



FHIR Consent Management Application

External API Specifications

CRISP Shared Services

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1. Introduction

The purpose of this document is to facilitate design, discussion, planning, and development of an externally facing FHIR Application Program Interface (API) to manage a patient's opt-out status.

1.1 Summary of Opt-Out Consent

When patients elect to opt out of sharing their clinical data for the purpose of treatment, they must complete an Opt-Out form. This form is unique to reflect the laws surrounding Protected Health Information (PHI) security. In Maryland, the patient's default status is opt-in and the patient must opt out from sharing their clinical data with any of the HIEs in Maryland.

CRISP and other HIEs in the state of Maryland will not exchange any clinical data received on patients who opt out. We will exchange the opt-out information with other HIEs per applicable laws and regulations.

1.2 Data Storage

CRISP Shared Services (CSS) maintains patient demographics submitted in Optout Form (Name, DOB, Gender, Address, Phone), patient SMRNs (source and medical record numbers) from other sources that match to those on the OPTOUT record.

CSS keeps all available patient demographics that match those on a patient's OPTOUT record(s) so that CSS can accurately maintain a patient entity of SMRNs from multiple sources. This ensures our processes can remove and/or restrict clinical data relating to opted out patients.

CSS does *not* maintain clinical information associated with the SMRNs in the opted-out patient's entity.



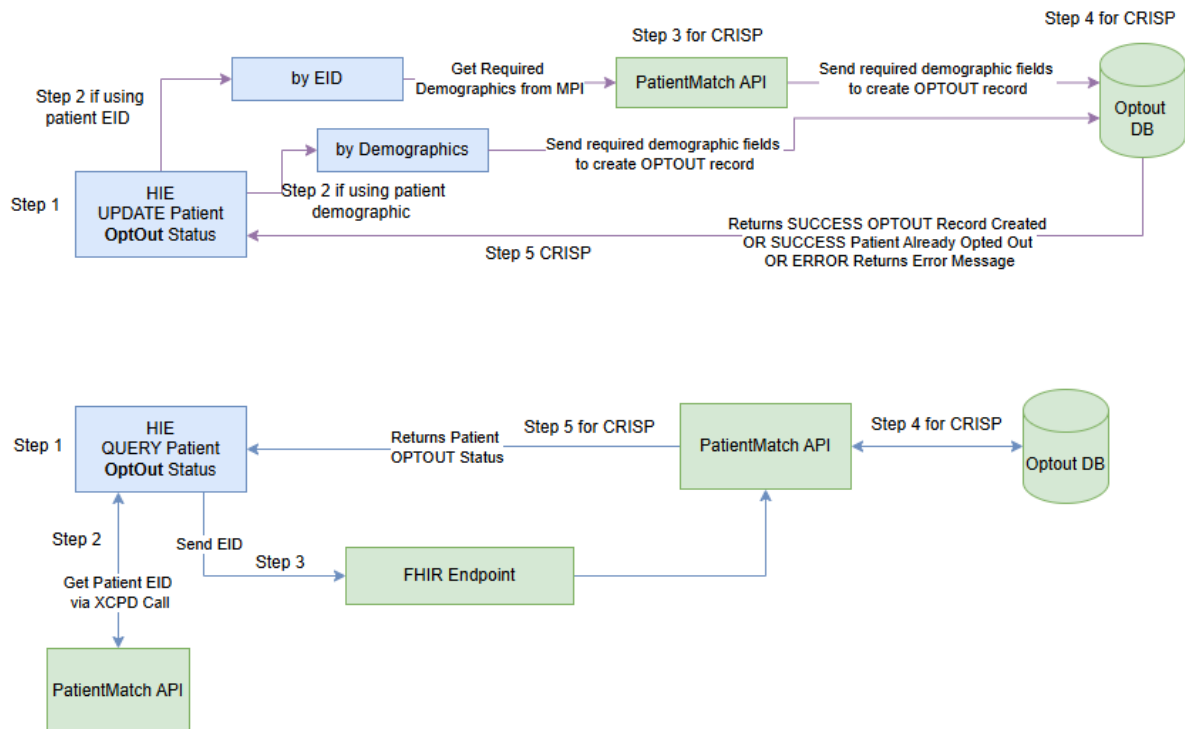
2. Opt-Out External Facing API Specifications

2.1 Assumption

- XCPD API call to get patient EID should happen before any calls to Consent Management API, if submitting or querying opt-out via patient identifier.
- If the user does not want to call via XCPD, then they can submit or query opt-out by demographics to match the patient.

2.2 API Diagram

The following diagram provides a graphical representation of the API requests.



API Consumer to Obtain Opt-Out

1. Consumer will call via XCPD to get the patient EID
2. Consumer obtained EID
3. Consumer will query a patient using the EID
4. CRISP FHIR endpoint matches the patient from the patient match API and from the opt-out database
5. CRISP returns patient opt-out status to the consumer



3. XCPD API

3.1 Overview

The XCPD SOAP API provides an endpoint with which CSS affiliates can find a patient's unique identifier (EID) within CRISP's MPI database based on patient demographics passed within a `PRPA_IN201305UV02` schema object.

3.2 Base URL, Messaging Protocol and HL7 Versioning

- **Base URLs:**
 - Test: <https://testapi.crisphealth.org>
 - Production: <https://api.crisphealth.org>
- **Messaging Protocol:**
[ITI-55](#)
- **HL7 Version:**
Version 3 Standard

3.3 XCPD Request

3.3.1 Endpoint

POST xcpd/passthrough

3.3.2 Sample SOAP Request Object

```
<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:a="http://www.w3.org/2005/08/addressing"
xmlns:s="http://www.w3.org/2003/05/soap-envelope">
  <s:Header>
    <a:Action>urn:h17-org:v3:PRPA_IN201305UV02:CrossGatewayPatientDiscovery</a:Action>
    <a:MessageID>urn:uuid:00000000-0000-0000-0000-000000000000</a:MessageID>
    <a:ReplyTo>
      <a:Address>http://www.w3.org/2005/08/addressing/anonymous</a:Address>
    </a:ReplyTo>
    <a:To>https://api.crisphealth.org/xcpd/passthrough</a:To>
    <a:From a:IsReferenceParameter="true">
      <a:Address>urn:umms:careeverywhere</a:Address>
    </a:From>
  </s:Header>
  <s:Body xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
    <PRPA_IN201305UV02 xmlns="urn:h17-org:v3" ITSVersion="XML_1.0">
      <!-- 1. TRANSMISSION WRAPPER METADATA -->
      <id extension="195338667" root="1.2.840.114350.1.13.168.2.7.2.696777" />
      <creationTime value="20171003103845-0400" />
    </PRPA_IN201305UV02>
  </s:Body>
</s:Envelope>
```



```
<interactionId extension="PRPA_IN201305UV02" root="2.16.840.1.113883.1.6" />
<processingCode code="P" />
<processingModeCode code="T" />
<acceptAckCode code="NE" />

<!-- Receiver Gateway Node Information -->
<receiver typeCode="RCV">
  <device classCode="DEV" determinerCode="INSTANCE">
    <id root="1.2.840.114350.1.13.168.2.7.2.688879.1000005" />
    <asAgent classCode="AGNT">
      <representedOrganization classCode="ORG" determinerCode="INSTANCE">
        <id root="1000005" />
      </representedOrganization>
    </asAgent>
  </device>
</receiver>

<!-- Sender Gateway Node Information -->
<sender typeCode="SND">
  <device classCode="DEV" determinerCode="INSTANCE">
    <id root="1.2.840.114350.1.13.168.2.7.2.688879.28200" />
    <asAgent classCode="AGNT">
      <representedOrganization classCode="ORG" determinerCode="INSTANCE">
        <id root="1.2.840.114350.1.13.168.2.7.3.688884.100" />
      </representedOrganization>
    </asAgent>
  </device>
</sender>

<!-- 2. CONTROL ACT WRAPPER -->
<controlActProcess classCode="CACT" moodCode="EVN">
  <code code="PRPA_TE201305UV02"/>
  <authorOrPerformer typeCode="AUT">
    <assignedDevice classCode="ASSIGNED">
      <id root="1.2.840.114350.1.13.168.2.7.3.688884.100"/>
    </assignedDevice>
  </authorOrPerformer>

  <!-- 3. DEMOGRAPHIC QUERY PARAMETERS -->
  <queryByParameter>
    <queryId root="00000000-0000-0000-0000-000000000000"/>
    <statusCode code="new"/>
    <responseModalityCode code="R"/>
    <responsePriorityCode code="I"/>
    <parameterList>
      <livingSubjectName>
        <value>
          <given>Cadence</given>
          <family>Anna</family>
        </value>
        <semanticsText>LivingSubject.name</semanticsText>
      </livingSubjectName>
      <livingSubjectBirthTime>
        <value value="19811116"/>
      </livingSubjectBirthTime>
      <livingSubjectAdministrativeGender>
```



```

        <value code="F"/>
      </livingSubjectAdministrativeGender>
    <patientAddress>
      <value>
        <city>Columbia</city>
        <streetAddressLine>1021 Main St</streetAddressLine>
        <state>MD</state>
        <postalCode>21046</postalCode>
      </value>
    </patientAddress>
  </parameterList>
</queryByParameter>
</controlActProcess>
</PRPA_IN201305UV02>
</s:Body>
</s:Envelope>

```

3.4 Sample SOAP Response Objects

3.4.1 Patient Found

- Within Control Act Wrapper, `queryAck.queryResponseCode` = OK
- Within Registration Event, `subject1.patient.id.extension` = matching patient EID

△ If more than one matching patient is found, only one patient EID, the highest scoring match, will be returned within RegistrationEvent.

```

<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing">
  <s:Header>
    <a:Action s:mustUnderstand="1">urn:hl7-
org:v3:PRPA_IN201306UV02:CrossGatewayPatientDiscovery</a:Action>
    <a:RelatesTo>urn:uuid:00000000-0000-0000-0000-000000000000</a:RelatesTo>
  </s:Header>
  <s:Body xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
    <PRPA_IN201306UV02 ITSVersion="XML_1.0" xmlns="urn:hl7-org:v3">
      <!-- 1. TRANSMISSION WRAPPER METADATA -->
      <id root="1000005" extension="175632"/>
      <creationTime value="202606100842"/>
      <interactionId root="2.16.840.1.113883.1.6" extension="PRPA_IN201306UV02"/>
      <processingCode code="P"/>
      <processingModeCode code="T"/>
      <acceptAckCode code="NE"/>

      <!-- Echoing target/sender from request -->
      <receiver typeCode="RCV">
        <device classCode="DEV" determinerCode="INSTANCE">
          <id root="1.2.840.114350.1.13.168.2.7.2.688879.28200"/>
          <asAgent classCode="AGNT">
            <representedOrganization classCode="ORG" determinerCode="INSTANCE">
              <id root="1.2.840.114350.1.13.168.2.7.3.688884.100"/>
              <notificationParty xsi:nil="true"/>
            </representedOrganization>

```



```
        </asAgent>
    </device>
</receiver>
<sender typeCode="SND">
    <device classCode="DEV" determinerCode="INSTANCE">
        <id root="1000005"/>
        <telecom value="https://tinithub1.test.local/xcpd-responding-gateway-
service-0.1.0/ws"/>
        <asAgent classCode="AUT">
            <representedOrganization classCode="ORG" determinerCode="INSTANCE">
                <id root="1000005"/>
                <notificationParty xsi:nil="true"/>
            </representedOrganization>
        </asAgent>
    </device>
</sender>

<!-- Acknowledgement block matching the request tracking code -->
<acknowledgement>
    <typeCode code="AA"/>
    <targetMessage>
        <id root="1.2.840.114350.1.13.168.2.7.2.696777" extension="195338667"/>
    </targetMessage>
</acknowledgement>

<!-- 2. CONTROL ACT WRAPPER -->
<controlActProcess classCode="CACT" moodCode="EVN">
    <code code="PRPA_TE201306UV02" codeSystem="2.16.840.1.113883.1.6"/>
    <authorOrPerformer typeCode="AUT">
        <assignedDevice>
            <id root="1000005"/>
            <assignedDevice xsi:nil="true"/>
            <representedOrganization xsi:nil="true"/>
        </assignedDevice>
    </authorOrPerformer>

    <!-- 3. PATIENT MATCH RECORD TARGET -->
    <subject typeCode="SUBJ">
        <registrationEvent classCode="REG" moodCode="EVN">
            <statusCode code="active"/>
            <subject1 typeCode="SBJ">
                <patient classCode="PAT">
                    <!-- Unique Patient Identifier (EID) -->
                    <id root="1000005" extension="82175974"
assigningAuthorityName="SMPI"/>
                    <statusCode code="active"/>
                    <patientPerson classCode="PSN" determinerCode="INSTANCE">
                        <name>
                            <given>Cadence</given>
                            <family>Anna</family>
                        </name>
                        <administrativeGenderCode code="F"/>
                        <birthTime value="1981-11-16"/>
                        <addr>
                            <streetAddressLine>1021 Main St</streetAddressLine>
                            <city>Columbia</city>
```



```
<state>MD</state>
<postalCode>21046</postalCode>
</addr>
<birthPlace xsi:nil="true"/>
</patientPerson>
<providerOrganization classCode="ORG"
determinerCode="INSTANCE">
  <id root="1000005"/>
  <contactParty classCode="CON">
    <contactPerson xsi:nil="true"/>
  </contactParty>
</providerOrganization>
<subjectOf1>
  <queryMatchObservation classCode="OBS" moodCode="EVN">
    <code code="IHE_PDQ"
codeSystem="2.16.840.1.113883.1.11.19914"/>
    <value xsi:type="INT" value="100"/>
  </queryMatchObservation>
</subjectOf1>
</patient>
</subject1>
<author xsi:nil="true"/>
<custodian typeCode="CST">
  <assignedEntity classCode="ASSIGNED">
    <id root="1000005"/>
    <code code="NotHealthDataLocator"
codeSystem="1.3.6.1.4.1.19376.1.2.27.2"/>
    <representedOrganization classCode="ORG"
determinerCode="INSTANCE">
      <id root="2.16.840.1.113883.3.651.2.1"/>
      <name>SMPI</name>
      <contactParty classCode="CON">
        <contactPerson xsi:nil="true"/>
      </contactParty>
    </representedOrganization>
  </assignedEntity>
</custodian>
</registrationEvent>
</subject>

<!-- Query Acknowledgment block -->
<queryAck>
  <queryId root="null" extension="null"/>
  <statusCode code="OK"/>
  <queryResponseCode code="OK"/>
</queryAck>

<!-- Echoes original query parameters for transaction auditing -->
<queryByParameter>
  <queryId root="00000000-0000-0000-0000-000000000000"/>
  <statusCode code="new"/>
  <responseModalityCode code="R"/>
  <responsePriorityCode code="I"/>
  <matchCriterionList xsi:nil="true"/>
  <parameterList>
    <livingSubjectAdministrativeGender>
```



```
        <value code="F"/>
      </livingSubjectAdministrativeGender>
      <livingSubjectBirthTime>
        <value value="19811116"/>
      </livingSubjectBirthTime>
      <livingSubjectName>
        <value>
          <given>Cadence</given>
          <family>Anna</family>
        </value>
        <semanticsText>LivingSubject.name</semanticsText>
      </livingSubjectName>
      <patientAddress>
        <value>
          <city>Columbia</city>
          <streetAddressLine>1021 Main St</streetAddressLine>
          <state>MD</state>
          <postalCode>21046</postalCode>
        </value>
      </patientAddress>
    </parameterList>
  </queryByParameter>
</controlActProcess>
</PRPA_IN201306UV02>
</s:Body>
</s:Envelope>
```

3.4.2 Patient Not Found

- Within Control Act Wrapper, `queryAck.queryResponseCode = NF`

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing">
  <s:Header>
    <a:Action s:mustUnderstand="1">urn:hl7-
org:v3:PRPA_IN201306UV02:CrossGatewayPatientDiscovery</a:Action>
    <a:RelatesTo>urn:uuid:00000000-0000-0000-0000-000000000000</a:RelatesTo>
  </s:Header>
  <s:Body xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
    <PRPA_IN201306UV02 ITSVersion="XML_1.0" xmlns="urn:hl7-org:v3">
      <!-- 1. TRANSMISSION WRAPPER METADATA -->
      <id root="1.2.840.114350.1.13.168.2.7.2.696777" extension="175632"/>
      <creationTime value="202606100842"/>
      <interactionId root="2.16.840.1.113883.1.6" extension="PRPA_IN201306UV02"/>
      <processingCode code="P"/>
      <processingModeCode code="T"/>
      <acceptAckCode code="NE"/>

      <!-- Echoing target/sender from request -->
      <receiver typeCode="RCV">
        <device classCode="DEV" determinerCode="INSTANCE">
          <id root="1.2.840.114350.1.13.168.2.7.2.688879.28200"/>
          <asAgent classCode="AGNT">
            <representedOrganization classCode="ORG" determinerCode="INSTANCE">
              <id root="1.2.840.114350.1.13.168.2.7.3.688884.100"/>
            </representedOrganization>
          </asAgent>
        </device>
      </receiver>
    </PRPA_IN201306UV02>
  </s:Body>
</s:Envelope>
```



```
        <notificationParty xsi:nil="true"/>
      </representedOrganization>
    </asAgent>
  </device>
</receiver>
<sender typeCode="SND">
  <device classCode="DEV" determinerCode="INSTANCE">
    <id root="1.2.840.114350.1.13.221.3.7.2.688879.100000121"/>
    <telecom value="https://tinithub1.test.local/xcpd-responding-gateway-
service-0.1.0/ws"/>
    <asAgent xsi:nil="true"/>
  </device>
</sender>

<!-- Acknowledgement block matching the request tracking code -->
<acknowledgement>
  <typeCode code="AA"/>
  <targetMessage>
    <id root="1.2.840.114350.1.13.168.2.7.2.696777" extension="195338667"/>
  </targetMessage>
</acknowledgement>

<!-- 2. CONTROL ACT WRAPPER -->
<controlActProcess classCode="CACT" moodCode="EVN">

  <!-- Query Acknowledgment block -->
  <queryAck>
    <queryId root=" " extension=" "/>
    <statusCode code="NF"/>
    <queryResponseCode code="NF"/>
  </queryAck>
  <queryByParameter xsi:nil="true"/>
</controlActProcess>
</PRPA_IN201306UV02>
</s:Body>
</s:Envelope>
```



4. Consent Management FHIR API

4.1 Overview

The FHIR Consent Management API supports management of patient privacy consent opt-out using the HL7® FHIR® R4 Consent resource. This API implements a Consent profile aligned with FHIR R4 and is intended to represent a patient's decision to opt out of participation in treatment-based health information exchange.

All responses conform to:

- FHIR Version: R4 (4.0.0)
- Primary FHIR Resources:
 - Patient
 - Consent
 - OperationOutcome

This API supports:

- Creating an opt-out FHIR Consent resource using patient demographics.
- Creating an opt-out FHIR Consent resource using a patient EID identifier.
- Querying a patient's opt-out status using a patient EID identifier or opt-out SMRN.
- Returning standardized FHIR OperationOutcome resource error responses.

4.2 Base URL, Versioning and Capability Statement

- **Base URLs:**
 - Test: <https://testapi.crisphealth.org>
 - Production: <https://api.crisphealth.org>
- **FHIR Version:**
R4 (4.0.0)
- **FHIR API Capability Statement:**
<https://api.crisphealth.org/consent/r4/metadata>

4.3 Consent Profile Requirements

The API creates a Consent resource representing patient opt-out with the following required constraints:



Element	Requirement
status	SHALL be active
scope	SHALL be patient-privacy
category	SHALL include LOINC 59284-0 (Privacy policy acknowledgment)
patient.identifier	SHALL reference patient opt-out SMRN
policy	SHALL reference MD legal patient consent regulation
provision.type	SHALL be deny if and only if the patient is opted out

4.4 API Operations

4.4.1 Create Opt-Out by Demographics

Creates an opt-out Consent by submitting a FHIR Patient resource containing patient demographics.

Endpoint logic will attempt to find a near-match patient in CRISP's MPI database based on patient demographics passed in the request. If a valid match is not found, a new patient will be created within MPI using demographics provided.

4.4.1.1 Endpoint

POST /consent/deny

4.4.1.2 Headers

Header	Required?	Value
Content-Type	Yes	application/fhir+json
Accept	Yes	application/fhir+json
UserName	Yes	Name of the user sending the opt-out request



Header	Required?	Value
<code>SendingOrganization</code>	Yes	Name of the organization from which the opt-out request was sent

Example:

```
Content-Type: application/fhir+json
Accept: application/fhir+json
UserName: Ashley Smith
SendingOrganization: Lakeside Health System
```

4.4.1.3 Body Parameters

Endpoint accepts a JSON formatted FHIR Patient resource as defined in [R4 FHIR Patient](#)

Example:

```
{
  "name": [
    {
      "use": "official",
      "family": "Doe",
      "given": ["John"]
    }
  ],
  "birthDate": "1980-01-01",
  "gender": "male",
  "address": [
    {
      "use": "home",
      "line": ["123 Main St"],
      "city": "Baltimore",
      "state": "MD",
      "postalCode": "21201",
      "country": "USA"
    }
  ],
  "telecom": [
    {
      "value": "555-123-4567",
      "system": "phone",
      "use": "mobile"
    }
  ],
  "identifier": [
    {
      "system": "http://hl7.org/fhir/sid/us-ssn",
      "value": "123456789"
    }
  ]
}
```



}

4.4.1.4 Processing Rules

- If a matching patient is found:
 - A new Consent is created (if not already opted out).
 - FHIR Bundle resource containing the new Consent resource returned.
- If no patient is found:
 - A new Patient is created.
 - A Consent is created.
 - FHIR Bundle resource containing the new Consent resource returned.
- If multiple matches are found:
 - No new Consent created.
 - FHIR Bundle resource containing OperationOutcome with **suppressed** issue code returned.
- If patient already opted out:
 - No new Consent created.
 - FHIR Bundle resource containing OperationOutcome with **conflict** issue code returned.

4.4.2 Create Opt-Out by EID

Custom FHIR operation for opt-out using Enterprise ID.

Endpoint logic will attempt to find patient by EID in CRISP's MPI database.

⚠ If an exact EID match is *not* found, new patient will *not* be created.

4.4.2.1 Endpoint

POST /consent/deny

4.4.2.2 Headers

Header	Required?	Value
Content-Type	Yes	application/fhir+json
Accept	Yes	application/fhir+json



Header	Required?	Value
UserName	Yes	Name of the user sending the opt-out request
SendingOrganization	Yes	Name of the organization from which the opt-out request was sent

Example:

```
Content-Type: application/fhir+json
Accept: application/fhir+json
UserName: Ashley Smith
SendingOrganization: Lakeside Health System
```

4.4.2.3 Body Parameters

Endpoint accepts JSON formatted FHIR Patient Identifier as defined in [R4 FHIR](#)

[Patient.Identifier](#) with system namespace <https://api.crisphealth.org/definitions/identifier/eid> and value set to patient's unique Enterprise ID value.

△ If patient demographics are passed along with an EID identifier, the API will default to using EID when searching for a patient match and ignore any additional demographics passed in the request.

Example:

```
{
  "identifier": [
    {
      "system": "https://api.crisphealth.org/definitions/identifier/eid",
      "value": "123456789"
    }
  ]
}
```

4.4.2.4 Processing Rules

- If a matching patient is found:
 - A new Consent is created (if not already opted out).
 - FHIR Bundle resource containing the new Consent resource returned.
- If no patient is found:
 - No new Consent created.
 - FHIR Bundle resource containing OperationOutcome with **not-found** issue code returned.



- If multiple matches are found:
 - No new Consent created.
 - FHIR Bundle resource containing OperationOutcome with **suppressed** issue code returned.
- If patient already opted out:
 - No new Consent created.
 - FHIR Bundle resource containing OperationOutcome with **conflict** issue code returned.

4.4.3 Consent Lookup

Searches MPI for matching patient by EID or SMRN identifier and returns FHIR resource based on patient's opt-out status.

4.4.3.1 Request

GET /consent?patient.identifier={system}|{value}

4.4.3.2 Headers

Header	Required?	Value
Accept	Yes	application/fhir+json

Example:

Accept: application/fhir+json

4.4.3.3 Request Parameters

Endpoint accepts **patient.identifier** URL parameter with one of two system namespace options specified.

1. Patient consent status lookup by EID identifier
 - a. System ID: **https://api.crisphealth.org/definitions/identifier/eid**
 - b. Identifier Value: patient's unique EID value.
2. Patient consent status lookup by opt-out SMRN
 - a. System ID: **https://api.crisphealth.org/definitions/identifier/smrn**
 - b. Identifier Value: patient's opt-out SMRN value.

Example (lookup by EID):

GET
/consent?patient.identifier=https://api.crisphealth.org/definitions/identifier/eid|82175974



Example (lookup by SMRN):

```
GET
/consent?patient.identifier=https://api.crisphealth.org/definitions/identifier/smrn|OPTOUT^0S2
E4T1Z4E113T1T2YS
```

4.4.3.4 Processing Rules

- If a matching patient is found and **is not** opted out:
 - FHIR Bundle resource with one Consent resource is returned. The Consent resource will have a `provision.type` of `permit`.
- If a matching patient is found and **is** opted out:
 - FHIR Bundle resource with one Consent resource is returned. The Consent resource will have a `provision.type` of `deny`.
- If no patient is found:
 - FHIR Bundle resource containing OperationOutcome with `not-found` issue code is returned.
- If multiple matches are found:
 - FHIR Bundle resource containing OperationOutcome with `suppressed` issue code is returned.

4.5 API Responses

4.5.1 Consent Created

HTTP/1.1 200 | Created

```
{
  "resourceType": "Bundle",
  "type": "searchset",
  "timestamp": "2026-02-05T21:00:37.3126774+00:00",
  "total": 1,
  "entry": [
    {
      "resource": {
        "resourceType": "Consent",
        "meta": {
          "lastUpdated": "2026-02-05T21:00:37.2882124+00:00"
        },
        "status": "active",
        "scope": {
          "coding": [
            {

```



```
        "system": "http://terminology.hl7.org/CodeSystem/consentscope",
        "code": "patient-privacy"
      }
    ],
    },
    "category": [
      {
        "coding": [
          {
            "system": "http://loinc.org",
            "code": "59284-0"
          }
        ]
      }
    ],
    "patient": {
      "identifier": {
        "system": "https://api.crisphealth.org/definitions/identifier/smrn",
        "value": "OPTOUT^0S2E4T1Z4E113T1T2YS"
      }
    },
    "policy": [
      {
        "authority": "https://health.maryland.gov",
        "uri": "https://dsd.maryland.gov/regulations/Pages/10.25.18.03.aspx"
      }
    ],
    "provision": {
      "type": "deny"
    }
  }
}
]
```

△ The patient identifier value returned in the FHIR Consent resource can be used to verify the patient's opt-out status using the consent lookup endpoint.

GET /consent?patient.identifier={patient.identifier.system}|{patient.identifier.value}

4.5.2 Consent Lookup

4.5.2.1 Opted In Patient

HTTP/1.1 200 | Patient Found

```
{
  "resourceType": "Bundle",
  "type": "searchset",
  "timestamp": "2026-06-05T19:55:00.0002825+00:00",
  "total": 1,
  "entry": [
    {
      "resource": {
```



```
"resourceType": "Consent",
"meta": {
  "lastUpdated": "2026-06-05T19:54:59.9967041+00:00"
},
"status": "active",
"scope": {
  "coding": [
    {
      "system": "http://terminology.hl7.org/CodeSystem/consentscope",
      "code": "patient-privacy"
    }
  ]
},
"category": [
  {
    "coding": [
      {
        "system": "http://loinc.org",
        "code": "59284-0"
      }
    ]
  }
],
"patient": {
  "identifier": {
    "system": "https://api.crisphealth.org/definitions/identifier/eid",
    "value": "82175974"
  }
},
"policy": [
  {
    "authority": "https://health.maryland.gov",
    "uri": "https://dsd.maryland.gov/regulations/Pages/10.25.18.03.aspx"
  }
],
"provision": {
  "type": "permit"
}
}
]
```

4.5.2.1 Opted Out Patient

HTTP/1.1 200 | Patient Found

```
{
  "resourceType": "Bundle",
  "type": "searchset",
  "timestamp": "2026-06-05T20:04:37.0294064+00:00",
  "total": 1,
  "entry": [
    {
      "resource": {
```



```
"resourceType": "Consent",
"meta": {
  "lastUpdated": "2026-06-05T19:54:59.9967041+00:00"
},
"status": "active",
"scope": {
  "coding": [
    {
      "system": "http://terminology.hl7.org/CodeSystem/consentscope",
      "code": "patient-privacy"
    }
  ]
},
"category": [
  {
    "coding": [
      {
        "system": "http://loinc.org",
        "code": "59284-0"
      }
    ]
  }
],
"patient": {
  "identifier": {
    "system": "https://api.crisphealth.org/definitions/identifier/eid",
    "value": "82175974"
  }
},
"policy": [
  {
    "authority": "https://health.maryland.gov",
    "uri": "https://dsd.maryland.gov/regulations/Pages/10.25.18.03.aspx"
  }
],
"provision": {
  "type": "deny"
}
}
]
```

4.5.3 Operation Outcomes

4.5.3.1 Patient Already Opted Out

HTTP/1.1 200 | Request Accepted

```
{
  "resourceType": "Bundle",
  "type": "searchset",
  "timestamp": "2026-05-14T21:43:32.4310997+00:00",
  "total": 1,
  "entry": [
```



```
{
  "resource": {
    "resourceType": "OperationOutcome",
    "issue": [
      {
        "severity": "information",
        "code": "conflict",
        "details": {
          "text": "The patient has already opted out."
        }
      }
    ]
  }
}
```

4.5.3.2 Patient Not Found

HTTP/1.1 200 | Request Accepted

```
{
  "resourceType": "Bundle",
  "type": "searchset",
  "timestamp": "2026-05-14T21:41:42.9834981+00:00",
  "total": 1,
  "entry": [
    {
      "resource": {
        "resourceType": "OperationOutcome",
        "issue": [
          {
            "severity": "warning",
            "code": "not-found",
            "details": {
              "text": "The requested patient was not found."
            }
          }
        ]
      }
    }
  ]
}
```

4.5.3.3 Ambiguous Match

HTTP/1.1 200 | Request Accepted

```
{
  "resourceType": "Bundle",
  "type": "searchset",
  "timestamp": "2026-05-14T21:41:42.9834981+00:00",
  "total": 1,
  "entry": [
    {

```



```
"resource": {
  "resourceType": "OperationOutcome",
  "issue": [
    {
      "severity": "warning",
      "code": "suppressed",
      "details": {
        "text": "The requested record is an ambiguous patient."
      }
    }
  ]
}
```

4.5.3.4 Validation Error

HTTP/1.1 400 | Bad Request

```
{
  "resourceType": "OperationOutcome",
  "issue": [
    {
      "severity": "error",
      "code": "invalid",
      "details": {
        "text": "Either a valid patient identifier (EID) or complete patient demographics are required. Demographics must include name (family and given), date of birth, and gender."
      }
    }
  ]
}
```

4.6 Required Request Elements (Demographic Matching)

When submitting a Patient resource for opt-out by demographics, the following elements are required:

Element	Cardinality
Patient.name.family	1..1
Patient.name.given	1..*
Patient.birthDate	1..1



Element	Cardinality
Patient.gender	1..1

All other [FHIR Patient](#) elements are optional.

4.7 Conformance Expectation

4.7.1 Clients SHALL:

- Send `application/fhir+json`
- Handle FHIR `OperationOutcome` responses
- Support HTTP status codes 200, 4xx, 5xx

4.7.2 Servers SHALL:

- Return valid FHIR R4 JSON
- Preserve idempotency (no duplicate active opt-outs)

4.8 Idempotency & Business Rules

- Only one active opt-out Consent per patient.
- Repeated submissions SHALL NOT create duplicate Consents.



5. Security

5.1 Transport Security

- TLS 1.2+ required
- Mutual TLS (mTLS) using client SSL certificate

5.2 Authentication

- All endpoints require SSL client certificate for secure access.
- Certificate to be issued by CSS Infrastructure team. API consumers already integrating with CRISP may reuse their existing client certificates.
- Certificate validation enforced at API Management layer.

5.3 Authorization

- Access restricted to approved trading partners
- Access provisioning must follow CRISP onboarding process



6. Terminology

Term	Definition
EID	CSS Enterprise Identifier
SMRN	Source Medical Record Number
MPI	Master Patient Index
XCPD	Cross-Gateway Patient Discovery
Consent	FHIR R4 Consent resource
OperationOutcome	Standard FHIR error resource
Patient	FHIR R4 Patient resource
Opt-Out	Consent with <code>provision.type = deny</code>

7. CSS Technical Support

- If the user is facing issues they can email or call CSS Support
 - email: support@crisphealth.org
 - CSS Support number: 1-877-952-7477.
- Alternatively, users can provide feedback via InContext app.