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HHS Patient Data Challenge
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Meet myHealth

myHealth helps patients organize and share data from disparate sources including wearables, EHRs, and flat files, via FHIR, C-CDA, and other health data & APIs.



myHealth Mission

With the push to value based care, providers need this more complete view to alert patients and the care team when patients need extra attention. Using consumer data myHealth hopes to attack the readmissions challenge as the industry shifts incentives.

By supporting health data standards and consumer devices, myHealth can provide a holistic view of the patients data, both at home and in health systems.

View the myHealth App

Video

Check out the [myHealth video](https://www.youtube.com/watch?v=St)
<https://www.youtube.com/watch?v=St>



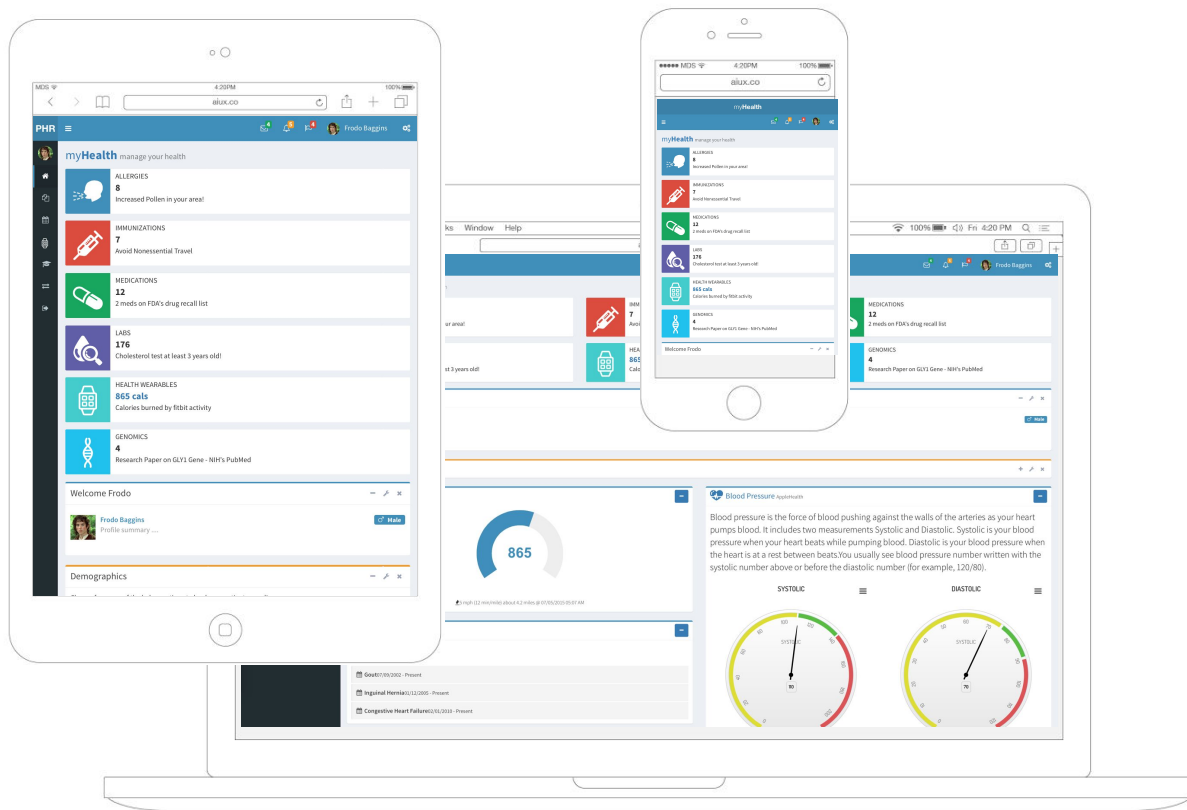
Or Use myHealth Yourself

[Visit myHealth](http://ec2-52-25-246-230.us-west-2.compute.amazonaws.com) to create an account or use our test account below:

- Location:
<http://ec2-52-25-246-230.us-west-2.compute.amazonaws.com>
- Username: frodo
- Password: frodobaggins

User experience and visual appeal

myHealth's home page summarizes the patient's data and provides quick access to views and actions through the sidebar. The responsive layout supports mobile, tablet, & desktop



Functionality & quality of data aggregation

All data including those from EHRs and wearables import into myHealth's profile.

Information has contextual views. Observations are graphed, problems are listed, the care team has faces.



My File Cabinet - Supported Formats

With myHealth patients can upload
5 supported file formats, and
explore the
sources, and share
them individually.

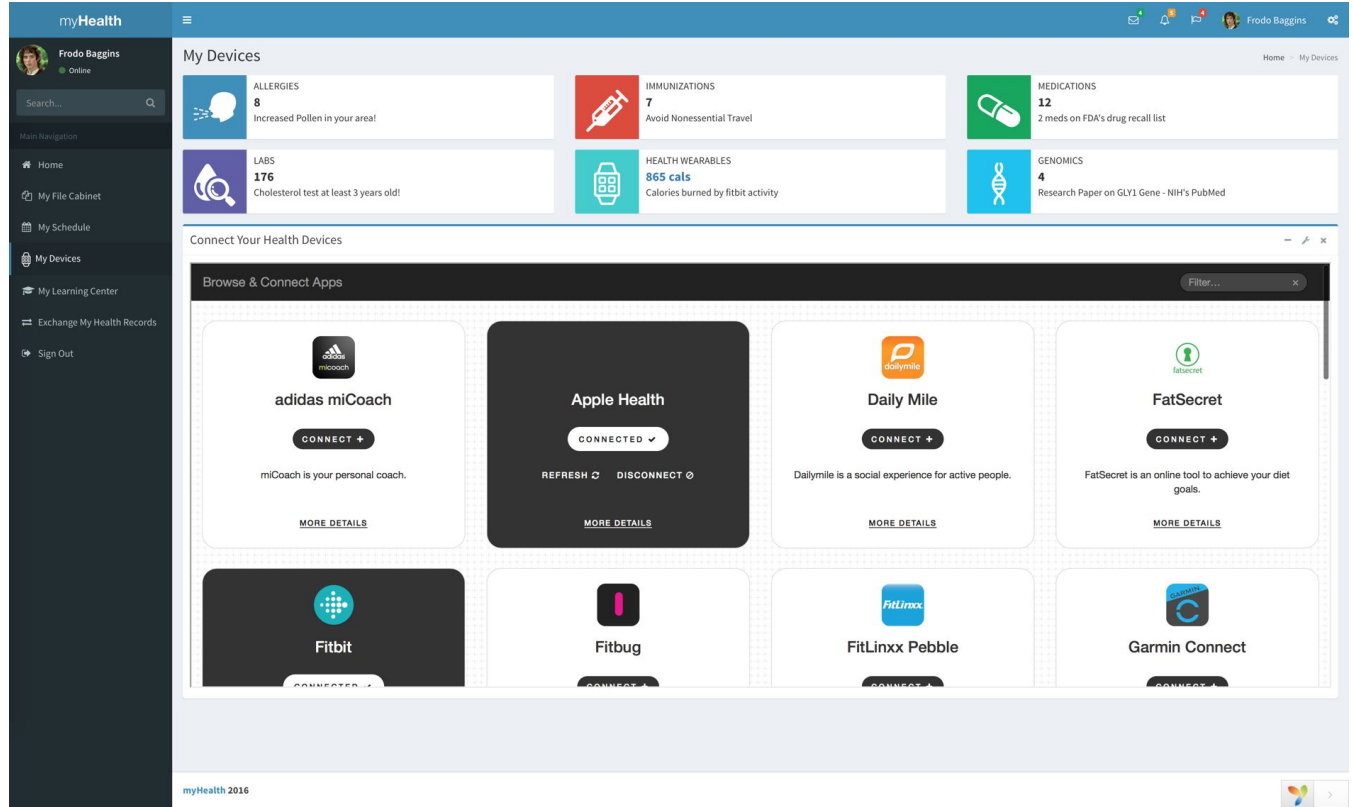
Aggregated data
can then be viewed
holistically.

The screenshot displays the 'myHealth' interface for a user named Frodo Baggins. The left sidebar contains navigation links: Home, My File Cabinet (selected), My Schedule, My Devices, My Learning Center, Exchange My Health Records, and Sign Out. The main content area is titled 'My File Cabinet' and includes a search bar and a list of files. A file named 'My Harvard Visit Summary 03052016 CCD.xml' is highlighted. Below it, a table shows a list of 10 files, including JSON and PDF formats, with columns for file name, type, size, and last uploaded date.

#	File Name	Type	Size	Last Uploaded
1	baydaqpsfufcpelfep-lochy1zcn73o1032702_1.json	application/json	1 KB	11/05/2016 04:59 PM
2	uxhnq4wt4x4ek-v55z15xvb414qb3x_1032702_1.json	application/json	1 KB	11/05/2016 04:59 PM
3	40dix0br4o8f5amcmehimj_pcmuw6o1032702_1.json	application/json	1 KB	11/05/2016 04:59 PM
4	jrm923v1-e6ctqulj2w2sykgoyoich41032702_1.json	application/json	1 KB	11/05/2016 04:58 PM
5	aosn-f0w84lybxoquu7igbcmmbzfbwpatientsvideoconsultsScrop.pdf	application/pdf	2 MB	11/05/2016 02:38 AM
6	5ebutusatwemgep964iwseab7jaedm8patientsvideoconsultsScrop.pdf	application/pdf	2 MB	11/05/2016 02:35 AM
7	6ovminwfv014mu03z7niibvucsoihdownload(7).json	application/json	10 KB	08/09/2015 08:30 PM
8	b_jlho_18c-kqof_wtzvviijawmxjrn9download.json	application/json	10 KB	08/09/2015 04:09 PM
9	hnohy9oq12nt1-rbjavtxk4ewqk5liqwdownload.json	application/json	10 KB	08/06/2015 06:58 PM
10	5qf_hfmxroinsaucncrcplnobi-igg6download.json	application/json	10 KB	08/06/2015 06:57 PM

Connected Apps/Devices

Data can be sourced from consumer apps. myHealth currently supports **22 consumer apps**. When applicable, data is transformed into FHIR to share with other health systems.



FHIR Data Integrations

myHealth has integrations capabilities to any health providers through FHIR APIs or MU2's C-CDA. These include CMS, DOD, the VA, Cerner, EPIC and other EHR systems & providers.

The screenshot displays the 'myHealth' application interface, specifically the 'Exchange My Health Records' section. The user is logged in as 'Frodo Baggins'.

Exchange My Health Records

My incoming health records

Incoming health records from different health systems.

[Connect to my health systems](#)

Showing 1-8 of 8 items.

#	API Name	API Desc.	Created At	
1	Gaj's Local Server - My API	FHIR API access to my own FHIR server.	05/18/2015 12:27 PM	
2	Gaj's Local Server - HL7 FHIR Imported Data	Gaj's Local Server - HL7 FHIR Imported Data	05/18/2015 12:33 PM	
3	CMS - MyMedicare.Gov [x]	CMS - MyMedicare.Gov [x]	05/18/2015 12:39 PM	
4	Department of Defense - TriCare	DoD - TriCare	05/18/2015 12:40 PM	
5	VA - MyHealtheVet [x]	VA - MyHealtheVet [x]	05/18/2015 12:41 PM	
6	My patient record from University Health Network - Canada	Interoperability between my PHR and Canadian Health system.	05/18/2015 12:53 PM	
7	My patient record from Argonaut	My patient record from Argonaut project from Health Intersections	05/18/2015 01:00 PM	
8	Cerner EHR	From Cerner EHR Sandbox	07/14/2015 03:04 PM	

My outgoing health records

myHealth outgoing API that I am authorizing for 3rd party applications.

Entity	App/System	Date	Status	Comments
Google	Google Genomics	03/7/2015	Approved	Outbound FHIR API access to my genomics files
Apple	Apple Health	04/16/2015	Denied	Not so sure, I revoked the API access outbound to Apple.
MedYear	MedYear	05/12/2015	Denied	Requested access but I denied it from the beginning.

myHealth 2016

Version 1.0.1

Privacy & security of patient data

All incoming and outgoing data connections are tracked.

Patients can take action on information requests, approve, deny, or defer them.

The screenshot displays the 'myHealth' application interface. The top navigation bar is blue with the 'myHealth' logo and a user profile for 'Frodo Baggins'. A dark sidebar on the left contains navigation links: Home, My File Cabinet, My Schedule, My Devices, My Learning Center, Exchange My Health Records (selected), and Sign Out. The main content area is titled 'Exchange My Health Records' and is divided into two sections: 'My incoming health records' and 'My outgoing health records'.

My incoming health records

Showing 1-8 of 8 items.

#	API Name	API Desc.	Created At	
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2	Gaj's Local Server - HL7 FHIR Imported Data	Gaj's Local Server - HL7 FHIR Imported Data	05/18/2015 12:33 PM	
3	CMS - MyMedicare.Gov [x]	CMS - MyMedicare.Gov [x]	05/18/2015 12:39 PM	
4	Department of Defense - TriCare	DoD - TriCare	05/18/2015 12:40 PM	
5	VA - MyHealtheVet [x]	VA - MyHealtheVet [x]	05/18/2015 12:41 PM	
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myHealth Helps organize health data

Using the Learning Center, calendar, activity sidebar, and notifications, myHealth helps patients organize all the information contributing to their digital health profile.

The screenshot displays the myHealth 2016 application interface. At the top, the user's name 'Frodo Baggins' is shown with a status indicator 'Online'. Below this is a search bar and a main navigation menu with options: Home, My File Cabinet, My Schedule, My Devices, My Learning Center, Exchange My Health Records, and Sign Out.

The central area is titled 'My Learning Center' and contains several educational modules:

- Cervical Fusion**: A module with a minus and close button. Text: 'Your doctor has recommended surgery on your neck. This surgery is called an anterior and/or posterior cervical (SERV-uh-kol) fusion (FEW-zhun). Bone spurs or disks causing the problem in your neck will be removed. Your neck will then be secured, or fused, with bone from your hip. Sometimes a metal plate or wires are used to secure the fusion.'
- Seasonal Flu and Pregnancy**: A module with a plus button. Text: 'Pregnant women are at high risk of complications from seasonal flu. Pregnancy puts stress on your health. Pregnancy can also affect your immune system, which can increase the risk of developing serious complications from the flu, such as severe pneumonia and respiratory problems. Complications from the flu may lead to miscarriage, premature labor or other pregnancy problems.'
- Bariatric Surgery**: A module with a minus and close button. Text: 'Bariatric surgery is a tool to help with weight loss. It is often called weight loss surgery, but it is not a cure for obesity. People who have the surgery need to make lifestyle changes. A healthy diet and regular exercise are needed along with surgery for permanent weight loss.'
- Insulin: How to Give a Shot**: A module with a minus and close button. Text: 'Many people with diabetes need to take insulin to keep their blood glucose in a good range. This can be scary for some people, especially for the first time. The truth is that insulin shots are not painful because the needles are short and thin and the insulin shots are placed into fatty tissue below the skin. This is called a subcutaneous (sub-kyu-TAY-nee-us) injection. The following instructions are for using a vial and syringe. For instructions on how to use an insulin pen, ask your doctor or diabetes educator.'
- Epidural Pain Medication**: A module with a plus button. Text: 'Controlling your pain is important. Pain control has been shown to improve your natural healing process. You will feel less anxious when you are in pain. This will help you increase your mobility, which aids in your recovery.'

On the right side, there is a 'Recent Activity' section with items like 'Langdon's Birthday', 'Frodo Updated His Profile', 'New message from Dr. Harper', and '254 Lab Results Retrieved'. Below this is a 'Goals' section with progress bars for Walking (70%), Sleeping (95%), Swimming (50%), and Yoga (68%).

At the bottom left, it says 'myHealth 2016'. At the bottom right, there is a Google Assistant icon and a right arrow.

In Production FHIR Data Integrations

myHealth supports the DSTU2 Specification of FHIR. Through the Argonaut group's dummy FHIR servers, myHealth has been tested and works with **7 test FHIR servers** (CMS, DOD, the VA, Cerner, EPIC, UHN-Canada, and a locally running FHIR server).

myHealth is production ready with FHIR and we currently looking for pilot sites and patient advocacy groups to push it out to public.

Any funding that we get through this challenge and other means will go to support a live myHealth integration at health systems.

Next steps for myHealth

myHealth hopes to create a world where both patients and providers have access to one another's' data sources to the end of improving quality and reducing costs.

Demo [myHealth online](#)

Contact the myHealth Team

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Review the [Video](#)

