# CARIN BB RESTful API

The EOB Resource is the focal Consumer-Directed Payer Data Exchange (CDPDE) Resource.  Several Reference Resources are defined directly/indirectly from the EOB:  Coverage, Patient, Organization (Payer ID), Practioner, Organization (Facility), PractionerRole, Location.

The Coverage Reference Resource SHALL be returned with data that was effective as of the date of service of the claim; for example, the data will reflect the employer name in effect at that time. However, for other reference resources, if payers have the data as of the date of service that data SHALL be provided in the reference resource and they SHALL populate meta.lastUpdated with the date that the payer record for that resource was created. If payers do not have the data as of the date of service, they SHALL provide their available data in the reference resource and they SHALL populate meta.lastUpdated with the date the data was updated.

# RESTful Capabilities by Resource/Profile

A server will always treat an EOB search request as if a client indicated "\_include=\*" and SHALL return all EOB & reference resources in the response bundle. Bundle.link.url (self) would show that "\_include=\*" was added by the server as an additional parameter. [Bundle.total](https://urldefense.proofpoint.com/v2/url?u=http-3A__Bundle.total&d=DwQD-g&c=aIUDzRSH0GV4AQi9KEcOBQ&r=yWXMVZr0SziUyEVZ56vTdlmXBCJDn2JEHB1y1-Ra3ig&m=fsmwYq37DJG1BCqsPeAj2Mvf-p4Vjmtryb6Wit2pU_8&s=AUhW6MYdk9xWpvtscgUjyMwpPRB-4FKl0hlXT1pzgxM&e=) will count only EOB resources (this is a normal practice in FHIR to only count the searched resources and not the included / reference resources)

# Summary of Search Criteria

|  |  |  |  |
| --- | --- | --- | --- |
| Resource Type | Supported Profiles | Required Search Parameters (SHALL) | \_includes (SHALL) |
| [ExplanationOfBenefit](https://www.hl7.org/fhir/explanationofbenefit.html) | * [CARIN BB ExplanationOfBenefit Profile](https://build.fhir.org/ig/HL7/carin-bb/StructureDefinition-CARIN-BB-ExplanationOfBenefit.html);
* [CARIN BB ExplanationOfBenefit Inpatient Facility Profile](https://build.fhir.org/ig/HL7/carin-bb/StructureDefinition-CARIN-BB-ExplanationOfBenefit-Inpatient-Facility.html);
* [CARIN BB ExplanationOfBenefit Outpatient Facility Profile;](https://build.fhir.org/ig/HL7/carin-bb/StructureDefinition-CARIN-BB-ExplanationOfBenefit-Outpatient-Facility.html)
* [CARIN BB ExplanationOfBenefit Pharmacy Profile](https://build.fhir.org/ig/HL7/carin-bb/StructureDefinition-CARIN-BB-ExplanationOfBenefit-Pharmacy.html)[;](https://build.fhir.org/ig/HL7/carin-bb/StructureDefinition-CARIN-BB-ExplanationOfBenefit-Outpatient-Facility.html)
* [CARIN BB ExplanationOfBenefit Professional NonClinician Profile](https://build.fhir.org/ig/HL7/carin-bb/StructureDefinition-CARIN-BB-ExplanationOfBenefit-Professional-NonClinician.html)
 | Required search parameters:* \_id,
* patient,
* \_lastUpdated\*
* type (Claim Type)
* identifier (Business / Claim Identifier of EOB
* service-date\*\*
 | Implicit: \_include=\*The following resources will be included:**Coverage &** Organization (Payor): ExplanationOfBenefit:coverageCoverage:payor**Patient**: ExplanationOfBenefit:patient**Provider**: ExplanationOfBenefit:provider **PractitionerRole, Practitioner & Organization (CareTeam)**: ExplanationOfBenefit:care-teamPractitionerRole:practitioner PractitionerRole:organization**Organization (Insurer)**: ExplanationOfBenefit:insurer**Location:** ExplanationOfBenefit:facility (FHIR-26700, FHIR-26734, FHIR-26808) |
| Ballot feedback from BCBSA will note that a search parameter needs to be defined for this IG: "name": "service-date", "type": "date", "description" = "Date of the service", "expression": "ExplanationOfBenefit. billablePeriod | ExplanationOfBenefit.serviced as dateTime | ExplanationOfBenefit.serviced as Period"(FHIR-26701, FHIR-26735, FHIR-26809) |

\*\_lastUpdated

Add a new logical CPCDS new data element, EOBLastUpdated,that defines the date the EOB was created or updated, whichever is later. The payer could choose how they want to map it to this CPCDS element. Map to meta.lastUpdated. Cardinality is 1..1. Search parameter uses the logical EOBLastUpdated field.

\*\* service-date

The goal of service-date is to simplify the search, so that a client doesn't need to know that for inpatient and outpatient admission dates they need to search by billablePeriod.period.start, for a pharmacy by servicedDate, for professional services - by servicedPeriod.period.start. Change the cardinality of these data elements to 1..1.

search by service-date definition:

 "expression": "ExplanationOfBenefit.billablePeriod | ExplanationOfBenefit.serviced as Date | ExplanationOfBenefit.serviced as Period",

 "xpath": "f:ExplanationOfBenefit/f:billablePeriod | f:ExplanationOfBenefit/f:serviced/f:servicedDate | f:ExplanationOfBenefit/f:serviced/f:servicedPeriod"

# ExplanationOfBenefit

Supported Profiles: [CARIN BB ExplanationOfBenefit Profile](https://build.fhir.org/ig/HL7/carin-bb/StructureDefinition-CARIN-BB-ExplanationOfBenefit.html); [CARIN BB ExplanationOfBenefit Inpatient Facility Profile](https://build.fhir.org/ig/HL7/carin-bb/StructureDefinition-CARIN-BB-ExplanationOfBenefit-Inpatient-Facility.html); [CARIN BB ExplanationOfBenefit Outpatient Facility Profile](https://build.fhir.org/ig/HL7/carin-bb/StructureDefinition-CARIN-BB-ExplanationOfBenefit-Outpatient-Facility.html); [CARIN BB ExplanationOfBenefit Pharmacy Profile](https://build.fhir.org/ig/HL7/carin-bb/StructureDefinition-CARIN-BB-ExplanationOfBenefit-Pharmacy.html); [CARIN BB ExplanationOfBenefit Professional NonClinician Profile](https://build.fhir.org/ig/HL7/carin-bb/StructureDefinition-CARIN-BB-ExplanationOfBenefit-Professional-NonClinician.html)

Resource Specific Documentation:

The ExplanationOfBenefit resources can represent a Patient, Provider, Insurer, Care Team, Facility and Coverage with references to Patient, Organization, Practioner, PractitionerRole, Location and Coverage resources. A server SHALL return all Patient, Practitioner, Organization, PractitionerRole, Location and Coverage reference resources for an ExplanationOfBenefit via implicit use of the "\_include=\*" parameter.

For example, a server SHALL interpret the following request:
GET [base]/ExplanationOfBenefit?patient=[patient]&\_lastUpdated=[prefix][date]

as GET [base]/ExplanationOfBenefit?patient=[patient]&\_lastUpdated=[prefix][date] &\_include=\* and return all reference resources in the EOB search response bundle

Search Parameter Summary:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Conformance | Parameter | Type | Example |
| 1 | **SHALL** | \_id | token | GET [base]/ExplanationOfBenefit?\_id=[id] |
| 2 | **SHALL** | patient | reference | GET [base]/ExplanationOfBenefit?patient=[patient] |
| 3 | **SHALL** | \_lastUpdated | date | GET [base]/ExplanationOfBenefit?*\_lastUpdated=*[prefix][date]\* Shall only be supported in a combination with patient |
| 4 | **SHALL** | type | token | GET [base]/ExplanationOfBenefit?type*=*[system]|[code]\* Shall only be supported in a combination with patient |
| 5 | **SHALL** | identifier | token | GET [base]/ExplanationOfBenefit?identifier*=*[system]|[value] |
| 6 | **SHALL** | service-date | date | GET [base]/ExplanationOfBenefit?*service-date=*[prefix][date]\* Shall only be supported in a combination with patient |

All searches, other than by\_\_id and identifier, are required in combination with the patient search parameter.