

I-heal 2.0 Integration Framework

Service Registration and Services

Purpose

This document provides a brief overview of the i-heal 2.0 integration API framework and describes the registration process used to request access to the API. The API can be used by a 3rd party application to request data contained in the i-heal 2.0 EHR.

Scope

The describes the process to gain access to the API and provides references to other documents which describe the API transactions in detail.

Other documents are available which describes each service

<https://ihealintegrationapi.healogics.com/apidocs/api/v1/registrationhelp> - describes registration process to gain access for i-heal integration api use as well as the api used for user authentication, password management, facility authorization, patient search, demographics, and patient common data sets.

<https://ihealintegrationapi.healogics.com/apidocs/api/v1/authenticationhelp> - describes api used for user authentication, password management, and facility authorization.

<https://ihealintegrationapi.healogics.com/apidocs/api/v1/patientsearchhelp> - describes api used for patient search and patient demographics access.

<https://ihealintegrationapi.healogics.com/apidocs/api/v1/datarequesthelp> - describes api used for accessing patient common data sets.

Terms of Use

Under the Health Insurance Portability and Accountability Act of 1996 (HIPAA), Healogics, Inc. and its subsidiaries (Healogics, Inc.) are "Business Associates" of each Hospital to which they provide wound care management services and, as such, are statutorily and contractually obligated and liable for maintaining the privacy and security of the "protected health information" (known as "PHI") for all patients treated in the Hospital's Wound Healing Program (Program). Under the HIPAA "Privacy Rule", "Security Rule" "HITECH Rule", and under each Hospital management agreement, Healogics, Inc. is also required to have comprehensive policies and procedures for the use and disclosure of PHI and "electronic PHI" (e-PHI). These policies and procedures can be located on the Healogics WebPortal within the Policy tab at <https://www.dcswebportal.com>.



As a part of your activities for the Program of the Hospital, you may have access to and use of PHI and/or e-PHI through the I-heal system. I-heal is a proprietary, web-based disease management and wound care outcome tracking system that documents patient progress and treatment outcomes for patients receiving treatment through the Program.

By using the i-heal integration API you acknowledge that: (1) your access to and use of I-heal is conditioned on your compliance with the below terms of use, (2) you agree to comply with HIPAA in connection with your Program activities and (3) you have read and agree to the below terms of use regarding your access to and use of the I-heal system. If you have any questions concerning our policies and procedures, please contact the Healogics, Inc. Compliance/Privacy Office at 904-446-3427, or e-mail us at: compliance@healogics.com.

1. My login ID is my own individual, personal code for gaining access into the I-heal system and I agree that I will not share my login ID and/or password with anyone or use another person's ID and/or password.
2. My login ID allows me to access only such information which I have been authorized to use to perform my job responsibilities and I agree that I will only use my computer access as appropriate in order to carry out my assigned duties.
3. When working in I-heal my login ID, electronic signature and initials, act as my personal signature, and are legally binding as my authorized personal signature.
4. The information I access through I-heal is privileged, and/or confidential, and should be used only in the performance of job-related or patient-related activities. I agree that I will not divulge PHI or other confidential information unless requested to do so by my supervisor or other authorized personnel in the performance of my job duties or as permitted or required by applicable law and regulation and policies and procedures of the Hospital.
5. It is a violation of Healogics, Inc.'s policies and the Hospital's policies to print PHI remotely using the I-heal system (e.g., at home, hotel, or any off-site printer) and I will not print such PHI remotely from the I-heal system.
6. I will notify Healogics's Compliance Officer if I believe a HIPAA breach has occurred or if I believe someone using I-heal has violated any of these terms of use.
7. I must log-off access to I-heal if I leave the computer terminal for any period of time. I understand that failure to log-off is a violation of these terms and Hospital policies.
8. I understand I am responsible for any information I input into the I-heal system.
9. I agree that no medical record or other document or information generated or maintained for the Hospital in connection with billing or medical recordkeeping for Program patients may be removed from the treatment center without Hospital written approval.

I understand that my failure to comply with the foregoing in the future may result in the discontinuation of my access to and use of I-heal and that any such breach may also be the basis for civil or criminal prosecution under state and/or federal law and that, if I am an employee or contractor of the Hospital or Healogics, Inc., such relationship may subject me to disciplinary action including and up to possible termination.

Registration

Vendors seeking access to the i-heal integration API must register with Healogics, Inc. and obtain a private key used during request authentication in each API request. No API request may be issued without a valid private key issued by Net Health.

API Message Context

i-heal API services are RESTful API that allows runs on HTTPS which accepts requests and sends responses in JSON format contained in the body of the HTTPS message. Requests and responses use the javascript style camel case notations for property names.

Private Key

A private key (or API Key) is assigned to a caller which must be included in the JSON request packet under property name 'privateKey'. This key must match the key assigned to the caller or else the request packet will be discarded, and an error message will be returned. The private key is obtained from Net Health as described in the registration help instructions.

API Message Errors

Successful API requests for all i-heal API return an HTTP 200 response; error conditions may return using HTTP response in 400 or 500 range. An error response message may be returned with the following data encoded in the message body.

Table 1 Error response body

errorCode	numeric	Required	Error code; see below
errorMessage	String; alpha-numeric	Required	error message; detailed user-friendly message
errors	Array of Object; Table 2 Error detail	Optional	May be empty array;
warnings	Array of Object; Table 2 Error detail	Optional	Non-fatal messages; May be empty array;
requestId	Guid	Required	Message requestId

Table 2 Error detail

fieldname	string	Required	Field associated with following messages
errors	Array of String; alpha-numeric	Required	Error message; detailed user-friendly message

Table 3 Error codes

errorCode	ErrorMessage
1	Login failed
2	Invalid private key
3	Invalid token
4	Authentication failed

7	Authorization failed
10	Account locked out
11	Password expired
12	Token expired
13	Invalid user Id
14	Invalid input field
15	Unknown error
16	Accept Terms required
40	User must change password
41	User must accept Terms of Use
42	User password expired in facility
43	User not authorized in facility
44	User not authorized in location
45	Invalid token for event
46	Could not reset password

Sample Response Body

```
{
  "errorCode": 2,
  "errorMessage": "The supplied private key is invalid for this service",
  "errors": null,
  "warnings": null,
  "requestId": "e6683367-b1fa-48c0-b566-61b518a89b68"
}
```

Authentication Overview

Authentication services include API which may be used to request user authentication, password management, and facility authorization. A user must be authenticated prior to subsequent calls to other i-heal API to ensure authorized access and log user activity.

- The *Authenticate* API may be used providing a valid username and password to obtain the i-heal userId for the authenticated user and a temporary token; both are required in all subsequent calls to any i-heal API.

An indicator is provided if the user must change their password or accept terms and conditions of use. The following API calls may be made to perform these operations. No clinical API may be subsequently called while these use states are indicated.

- *UserProfileGet* API may be used to obtain demographics of the authenticated user.
- *UserFacilityListGet* API may be used to obtain the facility authorization of the authenticated user. Attributes of each facility the user has access are provided.

- *UserPasswordSet* API may be used to change the password of the authenticated user.
- *TermsAndConditionsAccept* API may be used to accept i-heal terms of use by an authenticated user. *TermsAndConditionsAdminGet* API must be used to obtain the terms and condition 'noticeText' supplied to the *TermsAndConditionsAccept* request.
- *UserPasswordResetGet* and *UserPasswordResetSet* API may be used by a user to reset their password which had been forgotten. A security question must be answered correctly; after which, a new password is emailed to the user.
- The *AuthenticateInstance* API, like *Authenticate*, may be used providing a valid username and password to obtain the i-heal userId for the authenticated user and a temporary token. In this instance, the temporary token is very short term, single use token which is used by *AuthenticatebyToken* and *DocumentSign* API.
- *AuthenticateByToken* API authenticates a user using a short term, single use token instead of username and password. This is useful for single sign-on when transferring an authenticated user between applications. Like *Authenticate*, a userId and temporary token is returned.
- *Close* API invalidates a temporary token obtained using *Authenticate* or *AuthenticateByToken*.

Authentication Services API

Authenticate – authenticate the provided username and password returning the user's userId and a master token for temporary use.

HTTP POST

URL: <https://ihealintegrationapi.healogics.com/authservice/api/v2/Authenticate>

HEADER:

Content-Type application/json

Table 4 Authenticate request body

privateKey	String; alpha-numeric	Required	Assigned to vendor at registration
userName	String; alpha-numeric	Required	
password	String; printable	Required	

Table 5 Authenticate response body

masterToken	String; alpha-numeric	Required	Token obtained via Authenticate API; used in all subsequent API calls
user	Object; Table 6 User object	Required	Describes the authenticated user

Table 6 User object

userId	Numeric	Required	userId used in all subsequent API calls
username	alpha-numeric	Required	
firstName	alpha-numeric	Optional	
lastName	alpha-numeric	Optional	
middleName	Alpha-numeric	Optional	
address1	alpha-numeric	Optional	
address2	alpha-numeric	Optional	
city	alpha-numeric	Optional	
state	alpha-numeric	Optional	2 digit state code
zip	numeric string	Optional	5 or 10 digit zip code
phone	numeric string	Optional	10 digit phone
email	alpha-numeric	Optional	
positionCode	Numeric	Optional	values from 0 SelectionAdminGet – returns a list of valid code table values for the given selection list name and facilityId; returns list of valid code & value. <i>Position</i> selection in SelectionAdminGet – returns a list of valid code table values for the given selection list name and facilityId; returns list of valid code & value. Error! Reference source not found.
positionDescription	String	Conditionally Required	
employedByCode	Numeric	Optional	values from 0 SelectionAdminGet – returns a list of valid code table values for the given selection list name and facilityId; returns list of valid code & value. <i>EmployedBy</i> selection in SelectionAdminGet – returns a list of valid code table values for

			the given selection list name and facilityId; returns list of valid code & value. Error! Reference source not found.
employedByDescription	String	Conditionally Required	
roles	Array of string; alpha-numeric	Required	
termsAndCondition	Boolean	Conditionally Required	Indicates the user must agree to TAC; “true” – user must agree to Tac; otherwise, no action needed. If “true” all further API calls will fail.
passwordChange	Boolean	Conditionally Required	Indicates the user must change password; “true” –user must change pw; otherwise, no action needed. If “true” further API calls may fail.

Sample Request Body

```
{
  "userName" : "minniemouse",
  "password" : "daisyduck",
  "privateKey" : "ABCDEF0123456789abcdef"
}
```

Sample Response Body

```
{
  "masterToken": "EO7MkxplAL/ZtJ6nSeTS8MpckFTPSnyw2DBHaBlx5cFu3EW/CNzwjA",
  "user": {
    "userId": 674861,
    "userName": "minniemouse",
    "firstName": "Minnie",
    "lastName": "Mouse",
    "address1": null,
    "address2": null,
    "city": null,
    "state": null,
    "zip": null,
    "phone": "",
    "email": "mmouse@disney.com",
    "roles": [
      "FacilityUser",
      "ReportUser",
    ],
    "lastLogonTime": "2016-11-14T16:18:31.93",
    "termsAndConditions": false,
    "passwordChange": false,
    "positionCode": 13,
    "positionDescription": "Other",
    "employedByCode": 7,
    "employedByDescription": "Healogics"
  },
  "errorCode": 0,
  "errorMessage": "Request was completed successfully",
  "errors": [],
  "warnings": [],
  "requestId": "253ca6a3-f7c2-45e4-96f1-1318d7f5d46c"
}
```

AuthenticateInstance – authenticate the provided username and password generating an instance (single use) token instead of a master token. An instance token has a much shorter life span and is used for applying signatures API.

HTTP POST

URL: <https://ihealintegrationapi.healogics.com/authservice/api/v2/AuthenticateInstance>

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HEADER:

Content-Type application/json

Table 7 AuthenticateInstance request body

privateKey	String; alpha-numeric	Required	Assigned to vendor at registration
userName	String; alpha-numeric	Required	
password	String; printable	Required	

Table 8 AuthenticateInstance response body

instanceToken	String; alpha-numeric	Required	Single use token; expires very soon
userId	Numeric	Required	userId used in all subsequent API calls

Sample Request Body

```
{
  "userName" : "minniemouse",
  "password" : "daisyduck",
  "privateKey" : "ABCDEF0123456789abcdef"
}
```

Sample Response Body

```
{
  "masterToken": "EO7MkxpiAL/ZtJ6nSeTS8MpckFTPSnyw2DBHaBlx5cFu3EW/CNzWjA",
  "userId": 674861,
  "errorCode": 0,
  "errorMessage": "Request was completed successfully",
  "errors": [],
  "warnings": [],
  "requestId": "253ca6a3-f7c2-45e4-96f1-1318d7f5d46c"
}
```

AuthenticateByToken – authenticate the provided instance token and userId. Decrypts the provided ‘cipherText’ sequence. This API is used to authenticate a user using an authentication instance token generated with *AuthenticateInstance*.

HTTP POST

URL: <https://ihealintegrationapi.healogics.com/authservice/api/v2/AuthenticateByToken>

HEADER:

Content-Type application/json

Table 9 AuthenticateByToken request body

privateKey	String; alpha-numeric	Required	Assigned to vendor at registration
authenticateToken	String; alpha-numeric	Required	
userId	Numeric	Required	
cipherTexts	Object	Optional	Custom object carrying cipherTexts to be decrypted

Table 10 AuthenticateByToken response body

masterToken	String; alpha-numeric	Required	token used in all subsequent API calls
user	Object; Table 11 User object	Required	
plainTexts	Object	Conditionally Required	Present if cipherTexts present; matching object with decrypted strings

Table 11 User object

userId	Numeric	Required	userId used in all subsequent API calls
username	alpha-numeric	Required	
firstName	alpha-numeric	Optional	
lastName	alpha-numeric	Optional	
middleName	Alpha-numeric	Optional	
address1	alpha-numeric	Optional	
address2	alpha-numeric	Optional	
city	alpha-numeric	Optional	
state	alpha-numeric	Optional	2 digit state code
zip	numeric string	Optional	5 or 10 digit zip code
phone	numeric string	Optional	10 digit phone
email	alpha-numeric	Optional	
positionCode	Numeric	Optional	values from 0 SelectionAdminGet – returns a list of valid code table values for the given selection list name and facilityId; returns list of valid code & value. <i>Position selection in SelectionAdminGet</i> – returns a list of valid code table values for the given selection list name and facilityId;

			returns list of valid code & value. Error! Reference source not found.
positionDescription	String	Conditionally Required	
employedByCode	Numeric	Optional	values from 0 SelectionAdminGet – returns a list of valid code table values for the given selection list name and facilityId; returns list of valid code & value. <i>EmployedBy</i> selection in SelectionAdminGet – returns a list of valid code table values for the given selection list name and facilityId; returns list of valid code & value. Error! Reference source not found.
employedByDescription	String	Conditionally Required	
roles	Array of string; alpha-numeric	Required	
termsAndCondition	Boolean	Conditionally Required	Indicates the user must agree to TAC; “true” – user must agree to Tac; otherwise, no action needed. If “true” all further API calls will fail.
passwordChange	Boolean	Conditionally Required	Indicates the user must change password; “true” –user must change pw; otherwise, no action needed. If “true” further API calls may fail.

Sample Request Body

```
{
  "authenticateToken": "CWkNyTFC66ChggiA==vE6xY4r+jySLiOWTDyEedXCBao+ ",

```

```
"userId": "NAeptf07cqs=",
"PrivateKey": "ABCDEF0123456789abcdef",
"cipherTexts":
{
  "userId": "NAeptf07cqs=",
  "patientId": "",
  "facilityID": "12G1AtqXWQ+="
}
}
```

Sample Response Body

```
{
  "masterToken": "EO7MkxplAL/ZtJ6nSeTS8MpckFTPSnyw2DBHaBlx5cFu3EW/CNzwwjA",
  "user": {
    "userId": 674861,
    "userName": "minniemouse",
    "firstName": "Minnie",
    "lastName": "Mouse",
    "address1": null,
    "address2": null,
    "city": null,
    "state": null,
    "zip": null,
    "phone": "",
    "email": "mmouse@disney.com",
    "roles": [
      "FacilityUser",
      "ReportUser",
    ],
    "lastLogonTime": "2016-11-14T16:18:31.93"
  },
  "termsAndConditions": false,
  "passwordChange": false,
  "positionCode": 13,
  "positionDescription": "Other",
  "employedByCode": 7,
  "employedByDescription": "Healogics"
},
  "plainTexts":
{
```

```

        "userId": "674861",
        "patientId": "",
        "facilityID": "8932"
    },
    "errorCode": 0,
    "errorMessage": "Request was completed successfully",
    "errors": [],
    "warnings": [],
    "requestId": "253ca6a3-f7c2-45e4-96f1-1318d7f5d46c"
}

```

Close – invalidates the master token for an authenticated user.

HTTP POST

URL: <https://ihealintegrationapi.healogics.com/authservice/api/v2/UserFacilityListGet>

HEADER:

Content-Type application/json

Table 12 Close request body

privateKey	String; alpha-numeric	Required	Assigned to vendor at registration
masterToken	String; alpha-numeric	Required	Token obtained via Authenticate API; used in all subsequent API calls
userId	Numeric	Required	userId of the authenticated user

Table 13 Close response body

None			
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Sample Request Body

```

{
    "privateKey" : "ABCDEF0123456789abcdef"
    "masterToken": "EO7MkxpIAL/ZtJ6nSeTS8MpckFTPSnyw2DBHaBlx5cFu3EW/CNzjwA",
    "userId": 674861
}

```

Sample Response Body

```
{
  "errorCode": 0,
  "errorMessage": "The request completed successfully",
  "errors": null,
  "warnings": null,
  "requestId": "a5eceb1e-6ddd-44a2-8c64-b4124ca2d686"
}
```

TermsAndConditionsAccept – records a user’s acceptance of i-heal terms and condition notice.

New users and user password changes require acceptance of i-heal’s *Terms and Conditions* prior to accessing further clinical information from i-heal.

The “noticeText” value provided with this call may be obtained using *TermsAndConditionsAdminGet* API

Authenticate API call succeeds for the user when *Terms And Conditions* require acceptance; however, all other API calls requiring an authenticated *userId* will fail with “Accept Terms Required” error until terms are accepted.

HTTP POST

URL: <https://ihealintegrationapi.healogics.com/authservice/api/v2/TermsAndConditionsAccept>

HEADER:

Content-Type application/json

Table 14 TermsAndConditionsAccept request body

privateKey	String; alpha-numeric	Required	Assigned to vendor at registration
masterToken	String; alpha-numeric	Required	Token obtained via Authenticate API; used in all subsequent API calls
userId	Numeric	Required	userId of the authenticated user obtained via Authenticate API
eventDateTime	Datetime	Required	“yyyy-mm-ddThh:mm:ss”
facilityId	Numeric	Required	
noticeText	String	Required	Text must match that returned from <i>TermsAndConditionAdminGet</i>

Table 15 TermsAndConditionsAccept response body

N/A			
-----	--	--	--

Sample Request Body

```
{
  "privateKey" : "ABCDEF0123456789abcdef"
  "masterToken": "EO7MkxpIAL/ZtJ6nSeTS8MpckFTPSnyw2DBHaBlx5cFu3EW/CNzWjA",
  "userId": 674861
  "facilityId": 8921,
  "noticeText": "Under the Health Insurance Portability and Accountability Act of 1996 (HIPAA),\r\nHealogics, Inc. and its subsidiaries (Healogics, Inc.) are \"Business Associates\" of each\r\nHospital to which they provide wound care management services and, as such, are\r\nstatutorily and contractually obligated and liable for maintaining the privacy and\r\nsecurity of the \"protected health information\" (known as \"PHI\") for all patients treated\r\nin the Hospital\"'s Wound Healing Program (Program). Under the HIPAA \"Privacy Rule\", \r\n\"Security Rule\" \"HITECH Rule\", and under each Hospital management agreement, \r\nHealogics, Inc. is also required to have comprehensive policies and procedures for the\r\nuse and disclosure of PHI and \"electronic PHI\" (e-PHI). These policies and procedures\r\ncan be located on the Healogics WebPortal within the Policy tab at\r\n
```

or if I believe someone using I-heal has violated any of these terms of use.

I must log-off access to I-heal if I leave the computer terminal for any period of time. I understand that failure to log-off is a violation of these terms and Hospital policies.

I understand I am responsible for any information I input into the I-heal system.

I agree that no medical record or other document or information generated or maintained for the Hospital in connection with billing or medical recordkeeping for Program patients may be removed from the treatment center without Hospital written approval.

For Physicians Only:

If I am a physician who treats patients through the Program, I understand that:

- I am authorized to access only the information pertaining to patients I treat except as otherwise permitted by Hospital policies, HIPAA and/or a HIPAA compliant authorization or agreement permitting such access, as applicable.
- My use of such information shall be only for the limited purpose for which Hospital policy, HIPAA and/or a HIPAA compliant authorization or agreement permits
- I am entitled to receive and use my patients' PHI (and to receive related records) in order for treatment, payment and health care operations activities of my practice, consistent with the Privacy Rule and Security Rule.

I understand that my failure to comply with the foregoing in the future may result in the discontinuation of my access to and use of I-heal and that any such breach may also be the basis for civil or criminal prosecution under state and/or federal law and that, if I am an employee or contractor of the Hospital or Healogics, Inc., such relationship may subject me to disciplinary action including and up to possible termination.

Sample Response Body

```
{
  "errorCode": 0,
  "errorMessage": "The request completed successfully",
  "errors": null,
  "warnings": null,
  "requestId": "a5eceb1e-6ddd-44a2-8c64-b4124ca2d686"
}
```

TermsAndConditionsAdminGet – returns *Terms And Conditions* text for the given facilityId. Text is shown to the user and must be accepted using *TermsAndConditionsAccept* prior to access to any other calls.

HTTP POST

URL: <https://ihealintegrationapi.healogics.com/configservice/api/v1/TermsAndConditionsAdminGet>

HEADER:

Content-Type application/json

Table 16 TermsAndConditionsAdminGet request body

privateKey	String; alpha-numeric	Required	Assigned to vendor at registration
eventDateTime	Datetime	Optional	“yyyy-mm-ddThh:mm:ss”
facilityId	Numeric	Required	

Table 17 TermsAndConditionsAdminGet response body

noticeText	String	Required	Must be provided w/ TermsAndConditionAccept API call
------------	--------	----------	--

Sample Request Body

```
{
  "privateKey" : "ABCDEF0123456789abcdef"
  "facilityId": 8921
}
```

Sample Response Body

```
{
  "noticeText": "Under the Health Insurance Portability and Accountability Act of 1996 (HIPAA),\r\nHealogics, Inc. and its subsidiaries (Healogics, Inc.) are \"Business Associates\" of each\r\nHospital to which they provide wound care management services and, as such, are\r\nstatutorily and contractually obligated and liable for maintaining the privacy and\r\nsecurity of the \"protected health information\" (known as \"PHI\") for all patients treated\r\nin the Hospital\"'s Wound Healing Program (Program). Under the HIPAA \"Privacy Rule\", \r\n\"Security Rule\" \"HITECH Rule\", and under each Hospital management agreement, \r\nHealogics, Inc. is also required to have comprehensive policies and procedures for the\r\nuse and disclosure of PHI and \"electronic PHI\" (e-PHI). These policies and procedures\r\ncan be located on the Healogics WebPortal within the Policy tab at\r\n

```

person's ID and/or password.

My login ID allows me to access only such information which I have been authorized to use to perform my job responsibilities and I agree that I will only use my computer access as appropriate in order to carry out my assigned duties.

When working in I-heal my login ID, electronic signature and initials, act as my personal signature, and are legally binding as my authorized personal signature.

The information I access through I-heal is privileged, and/or confidential, and should be used only in the performance of job-related or patient-related activities. I agree that I will not divulge PHI or other confidential information unless requested to do so by my supervisor or other authorized personnel in the performance of my job duties or as permitted or required by applicable law and regulation and policies and procedures of the Hospital.

It is a violation of Healogics, Inc.'s policies and the Hospital's policies to print PHI remotely using the I-heal system (e.g., at home, hotel, or any off-site printer) and I will not print such PHI remotely from the I-heal system.

I will notify Healogics's Compliance Officer if I believe a HIPAA breach has occurred or if I believe someone using I-heal has violated any of these terms of use.

I must log-off access to I-heal if I leave the computer terminal for any period of time. I understand that failure to log-off is a violation of these terms and Hospital policies.

I understand I am responsible for any information I input into the I-heal system.

I agree that no medical record or other document or information generated or maintained for the Hospital in connection with billing or medical recordkeeping for Program patients may be removed from the treatment center without Hospital written approval.

For Physicians Only:

If I am a physician who treats patients through the Program, I understand that:

I am authorized to access only the information pertaining to patients I treat except as otherwise permitted by Hospital policies, HIPAA and/or a HIPAA compliant authorization or agreement permitting such access, as applicable.

My use of such information shall be only for the limited purpose for which Hospital policy, HIPAA and/or a HIPAA compliant authorization or agreement permits.

I am entitled to receive and use my patients' PHI (and to receive related records) in order for treatment, payment and health care operations activities of my practice, consistent with the Privacy Rule and Security Rule.

I understand that my failure to comply with the foregoing in the future may result in the discontinuation of my access to and use of I-heal and that any such breach may also be the basis for civil or criminal prosecution under state and/or federal law and that, if I am an employee or contractor of the Hospital or Healogics, Inc., such relationship may subject me to disciplinary action including and up to possible termination.

```
"errorCode": 0,  
"errorMessage": "The request completed successfully",  
"errors": null,  
"warnings": null,  
"requestId": "a5eceb1e-6ddd-44a2-8c64-b4124ca2d686"  
}
```

UserFacilityListGet – returns a list of facilities and location for which the authenticated user is authorized to access.

HTTP POST

URL: <https://ihealintegrationapi.healogics.com/authservice/api/v2/UserFacilityListGet>

HEADER:

Content-Type application/json

Table 18 UserFacilityListGet request body

privateKey	String; alpha-numeric	Required	Assigned to vendor at registration
masterToken	String; alpha-numeric	Required	Token obtained via Authenticate API; used in all subsequent API calls
userId	Numeric	Required	userId of the authenticated user obtained via Authenticate API
eventDateTime	Datetime	Optional	“yyyy-mm-ddThh:mm:ss”
externalSystems	Alpha-numeric	Optional	Name of external system; only returns facilities enabled for system.

Table 19 UserFacilityListGet response body

facilities	Array Object	Required	May be empty array; defined below Table 20 facility object
------------	--------------	----------	--

Table 20 facility object

facilityId	Numeric	Required	Identifier of the facility; used in subsequent calls.
facilityBluebookId	Alpha-numeric	Required	
facilityName	Alpha-numeric	Required	
address1	String	Optional	
address2	String	Optional	
city	String	Optional	
state	String	Optional	
zip	String	Optional	
phone	String	Optional	
fax	String	Optional	
email	String	Optional	
configuration	alpha	Required	EMR, OT, or POS
activeFacility	Boolean	Required	‘true’ or ‘false’
timeZone	Alpha-numeric	Required	Tz w/ respect of UTC; UTC-5

externalSystems	Object	Required	defined below Error! Reference source not found.
settings	Array of code:value pairs of type Boolean indicating facility setting status	Required	Supports <i>location</i> & <i>serviceLine</i> settings
locations	Array of CodeValue Objects	Required	Empty array if no locations for facility; see Table 21 codeValue object
serviceLines	Array of CodeValue Objects	Required	Empty array if no service lines for facility; see Table 21 codeValue object

Table 21 codeValue object

code	numeric	Required	i-heal internal identifier
value	String	Required	i-heal text value
sort	Numeric	Optional	Presentation sort order

Sample Request Body

```
{
  "privateKey" : "ABCDEF0123456789abcdef"
  "masterToken": "EO7MkxpIAL/ZtJ6nSeTS8MpckFTPSnyw2DBHaBlx5cFu3EW/CNzWjA",
  "userId": 674861
}
```

Sample Response Body

```
{
  "Facilities": [
    {
      "facilityId": 8932,
      "facilityBluebookId": "TS101",
      "facilityName": "EMR Training Facility 2",
      "configuration": "EMR",
      "timeZone": "UTC-5",
      "externalSystems": [
        {
          "name": "CCDA",
          "isEnabled": true
        }
      ]
    }
  ],
}
```

```
"settings": {
  "location": true,
  "serviceLine": true
},
"locations": [
  {
    "code": 106,
    "value": "Location AH2",
    "sort": null
  },
  {
    "code": 107,
    "value": "Location AH3",
    "sort": null
  }
],
"serviceLines": [
  {
    "code": 2,
    "value": "Inpatient",
    "sort": null
  },
  {
    "code": 1,
    "value": "Outpatient",
    "sort": null
  }
]
}
```

UserPasswordSet – updates the user’s password.

Requires a prior call to *Authenticate* as the *userId* and master token must be provided. This service may be called at any time; it must be called before other calls are made if the user’s profile indicates *PasswordChange* required.

The new password must meet existing password requirements define by the specified facility.

After a successful password change, the user must accept i-heal’s Terms And Conditions using *TermsAndConditionAccept*.

HTTP POST

URL: <https://ihealintegrationapi.healogics.com/authservice/api/v2/UserPasswordSet>

HEADER:

Content-Type application/json

Table 22 *UserPasswordSet* request body

privateKey	String; alpha-numeric	Required	Assigned to vendor at registration
masterToken	String; alpha-numeric	Required	Token obtained via Authenticate API; used in all subsequent API calls
userId	Numeric	Required	userId of the authenticated user obtained via Authenticate API
eventDateTime	Datetime	Required	“yyyy-mm-ddThh:mm:ss”
facilityId	Numeric	Required	follows password requirements for this facility
oldPassword	String	Required	user’s current password
newPassword	String	Required	user’s new password
newPasswordConfirm	String	Required	user’s new password

Table 23 *UserPasswordSet* response body

N/A			
-----	--	--	--

Sample Request Body

```
{
  "privateKey" : "ABCDEF0123456789abcdef"
  "masterToken": "EO7MkxpIAL/ZtJ6nSeTS8MpckFTPSnyw2DBHaBlx5cFu3EW/CNzwjA",
```

```

"userId": 674861,
"facilityId": 8921,
"oldPassword": "daisyduck",
"newPassword": "goofy",
"newPasswordConfirm": "goofy",
}

```

Sample Response Body

```

{
  "errorCode": 0,
  "errorMessage": "The request completed successfully",
  "errors": null,
  "warnings": null,
  "requestId": "a5eceb1e-6ddd-44a2-8c64-b4124ca2d686"
}

```

UserPasswordResetGet – Retrieves the user’s selected security question required for the user to reset their password when forgotten. These values are provided with an *UserPasswordResetSet* request to reset the user’s password.

The API fails if password recovery has not been setup for the user. The user’s profile in i-heal must contain the user’s email and security question/answer.

HTTP POST

URL: <https://ihealintegrationapi.healogics.com/authservice/api/v2/UserPasswordResetGet>

HEADER:

Content-Type application/json

Table 24 UserPasswordResetGet request body

privateKey	String; alpha-numeric	Required	Assigned to vendor at registration
userName	String; alpha-numeric	Required	

Table 25 UserPasswordResetGet response body

userName	String	Required	
identityQuestion	String;	Required	Provided to <i>UserPasswordResetSet</i> along with the answer from the user.

Sample Request Body

```

{
  "userName": "minniemouse",

```

```

    "privateKey" : "ABCDEF0123456789abcdef"
  }

```

Sample Response Body

```

{
  "userName" : "minniemouse",
  "identityQuestion": "What is your first pet's name?",
  "errorCode": 0,
  "errorMessage": "Request was completed successfully",
  "errors": null,
  "warnings": null,
  "requestId": "3475a105-c35d-46d1-b3a4-6e5f12965cf5"
}

```

UserPasswordResetSet – Resets the user’s password. Requires the username, identity question from *UserPasswordResetGet*, and the matching answer to the identity question. An email is set to the user with the new password.

The API fails if password recovery has not been setup for the user. The user’s profile must contain the user’s email and security question/answer. Fails if the identity question and identity answer do not match for the designated username.

If Successful, a new password is sent to the user’s recorded email address. The user must authenticate with their existing username and the new password, change their password using *UserPasswordSet*, and accept *Terms And Conditions* prior to continued API calls which require valid master token.

HTTP POST

URL: <https://ihealintegrationapi.healogics.com/authservice/api/v2/UserPasswordResetSet>

HEADER:

Content-Type application/json

Table 26 UserPasswordResetSet request body

privateKey	String; alpha-numeric	Required	Assigned to vendor at registration
userName	String; alpha-numeric	Required	
identityQuestion	String	Required	Retrieved using <i>UserPasswordResetGet</i> along with the answer from the user.
identityAnswer	String	Required	

Table 27 UserPasswordResetSet response body

N/A			
-----	--	--	--

Sample Request Body

```
{
  "userName" : "minniemouse",
  "privateKey" : "ABCDEF0123456789abcdef"
  "identityQuestion": "What is your first pet's name?",
  "identityAnswer": "goofy"
}
```

Sample Response Body

```
{
  "errorCode": 0,
  "errorMessage": "The request completed successfully",
  "errors": null,
  "warnings": null,
  "requestId": "a5eceb1e-6ddd-44a2-8c64-b4124ca2d686"
}
```

UserProfileGet – returns user’s demographic information for the authenticated user.

HTTP POST

URL: <https://ihealintegrationapi.healogics.com/authservice/api/v2/UserProfileGet>

HEADER:

Content-Type application/json

Table 28 UserProfileGet request body

privateKey	String; alpha-numeric	Required	Assigned to vendor at registration
masterToken	String; alpha-numeric	Required	Token obtained via Authenticate API; used in all subsequent API calls
userId	Numeric	Required	userId of the authenticated user obtained via Authenticate API
eventDateTime	Datetime	Option	“yyyy-mm-ddThh:mm:ss”

Table 29 UserProfileGet response body

user	Object	Required	defined below Table 30 User object
------	--------	----------	------------------------------------

Table 30 User object

userId	Numeric	Required	userId used in all subsequent API calls
username	alpha-numeric	Required	
firstName	alpha-numeric	Optional	
lastName	alpha-numeric	Optional	
middleName	Alpha-numeric	Optional	
address1	alpha-numeric	Optional	
address2	alpha-numeric	Optional	
city	alpha-numeric	Optional	
state	alpha-numeric	Optional	2 digit state code
zip	numeric string	Optional	5 or 10 digit zip code
phone	numeric string	Optional	10 digit phone
email	alpha-numeric	Optional	
positionCode	Numeric	Optional	values from 0 SelectionAdminGet – returns a list of valid code table values for the given selection list name and facilityId; returns list of valid code & value. <i>Position</i> selection in SelectionAdminGet – returns a list of valid code table values for the given selection list name and facilityId; returns list of valid code & value. Error! Reference source not found.
positionDescription	String	Conditionally Required	
employedByCode	Numeric	Optional	values from 0 SelectionAdminGet – returns a list of valid code table values for the given selection list name and facilityId; returns list of valid code & value. <i>EmployedBy</i> selection in

			SelectionAdminGet – returns a list of valid code table values for the given selection list name and facilityId; returns list of valid code & value. Error! Reference source not found.
employedByDescription	String	Conditionally Required	
roles	Array of string; alpha-numeric	Required	
termsAndCondition	Boolean	Conditionally Required	Indicates the user must agree to TAC; “true” – user must agree to Tac; otherwise, no action needed. If “true” all further API calls will fail.
passwordChange	Boolean	Conditionally Required	Indicates the user must change password; “true” –user must change pw; otherwise, no action needed. If “true” further API calls may fail.

Sample Request Body

```
{
  "privateKey" : "ABCDEF0123456789abcdef"
  "masterToken": "EO7MkxpIAL/ZtJ6nSeTS8MpckFTPSnyw2DBHaBlx5cFu3EW/CNzWjA",
  "userId": 674861,
}
```

Sample Response Body

```
{
  "user": {
    "userId": 674861,
    "userName": "minniemouse",
    "firstName": "Minnie",
    "lastName": "Mouse",
    "address1": null,
    "address2": null,
    "city": null,
    "state": null,
    "zip": null,
    "phone": "",
    "email": "mmouse@disney.com",
    "roles": [
      "FacilityUser",
      "ReportUser",
    ],
    "lastLogonTime": "2016-11-14T16:18:31.93",
    "termsAndConditions": false,
    "passwordChange": false,
    "positionCode": 13,
    "positionDescription": "Other",
    "employedByCode": 7,
    "employedByDescription": "Healogics"
  },
  "errorCode": 0,
  "errorMessage": "Request was completed successfully",
  "errors": [],
  "warnings": [],
  "requestId": "253ca6a3-f7c2-45e4-96f1-1318d7f5d46c"
}
```

Patient Services Overview

The patient services API may be used to perform searches for patients. Once identified, the demographic information may be loaded for a specific patient. A user must be authenticated prior to subsequent calls to other i-heal API to ensure authorized access and log user activity.

- The *PatientSearch* API may be used obtain a list of patients matching supplied criteria including facility, location, service line, patient status, first name, last name, medical record number or date of birth.
- The *PatientLoad* API is used to obtain all demographic information regarding a specific patient identified from the *PatientSearch* API.

Patient Services API

PatientSearch – returns a list of patients for the given facility, location, service line, patient status (active/inactive), first name, last name, medical record number, and date of birth.

Supports lazy loading in order of the “matchField” input parameter; that is, each call will load a “Page” of results defined by “pageIndex” and “maxPageSize”. Call the API multiple times as a user “pages” through a list of patients.

Only patients in the designated facility which the authenticated user has access will be returned. The API may further filter the results by location, service line, and patient active status if desired. Finally, the API searches for patients based on the “matchPhrase” provided for first name, last name, medical record number, or date of birth.

HTTP POST

URL: <https://ihealintegrationapi.healogics.com/patientservice/api/v1/PatientSearch>

HEADER:

Content-Type application/json

Table 31 PatientSearch request body

privateKey	String; alpha-numeric	Required	Assigned to vendor at registration
masterToken	String; alpha-numeric	Required	Token obtained via Authenticate API; used in all subsequent API calls
userId	Numeric	Required	userId of the authenticated user obtained via Authenticate API
eventDateTime	Datetime	Optional	“yyyy-mm-ddThh:mm:ss”
facilityId	Numeric	Required	

locationId	Numeric	Optional	if not provided, matches all locations
serviceLineId	Numeric	Optional	If not provided, Matches all service lines
activePatientsOnly	Boolean	Optional	“false” – all patients, “true” – active patients only; if not provided, provides active patients only
matchField	Numeric	Required	0 – first name; 1 – last name; 2 – mrn; 3 – date of birth
matchPhrase	String; alpha-numeric	Required	Match all if empty
pageIndex	Numeric	Required	Index of desired page to return; 0 = first page
maxPageSize	Numeric	Required	Maximum results to return per request; must be >= 1

Table 32 PatientSearch response body

resultCount	Numeric	Required	Total number of patients matching search.
pageIndex	Numeric	Required	Index of returned page
maxPageSize	Numeric	Required	Maximum results to return per request
patients	Array of Object	Required	May be empty array; defined below Table 33 patientMini object

Table 33 patientMini object

patientId	numeric	Required	
patientFirstName	Alpha-numeric	Optional	
patientLastName	Alpha-numeric	Optional	
patientNumber	Alpha-numeric	Optional	
patientDOB	Date	Optional	
patientSex	String	Optional	M – Male, F - Female
weeksInTreatment	Numeric	Optional	
admissionDate	Date only	Optional	Date only field; patient admission date
preregistrationDate	Date only	Optional	Date only field; patient registration date
locationId	Numeric	Optional	
locationDescription	String	Conditionally Required	
serviceLineId	numeric	Optional	
serviceLineDescription	String	Conditionally Required	

inpatient	Object	Optional	Present if serviceLineId = 2 (inpatient); else null;
-----------	--------	----------	--

Sample Request Body

```
{
  "privateKey" : "ABCDEF0123456789abcdef"
  "masterToken": "EO7MkxpIAL/ZtJ6nSeTS8MpckFTPSnyw2DBHaBlx5cFu3EW/CNzWjA",
  "userId": 674861
  "facilityId": 8921,
  "eventDateTime": "2018-03-20T22:06:00",
  "matchField" : 1,
  "matchPhrase" : "b",
  "activePatientsOnly" : 0,
  "pageIndex" : 0,
  "maxPageSize" : 20
}
```

Sample Response Body

```
{
  "patients": [
    {
      "PatientId": 2453254,
      "PatientFirstName": "Bilbo",
      "PatientLastName": "Baggins",
      "PatientNumber": "23435",
      "PatientDOB": "1958-01-01T00:00:00",
      "PatientSex": "M",
      "WeeksInTreatment": 0,
      "AdmissionDate": "2017-09-14T00:00:00",
      "PreRegistrationDate": "2015-09-14T00:00:00",
      "LocationId": 1,
      "LocationDescription": "Outpatient",
      "ServiceLineId": 105,
      "ServiceLineDescription": "Location AH1"
    },
    {
      "PatientId": 2876565,
      "PatientFirstName": "Frodo",
      "PatientLastName": "Baggins",
      "PatientNumber": "AH-100417",
    }
  ]
}
```



```
"PatientDOB": "1971-01-01T00:00:00",
"PatientSex": "M",
"WeeksInTreatment": 0,
"AdmissionDate": "2017-10-04T00:00:00",
"PreRegistrationDate": "2017-10-04T00:00:00",
"LocationId": null,
"LocationDescription": "",
"ServiceLineId": null,
"ServiceLineDescription": ""
},
{
  "PatientId": 2583653,
  "PatientFirstName": "Betty",
  "PatientLastName": "Boop",
  "PatientNumber": "SASA87S",
  "PatientDOB": "1942-12-08T00:00:00",
  "PatientSex": "F",
  "WeeksInTreatment": 0,
  "AdmissionDate": "2017-12-14T00:00:00",
  "PreRegistrationDate": "2017-12-14T00:00:00",
  "LocationId": null,
  "LocationDescription": "",
  "ServiceLineId": null,
  "ServiceLineDescription": ""
}
],
"recordCount": 3,
"pageIndex": 0,
"maxPageSize": 20,
"errorCode": 0,
"errorMessage": "The operation completed successfully",
"errors": [],
"warnings": [],
"requestId": "9597aa71-10c8-4948-b646-73303ab8cc35"
}
```

PatientLoad – returns all patient demographic information for a given patientId

HTTP POST

URL: <https://ihealintegrationapi.healogics.com/patientservice/api/v1/PatientLoad>

HEADER:

Content-Type application/json

Table 34 PatientLoad request body

privateKey	String; alpha-numeric	Required	Assigned to vendor at registration
masterToken	String; alpha-numeric	Required	Token obtained via Authenticate API; used in all subsequent API calls
userId	Numeric	Required	userId of the authenticated user obtained via Authenticate API
eventDateTime	Datetime	Optional	“yyyy-mm-ddThh:mm:ss”
facilityId	Numeric	Required	
patientId	Numeric	Required	From <i>PatientSearch</i> API

Table 35 PatientLoad response body

patient	Object	Required	defined below Table 36 patientFull object
---------	--------	----------	---

Table 36 patientFull object

patientId	numeric	Required	
patientFirstName	string	Optional	
patientLastName	string	Optional	
patientMiddleName	String	Optional	
patientTitle	String	Optional	
patientNumber	string	Optional	
patientSSN	String	Optional	
address1	string	Optional	
address2	String	Optional	
city	String	Optional	

state	string	Optional										
zip	string	Optional										
country	string	Optional										
phone1	string	Optional										
phone2	String	Optional										
Email	String	Optional										
patientDOB	Date	Optional										
patientSex	String	Optional	'M', 'F', ...									
patientRace	Array of Code Value Object	Optional	<p><i>Empty array if no races; see Table 37 Patient race object; values from SelectionAdminGet – returns a list of valid code table values for the given selection list name and facilityId; returns list of valid code & value. PatientRace selection in Table 42 codeValue object</i></p> <table border="1"> <tr> <td>code</td> <td>numeric</td> <td>R+</td> </tr> <tr> <td>value</td> <td>String</td> <td>R+</td> </tr> <tr> <td>sort</td> <td>Numeric</td> <td>O</td> </tr> </table> <p>Table 43 SelectionAdminGet selectionNameSelectionAdminGet – returns a list of valid code table values for the given selection list name and facilityId; returns list of valid code & value.</p>	code	numeric	R+	value	String	R+	sort	Numeric	O
code	numeric	R+										
value	String	R+										
sort	Numeric	O										
patientEthnicityCode	numeric	Optional	<p><i>values from 0 SelectionAdminGet – returns a list of valid code table values for the given selection list name and facilityId; returns list of valid code & value. PatientEthnicity selection in SelectionAdminGet – returns a list of valid code table values for the given selection list name and facilityId; returns list of valid code & value. Table 42 codeValue object</i></p> <table border="1"> <tr> <td>code</td> <td>numeric</td> <td>R+</td> </tr> <tr> <td>value</td> <td>String</td> <td>R+</td> </tr> <tr> <td>sort</td> <td>Numeric</td> <td>O</td> </tr> </table> <p>Table 43 SelectionAdminGet selectionName</p>	code	numeric	R+	value	String	R+	sort	Numeric	O
code	numeric	R+										
value	String	R+										
sort	Numeric	O										
patientEthnicityDCCode	String	Optional										
patientEthnicityDescription	String	Conditionally Required										
preferredLanguageCode	string	Optional	<i>values from SelectionAdminGet – returns a list of valid code table values for the given selection list name and facilityId; returns list of valid code & value. PreferredLanguage selection in SelectionAdminGet – returns a list of</i>									

			<i>valid code table values for the given selection list name and facilityId; returns list of valid code & value. Table 42 codeValue object</i>									
			<table border="1"> <tr> <td>code</td> <td>numeric</td> <td>R+</td> </tr> <tr> <td>value</td> <td>String</td> <td>R+</td> </tr> <tr> <td>sort</td> <td>Numeric</td> <td>O</td> </tr> </table>	code	numeric	R+	value	String	R+	sort	Numeric	O
code	numeric	R+										
value	String	R+										
sort	Numeric	O										
Table 43 SelectionAdminGet selectionName												
preferredLanguageRFCCode	String	Optional										
preferredLanguageDescription	String	Conditionally Required										
careCenterCode	Numeric	Optional										
careCenterDescription	String	Conditionally Required										
homeHealthCode	Numeric	Optional										
homeHealthDescription	String	Conditionally Required										
howHeardCode	Numeric	Optional										
howHeardDescription	String	Conditionally Required										
howHeardDetailCode	Numeric	Optional										
howHeardDetailDescription	String	Conditionally Required										
providerWoundCareId	Numeric	Optional	Id of wound care provider									
providerReferringId	Numeric	Optional	Id of referring provider									
providerReferredId	Numeric	Optional	Id of referred provider									
providerPrimaryId	Numeric	Optional	Id of primary care provider									
providerOtherId	Numeric	Optional	Id of other provider									

clinicianCaseManagerId	Numeric	Optional	Id of case manager									
emergencyContact	Object	Optional	May be null; defined in Table 38 Person object									
guarantor	Object	Optional	May be null; defined in Table 38 Person object									
insurance	Array of Object	Optional	May be empty array; defined Table 39 Patient Insurance object									
weeksInTreatment	Numeric	Optional	Calculated from admission date.									
admissionDate	Date only	Optional	Date only field									
preregistrationDate	Date only	Required	Date only field; patient registration date									
dischargeDate	Date only	Optional	null = active patient; present = discharged patient									
dischargeStatusCode	Numeric	Conditionally Required	<p><i>Required if dischargeDate present; values from SelectionAdminGet – returns a list of valid code table values for the given selection list name and facilityId; returns list of valid code & value. DischargeStatus selection in SelectionAdminGet – returns a list of valid code table values for the given selection list name and facilityId; returns list of valid code & value. Table 42 codeValue object</i></p> <table border="1"> <tr> <td>code</td> <td>numeric</td> <td>R+</td> </tr> <tr> <td>value</td> <td>String</td> <td>R+</td> </tr> <tr> <td>sort</td> <td>Numeric</td> <td>O</td> </tr> </table> <p>Table 43 SelectionAdminGet selectionName</p>	code	numeric	R+	value	String	R+	sort	Numeric	O
code	numeric	R+										
value	String	R+										
sort	Numeric	O										
dischargeStatusDescription	String	Conditionally Required										
locationId	Numeric	Optional	<p><i>values from SelectionAdminGet – returns a list of valid code table values for the given selection list name and facilityId; returns list of valid code & value. ComponentOfCare2 selection in SelectionAdminGet – returns a list of valid code table values for the given selection list name and facilityId; returns list of valid code & value. Table 42 codeValue object</i></p> <table border="1"> <tr> <td>code</td> <td>numeric</td> <td>R+</td> </tr> <tr> <td>value</td> <td>String</td> <td>R+</td> </tr> <tr> <td>sort</td> <td>Numeric</td> <td>O</td> </tr> </table> <p>Table 43 SelectionAdminGet selectionName</p>	code	numeric	R+	value	String	R+	sort	Numeric	O
code	numeric	R+										
value	String	R+										
sort	Numeric	O										
locationDescription	String	Conditionally Required										

serviceLineId	numeric	Optional	values from SelectionAdminGet – returns a list of valid code table values for the given selection list name and facilityId; returns list of valid code & value. ComponentOfCare selection in SelectionAdminGet – returns a list of valid code table values for the given selection list name and facilityId; returns list of valid code & value. Table 42 codeValue object		
			code	numeric	R+
			value	String	R+
			sort	Numeric	O
Table 43 SelectionAdminGet selectionName					
serviceLineDescription	String	Conditionally Required			
notes	String	Optional			

Table 37 Patient race object

raceCode	numeric	R+	
raceName	String	R+	
raceCDCCode	String	O	

Table 38 Person object

firstName	string	O	
lastName	string	O	
middleName	string	O	
relationship	string	O	
address1	string	O	
address2	string	O	
city	string	O	
state	string	O	2 digit state code
zip	string	O	5 or 10 digit zip code
country	string	O	
phone	string	O	10 digit phone
email	string	O	email

Table 39 Patient Insurance object

insuranceId	Numeric	R+	
insuranceName	String	R+	
Sequence	Numeric	R+	1-primary, 2-secondary, 3-tertiary
address1	String	O	
address2	String	O	
address3	String	O	
city	String	O	
state	String	O	

zip	String	0	
phone	String	0	
fax	String	0	
contactFirstName	String	0	
contactLastName	String	0	
contactPhone	String	0	
contactEmail	String	0	
insured	Object	0	May be null; defined Table 38 Person object
insuredDOB	Date	0	Date only
policyNumber	String	0	
groupNumber	String	0	
groupName	String	0	

Sample Request Body

```
{
  "privateKey" : "ABCDEF0123456789abcdef"
  "masterToken": "EO7MkxpIAL/ZtJ6nSeTS8MpckFTPSnyw2DBHaBix5cFu3EW/CNzWjA",
  "userId": 674861
  "facilityId": 8921,
  "patientId": 2583653
}
```

Sample Response Body

```
{
  "patient": {
    "PatientId": 2583653,
    "PatientFirstName": "Betty",
    "PatientLastName": "Boop",
    "patientTitle": null,
    "patientNumber": "SASA87S",
    "patientSSN": "",
    "address1": "202 Burlington Rd.",
    "address2": "",
    "city": "Bedford",
    "state": "MA",
    "zip": "01730",
```

```
"country": "United States",
"phone1": "7812713000",
"phone2": "",
"email": "",
"PatientDOB": "1942-12-08T00:00:00",
"patientSex": "F",
"patientRace": [
  {
    "RaceCode": 2,
    "RaceName": "American Indian / Alaskan Native",
    "RaceCDCCode": "1002-5"
  }
],
"patientEthnicityCode": 12,
"patientEthnicityCDCCode": "2186-5",
"patientEthnicityDescription": "Not Hispanic or Latino",
"preferredLanguageCode": null,
"preferredLanguageRFCCode": null,
"preferredLanguageDescription": "",
"careCenterCode": null,
"careCenterDescription": "",
"homeHealthCode": null,
"homeHealthDescription": "",
"howHeardCode": null,
"howHeardDescription": "",
"howHeardDetailCode": null,
"howHeardDetailDescription": null,
"providerWoundCareId": 150378,
"providerReferringId": null,
"providerReferredId": null,
"providerPrimaryId": 150378,
"providerOtherId": 150378,
"clinicianCaseManagerId": null,
"emergencyContact": {
  "firstName": "",
  "lastName": "",
  "middleName": "",
  "relationship": "",
  "address1": "",
  "address2": "",
  "city": "",
```



```
"state": "",
"zip": "",
"country": null,
"phone": "",
"email": null
},
"guarantor": {
  "firstName": "",
  "lastName": "",
  "middleName": "",
  "relationship": "",
  "address1": "",
  "address2": "",
  "city": "",
  "state": "",
  "zip": "",
  "country": null,
  "phone": null,
  "email": null
},
"insurance": [
  {
    "insuranceld": 47603,
    "insuranceName": "Other Organizations",
    "Sequence": 1,
    "address1": "",
    "address2": "",
    "address3": null,
    "city": "",
    "state": "",
    "zip": "",
    "phone": "7812713000",
    "fax": "",
    "contactFirstName": "",
    "contactLastName": "",
    "contactPhone": "",
    "contactEmail": "",
    "insured": {
      "firstName": "Albert",
      "lastName": "Barber",
      "middleName": "",
```

```
"relationship": "Self",
"address1": "",
"address2": "",
"city": "",
"state": "",
"zip": "",
"country": "0",
"phone": "7812713000",
"email": ""
},
"insuredDOB": "1942-02-01T00:00:00",
"policyNumber": "",
"groupNumber": "",
"groupName": ""
}
],
"weeksInTreatment": 237,
"admissionDate": "2014-05-10T00:00:00",
"preregistrationDate": "2014-03-01T00:00:00",
"dischargeDate": null,
"dischargeStatusCode": null,
"dischargeStatusDescription": null,
"locationId": 1,
"locationDescription": "",
"serviceLineId": 1,
"serviceLineDescription": "Outpatient",
"notes": ""
},
"errorCode": 0,
"errorMessage": "The operation completed successfully",
"errors": [],
"warnings": [],
"requestId": "42b76af7-297a-456c-8699-7e484464adf8"
}
```

SelectionAdminGet – returns a list of valid code table values for the given selection list name and facilityId; returns list of valid code & value. These values are used as select lists for various data

HTTP POST

URL: <https://ihealintegrationapi.healogics.com/configservice/api/v1/SelectionAdminGet>

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HEADER:

Content-Type application/json

Table 40 SelectionAdminGet request body

privateKey	String; alpha-numeric	Required	
eventDateTime	Datetime	Optional	
facilityId	Numeric	Required	
selectionName	String; alpha-numeric	Required	The <i>selectionName</i> for which to retrieve a list of selection items.

Table 41 SelectionAdminGet response body

codeValues	Array of Objects	Required	May be empty array; defined below Table 42 codeValue object
------------	------------------	----------	---

Table 42 codeValue object

code	numeric	R+	
value	String	R+	
sort	Numeric	O	

Table 43 SelectionAdminGet selectionName

DischargeStatus	Available patient discharge status
Clinician	Active clinician list (ID, clinician name only: "lname, fname minitial")
ComponentOfCare	Available Service Lines (Inpatient, Outpatient, etc)
ComponentOfCare2	Available Locations (satellite locations, SNF facilities, floors, departments, etc)
PatientEthnicity	Available list of patient ethnicity selections
PatientRace	Available list of patient race selections
PreferredLanguage	Available list of preferred languages
Provider	Active provider list (ID, provider name only: "lname, fname minitial")

Sample Request Body

```
{
  "privateKey" : "ABCDEF0123456789abcdef",
  "facilityId": 8921,
  "selectionName": "DischargeStatus"
}
```

Sample Response Body

```
{
  "CodeValues": [
    {
      "code": 0,
```

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```

    "value": "Treatment Complete (Inactive)",
    "sort": 0
  },
  {
    "code": 1,
    "value": "Active",
    "sort": 1
  },
  {
    "code": 2,
    "value": "Deceased",
    "sort": 2
  },
  {
    "code": 3,
    "value": "Unknown",
    "sort": 3
  }
],
"errorCode": 0,
"errorMessage": null,
"errors": null,
"warnings": null,
"requestId": "00000000-0000-0000-0000-000000000000"
}

```

VisitListGet – returns a list of encounters or visits for the given facility and patient; only includes visits for the current admission.

Only patients in the designated facility which the authenticated user has access will be returned.

HTTP POST

URL: <https://ihealintegrationapi.healogics.com/visitservice/api/v1/VisitListGet>

HEADER:

Content-Type application/json

Table 17 VisitListGet request body

privateKey	String; alpha-numeric	Required	Assigned to vendor at registration
masterToken	String; alpha-numeric	Required	Token obtained via Authenticate API; used

			in all subsequent API calls
userId	Numeric	Required	userId of the authenticated user obtained via Authenticate API
eventDateTime	Datetime	Optional	“yyyy-mm-ddThh:mm:ss”
facilityId	Numeric	Required	
patientId	Numeric	Required	From <i>PatientSearch</i> API

Table 18 *VisitListGet* response body

visits	Array of Object	Required	May be empty array; defined below Table 19 visit object
--------	-----------------	----------	---

Table 19 *visit* object

visitId	numeric	R+	
visitDateTime	DateTime	R+	Local time w/ utc offset
visitTypeCode	Numeric	R+	Values from SelectionAdminGet – returns a list of valid code table values for the given selection list name and facilityId; returns list of valid code & value. <i>VisitType</i> selection Name
visitTypeDescription	String	R+	
visitStatus	Numeric	R+	0 – active, 1 – complete, 2 - missed
locationId	Numeric	O	
locationDescription	String	C	
serviceLineId	Numeric	O	
serviceLineDescription	String	C	
providerId	Numeric	O	
providerFirstName	String	C	
providerLastName	String	C	
provider2Id	Numeric	O	
provider2FirstName	String	C	
provider2LastName	String	C	
clinicianId	Numeric	O	
clinicianFirstName	String	C	
clinicianLastName	String	C	
clinician2Id	Numeric	O	
clinician2FirstName	String	C	
clinician2LastName	String	C	

patient	Object	C	Present if patient not otherwise provided. Error! Reference source not found.
---------	--------	---	---

Table 20 patientMini object

patientId	numeric	Required	
patientFirstName	Alpha-numeric	Optional	
patientLastName	Alpha-numeric	Optional	
patientNumber	Alpha-numeric	Optional	
patientDOB	Date	Optional	
patientSex	String	Optional	M – Male, F - Female
weeksInTreatment	Numeric	Optional	
admissionDate	Date only	Optional	Date only field; patient admission date
preregistrationDate	Date only	Optional	Date only field; patient registration date
locationId	Numeric	Optional	
locationDescription	String	Conditionally Required	
serviceLineId	numeric	Optional	
serviceLineDescription	String	Conditionally Required	
inpatient	Object	Optional	Present if serviceLineId = 2 (inpatient); else null;

Sample Request Body

```
{
  "privateKey" : "ABCDEF0123456789abcdef",
  "facilityId": 8921,
  "patientId": 12345
}
```

Sample Response Body

```
{
  "visits": [
    {
      "visitId": 3153862,
      "visitDateTime": "2016-06-30T14:00:00-04:00",
      "visitTypeCode": 2,
      "visitTypeDescription": "Wound Care",
      "visitStatus": 0,
      "locationId": 1,
    }
  ]
}
```

```
"locationDescription": null,
"serviceLineId": 1,
"serviceLineDescription": "Outpatient",
"providerId": 150267,
"providerFirstName": "CMS123",
"providerLastName": "Diabeticfoot Test",
"provider2Id": 152810,
"provider2FirstName": "Berry",
"provider2LastName": "Allen",
"clinicianId": 2514,
"clinicianFirstName": "BARBARA",
"clinicianLastName": "HANNA",
"clinician2Id": 2488,
"clinician2FirstName": "Sara",
"clinician2LastName": "Gold",
"patient": {
  "patientId": 137159,
  "patientFirstName": "Felicia",
  "patientLastName": "Shelton",
  "patientMiddleName": "",
  "patientNumber": "CMS123_3",
  "patientDOB": "1982-02-01T00:00:00",
  "patientSex": "F",
  "weeksInTreatment": 376,
  "admissionDate": "2012-02-26T00:00:00",
  "preregistrationDate": "2012-02-26T00:00:00",
  "locationId": 1,
  "locationDescription": null,
  "serviceLineId": null,
  "serviceLineDescription": null,
  "inPatient": null
}
}},
"errorCode": 0,
"errorMessage": null,
"errors": null,
"warnings": null,
"requestId": "00000000-0000-0000-0000-000000000000"
}
```

CCDA Services Overview

The CCDA service API may be used to retrieve Common Clinical Data for each visit associated with a specified patient. A user must be authenticated prior to subsequent calls to other i-heal API to ensure authorized access and log user activity.

- The *CCDAGet* API may be used to retrieve the Common Clinical Data for each visit associated with a specified patient. The request may be filtered by date of service start and end range and include all or select Common Clinical Data parts. The clinical data is provided in C-CCDA format defined by Health Level Seven, International.

CCDA Services API

CcdaGet– returns a list of C-CDA formatted objects containing Common Clinical Data Set for each visit associated with the specified patientId. The request may be filtered by startVisitDate and endVisitDate. The response only contains elements defined by ccdaparts.

The C-CDA payload and XSLT stylesheet are returned using Base64 encoding and must be decoded before use.

HTTP POST

URL: <https://ihealintegrationapi.healogics.com/CCDAService/api/v1/CCDAGet>

HEADER:

Content-Type application/json

Table 44 CCDAGet request body

privateKey	String; alpha-numeric	Required	Assigned to vendor at registration
masterToken	String; alpha-numeric	Required	Token obtained via Authenticate API; used in all subsequent API calls
userId	Numeric	Required	userId of the authenticated user obtained via Authenticate API
eventDateTime	Datetime	Optional	“yyyy-mm-ddThh:mm:ss”
facilityId	Numeric	Required	
patientId	Numeric	Required	PatientId from <i>PatientSearch</i> API

visitStartDate	Date only	Required	“yyyy-mm-dd”; date of first encounter to retrieve.
visitEndDate	Date only	Optional	Date of last encounter to retrieve. Same as visitStartDate if not provided
ccdaParts	Object	Optional	CCDA contains all parts if not provided; object defined below Table 45 CCDA Generation Data Parts object

Table 45 CCDA Generation Data Parts object

includeAllergies	boolean	Optional	“false” – do not include; “true” – include; default “false”
includeEncounters	boolean	Optional	“
includeFunctionalStatus	boolean	Optional	“
includeImmunizations	boolean	Optional	“
includeImplantableDevices	boolean	Optional	“
includeInstructions	boolean	Optional	“
includeMedications	boolean	Optional	“
includePlanOfTreatment	boolean	Optional	“
includeProblemList	boolean	Optional	“
includeProcedures	boolean	Optional	“
includeReasonForReferral	boolean	Optional	“
includeResults	boolean	Optional	“
includeSocialHistory	boolean	Optional	“
includeVitalSigns	boolean	Optional	“
includeGoalsSection	boolean	Optional	“
includeHealthConcerns	boolean	Optional	“

Table 46 CCDAGet response body

visitStartDate	Date only	Required	Same as request
visitEndDate	Date only	Required	Same as request
patientId	Numeric	Required	Same as request
ccda	Array of string	Required	Array of string containing C-CDA formatted payload for each patient visit; may be empty array. C-CDA is Base64 encoded and must be decoded before use.

xsltStyeshet	String	Optional	Xslt stylesheet used to show C-CCDA in human readable form. Xslt is Base64 encoded and must be decoded before use.
--------------	--------	----------	--

Sample Request Body (all parts)

```
{
  "privateKey" : "ABCDEF0123456789abcdef",
  "masterToken": "EO7MkxpIAL/ZtJ6nSeTS8MpckFTPSnyw2DBHaBix5cFu3EW/CNzwwjA",
  "userId": 674861,
  "facilityId": 8921,
  "patientId": 2583653,
  "visitStartDate": "2018-07-07",
  "visitEndDate": "2018-07-21",
  "codeParts": null
}
```

Sample Request Body (select parts)

```
{
  "privateKey" : "ABCDEF0123456789abcdef"
  "masterToken": "EO7MkxpIAL/ZtJ6nSeTS8MpckFTPSnyw2DBHaBix5cFu3EW/CNzwwjA",
  "userId": 674861,
  "facilityId": 8921,
  "patientId": 2583653,
  "visitStartDate": "2018-07-07",
  "visitEndDate": "2018-07-21",
  "codeParts":
  {
    "includeImmunizations": true,
    "includeProcedures": true
  }
}
```

Sample Response Body

```
{
  "patientId": 2583653,
  "visitStartDate": "2018-07-07",
}
```

```
"visitEndDate": "2018-07-21",
"ccda": [
  "PD94bWwtc3R5bGVzaGVldCB0eXBIPSJ0ZXh0L3hzbClgaHJIZj0iQ0RBLnhzbC...",
  "PD94bWwtc3R5bGVzaGVldCB0eXBIPSJ0ZXh0L3hzbClgaHJIZj0iQ0RBLnhzbC..."
],
"xsltStypesheet": "PD94bWwgdMvyc2lvcj0iMS4wliBlbmNvZGluZz0iVVRGLTg..."
"errorCode": 0,
"errorMessage": "The operation completed successfully",
"errors": [],
"warnings": [],
"requestId": "42b76af7-297a-456c-8699-7e484464adf8"
}
```