MyHealthRec.io API

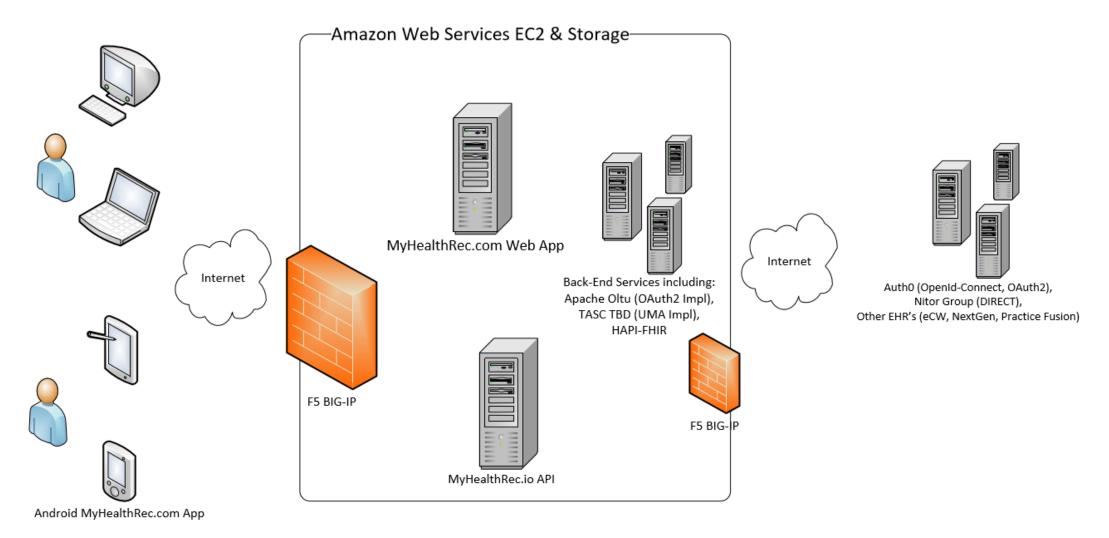
- Thoughtkeg Application Services Corporation
- Thomas "Rick" Bell, Founder & CEO
- Slides:
 - Solution Technical Description
 - High-Level System Architecture
 - HEART WG Specifications Usage
 - Two Basic Use Cases
 - Provider Value Proposition with MIPS
 - Final Statements on Advantages

Solution Technical Description

- MyHealthRec.com
- Patient Portal Web App
- HTML5, CSS, Modern Javascript Front-End, Single Page Application built on Aurelia Framework

- MyHealthRec.io
- RESTful API providing:
 - FHIR Server & Client
 - DIRECT Messaging
 - OpenID-Connect & OAuth2
 - UMA
- Micro-services Architecture
- Back-End Services for Web App
 & Mobile App

MyHealthRec High-Level System Architecture



HEART WG Specifications Usage

- Patient can use a MyHealthRec ID or use a social media account, like Google, Amazon, Microsoft, etc. to log in (OpenID-Connect, OAuth2)
- Patient can specify a Data Sharing Policy authorizing other users or entities to gain access and/or share their data based on certain conditions or claims. (UMA, OpenID-Connect, OAuth2)
 - Initial Patient Registration (sharing Demographics, etc.), Registration by Patient's designated Proxy
 - Sharing C-CDA document over DIRECT, or a FHIR Resource, from a Specialist with a Primary Care Provider

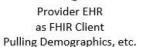
Example Use Case: Patient Registration

- Patient signs up with MyHealthRec.com and provides demographics, history and physical, etc.
 - Alternatively, Patient signs up and authorizes Proxy to provide and allow sharing of data (UMA)
- Patient or Proxy presents at Provider's registration assistant with a QR Code to scan. This overcomes the Patient Matching Issue.
- Provider's EHR performs as a FHIR Client pulling registration data from MyHealthRec.com (MyHealthRec.io's API) which performs as a FHIR Server.
- After the visit is complete, MyHealthRec.com can call the MyHealthRec.io API to pull from the Provider EHR's FHIR Server.



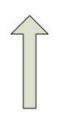








as FHIR Server

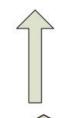






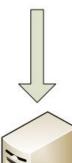


Patient Presents QR Code from MyHealthRec.com





MyHealthRec.com as FHIR Server



MyHealthRec.com as FHIR Client Pulling C-CDA Documents

Example Use Case: Creating UMA Policy

To the right is a wireframe of a form that could potentially be used to assist the Patient in creating Data Sharing Policies.

This is a very rough mockup, but the basic approach is that a UMA is essentially a statement of "WHO, identified by attributes or claims (like identity claims or others), can do HOW (action) on WHAT (data or documents as defined by types or attributes, like Tags or Categories)"

MyHealthRec.com WIREFRAME of UMA Policy Creation Form

Hear Attributes

Testing Center

Using this form, please identify any additional sharing rules that apply for you. For example, you could define a rule where "Proxies can Amend History and Physical documents that are Non-Sensitive"

All Documents

| Oser Attributes | Ability | Document Type |
|-----------------------------|------------------|------------------------|
| Select Role | Select Action(s) | Column 1 |
| Patient | View | History & Physical |
| Proxy | Download | Diagnostic Results |
| Primary Care Prov. | Share | Recent Care Summary |
| Specialist | Import to EHR | Advanced Directives |
| Provider Known to You | Comment | Bills |
| Payer (Insurance Co., etc.) | Amend | Messages with Provider |

Data Tags & Categories

Column 1
Sensitive
Non-Sensitive
Abnormal
Non-Clinical
Clinical

Save Rule

MyHealthRec will help Providers with MIPS: Advancing Care Information

Provides:

FHIR API for API Access measures

DIRECT Messaging for View, Download & Transmit measures

Exchanging data with Providers and with Patients

SOURCE: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/MACRA-MIPS-and-APMs/Advancing-Care-Information-Presentation.pdf

PROPOSED RULE

MIPS: Advancing Care Information Performance Category

THE PERFORMANCE SCORE

The performance score accounts for up to 80 percentage points towards the total Advancing Care Information category score

Physicians select the measures that best fit their practice from the following objectives, which emphasize patient care and information access:





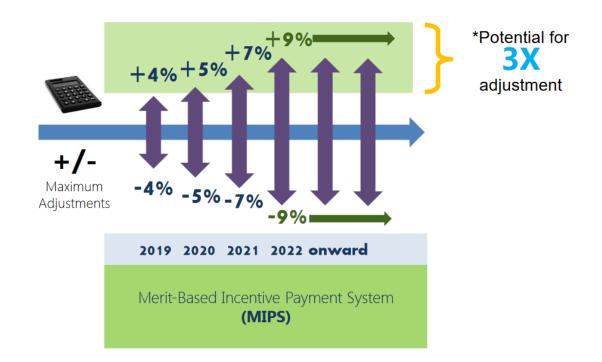


MIPS Potential Impact to Provider Revenue

The potential impact to Provider Revenue could be significant.

How much can MIPS adjust payments?

Note: MIPS will be a **budget-neutral** program. Total upward and downward adjustments will be balanced so that the average change is 0%.



Advantages of this Solution

- For Patients,
 - Set up properly, relieves some burden of moving data from Patient to Provider and Provider to Provider in a secure, controlled, consumer-mediated exchange
 - Keeps Healthcare Data as Data which can be moved swiftly and securely rather than Paperwork which can be lost or destroyed
 - Assists Family members supporting Patients to act on Patients behalf regarding data

- For Providers,
 - Streamlines the Patient Registration workflow and receipt of data from other Providers
 - Provides Patients with a better customer experience and reduces bothersome failures to connect in a dis-jointed healthcare system
 - Providers can use MyHealthRec to improve Advancing Care Information Performance scores for the MIPS program!

Thank You!