

### Overview

API resources are secured. API also verifies applications are registered to access the API server and authenticates resource requests. Upon authentication, an access token is provided enabling you to access API resources.

To access APIs, you will:

- Create a developer portal account
- Sign into Developer Portal
- Create an application and Construct the Access My Data URL
- Generate an access token
- Generate an authorization code

If you already have a developer portal account and registered an application, go right to Log in to developer portal.

# **Process overview**

Accessing APIs starts with creating an account in QSmartCare, logging in to QSmartCare Developer Portal and setting up an application access. The access URL, unique client ID and unique client secret key within QSmartCare application are then used to access through web portal API URL. Upon navigating to this URL and logging in using your unique information a dashboard will be displayed. This screen provides you with the option to create your API access depending on whether you created a Work (Provider / Physician) account or a Personal (patient) account. Provider access provides API access to data for a patient under the provider's care. Personal provides API access data for the specific patient.

# **API Categories**

	QSmartCare Patient Access APIs	QSmartCare Provider Access APIs
Technical Info &	Read-Only RESTful API endpoints	RESTful APIs
Data Standards	that provide <b>patient data</b> using the	enabling Read and Write transactions
	FHIR data standard (R4).	across an expansive array of EHR
		data using a proprietary data standard.
User Audience	Apps powered by Patient Access	Apps powered by APIs are intended
	APIs are used by Individual	for QSmartCare Users.
	Patients of QSmartCare Practices.	
Functional Scope	Patient Access API Apps let patients	API apps integrate with QSmartCare to
	of a QSmartCare Practice access	add value & expand functionality for
	their own personal health	QSmartCare Clients across an extensive
	data within that Practice's	variety of clinical, administrative, and
	QSmartCare system via API using a	other functions.
	web-based	
Partner Program	Program details for Patient Access	Program options for Clients or
Info	API Developers are provided in	3rd Party Vendors developing API Apps





	the Patient Access APIs and	include the Open Access and API
	Regulatory Compliance section	Distribution Partner programs
	of https://qsmartcare.com/patient	described
		at https://www.qsmartcare.com/app/
Technical	Patient Access API Documentation	Access to API technical documentation
Documentation	is publicly available	is provided following submission of
	via https://qsmartcare.com/api-	developer details to QSmartCare – links
	documentation.html	on the Partner Program page led to the
		appropriate API Onboarding Form.

## **Create a Developer Portal Account**

- 1. Navigate to the Developer's portal account using the link below Link: <u>https://qsmartcare.com/app/registration.html</u>
- 2. Enter the details and select Create button





Create a D	Developer Port	tal Account
First Name :	First Name	
Middle Name :	Middle Name	
Last Name :	Last Name	
DOB :	MM/DD/YYYY	
Enter Email ID :	Enter Email ID here	
City :	Select	~
State :	Select	~
Facility :	Select	~
Select services :	Patient O Provid	ler
Phone Number :	Phone Number	
	Clear Form	Create Account

Enter the following details to create a developer account

- a. Email Address: The Email to be used to log in to your developer account.
- b. Frist Name: Enter your first name.
- c. Last Name: Enter your last name.
- d. Middle Name: Enter your middle name
- e. DOB: Enter your DOB
- f. City: Enter your city name
- g. State: Enter your state name
- h. Facility Name: Enter your facility name
- i. Phone: Enter your phone name

#### Sign into Developer Portal

Click on the below link and navigate to the Developer Portal.





Link: https://qsmartcare.com/patient/index.html

- 1. Enter the Username, Password and PIN
- Select the Login button and the Developer Portal screen is displayed Note: Your display name should now appear in the top right corner of the screen.



# Creating an application and constructing the Access My Data URL (Patient – Single Patient)

- a. In the general info menu go to Manage API section
- b. Upon clicking the Manage API the screen appears as below
- c. Click the Show to view the AccesskeyID and SecretAccesskey

🌣 Manage API						
AccessKeyID	:	94f98b872ab6bbf5	SecretAccessKey	:	395e49d23a38462559213b7148f17e	
Valid From	* :	Copy Hide 06/01/2022	Valid To	*	Copy Hide 12/31/2022	
API EndPoint	:	https://qsmartcare.com/patient- api/controller/patient-service.php	Status	* :	Active     Inactive	
						<b>e</b>

#### **Generating the Access Token**

- a. Open Postman, create a blank tab and the Untitled Request screen is displayed.
- b. Select the Post Method and choose the tab Body
- c. Enter the Url: https://qsmartcare.com/R4-patient-api/oath2/token.php

Кеу	Value





grant_type	authorization_code
Client_ID	generated from the Developer Portal
Client_secret	generated from the Developer Portal

Hit the Send button in the right side as highlighted in the below screenshot

http:	s://qsmartcare.com/R4-patient-api/oath2/token.ph	р	🖺 Save 🗸		
POS	t v https://qsmartcare.com/R4-patient-	api/oath2/token.php		Send ~	:@:
Parar	ns Authorization Headers (8) Body •	Pre-request Script Tests Settings	-	Cookies	-
no	one 🔵 form-data 💿 x-www-form-urlencoded	🔵 raw 🌑 binary 🜑 GraphQL			
	KEY	VALUE	DESCRIPTION	••• Bulk Edit	
V	grant_type	authorization_code			
	Client_ID	94f98b872ab6bbf5			
$\mathbf{N}$	Client_secret	395e49d23a38462559213b7148f17e			
	Кеу	Value	Description		

Upon clicking the 'Send' button in postman generates the following details

- Patient id
- > Access token
- > Refresh token

http:	s://qsmartcare.com/R4-patient-api/oath2/token.pl	qr	🖺 Save	~ / E
POS	T v https://qsmartcare.com/R4-patient-	-api/oath2/token.php		Send ~
Parar	ms Authorization Headers (8) Body • one  one form-data  oxec x-www-form-urlencoded	Pre-request Script Tests Settings • raw • binary • GraphQL		Cookies
	KEY	VALUE	DESCRIPTION	••• Bulk Edit
	grant_type	authorization_code		
	Client_ID	94f98b872ab6bbf5		
	Client_secret	395e49d23a38462559213b7148f17e		
	Kev	Value	Description	
Body	Cookies Headers (10) Test Results	Ca Status: 200 OF	C Time: 1145 ms Size: 5.08 KB	Save Response $$
Pret	tty Raw Preview Visualize JSON			ΓQ
1 2 3 4	<pre>"need_patient_banner": true, "patient": "142859", "refresh_token": "eyJhbGci0iJIUZI1 eyJjb250ZXh01jp7Im51ZWRtcGF0ak I2/mJMNSISINNjb3BlljoibGF1bmNo LnJzIHBhdGllbnRcL0FsbGVyZ3lJbn 50XC9Db25kaXRpb24ucnMgcGF0aWVu ZWZ1cmVuY2UucnMgcGF0aWVu ZWZ1cmVuY2F0aW9uLnJzIHBhdGllbnRc aXphdGlvb15ycyBwYXRpZW50XC9QYX</pre>	NiIsInR5cCl6IkpXVCJ9. VudF91YW6uZXIiOnRydWUsInBhdGllbnQiOiIxND XC9wYXRpZW50IG9wZW5pZCBmaGlyVXNlciBvZmZs RvbGVyYW5jZS5ycyBwYXRpZW50XC9DYXJlUGxhbi dFwrR6V2aWNlLnJzIHBhdGllbnRcL0RpYWdub3N0 [5jb3VudGVyLnJzIHBhdGllbnRcL0dvYWwucnMgc6 L01ZGljYXRpb26SZXF1ZXN0LnJzIHBhdGllbnRc RpZW50LnJzIHBhdGllbnRcL1ByYWN0aXRpb25lci	I4NTkifSwiY2xpZW50X2lkIjo aW5lX2FjY2VzcyBwYXRpZW50XI 5ycyBwYXRpZW50XC9DYXJlVGVI aWNSZXBvcnQucnMgcGF0aWVudI F0aWVudFwvSW1tdW5pemF0aW91 L09ic2VydmF0aW9uLnJzIHBhdd 5ycyBwYXRpZW50XC9Qem9jZWR:	iOTRmOThiODcyYW C9NZWRpY2F0aW9u hbS6ycyBwYXRpZW wvR09jdW1lbnRS uLnJzIHBhdGllbn SilbnRcL09yZ2Fu LcmUucnMgcGF0aW





🔇 Rele	ease Notes	POST https://qsmartcare.co 🖲	+ 000	No Environment 🗸
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POST	r ~	https://qsmartcare.com/R4-patient-	api/oath2/token.php	Send ~
Paran	ns Authori	zation Headers (8) Body •	Pre-request Script Tests Settings	Cookies
🔵 no	one 🔵 form-	-data 🖲 x-www-form-urlencoded	🔵 raw 🜑 binary 🜑 GraphQL	
	KEY		VALUE	DESCRIPTION ••• Bulk Edit
	grant_type		authorization_code	
	Client_ID		94f98b872ab6bbf5	
	Client_secre	t	395e49d23a38462559213b7148f17e	
	Kev		Value	Description
Body	Cookies H	Preview Visualize ISON	Status: 200 0	✓ Time: 1145 ms Size: 5.08 KB Save Response ✓
10	<u>"acc</u>	wic3ViIjoiYTBmDQ40TM2MGE4Njli ImlhdCIGMTY20DYxNTcyOSwiZXhwIj ess_token": "eyJhbGoiOiJJUZIN eyJuZWVKX3BhdGllbnRfYmFubmVyIj lzSW5SNWNDSTZJa3BYVkNKOS5leUpq T2lJeE5ESTROV6tp2lN3aVkyeHBaVz JWWlcIME1H0XdaVzVwWkNCbWFHbHW R2xsYm5SY0wwRnNiR1Z5WjNsSmJUUn xWR12oYlM1eWNSQndZWFJwWlciMFhD ZHVIM04wYVd0U1pYQnZjblF1Y25NZ2	yvoboliwiempolivziativisytakpiwobacoka YzVmMWFmDM0NzA0Y2yzMjhiZmYzYWUyMDI5MDA3 oxNjY4NjE5MzI5fQ.k6G1xVu2fgxTXFjHlMnDkfu iIsInR5cC16IkpXVCJ9. p0cnVlLCJwYXRpZW50IjoiMTQyODU5IiwicmVmcn YjIMFpYaDBJanA3SW01bFpXUmZjR0YwYVdWdWRG UuWDJsa0lqb2IPVFJtT1RcaU9EY3IZV0kyWW4KbU WE5Y2lCd1ptWnNhVzVsWDJGalkyVnpjUJ3WVAS ZiR126WC1a1pTNX1jeUJ3WVbscFpXNTBYQzIEW OURMjVzYVhScGIyMHVjbk1nY0ddMGFXVnVkRnd2 NHRjBhV1Z1ZEZ3dJJH0WpkVzFsYm5SU1pXWmzjbV	ODM2NDU2NGVjNjIyNmMxNjJjOCIsImlzcyIGIIs sfV0xhtFMwA7KcGDJzTI", VzaF90b2tlbiIGImV5SmhiR2NpT21KSVV6STFOaU OWJZVZV1WlhJaU9uUnlkV1VzSW5CaGRHbGxiblFp i5T5XNJbkSqYJNCbElqb21R0YxYm10b1hDDXdZWF icFpXNTBYQ210WldScFkyRjBhV21TG6KeklIQmhk hkbFVHeGhiaTV6Y31Cd11YUnBaVzUwWEM5RF1YSm UkdWMmFXTmxMbkp6SUhCaGRHbGxiblJjTDBScF1X Z1WTJVdWNuTWdjR0YwYVdWdWRGd3ZSVZVqYjNWdW

### Generating the Authorization Code

A. Copy the Patient Id generated in the previous step and enter in url <u>https://qsmartcare.com/R4-patient-api/single/Patient.php?id=142859</u>

https	s://qsmartcare.com/R4-patient-api/single/Patient.	php?_id=142859	🖺 Save 🗸	P	
GET	✓ https://qsmartcare.com/R4-patient-	api/single/Patient.php?_id=142859		Send ~	୍ୱାହି
Paran Query	ns • Authorization Headers (6) Body y Params	Pre-request Script Tests Settings		Cookies	
	KEY	VALUE	DESCRIPTION	••• Bulk Edit	
	_id	142859			
	Кеу	Value	Description		
Respo	onse			$\sim$	

B. Copy the access token code generated in the previous step and enter in Authorization as highlighted below



Upon clicking the 'send' button it will display the patient health data.

http	s://qsmartcare.com/R4-patient-api/single/Patient.	ohp?_id=142859		🖺 Sav	ve v	/ 🗉
GET	https://qsmartcare.com/R4-patient-	api/single/Patient.php?_id=142859			s	Send ~
Para Head	ms • Authorization Headers (7) Body	Pre-request Script Tests Settings				Cookies
	KEY	VALUE	DESCRIPTION	000	Bulk Edit	Presets ~
$\checkmark$	Authorization	bearer eyJhbGciOiJIUzI1NiIsInR5cCl6lkpXVCJ9				
	Key	Value	Description			
Body Pre	Cookles Headers (10) Test Results tty Raw Preview Visualize JSON	<ul> <li>€ Status: 200 OK</li> <li>→</li> </ul>	Time: 1011 ms Siz	e: 11.38	KB Save	Response V
133 134 135 136 137 138 139 140 141 142 143	"name": [ "use": "offici "family": "Lar "given": [ "Rebecca" ], "suffix": [ "" ] ],	al", son",				

#### **Provider Workflow**

#### Sign into Developer Portal

- 1. Click on the below link and navigate to the Developers Portal Link: <u>https://qsmartcare.com/app/index.html</u>
- 2. Enter the Username, Password and PIN
- 3. Select the Login button and the Developer Portal screen is displayed

Note: Your display name should now appear in the top right corner of the screen.





▲ Login to your account
🚨 Username
Password
Remember Me Forgot password
Login

Creating an application and constructing the Access My Data URL (Provider – Multi Patient)

a. Click on the Manage FHIR API from the side menu

Manage FHIR API			(	View Audit Log
AccessKeyID;	Show	SecretAccessKey:	Show	
Valid From* :	10/11/2022	Valid To" :	12/30/2022	]
API EndPoint;	https://qsmartcare.com/patient-api/controller/patient-service.php	Status*:	Active Inactive	
Patient;	× Barry Tesla - 9111003 × Melinda Goodman - 9704911 ×			

- b. Upon clicking the Manage API the screen appears as below
- c. Click the Show to view the AccesskeyID and SecretAccesskey
- d. Search and select for the patients

<i>martCare</i> v.qsmartcare.com			4	2,
age FHIR AP	I			¢
AccessKeyID:	6817698a04e01b31	SecretAccessKey:	a50ae4f52b7838ddcc7a6ded577e98	
	Copy Hide		Copy Hide	
Valid From*:	10/01/2022	Valid To <sup>*</sup> :	12/31/2022	
API EndPoint:	https://qsmartcare.com/patient- api/controller/patient-service.php	Status <sup>*</sup> :	Active Inactive	
Patient:	* Rebecca Larson - 9999094 *			
	× John Wright - 9999097			

## Generating the Access Token

- a. Open Postman, create a blank tab and the Untitled Request screen is displayed.
- b. Select the Post Method and choose the tab Body
- c. Enter the Url: <u>https://qsmartcare.com/R4-patient-api/oath2/token.php</u>
- d. Hit the Send button in the right side as highlighted in the below screenshot

Кеу	Value
grant_type	authorization_code
Client_ID	generated from the Developer Portal
Client_secret	generated from the Developer Portal

http://qsmartcare.com/R4-patient-api/oath2/token.php	0	🖺 Save	~	0 E	>
POST ~ http://qsmartcare.com/R4-patient-a	pi/oath2/token.php		S	iend v	୍ବତ
Params • Authorization Headers (8) Body •	Pre-request Script Tests Settings			Cookies	
none offic form-data ox-www-form-urlencoded	🔵 raw 🌑 binary 🜑 GraphQL				
KEY	VALUE	DESCRIPTION	000	Bulk Edit	
grant_type	authorization_code				
Client_ID	6817698a04e01b31				
Client_secret	a50ae4f52b7838ddcc7a6ded577e98				
Кеу	Value	Description			
esponse				$\sim$	





Upon clicking the 'Send' button in postman generates the following details

- Patient id
- > Access token
- Refresh token

•					LO
https	s://qsmartcare.com/R4-patient-api/oath2/token.pl	hp	🖺 Save	~ 🥖 🗉	
POS	r ~ https://qsmartcare.com/R4-patient	-api/oath2/token.php		Send ~	:@:
Parar	ns   Authorization Headers (8) Body	Pre-request Script Tests Settings		Cookies	
🔵 no	ne 🔵 form-data 💿 x-www-form-urlencoded	🔵 raw 🕒 binary 🔵 GraphQL			
	KEY	VALUE	DESCRIPTION	••• Bulk Edit	
	grant_type	authorization_code			
	Client_ID	6817698a04e01b31			
Σ	Client_secret	a50ae4f52b7838ddcc7a6ded577e98			
	Key	Value	Description	,	
Body	Cookies Headers (10) Test Results	(合) Status: 200 (	DK Time: 834 ms Size: 5.17 KB	Save Response $$	
Pret	ty Raw Preview Visualize JSON	- → I		ΓQ	
1 2 3 4	<pre>"need_patient_banner": true, "patient": "142859,142891", "refresh_token": "eyJhbGci0iJIUzI1 eyJjb260ZXh0Tjp7Im5lZWRFcGF0ak c20ThhMDRIMDFiMzEiLCJzY29WZSIG aWNhdGlvbi5ycyBwYXRpZW50XC9BbG MgcGF0aWVudFwvQ29UZGI0aW9LLDJ Y3VtZW50UmVmZXJ1bmNlLnJzIHBhdG BwYXRpZW50XC9Mb2NhdGlvbi5ycyBw XC9Pcmdhbml6YXRpb24ucnMgcGF0aW</pre>	NiIsInR5cCI6IkpXVCJ9. VudF9YNK5uZXI10nRydWUsInBhdGllbnQi0iIxNU vImxhdW5jaFwvc6F0aWVudCBvc6VuaWQgZmhpclVz vIcmd5SW50b2xlcmFuY2UucnMgcGF0aWVudFwvQ2 IHBhdGllbnRcL0Rldmj72S5ycyBwYXRpZW50XC9Hb2 VYXRpZW50XC9NZWRpY2F0aW9uUmVxdWVzdC5ycyBw VudFwvUGF0aWVudC5ycyBwYXRpZW50XC9QcmFjdC	014NTksMTQyODkxIn0sImNsaWVu 2ZXIgb2ZmbGluZV9hY2Nlc3Mgc0 2gVZVBsYW4ucnMgcGF0aWVudFwv 2aWFnbm9zdGljUmVwb3J0LnJ2I 2FSLnJzIHBhdGllbnRcL0ltbXVu vYXRpZW50XC9PYnNlcnZhdGlvb 3l0aW9uZXIucnMgcGF0aWVudFwv	udF9pZCI6IjY4MT SF0aWVudFwvTWVk /Q2FyZVRIYW0ucn HBhdGllbhRcL0Rv uaXphdGlvb15ycy I5ycyBwYXRpZW50 /UHJvY2VkdXJLLn	

### Generating the Authorization Code

A. Enter the url

https://qsmartcare.com/R4-patient-api/multiple/api/patient.php

B. Copy the access token code generated in the previous step and enter in Authorization as highlighted in the below screenshot and click send button

http	s://qsmartcare.com/R4-patient-api/multiple/api/pa	tient.php		🖺 Sa	ve ~	/ E	
GET	GET v https://qsmartcare.com/R4-patient-api/multiple/api/patient.php					Send ~	:@:
Para	Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies Headers I for 6 hidden						
	KEY	VALUE	DESCRIPTION	000	Bulk Edit	Presets ~	
	Authorization	bearer eyJhbGciOiJIUzI1NiIsInR5cCl6lkpXVCJ9					
	Key Value Description						





Upon clicking the 'send' button displays the all the patient health data.

https://qsmartcare.com/R4-patient-api/multiple/api/patient.php					
GET v https://qsmartcare.com/R4-patient-a	api/multiple/api/patient.php			Send 🗸	:(j):
Params Authorization Headers (7) Body Pr	e-request Script Tests Settings			Cookies	
KEY	VALUE	DESCRIPTION	••• Bulk Edit	Presets ~	
Authorization	bearer eyJhbGciOiJIUzI1NilsInR5cCl6lkpXVCJ9				
Кеу	Value	Description			
Body Cookies Headers (9) Test Results	🖨 Status: 200 OK	Time: 1043 ms Size:	2.22 KB Save	Response ~	
Pretty Raw Preview Visualize JSON	✓ — — — — — — — — — — — — — — — — — — —			ΓQ	
<pre>1 1 2 "resourceType": "Patient", 3 "id": "142869", 4 "meta": { 5 "versionId": "1", 6 "lastUpdated": "2022-11-16T13:E 7 "source": "#iLFSV70Lv0KF8dmQ", 8 "profile": [ 9   "http://hl7.org/fhir/us/com 10 ] 11 },</pre>	52:25+00:00", ce/StructureDefinition/us-core-patient"				

## Troubleshooting

User session not found. User must re-authenticate.

h	nttps://qsmartcare.com/R4-patient-api/oath2/token.ph	p	🖺 Save	/ 🖉 🗉
P	POST ~ https://qsmartcare.com/R4-patient-a	api/oath2/token.php		Send ~
P	arams Authorization Headers (8) Body •	Pre-request Script Tests Settings		Cookies
•	none 🔵 form-data 💿 x-www-form-urlencoded	🔵 raw 🔵 binary 🔵 GraphQL		
	KEY	VALUE	DESCRIPTION	••• Bulk Edit
I	grant_type	authorization_code		
I	Client_ID	94f98b872ab6bbf		
I	Client_secret	395e49d23a38462559213b7148f17e		
	Kev	Value	Description	
30	dy Cookies Headers (7) Test Results	Ca Status: 200	OK Time: 242 ms Size: 276 B	Save Response $$
	Pretty Raw Preview Visualize HTML	✓ =		ΓQ
	1 🖟 Result": "Error: Wrong Client_ID or Cl	lient_secret Key"]		I

This error indicates the authentication has wrong client ID or wrong Client Secret key. To resolve this issue, you must enter the valid client ID and Client Secret ID.