Developer Resources

Dates and information subject to change. Please visit <u>https://www.eldoradocounty.ca.gov/Health-Well-Being/Behavioral-Health/Behavioral-Health-Resources</u> for up-to-date information.

The purpose of this documentation is for consumers to access the El Dorado County Health and Human Services Behavioral Health Patient Access and Provider Directory Application Programming Interface (API) products. This meets data exchange standards based on HL7 FHIR v4.0.1: https://hl7.org/fhir/R4/index.html using the CARIN-Blue Button Implementation Guide, US Core 3.1.1 (ONC) (https://hl7.org/fhir/us/carin-bb/. This conforms in accordance with requirements of 42 Code of Federal Regulations (CFR) Sections: 438.10, 438.242, 45 CFR Sections: 170.213, 170.215, 171. Security and authentication measures include utilizing OAuth 2.0 and OpenID Connect to provide secure authentication with HL7 FHIR API's. APIs are Read only.

myHealthPointe (mHP) is a Netsmart web-based and app-based portal for patients to access their own health data. If utilizing the mHP application to access your own health data, an account will be required to be created through the mHP portal accessible via a compatible device or website. An account will require the creation of a username, password and access to a consumer created email account. Account verification will include verification of date of birth and email address in the client chart record. The data available through the mHP portal is a combination of network providers and subcontractors' information. As required, the information available will be in compliance with the United States Core Data for Interoperability (USDI) Version 1, where available and as applicable (https://www.healthit.gov/isa/united-states-core-data-interoperability-uscdi).

Organizational registration is required for access by third-party to our Patient Access and Provider Directory APIs. Please email: HHSA-BH-API-Info@edcgov.us to request access, providing the name of organization, stating your reason/purpose for accessing this information, access time frames, whether requesting Provider Directory or Patient Access and any other pertinent information. Additional information may be requested when requesting access via the Patient Access API. Requesting access is confirming agreement to be monitored for usage and authorization authentication for access. Once a request for API connection is received, El Dorado County Behavioral Health (EDCBH) and the El Dorado County Information Security Office will conduct a risk analysis to address any deficiencies related to third-party applications connected to the API and potential impacts on the security of Protected Health Information (PHI). Following the risk analysis, EDCBH will either approve or deny the connection request. In case of denial, EDCBH will inform the third-party application provider of the decision, along with the reasons for denial, and document this information in accordance with local, state, or federal guidelines. These standards and additional procedures will be following the EDCBH Interoperability and Patient Access - Patient Access and Provider Directory API policies and procedures. No authorization or authentication is required for users, only registration and approval are required to access the Provider Directory API endpoints, however access will be monitored for security and adverse access mitigation measures. Access preference for EDCBH is through the mHP app and access will only be with the approval and at the direction of a beneficiary or beneficiary's authorized representative. The data available through the Provider Directory API is a combination of network providers and subcontractors' information.

Patient Access Application Programming Interface (API)

Base URL: https://fhir.netsmartcloud.com/uscore/v1/

Capability statement: https://fhir.netsmartcloud.com/uscore/v1/metadata

API Function Names and Return Variables

These operations retrieve a list of resources by the associated query parameters. A '*' denotes a required parameter. All query parameters must be url encoded.

Allergies/Intolerances

A description of the Allergy Intolerance resource and the return value structure can be viewed here.

GET https://fhir.netsmartcloud.com/v4/AllergyIntolerance{?[parameters]}

Assessments and Plan of Treatment/Health Concerns/Diagnoses/Problems

A description of the Condition resource and the return value structure can be viewed <u>here</u>.

GET https://fhir.netsmartcloud.com/uscore/v1/Condition{?[parameter]}

Parameter	Parameter Type	Description
Name	12.00	
patient*	ReferenceParam	Unique identifier of the Patient
clinical-status	TokenParam	Clinical status of the Condition
onset-date	DateRangeParam	Date-related onsets (dateTime and period)
antogon.	TokenParam	Category of the Condition. Possible values are: encounter-diagnosis health-
category	TOKETParam	concern pregnancy problem-list-item
code	TokenParam	Code for the Condition
page	StringParam	Page index (one-based)
_count	Integer	Page size
_sort	SortSpec	Sort option

Care Team Members

A description of the Care Team resource and the return value structure can be viewed <u>here</u>. GET https://fhir.netsmartcloud.com/uscore/v1/CareTeam{?[parameters]}

Parameter Name	Parameter Type	Description
patient*	ReferenceParam	Unique identifier of the Patient
status	TokenOrListParam	status of the CareTeam. Possible values are: active inactive
page	StringParam	Page index (one-based)
_count	Integer	Page size
_sort	SortSpec	Sort option

Claims Data/Encounters

A description of the Encounter resource and the return value structure can be viewed <u>here</u>. GET https://fhir.netsmartcloud.com/uscore/v1/Encounter{?[parameters]}

Parameter	Parameter Type	Description
Name	Furumeter Type	Description
_id	IdType	Unique identifier of the Encounter
patient	ReferenceParam	Unique identifier of the Patient
date	DateRangeParam	The period the Encounter lasted
page	StringParam	Page index (one-based)
_count	Integer	Page size
_sort	SortSpec	Sort option

Clinical Notes

A description of the Observation resource and the return value structure can be viewed <u>here</u>.

GET https://fhir.netsmartcloud.com/uscore/v1/Observation[?[parameter]}

Parameter Name	Parameter Type	Description
patient*	ReferenceParam	Unique identifier of the Patient
code	TokenOrListParam	Code for the Observation
category	TokenParam	Category of the Observation
date	DateRangeParam	Obtained date of the Observation
encounter	ReferenceParam	Encounter the Observation is related to
page	StringParam	Page index (one-based)
_count	Integer	Page size
_sort	SortSpec	Sort option

Goals

A description of the Goal resource and the return value structure can be viewed <u>here</u>.

GET https://fhir.netsmartcloud.com/uscore/v1/Goal{?[parameters]}

Parameter Name	Parameter Type	Description
patient*	ReferenceParam	Unique identifier of the Patient
lifecycle-status	TokenParam	proposed planned accepted active on-hold completed cancelled entered-in-error rejected
start-date	DateRangeParam	Start date of the Goal
target-date	DateRangeParam	Target date of the Goal
page	StringParam	Page index (one-based)
_count	Integer	Page size
_sort	SortSpec	Sort option

Immunization(s)

A description of the Immunization resource and the return value structure can be viewed <u>here</u>. GET https://fhir.netsmartcloud.com/uscore/v1/Immunization{?[parameters]}

Parameter Name	Parameter Type	Description
patient*	ReferenceParam	Unique identifier of the Patient
date	DateRangeParam	Immunization (non-)administration date
performer	ReferenceParam	Practitioner or Organization who performed the Immunization
page	StringParam	Page index (one-based)
_count	Integer	Page size
_sort	SortSpec	Sort option

Diagnostic Report

A description of the Diagnostic Report resource and the return value structure can be viewed <u>here</u>.

GET https://fhir.netsmartcloud.com/uscore/v1/DiagnosticReport

Parameter Name	Parameter Type	Description
patient*	ReferenceParam	Unique identifier of the Patient
type	TokenParam	Code for the DiagnosticReport
category	TokenParam	Category of the DiagnosticReport
status	TokenOrListParam	Status of the DiagnosticReport
date	DateRangeParam	Clinically relevant time of the DiagnosticReport
page	StringParam	Page index (one-based)
_count	Integer	Page size
sort	SortSpec	Sort option

Laboratory Results – not applicable for our organization

Medication(s)

A description of the Medication resource and the return value structure can be viewed here.

GET https://fhir.netsmartcloud.com/fhir/Medication{?[parameters]}

Parameter Name	Parameter Type	Description
_id	string	Medication ID

Patient Demographics

A description of the Patient resource and the return value structure can be viewed <u>here</u>. GET https://fhir.netsmartcloud.com/uscore/v1/MedicationRequest{?[parameters]}

Parameter Name	Parameter Type	Description
_id	IdType	Unique identifier of the Patient
identifier	TokenParam	An identifier for the Patient
name	StringParam	A portion of the name associated with the Patient
given	StringParam	A portion of the given name of the Patient
family	StringParam	A portion of the family name of the Patient
gender	TokenParam	Gender of the Patient
birthdate	DateRangeParam	Date of birth of the Patient
death-date	DateRangeParam	Date of death of the Patient
page	StringParam	Page index (one-based)
_count	Integer	Page size
_sort	SortSpec	Sort option

Procedures

A description of the Procedure resource and the return value structure can be viewed here.

GET https://html.netsmattciouu.com/uscore/vi/Procedure{?[parameters]}		
Parameter Name	Parameter Type	Description
patient*	ReferenceParam	Unique identifier of the Patient
type	TokenParam	Type of the Device
page	StringParam	Page index (one-based)
_count	Integer	Page size
_sort	SortSpec	Sort option

GET https://fhir.netsmartcloud.com/uscore/v1/Procedure{?[parameters]}

Provenances

A description of the Provenance resource and the return value structure can be viewed here.

This operation retrieves a resource by its id specified in the path.

GET https://fhir.netsmartcloud.com/uscore/v1/Provenance/[id]

Device(s)

A description of the Device resource and the return value structure can be viewed here.

GET https://fhir.netsmartcloud.com/uscore/v1/Device{?[parameters]}

Parameter Name	Parameter Type	Description
patient*	ReferenceParam	Unique identifier of the Patient
type	TokenParam	Type of the Device
page	StringParam	Page index (one-based)
_count	Integer	Page size
_sort	SortSpec	Sort option

API Parameters and Data Types

Note: Only Parameters that are available and subject to privacy standards will be available

Parameter	Description
Name	Name of Patient
Allergies and Intolerances	Harmful or undesired physiological responses associated with exposure to a substance
Assessments	Health professional's conclusions and working assumptions that will guide treatment of the patient
Care Team Members	Information on a person who participates or is expected to participate in the care of a patient

Claims Data	A list of encounters or services, including claim data for payment decisions that may be appealed, were appealed, or in the process of appeal, provider remittances, and beneficiary cost-sharing pertaining to such claims.
Clinical Notes	Narrative patient data relevant to the context identified by note types
Device(s)	Unique identifier(s) for a patient's implantable device(s)
Goal(s)	Desired state to be achieved by a patient.
Health Concern(s)	Health related matter that is of interest, importance, or worry to someone who may be the patient, patient's family, or patient's health care provider.
Immunizations	Record of vaccine administration
Laboratory	Analysis of clinical specimens to obtain information about the health of a patient.
Medications	Pharmacologic agents used in the diagnosis, cure, mitigation, treatment, or prevention of disease
Patient Demographics	Data used to categorize individuals for identification, records matching, and other purposes
Problem(s)	Condition, diagnosis, or reason for seeking medical attention
Procedure(s)	Activity performed for or on a patient as part of the provision of care
Provenance	The metadata, or extra information about data, regarding who created the data and when it was created
Unique Device Identifier(s) for Patient's Implantable Device(s)	Unique identifier(s) for a patient's implantable device(s)

API Data Structures

This resource may be received as JSON or XML. To specify your preference, use the Content-Type header in your request.

Format Content-Type Header

- JSON application/fhir+json
- XML application/fhir+xml

API Exceptions

This API is build using standard REST interactions. This means that all exceptions will be returned using standard HTML interaction. Consuming applications should pay attention to the status code in each server response to determine the state of the transaction.

Status Code	Description
200	Ok
201	Created
202	Accepted
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error
501	Not Implemented

API Returns

This API call returns a Patient Access electronic health record data point for Allergy Intolerance. The following is an example of a subset of the returned data:



Provider Directory Application Programming Interface (API)

Dates and information subject to change. Please visit https://www.eldoradocounty.ca.gov/Health-Well-Being/Behavioral-Health/Behavioral-Health-Resources for up-to-date information. Registration is required for access.

Base URL <u>https://fhir.netsmartcloud.com/payer/provider-directory/v2/e8c254e2-72ed-4654-8258-02a395017a2a/</u>

Capability Statement: https://hl7.org/fhir/us/davinci-pdex-plan-net/CapabilityStatement-plan-net.html

API Function Names and Return Variables

This operation retrieves a list of resources by these query parameters. A '*' denotes a required parameter. All query parameters must be url encoded.

Practitioner

A description of the Practitioner resource and the return value structure can be viewed here.

GET https://fhir.netsmartcloud.com/payer/provider-directory/v2/e8c254e2-72ed-4654-8258-

02a395017a2a/uscore/v1/provider-directory/Practitioner{?[parameters]}

Parameter Name	Parameter Type	Description
name	StringParam	A server defined search that may match any of the string fields in the HumanName, including family, give, prefix, suffix, suffix, and/or text
given	StringParam	Practitioner given (first) name.
family	StringParam	Practitioner family name (a.k.a., surname or last name).
	Practitioner NPI. E.g., '/Practitioner?identifier=97860456' or '/Practitioner?identifier=http://hl7.org/fhir/sid/us-	
identifier	TokenParam	npi 97860456'
npi	id	Practitioner NPI. E.g., '/Practitioner?npi=97860456'
page	StringParam	One-based (1-based) page index
_count	Integer	Page size
_sort	SortSpec	
communication	StringParam	Yes or No answer to Cultural Competence training completed

Practitioner Role

A description of the Practitioner Role resource and the return value structure can be viewed here.

GET https://fhir.netsmartcloud.com/payer/provider-directory/v2/e8c254e2-72ed-4654-8258-

02a395017a2a/uscore/v1/provider-directory/PractitionerRole{?[parameters]}

Parameter Name	Parameter Type	Description
endpoint	ReferenceParam	Technical endpoints providing access to services operated for the practitioner with this role
location	ReferenceParam	One of the locations at which this practitioner provides care
organization	ReferenceParam	The identity of the organization the practitioner represents / acts on behalf of
practitioner	ReferenceParam	Practitioner that is able to provide the defined services for the organization
role	TokenParam	The practitioner can perform this role at for the organization
service	ReferenceParam	The list of healthcare services that this worker provides for this role's Organization/Location(s)
specialty	TokenParam	The practitioner has this specialty at an organization
_count	Integer	Page size
_sort	SortSpec	Sort option

Location

A description of the Location resource and the return value structure can be viewed here.

GET https://fhir.netsmartcloud.com/payer/provider-directory/v2/e8c254e2-72ed-4654-

8258- 02a395017a2a/uscore/v1/provider-directory/Location?[parameters]}

Parameter Name	Parameter Type	Description
address-city	StringParam	A city specified in an address
address-postal- code	StringParam	A postal code specified in an address
address-state	StringParam	A state specified in an address
address	StringParam	A (part of the) address of the location
endpoint	ReferenceParam	Technical endpoints providing access to services operated for the location
organization	ReferenceParam	Searches for locations that are managed by the provided organization
part-of	ReferenceParam	A location of which this location is a part
type	TokenOrListParam	A code for the type of location
_count	Integer	Page size
_sort	SortSpec	Sort option

Organization

A description of the Organization resource and the return value structure can be viewed <u>here</u>. GET https://fhir.netsmartcloud.com/payer/provider-directory/v2/e8c254e2-72ed-4654-8258-02a395017a2a/uscore/v1/provider-directory/Organization{?[parameters]}

Parameter Name	Parameter Type	Description	
Ch 1 - D	A server defined search that may match any of the string fields in the Address, including line,		
address	StringParam	city, district, state, country, postalCode, and/or text	
address-city	StringParam	A city specified in an address	
address-postalcode	StringParam	A postal code specified in an address	
address-state	StringParam	A state specified in an address	
identifier	TokenParam	Any identifier for the organization (not the accreditation issuer's identifier)	
name	StringParam	A portion of the organization's name or alias	
_count	Integer	Page size	
_sort	SortSpec	Sort option	
telecom	StringParam	Website address	
telecom	Integer	Aphone #	
hoursofoperation	Integer	Hours organization is open for services	
newpatients	StringParam	Yes or No answer if organization is accepting new patients	
communication	StringParam	Listing of Cultural and Linguistic Capabilities	
accessibility	StringParam	Compliance information on ADA compliance	
telecom	Integer	24-hour phone # for organization	

Organization Affiliation

A description of the Organization Affiliation resource and the return value structure can be viewed <u>here</u>.

GET https://fhir.netsmartcloud.com/payer/provider-directory/v2/e8c254e2-72ed-4654-8258-02a395017a2a/uscore/v1/provider-directory/OrganizationAffiliation{?[parameters]}

Parameter Name	Parameter Type	Description
date	DateRangeParam	The period during which the participatingOrganization is affiliated with the primary organization
endpoint	ReferenceParam	Technical endpoints providing access to services operated for this role
location	ReferenceParam	The location(s) at which the role occurs
network	ReferenceParam	Health insurance provider network in which the participatingOrganization provides the role's services (if defined) at the indicated locations (if defined)
participating- organization	ReferenceParam	The organization that provides services to the primary organization
primary- organization	ReferenceParam	The organization that receives the services from the participating organization
role	TokenParam	Definition of the role the participatingOrganization plays
service	ReferenceParam	Healthcare services provided through the role
specialty	TokenParam	Specific specialty of the participatingOrganization in the context of the role
_count	Integer	Page size
_sort	SortSpec	Sort option

API Parameters and Data Types

Parameter	Description
Location	Location of service(s)
Organization	Name of organization
Organization Affiliation	Affiliation
Practitioner	Name of Practitioner
Practitioner Role	Credentials
URL	Website address
Practice Phone #	Phone number for organization
Hours	Hours of operation
Accepting New Beneficiaries	Accepting new patients
Cultural and Linguistic Capabilities	Language and cultural personnel capabilities
Cultural Competence Training	Cultural Competence training completion status
ADA Compliance	Compliance with American with Disabilities Act (ADA)
24-hour Phone #	Phone # available 24 hours a day

API Data Structures

This resource may be received as JSON or XML. To specify your preference, use the Content-Type header in your request.

Format Content-Type Header

- JSON application/fhir+json
- XML application/fhir+xml

API Exceptions

This API is build using standard REST interactions. This means that all exceptions will be returned using standard HTML interaction. Consuming applications should pay attention to the status code in each server response to determine the state of the transaction.

Status Code	Description
200	Ok
201	Created
202	Accepted
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error
501	Not Implemented

API Returns

This API call returns Provider Directory electronic health record data. The following is a subset of the returned data:

GET https://fhir.netsmartcloud.com/payer/provider-directory/v2/e8c254e2-72ed-4654-8258-02a395017a2a/v4/Practitioner{?[parameters]}

```
{"resourceType":"Bundle","id":"c85cf959-ad98-4871-ad97-
16b74e878365", "meta": { "lastUpdated": "2024-04-
04T22:39:19.754+00:00"},"type":"searchset","total":41,"link":[{"relation":"self","url
":"https://fhir.netsmartcloud.com/payer/provider-directory/v2/e8c254e2-72ed-4654-
8258-
02a395017a2a/v4/Practitioner?name=Roberts&page=1"}],"entry":[{"fullUrl":"https://fhir
.netsmartcloud.com/payer/provider-directory/v2/e8c254e2-72ed-4654-8258-
02a395017a2a/v4/Practitioner/000001", "resource": { "resourceType": "Practitioner", "id":"
000001", "identifier": [{"system": "http://hl7.org/fhir/sid/us-
npi","value":"1234567893"}],"name":[{"use":"official","text":"SELENA
GIBSON", "family": "GIBSON", "given": ["SELENA"] }], "telecom": [{"system": "phone", "value":"
631-968-
2000","use":"work"},{"system":"email","value":"nhatzispirou@ntst.com"}]}},{"fullUrl":
"https://fhir.netsmartcloud.com/payer/provider-directory/v2/e8c254e2-72ed-4654-8258-
02a395017a2a/v4/Practitioner/000012", "resource": { "resourceType": "Practitioner", "id": "
000012","identifier":[{"system":"http://hl7.org/fhir/sid/us-
npi","value":"123456789"}],"name":[{"use":"official","text":"Dr. EMILY
SMITH", "family": "SMITH", "given": ["EMILY"], "prefix": ["Dr."] }], "telecom": [{"system": "ph
one","value":"555-787-0987","use":"work"}]}}
```