



LOS ANGELES COUNTY
**DEPARTMENT OF
MENTAL HEALTH**
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Client Services (CS) FHIR R4 Migration Companion Guide

Document Information

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Version	1.3.0
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Version History

Version	Date	Summary of Changes
1.3.0	10/05/2026	8 Episode Management is updated
1.2.0	9/19/2026	Added CSI (§4.8) and UMDAP (§4.9) field-level mapping tables, and the no-FHIR-equivalent CS operations statement (§4.10). Added the identifying meta.tag code / questionnaire canonical URL column to the section 3 operation mapping table, and corrected the GetClientCSI row to the QuestionnaireResponse resource type it now targets. Corrected the CSI example in section 9 — the previous assessment-date / assessment-type linkId s and the cs-csi-assessment-type CodeSystem did not correspond to any CSI artifact and have been replaced with the published numeric linkId s. Removed the now-unused CSI Assessment Type CodeSystem row from Appendix B.
1.1.1	9/11/2026	Corrected "IBIS" to "IBHIS" throughout; removed EpisodeOfCare references from the admission and discharge workflow (it is read-only in CS); clarified the CSI questionnaire status. No request or payload change.
1.1.0	7/1/2026	Endpoint URLs and onboarding content updated for the HIDEX website release.
1.0.0	6/24/2026	Initial release.

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1. Migration Overview

Background

The LA County Department of Mental Health (DMH) is transitioning the Client Services (CS) electronic data exchange from the legacy **BizTalk SOAP/WCF** interface to a modern **FHIR R4 REST API** hosted within the HIDEX Provider Access API infrastructure.

Contract Providers (CPs) currently submit client data via a SOAP web service (`ClientService/ClientServiceInterface.svc`) using XML payloads authenticated with X.509 client certificates. The new system replaces this with:

- **FHIR R4 JSON** payloads conforming to DMH-defined profiles
- **Subscription key authentication** through API Management gateway (replacing client certificates)
- **RESTful HTTP** endpoints (replacing SOAP/WCF operations)

What Changes for Contract Providers

Aspect	Legacy (SOAP/WCF)	New (FHIR R4)
Protocol	SOAP 1.2 over HTTPS	REST over HTTPS
Payload Format	XML (XSD-validated)	JSON (FHIR R4 profiles)
Authentication	X.509 client certificates + BizTalk party resolution	OAuth2 client credentials + API subscription keys
Operations	AdmitNewClient, UpdateClientDetails, DischargeClient, etc.	POST /fhir/Patient, PUT /fhir/Patient/{id}, POST /fhir/Encounter, PUT /fhir/Encounter/{id}, etc.
Response ID	ClientID (SQL integer), various record IDs such as DiagnosisID, PregnancyID in alphanumeric	FHIR resource ID (FHIR server GUID)
Validation	BizTalk BRE policies + XSD	FluentValidation + FHIR profile conformance
Batch Submission	Individual calls per record	FHIR transaction Bundle (multiple in one call)

What Remains the Same

- **Business rules:** All CS validation rules (field lengths, required fields, code values) remain identical
- **Data content:** The same client demographics, episode, diagnosis, CSI, financial eligibility, UMDAP and pregnancy data is collected
- **Program-level access:** Each provider can only submit for their assigned programs
- **Client tracking:** Every client receives a unique identifier for cross-system correlation
- **Monthly submission deadline:** Client data must still be submitted by end of each month for the prior month

2. Authentication Transition

Legacy: Client Certificates

Previously, Contract Providers authenticated using X.509 client certificates installed on their application servers. BizTalk performed party resolution based on the certificate thumbprint to identify the submitting organization and its allowed programs.

New: OAuth2 Token and Subscription Key

Contact LACDMH CIOB Help Desk via [Heat Self Service Portal](#) or call 213 351-1335 to request API access for your organization. Every request to the new FHIR API requires two things: an OAuth2 bearer token obtained via the client credentials grant, and an APIM subscription key. See the **API Credentials Reference** table below for what's provisioned and where each value is used.

Step 1: Acquire OAuth2 Access Token

```
POST https://login.microsoftonline.com/{tenant-id}/oauth2/v2.0/token
Content-Type: application/x-www-form-urlencoded

grant_type=client_credentials
&client_id={your-client-id}
```

```
&client_secret={your-client-secret}
&scope={your-resource-audience}
```

{your-resource-audience} is the Resource Audience value from the API Credentials Reference table below (e.g., `api://{resource/appID}/.default`).

Response:

```
{
  "token_type": "Bearer",
  "expires_in": 3600,
  "access_token": "eyJ0eXAiOiJKV1QiLCJhbGciOi..."
}
```

The access token contains claims including your `program_id` authorization.

Step 2: Include Both Headers on API Requests

Every API request requires **both** authentication headers:

```
POST /fhir/Patient HTTP/1.1
Host: hidex-test.dmh.lacounty.gov
Authorization: Bearer {access_token}
Ocp-Apim-Subscription-Key: {your-subscription-key}
Content-Type: application/fhir+json
```

Important Notes

- **OAuth2 tokens expire after 1 hour** — implement token caching and refresh logic
- **Subscription key** targets the specific environment (TEST, QA, or PRODUCTION)
- Your token's `program_id` claim must match the program codes in your submissions
- Contact DMH HIDEX Support if you need to rotate your subscription key
- Contact LACDMH CIOB for OAuth2 client credential provisioning

API Credentials Reference

The Integration Team provisions the following credentials for API access:

Item	Type	Scope	Value
Client ID	App Registration	TEST / QA: [Shared Value]; PRODUCTION: [Unique Value]	Your OAuth2 application identifier (<code>client_id</code>)
Client Secret	App Registration	TEST / QA: [Shared Value]; PRODUCTION: [Unique Value]	Your OAuth2 application secret (<code>client_secret</code>) — store securely
Tenant ID	Azure AD	TEST / QA: [Shared Value]; PRODUCTION: [Unique Value]	The Azure AD tenant identifier (<code>tenant_id</code>)
Resource Audience	OAuth2 Scope	TEST / QA: [Shared Value]; PRODUCTION: [Unique Value]	<code>api://{resource/appID}/.default</code> — used as the <code>scope</code> parameter in the token request
Base URL	Endpoint	Environment-specific	TEST: <code>https://hidex-test.dmh.lacounty.gov/healthcare</code> QA: <code>https://hidex-qa.dmh.lacounty.gov/healthcare</code> PRODUCTION: <code>https://hidex.dmh.lacounty.gov/healthcare</code>
APIM Subscription Key	API Management	Environment-specific	Sent as the <code>Ocp-Apim-Subscription-Key</code> header on every request

Note: Client ID, Client Secret, Tenant ID, and Resource Audience are shared across the TEST and QA environments. Base URL and the APIM Subscription Key are environment-specific — request separate values for TEST and QA. All PRODUCTION values are unique.

Key Differences from Legacy

Aspect	Legacy (Certificates)	New (OAuth2 + Subscription Keys)
Credential Type	X.509 certificate files	OAuth2 client credentials + API subscription key
Storage	Certificate store on server	Secure configuration/key vault
Rotation	Manual certificate renewal	Contact LACDMH CIOB to rotate credentials
Validation	Certificate thumbprint	OAuth2 token validation + HTTP header validation
Expiration	Annual certificate renewal	OAuth2 tokens expire after 1 hour (refresh required)

3. Endpoint Configuration

Base URLs by Environment

Environment	Base URL
TEST	<code>https://hidex-test.dmh.lacounty.gov/healthcare</code>
QA	<code>https://hidex-qa.dmh.lacounty.gov/healthcare</code>
PRODUCTION	<code>https://hidex.dmh.lacounty.gov/healthcare</code>

Note: All environments use the same base URL pattern. Contact LACDMH CIOB for access credentials and subscription key requirements.

Legacy-to-FHIR Operation Mapping

Legacy SOAP Operation	HTTP Method	FHIR Path	Description
AdmitNewClient	POST	<code>{baseUrl}/Patient {baseUrl}/Encounter</code>	Create a new client with admission encounter
UpdateClientDetails (Update Demographics)	PUT	<code>{baseUrl}/Patient/{IBHISClientId}</code>	Update client demographics
GetClientDetails	GET	<code>{baseUrl}/Patient?identifier= {IBHISClientId}</code>	Retrieve client demographics
AdmitExistingClient (admission)	POST	<code>{baseUrl}/Encounter</code>	Create an admission encounter for an existing client
GetClientActiveEpisode	GET	<code>{baseUrl}/EpisodeOfCare?patient= {IBHISClientId}&_tag=ClinicalServices</code>	Get active episode (see tag note below)
GetClientEpisodeHist	GET	<code>{baseUrl}/EpisodeOfCare?patient= {IBHISClientId}&_tag=ClinicalServices</code>	Get episode history (see tag note below)
DischargeClient	POST	<code>{baseUrl}/Encounter</code>	Create a discharge encounter
DischargeClient (update)	PUT	<code>{baseUrl}/Encounter/{id}</code>	Update an existing encounter to finished
CreateClientDiagnosis	POST	<code>{baseUrl}/Condition</code>	Create a diagnosis record
UpdateClientDiagnosis	PUT	<code>{baseUrl}/Condition/{id}</code>	Update a diagnosis record
GetClientDiagnosis	GET	<code>{baseUrl}/Condition?patient= {id}&category=encounter-diagnosis</code>	Get current diagnosis
GetClientDiagnosisHistory	GET	<code>{baseUrl}/Condition?patient={id}</code>	Get diagnosis history
CreateClientCSI	POST	<code>{baseUrl}/QuestionnaireResponse</code>	Submit CSI assessment

Legacy SOAP Operation	HTTP Method	FHIR Path	Description
GetClientCSI	GET	{baseUrl}/QuestionnaireResponse?patient={id}&questionnaire=CSI	Get CSI assessment. Unconfirmed — questionnaire is not a dispatched parameter and the CS smoke test reads CSI by compound id ('QuestionnaireResponse/{clientId})
GetClientFinEligibility	GET	{baseUrl}/Coverage?patient={id}	Get financial eligibility. patient is the verified form; beneficiary is the canonical R4 parameter
UpdateClientFinEligibility	PUT	{baseUrl}/Coverage/{id}	Update financial eligibility
CreateClientUMDAP	POST	{baseUrl}/QuestionnaireResponse	Submit UMDAP assessment
GetClientUMDAPDetails	GET	{baseUrl}/QuestionnaireResponse?_tag=UMDAP&patient={id}	Get UMDAP details. Client-level — any episode identifier supplied is ignored
GetClientSvcHist	GET	{baseUrl}/QuestionnaireResponse?_tag=ServiceHistory&patient={id}	Get service history (refresh-on-read — see note below)
GetPublicGuardianSvcHist	GET	{baseUrl}/QuestionnaireResponse?_tag=PublicGuardian&patient={id}	Get Public Guardian history (refresh-on-read)
GetDCFSClientSvcHist	GET	{baseUrl}/QuestionnaireResponse?_tag=DCFS&patient={id}	Get DCFS history (refresh-on-read)
UpdateClientUMDAP	PUT	{baseUrl}/QuestionnaireResponse/{id}	Update UMDAP assessment
CreateClientPregnancy	POST	{baseUrl}/Condition	Create pregnancy record
GetClientPregnancyDetails	GET	{baseUrl}/Condition?patient={id}&code=pregnancy	Get pregnancy details
UpdateClientPregnancy	PUT	{baseUrl}/Condition/{id}	Update pregnancy record
SearchClient	GET	{baseUrl}/Patient?name={name}&birthdate={dob}	Search for clients
Submit batch	POST	{baseUrl}/Bundle	Submit multiple operations atomically

Required HTTP Headers

Header	Value	Required
Authorization	Bearer {access_token}	Yes
Ocp-Apim-Subscription-Key	{your-subscription-key}	Yes
Content-Type	application/fhir+json	Yes
Accept	application/fhir+json	Recommended

FHIR Version Requirement

All interactions use **FHIR R4 (4.0.1)**. Resources must conform to the DMH-defined profiles listed below:

Resource	Profile URL
Patient	http://dmh.lacounty.gov/fhir/StructureDefinition/cs-patient
Encounter	http://dmh.lacounty.gov/fhir/StructureDefinition/cs-encounter
EpisodeOfCare	http://dmh.lacounty.gov/fhir/StructureDefinition/cs-episode-of-care
Condition	http://dmh.lacounty.gov/fhir/StructureDefinition/cs-condition
Coverage	http://dmh.lacounty.gov/fhir/StructureDefinition/cs-coverage
QuestionnaireResponse	http://dmh.lacounty.gov/fhir/StructureDefinition/cs-questionnaire-response

Note: Admission and discharge are recorded as `Encounter` resources referencing the `Patient`. `EpisodeOfCare` is used for episode history search/read (`GET /fhir/EpisodeOfCare?patient={id}`) and is derived from the `Encounter` data — you do not POST or PUT an `EpisodeOfCare` directly for admission/discharge.

Important — the episode-independent history reads are refresh-on-read, not plain searches. For `_tag=ServiceHistory`, `_tag=PublicGuardian`, and `_tag=DCFS`, the API calls NetSmart live, deletes the existing FHIR records carrying that tag, recreates them from the NetSmart response, and then returns the refreshed searchset. Two consequences:

- **Resource ids change between calls.** Never cache or persist a `QuestionnaireResponse.id` from these tags as a stable key.
- If NetSmart errors **and** no FHIR record exists, you receive `400` with `Record cannot be found`. If NetSmart errors **but** a FHIR record does exist, you receive the previously stored (possibly stale) data with a success status and no freshness indicator — do not present it as live data.

`_tag` values are case-sensitive and exact: `ServiceHistory`, `PublicGuardian`, `DCFS`, `UMDAP`. An unrecognized `_tag` is not dispatched and falls through to an ordinary search.

4. Field Mapping Reference

This section maps legacy CS XML elements/attributes to their FHIR R4 equivalents.

4.1 Client Demographics (Patient Resource)

Legacy XML Path	FHIR R4 Path	Notes
<code>Client/@ClientFirstName</code>	<code>Patient.name[0].given[0]</code>	Max 38 chars
<code>Client/@ClientMiddleInitial</code>	<code>Patient.name[0].given[1]</code>	Single character
<code>Client/@ClientLastName</code>	<code>Patient.name[0].family</code>	Max 38 chars
<code>Client/@ClientPrefix</code>	<code>Patient.name[0].prefix[0]</code>	e.g., "Dr", "Mr"
<code>Client/@ClientSuffix</code>	<code>Patient.name[0].suffix[0]</code>	e.g., "Sr", "Jr"
<code>Client/@Alias</code>	<code>Patient.name[1].text</code> (use = "nickname")	Max 80 chars
<code>Client/@Email</code>	<code>Patient.telecom[system=email].value</code>	Valid email format
<code>Client/@Gender</code>	<code>Patient.gender</code>	Map: "M" → male, "F" → female, "U" → unknown
<code>Client/@DateOfBirth</code>	<code>Patient.birthDate</code>	ISO date format: YYYY-MM-DD
<code>Client/@SocialSecurityNumber</code>	<code>Patient.identifier[system=SSN].value</code>	9 digits exactly. System: http://hl7.org/fhir/sid/us-ssn
<code>Client/@MaritalStatus</code>	<code>Patient.maritalStatus.coding[0].code</code>	CodeSystem: http://terminology.hl7.org/CodeSystem/v3-MaritalStatus
<code>Client/@PrimaryLanguage</code>	<code>Patient.communication[0].language.coding[0].code</code>	CodeSystem: http://dmh.lacounty.gov/fhir/CodeSystem/cs-language
<code>Client/@Education</code>	<code>Patient.extension[education].valueCoding.code</code>	Extension URL: http://dmh.lacounty.gov/fhir/Extension/education-level
<code>Client/@EmploymentStatus</code>	<code>Patient.extension[employment-status].valueCoding.code</code>	Extension URL: http://dmh.lacounty.gov/fhir/Extension/employment-status
<code>Client/@Ethnicity</code>	<code>Patient.extension[ethnicity].valueCoding.code</code>	Extension URL: http://dmh.lacounty.gov/fhir/Extension/ethnicity
<code>Client/ClientOtherRace</code>	<code>Patient.extension[race].valueCoding.code</code>	Extension URL: http://dmh.lacounty.gov/fhir/Extension/race . Repeatable

4.2 Living Arrangement Fields

Legacy XML Path	FHIR R4 Path	Notes
ClientLivingArrangement/@LivingArrangements	Patient.extension[living-arrangement].valueCoding.code	Extension URL: http://dmh.lacounty.gov/fhir/Extension/living-arrangement
ClientLivingArrangement/@ClientsHomePhone	Patient.telecom[system=phone, use=home].value	10 digits exactly
ClientLivingArrangement/@StreetAddress1	Patient.address[0].line[0]	Max 100 chars
ClientLivingArrangement/@StreetAddress2	Patient.address[0].line[1]	Max 100 chars
ClientLivingArrangement/@ZipCode	Patient.address[0].postalCode	5 or 9 digits (ZIP+4 with dash)

4.3 Admission Fields (Encounter Resource)

Legacy XML Path	FHIR R4 Path	Notes
Admission/@AdmissionDate	Encounter.period.start	ISO date format: YYYY-MM-DD
Admission/@AdmissionTime	Encounter.extension[admission-time].valueTime	Extension URL: http://dmh.lacounty.gov/fhir/Extension/time . HH:mm format
Admission/@TypeOfAdmission	Encounter.extension[admission-type].valueCoding.code	Extension URL: http://dmh.lacounty.gov/fhir/Extension/type . CodeSystem: http://dmh.lacounty.gov/fhir/CodeSystem/admission-type
Admission/@AdmittingStaffNPI	Encounter.participant[type=ADM].individual.reference	Practitioner/{NPI} . 10 digits exactly
Admission/Admission24Hour/@ProgramOfAdmission	Encounter.extension[program-of-admission].valueCoding.code	Extension URL: http://dmh.lacounty.gov/fhir/Extension/of-admission
Admission/Admission24Hour/@SourceOfAdmission	Encounter.extension[source-of-admission].valueCoding.code	Extension URL: http://dmh.lacounty.gov/fhir/Extension/admission . CodeSystem: http://dmh.lacounty.gov/fhir/CodeSystem/admission-source

4.4 Smoking Assessment Fields

Legacy XML Path	FHIR R4 Path	Notes
ClientSmokingAssessment/@SmokingAssessment	Observation.valueCodeableConcept.coding[0].code	CodeSystem: http://dmh.lacounty.gov/fhir/CodeSystem/cs-smoking-status . LOINC: 72166-2
ClientSmokingAssessment/@SmokingAssessmentDate	Observation.effectiveDateTime	ISO date

4.5 Financial Eligibility Fields (Coverage Resource)

Legacy XML Path	FHIR R4 Path	Notes
MediCalClient/@CoverageEffectiveDate	Coverage.period.start	ISO date
MediCalClient/@SubscriberClientIndexNumber	Coverage.subscriberId	Medi-Cal CIN
MediCalClient/@SubscriberAddress	Coverage.extension[subscriber-address].valueAddress.line[0]	Max 100 chars
MediCalClient/@SubscriberAddress2	Coverage.extension[subscriber-address].valueAddress.line[1]	Max 100 chars

Legacy XML Path	FHIR R4 Path	Notes
MediCalClient/@SubscriberZip	Coverage.extension[subscriber-address].valueAddress.postalCode	5 or 9 digits
MediCalClient/@SubscriberGender	Coverage.extension[subscriber-gender].valueCoding.code	Map: "M" → male, "F" → female

4.6 Diagnosis Fields (Condition Resource)

Legacy XML Path	FHIR R4 Path	Notes
Diagnosis/@DiagnosisCode	Condition.code.coding[0].code	ICD-10 code. System: http://hl7.org/fhir/sid/icd-10-cm
Diagnosis/@DiagnosisDate	Condition.recordedDate	ISO date
Diagnosis/@DiagnosingStaffNPI	Condition.recorder.identifier.value	10 digits exactly
Diagnosis/@DiagnosisRanking	Condition.extension[ranking].valueInteger	Extension URL: http://dmh.lacounty.gov/fhir/Extension/diagnosis-ranking . 1 = primary
Diagnosis/@DiagnosisType	Condition.category[0].coding[0].code	CodeSystem: http://dmh.lacounty.gov/fhir/CodeSystem/cs-diagnosis-type

4.7 Discharge Fields (Encounter Resource)

Legacy XML Path	FHIR R4 Path	Notes
Discharge/@DischargeDate	Encounter.period.end	ISO date
Discharge/@DischargeReason	Encounter.extension[discharge-reason].valueCoding.code	Extension URL: http://dmh.lacounty.gov/fhir/Extension/discharge-reason . CodeSystem: http://dmh.lacounty.gov/fhir/CodeSystem/cs-discharge-reason
Discharge/@DischargingStaffNPI	Encounter.participant[type=ADM].individual.reference	Practitioner/{NPI}. 10 digits exactly

4.8 CSI Assessment Fields (QuestionnaireResponse)

The Client and Service Information (CSI) assessment maps to a `QuestionnaireResponse` tagged `CSI_Admission`, with `questionnaire` set to the canonical URL <http://fhir.dmh.lacounty.gov/Questionnaire/CSI>. Each row below is one `QuestionnaireResponse.item`, keyed by `linkId`. CS element names are spelled as they appear in `CreateClientCSI_Input.xsd` / `GetClientCSI_Output.xsd`.

Two items — Birth Suffix (`linkId` 5) and Date of Birth (`linkId` 7) — are **not part of the CS contract**. They are carried on the FHIR `QuestionnaireResponse` only, as fields the HIDEX Provider Access API added; there is no corresponding CS element to migrate from. `linkId` values 11, 12, and 22 are intentionally unassigned.

CS element	linkId	Answer type	Card.	Required	Length / facet	Source
BirthFirstName	2	valueString	1...1	Yes	maxLength 15, minLength 1, pattern <code>^[A-Za-z][-_ 'A-Za-z]*\$</code>	CreateClientCSI_Input.xsd
BirthLastName	3	valueString	0...1	No	maxLength 20	CreateClientCSI_Input.xsd
BirthMiddleName	4	valueString	0...1	No	maxLength 20	CreateClientCSI_Input.xsd
MothersFirstName	6	valueString	0...1	No	maxLength 20	CreateClientCSI_Input.xsd
PlaceOfBirthCounty	8	valueCoding	0...1	No	maxLength 19; 60 members	CreateClientCSI_Input.xsd, Types/Types.xsd
PlaceOfBirthState	9	valueCoding	1...1	Yes	maxLength 2; 53 members	CreateClientCSI_Input.xsd
PlaceOfBirthCountry	10	valueCoding	1...1	Yes	maxLength 39; 263 members	CreateClientCSI_Input.xsd, Types/Types.xsd

CS element	linkId	Answer type	Card.	Required	Length / facet	Source
PreferredLanguage	13	valueCoding	1...1	Yes	maxLength 25; members not enumerated in the schema — obtain from the DMH Dictionary Service, DictionaryType CSIPreferredLanguage , appID CS	CreateClientCSI_Input.xsd
CSIEthnicity	14	valueCoding	1...1	Yes	maxLength 19; 3 members	CreateClientCSI_Input.xsd
CSIRace	15	valueCoding , repeating	1...5	Yes	maxLength 28; 20 members	CreateClientCSI_Input.xsd , Types/Types.xsd
SpecialPopulation	16	valueCoding	0...1	No	maxLength 65; 5 members	CreateClientCSI_Input.xsd
FiscallyResponsibleCountyForClient	17	valueCoding	1...1	Yes	maxLength 13; 60 members	CreateClientCSI_Input.xsd , Types/Types.xsd
LegalClass	18	valueCoding	0...1	No	maxLength 64; 15 members	CreateClientCSI_Input.xsd
AdmissionNecessityCode	19	valueCoding	0...1	No	maxLength 29; 3 members	CreateClientCSI_Input.xsd
CountySchool	20	valueCoding	0...1	No	maxLength 7; members not yet published	CreateClientCSI_Input.xsd
ConservatorshipCourtStatus	21	valueCoding	0...1	No	maxLength 44; 11 members	CreateClientCSI_Input.xsd
NumberOfDependentsLessThan18Y0	23	valueInteger	0...1	No	non-negative	CreateClientCSI_Input.xsd
NumberOfDependentsOver18Y0	24	valueInteger	0...1	No	non-negative	CreateClientCSI_Input.xsd

Required fields apply to create only. All 18 CS fields, including the 7 marked required above, are optional on the `getClientCSI` read response — the CS contract does not require any field on read.

4.9 UMDAP Assessment Fields (QuestionnaireResponse)

The Uniform Method of Determining Ability to Pay (UMDAP) assessment maps to a `QuestionnaireResponse` tagged `UMDAP` on create and `Financial_Investigation` on update, with `questionnaire` set to the canonical URL <http://fhir.dmh.lacounty.gov/Questionnaire/UMDAP>. CS element names are spelled as they appear in `CreateClientUMDAP_Input.xsd`, `UpdateClientUMDAP_Input.xsd`, `GetClientUMDAPDetails_Output.xsd`, and `Entities/ClientUMDAP.xsd`.

CS element	linkId	Answer type	CS type / length	CS accepts on	Required	Notes
AnnualChargePeriod	1	valueDate	xs:date	create only	Yes, on create	Not carried on update — see the note below
RecordCreationDate	2	valueDate	xs:date	read only	n/a (system-set)	Read-only on the DMH-facing contract. Excluded from every write the API sends.
NumberOfDependentsUponIncome	3	valueInteger	xs:nonNegativeInteger	create, update, read	No	
AdjustedMonthlyIncome	4	valueDecimal	xs:decimal , 2 fractional digits, minInclusive 0.00	create, update, read	No	

CS element	linkId	Answer type	CS type / length	CS accepts on	Required	Notes
AnnualLiability	5	valueDecimal	xs:decimal , 2 fractional digits, minInclusive 0.00	create, update, read	No	
ResponsiblePerson	6	valueString	xs:string , maxLength 80	create, update, read	No	
ClientNote	7	valueString	xs:string , maxLength 80	create, update, read	No	
ClientResponsibleLegalEntity	8	valueCoding	xs:string	read only	n/a (system-set)	Read-only on the DMH-facing contract. Excluded from every write the API sends.

DMH 2 and DMH 8 are excluded from the write on the DMH-facing contract only. Both attributes appear only in `GetClientUMDAPDetails_Output.xsd`, and neither UMDAP input schema accepts them — that is why the HIDEX Provider Access API excludes them from every provider-facing write. This is a contract choice on the DMH-facing side, not evidence that the downstream system of record rejects the values.

AnnualChargePeriod (DMH 1) is create-only. `UpdateClientUMDAP_Input.xsd` does not carry this attribute at all; do not send it on `UpdateClientUMDAP`.

ClientAdditionalUMDAPUniqueID has no QuestionnaireResponse.item. The CS contract returns it from `CreateClientUMDAP` and `GetClientUMDAPDetails`, and requires it as a `use="required"` attribute on `UpdateClientUMDAP` (maxLength 14) — but no `linkId` is defined for it, and record identity for an UMDAP `QuestionnaireResponse` is carried on the resource `id` rather than on an item. Providers relying on this value for record identity should track the resource `id` returned by create instead. This is an open item; contact LACDMH CIOB if your integration depends on `ClientAdditionalUMDAPUniqueID` specifically.

4.10 CS Operations With No FHIR Equivalent

The `CS_Service_Schemas` define no message body — no `_Input.xsd` and no `_Output.xsd` — for the following operations, so they have no FHIR interaction in this guide:

CS Operation	Why it has no FHIR equivalent
AddCSI	No CS message body is defined for a CSI add distinct from <code>CreateClientCSI</code> ; not implemented in the legacy service.
GetCSI	No CS message body is defined; not implemented in the legacy service.
UpdateCSI	No CS message body is defined; not implemented in the legacy service.
DeleteCSI	No CS message body is defined; not implemented in the legacy service.

The CS contract has no CSI update operation. `CreateClientCSI` and `GetClientCSI` are the only two CSI operations this guide documents. Do not infer a CSI update path from the presence of `UpdateClientUMDAP` in section 4.9 — the two instruments are not symmetric. A corrected CSI submission is made by submitting a new `CreateClientCSI`-equivalent `QuestionnaireResponse`; contact LACDMH CIOB if your workflow requires an in-place CSI correction.

5. Submitting a Client Admission

Request

```
POST https://hidex-test.dmh.lacounty.gov/healthcare/Patient
Authorization: Bearer {access_token}
Ocp-Apim-Subscription-Key: {your-subscription-key}
Content-Type: application/fhir+json
```

Example: New Client Demographics

```
{
  "resourceType": "Patient",
  "meta": {
    "profile": [
      "http://dmh.lacounty.gov/fhir/StructureDefinition/cs-patient"
    ]
  },
  "name": [
    {
      "use": "official",
      "family": "Martinez",
      "given": ["Elena", "M"],
      "prefix": ["Dr"],
      "suffix": ["Sr"]
    }
  ],
  "gender": "female",
  "birthDate": "1999-10-10",
  "identifier": [
    {
      "system": "http://hl7.org/fhir/sid/us-ssn",
      "value": "456789998"
    }
  ],
  "telecom": [
    {
      "system": "email",
      "value": "elena.martinez@example.com"
    },
    {
      "system": "phone",
      "use": "home",
      "value": "2134567890"
    }
  ],
  "address": [
    {
      "line": ["5568 Main St", "Unit 4"],
      "postalCode": "91406-0445"
    }
  ],
  "communication": [
    {
      "language": {
        "coding": [
          {
            "system": "http://dmh.lacounty.gov/fhir/CodeSystem/cs-language",
            "code": "GER",
            "display": "German"
          }
        ]
      }
    }
  ],
  "maritalStatus": {
    "coding": [
      {
        "system": "http://terminology.hl7.org/CodeSystem/v3-MaritalStatus",
        "code": "M",
        "display": "Married"
      }
    ]
  },
  "extension": [
    {
      "url": "http://dmh.lacounty.gov/fhir/Extension/education-level",
      "valueCoding": {
        "system": "http://dmh.lacounty.gov/fhir/CodeSystem/cs-education-level",
        "code": "associate-arts",

```

```

        "display": "Associate of Arts degree"
    }
},
{
    "url": "http://dmh.lacounty.gov/fhir/Extension/employment-status",
    "valueCoding": {
        "system": "http://dmh.lacounty.gov/fhir/CodeSystem/cs-employment-status",
        "code": "other",
        "display": "Other"
    }
},
{
    "url": "http://dmh.lacounty.gov/fhir/Extension/ethnicity",
    "valueCoding": {
        "system": "http://dmh.lacounty.gov/fhir/CodeSystem/cs-ethnicity",
        "code": "unknown-not-reported",
        "display": "Unknown/Not Reported"
    }
},
{
    "url": "http://dmh.lacounty.gov/fhir/Extension/race",
    "valueCoding": {
        "system": "http://dmh.lacounty.gov/fhir/CodeSystem/cs-race",
        "code": "korean",
        "display": "Korean"
    }
},
{
    "url": "http://dmh.lacounty.gov/fhir/Extension/living-arrangement",
    "valueCoding": {
        "system": "http://dmh.lacounty.gov/fhir/CodeSystem/cs-living-arrangement",
        "code": "foster-family-home",
        "display": "Foster family home"
    }
},
{
    "url": "http://dmh.lacounty.gov/fhir/Extension/program-of-service",
    "valueCoding": {
        "system": "http://dmh.lacounty.gov/fhir/CodeSystem/cs-program-of-service",
        "code": "00502"
    }
}
]
}

```

Successful Response (HTTP 201 Created)

```

{
    "resourceType": "Patient",
    "id": "pt-abc12345",
    "meta": {
        "profile": [
            "http://dmh.lacounty.gov/fhir/StructureDefinition/cs-patient"
        ],
        "versionId": "1",
        "lastUpdated": "2026-01-15T22:30:05.123Z"
    },
    "identifier": [
        {
            "system": "http://dmh.lacounty.gov/fhir/identifier/client-id",
            "value": "3456789"
        },
        {
            "system": "http://hl7.org/fhir/sid/us-ssn",
            "value": "456789998"
        }
    ],
    "name": [
        {
            "use": "official",

```

```

    "family": "Martinez",
    "given": ["Elena", "M"]
  }
],
"gender": "female",
"birthDate": "1999-10-10"
}

```

Key: The response includes an `identifier` with system `http://dmh.lacounty.gov/fhir/identifier/client-id`. This is the Client ID — store it for cross-system correlation.

6. Submitting a Transaction Bundle

Use a FHIR transaction Bundle to submit multiple client operations in a single HTTP call. The entire Bundle is processed atomically — if any entry fails validation, the entire Bundle is rejected.

Request

```

POST https://hidex-test.dmh.lacounty.gov/healthcare/Bundle
Authorization: Bearer {access_token}
Ocp-Apim-Subscription-Key: {your-subscription-key}
Content-Type: application/fhir+json

```

Example: Transaction Bundle with Patient and Admission Encounter

```

{
  "resourceType": "Bundle",
  "type": "transaction",
  "entry": [
    {
      "fullUrl": "urn:uuid:patient-1",
      "resource": {
        "resourceType": "Patient",
        "meta": {
          "profile": ["http://dmh.lacounty.gov/fhir/StructureDefinition/cs-patient"]
        },
        "name": [{ "family": "Doe", "given": ["Jane"] }],
        "gender": "female",
        "birthDate": "1985-03-22",
        "extension": [
          {
            "url": "http://dmh.lacounty.gov/fhir/Extension/program-of-service",
            "valueCoding": {
              "system": "http://dmh.lacounty.gov/fhir/CodeSystem/cs-program-of-service",
              "code": "00502"
            }
          }
        ]
      }
    },
    {
      "request": {
        "method": "POST",
        "url": "Patient"
      }
    }
  ],
  {
    "fullUrl": "urn:uuid:encounter-1",
    "resource": {
      "resourceType": "Encounter",
      "meta": {
        "profile": ["http://dmh.lacounty.gov/fhir/StructureDefinition/cs-encounter"]
      },
      "status": "in-progress",
      "class": [
        {

```

```

        "system": "http://terminology.hl7.org/CodeSystem/v3-ActCode",
        "code": "2",
        "display": "Admission"
    }
],
"subject": { "reference": "urn:uuid:patient-1" },
"participant": [
    {
        "type": [
            {
                "coding": [
                    {
                        "system": "http://terminology.hl7.org/CodeSystem/v3-ParticipationType",
                        "code": "ADM",
                        "display": "admitter"
                    }
                ]
            }
        ]
    },
    "individual": { "reference": "Practitioner/1003001124" }
],
"period": { "start": "2026-01-15T09:00:00-08:00" },
"extension": [
    {
        "url": "http://dmh.lacounty.gov/fhir/Extension/admission-type",
        "valueCoding": {
            "system": "http://dmh.lacounty.gov/fhir/CodeSystem/cs-admission-type",
            "code": "elective",
            "display": "Elective"
        }
    }
]
},
"request": {
    "method": "POST",
    "url": "Encounter"
}
}
]
}

```

Successful Response (HTTP 200 OK)

```

{
  "resourceType": "Bundle",
  "type": "transaction-response",
  "entry": [
    {
      "response": {
        "status": "201 Created",
        "location": "Patient/pt-abc12345/_history/1"
      },
      "resource": {
        "resourceType": "Patient",
        "id": "pt-abc12345",
        "identifier": [
          {
            "system": "http://dmh.lacounty.gov/fhir/identifier/client-id",
            "value": "3456790"
          }
        ]
      }
    },
    {
      "response": {
        "status": "201 Created",
        "location": "Encounter/enc-def67890/_history/1"
      },
      "resource": {

```

```

    "resourceType": "Encounter",
    "id": "enc-def67890",
    "status": "in-progress"
  }
}
]
}

```

Important: Transaction Bundles are atomic. If any entry fails validation, the entire Bundle is rejected with HTTP 422 and no records are created.

7. Client ID in the Response

Overview

Every successfully created Patient includes a **Client ID** in the response body. The Client ID uniquely identifies the client across DMH systems (FHIR store, NetSmart/IBHIS, and reporting).

Identifier Structure

```

"identifier": [
  {
    "system": "Netsmart.WEBSVC.ClientService.cls-Patient",
    "value": "1234567"
  }
],

```

Field	Description
system	Always <code>http://dmh.lacounty.gov/fhir/identifier/client-id</code>
value	A numeric identifier assigned by the system

Usage

- **Store this ID** in your EHR system to correlate the client with DMH records
- The Client ID is returned synchronously in the API response (no polling required)
- Use the Client ID for any follow-up operations (episode management, diagnosis, CSI)
- For transaction Bundles, each Patient entry in the response includes its own Client ID

Comparison to Legacy

Legacy	FHIR R4
ClientID (integer from <code>AdmitNewClient_Output</code>)	Client ID on <code>identifier[client-id]</code>
Returned in SOAP response XML	Returned in JSON response body on the Patient resource

8. Client Episode Management

An episode tracks a client's period of care from admission to discharge. Admission and discharge are recorded as `Encounter` resources referencing the `Patient` .

Creating an Admission Encounter

```

POST https://hidex.dmh.lacounty.gov/healthcare/Encounter
Authorization: Bearer {access_token}
Ocp-Apim-Subscription-Key: {your-subscription-key}
Content-Type: application/fhir+json

```

There are four types of encounters that can be set up as below:

- Scenario-1: Create Outpatient Encounter with MediCal coverage
- Scenario-2: Create Outpatient Encounter with NonMediCal coverage
- Scenario-3: Create Inpatient Encounter with MediCal coverage
- Scenario-4: Create Inpatient Encounter with NonMediCal coverage

Below are examples of each scenario.

Scenario-1: Create Outpatient Encounter with MediCal coverage

```
{
  "resourceType": "Encounter",
  "meta": {
    "profile": [
      "http://dmh.lacounty.gov/fhir/StructureDefinition/cs-encounter"
    ],
    "tag": [
      {
        "code": "MediCal",
        "display": "MediCal"
      },
      {
        "code": "CSOutpatientEncounterAdmission",
        "display": "CSOutpatientEncounterAdmission"
      }
    ]
  },
  "extension": [
    {
      "url": "https://fhir.dmh.lacounty.gov/v4/StructureDefinition/encounter-hospitalServiceReference",
      "valueReference": {
        "id": "12345",
        "reference": "HospitalService/12345"
      }
    }
  ],
  "class": {
    "code": "2",
    "display": "Admission",
    "system": "44"
  },
  "status": "in-progress",
  "serviceProvider": {
    "reference": "Organization/12345"
  },
  "subject": {
    "id": "1234567",
    "reference": "Patient/1234567"
  },
  "participant": [
    {
      "type": [
        {
          "coding": [
            {
              "system": "http://terminology.hl7.org/CodeSystem/v3-ParticipationType",
              "code": "ADM",
              "display": "admitter"
            }
          ]
        }
      ],
      "individual": {
        "reference": "Practitioner/1112223334"
      }
    }
  ],
  "period": {
    "start": "2024-09-04T13:25:00"
  },
}
```

```

"priority": {
  "coding": [
    {
      "system": "http://terminology.hl7.org/CodeSystem/v3-ActPriority",
      "code": "EL",
      "display": "elective"
    }
  ],
  "text": "TypeOfAdmission"
}
}

```

Scenario-2: Create Outpatient Encounter with NonMediCal coverage

```

{
  "resourceType": "Encounter",
  "meta": {
    "profile": [
      "http://dmh.lacounty.gov/fhir/StructureDefinition/cs-encounter"
    ],
    "tag": [
      {
        "code": "NonMediCal",
        "display": "NonMediCal"
      },
      {
        "code": "CSOutpatientEncounterAdmission",
        "display": "CSOutpatientEncounterAdmission"
      }
    ]
  },
  "extension": [
    {
      "url": "https://fhir.dmh.lacounty.gov/v4/StructureDefinition/encounter-hospitalServiceReference",
      "valueReference": {
        "id": "12345",
        "reference": "HospitalService/12345"
      }
    }
  ],
  "class": {
    "code": "2",
    "display": "Admission",
    "system": "44"
  },
  "status": "in-progress",
  "serviceProvider": {
    "reference": "Organization/12345"
  },
  "subject": {
    "id": "12345",
    "reference": "Patient/12345"
  },
  "participant": [
    {
      "type": [
        {
          "coding": [
            {
              "system": "http://terminology.hl7.org/CodeSystem/v3-ParticipationType",
              "code": "ADM",
              "display": "admitter"
            }
          ]
        }
      ],
      "individual": {
        "reference": "Practitioner/1113334445"
      }
    }
  ]
}

```

```

    ],
    "period": {
      "start": "2024-09-04T13:25:00"
    },
  },
  "priority": {
    "coding": [
      {
        "system": "http://terminology.hl7.org/CodeSystem/v3-ActPriority",
        "code": "EL",
        "display": "elective"
      }
    ]
  },
  ],
  "text": "TypeOfAdmission"
}
}

```

Scenario-3: Create Inpatient Encounter with MediCal coverage

```

{
  "resourceType": "Encounter",
  "meta": {
    "profile": [
      "http://dmh.lacounty.gov/fhir/StructureDefinition/cs-encounter"
    ],
    "tag": [
      {
        "code": "MediCal",
        "display": "MediCal"
      },
      {
        "code": "CSInpatientEncounterAdmission",
        "display": "CS Inpatient Encounter Admission"
      }
    ]
  },
  "extension": [
    {
      "url": "https://fhir.dmh.lacounty.gov/v4/StructureDefinition/encounter-hospitalServiceReference",
      "valueReference": {
        "id": "1234R",
        "reference": "HospitalService/1234R"
      }
    }
  ],
  "class": {
    "system": "http://terminology.hl7.org/CodeSystem/v3-ActCode",
    "code": "2",
    "display": "inpatient encounter"
  },
  "status": "in-progress",
  "serviceProvider": {
    "reference": "Organization/1234R"
  },
  "subject": {
    "id": "1234567",
    "reference": "Patient/1234567"
  },
  "participant": [
    {
      "type": [
        {
          "coding": [
            {
              "system": "http://terminology.hl7.org/CodeSystem/v3-ParticipationType",
              "code": "ADM",
              "display": "admitter"
            }
          ]
        }
      ]
    }
  ],
}

```

```

        "individual": {
          "reference": "Practitioner/1234567890"
        }
      },
    ],
    "period": {
      "start": "2024-09-04T13:25:00"
    },
    "priority": {
      "coding": [
        {
          "system": "http://terminology.hl7.org/CodeSystem/v3-ActPriority",
          "code": "EL",
          "display": "elective"
        }
      ],
      "text": "TypeOfAdmission"
    },
    "hospitalization": {
      "admitSource": {
        "coding": [
          {
            "system": "http://terminology.hl7.org/CodeSystem/admit-source",
            "code": "hosp-trans",
            "display": "Transferred from other hospital"
          }
        ]
      }
    }
  }
}

```

Scenario-4: Create Inpatient Encounter with NonMediCal coverage

```

{
  "resourceType": "Encounter",
  "meta": {
    "profile": [
      "http://dmh.lacounty.gov/fhir/StructureDefinition/cs-encounter"
    ],
    "tag": [
      {
        "code": "NonMediCal",
        "display": "NonMediCal"
      },
      {
        "code": "CSInpatientEncounterAdmission",
        "display": "CS Inpatient Encounter Admission"
      }
    ]
  },
  "extension": [
    {
      "url": "https://fhir.dmh.lacounty.gov/v4/StructureDefinition/encounter-hospitalServiceReference",
      "valueReference": {
        "id": "1234R",
        "reference": "HospitalService/1234R"
      }
    }
  ],
  "class": {
    "system": "http://terminology.hl7.org/CodeSystem/v3-ActCode",
    "code": "2",
    "display": "inpatient encounter"
  },
  "status": "in-progress",
  "serviceProvider": {
    "reference": "Organization/1234R"
  },
  "subject": {
    "id": "1234567",

```

```

    "reference": "Patient/1234567"
  },
  "participant": [
    {
      "type": [
        {
          "coding": [
            {
              "system": "http://terminology.hl7.org/CodeSystem/v3-ParticipationType",
              "code": "ADM",
              "display": "admitter"
            }
          ]
        }
      ],
      "individual": {
        "reference": "Practitioner/1234567890"
      }
    }
  ],
  "period": {
    "start": "2024-09-04T13:25:00"
  },
  "priority": {
    "coding": [
      {
        "system": "http://terminology.hl7.org/CodeSystem/v3-ActPriority",
        "code": "EL",
        "display": "elective"
      }
    ]
  },
  "text": "TypeOfAdmission"
},
"hospitalization": {
  "admitSource": {
    "coding": [
      {
        "system": "http://terminology.hl7.org/CodeSystem/admit-source",
        "code": "hosp-trans",
        "display": "Transferred from other hospital"
      }
    ]
  }
}
}
}

```

Discharging a Client

Both outpatient and inpatient encounters can be discharged using the Encounter resource along with discharge information:

```

PUT https://hidex.dmh.lacounty.gov/healthcare/Encounter
Authorization: Bearer {access_token}
Ocp-Apim-Subscription-Key: {your-subscription-key}
Content-Type: application/fhir+json

```

Discharge an outpatient encounter

```

{
  "resourceType": "Encounter",
  "meta": {
    "tag": [
      {
        "code": "CSOutpatientEncounterDischarge",
        "display": "CSOutpatientEncounterDischarge"
      }
    ]
  },
  "status": "finished",
  "class": [

```

```

    {
      "code": "2",
      "display": "Admitted",
      "system": "44"
    }
  ],
  "subject": {
    "reference": "Patient/1234567"
  },
  "identifier": {
    "id": "1234567||1",
    "use": "old"
  },
  "serviceProvider": {
    "reference": "Organization/12345"
  },
  "participant": [
    {
      "type": [
        {
          "coding": [
            {
              "system": "http://terminology.hl7.org/CodeSystem/v3-ParticipationType",
              "code": "DIS",
              "display": "discharger"
            }
          ]
        }
      ],
      "individual": {
        "reference": "Practitioner/1112223334"
      }
    }
  ],
  "reasonCode": [
    {
      "text": "This is a comment."
    }
  ],
  "period": {
    "end": "2024-09-15T15:43:00-05:00"
  }
}

```

Discharge an inpatient encounter

```

{
  "resourceType": "Encounter",
  "meta": {
    "tag": [
      {
        "code": "CSIInpatientEncounterDischarge",
        "display": "CSIInpatientEncounterDischarge"
      }
    ]
  },
  "status": "finished",
  "class": [
    {
      "code": "2",
      "display": "Admitted",
      "system": "44"
    }
  ],
  "subject": {
    "reference": "Patient/1234567"
  },
  "identifier": {
    "id": "1234567||1",
    "use": "old"
  }
}

```

```

    },
    "serviceProvider": {
      "reference": "Organization/1234R"
    },
    "participant": [
      {
        "type": [
          {
            "coding": [
              {
                "system": "http://terminology.hl7.org/CodeSystem/v3-ParticipationType",
                "code": "DIS",
                "display": "discharger"
              }
            ]
          }
        ],
        "individual": {
          "reference": "Practitioner/1112223334"
        }
      }
    ],
    "reasonCode": [
      {
        "text": "This is a comment."
      }
    ],
    "period": {
      "end": "2024-09-15T15:43:00-05:00"
    }
  }
}

```

Retrieving Episodes

Episode history is read from `Encounter`, which the API derives from Encounter admission and discharge data:

```

GET https://hidex.dmh.lacounty.gov/healthcare/Encounter?<various parameters>
Authorization: Bearer {access_token}
Ocp-Apim-Subscription-Key: {your-subscription-key}
Accept: application/fhir+json

```

Here are examples query string for retrieving encounter data:

Retrieve Outpatient Encounter (Admission)

```

GET https://hidex.dmh.lacounty.gov/healthcare//Encounter?_tag=CSOutpatientEncounterAdmission&patient=ClientID

```

Retrieve Inpatient Encounter (Admission)

```

GET https://hidex.dmh.lacounty.gov/healthcare//Encounter?_tag=CSInpatientEncounterAdmission&patient=ClientID

```

Retrieve Outpatient Encounter (Discharge)

```

GET https://hidex.dmh.lacounty.gov/healthcare//Encounter?_tag=CSOutpatientEncounterDischarge&patient=ClientID

```

Retrieve Inpatient Encounter (Discharge)

```

GET https://hidex.dmh.lacounty.gov/healthcare//Encounter?_tag=CSInpatientEncounterDischarge&patient=ClientID

```

9. Diagnosis and CSI Submissions

Creating a Diagnosis (Condition Resource)

```
POST https://hidex-test.dmh.lacounty.gov/healthcare/Condition
Authorization: Bearer {access_token}
Ocp-Apim-Subscription-Key: {your-subscription-key}
Content-Type: application/fhir+json
```

```
{
  "resourceType": "Condition",
  "meta": {
    "profile": ["http://dmh.lacounty.gov/fhir/StructureDefinition/cs-condition"]
  },
  "subject": { "reference": "Patient/pt-abc12345" },
  "category": [
    {
      "coding": [
        {
          "system": "http://dmh.lacounty.gov/fhir/CodeSystem/cs-diagnosis-type",
          "code": "mental-health",
          "display": "Mental Health"
        }
      ]
    }
  ],
  "code": {
    "coding": [
      {
        "system": "http://hl7.org/fhir/sid/icd-10-cm",
        "code": "F32.1",
        "display": "Major depressive disorder, single episode, moderate"
      }
    ]
  },
  "recordedDate": "2026-01-15",
  "recorder": {
    "identifier": {
      "system": "http://hl7.org/fhir/sid/us-npi",
      "value": "1003001124"
    }
  },
  "extension": [
    {
      "url": "http://dmh.lacounty.gov/fhir/Extension/diagnosis-ranking",
      "valueInteger": 1
    }
  ]
}
```

CSI Assessment (QuestionnaireResponse)

The Client and Service Information (CSI) assessment is submitted as a FHIR `QuestionnaireResponse` resource referencing the CSI Questionnaire canonical URL.

Important: FHIR R4 requires `QuestionnaireResponse.status` (cardinality 1..1). Every CSI submission must include a valid status; use `"completed"` when the assessment is complete.

```
{
  "resourceType": "QuestionnaireResponse",
  "meta": {
    "profile": ["http://dmh.lacounty.gov/fhir/StructureDefinition/cs-questionnaire-response"],
    "tag": [{ "code": "CSI_Admission" }]
  },
  "questionnaire": "http://fhir.dmh.lacounty.gov/Questionnaire/CSI",
  "status": "completed",
  "authored": "2026-01-15T10:30:00-08:00",
}
```

```

"subject": { "reference": "Patient/pt-abc12345" },
"item": [
  {
    "linkId": "2",
    "text": "Birth First Name",
    "answer": [{ "valueString": "Elena" }]
  },
  {
    "linkId": "9",
    "text": "Place of Birth - State",
    "answer": [{
      "valueCoding": {
        "system": "70215",
        "code": "CA",
        "display": "California"
      }
    }]
  },
  {
    "linkId": "15",
    "text": "Race",
    "answer": [{
      "valueCoding": {
        "system": "70669",
        "code": "6",
        "display": "White"
      }
    }]
  }
]
}

```

linkId values are numeric DMH_Link_Ids, not descriptive strings. See section 4.8 for the full set. An earlier revision of this guide showed `assessment-date` and `assessment-type` as example `linkId` values against a `cs-csi-assessment-type` code system — none of those three identifiers exist on any CSI artifact (schema, published `Questionnaire`, or wire payload), and they have been removed. This example is illustrative only, showing 3 of the 18 CSI fields; a complete submission includes every required field listed in section 4.8.

Questionnaire Canonical URLs

Instrument	Canonical URL
CSI Assessment	<code>http://fhir.dmh.lacounty.gov/Questionnaire/CSI</code>
UMDAP Assessment	<code>http://fhir.dmh.lacounty.gov/Questionnaire/UMDAP</code>

10. Error Responses and Troubleshooting

All error responses use FHIR `OperationOutcome` resources with structured issue details.

HTTP 401 — Authentication Failed

Returned when the request does not include a valid subscription key.

```

{
  "resourceType": "OperationOutcome",
  "issue": [
    {
      "severity": "error",
      "code": "login",
      "diagnostics": "Missing or invalid subscription key. Ensure the Ocp-Apim-Subscription-Key header contains a valid subscription key."
    }
  ]
}

```

Troubleshooting:

- Verify the `Ocp-Apim-Subscription-Key: {your-subscription-key}` header is present
- Confirm you are using a valid subscription key for the target environment
- Contact DMH HIDEX Support if your subscription key needs to be rotated
- Ensure the token audience matches the Provider Access API application ID

HTTP 403 — Authorization Failed (Program Mismatch)

Returned when the token is valid but the `program_id` claim does not match the `program-of-service` extension in the submitted resource.

```
{
  "resourceType": "OperationOutcome",
  "issue": [
    {
      "severity": "error",
      "code": "forbidden",
      "diagnostics": "Token program_id claim 'XY789' does not match resource program-of-service '00502'. You are not authorized to submit data for this pr
    }
  ]
}
```

Troubleshooting:

- Verify the `program-of-service` extension code matches your assigned program
- Contact LACDMH CIOB if you need access to additional programs
- Ensure the program code is entered exactly (case-insensitive comparison)

HTTP 422 — Validation Failed

Returned when one or more business rules are violated. All validation errors are returned at once.

```
{
  "resourceType": "OperationOutcome",
  "issue": [
    {
      "severity": "error",
      "code": "required",
      "expression": ["Patient.name[0].family"],
      "diagnostics": "Client last name is required. Maximum length: 38 characters."
    },
    {
      "severity": "error",
      "code": "value",
      "expression": ["Patient.birthDate"],
      "diagnostics": "Date of birth must be a valid ISO date in YYYY-MM-DD format."
    },
    {
      "severity": "error",
      "code": "code-invalid",
      "expression": ["Patient.extension:ethnicity"],
      "diagnostics": "Ethnicity code 'INVALID' is not a recognized code in CodeSystem http://dmh.lacounty.gov/fhir/CodeSystem/cs-ethnicity."
    }
  ]
}
```

Common Validation Errors and Corrective Actions:

Error	Field	Fix
Client last name required	<code>Patient.name[0].family</code>	Max 38 chars, alphabetic/hyphens/apostrophes
Client first name required	<code>Patient.name[0].given[0]</code>	Max 38 chars
Invalid date of birth	<code>Patient.birthDate</code>	ISO format: YYYY-MM-DD
Invalid SSN format	<code>Patient.identifier[SSN]</code>	Must be exactly 9 digits

Error	Field	Fix
Phone number invalid	Patient.telecom[phone]	Must be exactly 10 digits
Invalid gender code	Patient.gender	Must be male , female , other , or unknown
NPI invalid format	Various NPI fields	Must be exactly 10 digits
Program code not recognized	Extension	Must match assigned program code
Diagnosis code invalid	Condition.code	Must be a valid ICD-10-CM code
Admission date required	Encounter.period.start	ISO format: YYYY-MM-DD
Discharge without admission	Encounter.period.end	Cannot discharge without an active admission Encounter

HTTP 422 — Bundle Validation Failed

When a transaction Bundle fails, the response identifies which entry caused the failure:

```
{
  "resourceType": "OperationOutcome",
  "issue": [
    {
      "severity": "error",
      "code": "required",
      "expression": ["Bundle.entry[1].resource.name"],
      "diagnostics": "Entry at index 1: Client name is required. The entire Bundle has been rejected."
    }
  ]
}
```

HTTP 503 — Service Unavailable

Returned when a downstream dependency (NetSmart/IBHIS or FHIR store) is unreachable. No data is persisted in this case.

```
{
  "resourceType": "OperationOutcome",
  "issue": [
    {
      "severity": "fatal",
      "code": "transient",
      "diagnostics": "NetSmart/IBHIS is currently unavailable. The operation was not completed. Please retry after a brief delay."
    }
  ]
}
```

Troubleshooting:

- This is a transient error — retry after 30-60 seconds
- If the error persists for more than 5 minutes, contact LACDMH CIOB
- No data has been saved; it is safe to resubmit the same request
- Implement exponential backoff in your retry logic (recommended: 3 retries with 1s, 5s, 15s delays)

11. Sandbox and Testing Environment

Test Environment Access

The **TEST** environment is available for integration testing:

Environment	Base URL	Purpose
TEST	https://hidex-test.dmh.lacounty.gov/healthcare	Integration testing and certification

Obtaining Test Credentials

1. **Request sandbox access:** Contact LACDMH CIOB at the designated onboarding email to request sandbox credentials
2. **Receive subscription key:** DMH will provision API access with:
 - Subscription key for TEST environment
 - Test `program_id` authorization configured for sandbox programs
3. **Verify API access:** Test your subscription key with a simple GET request before submitting data

Using Your Program IDs

Important: Use your organization's assigned Program IDs in all environments (TEST, QA, and PRODUCTION).

Your subscription key is associated with your authorized program code(s). These are your actual contracted program codes and should be used across all environments.

Program ID Requirements:

- Must match the `programid` extension value in your Patient resources
- Token `program_id` claim is validated on every submission
- Mismatch between token claim and resource program results in HTTP 403 Forbidden
- Format: 5-6 alphanumeric characters (e.g., `AB123` , `12345A`)

Note: Your assigned Program IDs work across all environments (TEST, QA, PRODUCTION). Contact DMH HIDEX Support if you need your Program ID list.

Certification Script and Runnable Payloads

Two artifacts implement the validation steps below. Use them to dry-run your integration before requesting a certification review:

Artifact	Location	Purpose
Certification Script 1A (FHIR)	<code>docs/Certification/CertificationScript1A_FHIR_ClientServices_Claiming_v1.0.0.md</code>	The 31-step script DMH reviews, focused on the calls support claiming. Replaces the legacy SOAP script <code>1081047_CertificationScript1A_ClientService_v2t</code>
Bruno collection	<code>tests/bruno/cs-certification/</code>	Ready-to-run request payloads for every step in the s assertions. Creates data — TEST or QA only.
Read-only smoke test	<code>tests/bruno/cs-smoke-test/</code>	GET-only health check, safe in any environment.

```
cd tests/bruno/cs-certification
.\run-certification.ps1 -Environment test
```

Note: the certification script records several open items where current DMH material is ambiguous (the `EpisodeOfCare _tag` value, Medi-Cal CIN length, `Condition.category` coding, whether claims read-back is available on the `/healthcare` surface, and whether payload validation returns `400` or `422`). Confirm these with DMH before your run so a documentation gap is not mistaken for an EHR defect.

Validation Steps for Contract Providers

Complete the following steps to verify your integration before production deployment. Each maps to a numbered step in Certification Script 1A (FHIR):

Step 1: Authentication

- Successfully include subscription key in API requests
- Verify subscription key is stored securely in your application

Step 2: Client Admission

- Submit a valid Patient resource (new client)
- Verify HTTP 201 response with Client ID in the identifier
- Submit an admission Encounter
- Verify validation errors are returned for invalid payloads (HTTP 422)

Step 3: Client Updates

- Update client demographics via PUT /fhir/Patient/{id}
- Retrieve client details via GET /fhir/Patient/{id}

Step 4: Episode Management

- Create an episode (admission)
- Retrieve active episode
- Discharge a client (close episode)
- Retrieve episode history

Step 5: Diagnosis

- Create a diagnosis record (Condition)
- Retrieve diagnosis and diagnosis history

Step 6: CSI/UMDAP (if applicable)

- Submit a CSI QuestionnaireResponse
- Submit a UMDAP QuestionnaireResponse
- Retrieve assessment details

Step 7: Batch Submission

- Submit a transaction Bundle with Patient + admission Encounter
- Verify atomic rejection when one entry is invalid

Step 8: Error Handling

- Verify your system handles 401 (re-authenticate)
- Verify your system handles 403 (alert operator)
- Verify your system handles 422 (display validation errors to user)
- Verify your system handles 503 (retry with backoff)

Production Cutover

Once all validation steps pass in the TEST environment:

1. DMH schedules a certification review
2. Upon approval, production credentials are issued
3. Update your system configuration to use the PROD base URL
4. Perform a supervised first submission in production
5. Legacy SOAP/WCF endpoint is deprecated on an agreed timeline

Appendix A: Extension URL Reference

Extension	URL	Value Type
Program of Service	http://dmh.lacounty.gov/fhir/Extension/program-of-service	valueCoding
Education Level	http://dmh.lacounty.gov/fhir/Extension/education-level	valueCoding
Employment Status	http://dmh.lacounty.gov/fhir/Extension/employment-status	valueCoding
Ethnicity	http://dmh.lacounty.gov/fhir/Extension/ethnicity	valueCoding
Race	http://dmh.lacounty.gov/fhir/Extension/race	valueCoding
Living Arrangement	http://dmh.lacounty.gov/fhir/Extension/living-arrangement	valueCoding
Admission Type	http://dmh.lacounty.gov/fhir/Extension/admission-type	valueCoding
Admission Time	http://dmh.lacounty.gov/fhir/Extension/admission-time	valueTime
Admitting Staff NPI	http://dmh.lacounty.gov/fhir/Extension/admitting-staff-npi	valueString
Program of Admission	http://dmh.lacounty.gov/fhir/Extension/program-of-admission	valueCoding

Extension	URL	Value Type
Source of Admission	http://dmh.lacounty.gov/fhir/Extension/source-of-admission	valueCoding
Discharge Reason	http://dmh.lacounty.gov/fhir/Extension/discharge-reason	valueCoding
Discharging Staff NPI	http://dmh.lacounty.gov/fhir/Extension/discharging-staff-npi	valueString
Diagnosis Ranking	http://dmh.lacounty.gov/fhir/Extension/diagnosis-ranking	valueInteger

Appendix B: CodeSystem URL Reference

CodeSystem	URL
Program of Service	http://dmh.lacounty.gov/fhir/CodeSystem/cs-program-of-service
Language	http://dmh.lacounty.gov/fhir/CodeSystem/cs-language
Education Level	http://dmh.lacounty.gov/fhir/CodeSystem/cs-education-level
Employment Status	http://dmh.lacounty.gov/fhir/CodeSystem/cs-employment-status
Ethnicity	http://dmh.lacounty.gov/fhir/CodeSystem/cs-ethnicity
Race	http://dmh.lacounty.gov/fhir/CodeSystem/cs-race
Living Arrangement	http://dmh.lacounty.gov/fhir/CodeSystem/cs-living-arrangement
Admission Type	http://dmh.lacounty.gov/fhir/CodeSystem/cs-admission-type
Admission Source	http://dmh.lacounty.gov/fhir/CodeSystem/cs-admission-source
Discharge Reason	http://dmh.lacounty.gov/fhir/CodeSystem/cs-discharge-reason
Diagnosis Type	http://dmh.lacounty.gov/fhir/CodeSystem/cs-diagnosis-type
Smoking Status	http://dmh.lacounty.gov/fhir/CodeSystem/cs-smoking-status

Appendix C: Identifier Systems

Identifier	System URL	Description
Client ID	http://dmh.lacounty.gov/fhir/identifier/client-id	System-assigned client identifier
SSN	http://hl7.org/fhir/sid/us-ssn	Social Security Number
NPI	http://hl7.org/fhir/sid/us-npi	National Provider Identifier
Legacy Client ID	http://dmh.lacounty.gov/fhir/identifier/cs-legacy-client-id	Legacy IBHIS client ID (historical records only)

--END OF THE DOCUMENT--