

Patient Access API Documentation

This document helps third party application owners develop and integrate their applications with Patient Access APIs. Medicare Members who consent to have their data shared with third party application providers of their choice can then access their clinical information on such applications.

There are three section in this document which shows the entire workflow needed to integrate successfully:-

- **Developer Registration**: This section shows how a third party application owner can register their application on the BCBSRI Developer Portal
- **Member Consent and Token Generation**: This section shows how the member providing consent to the third party application, provides his/her consent for their dependents. The Token generated in the process needs to be utilized for hitting the api endpoints and retrieving information.
- **API Endpoints**: This section shows the URLs and end point details that need to be utilized to retrieve the data

Developer Registration

Open Developer portal: <https://developerportal.bcbsri.com/landing>



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A screenshot of the Developer Portal login page. The page has a white background with a light gray border. At the top center, the text "Login Now" is displayed in blue. Below this, there are two input fields: "UserName *" and "Password *". Each field contains the placeholder text "Enter UserName" and "Enter Password" respectively, and has a small eye icon on the right side. Below the input fields, the text "UserName and Password should be filled." is displayed. Underneath, there is a link "Forgot Password" in blue. At the bottom, there are two blue buttons: "Login" and "Register".

Register as developer in developer portal



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Fields with * symbol are mandatory one.

PROFILE

Email Address *

Enter Email Address

[Send Verification Code](#)

Ensure your Email Address is in valid format.

Email has not been Verified

Password *

Enter Password

Confirm Password *

Enter Confirm Password

The password must be between 8 and 64 characters.

The password must have at least 3 of the following:

- a lowercase,uppercase,digit and special character.

Display Name *

Enter Display Name

FirstName *

Enter First Name

LastName *

Enter Last name

Fields with * symbol are mandatory one.

Organization

OrganizationName *

Enter OrganizationName

OrganizationTaxID *

Enter OrganizationTaxID

Organization StreetAddress

Enter OrgStreetAddress

Organization City

Enter OrgCity

Organization Country

Enter Country

Organization State

Enter State

Organization ZipCode

Enter OrgZipCode

Alternative Email

Enter AltEmail

Phone Number

Enter Phone Number

Privacy Policy

Enter Privacy Policy Url

Information Security Policy

Application's CARIN Bio URL

Enter Application's CARIN Bio URL



Blue Cross & Blue Shield of Rhode Island (BCBSRI) asks that any Application (App) developer requesting to access BCBSRI's Patient Access API attest to compliance with the following statements. If you do not attest to compliance with these statements, we will inform any member that requests her/his protected health data using your App of the non-compliance and suggest that the member select an App that has attested to complying with these statements

Questions

- The App's privacy policy includes, in plain language, how the App will inform members of changes in its privacy practices.
- The App is a member of and fully complies with The CARIN Trust Framework and Code of Conduct for sharing data with consumer applications. (https://www.carinalliance.com/wp-content/uploads/2019/05/2019_CARIN_Code_of_Conduct_05082019.pdf)
- The App's privacy policy includes, in plain language, a requirement for express consent from a member before the member's health data is accessed, exchanged, or used, including receiving express consent before a member's health data is shared or sold (other than disclosures required by law or disclosures necessary in connection with the sale of the application or a similar transaction).
- The App's privacy policy includes, in plain language, if an App will access any other information from a member's device, including, but not limited to GPS location or other non-health data.
- The App's privacy policy includes, in plain language, how the member's health data may be accessed, exchanged, or used by any person associated with the App or any other entity, including whether the member's health data may be shared or sold at any time (including potential future uses).
- The App has a publicly available privacy policy, written in plain language, that has been affirmatively shared with the BCBSRI member prior to such member authorizing the App access to their health data. To "affirmatively share" means that the member must take an action to indicate s/he saw the privacy policy, such as click or check a box.

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After successful registration, login to developer portal and Register the app

App Registration App Management Profile Management Resources

Fields with * symbol are mandatory one.

Register

Name of Application *

Application Purpose *

Redirect Url *

Redirect Url must in format <https://fqdn/resource>

Choose Logo No file chosen Image should be type of image only like .jpg/png

Once app successfully registered, client id and client secret is generated and it will be shown on the screen.

The screenshot shows a web interface with a navigation bar at the top containing 'App Registration', 'App Management', 'Profile Management', and 'Resources'. A 'Logout' link is in the top right corner. A tooltip above the navigation bar says 'Click to go back (Alt+Left arrow), hold to see history'. The main content area features a success message: 'Registration has been successfully completed with Production details.' Below this, the following information is displayed: 'Application Name: [redacted]', 'Application Purpose: [redacted]', 'Logo: [img alt="Application logo showing a flow diagram]", 'Redirect URI: https://www.[redacted]', 'ClientId: [redacted]', and 'ClientSecret: [redacted]'. A note at the bottom states: 'Please note down the ClientSecret for your future reference. It will be not shown again.'

Member Consent & Token generation

Members who intend to consent to share their data with a third party application will be re-directed to the BCBSRI member portal login page from the third party application to provide their consent.

Login to the registered app with BCBSRI User id and Password.

The screenshot shows the BCBSRI member portal login page. The top left features the BCBSRI logo. The top right has links for 'For Member' and 'For Developer'. The main content area is split into two sections. On the left, under the heading 'LOGIN', there is a form with the text 'Already a User? Log in here'. The form includes fields for 'User Name' and 'Password', each with an icon (a person for the name, a lock for the password), and a blue 'Login' button. On the right, there is a promotional banner for the 'myMember App'. The banner text reads: 'Download the myMember App. Now with fingerprint access, the myMember app makes it easier than ever to stay in-network—and save. Download the app today.*'. Below the text are buttons for 'GET IT ON Google Play' and 'Download on the App Store'. To the right of the text is a smartphone displaying the app's login screen. At the bottom of the page, there is a footer with 'Privacy Statement - Terms & Conditions', '© Copyright 2019 Blue Cross & Blue Shield of Rhode Island. All Rights Reserved.', and a disclaimer: 'All trademarks unless otherwise noted are the property of Blue Cross & Blue Shield of Rhode Island or the Blue Cross and Blue Shield Association. Blue Cross & Blue Shield of Rhode Island is an independent licensee of the Blue Cross and Blue Shield Association.' To the right of the footer is the BCBSRI logo and social media icons for Facebook, Twitter, and LinkedIn.

The following end points and their details are available for retrieval

Metadata

The metadata endpoint provides access to the FHIR Capability Statement of the server.

Endpoint: GET <https://<baseurl>/metadata>

Parameters: None

Baseurl : <https://api.bcsri.com/PatientAccessAPI/fhir> **Resource**

Types:

Sl.No.	Resource Types
1	Condition
2	Coverage
3	Claims
4	Device
5	DiagnosticReport
6	DocumentReference
7	Encounter
8	ExplanationOfBenefit
9	Immunization
10	Location
11	Medication
12	MedicationDispense
13	MedicationKnowledge
14	Observation
15	Organization
16	Patient
17	Practitioner
18	PractitionerRole
19	Procedure
20	Provenance

Requests – Params

Name	Required	Type	Description	Example
_id	false	Integer	System identifier of resource.	_id = d10956b0-8e50-49af-8db2-288xxxxx
_lastUpdated	false	String	Last updated date of resource type	_lastUpdated = gt2010-10-01
_count	false	Integer	Size of results page	_count = 5

Condition

This resource is used to record detailed information about a condition, problem, diagnosis or other event, situation, issue or clinical concept that has risen to a level of concern.

Endpoint: GET [https://<baseurl>/PatientAccessAPI/fhir/Condition?_id={Ids}&_count\]&_lastUpdated\]](https://<baseurl>/PatientAccessAPI/fhir/Condition?_id={Ids}&_count]&_lastUpdated])

Parameters:

Name	Required	Type	Description
_id	False	integer	System identifier of resource.
_lastUpdated	False	string	Last updated date of resource type
_count	False	integer	Size of results page

Condition By Id

Retrieve the Condition resource by id

Endpoint: GET <https://<baseurl>/Condition/{id}>

Parameters: None.

Coverage

The Coverage resource is intended to provide the high-level identifiers and descriptors of an insurance plan, typically the information which would appear on an insurance card, which may be used to pay, in part or in whole, for the provision of health care products and services.

The Patient Access API implements the FHIR Coverage Resource. The Coverage resource supports reading the current state of the resource using the Logical (Unique) ID. **Endpoint:** GET [https://<baseurl>/Coverage?_id={Ids}&_count\]\[&_lastUpdated\]](https://<baseurl>/Coverage?_id={Ids}&_count][&_lastUpdated]) **Parameters:**

Name	Required	Type	Description
_id	False	integer	System identifier of resource.
_lastUpdated	False	string	Last updated date of resource type
_count	False	integer	Size of results page

Coverage By Id

The Patient Access API implements the FHIR Coverage Resource. The Coverage resource supports to Read current state of the resource using the Logical (Unique) ID.

Retrieve the Coverage resource by id. **Endpoint:**

GET <https://<baseurl>/Coverage/{id}>

Parameters: None.

Claim

The Claim resource is used to request the adjudication and/or authorization of a set of healthcarerelated goods and services for a patient against the patient's insurance coverages, or to request what the adjudication would be for a supplied set of goods or services should they be actually supplied to the patient.

Endpoint: GET [https://<baseurl>/Claim?_id={Ids}&_count\]\[&_lastUpdated\]](https://<baseurl>/Claim?_id={Ids}&_count][&_lastUpdated]) **Parameters:**

Name	Required	Type	Description
_id	False	integer	System identifier of resource.
_lastUpdated	False	string	Last updated date of resource type
_count	False	integer	Size of results page

Claim By Id

Retrieve the Claim resource by id.

Endpoint: GET <https://<baseurl>/Claim/{id}>

Parameters: None.

Device By Id

A type of a manufactured item that is used in the provision of healthcare without being substantially changed through that activity. This device may be a medical or non-medical.

Note : Id is mandatory

Endpoint: GET <https://<baseurl>/Device/{id}>

Parameters: None.

DiagnosticReport

The findings and interpretation of diagnostic tests performed on patients, groups of patients, devices and locations and/or specimens derived from these. The report includes clinical context such as requesting and providing information and some mix of atomic results, images textual and coded interpretations and formatted representation of diagnostic

Endpoint: GET [https://<baseurl>/DiagnosticReport?_id={Ids}\[&_count\]\[&_lastUpdated\]](https://<baseurl>/DiagnosticReport?_id={Ids}[&_count][&_lastUpdated]) **Parameters:**

Name	Required	Type	Description
_id	false	integer	System identifier of resource.
_lastUpdated	false	string	Last updated date of resource type
_count	false	integer	Size of results page

DiagnosticReport By Id

The findings and interpretation of diagnostic tests performed on patients, groups of patients, devices and locations and/or specimens derived from these. The report includes clinical context such as requesting and providing information and some mix of atomic results, images textual and coded interpretations and formatted representation of diagnostic.

Retrieve the Diagnostic Reports resource by id. **Endpoint:**

GET <https://<baseurl>/DiagnosticReport/{id}> **Parameters:**

None.

DocumentReference

A reference to a document of any kind for any purpose. Provides metadata about the document so that the document can be discovered and managed. The scope of a document is any serialized object with the mime-type, so includes formal patient centric documents (CDA), clinical notes, scanned paper and non-patient specific documents like policy text.

Endpoint: GET [https://<baseurl>/DocumentReference?_id={Ids}&_count\]\[&_lastUpdated\]](https://<baseurl>/DocumentReference?_id={Ids}&_count][&_lastUpdated]) **Parameters:**

Name	Required	Type	Description
_id	false	integer	System identifier of resource.
_lastUpdated	false	string	Last updated date of resource type
_count	false	integer	Size of results page

DocumentReference By Id

Retrieve the DocumentReference resource by id. **Endpoint:**

GET <https://<baseurl>/DocumentReference/{id}>

Parameters: None.

Encounter

The interaction between a patient and healthcare provider for the purpose of providing healthcare service(s) or assessing the health status of a patient.

Endpoint: GET [https://<baseurl>/Encounter?_id={Ids}&_count\]\[&_lastUpdated\]](https://<baseurl>/Encounter?_id={Ids}&_count][&_lastUpdated]) **Parameters:**

Name	Required	Type	Description
_id	false	integer	System identifier of resource.
_lastUpdated	false	string	Last updated date of resource type
_count	false	integer	Size of results page

Encounter By Id

Retrieve the Encounter resource by id.

Endpoint: GET <https://<baseurl>/Encounter/{id}>

Parameters: None.

ExplanationOfBenefit

The ExplanationOfBenefit (EOB) resource combines key information from a Claim, a ClaimResponse and optional Account information to inform a patient of the goods and services rendered by a provider and the settlement made under the patient's coverage in respect of that Claim. The ExplanationOfBenefit resource may also be used as a resource for data exchange for bulk data analysis, as the resource encompasses Claim, ClaimResponse and Coverage/Eligibility information.

The Patient Access API implements HL7 FHIR standards to meet the CMS requirements for interoperability. The API enables members to access their claims and encounter information using Third-Party client applications. A request for Explanation Of Benefit resource will initiate a fetch that returns claims for a patient from claims data sources .

Endpoint: GET [https://<baseurl>/ExplanationOfBenefit?_id={Ids}&_count\]\[&_lastUpdated\]](https://<baseurl>/ExplanationOfBenefit?_id={Ids}&_count][&_lastUpdated]) **Parameters:**

Name	Required	Type	Description
_id	false	integer	System identifier of resource.
_lastUpdated	false	string	Last updated date of resource type
_count	false	integer	Size of results page

ExplanationOfBenefit By id

Retrieve the Explanation of Benefits resource by id. **Endpoint:**

GET <https://<baseurl>/ExplanationOfBenefit/{id}> **Parameters:**

None.

Immunization

Describes the event of a Patient being administered a vaccine or a record of an immunization as reported by a patient, a clinician or another party.

Endpoint: GET [https://<baseurl>/Immunization?_id={Ids}\[&_count\]\[&_lastUpdated\]](https://<baseurl>/Immunization?_id={Ids}[&_count][&_lastUpdated])

Parameters:

Name	Required	Type	Description
_id	false	integer	System identifier of resource.
_lastUpdated	false	string	Last updated date of resource type
_count	false	integer	Size of results page

Immunization By Id

Retrieve the Immunization resource by id. **Endpoint:**

GET <https://<baseurl>/Immunization/{id}>

Parameters: None.

Location By Id

A Location includes both incidental locations (a place which is used for healthcare without prior designation or authorization) and dedicated, formally appointed locations. Locations may be private, public, mobile or fixed and scale from small freezes to full hospital buildings or parking garages.

Manage the collection of resources of type Location.

Note : Id is mandatory

Endpoint: GET <https://<baseurl>/Location/{id}>

Parameters: None.

Medication By Id

The Medication resource allows for medications to be characterized by the form of the drug and the ingredient (or ingredients), as well as how it is packaged. The medication will include the ingredient(s) and their strength(s) and the package can include the amount (for example, number of tablets, volume, etc.) that is contained in a particular container (for example, 100 capsules of Amoxicillin 500mg per bottle).

Note : Id is mandatory

Endpoint: GET <https://<baseurl>/Medication/{id}>

Parameters: None.

MedicationDispense

Indicates that a medication product is to be or has been dispensed for a named person/patient. This includes a description of the medication product (supply) provided and the instructions for administering the medication. The medication dispense is the result of the pharmacy system responding to a medication order.

Endpoint: GET [https://<baseurl>/MedicationDispense?_id={Ids}\[&_count\]\[&_lastUpdated\]](https://<baseurl>/MedicationDispense?_id={Ids}[&_count][&_lastUpdated]) **Parameters:**

Name	Required	Type	Description
_id	false	integer	System identifier of resource.
_lastUpdated	false	string	Last updated date of resource type
_count	false	integer	Size of results page

MedicationDispense By Id

Retrieve the Medication Dispense resource by id. **Endpoint:**

GET

<https://<baseurl>/MedicationDispense/{id}> **Parameters:**

None.

MedicationKnowledge By Code

This resource supports use cases for creation of and querying for drug information including attributes such as drug classifications, images of medications, drug costs and/or coverages, etc. This resource can be used to return drug information as part of a formulary or a catalogue.

Note: Search by code. **Endpoint:**

GET

<https://<baseurl>/MedicationKnowledge?code={code}>

Parameters:

Name	Required	Type	Description
code	true	string	System identifier of resource.

MedicationKnowledge By Id

This resource supports use cases for creation of and querying for drug information including attributes such as drug classifications, images of medications, drug costs and/or coverages, etc. This resource can be used to return drug information as part of a formulary or a catalogue.

Note : Id is mandatory

Endpoint: GET <https://<baseurl>/MedicationKnowledge/{id}> **Parameters:**

None.

Observation

This resource will retrieve all observation details associated with a patient using the patient identifier and formats the response to the Observation

Endpoint: GET [https://<baseurl>/Observation?_id={ids}&_count\]\[&_lastUpdated\]](https://<baseurl>/Observation?_id={ids}&_count][&_lastUpdated]) **Parameters:**

Name	Required	Type	Description
_id	false	integer	System identifier of resource.
_lastUpdated	false	string	Last updated date of resource type
_count	false	integer	Size of results page

Observation By Id

This resource will retrieve all observation details associated with a patient using the patient.identifier and formats the response to the Observation Retrieve the Observation resource by id. **Endpoint:**

GET <https://<baseurl>/Observation/{id}> **Parameters:** None.

Organization By Id

The Organization resource is used for collections of people that have come together to achieve an objective. The Group resource is used to identify a collection of people (or animals, devices, etc.) that are gathered for the purpose of analysis or acting upon, but are not expected to act themselves.

Note : Id is mandatory

Endpoint: GET <https://<baseurl>/Organization/{id}>

Parameters: None.

Patient

This resource API implements the HL7 FHIR standards and provides the ability to access their data using Third-Party client applications supporting those standards.

The data in the Resource covers the "who" information about the patient: its attributes are focused on the demographic information necessary to support the administrative, financial and logistic procedures.

Endpoint: GET [https://<baseurl>/Patient?_id={ids}\[&_count\]\[&_lastUpdated\]](https://<baseurl>/Patient?_id={ids}[&_count][&_lastUpdated]) **Parameters:**

Name	Required	Type	Description
_id	false	integer	System identifier of resource.
_lastUpdated	false	string	Last updated date of resource type
_count	false	integer	Size of results page

Patient By Id

This resource allows the members to access their data using Third-Party client applications.

Retrieve the Patient resource by id. **Endpoint:**

GET <https://<baseurl>/Patient/{id}>

Parameters: None.

Practitioner By Id

Practitioner covers all individuals who are engaged in the healthcare process and healthcare-related services as part of their formal responsibilities and this Resource is used for attribution of activities and responsibilities to these individuals.

Note : Id is mandatory

Endpoint: GET <https://<baseurl>/Practitioner/{id}>

Parameters: None.

PractitionerRole By Id

PractitionerRole covers the recording of the location and types of services that Practitioners are able to provide for an organization.

Note : Id is mandatory

Endpoint: GET <https://<baseurl>/PractitionerRole/{id}>

Parameters: None.

Procedure

This resource is used to record the details of current and historical procedures performed on or for a patient. A procedure is an activity that is performed on, with, or for a patient as part of the provision of care.

Endpoint: GET [https://<baseurl>/Procedure?_id={Ids}&_count\]\[&_lastUpdated\]](https://<baseurl>/Procedure?_id={Ids}&_count][&_lastUpdated])

Parameters:

Name	Required	Type	Description
_id	false	integer	System identifier of resource.
_lastUpdated	false	string	Last updated date of resource type

_count	false	integer	Size of results page
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Procedure By Id

Retrieve the Procedure resource by id.

Endpoint: GET <https://<baseurl>/Procedure/{id}>

Parameters: None.

Provenance By Id

Provenance of a resource is a record that describes entities and processes involved in producing and delivering or otherwise influencing that resource. Provenance provides a critical foundation for assessing, authenticity, enabling trust and allowing reproducibility Provenance assertions are a form of contextual metadata and can themselves become important records with their own provenance.

Provenance statements indicate clinical significance in terms of confidence in authenticity, reliability and trustworthiness, integrity and stage in lifecycle (e.g. Document completion – has the artifact been legally authenticated) all of which may impact security, privacy and trust policy.

Endpoint: GET <https://<baseurl>/Provenance/{id}> **Parameters:** None.