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## Terms and Conditions of Use

The terms and conditions beneath oversee your utilization of application programming interface (API) provided by IPClinical.

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- Developers are permitted to keep the copies of the documentation; however, it must not be distributed. Those willing to share the documentation, may do as such by sharing the link to CHPL.
- Developers are responsible for their products using IPClinical API and PHI must not be shared outside the expressed conventions.
- If a developer is utilizing the API for their employer, they should maintain the terms and conditions and that the employer will be at risk to repay IPClinical in the event of infringement.
- You should not use the API to, or in the manner that allows the transmission of any virus, or other unauthorized or malicious code.
- You should not attempt to reverse engineer or derive source code, translate, record, trade or create derivative works based on IPClinical API or API Materials.
- You are not allowed to sell, rent, lease, sublicense or redistribute access to the IPClinical API or API Materials to any third party without getting an approval from IPClinical.
- IPClinical will inform you with a prior notice as it may alter or suspend the IPClinical API or a part or property thereof, or refresh and change these terms and conditions.
- The sole reason of this API will be to acquire the protected health information (PHI) of patients and by accessing or utilizing the material on this API, you agree to bound by these terms and conditions.

## Intellectual Property

IPClinical exclusively own all right, title and interest in and to all the trademarks, documentation, software, contents, graphics, designs, data, computer code, application program interfaces, patents, works, ideas (whether or not patentable), know-how, trade secrets, "look and feel," compilations, magnetic translations, digital conversions and other materials, and all intellectual property rights related thereto (the "Intellectual Property") included within or related to the API or the API Materials.

## Fees

IPClinical does not currently charge any fees for the use of the API. IPClinical reserves the right to charge fees for future use of or access to the API. Should we exercise our right to charge fees in the future, we will provide you with advance notice of this decision, and will describe any and all such fees in detailed plain language.

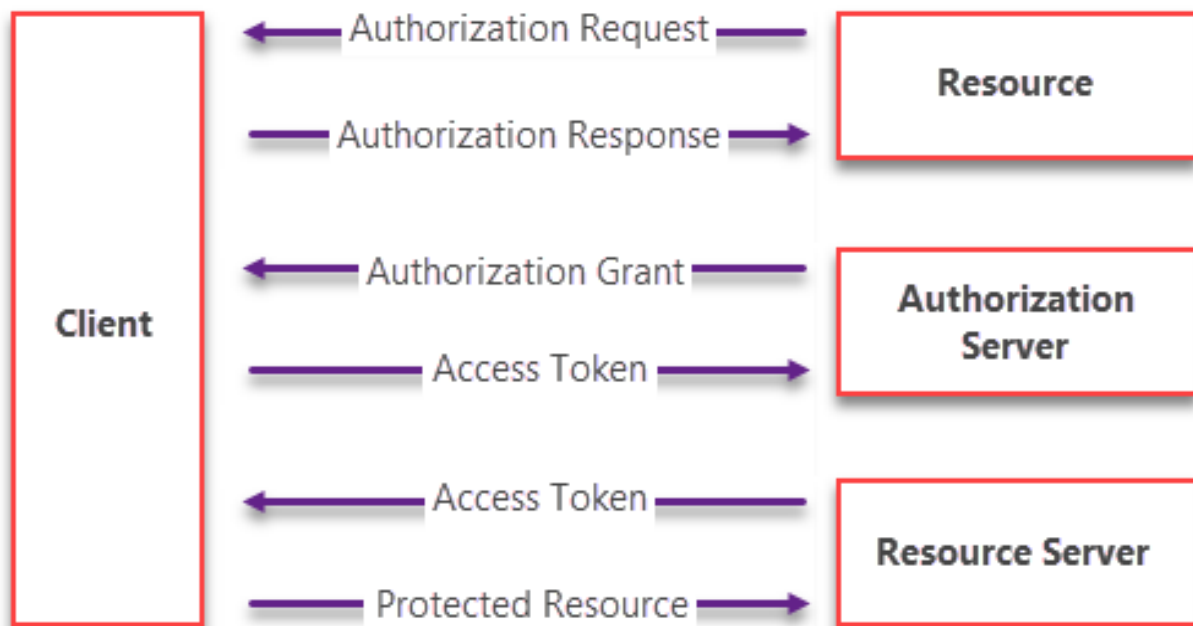


## Introduction

This document is created by IPClinical for the clients that use its API to access protected health information (PHI) of the patients. This document provides a comprehensive step by step approach for the users to understand authentication and methods to connect to the IPClinical API and query patient health data.

## Authentication Process

IPClinical API uses OAuth 2.0 protocol. Please see the chart below:





## Generating Authentication Request

Requests can be generated by the authorized users only. Upon successful authorization, a user can access the patient health information from IPClinical. A unique access\_token is granted to each user which is valid for a limited time. After the access\_token is expired, authorized user will be given a new one. An access\_token is a combination of alphanumeric characters which a user requests after they are provided with a client ID and client secret by the IPClinical API.

## Request

Please see below the sample URL:

[http://192.168.0.18/oauth2/access\\_token](http://192.168.0.18/oauth2/access_token)

Following are the parameters required to complete the request for access\_token:

client_id	Unique identifier to access the API
client_secret	Secret answer for authentication
grant_type	Value for Client_Credentials

IPClinical will assign client\_id and client\_secret to its vendors.

## Response

Following response will be given as a result of a successful request:

access_token	Token required to access the API
expires_in	Time of the expiry of access token



## Patient Search

Once the user has been successfully authorized, they can proceed to access the required patient health information. They then need to access patient search URL where they can enter the granted `access_token` to complete the request. Without the `access_token`, request will not be accepted. In order to search a patient, the parameters given below will be entered.

<code>first_name</code>	Patient first name <b>(Required)</b>
<code>last_name</code>	Patient last name <b>(Required)</b>
<code>date_of_birth</code>	Date of birth in YYYY-MM-DD format <b>(Required)</b>
<code>gender</code>	Patient gender <b>(Optional)</b>
<code>phone_number</code>	Phone number of patient <b>(Optional)</b>

Gender field will only accept below the values:

- i. "M" for Male
- ii. "F" for Female
- iii. "U" for Unknown

The parameters will be passed in the form of a string. IPClinical returns the response in below format:

```
{
  "patient_id": "S1-S2-Sa-T1-S3-I2-S4-==-",
  "first_name": "sample string 1",
  "last_name": "sample string 2",
  "date_of_birth": "sample string 3",
  "gender": "sample string 5",
  "phone_number": "sample string 4",
}
```

If the parameters are not entered in the said format, the request will not be accepted and the user will get an error. In case of a successful request, user will be given a unique id for the selected patient through which the required health records for that patient can be accessed.



## All Patient Data

Once the patient id has been received, user may either get the patient data in categories or the complete data. It is not mandatory to enter the dates when requesting all of the patient data. User can select a date range if they want to. In case a date is not selected, API will return all data automatically. It is mandatory to enter the other date if one of them is selected e.g., end date becomes mandatory if start date is entered and vice versa.

### CCDS Categories recognized by the API

DemographicDataElement	Patient's first and last name, sex, DOB, Race, Ethnicity, Language
ProviderDataElement	Primary care provider, contact info
SocialHx	Current smoking status
Assessment	Provider's observations, assumptions and conclusions to improve the treatment process
PlanofTreatment	All pending orders, encounters, and procedures
Goals	Outcomes and conditions to be achieved in patient's care
CareTeamMembers	Provider's team responsible for patient's care
VisitReason	Reason of the visit
HealthConcerns	Non-optimal physical and psychological conditions leading the patient to healthcare system
Vitals	Latest vitals
ProblemLists	Past and current diagnosis
Medications	Past and current medications
Allergies	Active allergies
Immunization	Received or refused vaccines



LabResult	Received lab results
LabOrder	Ordered lab orders
MedicalEquipment	Recorded implantable devices
Referral	Patient's referral history
FunctionalStatus	Patient's normal functioning
EncounterDiagnosis	Chief complaint
PayersSection	Insurance information
MentalStatus	Behavioral and mental health
Procedures	All ordered procedures

## Request

Please see below the sample URL:

[http://192.168.0.18/oauth2/access\\_token](http://192.168.0.18/oauth2/access_token)

## Header Parameters

Authorization	access_token e.g., Bearer fskdjf36saQ
Content_type	Format e.g., JSON (application/JSON)
Host	Provided URL

## Body Parameters

PatientKey	Unique id for the patient
DateRange	Specific date or date range
IncludedComponents	Required components
ResponseType	XML, JSON



## Example

```
{
  "PatientKey": "sample string 1"
  "DateRange": {
    "StartDate": "sample string 1",
    "EndDate": "sample string 2"
  },
  "IncludedComponents":{
    "AllDataAccess":true,
  },
  "ResponseType": "sample string 2"
}
```

## Response

API returns the patient data as a CCDA file in XML format. Result would be returned in JSON body.





## Component Based Patient Data

To access component-based patient data, user needs to post the following parameters in the header and body of the request:

### Header

Authorization	access_token e.g., Bearer fskdjf36saQ
Content_type	Format e.g., JSON (application/JSON)
Host	Provided URL

### Body Parameters

PatientKey	Unique id for the patient
DateRange	Specific date or date range
IncludedComponents	Required components
ResponseType	XML, JSON

In case of an error in a request, IPClinical will return following sets of codes:

4xx	“Error in Request” i.e., there was a problem with your request
200	“Okay” i.e., successful request
400	“Bad Request” i.e., possible issues: <ul style="list-style-type: none"> <li>• Search parameter(s) missing/invalid</li> <li>• End date missing</li> <li>• Start date missing</li> <li>• Invalid end date</li> </ul>
401	“Unauthorized” i.e., user does not have the authorization to generate a request.
404	“Not Found” i.e., Possible issues: <ul style="list-style-type: none"> <li>• Patient not found</li> <li>• Invalid category</li> <li>• Token expired</li> <li>• Invalid token</li> </ul>



413	"Payload Too Large" i.e., included JSON payload is too large.
-----	---------------------------------------------------------------

If a user does not want to get data for a selected component, they can remove that particular variable or type false against it, instead of true.

## Example

```
{
  "PatientKey": "sample string 1",
  "DateRange": {
    "StartDate": "sample string 1",
    "EndDate": "sample string 2"
  },
  "IncludedComponents": {
    "DemographicDataElement": true,
    "ProviderDataElement": true,
    "SocialHx": true,
    "Assessment": true,
    "PlanofTreatment": true,
    "PlanOfCare": true,
    "CareTeamMembers": true,
    "VisitReason": true,
    "HealthConcerns": true,
    "Vitals": true,
    "ProblemLists": true,
    "Medications": true,
    "Allergies": true,
    "Immunization": true,
    "LabResult": true,
    "Procedures": true,
    "MedicalEquipment": true,
    "Referral": true,
    "FunctionalStatus": true,
    "EncounterDiagnosis": true,
    "PayerSection": true,
    "MentalStatus": true,
  }
  "ResponseType": "sample string 2"
}
```