



LOS ANGELES COUNTY  
**DEPARTMENT OF  
MENTAL HEALTH**  
hope. recovery. wellbeing.

**LACDMH  
PATIENT ACCESS API  
COMPANION GUIDE**

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## 1. Introduction

This document serves as a companion guide to the Patient Access API maintained by the Los Angeles County Department of Mental Health (DMH) as required by state and federal mandates. The goal of this guide is to supplement the FHIR standard specifications by outlining DMH-specific requirements, usage details, and best practices.

The Patient Access API follows the FHIR v4.0.1 standard, and this guide assumes basic familiarity with FHIR resources and terminology. For complete FHIR documentation, refer to the official FHIR specification from the following link: <https://hl7.org/fhir/R4/>

## 2. Legal Background

The Patient Access API is required to comply with several legal and regulatory mandates, primarily at both the federal and state levels. These mandates focus on improving access to clients' healthcare information. Key mandates driving the requirement for a Patient Access API include:

- 21st Century Cures Act (2016): Requires healthcare organizations to provide open access to data, including provider directories, through standardized APIs (FHIR), supporting interoperability and patient access to information.
- CMS Interoperability and Patient Access Final Rule (2020): Mandates Medicaid and CHIP plans to offer publicly accessible, FHIR-compliant provider directories via APIs to improve care coordination and empower patients.
- California Assembly Bill 205 (AB 205): Requires Medi-Cal managed care plans to maintain accurate online provider directories and make the information publicly accessible through APIs.
- CalAIM Initiative: California's Medicaid reform mandates accurate, API-based provider directories to enhance system integration and patient access to care.
- HITECH Act (2009): Promotes secure exchange of health information, influencing the development of modern healthcare data systems, including provider directories.

## 3. Definitions

HL7 FHIR - Health Level Seven Fast Healthcare Interoperability Resources, is a standardized format designed to enable the exchange of healthcare data between different electronic health record (EHR) systems and healthcare applications.

REST - Representational State Transfer. It is an architectural style for designing web services. RESTful web services are based on the HTTP methods, such as GET, POST, PUT.

JSON - JavaScript Object Notation. It's a popular way to store and exchange information between computers and applications.

## 4. Technical Details

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### 4.1 API Overview

The Provider Directory API is a RESTful web service that facilitates data exchange in JSON format. It uses standard FHIR resources, as defined by HL7, to represent healthcare provider information. The API follows the REST (Representational State Transfer) architectural style, meaning it uses standard HTTP methods—primarily GET—to retrieve data. JSON (JavaScript Object Notation) is used to structure and transmit the data, providing an efficient way for systems to communicate and share information.

- Base URL: <https://hidex.dmh.lacounty.gov/Patient/>
- FHIR Version: v4.0.1
- Access: Application registration required.
- Content Type: application/fhir+json

The API supports standard FHIR resources related to patient access to their data, primarily focusing on the following:

- *ExplanationOfBenefits*
- Patient
- Observation
- Coverage
- Condition
- Immunization
- AllergyIntolerance
- Location
- Organization
- MedicationKnowledge
- MedicationRequest
- MedicationDispense
- MedicationStatement
- Encounter

The following section covers the following topics:

- API syntax, function names, required and optional parameters supported and their data types, return variables and their types/structures, exceptions and exception handling methods, and their returns.
- The software components and configurations an application shall use to successfully interact with the API and process its response(s).
- All applicable technical requirements and attributes that are necessary for an application to be registered with any authorization server(s) deployed in conjunction with the API

## 4.2 Key FHIR Resources

Following use-cases identify the need from user and how the GET method can be invoked in the API to meet the user need. Note that in each example, [base]=LACDMH PatientAccessAPI Endpoint URL

Resource	Use Case Description	LACDMH FHIR Service Method & Search Query
Patient	<ul style="list-style-type: none"> <li>Client wants to find his/her record by medical record number (Client ID)</li> <li>Client wants to find his/her record by an identifier (such as SSN)</li> <li>Client wants to search record by name</li> <li>Client wants to search by birthdate and name</li> <li>Client wants to search by gender and name</li> </ul>	Link: <a href="https://build.fhir.org/ig/HL7/US-Core/StructureDefinition-us-core-patient.html#mandatory-search-parameters">https://build.fhir.org/ig/HL7/US-Core/StructureDefinition-us-core-patient.html#mandatory-search-parameters</a>
Organization	<ul style="list-style-type: none"> <li>Client wants to search for an organization by name</li> <li>Client wants to search for an organization by address</li> </ul>	Link: <a href="https://build.fhir.org/ig/HL7/US-Core/StructureDefinition-us-core-patient.html#mandatory-search-parameters">https://build.fhir.org/ig/HL7/US-Core/StructureDefinition-us-core-patient.html#mandatory-search-parameters</a>
Laboratory Result Observation	<ul style="list-style-type: none"> <li>Client needs to search lab results.</li> </ul>	Link: <a href="https://hl7.org/fhir/us/core/StructureDefinition-us-core-observation-lab.html#mandatory-search-parameters">https://hl7.org/fhir/us/core/StructureDefinition-us-core-observation-lab.html#mandatory-search-parameters</a>
Coverage	<ul style="list-style-type: none"> <li>Client needs to retrieve coverage info</li> </ul>	Link: <a href="https://hl7.org/fhir/us/core/StructureDefinition-us-core-observation-lab.html#mandatory-search-parameters">https://hl7.org/fhir/us/core/StructureDefinition-us-core-observation-lab.html#mandatory-search-parameters</a>
Condition	<ul style="list-style-type: none"> <li>Client needs to view his/her diagnosis</li> </ul>	Link: <a href="https://build.fhir.org/ig/HL7/US-Core/StructureDefinition-us-core-condition-problems-health-concerns.html#mandatory-search-parameters">https://build.fhir.org/ig/HL7/US-Core/StructureDefinition-us-core-condition-problems-health-concerns.html#mandatory-search-parameters</a>

Resource	Use Case Description	LACDMH FHIR Service Method & Search Query
Immunization	<ul style="list-style-type: none"> <li>Client wants to get all immunization record</li> </ul>	Link: <a href="https://build.fhir.org/ig/HL7/US-Core/StructureDefinition-us-core-immunization.html#mandatory-search-parameters">https://build.fhir.org/ig/HL7/US-Core/StructureDefinition-us-core-immunization.html#mandatory-search-parameters</a>
Medication Request	<ul style="list-style-type: none"> <li>Client wants to review medication information</li> </ul>	Link: <a href="https://hl7.org/fhir/us/core/StructureDefinition-us-core-medicationrequest.html#mandatory-search-parameters">https://hl7.org/fhir/us/core/StructureDefinition-us-core-medicationrequest.html#mandatory-search-parameters</a>
Adjudicated Claims	<ul style="list-style-type: none"> <li>Client wants to review claim related data</li> </ul>	Link: <a href="https://hl7.org/fhir/R4/explanationofbenefit.html#search">https://hl7.org/fhir/R4/explanationofbenefit.html#search</a>
Allergy Intolerance	<ul style="list-style-type: none"> <li>Client wants to review allergy info</li> </ul>	Link: <a href="https://build.fhir.org/allergyintolerance.html#search">https://build.fhir.org/allergyintolerance.html#search</a>

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### 4.3 Exception Handling

Errors will be returned as `OperationOutcome` resources as per the FHIR standard. Typical HTTP status codes used by the API are:

- 200 OK: Successful request.
- 400 Bad Request: Invalid request, typically due to incorrect query parameters.
- 404 Not Found: No matching resources found.
- 500 Internal Server Error: Unexpected error occurred on the server.

Example error response:

```
{
  "resourceType": "OperationOutcome",
  "issue": [
    {
      "severity": "error",
      "code": "invalid",
      "details": {
        "text": "Invalid query parameter 'unknown'"
      }
    }
  ]
}
```

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### 4.4 Paging and Filtering

Results returned by the Provider Directory API can be paginated. The Bundle resource will contain a link element with next and previous URLs to facilitate paging.

To limit the number of results returned, use the `_count` parameter. For example:

```
GET /Condition?_count=10
```