national health authority

SANDBOX DOCUMENTATION

(ABDM_Milestone 2)

Version 2.8

Created On 13.02.2026

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1 Base URL and X-CM-ID

Environment	Base URL	X-CM-ID
Sandbox	https://dev.abdm.gov.in	Sbx
Production	https://apis.abdm.gov.in	Abdm

2.Terminology Definition:

Bridge ID: Is client ID which provided by NHA to HIP (Its alphanumerical eg: SBX_00XXXX)

Service ID: Is Facility ID which is generated from NHPR application (Its alphanumeric eg: IN02100000XX)

3.Gateway

3.1 Overview

This is the key ABDM building block that manages ABHA addresses, maintains links to health data for each ABHA address and manages consents provided by the user for sharing of their health data. It also supports exchange of interoperable health data between HIPs and HIUs. The HIE-CM enables exchange of personal health data with consent as per the Health Data Management Policy issued by NHA.

3.2List of APIs

3.2.1 Auth token API

This API will be invoked to generate auth token.

URL: /api/hiecm/gateway/v3/sessions

Request: POST

Header Parameters:

Property Name	Example Value	Required	Description
REQUEST-ID	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	Unique UUID for tracking the endtoend request transaction
TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	The actual time when the request was initiated, ISO Date time format represents the date and time
X-CM-ID	Sbx	Yes	Suffix of the consent manager to which the request was intended.

Body Parameters:

Property Name	Example Value	Required	Description
clientId	SBX_XXXXXX	Yes	Client id for authentication
clientSecret	"XXXXXXXXXXXXXX"	Yes	Client secret for authentication
grantType	client_credentials	Yes	Grant type for authentication

Request Body:

Request Body

{
"clientId": "SBX_XXXXX",
"clientSecret": "XXXX-XXX-XXXX-XXXX-XXXXXXX",
"grantType": "client_credentials"
}

Response:

Response

Code : 202 Accepted


```
{
   "accessToken":
"eyJhbGciOiJSUzI1NiIsInR5cCIgOiAiSldUIiwia2lkIiA6ICJBbFJiNVdDbThUbTlFSl9JZk85ejA2ajlvQ3Y1MXBLS
0ZrbkdiX1RCdkswIn0.eyJleHAiOjE3MjMyMjU3MTEsImlhdCI6MTcyMzIyNDUxMSwianRpIjoiMzE3MjVkN2Qt
NmM1Mi00OWE0LTk0M2MtZmY2ZjhkNjNhYmRlIiwiaXNzIjoiaHR0cHM6Ly9kZXYubmRobS5nb3YuaW4vYX
V0aC9yZWFsbXMvY2VudHJhbC1yZWdpc3RyeSIsImF1ZCI6ImFjY291bnQiLCJzdWIiOiJjN2NhMjk3Yi0yZTVh
LTRkN2UtOGY5YS0xYWU2NDAxYWQ0Y2YiLCJ0eXAiOiJCZWFyZXIiLCJhenAiOiJTQlhfMDAwMTM1Iiwic2Vzc
2lvbl9zdGF0ZSI6IjhiYjQ4ZGM5LTJmMDUtNDA0OC05MGUxLWRjYjgxNWRmOGU5MyIsImFjciI6IjEiLCJhbGx
vd2VkLW9yaWdpbnMiOlsiaHR0cDovL2xvY2FsaG9zdDo5MDA3Il0sInJlYWxtX2FjY2VzcyI6eyJyb2xlcyI6W
yJIaWRJbnRlZ3JhdGVkUHJvZ3JhbSIsIkhJVV9QQVlFUiIsImhmciIsImhpdSIsIm9mZmxpbmVfYWNjZXNzIi
wiaGVhbHRoSWQiLCJwaHIiLCJPSURDIiwiaGVhbHRoX2xvY2tlciIsImhpcCIsImhwX2lkIl19LCJyZXNvdXJjZV
9hY2Nlc3MiOnsiU0JYXzAwMDEzNSI6eyJyb2xlcyI6WyJ1bWFfcHJvdGVjdGlvbiJdfSwiYWNjb3VudCI6eyJy
b2xlcyI6WyJtYW5hZ2UtYWNjb3VudCIsIm1hbmFnZS1hY2NvdW50LWxpbmtzIiwidmlldy1wcm9maWxlIl19f
Swic2NvcGUiOiJvcGVuaWQgZW1haWwgcHJvZmlsZSIsImNsaWVudEhvc3QiOiIxMDAuNjUuMTYwLjIxNCI
sImNsaWVudElkIjoiU0JYXzAwMDEzNSIsImVtYWlsX3ZlcmlmaWVkIjpmYWxzZSwicHJlZmVycmVkX3VzZXJ
uYW1lIjoic2VydmljZS1hY2NvdW50LXNieF8wMDAxMzUiLCJjbGllbnRBZGRyZXNzIjoiMTAwLjY1LjE2MC4yMTQi
fQ.L56AYZYfzFrO_gNedAbSwR9foEO661z2cMGEeOKsz2ZXsIpTb9oLd9fmRiixIS7ToGoW2VzzXC14qrXnwZIqknBZchTRJrmyGk6iRJ
NQYR4k12hrn4tbdW- h5e9m4NWFAvPtGbBUyKA8gotrne9fn7T0MOC7N_J8TS3JLr2gothJSgc9P3VDKm8c6zpAObQPmwEpH
qJH6j2Q07nGsoaBygxovoIeFn6G6zwIa-_mKw_a86L_CYxr8Gxw5-
5PXkh2XwYp_xLIiJ3t7vLM97UFThwSn_TmRF6W1LH145m_6NxY4hQclHi1elK3OP4LvR1SLDwtAQZSCm4Jpihd0uMw",
   "expiresIn": 1200,     "refreshExpiresIn": 1800,
   "refreshToken":
"eyJhbGciOiJIUzI1NiIsInR5cCIgOiAiSldUIiwia2lkIiA6IClyMWU5NzA4OS00ZTcxLTQyNGEtOTAzYS1jOTAyMW
M1NmFlNWYifQ.eyJleHAiOjE3MjMyMjYzMTEsImlhdCI6MTcyMzIyNDUxMSwianRpIjoiZGY5ODdmYzQtYzdk
Ni00OGNmLTliM2EtNzRmNWVkMTljMmNmIiwiaXNzIjoiaHR0cHM6Ly9kZXYubmRobS5nb3YuaW4vYXV0a
C9yZWFsbXMvY2VudHJhbC1yZWdpc3RyeSIsImF1ZCI6Imh0dHBzOi8vZGV2Lm5kaG0uZ292LmluL2F1dGg
vcmVhbG1zL2NlbnRyYWwtcmVnaXN0cnkiLCJzdWIiOiJjN2NhMjk3Yi0yZTVhLTRkN2UtOGY5YS0xYWU2ND
AxYWQ0Y2YiLCJ0eXAiOiJSZWZyZXNoIiwiYXpwIjoiU0JYXzAwMDEzNSIsInNlc3Npb25fc3RhdGUiOiI4YmI0O
GRjOS0yZjA1LTQwNDgtOTBlMS1kY2I4MTVkZjhlOTMiLCJzY29wZSI6Im9wZW5pZCBlbWFpbCBwcm9maWx
lIn0._cOnTXMf2bObS1nySL-AjvM5PQxgCHJRm2oO66nrx1M",
   "tokenType": "bearer"
}
```


3.2.2 OpenID Configuration API

Openid-configuration API, defined within OpenID Connect which provides configuration information about the Identity Provider (IDP).

URL: /api/hiecm/gateway/v3/.well-known/openid-configuration **Request:** GET **Header Parameters:**

Property Name	Example Value	Required	Description
REQUEST-ID	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	Unique UUID for tracking the endtoend request transaction

TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	The actual time when the request was initiated, ISO Date time format represents the date and time
X-CM-ID	Sbx	Yes	Suffix of the consent manager to which the request was intended.

Response:

Response
Code : 202 OK

{
"jwks_uri": "https://dev.abdm.gov.in/api/hiecm/gateway/v3/certs"
}

3.2.3 Keycloak Certificate API

In response to open ID configuration API, Keycloak, the open-source identity provider, provides an OAuth certificate that can be used with open source authentication requests for certificates.

URL: /api/hiecm/gateway/v3/certs

Request: GET

Header Parameters:

Property Name	Example Value	Required	Description
REQUEST-ID	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	Unique UUID for tracking the endtoend request transaction
TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	The actual time when the request was initiated, ISO Date time format represents the date and time

X-CM-ID	sbx	Yes	Suffix of the consent manager to which the request was intended.

Response:

Response
Code : 202 OK


```
{
  "keys": [
    {
      "e": "AQAB",
      "kid": "AlRb5WCm8Tm9EJ_IfO9z06j9oCv51pKKFknGb_TBvK0",
      "kty": "RSA",
      "n": "mgmW7W5ZGF_G5cJevwYi8HiPcI-6qS_psnZxa4v3bkwAkyOoOd8-6ketrOI-
ZA2PbRbGnxFfZHiI94rdFXJ4Q9ampscsz9NocTIPMPmWydJ8A50pZaYWyikYDSJiDltq7i3WspPKSOuQHrC
5h9dMcCVveX5oeg0tO68Z79gwDlpcxiqDbFaphsqDvx-
5XkfwiqvOBaybK6_BCBPuTqWMUEuUklLYXu2X7ESHdVNFMFAjxCcCXUtP7LFdvT3nnFekRmG82QbSQSVe
4N5tPH8q0MCxSWWn2c15bDnzOF-dvfRCVPRabCzw0M-utHR9diTrWtq6Koi5buxgwM1rbk0p8Q",
      "use": "sig",
      "x5c": [

"MIICrzCCAZcCBgFy/3WZBjANBgkqhkiG9w0BAQsFADAbMRkwFwYDVQQDDBBjZW50cmFsLXJlZ2lzdHJ5
MB4XDTIwMDYyOTA5NDEzNloXDTMwMDYyOTA5NDMxNlowGzEZMBcGA1UEAwwQY2VudHJhbC1yZWdpc
3RyeTCCASIwDQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEBAJoJlu1uWRhfxuXCXr8GIvB4j3CPuqkv6b
J2cWuL925MAJMjqDnfPupHraziPmQNj20Wxp8RX2R4iPeK3RVyeEPWpqbHLM/TaHEyDzD5lsnSfAOdKWW
mFsopGA0iYg5bau4t1rKTykjrkB6wuYfXTHAlb3l+aHoNLTuvGe/YMA5aXMYqg2xWqYbKg78fuV5H8Iqrzg
WsmyuvwQgT7k6ljFBLlJJS2F7tl+xEh3VTRTBQI8QnAl1LT+yxXb0955xXpEZhvNkG0kElXuDebTx/KtDAsUllp9
```

nNeWw58zhfnb30QlT0Wmws8NDPrrR0fXYk61rauiqIuW7sYMDNa25NKfECAwEAATANBgkqhkiG9w0BAQs
FAAOCAQEACkC3TijrXIgi4vn+l1uL1nfdK6vOIL5UZ6yCjSOq7zYW6b3Qe8j7NrPb9RJC+pbIERyNbB+t9hsa5
g1L7lkjCNlUuxfJprsJ9LJKlM5g7dYEA6XPCJ7C6AVlarj72vlWXQvwjnQMO2/CM9/Jp5Hnv2Qwjn7NME2OW
M0iblc/TD+DEZK5L5mlWMyuBSQo2o/AcOmfG4MoE5Gm/CaOJ47rSrf+lq83e5+dyKh7uLVAa+5WK8Im
5nEs6BLSGyo2KlaV0mW9yCkoRLLbipjH8+rJwkUU6iu7QVjz0peGZzYldya5n35gMWH7Bu4HqFneKNRww D6w8rGNC+uWtgWejDZ3yQ==

```
      ],
      "x5t": "EaMhYGUIvMkp8tvSM3QoaqaF8xM",
      "x5t2": "vGer6Pt8AhZn8RlbHhAFksOCcGf3u1UWU7Qq-Doy7ro",
      "alg": "RS256"
    },
    {
      "e": "AQAB",
      "kid": "oc-l6O1yJ7wJKYEeyeUafsz3Aecq7YnCIqbzbIfkJk8",
      "kty": "RSA",          "n":
```

"jDOehgMzurNQT0WJCTWN6a34639uIKOLO1LnXZes_kTakWh6iRxmkExLLCD7MJjz9aijTHwIuKAtOCSbFO pwbqSfF6dMBS2c8cv0AU3pE8
BuUriwr9BUYSUW8SM68QH_HCaz2mmN_Z8ynTQ4kWw_Idj-
enVpkHYtq00DriG98l6RXF1Ao9Kd16ctoNbthuQYH0RSRIXnt0Qtm4GSAY7abPCNa64mir0auldU72DJHXwDo6g5OGz6EMm86ZAV_pvh_5Y
lMxv0yMMKFZjkFGA0QKYMkMTC5ruLaE7cec-njA7dJQnQ",

```
      "use": "sig",
      "x5c": [
```

"MIICrzCCAZcCBgGHxvQVmDANBgkqhkiG9w0BAQsFADAbMRkwFwYDVQQDDBBjZW50cmFsLXJlZ2lzdHJ
5MB4XDTIzMDQyODA4MTk1N1oXDTMzMDQyODA4MjEzN1owGzEZMBcGA1UEAwwQY2VudHJhbC1yZWdpc
3RyeTCCASIwDQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEBAIwznoYDM7qzUE9FiQk1jemt+Ot/biCjiztS
512XrP5E2pFoeokcZpBMSywg+zCY8/Woo0x8CLigLTgkmxTqcG6knxenTAUtnPHL9AFN6RPJEjKRiSg2fXYg
PgblK4sK/QVGElFvPkjOvEB/xwms9ppjf2fMp00OJFsPyHY/np1aZB2LatNA64hvfJekVxdQKPSndenLaDW7Y
bkGB9EUkSF57dELZuBkgGO2mzwjWuuJoq9PmrpXVPu9gyR18A6OoOThs+hDJvOmQFf6b4f+WMxaX5FA
PEytixVQJgt1KfiDMb9MjDChWY5BRgNECmDJDEwua7i2hO3HnPp4wO3SUJ0CAwEAATANBgkqhkiG9w0B
AQsFAAOCAQEABYAcXOSr+WgOxKVmygID9WjB4rDuAVDyU3GmjBvckdWhYJuBX8Vs04hNVNgf904gqy
+D5wZIQU985stK3PdogFGN2jVw2kO9G3hG4/7uwYKqciKApT/pSPMeHRltHGp/Mwr6e5poVwgQyrn+Be
H373U1Q6eB1QUYnElP+16y7bbvQhfDAS2X9sqdfurB9YIL5xZMPddZaf7pPX8oWOVlB0XH1JEZfsX125qq0Xn
K8z/Rd8KI8zTfJw6D2Kzrk1WvQSlM5KnTQmcSk3kwDlW5Dg657dT49Y68mI4azq34q17JgBhTx3IbTuf94QT w7QC5wmFtO+hc6zPVODX8J

```
        ],
        "x5t": "-HZ-fkkNBhTsPHWrhATwlZflhdU",
        "x5t2": "tjVDNCTx7Fn0TfM-6uHvbwjWlIxIaFtGxiZZ6uJFxr4",
        "alg": "RS512"
      }
  ]
}
```


3.2.4 Update bridge URL API

This API will be called to update the bridge base URL.

URL: /api/hiecm/gateway/v3/bridge/url

Request: PATCH

Header Parameters:

Property Name	Example Value	Required	Description
Authorization	eyJhbGciOiJSUzUxMiJ9.eyJzdWIiOiJ2YXNhbnRoYWt1bWFyLmtlc2F2YW5Ac2J4IiwiY2xpZW50SWQiOiJzYngiLCJzeXN0ZW0iOiJBQkhBLUEiLCJyZXF1ZXN0ZXJJZCI6IlBIUi1XRUIiLCJwaHJNb2JpbGUiOm51bGws	Yes	JWT Access token which was issued by ABDM session API after successful validation of client id and secret.
REQUEST-ID	18235d89-cb13-479dad71-7a57d5f669a8	Yes	Unique UUID for tracking the end-to-end request transaction
TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	The actual time when the request was initiated, ISO Date time format represents the date and time
X-CM-ID	sbx	Yes	Suffix of the consent manager to which the request was intended.

Body Parameters:

Property Name	Example Value	Required	Description
url	https://webhook.site/b7 99c0b8-4e75-4545-8eb2d8c2d5f0c9f6	Yes	Bridge base URL

Request Body:

Request Body
{ "url": "https://webhook.site/b799c0b8-4e75-4545-8eb2-d8c2d5f0c9f6" }

Response:

Response
Code : 202 Accepted

3.2.5 Registration of Facility & Software Linkage

Overview: The software being used by the provider must integrate with the digital building blocks of ABDM and comply with the guidelines outlined NHA. NHA maintains the national directory of all healthcare facilities. Any participating facility needs to sign up in the health facility registry at (nhpr.abdm.gov.in) This ensures that they are a valid facility which is authorized to issue health records in the ecosystem. HFR consists of information for each healthcare facility in the country – hospitals, clinics, diagnostic centres, pharmacies etc., across all systems of medicine and covering both public and private health facilities. HFR offers APIs that can be used by various stakeholders in the ecosystem. Healthcare information service provider application or healthcare repository provider application must be upgraded to become ABDM compliant.

Registration of facility:

Through website: https://hspsbx.abdm.gov.in/home (sandbox) , https://nhpr.abdm.gov.in/home (production) **Step-by-step user manual document access:** Goto https://hspsbx.abdm.gov.in/home (sandbox), https://nhpr.abdm.gov.in/home (production) >>Resource center >> User Manual >> Select "For Health Fecility" >>Download "User Manual" >>Refer Content "A" (Health Professional ID (HPID) creation), "B" (Facility Registration) **Registration of bridge services (HIP/HIU) on facility:**

Option 1: Linking through website: https://hspsbx.abdm.gov.in/home (sandbox), https://nhpr.abdm.gov.in/home (production) **Step-by-step user manual document access:** Goto: https://hspsbx.abdm.gov.in/home (sandbox) , https://nhpr.abdm.gov.in/home (production) >>Resource center >> User Manual >> Select "For Health Facility" >>Download "User Manual" >>Refer Content "C" (Software Linkage).

Option 2: Through API This API (https://apihspsbx.abdm.gov.in/v4/int/v1/bridges/MutipleHRPAddUpdateServices) will be used to link multiple bridges against a facility. It will accept the facility id , facility name and list of HRP i.e. bridges.

Please note:

- You must pass in all the required parameters to create the API.
- The data needs to be passed in the required format as mentioned for each field.

API can refer swagger link : https://apihspsbx.abdm.gov.in/v4/int/swagger-ui-ext/index.html#/Multiple%20HRP%20API/facilityAddAndUpdate >>>Go to Multi HRP API >>>and Select "/v1/bridges/MutipleHRPAddUpdateServices v1MutipleHRPAddUpdateServices"

Parameters:

Params	Required	Description	Data type	Format if any
facilityId	Yes	Will be validated if present in HFR or not	String	Starting with IN and of 12 characters

facilityName	Yes	Name of the facility to be linked	String	Alphanumeric
bridgeId	Yes	Valid Bridge Id to be linked.	String	Alphanumeric and validity to be checked by HIECM
hipName	Yes	• To provide uniqueness against each bridges that is linked . HIP name is the	String	• HIP name can be the Hospital name added
		name of the hospital which will reflect		with suffix of bridge name. example
		on ABHA/PHR app when the patent will search respective hospital.		Hospital name=XYZ and bridge name =BRIDGE TEST, so the HIP name = XYZ BRIDGE. • HIP name can not be more than 15 characters., No special character is allowed (%$*#@(~&!), and it should be unique for every bridge for a facility

type	Yes	HIP / HIU etc	String	Validated by HIECM
Active	Yes	True/false	boolean	Accept Boolean value

3.2.6 Find bridge by service id

This API will fetch the bridge details for the given service id.

URL: /api/hiecm/gateway/v3/bridge-service/serviceId/{serviceId}

Request: GET

Header Parameters:

Property Name	Example Value	Required	Description
Authorization	eyJhbGciOiJSUzUxMiJ9.eyJzdWIiOiJ2YXNhbnRoYWt1bWFyLmtlc2F2YW5Ac2J4IiwiY2xpZW50SWQiOiJzYngiLCJzeXN0ZW0iOiJBQkhBLUEiLCJyZXF1ZXN0ZXJJZCI6IlBIUi1XRUIiLCJwaHJNb2JpbGUiOm51bGwslmV4cCI6MTY2NzI5ODExNSwiaWF0IjoxNjY3MjkwOTE1LCJwaHJBZGRyZXNzIjoidmFzYW50aGFrdW1hci5rZXNhdmFuQHNieCIsInR4bklkIjoiYjEwMGM4ZDMtNTE1ZC00YWFiLTg1OWQtYzNlMTUwOTE3ZGY1In0	Yes	JWT Access token which was issued by ABDM session API after successful validation of client id and secret.
REQUEST-ID	18235d89-cb13-479dad71-7a57d5f669a8	Yes	Unique UUID for tracking the end-to-end request transaction
TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	The actual time when the request was initiated, ISO Date time format represents the date and time

X-CM-ID	sbx	Yes	Suffix of the consent manager to which the request was intended.

Response:

Response
Code : 200 Ok

{
"id": 1561,
"bridgeId": "SBX_XXXX",
"serviceId": "TestClinicHIP",
"name": "TestClinicHIP",
"isHip": true,
"isHiu": true,
"isPhr": false,
"endpoints": {},
"active": true,
"registerTime": "2021-03-01 11:17:35.1735",
"dateCreated": "2021-03-01 11:17:35.1735",
"dateModified": "2024-04-22 11:04:46.446"
}

3.2.7 Find services by bridge id

This API will fetch all the service ID details linked with the respective bridge id.

URL: /api/hiecm/gateway/v3/bridge-services'

Request: GET

Header Parameters:

Property Name	Example Value	Required	Description
Authorization	eyJhbGciOiJSUzUxMiJ9.eyJzdWIiOiJ2YXNhbnRoYWt1bWFyLmtlc2F2YW5Ac2J4IiwiY2xpZW50SWQiOiJzYngiLCJzeXN0ZW0iOiJBQkhBLUEiLCJyZXF1ZXN0ZXJJZCI6IlBIUi1XRUIiLCJwaHJNb2JpbGUiOm	Yes	JWT Access token which was issued by ABDM session API after successful validation of client id and secret.
REQUEST-ID	18235d89-cb13-479dad71-7a57d5f669a8	Yes	Unique UUID for tracking the end-to-end request transaction

TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	The actual time when the request was initiated, ISO Date time format represents the date and time
X-CM-ID	sbx	Yes	Suffix of the consent manager to which the request was intended.

Response:

Response
Code : 200 Ok

{
"bridge": {
"id": "SBX_XXXX",
"name": "Testing",
"url": "https://abdcb.doctor9.com",
"active": true,
"blocklisted": false
},
"services": [
{
"id": "@#$%^&*(",
"name": "hello",
"types": [
"HIP",
"HIU"

```
        ],
        "endpoints": {
          "hipEndpoints": [
            {
              "use": "registration",
              "connectionType": "HTTPS",
"address":
"https://events.hookdeck.com/e/src_3gsnEgI941mh/registration"



            },
            {
              "use": "data-upload",
              "connectionType": "HTTPS",
"address":
"https://events.hookdeck.com/e/src_3gsnEgI941mh/dataupload"
            }
          ],
          "hiuEndpoints": [
            {
              "use": "registration",
              "connectionType": "HTTPS",
"address":
"https://events.hookdeck.com/e/src_3gsnEgI941mh/registration"
            },
            {
              "use": "data-upload",
              "connectionType": "HTTPS",
"address":
"https://events.hookdeck.com/e/src_3gsnEgI941mh/dataupload"
            }
          ],
          "healthLockerEndpoints": [
            {
              "use": "registration",
              "connectionType": "HTTPS",
"address":
"https://events.hookdeck.com/e/src_3gsnEgI941mh/registration"
            },
            {
              "use": "data-upload",
              "connectionType": "HTTPS",
"address":
"https://events.hookdeck.com/e/src_3gsnEgI941mh/dataupload"
            }
          ]
        },
        "active": true
      }
  ]   }
```

4 HIP Initiated Linking

4.1 Overview

HIP-initiated linking is the process through which a HIP links the patient's care context (health record) with the patient's ABHA Address, after patient registration and creation of health records (in their HMIS/LMIS system).

Care context (Health record) linking happens in two steps.

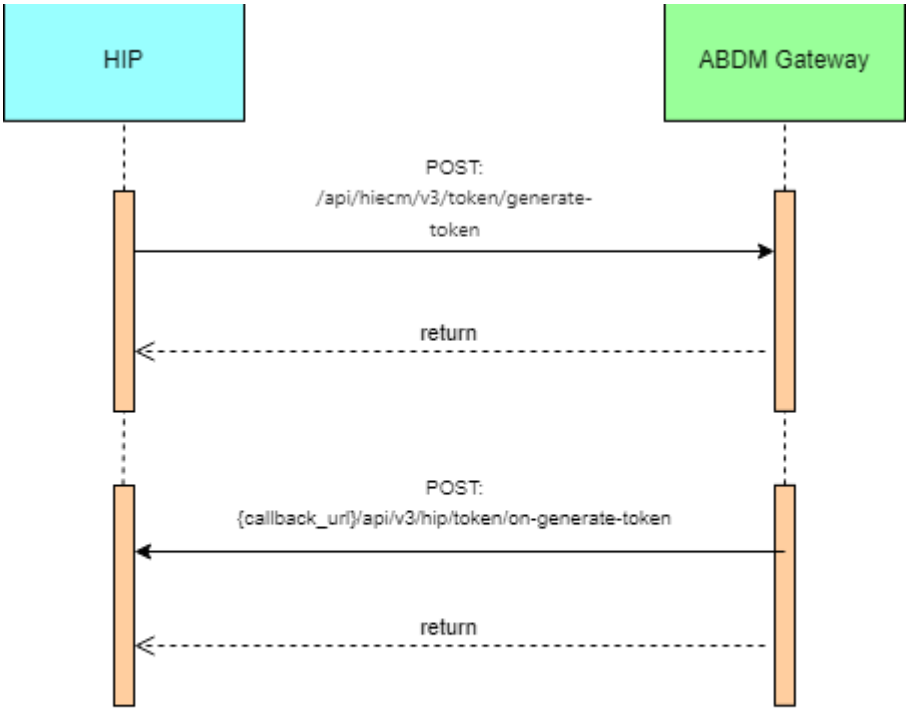
- Link token generation
- Linking care context with ABHA address after obtaining a valid link token

Link token generation

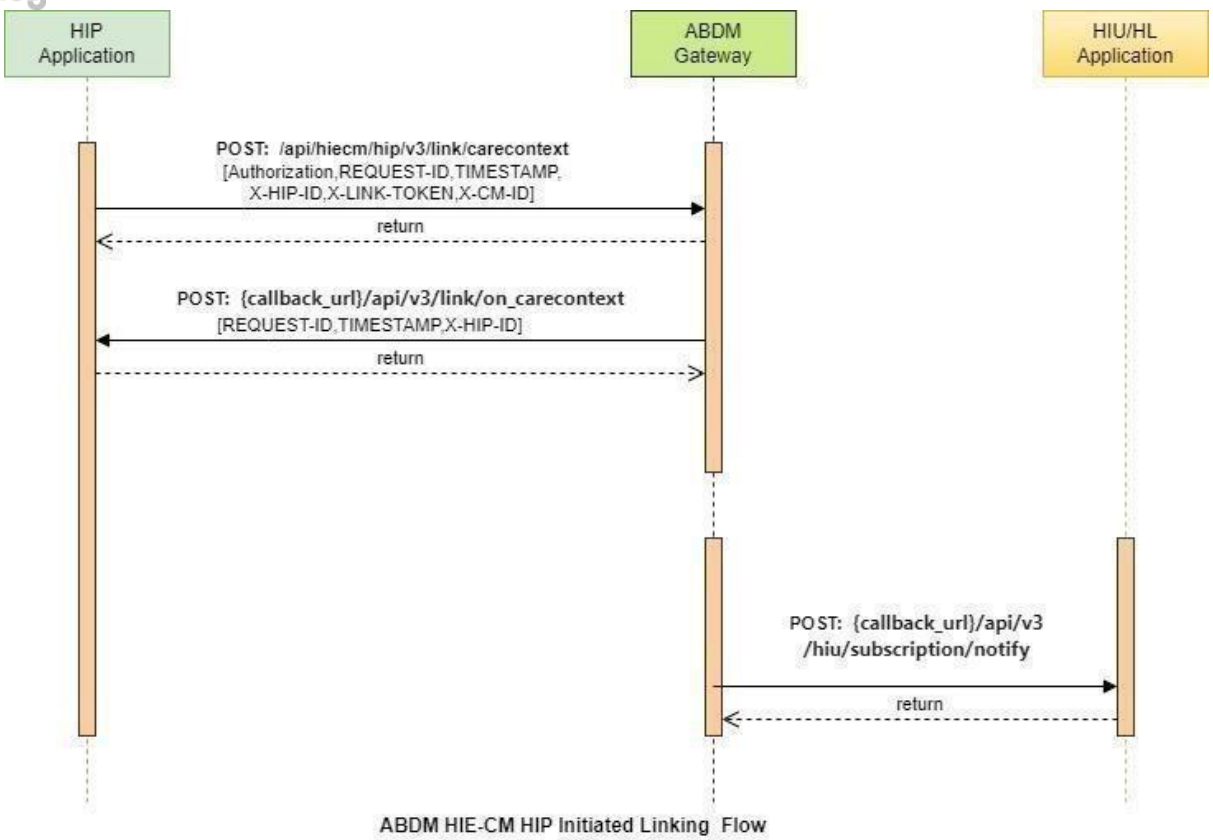
To achieve linking, the HIPs need to have a valid link token using link token service

The link token will be used for linking the 'n' number of care contexts, and concurrent linkages.

4.2 Sequence Diagram



ABDM - HIE-CM - Link Token



4.3 List of APIs

4.3.1 Link token generation

This API invoked by HIP or HRP to generate a link token.

URL: /api/hiecm/v3/token/generate-token **Method:**

POST **Request Headers:**

Property Name	Example Value	Required	Description
REQUEST-ID	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	Unique UUID for tracking the end-toend request transaction
TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	The actual time when the request was initiated, ISO Date time format represents the date and time

Authorization	eyJhbGciOiJSUzUxMiJ9. eyJzdWIiOiJ2YXNhbnRoYWt1bWFyLmtlc2F2 YW5Ac2J4IiwiY2xpZW50SWQiOiJz YngiLCJzeXN0ZW0iOiJBQkhBLUEiLCJy ZXF1ZXN0ZXJJZCI6IlBIUi1XRUIiL CJwaHJNb2JpbGUiOm51bGwsImV4c CI6MTY2NzI5ODExNSwia WF0IjoxNjY3MjkwOTE1LCJwaHJBZ GRyZXNzIjoidmFzYW50aGFrdW1hci5rZX NhdmFuQHNieCIsInR4bklkIjoi YjEwMGM4ZDMtNTE1ZC00YWFiLTg1O WQtYzNlMTUwOTE3ZGY1In0	Yes	JWT Access token which was issued by ABDM session API after successful validation of client id and secret
X-HIP-ID	IN2810014366	Yes	Identifier of the health information provider to which the request was intended
X-CM-ID	sbx	Yes	Suffix of the consent manager to which the request was intended

Body Parameters:

Property Name	Example Value	Required	Description
abhaAddress	“ABHA address”	Yes (if ABHA number is not provided)	Patient ABHA address against which the health records need to be linked.
abhaNumber	ABHA number	Yes (if ABHA address is not provided)	14-digit unique ABHA number of the patient.
Name	“Full name”	Yes	Patient's full name in the following format First Name | Middle Name | Last Name
Gender	“M”/”F”/”O”	Yes	Patient gender
yearOfBirth	XXXX	Yes	Patient's year of birth

Request Body:

Request Body

{
"abhaNumber": 98765432101XXXX,
"abhaAddress": "user@sbx",
"name": "Arjun",
"gender": "M",
"yearOfBirth": XXXX
}

Response Body:

Response:
Code : 202 Accepted

Error scenarios:

Scenario	Request Headers/Body	Message
When Request ID is Blank, null or empty in header	[{ "key": "REQUEST-ID", "value": "", "type": "text" }]	Access Denied Code : 403 Forbidden

When invalid Request- ID is pass in header	[
	{
	"key": "REQUEST-ID",
	"value": "*{{$guid}}*zxzzxs",
	"type": "text"
	}
	]
		{
		"code": "ABDM-1030: ",
		"message": "Invalid request ID"
		}
		Code: 400Bad Request

When Timestamp is Blank, null or empty in header.	[{ "key": "TIMESTAMP", "value": "", "type": "text" }]	Access Denied Code : 403 Forbidden { "code": "ABDM-1016: ",

When invalid Timestamp is pass in header	[{ "key": "TIMESTAMP", "value": "{{$isoTimestamp}}jh gftytgtyu", "type": "text" }]	"message": "Invalid Timestamp" } Code - 400Bad Request

When X-HIP-ID is Blank, null or empty in header.	[
	{
	"key": "X-HIP-ID",
	"value": "",
	"type": "text"
	}
	]
		Access Denied
		Code : 403 Forbidden

When X-CM-ID is Invalid, Blank, null or empty in header.	[{ "key": "X-CM-ID", "value": "sbxdvdfvdf", "type": "text" }]	Access Denied Code : 403 Forbidden

Request body missing		{
		"code": "ABDM-1064",
		"message": "Request body was missi ng"
		}
		
		Code : 400Bad Request

Duplicate Link token request	{
	"abhaNumber": 9117838618XXXX,
	"abhaAddress": "9117838610XXXX @sbx",
	"name": "Mayur Chaskar",
	"gender": "M",
	"yearOfBirth": XXXX
	}
		{
		"code": "ABDM-1092",
		"message": "Duplicate Link token req uest"
		}
		
		Code : 400Bad Request

ABHA number and ABHA address cannot be null	{ "abhaNumber": **null**, "abhaAddress": **null**, "name": "Mayur Bapu", "gender": "M", "yearOfBirth": XXXX }	"code": "ABDM-1125", "message": "ABHA number and ABH A address cannot be null" } Code - 400Bad Request
When passing an abha number of more or less than 14 digits	{ "abhaNumber": 911783861017XXX, "abhaAddress": "91178386101731XXXX@sbx", "name": "Mayur M ", "gender": "M", "yearOfBirth": XXXX }	[{ "code": "ABDM-9999: ", "message": "Invalid ABHA Number, it must be only 14 digit" }] Code - 400Bad Request
When passing invalid abha address/Invalid domain.	{ "abhaNumber": 91178386109XXXX, "abhaAddress": "9117838610XXX@gmail.com", "name": "Mayur M", "gender": "M", "yearOfBirth": 1994 }	[{ "code": "ABDM-9999: ", "message": "Invalid ABHA Address, it must start with Alphanumeric . and _ in the middle and must be ending with @abdm or @sbx" }] Code - 400Bad Request Callback: { "error": { "code": "ABDM-1207: ",

When passing invalid Name	{ "abhaNumber": 9117838610XXXX, "abhaAddress": "911783861XXXX@ sbx", "name": "Mferr", "gender": "M", "yearOfBirth": 1994 }	"message": "Demographic details was invalid or doesn't exists" }, "response": { "requestId": "58f080de-b5444bcf-8f4b-3d45222b2885" } } Code- 202Accepted

When passing invalid Gender except M, F, O, D	{ "abhaNumber": 9117838610XXXX, "abhaAddress": "9117838610XXXX @sbx", "name": "Mayur B ", "gender": "W", "yearOfBirth": XXXX }	[{ "code": "ABDM-9999: ", "message": "Invalid Gender, It mus t be M, F, O, D" }] Code- 400Bad Request [{ "code": "ABDM-9999: ", "message": "Invalid Year of birth, must be 4 digit range between 1900 a nd 2200" }]
Year Of Birth should be in between 1900 to 2200.	{ "abhaNumber": 9117838610XXX, "abhaAddress": "9117838610XXX@ sbx", "name": "Mayur B", "gender": "M", "yearOfBirth": XX }	Code- 400Bad Request Callback: { "error": { "code": "ABDM-1207: ",

When passing F, O, D gender for male.	{ "abhaNumber": 9117838610XXXX, "abhaAddress": "9117838610XXXX @sbx", "name": "Mayur B ", "gender": "F", "yearOfBirth": XXXX }	"message": "Demographic details was invalid or doesn't exists" }, "response": { "requestId": "89d2dcb4-06a545fa-8910-417d6e83bdd5" } } Code- 202Accepted Callback: { "error": { "code": "ABDM-1207: ", "message": "Demographic details was invalid or doesn't exists" }, "response": { "requestId": "58f080de-b5444bcf-8f4b-3d45222b2885" } }
When Year of birth not matching with user's YearOfBirth. (Allowing +2 & -2 from original year) When abha numbe r is passing of another's user.	{ "abhaNumber": 9117838610XXXX, "abhaAddress": "9117838610XXXX @sbx", "name": "Mayur B", "gender": "M", "yearOfBirth": XXXX } { "abhaNumber": 9117838610XXXX, "abhaAddress": "9117838610XXXX @sbx",	Code- 202Accepted Callback: { "error": { "code": "ABDM-1207: ",
	"name": "Mayur B ", "gender": "F", "yearOfBirth": XXXX }	"message": "Demographic details was invalid or doesn't exists" }, "response": { "requestId": "58f080de-b5444bcf-8f4b-3d45222b2885" } } Code- 202Accepted Callback: { "error": { "code": "ABDM-1207: ", "message": "Demographic details was invalid or doesn't exists" },

When abha Address is passing of another's user.	{
	"abhaNumber": 9117838610XXXX,
	"abhaAddress": "9117838610XXXX @sbx",
	"name": "Mayur B",
	"gender": "F",
	"yearOfBirth": XXXX
	}
		"response": {
		"requestId": "89d2dcb4-06a545fa-8910-417d6e83bdd5"
		} }
		
		Code- 202Accepted
		Callback: {
		"abhaAddress": "91178386101731@sbx",
		"error": {
		"code": "ABDM-1027: ",
		"message": "You are blocked. Plea se try again after 24 hours."
		},
		"response": {
		"requestId": "ddcd6213-49e24d46-ad44-07897c63c36b"
		} }

When the user tries to generate a link token more than 3 times	{
	"abhaNumber": 9117838610XXXX,
	"abhaAddress": "9117838610XXXX @sbx",
	"name": "Mayur B",
	"gender": "M",
	"yearOfBirth": XXXX
	}	

4.3.2 Callback API for Link token generation

This is a callback API triggered by HIE-CM to HIP/HRP to get the link token.

URL: {callback_url}/api/v3/hip/token/on-generate-token

Method: POST

Request Headers:

Property Name	Example Value	Required	Description
REQUEST-ID	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	Unique UUID for tracking the end-toend request transaction.

TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	The actual time when the request was initiated, ISO Date time format represents the date and time
X-HIP-ID	IN2810014366	Yes	Identifier of the health information provider to which the request was intended.
Authorization	eyJhbGciOiJSUzUxMiJ9. eyJzdWIiOiJ2YXNhbnRoYWt1bWFyLmtlc2F2 YW5Ac2J4IiwiY2xpZW50SWQiOiJz YngiLCJzeXN0ZW0iOiJBQkhBLUEiLCJy ZXF1ZXN0ZXJJZCI6IlBIUi1XRUIiL CJwaHJNb2JpbGUiOm51bGwsImV4c CI6MTY2NzI5ODExNSwia WF0IjoxNjY3MjkwOTE1LCJwaHJBZ GRyZXNzIjoidmFzYW50aGFrdW1hci5rZX NhdmFuQHNieCIsInR4bklkIjoi YjEwMGM4ZDMtNTE1ZC00YWFiLTg1O WQtYzNlMTUwOTE3ZGY1In0	Yes	JWT Access token which was issued by ABDM session API after successful validation of client id and secret

Body parameters:

Property Name	Example Value	Required	Description
abhaAddress	ABHA address	Yes (if ABHA number is not provided)	Patient ABHA address against which the health records need to be linked

linkToken	eyJhbGciOiJSUzUxMiJ9.eyJoaXBJZCI6Ik1BRE hVUkFfSElQIiwic3ViIjoiMTAwMDAyNjIxMzE2N DBAYWJkbSIsImFiaGFOdW1iZXIiOjEwMDAwM jYyMTMxNjQwLCJleHAiOjE2OTc1OTY2MDAsI mlhdCI6MTY4MTgyODYwMCwidHJhbnNhY3 Rpb25JZCI6IjM1YjkzYzQwLWM1OGQtNDk2ZC 04MDgxLWY1OTM0MWVkNGNkNSIsImFiaGFB ZGRyZXNzIjoiMTAwMDAyNjIxMzE2NDBAYWJk bSJ9.q-p8eHxdacvSg2QPzm7vY7_kLHYCQXwkbkAc EvSwcp5HFAdtUyNoZ50LyquQih2Lbxv0Dxm Da3YxyMnQY37GJsBpcs-4OQmUk5tvoad1HYGjBVMlq0tVae7gpFHno nSSyhkVPGLTO5G4tvghvcK8xcMqoQol_lmR 26VIGCue07nx6K4xPueUOQeeqKMXPJs115wPunafT3LT24 k9KEHzbmDcWDJjUouBZ4TKAXcGrfwOuhG M0eWr-SMZ99PAlTHxHCZnJybUWL9E2MH6bpq87wD hFPrq0WLzhLJhynnfaWxrd7JkFdUtDygkpaiR h3V12xVqx8eWaSwxdwvCLut4A	Yes	Patient full name: First Name | Middle Name | Last Name
requestId	d6d6d056-666a-4af8-b6804c61bcb29dd4	Yes	Unique UUID to track the endtoend flow

Request Body:

Request Body


```
{
  "abhaAddress": "10000262131640@sbx",
  "linkToken": "eyJhbGciOiJSUzUxMiJ9.eyJoaXBJZCI6Ik1BREhVUkFfSElQIiwic3ViIjoiMTAwMDAyNjIxMzE2
NDBAYWJkbSIsImFiaGFOdW1iZXIiOjEwMDAwMjYyMTMxNjQwLCJleHAiOjE2OTc1OTY2MDAsImlhdCI6MT
Y4MTgyODYwMCwidHJhbnNhY3Rpb25JZCI6IjM1YjkzYzQwLWM1OGQtNDk2ZC04MDgxLWY1OTM0MWV
kNGNkNSIsImFiaGFBZGRyZXNzIjoiMTAwMDAyNjIxMzE2NDBAYWJkbSJ9.q-
p8eHxdacvSg2QPzm7vY7_kLHYCQXwkbkAcEvSwcp5HFAdtUyNoZ50LyquQih2Lbxv0DxmDa3YxyMnQ Y37GJsBpcs-
4OQmUk5tvoad1HYGjBVMlq0tVae7gpFHnonSSyhkVPGLTO5G4tvghvcK8xcMqoQol_lmR26VIGCue07
-
nx6K4xPueUOQeeqKMXPJs115wPunafT3LT24k9KEHzbmDcWDJjUouBZ4TKAXcGrfwOuhGM0eWrSMZ99PAlTHxHCZnJybUWL
9E2MH6bpq87wDhFPrq0WLzhLJhynnfaWxrd7JkFdUtDygkpaiRh3V12xVqx8 eWaSwxdwvCLut4A",
  "response": {
    "requestId": "d6d6d056-666a-4af8-b680-4c61bcb29dd4"
  }  }
```


Response Body

Response
Code : 202 Accepted

POST	http://webhook.site/b799c0b8-4e75-4545-8eb2-d8c2d5f0c9f6/api/v3/hip/token/on-generate-token
Host	14.143.232.140 Whois Shodan Netify Censys VirusTotal
Date	08/09/2024 7:51:52 PM (a few seconds ago)
Size	739 bytes
Time	0.000 sec
ID	c3d6324c-1e2e-494c-b507-4ee194c778a2
Note	Add Note

x-b3-sampled	0
x-b3-spanid	abda4c22374b7c10
x-b3-traceid	4f5e10bc728b49aeabda4c22374b7c10
x-envoy-attempt-count	1
x-envoy-peer-metadata-id	sidecar~10.233.122.92~abdm-hiecm-link-token-app-676fb7c89b-...
x-envoy-peer-metadata	ChoKCkNMVVNURVJfSUQSDBoKS3ViZXJuZXRlcwofCgxJTlNUQU5DRV9JUFM...
x-request-id	1824d81a-0752-4d2c-b889-9718a3fc9797
content-length	739
content-type	application/json
x-hip-id	Mohan_HIP
timestamp	2024-08-09T14:21:52.132Z
request-id	6526adbd-0bae-41f7-aa22-b9b1c3f00572
authorization	Bearer eyJhbGciOiJSUzI1NiIsInR5cCIgOiAiSldUIiwia2lkIiA6ICJB...
accept	*/*
user-agent	ReactorNetty/1.0.24
accept-encoding	gzip
host	webhook.site

Query strings

(empty)

Form values

(empty)

Raw Content Format JSON Word-Wrap Copy


```
{
  "abhaAddress": "vignesh_1992@sbx",
  "linkToken": "eyJhbGciOiJSUzUxMiJ9.eyJoaXBJZCI6Ik1vaGFuX0hJUCIsInN1YiI6InZpZ25lc2hfMTk5MkBzYngiLCJhYmhhTnVtYmVyIjo5MTc1MDc2ODIxNzc3MCwiZXhwIjoxNzM4OTgxMzEyLCJpYXQiOjE3MjMyMTMzMTIsInRyYW5zYWN0aW9uSWQiOiIzODNkYTY2NS04Nzg3LTQ0YTYtOGYxMC1iODUyNDdiY2NkMDYiLCJhYmhhQWRkcmVzcyI6InZpZ25lc2hfMTk5MkBzYngifQ.mtEyQMFBTY7KtB7C8TFpsgVeBAjPqMrMgABHspHQUD45GF_jeW9P-GMMlaFOBkddIQ3daZfCHf-SkTuLBsZrdRycvxD7jJDXBK6Gp_QxO3agz5O6Z1iy_yOgPbCSRH1rRxwP16JNZ_ckYu-BaGGIIZ_eAJpi12CRk078EiVIEhLWpFkjNOGnHN7bGxeHL71QkNOxLGqIJ4zhEIiDi65R-fnk1HV2ndiUL0x2PKIIJU9nhYUN9OfKB30nLF6v8YYgIYn0hu8SOFhjuVmsNhJFQYGDWOTzFWvA
```


Error Scenarios:

Scenario	Headers/Body	Message
When Request ID is Blank, null or empty in header	[{ "key": "REQUEST-ID", "value": "", "type": "text" }]	Access Denied Code : 403 Forbidden

When invalid Request-ID is pass in header	[
	{
	"key": "REQUEST-ID",
	"value": "*{{$guid}}*zxzzxs",
	"type": "text"
	}]
		{
		"code": "ABDM-1030: ",
		"message": "Invalid request ID"
		}
		Code: 400Bad Request

When Timestamp is Blank, null or empty in header.	[{ "key": "TIMESTAMP", "value": "", "type": "text" }]	Access Denied Code : 403 Forbidden

When invalid Timestamp is pass in header	[
	{
	"key": "TIMESTAMP",
		{
		"code": "ABDM-1016: ",
		"message": "Invalid Timestamp"
		}

	"value": "{{$isoTimestamp}}jhgftyt gtyu", "type": "text" }]	Code - 400Bad Request
When X-HIP-ID is Blank, null or empty in header.	[{ "key": "X-HIP-ID", "value": "", "type": "text" }]	Access Denied Code : 403 Forbidden
When X-CM-ID is Invalid, Blank, null, or empty in the header.	[{ "key": "X-CM-ID", "value": "sbxdvdfvdf", "type": "text" }]	Access Denied Code : 403 Forbidden
When X-LINKTOKEN is Blank, null, or empty in the header.	[{ "key": "X-LINK-TOKEN", "value": "", "type": "text" }]	Access Denied Code : 403 Forbidden

When X-LINK-TOKEN is Invalid in the header.	[
	{
	"key": "X-LINK-TOKEN",
	"value": "hghhjjkhjkbkjbjkbkjbnkjbk
	",
	"type": "text"
	}]
		{
		"code": "ABDM-1066: ",
		"message": "Invalid JWT token"
		}
		Code - 400Bad Request

When the HIP ID is not matching with Link Token in Header	[
	{
	"key": "X-HIP-ID",
	"value": "XYZ",
	"type": "text"
	},
	{
	"key": "X-LINK-TOKEN",
	"value": "eyJhbGciOiJSUzUYr9LtA5 A",
	"type": "text"
	}
		{
		"code": "ABDM-1063",
		"message": "HIP Id mismatch with Link token"
		}
		
		Code - 400Bad Request

	]	

When passing the Link Token of another user in the header	[
	{
	"key": "X-LINK-TOKEN",
	"value": "eyJhbGciOiJSUzUxMiJ9.eyJoaXBJZCI6IlN1YzTlcJDFRfSAhPZxRpArmlevBdVt4rLk-EkCRGfLmFqizijYO7z_pdasi35fG6dknrNDQb1vf-0o0ggQHOyjhD2aJLBDGjSKsAOidU9qSusEjBC6j4HU3uZjyFPMQjg",
	"type": "text"
	}]
		{
		"code": "ABDM-1038",
		"message": "ABHA address misma tch with Link token"
		}
		Code : 400Bad Request

Request body missing		{
		"code": "ABDM-1064",
		"message": "Request body was mi ssing"
		}
		Code : 400Bad Request

Duplicate HIP Link request	{
	"abhaNumber": "91178386101731",
	"abhaAddress": "91178386101731@sbx"
	,
	"patient": [
	{
	"referenceNumber": "Mayur C",
	"display": "Apollo_Encounter_123_2023070414",
	"careContexts": [
	{
	"referenceNumber": "Health Document Reference Number",
	"display": "Sugar Test"
	}
	],
	"hiType": "PRESCRIPTION",
	"count": 1
	}
	] }
		{
		"code": "ABDM-1090",
		"message": "Duplicate HIP link req uest"
		}

When Abha Number is mismatch with Link Token	{
	"abhaNumber": "11111111111111",
	"abhaAddress": "91178386101731@sbx"
	,
	"patient": [
	{
	"referenceNumber": "Mayur C",
		{
		"code": "ABDM-1062",
		"message": "ABHA number misma tch with Link token"
		}

	"display": "Apollo_Encounter_123_2023070414",
	"careContexts": [
	{
	"referenceNumber": "Health Document Reference Number",
	"display": "Sugar Test"
	}
	],
	"hiType": "PRESCRIPTION",
	"count": 1
	}
	] }	

When Abha Number is mismatch with Link Token	{
	"abhaNumber": "91178386101731",
	"abhaAddress": "11111111111111@sbx",
	"patient": [
	{
	"referenceNumber": "Mayur C",
	"display": "Apollo_Encounter_123 _2023070414",
	"careContexts": [
	{
	"referenceNumber": "Health Document Reference Number",
	"display": "Sugar Test"
	}
	],
	"hiType": "PRESCRIPTION",
	"count": 1
	}
	]
	}
		{
		"code": "ABDM-1038",
		"message": "ABHA address misma tch with Link token"
		}
		
		Code - 400Bad Request

If care context is null	{ "abhaNumber": "91178386101731", "abhaAddress": "91178386101731@sbx" , "patient": [{ "referenceNumber": "Mayur C", "display": "Apollo_Encounter_123 _2023070414", "careContexts": **null**, "hiType": "PRESCRIPTION", "count": 1	[{ "code": "ABDM-9999: ", "message": "careContexts attrib ute required in the payload" }] Code - 400Bad Request
	}] }	

when passing invlalid HiType	{
	"abhaNumber": "9117838610XXXX ",
	"abhaAddress": "9117838610XXXX @sbx",
	"patient": [
	{
	"referenceNumber": "Mayur C",
	"display": "Apollo_Encounter_123 _2023070414",
	"careContexts": [
	{
	"referenceNumber": "Health Document Reference Number",
	"display": "Sugar Test"
	}
	],
	"hiType": "PRESCRsbjs",
	"count": 1
	}
	]
	}
		[
		{
		"code": "ABDM-9999: ",
		"message": "Invalid HIType, it m ust be in PRESCRIPTION, DIAGNOSTIC REPORT, OPCONSULTATION, DISCHAR GESUMMARY, IMMUNIZATIONRECORD, HEALTHDOCUMENTRECORD, WELLNE SSRECORD"
		}]
		
		Code - 400Bad Request

If count is not matching with Care Context count	{
	"abhaNumber": "91178386101731",
	"abhaAddress": "91178386101731@sbx" ,
	"patient": [
	{
	"referenceNumber": "Mayur C",
	"display": "Apollo_Encounter_123 _2023070414",
	"careContexts": [
	{
	"referenceNumber": "Health Document Reference Number",
	"display": "Sugar Test"
	}
	],
	"hiType": "PRESCRIPTION",
	"count": 20
	}
	]
	}
		Callback: {
		"abhaAddress": "91178386101731@s bx",
		"error": {
		"code": "ABDM-1037: ",
		"message": "Count and Care co ntext count mismatch"
		},
		"response": {
		"requestId": "ab00fdec-fc804502-b1bc-121be6808a9f"
		} }
		
		Code - 202Accepted

4.3.3 Linking care context

This API needs to be called by the HIP to link the care context against the patient ABHA address, once the HIP has the valid linking token generated against the same patient ABHA address.

URL: /api/hiecm/hip/v3/link/carecontext

Request: POST

Header Parameters:

Property Name	Example Value	Required	Description
REQUEST-ID	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	Unique UUID for tracking the endto-end request transaction.
TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	The actual time when the request was initiated, ISO Date time format represents date and time.
Authorization	eyJhbGciOiJSUzUxMiJ9.eyJzdWIiOiJ2YXNhbnRoYWt1bWFyLmtlc2F2YW5Ac2J4IiwiY2xpZW50SWQiOiJzYngiLCJzeXN0ZW0iOiJBQkhBLUEiLCJyZXF1ZXN0ZXJJZCI6IlBIUi1XRUIiLCJwaHJNb2JpbGUiOm51bGwsImV4cCI6MTY2NzI5ODExNSwiaWF0IjoxNjY3MjkwOTE1LCJwaHJBZGRyZXNzIjoidmFzYW50aGFrdW1hci5rZXNhdmFuQHNieCIsInR4bklkIjoiYjEwMGM4ZDMtNTE1ZC00YWFiLTg1OWQtYzNlM TUwOTE3ZGY1In0	Yes	JWT Access token which was issued by ABDM session API after successful validation of client id and secret.
X-HIP-ID	IN2810014366	Yes	Identifier of the health information provider to which the request was intended.

X-CM-ID	sbx	Yes	Suffix of the consent manager to which the request was intended.
X-LINK-TOKEN	“eyJhbGciOiJSUzUxMiJ9.eyJoaXBJZCI6Ik1BREhV UkFfREVNTyIsInN1YiI6InBhcmFnQHNieCIsImFiaG FOdW1iZXIiOjcxMTYyODUwMTMzNjYzLCJleHAiOj E2OTA5MTIzMDEsImlhdCI6MTY3NTE0NDMwMS widHJhbnNhY3Rpb25JZCI6IjhjMjYyZTFhLTlhY2M tNDM1YS04OTY4LTVlODY1YjUzNjQwNSIsImFiaGF BZGRyZXNzIjoicGFyYWdAc2J4In0.aNDRjI-	Yes	Link token generated against patient ABHA address and/or ABHA number.
	WKUecEX7BAM710B1aFkHfhB5nB- ND4T3Lpm9kFCNJIj9BVLUaLZAMU0svscEMrPuZXONG1 JalymEjhlCYvjBsFOSBUQ5CTFdoT4VDJC3P2u2X 3Xhi5tepTZrgsYMafuhMRXvRfqSjn0kSLJQloAr5fi NQdBWWMGsYwcFLWLjo4MSwHC6AS9RMUfY3 w4_J4qy4zgqULBoedlTc1tQHxDlIg7amvXXgYzn 29Iam65cQG0sseRYf_ceI5kq3mxn154Lpwzh_lH_VXOx0h9MDvLFf76TXgozce8_Q8 SKEsyB1U pbes2vQ59qjQS4e9MHbtRHeyEeJ2IMmThYQ”		

Body Parameters:

Property Name	Example Value	Required	Description
abhaAddress	ABHA address	Yes	Patient ABHA address against which the health records need to be linked. ABHA address is mandatory.
abhaNumber	ABHA number	No	14-digit unique ABHA number of the patient.
referenceNumber	“TMH-PUID-001”	Yes	This should be a unique ID or number for each new response.
display	“Display”	Yes	Displayed information about the care contexts

careContexts	"careContexts": [{ "referenceNumber": "TMH-PUID", "display": "display 1" }]	Yes	Care context is the patient individual health record.
hiType	"PRESCRIPTION"	Yes	There are 7 different hiTypes in ABDM: Prescription DiagnosticReport OPConsultation DischargeSummary ImmunizationRecord HealthDocumentRecord WellnessRecord
count	1	Yes	Number of health records in the careContext object

Request Body:

Request Body
{ "abhaNumber": 9117838610XXXX, "abhaAddress": "abc@abdm",

```
  "patient": [
    {
      "referenceNumber": "TMH-PUID-001",
      "display": "Display",
      "careContexts": [
        {
          "referenceNumber": "TMH-PUID-001",
          "display": "display 1"
        }
      ],
      "hiType": "PRESCRIPTION",
      "count": 1
    }
  ] }
```

Response Body:

Response
Code : 202 Accepted

Error scenarios:

Scenario	Headers/Body	Message
When the Request ID is Blank, null, or empty in the header	[{"key":"REQUEST-ID","value":"","type":"text"}]	Access Denied Code : 403 Forbidden

When an invalid Request ID is passed in the header	[{"key":"REQUEST-
	
	ID","value":"{{$guid}}zxzzxs","type":"text"}]
		{
		"code": "ABDM-1030: ",
		"message": "Invalid request ID"
		}
		
		Code: 400Bad Request

When Timestamp is Blank, null, or empty in the header.	[{"key":"TIMESTAMP","value":"","type":"text"}]	Access Denied Code : 403 Forbidden

When an invalid Timestamp is passed in the header	[{"key":"TIMESTAMP","value":"{{$isoTimestamp}}jhgftytgty
	
	u","type":"text"}]
		{
		"code": "ABDM-1016: ",
		"message": "Invalid Timestamp"
		}
		
		Code - 400Bad Request

		Access Denied

When X-HIP-ID is Blank, null, or empty in the header.	[{"key":"X-HIP-ID","value":"","type":"text"}]	Code : 403 Forbidden
	[{"key":"X-CM-	Access Denied

When X-CM-ID is Invalid, Blank, null or empty in header.	ID","value":"sbxdvdfvdf","type":"text"}]	Code : 403 Forbidden
When X-LINK-TOKEN is Blank, null or empty in header.	[{"key":"X-LINK-TOKEN","value":"","type":"text"}]	Access Denied Code : 403 Forbidden

When X-LINK-TOKEN is Invalid in header.	[{"key":"X-LINK-TOKEN","value":"hghhjjkhjkbkjbjkbkjbnkjbk","type":"text"}]	{
		"code": "ABDM-1066: ",
		"message": "Invalid JWT token"
		}
		
		Code - 400Bad Request

When HIP ID is not matching with Link Token in Header	[{"key":"X-HIP-ID","value":"XYZ","type":"text"},
	{"key":"X-LINK-TOKEN","value":"eyJhbGciOiJSUzUYr9LtA5A","type":"text"}]
		{
		"code": "ABDM-1063",
		"message": "HIP Id mismatch with Link token"
		}
		
		Code - 400Bad Request

When passing Link Token of another user in header	[{"key":"X-LINK-TOKEN","value":"eyJhbGciOiJSUzUxMiJ9.eyJoaXBJZCI6IlN1Yl9ISVAiLCJzdWIiOiI5MTQxNDA3MTMyMTgyNUBhYmRtIiwiYWJoYU51bWJlciI6OTE0MTQwNzEzMjE4MjUsImV4cCI6MTY5OTI5ODE2NCwiaWF0IjoxNjgzNTMwMTY0LCJ0cmFuc2FjdGlvbklkIjoiZTI5YTA3ZDktYTA0OC00N2NhLWI1MTUtNTkyMjMwMDk5NmVjIiwiYWJoYUFkZHJlc3MiOiI5MTQxNDA3MTMyMTgyNUBhYmRtIn0.IZqQAtFNBnEav0nT4XSG3XDDXKDTljAMPYW-I81EU9xkhi-9xK6MrzTw5xlzaOasllcJDFRfSAhPZxRpArmlevBdVt4rLkEkCRGfLmFqizijYO7z_pdasi35-fG6bV3DbCidO8ZM2zl_wHi5vDXZbv3gJvjBQ4Hd0Pz62WRJSbcRt62Dfcha3HYr1gKcKZCkojDk94RGNYWevdHKYgr4lFdu_EKuuykyFlk5VjBeoLFyivpqjiQmbPeRutE_T7B9G4VveakeyAQosLHAG6dknrNDQb1vf-0o0ggQHOyjhD2aJLBDGjSKsAOidU9qSusEjBC6j4HU3uZj yFPMQjg","type":"text"}]	{
		"code": "ABDM-1038",
		"message": "ABHA address mismatch with Link token"
		}
		
		Code : 400Bad Request

Request body missing		{
		"code": "ABDM-1064",
		"message": "Request body was missing"
		}
		
		Code : 400Bad Request

Duplicate HIP Link request	{
	"abhaNumber": "9117838610XXXX ", "abhaAddress": "9117838610XXXX @sbx",
	"patient": [
	{
	"referenceNumber": "Mayur C",
		{
		"code": "ABDM-1090", "message": "Duplicate HIP link request"
		}

	"display": "Apollo_Encounter_123_2023070414",
	"careContexts": [
	{
	"referenceNumber": "Health Document Reference Number",
	"display": "Sugar Test"
	}
	],
	"hiType": "PRESCRIPTION",
	"count": 1
	}
	] }	

When Abha Number is mismatch with Link Token	{
	"abhaNumber": "11111111111111",
	"abhaAddress": "91178386101731@sbx",
	"patient": [
	{
	"referenceNumber": "Mayur C",
	"display": "Apollo_Encounter_123_2023070414",
	"careContexts": [
	{
	"referenceNumber": "Health Document Reference Number",
	"display": "Sugar Test"
	}
	],
	"hiType": "PRESCRIPTION",
	"count": 1
	}
	] }
		{
		"code": "ABDM-1062",
		"message": "ABHA number mismatch with Link token"
		}

	{	

Empty patient details in the request	{
	"abhaNumber": 12345678901234,
	"abhaAddress": "abc@abdm",
	"patient": []
	}
		{
		"code": "ABDM-1115",
		"message": "Invalid patient information. At least one patient information is required."
		}

Trying to link a record for a deleted abha address	{
	"abhaNumber": "91178386101731",
	"abhaAddress": "91178386101731@sbx",
	"patient": [
	{
	"referenceNumber": "Mayur C",
	"display": "Apollo_Encounter_123_2023070414",
	"careContexts": [
	{
	"referenceNumber": "Health Document Reference Number",
	"display": "Sugar Test"
	}
	],
	"hiType": "PRESCRIPTION",
	"count": 1
	}
	] }
		{
		"code": "ABDM-1031", "message": "The abha address is deactivated."
		}

4.3.4 Call back API for linking care context with patient ABHA address

This is a callback API triggered by HIE-CM to notify HIP/HRP about linked care context response.

URL: {callback_url}/api/v3/link/on_carecontext

Request: POST

Header Parameters:

Property Name	Example Value	Required	Description
REQUEST-ID	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	Unique UUID for tracking the end-toend request transaction.

TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	The actual time when the request was initiated, ISO 8601 represents the date and time by starting with the year, followed by the month, the day, the hour, the minutes, seconds, and milliseconds.
X-HIP-ID	IN2810014366	Yes	Identifier of the health information provider to which the request was intended.
Authorization	eyJhbGciOiJSUzUxMiJ9. eyJzdWIiOiJ2YXNhbnRoYWt1bWFyLmtlc2F2 YW5Ac2J4IiwiY2xpZW50SWQiOiJz YngiLCJzeXN0ZW0iOiJBQkhBLUEiLCJy ZXF1ZXN0ZXJJZCI6IlBIUi1XRUIiL CJwaHJNb2JpbGUiOm51bGwsImV4c CI6MTY2NzI5ODExNSwia WF0IjoxNjY3MjkwOTE1LCJwaHJBZ GRyZXNzIjoidmFzYW50aGFrdW1hci5rZX NhdmFuQHNieCIsInR4bklkIjoi YjEwMGM4ZDMtNTE1ZC00YWFiLTg1O WQtYzNlMTUwOTE3ZGY1In0	Yes	JWT Access token which was issued by ABDM session API after successful validation of client id and secret

Body Parameters:

Property Name	Example Value	Required	Description
abhaAddress	"abc@abdm"	Yes	Patient ABHA address against which the health records need to be linked

status	"Successfully Linked care context"	Yes	Status message in various scenarios: "Successfully Linked care context" "Counter and Care context count mismatch" "ABHA address and Link token mismatch" "Dependent service unavailable" "These care contexts have been already linked"
requestId	"f29f0e59-8388-4698-9fe605db67aeac46"	Yes	Unique UUID for tracking the endto-end request transaction.

Request Body:

Request Body


```
{
  "abhaAddress": "abc@sbx",
  "status": "Successfully Linked care context",
  "response": {
    "requestId": "f29f0e59-8388-4698-9fe6-05db67aeac46"
  }
}
```


Error Scenario:


```
{
  "error": {
    "code": "ABDM-1056",
    "message": "This care context has been already linked"
  },
  "response": {
    "requestId": "5ad6e060-ea35-4765-8c8c-cd7db8cb1a6f"
  }}
```


Response Body:

Response

Code : 202 Accepted

POST	http://webhook.site/b799c0b8-4e75-4545-8eb2-d8c2d5f0c9f6/api/v3/link/on_...
Host	14.143.232.140 Whois Shodan Netify Censys VirusTotal
Date	08/09/2024 7:59:06 PM (a few seconds ago)
Size	142 bytes
Time	0.000 sec
ID	eb6eb336-edf5-4cfb-8cd2-c961bc8935e1
Note	Add Note

x-b3-sampled	0
x-b3-parentspanid	889ab3fd009e3e88
x-b3-spanid	e749de2962083225
x-b3-traceid	22852c7b97ba37c2d73043bc81aaf140
x-envoy-attempt-count	1
x-envoy-peer-metadata-id	sidecar~10.233.109.220~hiecm-hip-app-5d87bb9b9d-tpgls.abdm2...
x-envoy-peer-metadata	ChoKCkNMVVNURVJfSUQSDBoKS3ViZXJuZXRlcwogCgxJTlNUQU5DRV9JUFM...
x-request-id	e47e70a8-39c7-4610-8d88-79e5a3958832
content-length	142
content-type	application/json
authorization	Bearer eyJhbGciOiJSUzI1NiIsInR5cCIgOiAiSldUIiwia2lkIiA6ICJB...
x-hip-id	Mohan_HIP
timestamp	2024-08-09T14:29:06.667441478
request-id	b4c27c88-e057-4d93-abcc-4b08021ba76e
accept	*/*
user-agent	ReactorNetty/1.0.24
accept-encoding	gzip
host	webhook.site

Query strings

(empty)

Form values

(empty)

Raw Content Format JSON Word-Wrap Copy


```
{
  "abhaAddress": "vignesh_1992@sbx",
  "status": "Successfully Linked care context",
  "response": {
    "requestId": "d24eb3da-088a-4c39-871c-58e419d30774"
```


Call back HIU

All the HIUs who are subscribed will be notified about the linkage of care contexts.

4.3.5 Get all patient links

This is the PHR APP API, this api will used to fetch all link care-context for a patient.

URL: /api/hiecm/hip/v3/link/patient/links

Request: GET

Header Parameters:

Property Name	Example Value	Required	Description

Authorization	eyJhbGciOiJSUzUxMiJ9. eyJzdWIiOiJ2YXNhbnRoYWt1bWFyLmtlc2F2YW5Ac2J4IiwiY2xpZW50SWQiOiJzYngiLCJzeXN0ZW0iOiJBQkhBLUEiLCJyZXF1ZXN0ZXJJZCI6IlBIUi1XRUIiLCJwaHJNb2JpbGUiOm51bGwsImV4cCI6MTY2NzI5ODExNSwiaWF0IjoxNjY3MjkwOTE1LCJwaHJBZGRyZXNzIjoidmFzYW50aGFrdW1hci5rZXNhdmFuQHNieCIsInR4bklkIjoiYjEwMGM4ZDMtNTE1ZC00YWFiLTg1OWQtYzNlMTUwOTE3ZGY1In0	Yes	JWT Access token which was issued by ABDM session API after successful validation of client id and secret
REQUEST-ID	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	Unique UUID for tracking the endtoend request transaction
TIMESTAMP	2023 -03-09T07:07:41.793Z	Yes	The actual time when the request was initiated, ISO Date time format represents the date and time
X-AUTH-TOKEN	eyJhbGciOiJSUzUxMiJ9.eyJzdWIiOiJ2YXNhbnRoYWt1bWFyLmtlc2F2		JWT Authentication token which was issued by ABDM after successful validation of username and password
X-CM-ID	sbx	Yes	Suffix of the consent manager to which the request was intended

Request Params:

Property Name	Example Value	Description
limit	100	Number of records to be fetched from the database.

Error scenarios:

Scenarios	Headers/Body	Message

To verify when Request ID is Blank, null or empty in header	[
	{
	"key": "REQUEST-ID",
	"value": "",
	"type": "text"
	}
	]
		Access Denied
		Code : 403 Forbidden

	[	{

To verify when invalid RequestID is pass in header	{
	"key": "REQUEST-ID",
	"value": "*{{$guid}}*zxzzxs",
	"type": "text"
	}
	]
		"code": "ABDM-1030: ",
		"message": "Invalid reque st ID"
		}
		
		Code: 400Bad Request

When Timestamp is Blank, null or empty in header.	[
	{
	"key": "TIMESTAMP",
	"value": "",
	"type": "text"
	}
	]
		Access Denied
		Code : 403 Forbidden

When invalid Timestamp is pass in header	[
	{
	"key": "TIMESTAMP",
	"value": "*{{$isoTimestamp}}*jhgftytgtyu",
	"type": "text"
	}
	]
		{
		"code": "ABDM-1016: ",
		"message": "Invalid Times tamp"
		}
		
		Code - 400Bad Request

		Access Denied Code : 403 Forbidden
When X-CM-ID	[	Access Denied

is Invalid, Blank, null or empty in header.	{ "key": "X-CM-ID", "value": "sbxdvdfvdf", "type": "text" }]	Code : 403 Forbidden
When X-Auth-TOKEN is Invalid in header.	[{ "key": "X-AUTH-TOKEN", "value": "hghhjjkhjkbkjbjkbkjbnkjbk", "type": "text" }]	{ ""code"": ""ABDM-1065: "", ""message"": "" Invalid X Auth token"" } Code - 400Bad Request"

Response Body:

Response


```
{
  "patient": {
    "id": "user_1992@sbx",
    "links": [
      {
        "hip": {
          "id": "TestClinicHIP",
          "name": "TestClinicHIP",
         "type": "HIP"
},
        "referenceNumber": "user_1992@sbx",
        "display": "User Record",
        "hiType": "HealthDocumentRecord",
        "careContexts": [
          {
            "referenceNumber": "e707c945-3672-4b85-8525-4c7e620ef301",
            "display": "Visited on 08-Feb-2024 09:00:00 Visit Type as Out Patient"
          }
        ],
        "dateCreated": "2024-07-18T11:49:15.736Z"
      }
    ]
  }
}
```

4.3.6 Notify care context update

This API will be invoked by HIP after updating a health record to notify all the subscribed HIUs.

URL: /api/hiecm/hip/v3/link/context/notify

Request: POST

Header Parameters:

Property Name	Example Value	Required	Description
Authorization	eyJhbGciOiJSUzUxMiJ9. eyJzdWIiOiJ2YXNhbnRoYWt1bWFyLmtlc2F2YW5Ac2J4IiwiY2xpZW50SWQiOiJzYngiLCJzeXN0ZW0iOiJBQkhBLUEiLCJyZXF1ZXN0ZXJJZCI6IlBIUi1XRUIiLCJwaHJNb2JpbGUiOm51bGwsImV4cCI6MTY2NzI5ODExNSwiaWF0IjoxNjY3MjkwOTE1LCJwaHJBZGRyZXNzIjoidmFzYW50aGFrdW1hci5rZXNhdmFuQHNieCIsInR4bklkIjoiYjEwMGM4ZDMtNTE1ZC00YWFiLTg1OWQtYzNlMTUwOTE3ZGY1In0	Yes	JWT Access token which was issued by ABDM session API after successful validation of client id and secret
REQUEST-ID	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	Unique UUID for tracking the endtoend request transaction
TIMESTAMP	2023 -03-09T07:07:41.793Z	Yes	The actual time when the request was initiated, ISO Date time format represents the date and time
X-HIP-ID	IN2810014366		Identifier of the health information provider to which the request was intended
X-CM-ID	sbx	Yes	Suffix of the consent manager to which the request was intended

Body Parameters:

Property Name	Example Value	Required	Description

Patient	"patient" : {
	"id": "user123@sbx"
	}
		Yes	The abha address of the patient whose record was updated.

careContext	"careContext": {
	"patientReference": "batman@tmh",
	"careContextReference": "Episode1"
	}
		Yes	Updated health record of the patient.

hiTypes	"hiTypes": ["OPConsultation"]	Yes	There are 7 different hiTypes in ABDM: Prescription DiagnosticReport OPConsultation DischargeSummary ImmunizationRecord HealthDocumentRecord WellnessRecord
Date	"2024-05-30T05:21:34.155Z"	Yes	The UTC time when the request was initiated, ISO Date time format represents the date and time.

Hip	"hip": {
	"id": "demo-hip-261222"
	}
		Yes	Identifier of the health information provider.

Request Body:

Request Body:

```
{
 "notification": {
  "patient": {
   "id": "user_122@sbx"
  },
  "careContext": {
   "patientReference": "batman@tmh",
   "careContextReference": "Episode1"
  },
  "hiTypes": [
   "OPConsultation"
  ],
  "date": "2024-05-30T05:21:34.155Z",
  "hip": {
   "id": "demo-hip-261222"
  }  } }
```


Error scenarios:

Scenarios	Headers/Body	Message
To verify when Request ID is Blank, null or empty in header	[{ "key": "REQUEST-ID", "value": "", "type": "text" }]	Access Denied Code : 403 Forbidden

To verify when invalid RequestID is pass in header	[
	{
	"key": "REQUEST-ID",
	"value": "*{{$guid}}*zxzzxs",
	"type": "text"
	}]
		{
		"code": "ABDM-1030: ",
		"message": "Invalid requ est ID"
		}
		
		Code: 400Bad Request

When Timestamp is Blank, null or empty in header.	[{ "key": "TIMESTAMP", "value": "", "type": "text"	Access Denied Code : 403 Forbidden

	}]	

When invalid Timestamp is pass in header	[
	{
	"key": "TIMESTAMP",
	"value": "{{$isoTimestamp}}jhgftytgtyu",
	"type": "text"
	}]
		{
		"code": "ABDM-1016: ",
		"message": "Invalid Time stamp"
		}
		
		Code - 400Bad Request

		Access Denied Code : 403 Forbidden
When X-CM-ID is Invalid, Blank, null or empty in header.	[{ "key": "X-CM-ID", "value": "sbxdvdfvdf",	Access Denied Code : 403 Forbidden
	"type": "text"	
	}	
	]	

When X-HIP-ID is empty or Invalid in header.	[
	{
	"key": " X-HIP-ID",
	"value": "",
	"type": "text"
	}
		Access Denied
		Code : 403 Forbidden

	]	

When given XHIP-ID does not exist.		{ "code": "ABDM-1035: ", "message": "Invalid HIP ID" }

Response Body:

Response
Code : 202 Accepted

Call back HIU

All the HIUs who are subscribed will be notified about the linkage of care contexts.

4.3.7 Call back API for notify care context update

This is a callback API triggered by HIE-CM to notify HIP/HRP about care context update response.

URL: {callbackURL}/api/v3/links/context/on-notify **Request:**

POST **Header Parameters:**

Property Name	Example Value	Required	Description
Authorization	eyJhbGciOiJSUzUxMiJ9. eyJzdWIiOiJ2YXNhbnRoYWt1bWFyLmtlc2F2YW5Ac2J4IiwiY2xpZW50SWQiOiJzYngiLCJzeXN0ZW0iOiJBQkhBLUEiLCJyZXF1ZXN0ZXJJZCI6IlBIUi1XRUIiLCJwaHJNb2JpbGUiOm51bGwsImV4cCI6MTY2NzI5ODExNSwiaWF0IjoxNjY3MjkwOTE1LCJwaHJBZGRyZXNzIjoidmFzYW50aGFrdW1hci5rZXNhdmFuQHNieCIsInR4bklkIjoiYjEwMGM4ZDMtNTE1ZC00YWFiLTg1OWQtYzNlMTUwOTE3ZGY1In0	Yes	JWT Access token which was issued by ABDM session API after successful validation of client id and secret
REQUEST-ID	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	Unique UUID for tracking the endto-end request transaction
TIMESTAMP	2023 -03-09T07:07:41.793Z	Yes	The actual time when the request was initiated, ISO Date time format represents the date and time

X-HIP-ID	IN2810014366		Identifier of the health information provider to which the request was intended

Body Parameters:

Property Name	Example Value	Required	Description
requestId	18235d89-cb13-479dad717a57d5f669a8	Yes	Unique UUID for tracking the end-toend request transaction
timestamp	2023 -03-09T07:07:41.793Z	Yes	The actual UTC time when the request was initiated, ISO Date time format represents the date and time

error	"error": {
	"code": "ABDM-1024",
	"message": "Dependent service unavailable"
	}
		No	The error code and message if the notify request is failed.

response	“response“: {
	“requestId”: “18235d89-cb13-479d-ad71-7a57d5f6656a”
	}
		Yes	requestId from the /api/hiecm/hip/v3/link/context/notify API call

acknowledgement	" acknowledgement": {
	“status": “SUCCESS"
	}
		Yes	Status of the /api/hiecm/hip/v3/link/context/notify API call.

Request Body:

```
{
  "requestId": "743ec386-670f-43a8-a3ed-44aa30fb15fb",
  "timestamp": "2024-05-09T10:34:00.387Z",
  "acknowledgement": {
    "status": "SUCCESS"
  },
  "response": {
    "requestId": "6f0b4665-a915-4c92-aa36-65afb4a2cd71"
  }
}
```


Response Body:

Response
Code : 202 Accepted

POST	http://webhook.site/b799c0b8-4e75-4545-8eb2-d8c2d5f0c9f6/api/v3/links/context/on-notify
Host	14.143.232.140 Whois Shodan Netify Censys VirusTotal
Date	08/09/2024 8:07:37 PM (a few seconds ago)
Size	104 bytes
Time	0.000 sec
ID	ea1357aa-ce0c-44a1-b220-4627b9d2fedb
Note	Add Note

x-b3-sampled	0
x-b3-spanid	980c6126ab239ef8
x-b3-traceid	2222e6d288c751f3980c6126ab239ef8
x-envoy-attempt-count	1
x-envoy-peer-metadata-id	sidecar~10.233.109.220~hiecm-hip-app-5d87bb9b9d-tpgls.abdm2...
x-envoy-peer-metadata	ChoKCkNMVVNURVJfSUQSDBoKS3ViZXJuZXRlcwogCgxJTlNUQU5DRV9JUFM...
x-request-id	448dcdc8-91fd-4cb0-96bb-f17edfafe24b
content-length	104
content-type	application/json
x-hip-id	Mohan_HIP
timestamp	2024-08-09T14:37:36.888Z
request-id	057bc724-d47e-4054-a8ef-1680d75b110a
authorization	Bearer eyJhbGciOiJSUzI1NiIsInR5cCIgOiAiSldUIiwia2lkIiA6ICJB...
accept	*/*
user-agent	ReactorNetty/1.0.24
accept-encoding	gzip
host	webhook.site

Query strings

(empty)

Form values

(empty)

Raw Content Format JSON Word-Wrap Copy


```
{
  "acknowledgement": {
    "status": "SUCCESS"
  },
  "response": {
    "requestId": "001b9459-630a-448f-bab4-3e8cc7621edd"
```


4.3.8 SMS Notification to patients

This API will be invoked by HIP to trigger a SMS notification to the patient mobile number when health record is available to fetch.

URL: /api/hiecm/hip/v3/link/patient/links/sms/notify2

Request: POST

Header Parameters:

Property Name	Example Value	Required	Description
Authorization	eyJhbGciOiJSUzUxMiJ9. eyJzdWIiOiJ2YXNhbnRoYWt1bWFyLmtlc2F2YW5Ac2J4IiwiY2xpZW50SWQiOiJzYngiLCJzeXN0ZW0iOiJBQkhBLUEiLCJyZXF1ZXN0ZXJJZCI6IlBIUi1XRUIiLCJwaHJNb2JpbGUiOm51bGwsImV4cCI6MTY2NzI5ODExNSwiaWF0IjoxNjY3MjkwOTE1LCJwaHJBZGRyZXNzIjoidmFzYW50aGFrdW1hci5rZXNhdmFuQHNieCIsInR4bklkIjoiYjEwMGM4ZDMtNTE1ZC00YWFiLTg1OWQtYzNlMTUwOTE3ZGY1In0	Yes	JWT Access token which was issued by ABDM session API after successful validation of client id and secret
REQUEST-ID	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	Unique UUID for tracking the endtoend request transaction
TIMESTAMP	2023 -03-09T07:07:41.793Z	Yes	The actual time when the request was initiated, ISO Date time format represents the date and time
X-CM-ID	sbx	Yes	Suffix of the consent manager to which the request was intended

Body Parameters:

Property Name	Example Value	Required	Description
requestId	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	The id will be unique value to identify each notification requests.
phoneNo	9876543210	Yes	Mobile number of the patient.

hip	"hip": {
	"name": "HIP Name",
	"id": "TestClinicHIP"
	}
		yes	Identifier and name of the health information provider.

Request Body:

Request Body:


```
{
 "requestId": "743ec386-670f-43a8-a3ed-44aa30fb15fb",
 "timestamp": "2024-05-09T10:34:00.387Z",
 "notification": {
  "phoneNo": "986543210",
  "hip": {
   "id": "ABDM_HIP",
   "name": "ABC Hospital"
  }
 }  }
```


Error scenarios:

Scenarios	Headers/Body	Message
To verify when Request ID is Blank, null or	[{ "key": "REQUEST-ID",	Access Denied Code : 403 Forbidden
empty in header	"value": "", "type": "text" }]	

To verify when invalid RequestID is pass in header	[
	{
	"key": "REQUEST-ID",
	"value": "{{$guid}}zxzzxs",
	"type": "text"
	}]
		{
		"code": "ABDM-1030: ",
		"message": "Invalid requ est ID"
		}
		
		Code: 400Bad Request

When Timestamp is Blank, null or empty in header.	[{ "key": "TIMESTAMP", "value": "", "type": "text" }]	Access Denied Code : 403 Forbidden

When invalid Timestamp is pass in header	[
	{
	"key": "TIMESTAMP",
	"value": "{{$isoTimestamp}}jhgftytgtyu",
	"type": "text"
	}]
		{
		"code": "ABDM-1016: ",
		"message": "Invalid Time stamp"
		}
		
		Code - 400Bad Request

		Access Denied Code : 403 Forbidden

When X-CM-ID is Invalid, Blank, null or empty in header.	[
	{
	"key": "X-CM-ID",
	"value": "sbxdvdfvdf",
	"type": "text"
	}
	]
		Access Denied
		Code : 403 Forbidden

When given HIP id does not exist.		{ "code": "ABDM-1035: ", "message": "Invalid HIP ID" }

Response Body:

Response
Code : 202 Accepted

4.3.9 Callback API for SMS Notification to patients

This is a callback API triggered by HIE-CM to notify HIP/HRP about SMS notification response. **URL:** {callbackURL}/api/v3/patients/sms/on-notify

Request: POST **Header**

Parameters:

Property Name	Example Value	Required	Description
Authorization	eyJhbGciOiJSUzUxMiJ9. eyJzdWIiOiJ2YXNhbnRoYWt1bWFyLmtlc2F2YW5Ac2J4IiwiY2xpZW50SWQiOiJzYngiLCJzeXN0ZW0iOiJBQkhBLUEiLCJyZXF1ZXN0ZXJJZCI6IlBIUi1XRUIiLCJwaHJNb2JpbGUiOm51bGwsImV4cCI6MTY2NzI5ODExNSwiaWF0IjoxNjY3MjkwOTE1LCJwaHJBZGRyZXNzIjoidmFzYW50aGFrdW1hci5rZXNhdmFuQHNieCIsInR4bklkIjoiYjEwMGM4ZDMtNTE1ZC00YWFiLTg1OWQtYzNlMTUwOTE3ZGY1In0	Yes	JWT Access token which was issued by ABDM session API after successful validation of client id and secret
REQUEST-ID	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	Unique UUID for tracking the endto-end request transaction
TIMESTAMP	2023 -03-09T07:07:41.793Z	Yes	The actual time when the request was initiated, ISO Date time format represents the date and time
X-HIP-ID	IN2810014366	Yes	Identifier of the health information provider to which the request was intended

Body Parameters:

Property Name	Example Value	Required	Description

requestId	18235d89-cb13-479dad717a57d5f669a8	Yes	Unique UUID for tracking the end-to-end request transaction
timestamp	2023 -03-09T07:07:41.793Z	Yes	The actual UTC time when the request was initiated, ISO Date time format represents the date and time
status	“status": “SUCCESS"	Yes	Status of the /hiecm/api/v3/link/patient/links/sms/notify2 API call.

error	"error": {
	"code": "ABDM-1024",
	"message": "Dependent service unavailable"
	}
		No	The error code and message if the notify request is failed.

resp	“resp“: {
	“requestId”: “18235d89cb13-479d-ad717a57d5f6656a”
	}
		Yes	requestId from the /hiecm/api/v3/link/patient/links/sms/notify2 API call.

Request Body:

Request Body:


```
{
 "requestId": "743ec386-670f-43a8-a3ed-44aa30fb15fb",
 "timestamp": "2024-05-09T10:34:00.387Z",
 "status": "SUCCESS",
 "error": {
  "code": "ABDM-1024",
  "message": "Dependent service unavailable"
 },
 "resp": {
  "requestId": "6f0b4665-a915-4c92-aa36-65afb4a2cd71"
 }  }
```

Response Body:

Response
Code : 202 Accepted

POST http://webhook.site/b799c0b8-4e75-4545-8eb2-d8c2d5f0c9f6/api/v3/patients/sms/on-notify

Host	14.143.232.140 Whois Shodan Netify Censys VirusTotal
Date	08/09/2024 8:10:35 PM (a few seconds ago)
Size	132 bytes
Time	0.000 sec
ID	62154ffb-e160-48ee-92f2-c0dbff446500
Note	Add Note

x-b3-sampled	0
x-b3-spanid	cd1dded72f6d842a
x-b3-traceid	1508002edbb42691cd1dded72f6d842a
x-envoy-attempt-count	1
x-envoy-peer-metadata-id	sidecar~10.233.109.220~hiecm-hip-app-5d87bb9b9d-tpgls.abdm2...
x-envoy-peer-metadata	ChoKCkNMVVNURVJfSUQSDBoKS3ViZXJuZXRlcwogCgxJTlNUQU5DRV9JUFM...
x-request-id	c20d51d9-dfed-454d-a9ed-0719a7c51430
content-length	132
content-type	application/json
x-hip-id	Mohan_HIP
timestamp	2024-08-09T14:40:35.565Z
request-id	276fef41-9867-46de-bac5-bb0c45d9dcf0
authorization	Bearer eyJhbGciOiJSUzI1NiIsInR5cCIgOiAiSldUIiwia2lkIiA6ICJB...
accept	*/*
user-agent	ReactorNetty/1.0.24
accept-encoding	gzip
host	webhook.site

Query strings
(empty)

Form values
(empty)

Raw Content
Format JSON Word-Wrap Copy

```
{
  "requestId": null,
  "timestamp": null,
  "status": "ACKNOWLEDGED",
  "error": null,
```

8c2d5f0c9f6/api/v3/patients/sms/on-notify

5.User Initiated Linking

5.1 Overview

User-initiated linking is the process in which Users/Patient search for their health records from ABDM-compliant health facilities. Once health records are found, users can link their health records with their ABHA address.

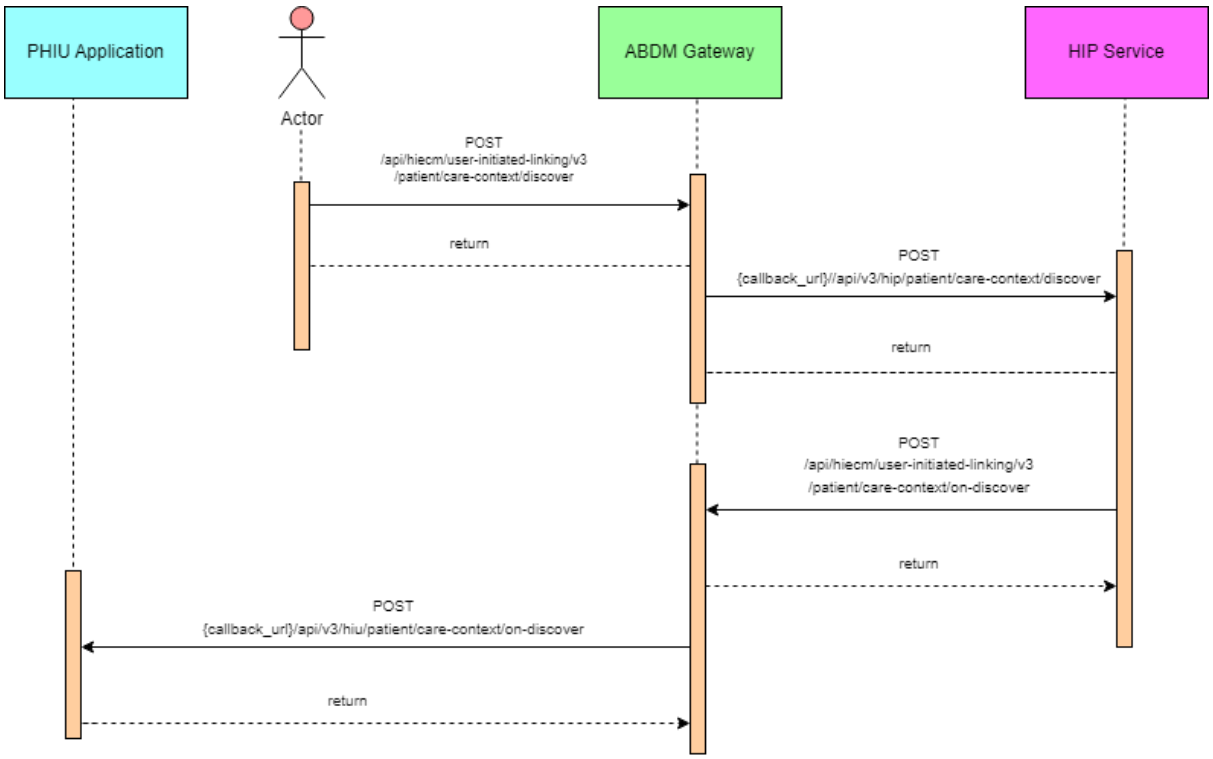
The user must have a Patient HIU (PHR App in the current scenario) via which the user can start the discovery of health records and link the health records for future reference.

Following are the steps involved in User initiated linking

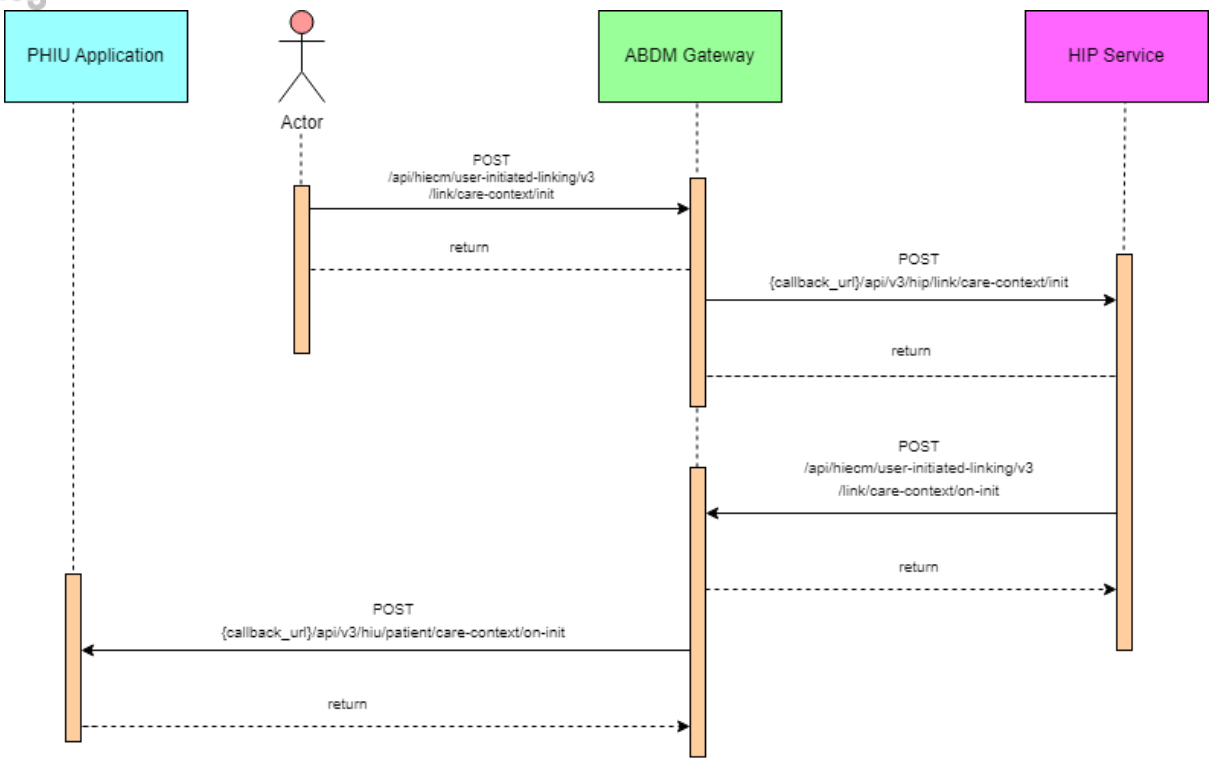
- User searches for a health facility that they have visited in the past.
- The health facility must be a HIP (part of the facility registry) and linked with an HRP for discovery to be supported

- User makes a discovery request via Patient HIU (PHR App) – i.e., requests the HIP to find any health records in their name
- User shares his/her details through their PHR address. Details shared- Name, Date of birth, Gender, verified mobile no. with the HIP / HRP
- The HRP/HIP is expected to search its database for any records that match this patient.
- If there is a match, the HRP/HIP returns with the Care Context details for the records available
- If there is no match, the HRP/HIP returns an error
- The User can now request to link the records (care contexts) with their PHR address
- The HRP/HIP will perform the validation by sending an OTP to the registered mobile.
- If the authentication succeeds, the care contexts are linked to the PHR address

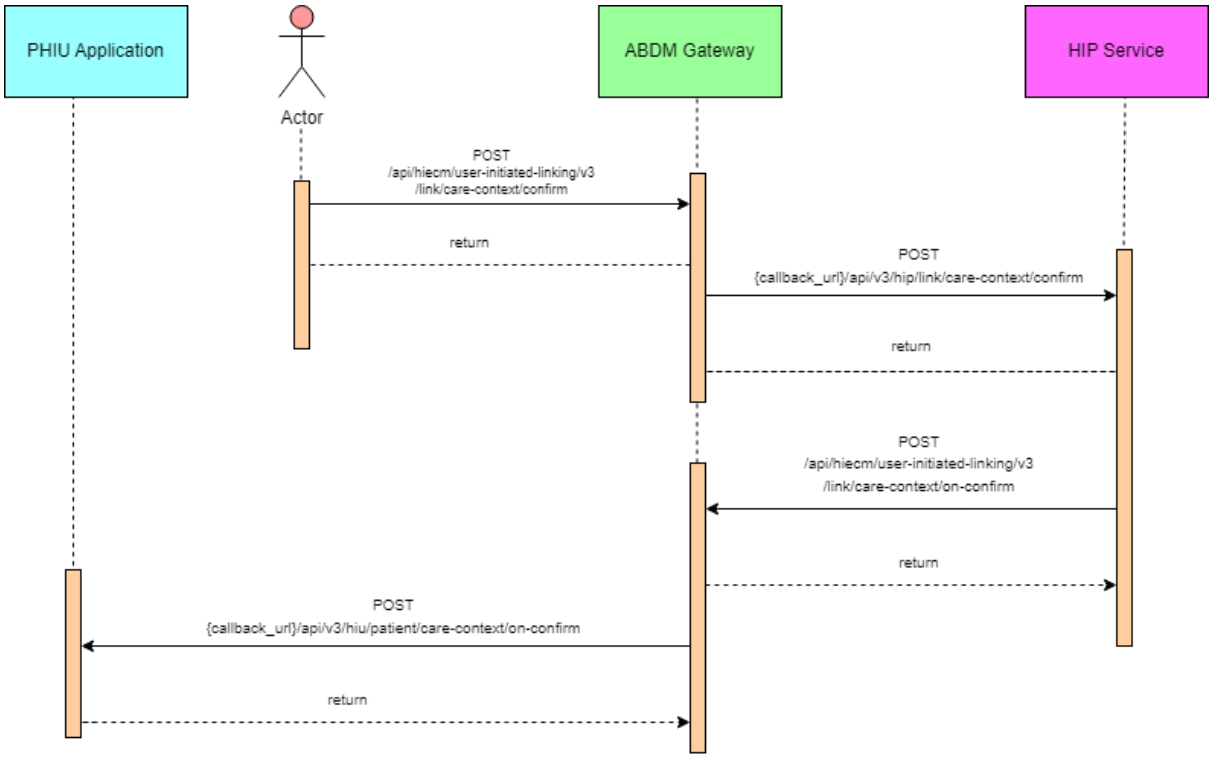
5.2 Sequence Diagram



ABDM - HIE-CM - Discover Sequence Diagram



ABDM - HIE-CM - Link Init Sequence Diagram



ABDM - HIE-CM - Link Confirm Sequence Diagram

5.3List of APIs

5.3.1 Patient Health record discovery

This API will be invoked by the patient/user from the PHR application to HIECM to discover his/her health records.

URL: /api/hiecm/user-initiated-linking/v3/patient/care-context/discover **Request:** POST **Header Parameters:**

Property Name	Example Value	Required	Description
Authorization	eyJhbGciOiJSUzUxMiJ9. eyJzdWIiOiJ2YXNhbnRoYWt1bWFyLmtlc2F2YW5Ac2J4IiwiY2xpZW50SWQiOiJzYngiLCJzeXN0ZW0iOiJBQkhBLUEiLCJyZXF1ZXN0ZXJJZCI6IlBIUi1XRUIiLCJwaHJNb2JpbGUiOm51bGwsImV4cCI6MTY2NzI5ODExNSwiaWF0IjoxNjY3MjkwOTE1LCJwaHJBZGRyZXNzIjoidmFzYW50aGFrdW1hci5rZXNhdmFuQHNieCIsInR4bklkIjoiYjEwMGM4ZDMtNTE1ZC00YWFiLTg1OWQtYzNlMTUwOTE3ZGY1In0	Yes	JWT Access token which was issued by ABDM session API after successful validation of client id and secret
REQUEST-ID	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	Unique UUID for tracking the end-toend request transaction
TIMESTAMP	2023 -03-09T07:07:41.793Z	Yes	The actual time when the request was initiated, ISO Date time format represents the date and time
X-AUTH-TOKEN	eyJhbGciOiJSUzUxMiJ9.eyJzdWIiOiJ2YXNhbnRoYWt1bWFyLmtlc2F2		JWT Authentication token which was issued by ABDM after successful validation of username and password
X-CM-ID	sbx	Yes	Suffix of the consent manager to which the request was intended

X-HIU-ID	HIU_ID	Yes	Identifier of the health information user to which the request was intended

Body Parameters:

Property Name	Example Value	Required	Description
hipId	ABDM_HIP	Yes	Identifier of the health information provider to which the request was intended
unverifiedIdentifiers	{ "type": "ABHA_ADDRESS", "value": "shaik.XXXX@sbx" }	Yes	Identifiers using which the HIP will search the patient information in their records.

Request Body:

Request Body

```
{
  "hipId": "ABDM_HIP",
  "unverifiedIdentifiers": [
    {
      "type": "ABHA_ADDRESS",
"value": "shaik.XXXX@sbx"
    }  ]
}
```

Response Body:

Response

Code: 202 Accepted

Error scenarios:

Scenarios	Headers/Body	Message
To verify when Request ID is Blank, null or empty in header	[{ "key": "REQUEST-ID", "value": "", "type": "text" }]	Access Denied Code : 403 Forbidden

To verify when invalid RequestID is pass in header	[
	{
	"key": "REQUEST-ID",
	"value": "{{$guid}}zxzzxs",
	"type": "text"
	}]
		{
		"code": "ABDM-1030: ",
		"message": "Invalid reque st ID"
		}
		
		Code: 400Bad Request

When Timestamp is Blank, null or empty in header.	[{ "key": "TIMESTAMP", "value": "", "type": "text" }]	Access Denied Code : 403 Forbidden

When invalid Timestamp is pass in header	[
	{
	"key": "TIMESTAMP",
	"value": "{{$isoTimestamp}}jhgftytgtyu",
	"type": "text"
	}]
		{
		"code": "ABDM-1016: ",
		"message": "Invalid Times tamp"
		}
		
		Code - 400Bad Request

When X-HIP-ID is Blank, null or empty in header.	[{ "key": "X-HIP-ID", "value": "", "type": "text" }]	Access Denied Code : 403 Forbidden

When X-CM-ID is Invalid, Blank, null or empty in header.	[{ "key": "X-CM-ID", "value": "sbxdvdfvdf",	Access Denied Code : 403 Forbidden
	"type": "text" }]	

When X-Auth-TOKEN is Invalid in header.	[
	{
	"key": "X-LINK-TOKEN",
	"value": "hghhjjkhjkbkjbjkbkjbnkjbk",
	"type": "text"
	}]
		{
		""code"": ""ABDM-1066: "",
		""message"": ""Invalid JWT token""
		}
		
		Code - 400Bad Request"

Verify when HIP is null, blank or invalid in the body	{
	"hip": {
	"id": ""
	},
	"unverifiedIdentifiers": [
	{
	"type": "MR",
	"value": "69128688344"
	}
	] }
		{
		"code": "ABDM-9999: ",
		"message": "HIP ID is mandatory"
		}

When X-HIU-ID and the hipId in the payload is same.		{
		""code"": ""ABDM-1031
		: "",
		""message"": HIP and HIU cannot be same""
		}
		
		Code - 400Bad Request"

When duplicate request payload is sent.		{
		"code": "ABDM-1103: ",
		""message"": “Duplicate Discovery request“
		}
		
		Code - 400Bad Request"

5.3.2 HIE-CM callback to HIP - Discovery

This is a callback API invoked by HIE-CM to let the HIP know about the discovery request raised by the patient using HIE-CM's discovery.

URL: {callback_url}/api/v3/hip/patient/care-context/discover

Request: POST

Header Parameters:

Property Name	Example Value	Required	Description
REQUEST-ID	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	Unique UUID for tracking the endto-end request transaction
TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	The actual time when the request was initiated, ISO Date time format represents the date and time
X-HIP-ID	HIP_ID	Yes	Identifier of the health information provided to which the request was intended

Body Parameters:

Property Name	Example Value	Required	Description
transactionId	03813343-ebc5-4c9f-89b6-6e9a75fd7c92	Yes	Transaction Id is required to identify the unique transaction for user-initiated care context linking. This chains all the steps to link care contexts. Transaction Id will be returned after a successful discovery request to HIP by the patient.
patient	-	Yes	A list of records of the patient that were found as a result of the identifiers that the patient had provided.
Id	9162484106XXXX@sbx	Yes	ABHA Address of the patient
verifiedIdentifiers	-	Yes	Identification details of the patient like the Mobile number and Abha Number
unverifiedIdentifiers	-	Yes	The identification details provided by the patient in Discover API body
Name	User 1	Yes	Name of the patient
Gender	M	Yes	Gender of the user
yearOfBirth	XXXX	Yes	Year of Birth of the patient

Request Body:

```
{
  "transactionId": "03813343-ebc5-4c9f-89b6-6e9a75fd7c92",
  "patient": {
    "id": "9167@sbx",
    "verifiedIdentifiers": [
      {
        "type": "MOBILE",
        "value": "987654XXXX"
      },
      {
        "type": "ABHA_NUMBER",
        "value": "916248419XXXX"
      }
    ],
    "unverifiedIdentifiers": [
      {
        "type": "MR",
        "value": "987654XXXX"
      }
    ],
    "name": "User 1",
    "gender": "M",
    "yearOfBirth": XXXX
  }  }
```

Response

Code: 200 OK

POST	http://webhook.site/b799c0b8-4e75-4545-8eb2-d8c2d5f0c9f6/api/v3/hip/pati...
Host	14.143.232.140 Whois Shodan Netify Censys VirusTotal
Date	08/09/2024 11:07:20 PM (5 minutes ago)
Size	368 bytes
Time	0.000 sec
ID	7d7e7e45-3b97-40bc-ac6d-e40f1a44614f
Note	Add Note

x-b3-sampled	0
x-b3-parentspanid	7dec634a3b689615
x-b3-spanid	2684cf16c1ed1bf6
x-b3-traceid	d6326875836e9cf3b322250b5efbe360
x-envoy-attempt-count	1
x-envoy-peer-metadata-id	sidecar~10.233.93.70~abdm-hiecm-user-initiated-linking-api-...
x-envoy-peer-metadata	ChoKCkNMVVNURVJfSUQSDBoKS3ViZXJuZXRlcwoeCgxJTlNUQUSDRV9JUFM...
x-request-id	d3e25fe5-198f-4390-a4f4-99fadaba899e
content-length	368
content-type	application/json
x-hip-id	Mohan_HIP
authorization	Bearer eyJhbGciOiJSUzI1NiIsInR5cCIgOiAiSldUIiwia2lkIiA6ICJB...
timestamp	2024-08-09T17:37:20.621Z
request-id	4a1bfc6f-5f1a-4252-8afc-9d32539637c0
accept	*/*
user-agent	ReactorNetty/1.0.24
host	webhook.site

Query strings

(empty)

Form values

(empty)

Raw Content ☑ Format JSON ☑ Word-Wrap Copy


```
{
  "transactionId": "a1c8f54e-4eab-4369-9cd9-a00b8085724f",
  "patient": {
    "id": "vignesh_1992@sbx",
    "verifiedIdentifiers": [
```


5.3.3 HMIS/LMIS response on health record discover

This API will be invoked by the **HMIS/LIMS application** for sharing the response of discover request.

URL: /api/hiecm/user-initiated-linking/v3/patient/care-context/on-discover
Request: POST

Header Parameters:

Property Name	Example Value	Required	Description
Authorization	eyJhbGciOiJSUzUxMiJ9. eyJzdWIiOiJ2YXNhbnRoY Wt1bWFyLmtlc2F2YW5Ac2J4IiwiY2xpZW50SWQiOi JzYngiLCJzeXN0ZW0iOiJBQkhBLUEiLCJyZXF1ZXN0Z XJJZCI6IlBIUi1XRUIiLCJwaHJNb2JpbGUiOm51bGw sImV4cCI6MTY2NzI5ODExNSwiaWF0IjoxNjY3Mjkw OTE1LCJwaHJBZGRyZXNzIjoidmFzYW50aGFrdW1h ci5rZXNhdmFuQHNieCIsInR4bklkIjoiYjEwMGM4ZD MtNTE1ZC00YWFiLTg1OWQtYzNlMTUwOTE3ZGY1In0	Yes	JWT Access token which was issued by ABDM session API after successful validation of client id and secret
REQUEST-ID	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	Unique UUID for tracking the end-toend request transaction

TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	The actual time when the request was initiated, ISO Date time format represents the date and time
X-CM-ID	sbx	Yes	Suffix of the consent manager to which the request was intended

Body Parameters:

Property Name	Example Value	Required	Description
transactionId	f901b782-bfdf-4224-9f8d-da2cadc20c0d	Yes	Transaction Id is required to identify the unique transaction for user-initiated care context linking. This chains all the steps to link care contexts. Transaction Id will be returned after a successful discovery request to HIP by the patient.
patient	-	Optional	A list of records of the patient that were found as a result of the identifiers that the patient had provided.
referenceNumber	example01	Yes	Reference number of the patient details
careContexts	-	Yes	List of care contexts linked at the HIP end for the identified patient.
hiType	PRESCRIPTION	Yes	HiType of the patient details
count	1	Yes	The count of care contexts that are found for the patient in scope
requestId	2c17a46b-d28e-4a60a7cffe77163ae93c	Yes	Request ID sent by the patient in the discovery API call. This request ID will be used to match the flow of linking care contexts for a patient

Error	{
	"code": "ABDM-1010",
	"message": "Patient not found"
	}
		Optional	The error should be included if no details are found for the patient at HIP for the given patient identifiers. The error should contain ABDM standard code and message to indicate the reason properly.

matchedBy	MR	Yes	How the records are matched

Request Body

Success Scenario:


```
{
  "transactionId": "66446ece-396b-4f22-a1a6-756196fdffc9",
  "patient": [
    {
      "referenceNumber": "example01",
      "display": "abcd-display",
      "careContexts": [
        {
          "referenceNumber": "abcd",
          "display": "123-display"
        }
      ],
      "hiType": "PRESCRIPTION",
      "count": 1
    }
  ],
  "matchedBy": [
    "MR"
  ],
  "response": {
    "requestId": "2c17a46b-d28e-4a60-a7cf-fe77163ae93c"
  }  }
```


Failure Scenario:


```
{
  "transactionId": "66446ece-396b-4f22-a1a6-756196fdffc9",
  "error": {
    "code": "ABDM-1010",
    "message": "Patient not found"
  },
  "response": {
    "requestId": "2c17a46b-d28e-4a60-a7cf-fe77163ae93c"
  }  }
```

Response:

Response
Code: 202 Accepted

Error Scenarios:

Scenarios	Headers/Body	Message
To verify when Request ID is Blank, null or empty in header	[{ "key": "REQUEST-ID", "value": "", "type": "text" }]	Access Denied Code : 403 Forbidden

To verify when invalid Request-ID is pass in header	[
	{
	"key": "REQUEST-ID",
	"value": "*{{$guid}}*zxzzxs",
	"type": "text"
	}]
		{
		"code": "ABDM-1030: ",
		"message": "Invalid request I D"
		}
		Code: 400Bad Request

When Timestamp is Blank, null or empty in header.	[{ "key": "TIMESTAMP", "value": "", "type": "text" }]	Access Denied Code : 403 Forbidden

When invalid Timestamp is pass in header	[
	{
	"key": "TIMESTAMP",
	"value": "*{{$isoTimestamp}*
	*}*jhgftytgtyu",
	"type": "text"
	}]
		{
		"code": "ABDM-1016: ",
		"message": "Invalid Timesta mp"
		}
		Code - 400Bad Request

When X-CM-ID is Invalid, Blank, null or empty in header.	[{ "key": "X-CM-ID", "value": "sbxdvdfvdf", "type": "text" }]	Access Denied Code : 403 Forbidden

Verify when transaction id is invalid, null or blank	"transactionId": "776a9becab12-42bc-9ae9c63b1ae5bce2",
	"patient": [
	{
	"referenceNumber": "ST1",
	"display": "",
	"careContexts": [
	{
	"referenceNumber": "S T2",
	"display": "ST2"
	}
	],
	"hiType": "PRESCRIPTION",
	"count": 1
	}
	],
	"matchedBy": [
	"MR"
	],
	"response": {
	"requestId": "6f37ddf8-62df-4 afe-bc25-599789c90558"
		"code": "ABDM-9999: ",
		"message": "Invalid Transactio n ID / Transaction expired."

Verify message when HI types is passed as incorrect	"transactionId": "776a9becab12-42bc-9ae9c63b1ae5bce2",
	"patient": [
	{
	"referenceNumber": "ST1",
	"display": "",
	"careContexts": [
	{
	"referenceNumber": "S T2",
	"display": "ST2"
	}
	],
	"hiType": "PRESCRIPTION",
	"count": 1
	}
	],
	"matchedBy": [
	"MR"
	],
	"response": {
	"requestId": "6f37ddf8-62df4afebc25-599789c90558"
		{
		"code": "ABDM-9999: ",
		"message": "Invalid HIType, it must be in PRESCRIPTION, DIAGNOSTI CREPORT, OPCONSULTATION, DISCHARGES UMMARY, IMMUNIZATIONRECORD, HEALTH DOCUMENTRECORD, WELLNESSR ECORD"
		}
		400 Bad Request

Verify message when careconexts is blank, null	"transactionId": "776a9becab12-42bc-9ae9c63b1ae5bce2",
	"patient": [
	{
	"referenceNumber": "ST1",
	"display": "",
	"careContexts": [
	{
	"referenceNumber": "S T2",
	"display": "ST2"
	}
	],
	"hiType": "PRESCRIPTION",
	"count": 1
	}
	],
	"matchedBy": [
	"MR"
	],
	"response": {
	"requestId": "6f37ddf8-62df-4 afe-bc25-599789c90558"
		{
		"code": "ABDM-9999: ",
		"message": "Invalid Care Contexts count, must range be tween 1 to 20"
		}

Verify if the requestId is a valid id from the discovery request.		{
		"code": "ABDM-1015: ",
		"message": "Invalid Response"
		}

Verify if it is a duplicate request		{
		"code": "ABDM-1106: ",
		"message": "Duplicate On discovery request"
		}
		Code: 400Bad Request

Verify if the count and the no of care contexts matches in the payload.	"transactionId": "776a9becab12-42bc-9ae9c63b1ae5bce2",
	"patient": [
	{
	"referenceNumber": "ST1",
	"display": "",
	"careContexts": [
	{
	"referenceNumber": "S T2",
	"display": "ST2"
	}
	],
	"hiType": "PRESCRIPTION",
	"count": 2
	}
	],
	"matchedBy": [
	"MR"
	],
	"response": {
	"requestId": "6f37ddf8-62df4afebc25-599789c90558"
		{
		"code": "ABDM-1059: ",
		"message": "Invalid Care Contexts count"
		}

5.3.4 HIE-CM callback on Health record discover

This API will be invoked by the **HIE-CM** for sharing the response of health record discover.

URL: {callback_url}/api/v3/hiu/patient/care-context/on-discover **Request:** POST

Header Parameters:

Property Name	Example Value	Required	Description
REQUEST-ID	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	Unique UUID for tracking the endto-end request transaction
TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	The actual time when the request was initiated, ISO Date time format represents the date and time

X-CM-ID	sbx	Yes	Identifier of the health information user to which the request was intended

Body Parameters:

Property Name	Example Value	Required	Description
transactionId	f901b782bfdf4224-9f8dda2cadc20c0d	Yes	Transaction Id is required to identify the unique transaction for user-initiated care context linking. This chains all the steps to link care contexts. Transaction Id will be returned after a successful discovery request to HIP by the patient.
patient	-	Yes	A list of records of the patient that were found as a result of the identifiers that the patient had provided.
referenceNumber	example01	Yes	Reference number of the patient details
careContexts	-	Yes	List of care contexts linked at the HIP end for the identified patient.
hiType	PRESCRIPTION	Yes	HiType of the patient details
Count	1	Yes	The count of care contexts that are found for the patient in scope
createdAt	2023-06-13T08:05:43.030Z	Yes	The time at which the on discover API is invoked
requestId	d89525a23a3f-4d39-98b5-477afb1865f6	Yes	Request ID sent by in on-discover API call. This request ID will be used to match the flow of linking care contexts for a patient

Request Body:

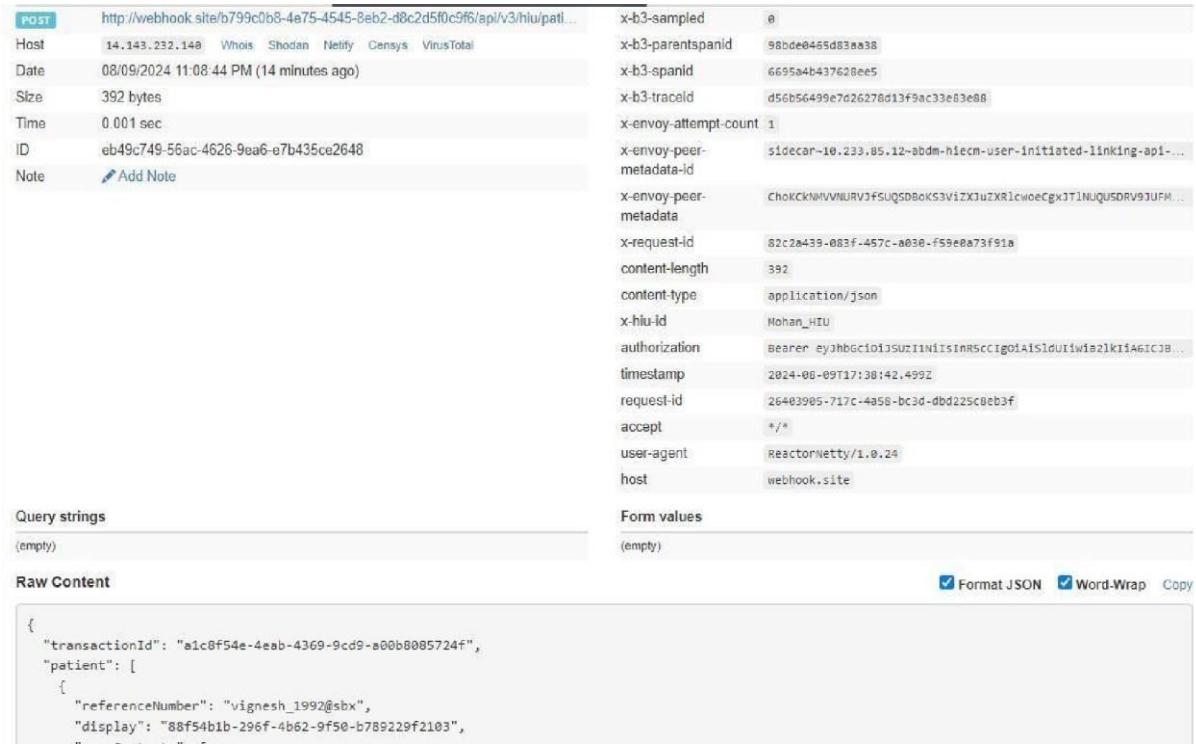
Request Body:


```
{
  "transactionId": "0d36501c-551a-4bb5-b247-eec4bb42984b",
  "patient": [
    {
      "referenceNumber": "example01",
      "display": "abcd-display",
      "careContexts": [
```

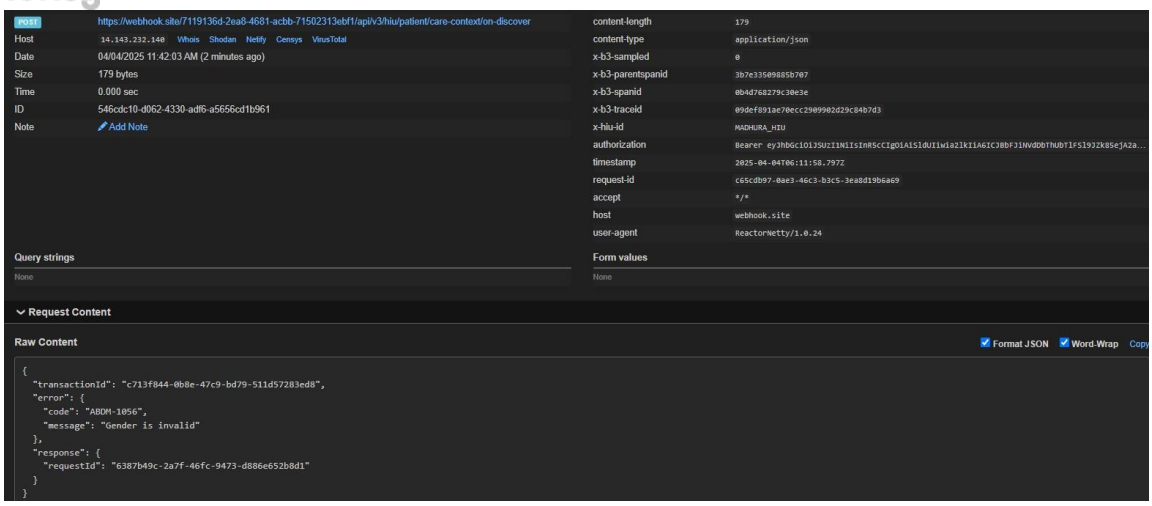
```
            {
              "referenceNumber": "abcd",
              "display": "123-display"
            }
          ],
          "hiType": "PRESCRIPTION",
          "count": 1
        }
      ],
      "createdAt": "2023-06-13T08:05:43.030Z",
      "response": {
        "requestId": "d89525a2-3a3f-4d39-98b5-477afb1865f6"
      }
    }
```


Response:

Response
Code: 200 OK



Error response:



5.3.5 Patient health record link init

This API will be invoked by the patient to link his/her health records.

URL: /api/hiecm/user-initiated-linking/v3/link/care-context/init

Request: POST

Header Parameters:

Property Name	Example Value	Required	Description
Authorization	eyJhbGciOiJSUzUxMiJ9. eyJzdWIiOiJ2YXNhbnRoYWt1bWFyLmtlc2F2YW5Ac2J4IiwiY2xpZW50SWQiOiJzYngiLCJzeXN0ZW0iOiJBQkhBLUEiLCJyZXF1ZXN0ZXJJZCI6IlBIUi1XRUIiLCJwaHJNb2JpbGUiOm51bGwsImV4cCI6MTY2NzI5ODExNSwiaWF0IjoxNjY3MjkwOTE1LCJwaHJBZGRyZXNzIjoidmFzYW50aGFrdW1hci5rZXNhdmFuQHNieCIsInR4bklkIjoiYjEwMGM4ZDMtNTE1ZC00YWFiLTg1OWQtYzNlMTUwOTE3ZGY1In0	Yes	JWT Access token which was issued by ABDM session API after successful validation of client id and secret
REQUEST-ID	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	Unique UUID for track the end-toend request transaction
TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	Actual time when request was initiated, ISO Date time format represents date and time

X-AUTHTOKEN	eyJhbGciOiJSUzUxMiJ9.eyJzdWIiOiJ2YXNhbnRoYWt1bWFyLmtlc2F2		JWT Authentication token which was issued by ABDM after successful validation of username and password
X-HIU-ID	HIU_ID	Yes	Identifier of the health information user by which the request was initiated
X-CM-ID	sbx	Yes	Suffix of the consent manager to which the request was intended

Body Parameters:

Property Name	Example Value	Required	Description
transactionId	f901b782bfdf4224-9f8dda2cadc20c0d	Yes	Transaction Id is required to identify the unique transaction for user-initiated care context linking. This chains all the steps to link care contexts. Transaction Id will be returned after successful discovery request to HIP by the patient.
abhaAddress	user_123@sbx	No	The abha address of the patient
patient	-	Yes	A list of records of the patient that were found as a result of the identifiers that the patient had provided.
referenceNumber	example01	Yes	Reference number of the patient details
careContexts	-	Yes	List of care contexts linked at the HIP end for the identified patient.
hiType	PRESCRIPTION	Yes	HiType of the patient details
Count	1	Yes	The count of care contexts that are found for the patient in scope

Request Body:

Request Body:

{
"transactionId": "66446ece-396b-4f22-a1a6-756196fdffc9",
"abhaAddress": "user_123@sbx",
"patient": [
{
"referenceNumber": "example01",
"careContexts": [
{
"referenceNumber": "123"
}
],
"hiType": "PRESCRIPTION",
"count": 1
}]
}

Response:

Response
Code : 202 Accepted

Error scenarios:

Scenarios	Headers/Body	Message

Verify when transaction id is invalid, null or blank	"transactionId": "",
	"error": {
	"code": "ABDM-1010",
	"message": "test"
	},
	"response": {
	"requestId": "926ca4adaef54937a26cc2b529464566"
	}
		"code": "ABDM-9999: ",
		"message" : "Invalid Transaction ID"

Verify message when count is incorrect	"transactionId": "776a9becab1242bc9ae9c63b1ae5bce2", "patient": [{ "referenceNumber": "Testing defect", "careContexts": [{ "referenceNumber": "1234", "display": "12" }], "hiType": "PRESCRIPTION", "count": 0 }	"{ "code": "ABDM-1059: ", "message": "Invalid Care Contexts count" }"
To verify when Request ID is Blank, null or empty in header	[{ "key": "REQUEST-ID", "value": "", "type": "text" }]	Access Denied Code : 403 Forbidden

To verify when invalid RequestID is pass in header	[
	{
	"key": "REQUEST-ID",
	"value": "{{$guid}}zxzzxs",
	"type": "text"
	}]
		{
		"code": "ABDM-1030: ",
		"message": "Invalid request ID"
		}
		Code: 400Bad Request

When Timestamp is Blank, null or empty in header.	[{ "key": "TIMESTAMP", "value": "", "type": "text" }]	Access Denied Code : 403 Forbidden

When invalid Timestamp is pass in header	[
	{
	"key": "TIMESTAMP",
	"value": "{{$isoTimestamp}}jhgftytgtyu",
	"type": "text"
	}]
		{
		"code": "ABDM-1016: ",
		"message": "Invalid Timestamp"
		}
		Code - 400Bad Request

When X-CM-ID is Invalid, Blank, null or empty in header.	[{ "key": "X-CM-ID", "value": "sbxdvdfvdf", "type": "text" }]	Access Denied Code : 403 Forbidden
When X-HIU-ID is Blank, null or empty in header.	[{ "key": "X-HIU-ID", "value": "", "type": "text" }]	Access Denied Code : 403 Forbidden

When XAUTHTOKEN is Invalid, Blank, null or empty in header.	[
	{
	"key": "X-CM-ID",
	"value": "sbxdvdfvdf",
	"type": "text"
	}]
		{
		"code": "ABDM-1065: ",
		"message": "Invalid X Auth token"
		}

When the careContexts is null or empty.	"transactionId": "776a9becab1242bc9ae9c63b1ae5bce2", "patient": [{ "referenceNumber": "Testing defect", "careContexts": [], "hiType": "PRESCRIPTION", "count": 0 }	{ "code": "ABDM-1057: ", "message": "Invalid Care Contexts" }
When link/init is called after discovery request expired.		{ "code": "ABDM-1086: ", "message": "Invalid Transaction ID / Transaction expired." }

5.3.6 HIE-CM callback on health record link init

This API will be invoked by the HIE-CM to initiate the linking of patient health records to HIP.

URL: {callback_url}/api/v3/hip/link/care-context/init **Request:** POST

Header Parameters:

Property Name	Example Value	Required	Description
REQUEST-ID	18235d89-cb13-479dad71-7a57d5f669a8	Yes	Unique UUID for tracking the end-to-end request transaction
TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	The actual time when the request was initiated, ISO Date time format represents the date and time
X-HIP-ID	IN2810014366	Yes	Identifier of the health information provider to which the request was intended

Authorization	eyJhbGciOiJSUzUxMiJ9.eyJzdWIiOiJ2YXNhbnRoYWt1bWFyLmtlc2F2YW5Ac2J4IiwiY2xpZW50SWQiOiJzYngiLCJzeXN0ZW0iOiJBQkhBLUEiLCJyZXF1ZXN0ZXJJZCI6IlBIUi1XRUIiLCJwaHJNb2JpbGUiOm51bGwsImV4cCI6MTY2NzI5ODExNSwiaWF0IjoxNjY3MjkwOTE1LCJwaHJBZGRyZXNzIjoidmFzYW50aGFrdW1hci5rZXNhdmFuQHNieCIsInR4bklkIjoiYjEwMGM4ZDMt	Yes	JWT Access token which was issued by ABDM session API after successful validation of client id and secret
	NTE1ZC00YWFiLTg1OWQtYzNlMTUwOTE3ZGY1In0		

Body Parameters:

Property Name	Example Value	Required	Description
transactionId	f901b782-bfdf-4224-9f8d-da2cadc20c0d	Yes	Transaction Id is required to identify the unique transaction for user-initiated care context linking. This chains all the steps to link care contexts. Transaction Id will be returned after a successful discovery request to HIP by the patient.
abhaAddress	9162484106XXXX@sbx		ABHA addresses which the linking of care contexts should be initiated by the HIP.
patient	-	Yes	A list of records of the patient that were found as a result of the identifiers that the patient had provided.
referenceNumber	example01	Yes	Reference number of the patient details
careContexts	-	Yes	List of care contexts linked at the HIP end for the identified patient.
hiType	PRESCRIPTION	Yes	HiType of the patient details

Count	1	Yes	The count of care contexts that are found for the patient in scope

Request Body:

Request Body:


```
{
  "transactionId": "5042908f-dac4-43dd-99b9-9b5bedad32ea",
  "abhaAddress": "9162484106XXXX@abdm",
  "patient": [
    {
      "referenceNumber": "example01",
      "careContexts": [
        {
          "referenceNumber": "123"
        }
      ],
      "hiType": "PRESCRIPTION",
      "count": 1
    }
  ]  }
```


Response:

Response
Code : 200 OK

POST http://webhook.site/b799c0b8-4e75-4545-8eb2-d8c2d5f0c9f6/api/v3/hip/link/care-context/init

Host	14.143.232.140 Whois Shodan Netify Censys VirusTotal
Date	08/09/2024 11:09:33 PM (13 minutes ago)
Size	250 bytes
Time	0.000 sec
ID	12efd017-251a-4428-b8ef-b70adc1ab7f5
Note	Add Note

x-b3-sampled	0
x-b3-parentspanid	a3712e6a1effccd6
x-b3-spanid	180c31b2d3e87931
x-b3-traceid	82df0e2208bd50e50f96f184f569d081
x-envoy-attempt-count	1
x-envoy-peer-metadata-id	sidecar~10.233.93.70~abdm-hiecm-user-initiated-linking-api-...
x-envoy-peer-metadata	ChoKCkNMVVNURVJfSUQSDBoKS3ViZXJuZXRlcwoeCgxJTlNUQU5DRV9JUFM...
x-request-id	a0c88eb3-d3df-4265-9630-2081765f546e
content-length	250
content-type	application/json
x-hip-id	Mohan_HIP
authorization	Bearer eyJhbGciOiJSUzI1NiIsInR5cCIgOiAiSldUIiwia2lkIiA6ICJB...
timestamp	2024-08-09T17:39:33.102Z
request-id	9b5fed18-0122-408d-b6c0-b3c5b873ef7a
accept	*/*
user-agent	ReactorNetty/1.0.24
host	webhook.site

Query strings

(empty)

Form values

(empty)

Raw Content

Format JSON Word-Wrap Copy


```
{
  "transactionId": "a1c8f54e-4eab-4369-9cd9-a00b8085724f",
  "abhaAddress": "vignesh_1992@sbx",
  "patient": [
    {
      "referenceNumber": "vignesh_1992@sbx",
```


Error Response : (Already linked care context)

Request Details & Headers

Permalink Raw content Copy as

POST https://webhook.site/7119136d-2ea8-4681-acbb-71502313ebf1/api/v3/hip/link/care-context/init

Host	14.143.232.140 Whois Shodan Netify Censys VirusTotal
Date	04/04/2025 11:40:08 AM (6 minutes ago)
Size	140 bytes
Time	0.000 sec
ID	b6b9b442-41c2-4eb8-8130-6db133a39281
Note	Add Note

content-length	140
content-type	application/json
x-b3-sampled	0
x-b3-parentspanid	906b6f4e9cd91524
x-b3-spanid	ba1aedcf33e1b43b
x-b3-traceid	c6785fc11683c1d487a12d88cfe79044
x-hip-id	MAYUR_HIP
authorization	Bearer eyJhbGciOiJSUzI1NiIsInR5cCIgOiAiSldUIiwia2lkIiA6ICJBbFJiNVdDbThUbTlFSl9JZk85ejA2aj...
timestamp	2025-04-04T06:10:08.213Z
request-id	2b9aca1a-5385-4878-a4a3-e49bc15d9373
accept	*/*
host	webhook.site
user-agent	ReactorNetty/1.0.24

Query strings

None

Form values

None

Request Content

Raw Content

Format JSON Word-Wrap Copy


```
{
  "transactionId": "d682f433-3745-4175-9ed5-b5a14487bbe2",
  "error": {
    "code": "ABDM-1056",
    "message": "This care contexts has been already linked"
  }
}
```


5.3.7 HMIS/LMIS response on health record link

This API will be invoked by the **HMIS/LMIS** to share the response of link init API (referenceNumber will be generated by HIP and this will used in the confirm API)

URL: /api/hiecm/user-initiated-linking/v3/link/care-context/on-init
Request: POST
Header
Parameters:

Property Name	Example Value	Required	Description
Authorization	eyJhbGciOiJSUzUxMiJ9. eyJzdWIiOiJ2YXNhb nRoYWt1bWFyLmtlc2F2YW5Ac2J4IiwiY2xpZW 50SWQiOiJzYngiLCJzeXN0ZW0iOiJBQkhBLUEi LCJyZXF1ZXN0ZXJJZCI6IlBIUi1XRUIiLCJwaHJN	Yes	JWT Access token which was issued by ABDM session API after successful
	b2JpbGUiOm51bGwsImV4cCI6MTY2NzI5ODE xNSwiaWF0IjoxNjY3MjkwOTE1LCJwaHJBZGRy ZXNzIjoidmFzYW50aGFrdW1hci5rZXNhdmFu QHNieCIsInR4bklkIjoiYjEwMGM4ZDMtNTE1ZC0 0YWFiLTg1OWQtYzNlMTUwOTE3ZGY1In0		validation of client id and secret
REQUEST-ID	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	Unique UUID for track the end to end request transaction
TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	Actual time when request was initiated, ISO Date time format represents date and time
X-CM-ID	sbx	Yes	Suffix of the consent manager to which the request was intended

Body Parameters:

Property Name	Example Value	Required	Description
transactionId	f901b782-bfdf-4224-9f8d-da2cadc20c0d	Yes	Transaction Id is required to identify the unique transaction for user initiated care context linking. This chains all the steps to link care contexts.Transaction Id will be returned after successful discovery request to HIP by the patient.

Link	{
	"referenceNumber": "3336268d-89a34c84-8674-aef42092d9fc",
	"authenticationType": "MEDIATE",
	"meta": {
	"communicationMedium": "MOBILE",
	"communicationHint": "OTP",
	"communicationExpiry": "2023-1230T12:01:55.324Z"
	}
		Yes	The details of the link using which the records has to be linked to the patient's ABHA account. It will contain details like the referenceNumber, authenticationType and the meta details of the link

requestId	2b835afb-0c97-4ce7-9dd9ef58ee98a326	Yes	Request ID sent in init API call. This request ID will be used to match the flow of linking care contexts for a patient

Request Body:

Request Body:


```
{
  "transactionId": "66446ece-396b-4f22-a1a6-756196fdffc9",
  "link": {
    "referenceNumber": "3336268d-89a3-4c84-8674-aef42092d9fc",
    "authenticationType": " MEDIATE",
    "meta": {
      "communicationMedium": "MOBILE",
      "communicationHint": "OTP",
      "communicationExpiry": "2023-12-30T12:01:55.324Z"
    }
  },
  "response": {
    "requestId": "2b835afb-0c97-4ce7-9dd9-ef58ee98a326"
  }
}
```


Response:

Response

Code : 202 Accepted

Error scenarios:

Scenarios	Headers/Body	Message

Verify when transaction id is invalid, null or blank	{
	"transactionId": "",
	"link": {
	"referenceNumber": "Testing defe ct",
	"authenticationType": " MEDIATE",
	"meta": {
	"communicationMedium": "MO BILE",
	"communicationHint": "OTP",
	"communicationExpiry": "202306-31T12:33:37.603Z"
	}
	},
	"response": {
	"requestId": "3a95d49d-c06b46cf-99b4-695ec53316e2"
	}
	}
		“Code”: " ABDM-9999: ",
		“message”: "Invalid Transaction Id ."

Verify message when communication expiry date is invalid or null	"{
	""transactionId"": """",
	""link"": {
	""referenceNumber"": ""Testing defe ct"",
	""authenticationType"": ""DIRECT"",
	""meta"": {
	""communicationMedium"": ""MO BILE"",
	""communicationHint"": ""OTP"",
	""communicationExpiry"": ""2023- 06-31T12: 33: 37.603Z""
	}
	},
	""response"": {
	""requestId"": ""3a95d49d-c06b46cf-99b4-695ec53316e2""
	}
	} "
		{
		"code": "ABDM-9999: ",
		"message": "Invalid communica tion expiry date."
		}
		400 Bad Request

Verify message when request ID is invalid or null	"{
	""transactionId"": """",
	""link"": {
	""referenceNumber"": ""Testing defe ct"",
	""authenticationType"": "" MEDIATE"",
	""meta"": {
	""communicationMedium"": ""MO BILE"",
	""communicationHint"": ""OTP"",
	""communicationExpiry"": ""2023- 06-31T12: 33: 37.603Z""
	}
	},
	""response"": {
	""requestId"": ""3a95d49d-c06b46cf-99b4-695ec53316e2""
	} }"
		{
		"code": "ABDM-9999: ",
		"message": "Invalid request ID"
		}
		400 Bad Request

When the referenceNumber is null or empty.	{
	"transactionId": "",
	"link": {
	"referenceNumber": ",
	"authenticationType": " MEDIATE",
	"meta": {
	"communicationMedium": "MOBIL E",
	"communicationHint": "OTP",
	"communicationExpiry": "2023- 06-31T12: 33: 37.603Z"
	}
		{
		"code": "ABDM-9999: ",
		"message": "Invalid reference number."
		}

	},
	"response": {
	"requestId": "3a95d49d-c06b46cf-99b4-695ec53316e2"
	}
	}	

When the authenticationTypeis null or empty.	{
	"transactionId": "",
	"link": {
	"referenceNumber": “12345",
	"authenticationType": "",
	"meta": {
	"communicationMedium": "MOBIL E",
	"communicationHint": "OTP",
	"communicationExpiry": "2023-06-31T12: 33: 37.603Z"
	}
	},
	"response": {
	"requestId”: "3a95d49d-c06b46cf-99b4-695ec53316e2"
	}
	}
		{
		"code": "ABDM-9999: ", "message": “Invalid authentication type”
		}

When the communicationMedi um is null or empty.	{
	"transactionId": "3a95d49d-c06b46cf-99b4-695ec53316e2",
	"link": {
	"referenceNumber": “12345",
	"authenticationType": "",
	"meta": {
	"communicationMedium": "",
	"communicationHint": "OTP",
	"communicationExpiry": "2023- 06-31T12: 33: 37.603Z"
	}
	},
	"response": {
	"requestId”: "3a95d49d-c06b46cf-99b4-695ec53316e2"
	}
	}
		{
		"code": "ABDM-9999: ",
		"message": “Invalid communication medium”
		}

When the communicationHint is null or empty.	{
	"transactionId": "3a95d49d-c06b46cf-99b4-695ec53316e2",
	"link": {
	"referenceNumber": “12345",
	"authenticationType": "",
	"meta": {
	"communicationMedium": "DIRECT",
	"communicationHint": "",
	"communicationExpiry": "2023- 06-31T12: 33: 37.603Z"
	}
	},
	"response": {
	"requestId”: "3a95d49d-c06b46cf-99b4-695ec53316e2"
	}
	}
		{
		"code": "ABDM-9999: ", "message": “Invalid communication hint”
		}

5.3.8 HIE-CM response on health record link

This is a callback API that will be invoked by the HIE-CM to share the response of the link oninit request from HIP

URL: {callback_url}/api/v3/hiu/patient/care-context/on-init **Request:**
POST
Header Parameters:

Property Name	Example Value	Required	Description

Authorization	eyJhbGciOiJSUzUxMiJ9. eyJzdWIiOiJ2YXNhbnRoY Wt1bWFyLmtlc2F2YW5Ac 2J4IiwiY2xpZW50SWQiOi JzYngiLCJzeXN0ZW0iOiJ BQkhBLUEiLCJyZXF1ZXN0Z XJJZCI6IlBIUi1XRUIiLCJwa HJNb2JpbGUiOm51bGws ImV4cCI6MTY2NzI5ODEx NSwiaWF0IjoxNjY3MjkwO TE1LCJwaHJBZGRyZXNzIjo idmFzYW50aGFrdW1hci5 rZXNhdmFuQHNieCIsInR 4bklkIjoiYjEwMGM4ZDMt NTE1ZC00YWFiLTg1OWQtY zNlMTUwOTE3ZGY1In0	Yes	JWT Access token which was issued by ABDM session API after successful validation of client id and secret.
REQUEST-ID	18235d89-cb13-479dad71-7a57d5f669a8	Yes	Unique UUID for track the end to end request transaction
TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	Actual time when request was initiated, ISO Date time format represents date and time
X-HIU-ID	IN2810014366	Yes	Identifier of the health information user to which the request was intended

Body Parameters:

Property Name	Example Value	Required	Description
transactionId	f901b782-bfdf-4224-9f8d-da2cadc20c0d	Yes	Transaction Id is required to identify the unique transaction for user initiated care context linking. This chains all the steps to link care contexts.Transaction Id will be returned after successful discovery request to HIP by the patient.

Link	{ "referenceNumber": "4336268d-89a34c84-8674-aef42092d9fc", "authenticationType": " MEDIATE", "meta": { "communicationMedium": "MOBILE", "communicationHint": "OTP", "communicationExpiry": "2023-1230T12:01:55.324Z" } }	No	The details of the link using which the records have to be linked to the patient's ABHA account. It will contain details like the referenceNumber, authenticationType and the meta details of the link
error	"error": { "code": 1000, "message": "string" }	No	The error code and message if any occurred.
requestId	2b835afb-0c97-4ce7-9dd9ef58ee98a326	Yes	Request ID sent in init API call. This request ID will be used to match the flow of linking care contexts for a patient

Request Body:

Request Body:

```
{
  "transactionId": "5b39f73e-b19a-421a-ab43-c97cbd903041",
  "link": {
    "referenceNumber": "4336268d-89a3-4c84-8674-aef42092d9fc",
    "authenticationType": " MEDIATE",
    "meta": {
      "communicationMedium": "MOBILE",
      "communicationHint": "OTP",
      "communicationExpiry": "2023-12-30T12:01:55.324Z"
    }
  },
  "response": {
    "requestId": "14a298b4-cf4a-497b-b4c1-72b50295fb91"
  }
}
```

Response:

Response
Code : 202 Accepted

POST	http://webhook.site/b799c0b8-4e75-4545-8eb2-d8c2d5f0c9f6/api/v3/hiu/patient/care-context/on-init
Host	14.143.232.140 Whois Shodan Netify Censys VirusTotal
Date	08/09/2024 11:10:15 PM (13 minutes ago)
Size	331 bytes
Time	0.000 sec
ID	fef653f0-1d5e-4c84-8a65-44eeb3fbe245
Note	Add Note

x-b3-sampled	0
x-b3-parentspanid	7ba0cf39526110df
x-b3-spanid	5ccae4779231a5f4
x-b3-traceid	1e034b22385263b98b2919882f01a0bd
x-envoy-attempt-count	1
x-envoy-peer-metadata-id	sidecar~10.233.93.70~abdm-hiecm-user-initiated-linking-api-...
x-envoy-peer-metadata	ChoKCkNMVVNURVJfSUQSDBoKS3ViZXJuZXRlcwoeCgxJTlNUQU5DRV9JUFM...
x-request-id	bb29b55d-6b38-4cdb-96ba-82796567dc3c
content-length	331
content-type	application/json
x-hiu-id	Mohan_HIU
authorization	Bearer eyJhbGciOiJSUzI1NiIsInR5cCIgOiAiSldUIiwia2lkIiA6ICJB...
timestamp	2024-08-09T17:40:13.332Z
request-id	46e7b826-6e32-4f75-bad9-5cdc608f1c64
accept	*/*
user-agent	ReactorNetty/1.0.24
host	webhook.site

Query strings

(empty)

Form values

(empty)

Raw Content Format JSON Word-Wrap Copy


```
{
  "transactionId": "a1c8f54e-4eab-4369-9cd9-a00b8085724f",
  "link": {
    "referenceNumber": "a9f3db7a-c0c2-4570-93be-89d2d0366533",
    "authenticationType": "DIRECT",
    "meta": {
```


5.3.9 Patient health record confirm

This API will be invoked by the **patient** to confirm his/her health records.

URL: /api/hiecm/user-initiated-linking/v3/link/care-context/confirm

Request: POST

Header Parameters:

Property Name	Example Value	Required	Description
Authorization	eyJhbGciOiJSUzUxMiJ9. eyJzdWIiOiJ2YXNhbnRoYWt1bWFyLmtlc2F2YW5Ac2J4IiwiY2xpZW50SWQiOiJzYngiLCJzeXN0ZW0iOiJBQkhBLUEiLCJyZXF1ZXN0ZXJJZCI6IlBIUi1XRUIiLCJwaHJNb2JpbGUiOm51bGwsImV4cCI6MTY2NzI5ODExNSwiaWF0IjoxNjY3MjkwOTE1LCJwaHJBZGRyZXNzIjoidmFzYW50aGFrdW1hci5rZXNhdmFuQHNieCIsInR4bklkIjoiYjEwMGM4ZDMtNTE1ZC00YWFiLTg1OWQtYzNlMTUwOTE3ZGY1In0	Yes	JWT Access token which was issued by ABDM session API after successful validation of client id and secret

REQUEST-ID	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	Unique UUID for track the end to end request transaction
TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	Actual time when request was initiated, ISO Date time format represents date and time
X-AUTH-TOKEN	eyJhbGciOiJSUzUxMiJ9.eyJzdWIiOiJ2YXNhbnRoYWt1bWFyLmtlc2F2		JWT Authentication token which was issued by ABDM after successful validation of username and password
X-HIU-ID	HIU_ID	Yes	Identifier of the health information user by which the request was initiated
X-CM-ID	sbx	Yes	Suffix of the consent manager to which the request was intended

Body Parameters:

Property Name	Example Value	Required	Description
linkRefNumber	“4336268d-89a3-4c84-8674aef42092d9fc”	Yes	Link reference number used while initiating the linking of health records of the patient
token	“123456”	Yes	OTP generated during init process to confirm the linking

Request Body:

Request Body

```
{
  "token": 123456,
```

"linkRefNumber": "4336268d-89a3-4c84-8674-aef42092d9fc" }

Response:

Response
Code : 202 Accepted

Error scenarios:

Scenarios	Headers/Body	Message
To verify when Request ID is Blank, null or empty in header	[{ "key": "REQUEST-ID", "value": "", "type": "text" }]	Access Denied Code : 403 Forbidden

To verify when invalid RequestID is pass in header	[
	{
	"key": "REQUEST-ID",
	"value": "{{$guid}}zxzzxs",
	"type": "text"
	}
	]
		{
		"code": "ABDM-1030: ", "message": "Invalid request ID"
		}
		
		Code: 400Bad Request

When Timestamp is Blank, null or empty in header.	[{ "key": "TIMESTAMP", "value": "", "type": "text" }]	Access Denied Code : 403 Forbidden

When invalid Timestamp is pass in header	[
	{
	"key": "TIMESTAMP",
	"value": "{{$isoTimestamp}}jhgftytgtyu",
	"type": "text"
	}]
		{
		"code": "ABDM-1016: ",
		"message": "Invalid Timestamp"
		}
		
		Code - 400Bad Request

When X- HIU-ID is Blank, null or empty in header.	[
	{
	"key": "X-HIU-ID",
	"value": "",
	"type": "text"
	}
	]
		Access Denied
		Code : 403 Forbidden

When X-CM-ID is Invalid, Blank, null or empty in header.	[
	{
	"key": "X-CM-ID",
	
	"value": "sbxdvdfvdf",
	"type": "text"
	}
	]
		Access Denied
		Code : 403 Forbidden

When XAuthTOKEN is Invalid in header.	[
	{
	"key": "X-LINK-TOKEN",
	"value": "hghhjjkhjkbkjbjkbkjbnkjbk",
	"type": "text"
	}
	]
		{
		""code"": ""ABDM-1066: "",
		""message"": ""Invalid JWT token""
		}
		
		Code - 400Bad Request"

Verify message when invalid token is passed	{
	"token": 7897654,
	"linkRefNumber": "Testing defect"
	}
		{
		"code": "ABDM-9999: ", "message": Invalid link reference number."
		}

Verify message when the X- HIU-ID is different from the hiu that initiated link request.		{
		"code": "ABDM-1040: ",
		"message": “Invalid HIU ID."
		}

5.3.10 HIE-CM callback for health record confirmation

This API will be invoked by the **HIE-CM** to confirm patient health records to HIP

URL: {callback_url}/api/v3/hip/link/care-context/confirm
Request: POST
Header Parameters:

Property Name	Example Value	Required	Description
REQUEST-ID	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	Unique UUID for tracking the endto-end request transaction
TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	Actual time when request was initiated, ISO Date time format represents date and time
X-HIU-ID	IN2810014366	Yes	Identifier of the health information provider to which the request was intended

Body Parameters:

Property Name	Example Value	Required	Description
linkRefNumber	“4336268d-89a3-4c84-8674aef42092d9fc”	Yes	Link reference number used while initiating the linking of health records of the patient
Token	“123456”	Yes	OTP generated during init process to confirm the linking

Request Body:

Request Body:

```
{
  "confirmation": {
    "token": "123456",
    "linkRefNumber": "4336268d-89a3-4c84-8674-aef42092d9fc"
  }
}
```

Response:

Response
Code : 202 Accepted

POST http://webhook.site/b799c0b8-4e75-4545-8eb2-d8c2d5f0c9f6/api/v3/hip/link/care-context/confirm

Host	14.143.232.140 Whois Shodan Netify Censys VirusTotal
Date	08/09/2024 11:10:49 PM (13 minutes ago)
Size	124 bytes
Time	0.000 sec
ID	56d79de9-e6d3-4f1b-88b4-98286d1d20f9
Note	Add Note

x-b3-sampled	0
x-b3-parentspanid	f70a3013cf2cb744
x-b3-spanid	b711cb4bd5f5f85c
x-b3-traceid	885c49429bdbbf3cba63b682a2b3dac2
x-envoy-attempt-count	1
x-envoy-peer-metadata-id	sidecar~10.233.93.70~abdm-hiecm-user-initiated-linking-api-...
x-envoy-peer-metadata	ChoKCkNHVVNURVJfSUQSDBoKS3ViZXJuZXRlcwoeCgxJTlNUQU5DRV9JUFM...
x-request-id	2d376d67-267d-4d00-9da9-b08662ce0e60
content-length	124
content-type	application/json
x-hip-id	Mohan_HIP
authorization	Bearer eyJhbGciOiJSUzI1NiIsInR5cCIgOiAiSldUIiwia2lkIiA6IC3B...
timestamp	2024-08-09T17:40:48.949Z
request-id	9ecc6aa6-04b2-4aa9-b5c6-373f62dac06c
accept	*/*
user-agent	ReactorNetty/1.0.24
host	webhook.site

Query strings

(empty)

Form values

(empty)

Raw Content Format JSON Word-Wrap Copy


```
{
  "requestId": null,
  "timestamp": null,
  "confirmation": {
    "token": "123456",
    "linkRefNumber": "a9f3db7a-c0c2-4570-93be-89d2d0366533"
```


5.3.11 HMIS/LMIS response on health record confirm

This API will be invoked by the **HIP** to share the response of link confirmation API

URL: /api/hiecm/user-initiated-linking/v3/link/care-context/on-confirm **Request:** POST

Header Parameters:

Property Name	Example Value	Required	Description
Authorization	eyJhbGciOiJSUzUxMiJ9. eyJzdWIiOiJ2YXNhb nRoYWt1bWFyLmtlc2F2YW5Ac2J4IiwiY2xpZW 50SWQiOiJzYngiLCJzeXN0ZW0iOiJBQkhBLUEi LCJyZXF1ZXN0ZXJJZCI6IlBIUi1XRUIiLCJwaHJN b2JpbGUiOm51bGwsImV4cCI6MTY2NzI5ODE xNSwiaWF0IjoxNjY3MjkwOTE1LCJwaHJBZGRy ZXNzIjoidmFzYW50aGFrdW1hci5rZXNhdmFu QHNieCIsInR4bklkIjoiYjEwMGM4ZDMtNTE1ZC0 0YWFiLTg1OWQtYzNlMTUwOTE3ZGY1In0	Yes	JWT Access token which was issued by ABDM session API after successful validation of client id and secret
REQUEST-ID	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	Unique UUID for track the end to end request transaction

TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	Actual time when request was initiated, ISO Date time format represents date and time
X-CM-ID	sbx	Yes	Suffix of the consent manager to which the request was intended

Body Parameters:

Property Name	Example Value	Required	Description
patient	-	Yes	A list of records of the patient that were found as a result of the identifiers that the patient had provided.
referenceNumber	"4336268d-89a34c84-8674aef42092d9fc"	Yes	Link reference number used while initiating the linking of health records of the patient
Display	Display Text	No	The display text for patient reference
careContexts	-	Yes	List of care contexts linked at the HIP end for the identified patient.
hiType	PRESCRIPTION	Yes	HiType of the patient details
Count	1	Yes	The count of care contexts that are found for the patient in scope
requestId	f207e461-1994-42749b86554384f170ab	Yes	Request ID sent in init API call. This request ID will be used to match the flow of linking care contexts for a patient

Request Body:

Request Body:


```
{
  "patient": [
    {
      "referenceNumber": "4336268d-89a3-4c84-8674-aef42092d9fc",        "display": "abcdefgdisplay",
"careContexts": [
        {
          "referenceNumber": "1234",
          "display": "1234-display"
        }
      ],
      "hiType": "PRESCRIPTION",
      "count": 1
    }
  ],
```

```
 "response": {
   "requestId": "f207e461-1994-4274-9b86-554384f170ab"
 }  }
```


Response:

Response
Code : 202 Accepted

Error scenarios:

Scenario s	Request Body	Response
To verify when Request ID is Blank, null or empty in header	[{ "key": "REQUEST-ID", "value": "", "type": "text" }]	Access Denied Code : 403 Forbidden

To verify when invalid Request-ID is pass in header	[
	{
	"key": "REQUEST-ID",
	"value": "{{$guid}}zxzzxs",
	"type": "text"
	}]
		{
		"code": "ABDM-1030: ",
		"message": "Invalid request ID"
		}
		Code: 400Bad Request

When X- HIP-ID is Blank, null or empty in header.	[{ "key": "X-HIP-ID", "value": "", "type": "text" }]	Access Denied Code : 403 Forbidden

When X- CM-ID is Invalid, Blank, null or empty in header.	[{ "key": "X-CM-ID", "value": "sbxdvdfvdf", "type": "text" }]	Access Denied Code : 403 Forbidden

Verify message when request id is passed	{
	"patient": [
	{
	"referenceNumber": "Testing defe ct",
	"display": "bg",
	"careContexts": [
	{
	"referenceNumber": "1234",
	"display": "12"
	}
	],
	"hiType": "PRESCRIPTION",
	"count": 1
	}
	],
	"response": {}
	}
		{
		"code": "ABDM-1015",
		"message": "Invalid Response"
		}

Verify message when count is incorrect	{
	"patient": [
	{
	"referenceNumber": "Testing defe ct",
	"display": "bg",
	"careContexts": [
	{
	"referenceNumber": "1234",
	"display": "12"
	}
	],
	"hiType": "PRESCRIPTION",
	"count": 1
	}
	],
	"response": {
	"requestId": "f9d77c6b-e918-438da19f-835f356c118b"
	}
		"{
		""code"": ""ABDM-9999: "",
		""message"": ""Invalid Care Contexts count, must range between 1 to 20""
		} "

5.3.12 HIE-CM response on health record on-confirm

This is callback API will be invoked by the **HIE-CM** to share the response of on-confirm API from HIP.

URL: {callback_url}/api/v3/hiu/patient/care-context/on-confirm

Request: POST

Header Parameters:

Property Name	Example Value	Required	Description
REQUEST-ID	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	Unique UUID for tracking the endto-end request transaction
TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	The actual time when the request was initiated, ISO Date time format represents the date and time
X-HIU-ID	IN2810014366	Yes	Identifier of the health information provider to which the request was intended

Body Parameters:

Property Name	Example Value	Required	Description
patient	-	Yes	A list of records of the patient that were found as a result of the identifiers that the patient had provided.
referenceNumber	"4336268d-89a34c84-8674aef42092d9fc"	Yes	Link reference number used while initiating the linking of health records of the patient
careContexts	-	Yes	List of care contexts linked at the HIP end for the identified patient.
hiType	PRESCRIPTION	Yes	HiType of the patient details
Count	1	Yes	The count of care contexts that are found for the patient in scope

requestId	f207e461-1994-42749b86554384f170ab	Yes	Request ID sent in the init API call. This request ID will be used to match the flow of linking care contexts for a patient

Request Body:

Request Body


```
{
  "patient": [
    {
      "referenceNumber": "4336268d-89a3-4c84-8674-aef42092d9fc",          "display":
"abcdefgdisplay",
      "careContexts": [
        {
          "referenceNumber": "1234",
          "display": "1234-display"
        }
      ],
      "hiType": "PRESCRIPTION",
      "count": 1
    }
  ],
  "response": {
    "requestId": "f207e461-1994-4274-9b86-554384f170ab"
  }
}
```


Response:

Response

Code : 202 Accepted

POST	http://webhook.site/b799c0b8-4e75-4545-8eb2-d8c2d5f0c9f6/api/v3/hiu/patient/care-context/on-confirm
Host	14.143.232.140 Whois Shodan Netify Censys VirusTotal
Date	08/09/2024 11:12:00 PM (13 minutes ago)
Size	298 bytes
Time	0.001 sec
ID	de5b906b-ca76-4320-9da2-d50ef4b05748
Note	Add Note

x-b3-sampled	0
x-b3-parentspanid	cadee14952e1a225
x-b3-spanid	1b386a1385d59822
x-b3-traceid	e64cf11c2c4f042800a177576c812e93
x-envoy-attempt-count	1
x-envoy-peer-metadata-id	sidecar~10.233.85.12~abdm-hiecm-user-initiated-linking-api-...
x-envoy-peer-metadata	ChoKCkNMVVNURVJfSUQSDBoKS3ViZXJuZXRlcwoeCgxJTlNUQU5DRV9JUFM...
x-request-id	d4dc7ef9-e2f1-4a7d-a013-6cb1ebf95d70
content-length	298
content-type	application/json
x-hiu-id	Mohan_HIU
authorization	Bearer eyJhbGciOiJSUzI1NiIsInR5cCIgOiAiSldUIiwia2lkIiA6ICJB...
timestamp	2024-08-09T17:41:58.593Z
request-id	addda903-a380-4c9a-bfae-ff1d1f36dbf1
accept	*/*
user-agent	ReactorNetty/1.0.24
host	webhook.site

Query strings

(empty)

Form values

(empty)

Raw Content Format JSON Word-Wrap Copy

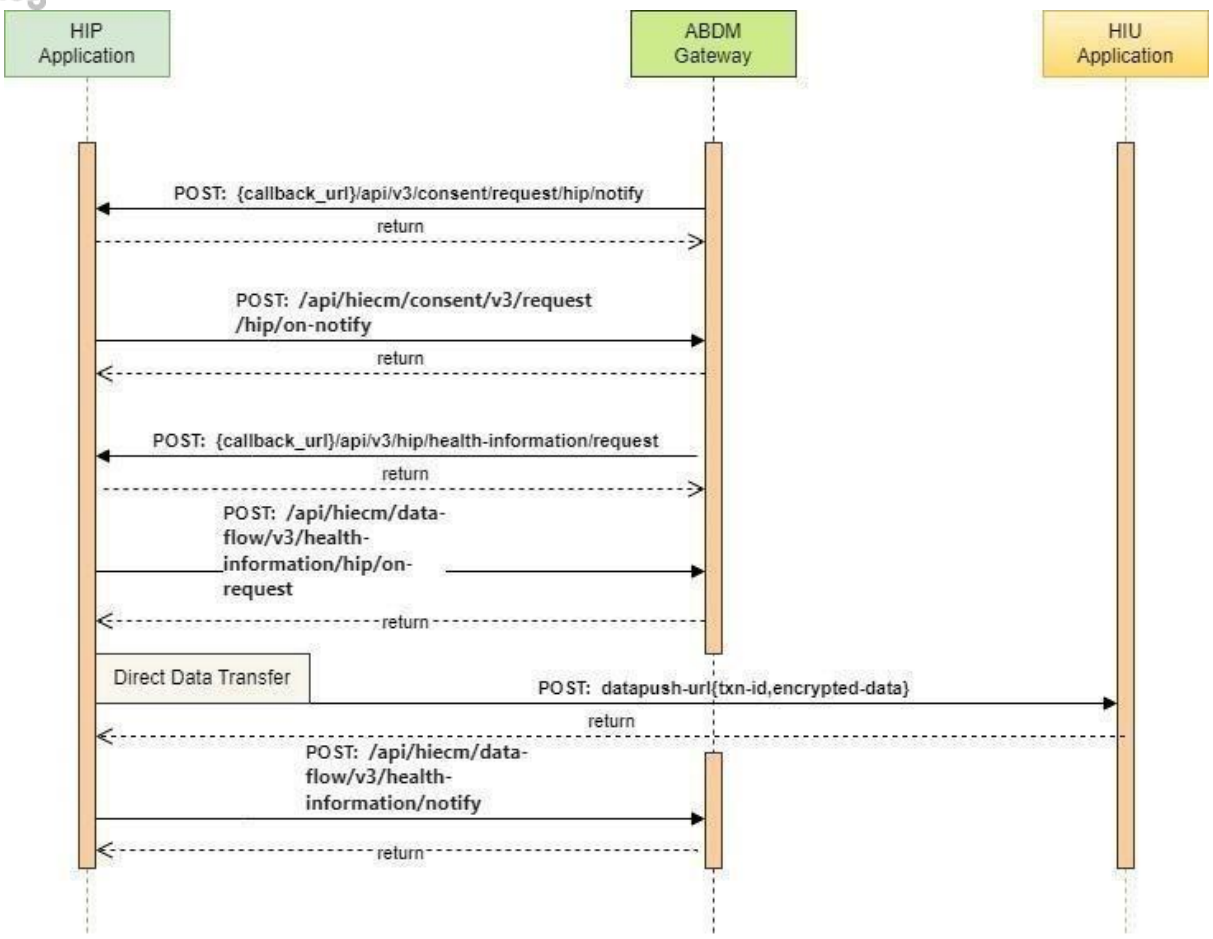

```
{
  "patient": [
    {
      "referenceNumber": "vignesh_1992@sbx",
      "display": "88f54b1b-296f-4b62-9f50-b789229f2103",
      "careContexts": [
```


6.Data Flow

6.1 Overview

The process of Data flow starts once the HIECM has generated Consent artefact (Consent artefact is generated only if the status of Consent request is “Granted”) and same is notified to HIP and HIU. HIU sends pushback URL to HIP via HIECM. HIP now bundles the care context or Health data of the patient as per FHIR standards and share the data via pushback data URL. HIECM is notified the status of the data shared both by HIU and HIP.

6.2 Sequence Diagram



ABDM HIE-CM HIP Data Transfer Flow

6.3 List of APIs

6.3.1 Callback API to HIP when a consent request is APPROVED/REVOKED

This API is a callback to HIP when a consent request is approved/revoked.

URL: {callbackURL}/api/v3/consent/request/hip/notify

Request: POST

Header Parameters:

Property Name	Example Value	Required	Description

REQUEST-ID	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	Unique UUID for track the end to end request transaction
TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	Actual time when request was initiated, ISO Date time format represents date and time
X-HIP-ID	eyJhbGciOiJSUzUxMiJ9.eyJzdWIiOiIx ODQ0MzgxMDgwNjQ0MEBhYmRt	Yes	Identifier to the health information provider.

Body parameters:

Property Name	Example Value	Required	Description
Status	GRANTED	Yes	The status of the consent artefact
consentId	3fa85f64-5717-4562b3fc-2c963f66afa6	Yes	The consent artefact id
createdAt	2024-05-01T05:10:20.123Z	Yes	The date when consent artefact was created.
patient	abc@abdm	Yes	A unique and valid ABHA address suffix with @abdm for live and @sbx for Sandbox
Hip	ABDM_HIP	No	Health information provider ID
purpose – text	Care Management	Yes	Purpose text of consent request
Purpose-code	CAREMGT	Yes	Purpose code of consent request
Purpose-refUri	www.test.com	Yes	Purpose refUri of consent request
patientReference	batman@tmh	No	Patient reference Id

careContextReference	Episode11	No	Care context reference
Hiu	Sub_HIU	Yes	Health information user Id
Requester-name	Smith	Yes	Name of the requester

Requester-identifiertype	REGN01	Yes	Requester identifier type
Requester-identifiervalue	MH1001	Yes	Requester identifier value
Requester-identifiersystem	https://www.mciindia. org	Yes	Requester identifier system
hiTypes	["OPCONSULTATION", "WELLNESSRECORD"]	Yes	Type of document
PermissionaccessMode	VIEW	Yes	Access mode of consent
PermissiondateRange	"from": "2023-0509T08:58:09.738Z", "to": "2023-0510T08:58:09.738Z"	Yes	Data range of permission required
PermissiondateEraseAt	2023-05-25T08:58:09.738Z	Yes	Date of erase data
Permissionfrequency-value	0	Yes	Frequency value for consent
Permissionfrequencyrepeats	0	Yes	Frequency repeats for consent
Permissionfrequency-unit	HOUR	Yes	Frequency unit for consent

Signature	e8nY601CYDsC0FKoDj Sp+7GeQ2s2R8oZncLC z5ce+pEuDOr5bZV0aa HjwJg4b9S9V+twjt4hb ojx3fl7egrt8+0c+lfPTi5 /bBUAQXCABTfFmtFU7 jn65HlTt8kgkiONx26ZB hJ0wX3xjYI72PPtzYIiT5 Q08YtDoILA62KceioV7l wuKssw7wC4ECbBAvR uXT121TmtrPhf+0myJA TSnaajS06S6OthrKfZLN TUFf3pFiJzqouSTrjNblO X6DT2+JuO3rom1Szz/0 3c0HQG+wWASv+PO3 J6uRs0UI4JvKmM/4tP +Z+/HPKM15K5U5K+4p qf6czKrbIDpkT/kP8bG g==	Yes	Signature of signed consent artefact details.
grantAcknowledgement	False	Yes	The Boolean flag to denote if HIP acknowledged the callback.

Request Body:

Request Body:

```
{
 "notification": {
  "status": "GRANTED",
  "consentId": "3fa85f64-5717-4562-b3fc-2c963f66afa6",
  "consentDetail": {
   "schemaVersion": "v3",
   "consentId": "3fa85f64-5717-4562-b3fc-2c963f66afa6",
   "createdAt": "2024-05-01T05:10:20.123Z",
   "patient": {
    "id": "abdulkalam@abdm"
   },
   "careContexts": [
    {
     "patientReference": "batman@tmh",
     "careContextReference": "Episode1"
    }
   ],
   "purpose": {
    "text": "Care Management",
    "code": "CAREMGT",
    "refUri": "www.abc.com"
   },
   "hip": {
    "id": "cowin_hip_01",
    "name": "Cowin",
    "type": "HIP"
   },
   "hiu": {
    "id": "cowin_hiu_01",
    "name": "Cowin",
    "type": "HIU"
   },
   "consentManager": {
    "id": "abdm"
   },
   "requester": {
    "name": "abdulkalam@abdm",
    "identifier": {
     "value": "REG1",
     "type": "MH1001",
     "system": "https://www.sample.com"
    }
   },
"hiTypes": [
    "DiagnosticReport, Prescription, ImmunizationRecord, DischargeSummary, OPConsultation,
HealthDocumentRecord, WellnessRecord"
   ],
```

```
    "permission": {
      "accessMode": "VIEW",
      "dateRange": {
        "from": "2021-09-28T12:30:08.573565Z",
        "to": "2021-09-28T12:30:08.573565Z"

      },
      "dataEraseAt": "2021-09-28T12:30:08.573565Z",
      "frequency": {
        "unit": "HOUR",
        "value": 1,
        "repeats": 0
      }
    }
  },
  "signature":
"e8nY601CYDsC0FKoDjSp+7GeQ2s2R8oZncLCz5ce+pEuDOr5bZV0aaHjwJg4b9S9V+twjt4hbojx3fl7e
grt8+0c+lfPTi5/bBUAQXCABTfFmtFU7jn65HlTt8kgkiONx26ZBhJ0wX3xjYI72PPtzYIiT5Q08YtDoILA62Kce
ioV7lwuKssw7wC4ECbBAvRuXT121TmtrPhf+0myJATSnaajS06S6OthrKfZLNTUFf3pFiJzqouSTrjNblOX6D
T2+JuO3rom1Szz/03c0HQG+wWASv+PO3J6uRs0UI4JvKmM/4tP+Z+/HPKM15K5U5K+4pqf6czKrbIDpk T/kP8bGg==",
"grantAcknowledgement": false
 }   }
```


Response Body:

Response
Status: 202 Accepted

6.3.2 HIP to respond back to consent HIP notify

This API will be invoked by HIP to respond back to the callback API

URL: /api/hiecm/consent/v3/request/hip/on-notify

Request: POST

Header Parameters:

Property Name	Example Value	Required	Description
REQUEST-ID	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	Unique UUID for track the end to end request transaction

TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	Actual time when request was initiated, ISO Date time format represents date and time
X-CM-ID	sbx	Yes	Suffix of the consent manager to which the request was intended

Body parameters:

Property Name	Example Value	Required	Description
Status	OK	Yes	The status of the consent notify.
consentId	3fa85f64-5717-4562b3fc-2c963f66afa6	Yes	The consent artefact id

Error	"error": {
	"code": "ABDM-1001",
	"message": "unable to connect database"
	}
		No	The error code and message if any happened.

requestId	3fa85f64-5717-4562b3fc-2c963f66afa6	Yes	The request id from the /consent/hip/notify

Request Body:

Request Body:

{
"acknowledgement": {
"status": "OK",
"consentId": "e3c74829-3f82-4f94-959e-e10f57bcd57b"
},
"error": {
"code": "ABDM-1001",
"message": "unable to connect database"
},
"response": {

```
  "requestId": "6f0b4665-a915-4c92-aa36-65afb4a2cd71"
}  }
```


Response Body:

Response
Status: 202 Accepted

6.3.3 Data Flow - Health information request – Callback to HIP

This isa callback API triggered by HIE-CM to notify HIP about the health information request.

URL: {callback_URL}/api/v3/hip/health-information/request **Request:** POST **Header Parameters:**

Property Name	Example Value	Required	Description
Authorization	eyJhbGciOiJSUzUxMiJ9. eyJzdWIiOiJ2YXNhbnRoY Wt1bWFyLmtlc2F2YW5Ac 2J4IiwiY2xpZW50SWQiOi JzYngiLCJzeXN0ZW0iOiJ BQkhBLUEiLCJyZXF1ZXN0Z XJJZCI6IlBIUi1XRUIiLCJwa HJNb2JpbGUiOm51bGws ImV4cCI6MTY2NzI5ODEx NSwiaWF0IjoxNjY3MjkwO TE1LCJwaHJBZGRyZXNzIjo idmFzYW50aGFrdW1hci5 rZXNhdmFuQHNieCIsInR 4bklkIjoiYjEwMGM4ZDMt NTE1ZC00YWFiLTg1OWQtY zNlMTUwOTE3ZGY1In0	Yes	JWT Access token which was issued by ABDM session API after successful validation of client id and secret.
REQUEST-ID	18235d89-cb13-479dad71-7a57d5f669a8	Yes	Unique UUID for tracking the end-to-end request transaction
TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	The actual time when the request was initiated, ISO Date time format represents the date and time

X-HIP-ID	IN2810014366	Yes	Identifier to the health information provider.

Body Parameters:

Property Name	Example Value	Required	Description
Consent ID	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	Valid consent ID, which HIU must obtain to request patient data from a HIP
DateRange	[{ "from": "1924-07-09T12:05:57.151Z", "to": "2024-07-17T12:05:57.151Z" }]	Yes	Date Range against which the consent granted will be validated.
DataPushUrl	https://webhook.site/2cfcc184-5d29-4e2c974d3e56cbaa5cc1/v3/data/push	Yes	This is the URL provided by HIU to which HIP has to push the requested health information record
cryptoAlg	"ECDH"		ECDH is a key sharing algorithm, most commonly used to send encrypted messages. ECDH works by multiplying your private key by another's public key to get a shared secret, then using that shared secret to perform symmetric encryption

curve	"curve25519"	Yes	Key exchanges authentication
expiry	2124-12-09T00:00:00.000Z	Yes	Actual time by when dataPushUrl is available
parameters	"Ephemeral public key"	Yes	Encryption and decryption key
keyValue	BFN7KTdOT0jIAExG2A8Jg+01w MPWxptiGqwHRVvtiVEsUq2FR7P2 UdqZxJyPJSeR6muai21iQhasNxnhh8I5M+g="	Yes	key agreement protocol that allows two parties, each
			having an ellipticcurve public– private key pair, to establish a shared secret over an insecure channel

Request Body:

Request Body


```
{
  "hiRequest": {
    "consent": {
      "id": "d6a83f24-6c96-421e-b8b8-844e5344ef69"
    },
    "dateRange": {
      "from": "1924-07-09T12:05:57.151Z",
      "to": "2024-07-17T12:05:57.151Z"
    },
    "dataPushUrl": "https://webhook.site/2cfcc184-5d29-4e2c-974d3e56cbaa5cc1/v3/data/push",
    "keyMaterial": {
      "cryptoAlg": "ECDH",
      "curve": "Curve25519",
      "dhPublicKey": {
        "expiry": "2124-12-09T00:00:00.000Z",
        "parameters": "Curve25519/32byte random key",
        "keyValue":
"BCpsBW37KgfLyjxJK0zHHG26hDjxzK368DEO4PapzFhQM0cghZziKuvJh5/anTnHitVHKMn0Owr1HvcH1f m0DpA="
      },
      "nonce": "0ka0stPfqmXWhX+ODC/iOFMO0PXFdRjBdcEGbv55qqc="
    }
  }  }
```


Response:

Response
Code : 202 Accepted

6.3.4 HIP acknowledgement to the health information request

This API will be invoked by HIP to acknowledge the health information request by HIU.

URL: /api/hiecm/data-flow/v3/health-information/hip/on-request **Request:** POST **Header Parameters:**

Property Name	Example Value	Required	Description
Authorization	eyJhbGciOiJSUzUxMiJ9.eyJzdWIiOiJ2YXNhbnRoYWt1bWFyLmtlc2F2YW5Ac2J4IiwiY2xpZW50SWQiOiJzYngiLCJzeXN0ZW0iOiJBQkhBLUEiLCJyZXF1ZXN0ZXJJZCI6IlBIUi1XRUIiLCJwaHJNb2JpbGUiOm51bGwsImV4cCI6MTY2NzI5ODExNSwiaWF0IjoxNjY3MjkwOTE1LCJwaHJBZGRyZXNzIjoidmFzYW50aGFrdW1hci5rZXNhdmFuQHNieCIsInR4bklkIjoiYjEwMGM4ZDMtNTE1ZC00YWFiLTg1OWQtYzNlMTUwOTE3ZGY1In0	Yes	JWT Access token which was issued by ABDM session API after successful validation of client id and secret.
REQUEST-ID	18235d89-cb13-479dad71-7a57d5f669a8	Yes	Unique UUID for tracking the end-toend request transaction
TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	The actual time when the request was initiated, ISO Date time format represents the date and time

X-CM-ID	IN2810014366	Yes	Suffix of the consent manager to which the request was intended.

Body Parameters:

Property Name	Example Value	Required	Description
transactionId	18235d89-cb13-479dad71-7a57d5f669a8	No	Unique transaction id to track the health information request
sessionStatus	ACKNOWLEDGED	No	Status of the request
Error		No	Error code and message if any occurred
requestId	18235d89-cb13-479dad71-7a57d5f669a8	Yes	Unique id to track end to end transaction

Request Body:

Request Body


```
{
"hiRequest": {
      "transactionId": "18235d89-cb13-479d-ad71-7a57d5f669a8",      "sessionStatus":   "ACKNOWLEDGED"
   },
   "response": {
      "requestId": "18235d89-cb13-479d-ad71-7a57d5f669a8 “
   }
}
```


Request Body : Error scenario

Request Body


```
    {
 "error": {
       "code": ABDM-1001,
       "message": " unable to connect database"
    },
 "response": {
       "requestId": "18235d89-cb13-479d-ad71-7a57d5f669a8 "
    }
 }
```


Response:

Response
Code : 202 Accepted

6.3.5 HIP calling data push URL

This API will be invoked by HIP to push the data to HIU.

URL: /api-hiu/data/notification

Request: POST

Body Parameters:

Property Name	Example Value	Required	Description
pageNumber	1	Yes	The page number
pageCount	2	Yes	The total page count
transactionId	18235d89-cb13-479dad71-7a57d5f669a8	Yes	The transaction id that is generated when health information request initiated.
entries	"entries": [{"content": "{{content}}", "media": "application/fhir+json", "checksum": "{{checksum}}", "careContextReference": "{{care Context Reference}}" }]	Yes	List of encrypted content details.

keyMaterial	"keyMaterial": {
	
	"cryptoAlg": "ECDH",
	
	"curve": "Curve25519",
	
	"dhPublicKey": {
	
	"expiry": "*{{expiry date}}*",
	
	"parameters": "Curve25519/32byte random key",
	
	"keyValue": "*{{Key value}}*"
	
	},
	
	"nonce": "*{{nonce}}*"
	
	}
		Yes	Encryption/Decryption key details

Request Body:

```
{
  "pageNumber": 0,
  "pageCount": 1,
  "transactionId": "{{transactionId}}",
  "entries": [
    {"content": "{{content}}",
      "media": "application/fhir+json",
      "checksum": "{{checksum}}",
      "careContextReference": "{{care Context Reference}}"
    }
  ],
  "keyMaterial": {
    "cryptoAlg": "ECDH",
    "curve": "Curve25519",
    "dhPublicKey": {
      "expiry": "{{expiry date}}",
      "parameters": "Curve25519/32byte random key",
"keyValue": "{{Key value}}"
    },
    "nonce": "{{nonce}}"
```

```
  }
}
```

Response:

Response
Code : 202 Accepted

6.3.6 Health Information notify API

This API will be called by HIU and HIP to notify the CM about the status of the data transfer.

HIP on the transfer of data would send sessionStatus - one of [TRANSFERRED, FAILED]. HIP would also send hiStatus for each careContextReference - on of [DELIVERED, ERRORED]

HIU on receipt of data would send sessionStatus - one of [RECEIVED, FAILED]. For example, ERRORED when data was not sent or if invalid data was sent. HIU would also send hiStatus for each careContextReference - one of [OK, ERRORED]. **URL:** /api/hiecm/data-flow/v3/health-information/notify

Request: POST

Header Parameters:

Property Name	Example Value	Required	Description

Authorization	eyJhbGciOiJSUzUxMiJ9. eyJzdWIiOiJ2YXNhbnRoY Wt1bWFyLmtlc2F2YW5Ac 2J4IiwiY2xpZW50SWQiOi JzYngiLCJzeXN0ZW0iOiJ BQkhBLUEiLCJyZXF1ZXN0Z XJJZCI6IlBIUi1XRUIiLCJwa HJNb2JpbGUiOm51bGws ImV4cCI6MTY2NzI5ODEx NSwiaWF0IjoxNjY3MjkwO TE1LCJwaHJBZGRyZXNzIjo idmFzYW50aGFrdW1hci5 rZXNhdmFuQHNieCIsInR 4bklkIjoiYjEwMGM4ZDMt NTE1ZC00YWFiLTg1OWQtY zNlMTUwOTE3ZGY1In0	Yes	JWT Access token which was issued by ABDM session API after successful validation of client id and secret.
REQUEST-ID	18235d89-cb13-479dad71-7a57d5f669a8	Yes	Unique UUID for tracking the end-toend request transaction
TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	The actual time when the request was initiated, ISO Date time format represents the date and time
X-CM-ID	IN2810014366	Yes	Suffix of the consent manager to which the request was intended.

Body Parameters:

Property Name	Example Value	Required	Description
consentId	97c3668e-49e3-4121b2d3-1ca6d949cd8a	Yes	The consent artefact id
transactionId	e3472dad-86c5-42df9afdd7c13df2a564	Yes	The transaction id that is generated when health information request initiated.

doneAt	2023-05-24T10:51:08.374Z	Yes	UTC date when the data was transferred/received.
notifier	"notifier": {	Yes	Identifier to denote either HIP or HIU is calling this API
	"type": "HIP", "id": "HIP-HOSPITAL" }		

statusNotification	"statusNotification": {
	"sessionStatus": "TRANSFERRED",
	"hipId": "HIP-HOSPITAL",
	"statusResponses": [
	{
	"careContextR eference": "b18d2e56c5d241d0bbe932a8b7579f74",
	"hiStatus": "OK",
	"description": "test care context"
	}
	]
	}
		Yes	Status of the data transfer

Request Body:

Request Body

```
{
"notification": {
      "consentId": "97c3668e-49e3-4121-b2d3-1ca6d949cd8a",
      "transactionId": "e3472dad-86c5-42df-9afd-d7c13df2a564",
      "doneAt": "2023-05-24T10:51:08.374Z",
      "notifier": {
         "type": "HIP",
         "id": "HIP-HOSPITAL"
      },
      "statusNotification": {
         "sessionStatus": "TRANSFERRED",
"hipId": "HIP-HOSPITAL",
```

```
        "statusResponses": [
          {
            "careContextReference": "b18d2e56-c5d2-41d0-bbe9-32a8b7579f74",
            "hiStatus": "OK",
            "description": "test care context"
          }
        ]
      }


  }

  }
```


Response:

Response
Code : 202 Accepted

{
“status”: “Notification is Accepted”
}

7.Scan and Profile Share

7.1 Overview

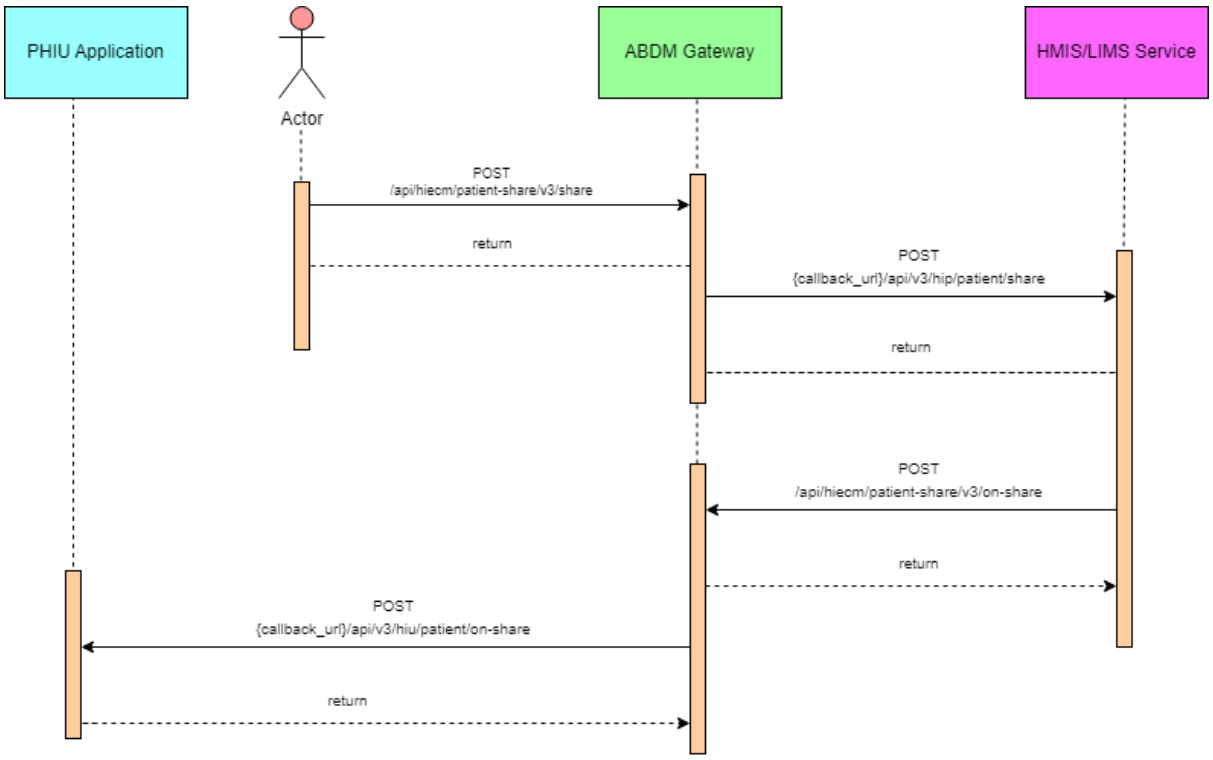
The User/Patient can share his/her basic KYC information with the HMIS/LIMS by scanning the QR Code using the integrator application (Example: ABHA App), which enables them to complete the seamless profile share during their visit.

The authenticity of the profile information is verified by the HIE-CM internally before sharing with the HMIS/LIMS.

The content of the QR code is a URL (sample for reference: https://phrsbx.abdm.gov.in/shareprofile?hipid=IN3410000260&counterid=12345) that contains 2 parameters:

- The HIP ID
- Facility defined context (for example: counter code)

7.2 Sequence Diagram



ABDM - HIE-CM - Patient Share Sequence Diagram

7.3 List of APIs

7.3.1 Profile share

This API will be invoked from the integrator application (any PHR application, just like ABHA) to share the user/patient profile with HMIS/LIMS.

URL: /api/hiecm/patient-share/v3/share
Method: POST
Request Headers:

Property Name	Example Value	Required	Description
REQUEST-ID	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	Unique UUID for track the end to end request transaction
TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	Actual time when request was initiated, ISO Date time format represents date and time
Authorization	eyJhbGciOiJSUzUxMiJ9. eyJzdWIiOiJ2YXNhbnRoYWt1bWFyLmtlc2F2 YW5Ac2J4IiwiY2xpZW50SWQiOiJz YngiLCJzeXN0ZW0iOiJBQkhBLUEiLCJy ZXF1ZXN0ZXJJZCI6IlBIUi1XRUIiL CJwaHJNb2JpbGUiOm51bGwsImV4c CI6MTY2NzI5ODExNSwia WF0IjoxNjY3MjkwOTE1LCJwaHJBZ GRyZXNzIjoidmFzYW50aGFrdW1hci5rZX NhdmFuQHNieCIsInR4bklkIjoi YjEwMGM4ZDMtNTE1ZC00YWFiLTg1O WQtYzNlMTUwOTE3ZGY1In0	Yes	JWT Access token which was issued by ABDM session API after successful validation of client id and secret
X-HIU-ID	IN2810014366	Yes	Identifier of the health information user to which the request was intended

X-CM-ID	sbx	Yes	Suffix of the consent manager to which the request was intended
X-AUTHTOKEN	eyJhbGciOiJSUzUxMiJ9.eyJzdWIiOiJna XJpamFAc2J4IiwiY2xpZW50SWQiOiJQS FItV0VCIiwicmVxdWVzdGVySWQiOiJrX 2hpcCIsInN5c3RlbSI6IkFCRE0iLCJtb2Jp bGUiOiI4MjgxMTQ3MDgwIiwiZXhwIjoxNj c3NjY5NDU1LCJpYXQiOjE2Nzc2NjIyNTUs InRyYW5zYWN0aW9uSWQiOiJkMmY5O TNkNi1kODg4LTQyMTMtOTc3My0wYmJj MzMwMjVhNGYiLCJhYmhhQWRkcmVzc yI6ImdpcmlqYUBzYngifQ.Ad_jGrduH6 _krBBnlRO912mQabxMOiB0GN6FjdZjoi CQY4AkUD3McGq2NR-XGAjHVpkRtKx69m4_44h-FqTCbZlo09hq0SEM1KBMkPDl163JcFNM JGnXBa5E-mu6DpBSPA-VirSvBVj6CEpZLbTa2nBBSJJi_leszwHNr kdope6rSc2G3SJfCW_DzFmzd_fxdvbFCN1yyhN3Rw5r8A1GnSrVSBhRjm4qy5O _ gutl1XW9CaBaZSah7GOxGRr4gpSIJJvIL WovwG58DyNzEhrHtAfIje_pegqRsNMO FI-xPYJd2x6CcDKSoAXvXO0jbuoOvlPl5kh plOKU-WcFeWA	Yes	JWT Access token which was issued by IDP service after successfully user authentication

Body Parameters:

Property Name	Example Value	Require d	Description
intent	"PROFILE_SHARE"	Yes	This is a key value pair which contains the purpose with following possible values. Profile_share Payment Health_record_sharing

metaData	{ "hipId": "Test_HIP", "context": "ABC123", "hprId": "abdulkalam@abdm", "latitude": "-38.679", "longitude": "58.498" }	Yes	This is a key value pair which contains the location longitude and latitude
profile	{ "patient": { "abhaNumber": 18443810806111, "abhaAddress": "1844381@abdm",	Yes	This is key value pair which contains patient details
	"name": "User 1", "gender": "M", "dayOfBirth": "20", "monthOfBirth": "1", "yearOfBirth": "1999", "address": { "line": "C/O Sandipan Kshirsagar Ambejogai Road Renuka Nagar Latur", "district": **null**, "state": **null**, "pincode": **null** } "phoneNumber": "9876543210" } }		

Request Body

Request Body:

```
{
"intent": "PROFILE_SHARE",
"metaData": {
  "hipId": "MAYUR_HIP",
  "context": "ABC123",
  "hprId": "abdulkalam@abdm",
  "latitude": "-38.679",
  "longitude": "58.498"
},
"profile": {
  "patient": {
    "abhaNumber": 91178386101251,
    "abhaAddress": "9117838@sbx",
    "name": "User 1",
    "gender": "M",
    "dayOfBirth": "10",
    "monthOfBirth": "10",
    "yearOfBirth": "1994",
    "address": {
      "line": "C/O Sandipan Kshirsagar Ambejogai Road Renuka Nagar",
      "district": null,
      "state": null,
      "pincode": null
    },
    "phoneNumber": "9876543210"
  }
}
}
```


Response

Response:
Code: 202 ACCEPTED

7.3.2 Profile share – Callback

This is a callback API for patient share API.

URL: {callback_url}/api/v3/hip/patient/share
Method: Post
Request Headers:

Property Name	Example Value	Required	Description

REQUEST-ID	18235d89-cb13-479d-ad717a57d5f669a8	Yes	Unique UUID for track the end to end request transaction
TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	Actual time when request was initiated, ISO 8601 represents date and time by starting with the year, followed by the month, the day, the hour, the minutes, seconds and milliseconds
X-HIP-ID	IN2810014366	Yes	Identifier of the health information provider to which the request was intended

Body parameters

Property Name	Example Value	Required	Description
intent	PROFILE_SHARE	Yes	This is a key value pair which contains the purpose with following possible values. Profile_share Payment Health_record_sharing
metaData	"metaData": { "hipId": "MAYUR_HIP", "context": "ABC123",	Yes	This is a key value pair which contains the location longitude and latitude
	"hprId": "abdulkalam@abdm", "latitude": "-38.679", "longitude": "58.498" }		

profile	"profile": {
	"patient": {
	"abhaNumber": 91178386176531,
	"abhaAddress": "91178386@sbx",
	"name": "User 1",
	"gender": "M",
	"dayOfBirth": "10",
	"monthOfBirth": "10",
	"yearOfBirth": "1994",
	"address": {
	"line": "C/O Sandipan Kshirsagar Ambejogai Road",
	"district": **null**,
	"state": **null**,
	"pincode": **null**
	},
	"phoneNumber": "9876543210"
	}
		Yes	This is key value pair which contains all the patient details

Request Body

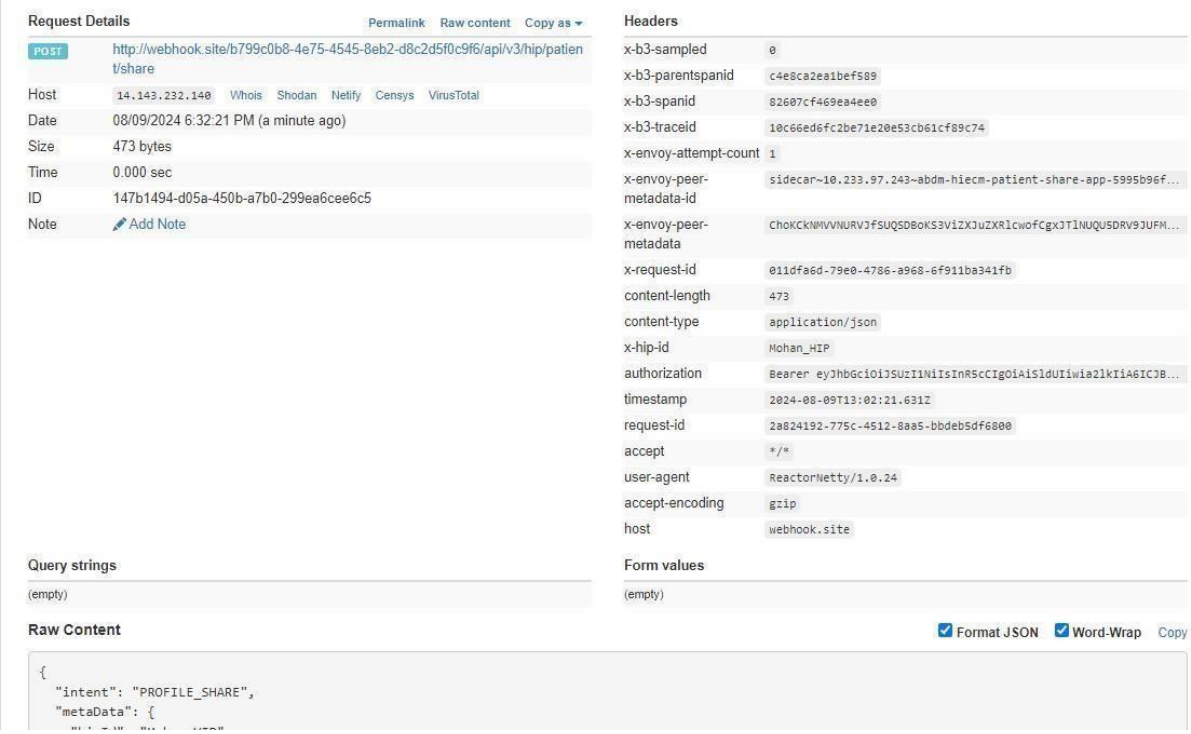
Request Body:

{
"intent": "PROFILE_SHARE",
"metaData": {
"hipId": "MAYUR_HIP",
"context": "ABC123",
"hprId": "abdulkalam@abdm",
"latitude": "-38.679",
"longitude": "58.498"
},
"profile": {
"patient": {
"abhaNumber": 9117838615XXXX,
"abhaAddress": "91178XXXX@sbx",
"name": "User 1",
"gender": "M",
"dayOfBirth": "XX",
"monthOfBirth": "XX",
"yearOfBirth": "XXXX",
"address": {

```
        "line": "C/O Sandipan Kshirsagar Ambejogai Road Renuka Nagar",
        "district": null,
        "state": null,
        "pincode": null
      },
      "phoneNumber": "987654XXXX"
    }    } }
```


Response

Response:
Response: In call back url below details should be displayed as per the Xauth token {"intent":"PROFILE_SHARE","metaData":{"hipId":"MAYUR_HIP","context":"6","hprId":"abdulkalam@hpr.abdm","latitude":"-38.670","longitude":"58.498"},"profile":{"patient":{"abhaNumber":"91178386156891","abhaAddress":"911783XX@sbx","name":"User 1", "gender":"M","dayOfBirth":"XX","monthOfBirth":"XX","yearOfBirth":"XXXX","address":{"line":null,"district":null,"state":null,"pincode":null},"phoneNumber":"987654XXXX"}}}
Code: 200 OK



7.3.3 Profile on-share

This API will be invoked by HIP to acknowledge the request by the user/patient to share the profile details.

URL: /api/hiecm/patient-share/v3/on-share
Method: Post
Request Headers:

Property Name	Example Value	Required	Description
REQUEST-ID	18235d89-cb13-479d-ad71-7a57d5f669a8	Yes	Unique UUID for track the end to end request transaction
TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	Actual time when request was initiated, ISO 8601 represents date and time by starting with the year, followed by the month, the day, the hour, the minutes, seconds and milliseconds
Authorization	eyJhbGciOiJSUzUxMiJ9. eyJzdWIiOiJ2YXNhbnRoYWt1bWFyLmtlc 2F2 YW5Ac2J4IiwiY2xpZW50SWQiOiJz YngiLCJzeXN0ZW0iOiJBQkhBLUEiLCJy ZXF1ZXN0ZXJJZCI6IlBIUi1XRUIiL CJwaHJNb2JpbGUiOm51bGwsImV4c CI6MTY2NzI5ODExNSwia WF0IjoxNjY3MjkwOTE1LCJwaHJBZ GRyZXNzIjoidmFzYW50aGFrdW1hci5rZX NhdmFuQHNieCIsInR4bklkIjoi YjEwMGM4ZDMtNTE1ZC00YWFiLTg1O WQtYzNlMTUwOTE3ZGY1In0	Yes	JWT Access token which was issued by ABDM session API after successful validation of client id and secret
X-CM-ID	sbx	Yes	Suffix of the consent manager to which the request was intended

Body Parameters

Property Name	Example Value	Required	Description
abhaAddress	ABHA address	Yes	Patient ABHA address against which the health records needs to be linked
status	"SUCCESS"	Yes	Transaction status from HIP to HIECM, "success" "failed"
context	43	Yes	HMIS/LMIS Counter ID
tokenNumber	3	Yes	Token number at HMIS/LMIS to be provided to the patient
expiry	180	Yes	Patient year of birth
requestId	f29f0e59-8388-46989fe605db67aeac46	Yes	This is a key value pair which contains the purpose

Request Body

Request Body:


```
{
  "acknowledgement": {
    "abhaAddress": "abc@abdm",
    "status": "success",
    "profile": {
      "context": "43",
      "tokenNumber": "3",
      "expiry": "180"
    }
  },
  "response": {
    "requestId": "f29f0e59-8388-4698-9fe6-05db67aeac46"
  }  }
```

Response

Response:
Code : 200 OK

Request Body : ERROR

-> Use this in case of error response (Ex: This is the one example for error payload and the code will be same. But, message will be change each error).

Request Body:


```
{
 "error": {
  "code": "ABDM-9999: ",
  "message": "string
 },
 "response": {
  "requestId": "6f0b4665-a915-4c92-aa36-65afb4a2cd71"
 } }
```


7.3.4 Profile on share – Callback

This is a callback API for patient on-share API.

URL: {callback_url}/api/v3/hiu/patient/on-share
Method: Post
Request Headers:

Property Name	Example Value	Required	Description
REQUEST-ID	18235d89-cb13-479d-ad717a57d5f669a8	Yes	Unique UUID for track the end to end request transaction

TIMESTAMP	2022-10-06T10:10:00.587Z	Yes	Actual time when request was initiated, ISO 8601 represents date and time by starting with the year, followed by the month, the day, the hour, the minutes, seconds and milliseconds
X-HIU-ID	ABDM_sbx	Yes	Suffix of the HIU to which the request was intended

Body Parameters:

Property Name	Example Value	Required	Description
abhaAddress	ABHA address	Yes	Patient ABHA address against which the health records needs to be linked
Status	"success"	Yes	Trasaction status from HIP to HIE-CM, "success" "failed"
Context	43	Yes	HMIS/LMIS Counter ID
tokenNumber	3	Yes	Token number at HMIS/LMIS to be provided to the patient
Expiry	180	Yes	Patient year of birth
requestId	f29f0e59-8388-46989fe605db67aeac46	Yes	This is a key value pair which contains the purpose

Request Body

Request Body:

```
{
  "acknowledgement": {
    "abhaAddress": "abc@abdm",
    "status": "success",
    "context": "43",
    "tokenNumber": "3",
    "expiry": 180
  },
  "response": {
    "requestId": "f29f0e59-8388-4698-9fe6-05db67aeac46"
  }
}
```

Response

Response:
Code: 200 OK

Request Details Permalink Raw content Copy as

POST	http://webhook.site/b799c0b8-4e75-4545-8eb2-d8c2d5f0c9f6/api/v3/hiu/patient/on-share
Host	14.143.232.140 Whois Shodan Netify Censys VirusTotal
Date	08/09/2024 6:33:09 PM (3 minutes ago)
Size	198 bytes
Time	0.001 sec
ID	171d960d-56d9-4994-96ed-2ee8f1150d23
Note	Add Note

Headers

x-b3-sampled	0
x-b3-parentspanid	0ae362fb64a4b70c
x-b3-spanid	1d4fdae4f3f33013
x-b3-traceid	a43baee2587a76ee95ab58760679eedb
x-envoy-attempt-count	1
x-envoy-peer-metadata-id	sidecar~10.233.97.243~abdm-hiecm-patient-share-app-5995b96f...
x-envoy-peer-metadata	ChoKCkNMVVNURVJfSUQSDBoKS3ViZXJuZXRlcwofCgxJTlNUQU5DRV9JUFM...
x-request-id	fb86d36a-8a62-4022-8c09-0c6b30b49713
content-length	198
content-type	application/json
x-hiu-id	Mohan_HIU
authorization	Bearer eyJhbGciOiJSUzI1NiIsInR5cCIgOiAiSldUIiwia2lkIiA6ICJB...
timestamp	2024-08-09T13:03:09.079Z
request-id	a6f7c337-aef7-496e-a23c-0ad391504480
accept	*/*
user-agent	ReactorNetty/1.0.24
accept-encoding	gzip
host	webhook.site

Query strings

(empty)

Form values

(empty)

Raw Content Format JSON Word-Wrap Copy


```
{
  "acknowledgement": {
    "status": "SUCCESS",
```


8.API Listing

No.	Flow	Serial	v3 API	Description
1	**HIP initiated linking**	1.1	/api/hiecm/v3/token/gene rate-token	This generic API endpoint will be used to generate a linking token to link care context.
		1.2	{callback_url}/api/v3/hip/token/ongeneratetoken	This is a Call-back API for hiecm/api/v3 /token/generatetoken
		1.3	/api/hiecm/hip/v3/link/car econtext	This API needs to be called by the HIP to link the care context against the patient ABHA address, once the HIP has the valid linking token generated against the same patient ABHA address.

		1.4	{callback_url}/api/v3/link/ on_carecontext	This is a Call-back API for hiecm/api/v3 /link/carecontext
		1.5	/api/hiecm/hip/v3/link/pat ient/links	This API will be invoked to get all the linked health records of the patient.
		1.6	/api/hiecm/hip/v3/link/co ntext/notify	This API will be invoked by HIP after updating a health record to notify all the subscribed HIUs.
		1.7	{callbackURL}/api/v3/links/ context/onnotify	This is a callback api for /hiecm/api/v3/link/context/notify API.
		1.8	/api/hiecm/hip/v3/link/pat ient/links/sms/notify2	This API will be invoked by HIP to trigger a SMS notification to the patient mobile number.
		1.9	{callbackURL}/api/v3/patie nts/sms/onnotify	This is a callback API for /hiecm/api/v3/link/patient/links/ sms/notify2 API call.
		1.10	/api/hiecm/hip/v3/link/pat ient/links/hip/ondeactivate	This API will be invoked by HIP as a response on deactivating an abha address.
		1.11	/api/hiecm/hip/v3/link/pat ient/links/hiu/ondeactivate	This API will be invoked by HIU as a response on deactivating an abha address.
2	**User initiated linking**	2.1	/api/hiecm/userinitiated-linking/v3/patient/carecontext/discover	This API will be invoked by the **patient/user** from the PHR application to discover his/her health records.
		2.2	{callback_url}/api/v3/hi p/patient/carecontext/discover	This API will be invoked by the **HIE-CM** to discover patient health records from HIP.

		2.3	/api/hiecm/userinitiatedlinking/v3/patient/carecontext/ondiscover	This API will be invoked by the **HMIS/LIMS application** sharing response for of the discover API. the
		2.4	{callback_url}/api/v3/hi u/patient/carecontext/on-discover	This API will be invoked by the **HIECM** for sharing the response of the discover API.
		2.5	/api/hiecm/userinitiated- linking/v3/link/carecontext/init	This is an API that will be invoked by the **patient/user** to link his/her health records.
		2.6	{callback_url}/api/v3/hi p/link/care-context/init	This API will be invoked by the **HIECM** to link patient/user health records to HIP.
		2.7	/api/hiecm/userinitiatedlinking/v3/link/carecontext/on-init	This is an API that will be invoked by the **HIP** to share the response of the init API.
		2.8	{callback_url}/api/v3/hi u/patient/carecontext/on-init	This is an API that will be invoked by the **HIECM** to share the response of the init API with the Patient.

		2.9	/api/hiecm/userinitiatedlinking/v3/link/carecontext/confirm	This API will be invoked by the **patient/user** to confirm his/her health records.
		2.10	{callback_url}/api/v3/hi p/link/carecontext/confirm	This API will be invoked by the **HIECM** to confirm patient/user health records to HIP.
		2.11	/api/hiecm/userinitiatedlinking/v3/link/carecontext/onconfirm	This is an API that will be invoked by the HIP to share the response of the confirmed API.

		2.12	{callback_url}/api/v3/hi u/patient/carecontext/on-confirm	This API will be invoked by the HIECM to share the response of confirm API to the patient.
3	**Patient Share**	3.1	/api/hiecm/patientshare/v3/share	This API will be invoked from the integrator application (any PHR application, just like ABHA) to share the user/patient profile with HMIS/LIMS.
		3.2	{callback_url}/api/v3/hi p/patient/share	Callback API for patient share
		3.3	/api/hiecm/patientshare/v3/on-share	This API will be invoked by HIP to acknowledge the request by the user/patient to share the profile details.

		3.4	{callback_url}/api/v3/hi u/patient/on-share	Callback for Patient on-share
4	**Session**	4.1	/api/hiecm/gateway/v3 /sessions	API to generate Auth token
5	**Gateway**	5.1	/api/hiecm/gateway/v3 /bridge/url	API to update the bridge URL
		5.2	/api/hiecm/gateway/v3 /certs	API to get keys from keycloak
		5.3	/api/hiecm/gateway/v3 /.well-known/openidconfiguration	API to get OpenID configuration
		5.4	/api/hiecm/gateway/v3 /bridge-service/serviceId/{servic eId}	API to fetch bridge details by service id
		5.5	/api/hiecm/gateway/v3 /bridge-services	API to fetch all the service details from a bridge
6	**Data Flow**	6.1	/api/hiecm/consent/v3/ request/hip/on-notify	API will be called by HIP to acknowledge the consent approval
		6.2	/api/hiecm/dataflow/v3/healthinformation/hip/onrequest	API will be called by HIP to acknowledge data flow request
		6.3	/api- hiu/data/notification	Data transfer API to push data
		6.4	/api/hiecm/dataflow/v3/healthinformation/notify	API called by HIP/HIU to notify the status of data transfer

9.Error Codes Listing

Code	Error

ABDM-1000	Unable to connect the database
ABDM-1001	No data found
ABDM-1002	Integrity violation
ABDM-1003	Email Gateway is unavailable
ABDM-1004	SMS Gateway is unavailable
ABDM-1005	Invalid receiver

ABDM-1006	Bad Request, invalid request Body
ABDM-1007	Connection failed due to timeout
ABDM-1008	SMS service currently disabled
ABDM-1009	Email service currently disabled
ABDM-1010	Validation failed
ABDM-1011	Gateway database unavailable
ABDM-1012	No records found against the ABHA Address
ABDM-1013	Invalid ABHA Number
ABDM-1014	Invalid Mobile Email
ABDM-1015	Invalid Response
ABDM-1016	Invalid TimeStamp
ABDM-1017	Invalid TransactionId
ABDM-1018	Share Profile database unavailable
ABDM-1019	Dependent Service Unavailable
ABDM-1020	Unknown database
ABDM-1021	Lack of required priviledges
ABDM-1022	Too many requests
ABDM-1023	Invalid User
ABDM-1024	Dependent service unavailable
ABDM-1025	Invalid ServiceId
ABDM-1026	Invalid Link Token
ABDM-1027	You are blocked. Please try again after 24 hours.
ABDM-1028	HIP is unavailable
ABDM-1029	Redis server is unavailable
ABDM-1030	Invalid request ID

ABDM-1031	Invalid request
ABDM-1032	Invalid header
ABDM-1033	HIU is unavailable

ABDM-1034	Notification service unavailable
ABDM-1035	Invalid HIP ID
ABDM-1035	OTP does not matched
ABDM-1036	Data does not matched
ABDM-1037	Counter and Care context count mismatch
ABDM-1038	ABHA address and Link token mismatch
ABDM-1039	Invalid Consent request id
ABDM-1040	Invalid HIU ID
ABDM-1041	Invalid Acknowledgement
ABDM-1042	Provider Mandatory
ABDM-1043	ABHA Address does not match with KYC details.

ABDM-1044	Broadcast Failed
ABDM-1045	Database Access is restricted
ABDM-1046	Invalid Purpose
ABDM-1047	Purpose does not exist
ABDM-1048	Timeout
ABDM-1049	Invalid Profile Share Intent Keys
ABDM-1050	Invalid Profile Share Metadata Keys
ABDM-1051	Invalid ABHA Number or ABHA Address
ABDM-1052	Invalid TransactionId or response's requestId
ABDM-1053	Data already exists
ABDM-1054	Invalid Subscription Request Id
ABDM-1401	HIP is not available
ABDM-1402	Acknowledgement is not received from HIP

ABDM-9999	Unknown exception
ABDM-1061	Consent artefact expired
ABDM-1062	Consent Not granted
ABDM-1063	Date Range given is invalid
ABDM-1064	request with this request id already exists
ABDM-1017	Invalid TransactionId
ABDM-1109	ABHA DB service unavailable
ABDM-1108	Notification DB service unavailable
ABDM-1205	Document DB Gateway is unavailable
ABDM-1034	Notification service unavailable
ABDM-1029	Redis server is unavailable
ABDM-1202	Document Gateway is unavailable
ABDM-1200	LGD Gateway is unavailable
ABDM-1201	IDP Gateway is unavailable
ABDM-9999	Unknown exception
ABDM-1101	This ABHA Address already exists. Please create with unique ABHA Address
ABDM-1006	Invalid combinations of scopes
ABDM-1100	You have requested multiple OTPs Or Exceeded maximum number of attempts for OTP match in this transaction. Please try again in 30 minutes.
ABDM-1006	Bad Request, invalid request Body