category = vital-signs	

codes (LOINC)	
8302-2	dbo.VitalSigns.Height
29463-7	dbo.VitalSigns.Weight
39156-5	dbo.VitalSigns.BMI
8310-5	dbo.VitalSigns.Temperature
8867-4	dbo.VitalSigns.Pulse
85354-9	dbo.VitalSigns.BPDiastolic dbo.VitalSigns.BPSystolic
8480-6	dbo.VitalSigns.BPSystolic
8462-4	dbo.VitalSigns.BPDiastolic
9279-1	dbo.VitalSigns.Respiration
2708-6	dbo.VitalSigns.PulseOx
59408-5	dbo.VitalSigns.BMIPercentileValue
59576-9	dbo.VitalSigns.HeadOccipitalFrontalCircumferencePercentile
8289-1	dbo.VitalSigns.PediatricWeight
77606-2	Pulse Oximetry - Unsupported
9843-4	
date	dbp.Clients.updateDate for Social-history category dbo.VitalSigns.VitalDate for other categories
patient	dbo.VitalSigns.Client
category = sdoh	
71802-3	dbo.HRSNQuestions.LivingSituation
96778-6	
88122-7	dbo.HRSNQuestions.FoodRanOutPast12Months
88123-5	dbo.HRSNQuestions.FoodDidNotLastPast12Months

93030-5	dbo.HRSNQuestions.LackOfTransportation
96779-4	dbo.HRSNQuestions.UtilityConcerns
95618-5	dbo.HRSNQuestions.PhysicallyHurt
95617-7	dbo.HRSNQuestions.InsultedByAnyone
95616-9	dbo.HRSNQuestions.ThreatenedByAnyone
95615-1	dbo.HRSNQuestions.CursedByAnyone
category = survey	
44250-9	dbo.PHQ9Depressions.LittleInterestPleasure
44255-8	dbo.PHQ9Depressions.FeelingDownDepressedHopeless
44259-0	dbo.PHQ9Depressions.TroubleSleeping
44254-1	dbo.PHQ9Depressions.FeelingTiredLittleEnergy
44251-7	dbo.PHQ9Depressions.PoorAppetiteOvereating
44258-2	dbo.PHQ9Depressions.LowEsteem
44252-5	dbo.PHQ9Depressions.TroubleConcentrating
44253-3	dbo.PHQ9Depressions.SlowSpeechMovingFidgety
44260-8	dbo.PHQ9Depressions.BetterDead
69722-7	dbo.PHQ9Depressions.LevelofDifficulty
category = Survey	
69725-0	dbo.EV_GAD7Assessments.FeelingNervous
68509-9	dbo.EV_GAD7Assessments.NotAbleToControlWorrying
69733-4	dbo.EV_GAD7Assessments.WorryingTooMuch
69734-2	dbo.EV_GAD7Assessments.TroubleRelaxing
69735-9	dbo.EV_GAD7Assessments.Restless
69689-8	dbo.EV_GAD7Assessments.EasilyAnnoyed
69736-7	dbo.EV_GAD7Assessments.FeelingAfraid
category = cognitive-status	
11332-4	dbo.VitalSigns.CognitiveStatus
category = functional-status	

- Pediatric BMI (BMI Percentile Value) is only applicable for age 20 and below. It will not show for patients older than 20 years of age.
- Pediatric Weight is only applicable for age 2 and below. It will not show for patients older than 2 years of age.
- Pediatric Head Circumference (HeadOccipitalFrontalCircumferencePercentile) is only applicable for age 3 and below. It will not show for patients with age 4 and above.
- Vital Signs observation for BMI will show the 'valueQuantity' section as follows when the BMI is NULL. "valueQuantity": {
"value": 0.0000,
"unit": "kg/m2",
"system": "<http://unitsofmeasure.org>",
"code": "kg/m2"
}
- When there is no BMI value for a record, the inferno validator fails to validate because it expects the above section in the observation. Hence the above change.

category parameter:

- Supported categories:
 - laboratory
 - ex: <http://localhost:8000/fhir/Observation?patient=123&category=laboratory>
 - social-history
 - ex: <http://localhost:8000/fhir/Observation?patient=123&category=social-history>
 - vital-signs
 - ex: <http://localhost:8000/fhir/Observation?patient=123&category=vital-signs>
 - sdoh
 - ex: <http://localhost:8000/fhir/Observation?patient=123&category=sdoh>
 - survey
 - ex: <http://localhost:8000/fhir/Observation?patient=123&category=survey>
 - Survey
 - ex: <http://localhost:8000/fhir/Observation?patient=123&category=Survey>
 - cognitive-status

- ex: <http://localhost:8000/fhir/Observation?patient=123&category=cognitive-status>
- functional-status
 - ex: <http://localhost:8000/fhir/Observation?patient=123&category=functional-status>
- exam
 - ex: <http://localhost:8091/fhir/r4/Observation?patient=20230215032333974F06EDAA669BF4B29911&category=exam>

code parameter:

- Supported LOINC codes:
- BMI - 39156-5
- ex: <http://localhost:8000/fhir/Observation?patient=123&code=39156-5>
- Body Temperature - 8310-5
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=8310-5>
 - Blood Pressure (Diastolic and Systolic) - 85354-9
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=85354-9>
 - Blood Pressure (Diastolic) - 8462-4
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=8462-4>
 - Blood Pressure (Systolic) - 8480-6
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=8480-6>
 - Head Circumference - 9843-4
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=9843-4>
 - Heart Rate - 8867-4
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=8867-4>
 - Height - 8302-2
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=8302-2>
 - Laboratory Codes (any values in dbo.LabResultItems.NameCode)
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=<NameCode>>
 - Oxygen Saturation
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=2708-6>
 - Pediatric BMI - 59576-9
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=59576-9>
 - Pediatric Head Circumference - 8289-1
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=8289-1>
 - Pediatric Weight - 77606-2
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=77606-2>
 - Pulse Oximetry
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=59408-5>

- Respiratory Rate - 9279-1
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=9279-1>
- Smoking Status - 72166-2
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=72166-2>
- Weight - 29463-7
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=29463-7>
- Sexual orientation- 76690-7
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=76690-7>
- History of Occupation- 11341-5
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=11341-5>
- History of Occupation Industry- 86188-0
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=86188-0>
- Pregnancy status- 82810-3
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=82810-3>
- Pregnancy Intent- 86645-9
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=86645-9>
- Living Situation- 71802-3
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=71802-3>
- CursedByAnyone- 95615-1
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=95615-1>
- Problems with place where you live- 96778-6
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=96778-6>
- FoodRanOutPast12Months- 88122-7
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=88122-7>
- FoodDidNotLastPast12Months- 88123-5
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=88123-5>
- LackOfTransportation- 93030-5
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=93030-5>
- UtilityConcerns- 96779-4
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=96779-4>
- PhysicallyHurt- 95618-5
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=95618-5>
- InsultedByAnyone- 95617-7
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=95617-7>
- ThreatenedByAnyone- 95616-9
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=95616-9>
- Cognitive Status- 11332-4
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=11332-4>
- Feeling nervous- 69725-0
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=69725-0>
- Not able to stop or control worrying- 68509-9
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=68509-9>
- Worrying too much- 69733-4
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=69733-4>
- Trouble relaxing- 69734-2
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=69734-2>
- Being so restless- 69735-9
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=69735-9>
- Becoming easily annoyed- 69689-8
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=69689-8>

- Feeling afraid- 69736-7
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=69736-7>
- FunctionalStatus- 75276-6
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=75276-6>
 - Disability Status- 94023-9
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=94023-9>
- Supports multiple codes separated by comma
 - ex: <http://localhost:8000/fhir/Observation?patient=123&code=39156-5,8302-2,29463-7>

date parameter:

- Supported operators:
 - equal - default
 - ex: <http://localhost:8000/fhir/Observation?patient=123&date=2022-01-01>
 - greater than - gt
 - ex: <http://localhost:8000/fhir/Observation?patient=123&date=gt2022-01-01>
 - greater than or equals - ge
 - ex: <http://localhost:8000/fhir/Observation?patient=123&date=ge2022-01-01>
 - less than - lt
 - ex: <http://localhost:8000/fhir/Observation?patient=123&date=lt2022-01-01>
 - less than or equals - le
 - ex: <http://localhost:8000/fhir/Observation?patient=123&date=le2022-01-01>

Organization

Documentation: <http://hl7.org/fhir/us/core/STU4/StructureDefinition-us-core-organization.html>

Supported actions:

- Read
- Search

Search Parameters:

- name
- address

FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
Organization	dbo.Organizations
name	dbo.Organizations.Name
address	dbo.Organizations.Address1
	dbo.Organizations.Address2

Search examples:

- GET [base]/Organization?name=abc
- GET [base]/Organization?address=xyz

Patient

Documentation: <https://www.hl7.org/fhir/patient.html>

Supported actions:

- Create
- Read
- Search

Search Parameters:

- birthdate
- family
- name
- identifier (Client Code)
- gender

FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
Patient	dbo.Clients, dbo.ClientNames, dbo.ClientPhoneNumbers, dbo.ClientEmails
birthdate	dbo.Clients.BirthDate
family	dbo.ClientNames.LastName

name	dbo.ClientNames.FirstName dbo.ClientNames.MiddleName dbo.ClientNames.LastName dbo.ClientNames.Suffix
identifier	dbo.Clients.ClientCode
gender	dbo.Clients.GenderCode
deceasedDate	dbo.Clients.DeathDate
genderIdentity	dbo.Clients.GenderIdentity, dbo.GenderIdentities, dbo.ReportingDataMappings
tribalAffiliation	dbo.Clients.TribalAffiliation, dbo.VTribalAffiliation, dbo.ReportingDataMappings

birthdate parameter:

- Supported operators:
 - equal - default
 - ex: <http://localhost:8000/fhir/Patient?birthdate=2022-01-01>
 - greater than - gt
 - ex: <http://localhost:8000/fhir/Patient?birthdate=gt2022-01-01>
 - greater than or equals - ge
 - ex: <http://localhost:8000/fhir/Patient?birthdate=ge2022-01-01>
 - less than - lt
 - ex: <http://localhost:8000/fhir/Patient?birthdate=lt2022-01-01>
 - less than or equals - le
 - ex: <http://localhost:8000/fhir/Patient?birthdate=le2022-01-01>

Practitioner

Documentation: <https://www.hl7.org/fhir/practitioner.html>

Supported actions:

- Read
- Search

Search Parameters:

- identifier

- name

FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
Practitioner	dbo.Staff, dbo.StaffEmails
name	dbo.Staff.FirstName dbo.Staff.MiddleName dbo.Staff.LastName dbo.Staff.Suffix
identifier	dbo.Staff.DefaultNPI dbo.Staff.StaffCode

Search examples:

- GET [base]/Practitioner?name=abc
- GET [base]/Practitioner?identifier=http://hl7.org/fhir/sid/us-npi|some-npi
- GET [base]/Practitioner?identifier=some-staff-code

PractitionerRole

Documentation: <http://hl7.org/fhir/us/core/STU4/StructureDefinition-us-core-practitionerrole.html>

Supported actions:

- Read
- Search

Search Parameters:

- practitioner
- specialty

FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
PractitionerRole	dbo.Staff
practitioner	dbo.Staff.id
specialty	dbo.Staff.DefaultTaxonomy

Search examples:

- GET [base]/PractitionerRole?practitioner=<staff id>
- GET [base]/PractitionerRole?specialty=<taxonomy code>

Procedure

Documentation: <http://hl7.org/fhir/us/core/STU4/StructureDefinition-us-core-procedure.html>

Supported actions:

- Read
- Search

Search Parameters:

- patient (Required)
- date
- code
- status

FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
Procedure	dbo.ServiceDefinitions where dbo.Services.ServiceType = 1
patient	dbo.Services.client
date	dbo.Services.StartDate
code	dbo.Services.Cpt dbo.Services.Snomed dbo.Services.Loinc dbo.Services.Hcpcs
status	preparation = services with dbo.Services.StartDate after today completed = services ended before today

Search examples:

- GET [base]/Procedure?patient=123

- GET [base]/Procedure?status=completed

Provenance

Documentation: <http://hl7.org/fhir/us/core/STU4/StructureDefinition-us-core-provenance.html>

Supported actions:

- Search

Search Parameters:

- target (Required)
- patient
- _id

FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
target	The name of supported FHIR Resources listed in this page (except Provenance)
patient	dbo.Clients.id
_id	table id column

Observation Resource

- Supported operators:
 - SEXUAL_ORIENTATION
 - ex: <http://localhost:8091/fhir/r4/Provenance/2025061807391604485DEB0965CA945A0A2C-76690-7> (Format: ID-ObservationCode, id column from Clients table)
 - OCCUPATION_HISTORY
 - ex: <http://localhost:8091/fhir/r4/Provenance/2025061807391604485DEB0965CA945A0A2C-11341-5>(Format: ID-ObservationCode , id column from ClientEmployments table)
 - OCCUPATION_INDUSTRY
 - ex: <http://localhost:8091/fhir/r4/Provenance/2025061807391604485DEB0965CA945A0A2C-86188-0>(Format: ID-ObservationCode , id column from ClientEmployments table)
 -)

- SMOKING_STATUS
 - ex:
<http://localhost:8091/fhir/r4/Provenance/2025061807391604485DEB0965CA945A0A2C-72166-2>(Format: ID-ObservationCode , id column from VitalSigns table)
- PREGNANCY_STATUS
 - ex:
<http://localhost:8091/fhir/r4/Provenance/2025061807391604485DEB0965CA945A0A2C-82810-3>(Format: ID-ObservationCode , id column from VitalSigns table)
- PREGNANCY_INTENT
 - ex:
<http://localhost:8091/fhir/r4/Provenance/2025061807391604485DEB0965CA945A0A2C-86645-9>(Format: ID-ObservationCode , id column from VitalSigns table)
- LIVING_SITUATION
 - ex:
<http://localhost:8091/fhir/r4/Provenance/2025061807391604485DEB0965CA945A0A2C-71802-3>(Format: ID-ObservationCode , id column from HRSNQuestions table)
- PROBLEMS_WITH_PLACE
 - ex:
<http://localhost:8091/fhir/r4/Provenance/2025061807391604485DEB0965CA945A0A2C-96778-6>(Format: ID-ObservationCode , id column from HRSNQuestions table)
- FOOD_RAN_OUT_PAST_12_MONTHS
 - ex:
<http://localhost:8091/fhir/r4/Provenance/2025061807391604485DEB0965CA945A0A2C-88122-7>(Format: ID-ObservationCode , id column from VitalSigns table)
- FOOD_DID_NOT_LAST_PAST_12_MONTHS
 - ex:
<http://localhost:8091/fhir/r4/Provenance/2025061807391604485DEB0965CA945A0A2C-88123-5>(Format: ID-ObservationCode , id column from HRSNQuestions table)
- LACK_OF_TRANSPORTATION
 - ex:
<http://localhost:8091/fhir/r4/Provenance/2025061807391604485DEB0965CA945A0A2C-93030-5>(Format: ID-ObservationCode , id column from HRSNQuestions table)
- UTILITY_CONCERNS
 - ex:
<http://localhost:8091/fhir/r4/Provenance/2025061807391604485DEB0965CA945A0A2C-96779-4>(Format: ID-ObservationCode , id column from HRSNQuestions table)

- PHYSICALLY_HURT
 - ex:
<http://localhost:8091/fhir/r4/Provenance/2025061807391604485DEB0965CA945A0A2C-95618-5>(Format: ID-ObservationCode , id column from HRSNQuestions table)
- INSULTED_BY_ANYONE
 - ex:
<http://localhost:8091/fhir/r4/Provenance/2025061807391604485DEB0965CA945A0A2C-95617-7>(Format: ID-ObservationCode , id column from HRSNQuestions table)
- THREATENED_BY_ANYONE
 - ex:
<http://localhost:8091/fhir/r4/Provenance/2025061807391604485DEB0965CA945A0A2C-95616-9>(Format: ID-ObservationCode , id column from HRSNQuestions table)
- CURSED_BY_ANYONE
 - ex:
<http://localhost:8091/fhir/r4/Provenance/2025061807391604485DEB0965CA945A0A2C-95615-1>(Format: ID-ObservationCode , id column from HRSNQuestions table)
- HEALTH_CONCERN
 - ex:
<http://localhost:8091/fhir/r4/Provenance/2025061807391604485DEB0965CA945A0A2C>(Format: ID , id column from VitalHealthConcernstable)
- FEELING_NERVOUS
 - ex:
<http://localhost:8091/fhir/r4/Provenance/2025061807391604485DEB0965CA945A0A2C-69725-0>(Format: ID , id column from EV_GAD7Assessments table)
- NOT_ABLE_TO_CONTROL_WORRYING
 - ex:
<http://localhost:8091/fhir/r4/Provenance/2025061807391604485DEB0965CA945A0A2C-68509-9>(Format: ID , id column from EV_GAD7Assessments table)
- WORRYING_TOO_MUCH
 - ex:
<http://localhost:8091/fhir/r4/Provenance/2025061807391604485DEB0965CA945A0A2C-69733-4>(Format: ID , id column from EV_GAD7Assessments table)
- TROUBLE_RELAXING
 - ex:
<http://localhost:8091/fhir/r4/Provenance/2025061807391604485DEB0965CA945A0A2C-69734-2>(Format: ID , id column from EV_GAD7Assessments table)
- RESTLESS

- ex:
 - <http://localhost:8091/fhir/r4/Provenance/2025061807391604485DEB0965CA945A0A2C-69735-9>(Format: ID , id column from EV_GAD7Assessments table)
 - EASILY_ANNOYED
 - ex:
 - <http://localhost:8091/fhir/r4/Provenance/2025061807391604485DEB0965CA945A0A2C-69689-8>(Format: ID , id column from EV_GAD7Assessments table)
 - FEELING_AFRAID
 - ex:
 - <http://localhost:8091/fhir/r4/Provenance/2025061807391604485DEB0965CA945A0A2C-69736-7>(Format: ID , id column from EV_GAD7Assessments table)
 - COGNITIVE_STATUS
 - ex:
 - <http://localhost:8091/fhir/r4/Provenance/2025061807391604485DEB0965CA945A0A2C-11332-4>(Format: ID-ObservationCode , id column from VitalSignstable)
 - FUNCTIONAL_STATUS
 - ex:
 - <http://localhost:8091/fhir/r4/Provenance/2025061807391604485DEB0965CA945A0A2C-75276-6>(Format: ID-ObservationCode , id column from VitalSignstable)
 - DISABILITY_STATUS
 - ex:
 - <http://localhost:8091/fhir/r4/Provenance/2025061807391604485DEB0965CA945A0A2C-94023-9>(Format: ID-ObservationCode , id column from VitalSignstable)

Search examples:

- GET [base]/Provenance?target=Encounter&patient=123
- GET [base]/Provenance?target=Practitioner&_id=123
- GET [base]/Provenance/id (where id format is ID-OBSERVATIONCODE)

*While testing **Provenance** for 'Coverage' resource, path variable should be 'ClientPayerId'.*

Ex: ClientPayerId = [2025091205415799467CC523403E54B88892](https://avengers.gamilestone.echoehr.com/fhir/r4/Provenance/2025091205415799467CC523403E54B88892)
<https://avengers.gamilestone.echoehr.com/fhir/r4/Provenance/2025091205415799467CC523403E54B88892>

QuestionnaireResponse

Documentation: <https://hl7.org/fhir/us/core/STU6.1/StructureDefinition-us-core-questionnaireresponse.html>

Supported actions:

- Search
- Read

Search Parameters:

- id
- patient
- authored
- questionnaire
- _id

FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
id	table id column ofHRSNQuestionstable
patient	dbo.Clients.id
authored	dbo.HRSNQuestions.AssessmentDate
questionnaire	HRSN
_id	table id column ofHRSNQuestionstable

QuestionnaireResponse Resource

- Supported operators:
 - id
 - ex:
<http://localhost:8091/fhir/r4/QuestionnaireResponse/20250916094110828073FB19A8B494657BEF>
 - _id
 - ex:
<http://localhost:8091/fhir/r4/QuestionnaireResponse?id=20250916094110828073FB19A8B494657BEF>
 - authored
 - Supported operators:
 - equal - default
 - ex:
<http://localhost:8000/fhir/r4/QuestionnaireResponse?patient=<client id>&date=2022-01-01>
 - greater than - gt

- ex:
 - <http://localhost:8000/fhir/r4/QuestionnaireResponse?patient=<client id>&date=gt2022-01-01>
 - greater than or equals - ge
 - ex:
 - <http://localhost:8000/fhir/r4/QuestionnaireResponse?patient=<client id>&date=ge2022-01-01>
 - less than - lt
 - ex:
 - <http://localhost:8000/fhir/r4/QuestionnaireResponse?patient=<client id>&date=lt2022-01-01>
 - less than or equals - le
 - ex:
 - <http://localhost:8000/fhir/r4/QuestionnaireResponse?patient=<client id>&date=le2022-01-01>
 - questionnaire
 - ex: <http://localhost:8091/fhir/r4/QuestionnaireResponse?patient=<client id>&questionnaire=HRSN>
 - patient
 - ex:
 - <http://localhost:8091/fhir/r4/QuestionnaireResponse?patient=20230215032333974F06EDAA669BF4B29911>

Search examples:

- GET [base]/QuestionnaireResponse/id (id from HRSNQuestionstable)
 - ex:
 - <https://avengers.gamilestone.echoehr.com/fhir/r4/QuestionnaireResponse/202511030652214226137EB0D01C34971A47>
- GET [base]/QuestionnaireResponse?patient=<client id>
 - ex:
 - <https://avengers.gamilestone.echoehr.com/fhir/r4/QuestionnaireResponse?patient=2025081208175381353625543EE3841278A5>
- GET [base]/QuestionnaireResponse?patient=<client id>&questionnaire=HRSN
 - ex:
 - <https://avengers.gamilestone.echoehr.com/fhir/r4/QuestionnaireResponse?patient=2025081208175381353625543EE3841278A5&questionnaire=HRSN>
- GET [base]/QuestionnaireResponse?patient=<client id>&authored=<Assessment Date>
 - ex:
 - <https://avengers.gamilestone.echoehr.com/fhir/r4/QuestionnaireResponse?patient=2025081208175381353625543EE3841278A5&authored=2025-11-03>

Specimen

Documentation: <https://hl7.org/fhir/us/core/STU6.1/StructureDefinition-us-core-specimen.html>

Supported actions:

- Search

Search Parameters:

- id
- patient
- _id

FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
id	table id column of LabOrders table
patient	dbo.Clients.id
_id	table id column of LabOrders table

Specimen Resource

- Supported operators:
 - id
 - ex:
<http://localhost:8091/fhir/r4/Specimen/20250916094110828073FB19A8B494657BEF>
 - _id
 - ex:
<http://localhost:8091/fhir/r4/Specimen?id=20250916094110828073FB19A8B494657BEF>
 - patient
 - ex:
<http://localhost:8091/fhir/r4/Specimen?patient=20230215032333974F06EDAA669BF4B29911>

Search examples:

- GET [base]/Provenance/id (id from LabOrders table)
 - ex:
<https://avengers.gamilestone.echoehr.com/fhir/r4/Provenance/2025101601004584920525436BCE1415AA1A>
- GET [base]/Provenance?target=Specimen&_id=id(id from LabOrders table)

- ex: <https://avengers.gamilestone.echoehr.com/fhir/r4/Provenance?target=Specimen&id=2025101601004584920525436BCE1415AA1A>
- GET [base]/Provenance?target=Specimen&patient=123
 - ex: <https://avengers.gamilestone.echoehr.com/fhir/r4/Provenance?target=Specimen&patient=20230921032108442FF6F6C53446741CAA76>

MedicationDispense

Documentation: <https://hl7.org/fhir/us/core/STU6.1/StructureDefinition-us-core-medicationdispense.html>

Supported actions:

- Search

Search Parameters:

- id
- patient
- _include

FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
id	table id column of ClientMedications table
patient	http://dbo.Clients.id
_include	MedicationDispense:medication
status	unknown (only status with unknown will return results)

Specimen Resource

- Supported operators:
 - id
 - ex: <http://localhost:8091/fhir/r4/MedicationDispense/20251027122424887933663DDD81243BEAA0>
 - _id
 - ex: <http://localhost:8091/fhir/r4/MedicationDispense?patient=20230419022>

[71884989238485D0F6452FAAD& include=MedicationDispense:medicati
on](#)

- patient
 - ex:
<http://localhost:8091/fhir/r4/MedicationDispense?patient=2023041902271884989238485D0F6452FAAD>
- status
 - ex:
<http://localhost:8091/fhir/r4/MedicationDispense?patient=2023041902271884989238485D0F6452FAAD&status=cancelled,unknown>

Search examples:

- GET [base]/Provenance/id (id from ClientMedications table)
 - ex:
<https://avengers.gamilestone.echoehr.com/fhir/r4/Provenance/2025101601004584920525436BCE1415AA1A>
- GET [base]/Provenance?target=MedicationDispense&_id=id(id from ClientMedications table)
 - ex:
http://localhost:8091/fhir/r4/Provenance?target=MedicationDispense&_id=20251027122424887933663DDD81243BEEA0
- GET [base]/Provenance?target=MedicationDispense&patient=123
 - ex:
<http://localhost:8091/fhir/r4/Provenance?target=MedicationDispense&patient=2023041902271884989238485D0F6452FAAD>

ServiceRequest

Documentation: [HL7.FHIR.US.CORE\US Core ServiceRequest Profile - FHIR v4.0.1](#)

Supported actions:

- Read
- Search

Search Parameters:

- `_id` (Required if patient parameter is not provided)
- `patient` (Required if `_id` parameter is not provided)

FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
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FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
EpisodesServicesRequested	dbo.ServiceDefinitions where dbo.ServiceDefinitions.ServiceType = 1
patient	dbo.Episode.client
code	dbo.ServiceDefinitions.Cpt dbo.ServiceDefinitions.Snomed dbo.ServiceDefinitions.Loinc dbo.ServiceDefinitions.Hcpcs
_id	dbo.EpisodesServicesRequested.id
date/authored	dbo.Episodes.StartDate
status	active (hard-coded)

Search examples:

- GET
<http://localhost:8091/fhir/r4/ServiceRequest?patient=2022070814134411359C820F3B5A044A5AB9>
- GET
<http://localhost:8091/fhir/r4/ServiceRequest? id=202207150038077983F5B282CD5584822AFE>
- GET
<http://localhost:8091/fhir/r4/ServiceRequest?patient=2022070814134411359C820F3B5A044A5AB9&authored=gt2022-01-14T00:00:00Z>
- GET
<http://localhost:8091/fhir/r4/ServiceRequest?patient=2022070814134411359C820F3B5A044A5AB9&status=active>
- GET
<http://localhost:8091/fhir/r4/ServiceRequest?patient=2022070814134411359C820F3B5A044A5AB9&code=410606002>

RelatedPerson

Documentation: [HL7.FHIR.US.CORE\US Core RelatedPerson Profile - FHIR v4.0.1](#)

Supported actions:

- Read
- Search

Search Parameters:

- _id
- patient
- name

FHIR Resource/Search Parameters	EchoVantage Resource/Search Parameters
ClientContacts	dbo.ClientContacts
patient	dbo.ClientContacts.Client
_id	dbo.ClientContacts.id
name	dbo.ClientContactRoleDefinitions.Description

Search examples:

- GET <https://avengers.gamilestone.echoehr.com/fhir/r4/RelatedPerson?patient=202504011053161723193A3F46CE64D67B2A>
- GET https://avengers.gamilestone.echoehr.com/fhir/r4/RelatedPerson?_id=2025120807502176413E574E18DF44C49993
- GET <https://avengers.gamilestone.echoehr.com/fhir/r4/RelatedPerson?patient=202504011053161723193A3F46CE64D67B2A&name=child1>
- GET <https://avengers.gamilestone.echoehr.com/fhir/r4/RelatedPerson?name=child1>