

# The Power of Beneficiary-Directed Data



*Blue Button<sup>®</sup> API: Creating  
a Data-Driven Ecosystem  
to Benefit Medicare Beneficiaries*

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# Introduction: Mark Scrimshire

- CMS Blue Button<sup>®</sup> Innovator
- Health Data and Cloud Technologist
- Co-Founder & CTO: Medyear
- Chief Instigator: HealthCa.mp
- Blogger: [blog.ekivemark.com](http://blog.ekivemark.com)
- Twitter: @ekivemark



# A Brief History of Blue Button®



Blue Button  
Unleashes  
Personal  
Data

2016

2010

3.6M Total Users  
VA, CMS, DoD



# Why Change Blue Button?

- Health information is challenging to use in current PDF or plain text format
- Beneficiary has to return to MyMedicare.gov to get at least six months of data each time new information is available
- Apps like iBlueButton have entered the market to automate this process by screen scraping and borrowing beneficiary user IDs and passwords, weakening security
- Health care industry has moved to structured data formats (BlueButton+ /CCDA)
- Enhanced Blue Button service can be a powerful tool to support the drive to improve quality of care
- Interoperability is finally taking hold in health care (HL7/FHIR)

# Blue Button Vision

*“Build a developer-friendly, standards-based data API that enables beneficiaries to connect their data to the applications, services, and research programs they trust”*



# Aligned with FHIR®

A next generation standards framework created by HL7.

FHIR combines the best features of:

- HL7 v2
- HL7 v3
- CDA

Leveraging the latest web standards and applying a tight focus on implementability.



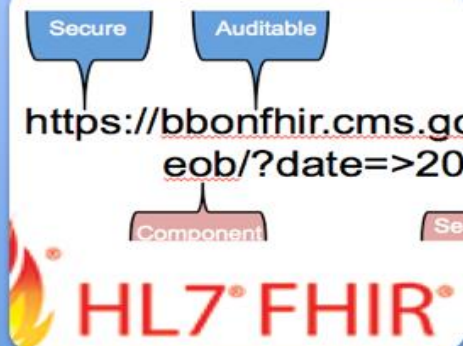
# Why Blue Button on FHIR?

*"I download my data"*



*"I control who  
I share my data with"*

*Bi-directional*



Secure  
Transport



Developer  
Friendly



Structured  
Data

# Blue Button API

**Blue Button API** is using FHIR to create a robust data API service that enables beneficiaries to connect their health data **with applications and services they trust**.

- **For beneficiaries**
  - Direct control over how they share their claims data
  - Structured Blue Button data will unleash innovation for better health
  - International standard formats make sharing data easier
- **For care coordination**
  - Earlier access to beneficiary claims data for proactive care management
  - Access to three years of beneficiary claims history
  - Structured data formats improve data validation for more accurate analytics
- **Directly supporting key initiatives**
  - Supports the adoption of industry standard APIs for improved data interoperability
  - Supports the triple aim: better care, better health, and lower costs



# The Blue Button API Enables a New Era and a New Route for Research Data Collection



- Each beneficiary must register with research app and authorize app access to their data
- Beneficiary consent opens the door for:
  - No cost access to their claims information
- Benefits to researchers:
  - Avoid the Data Use Agreement
  - No payment to CMS
  - Refreshed Data
    - Weekly—Part A / B
    - Monthly—Part D

# Patients Take Ownership of Their Data

- A familiar and proven authorization process
- Used billions of times each day

A screenshot of the Blue Button On FHIR interface. At the top is the "BlueButtonOnFHIR" header with a logo. Below it is a section titled "Authorize PMI?" with a small icon. Under this title, there are two links: "PMI support page" and "PMI privacy page". Below the links, a text block states: "PMI requires that you, None, give the following permissions for the use of your Blue Button data:". This is followed by a bulleted list of permissions: "Download my claims data and bluebutton profile information" and "Write a record of this consent to download my data to this app". At the bottom of the form are two buttons: "Cancel" and "Authorize".

**Authorize**

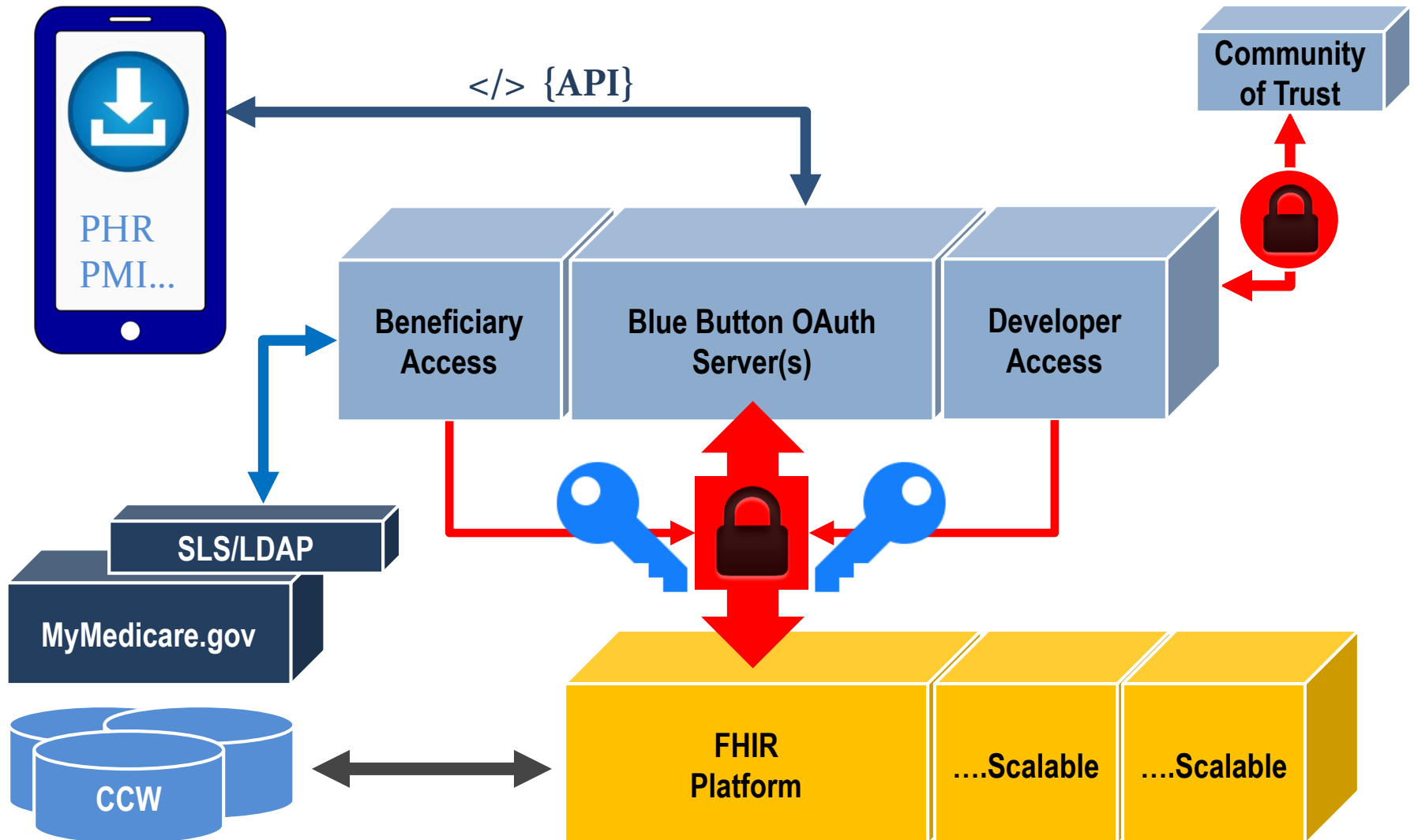
# Lighting the FHIR at CMS

- FHIR extension to Chronic Condition Warehouse (CCW)
- 38M Medicare beneficiaries
- Three years of Blue Button claims information (6+ billion records)
- Jointly-developed FHIR “ExplanationOfBenefit” resource
- Integration with MyMedicare.gov
- Future integration with CMS Simple Login Service
- Built on CMS Cloud Services



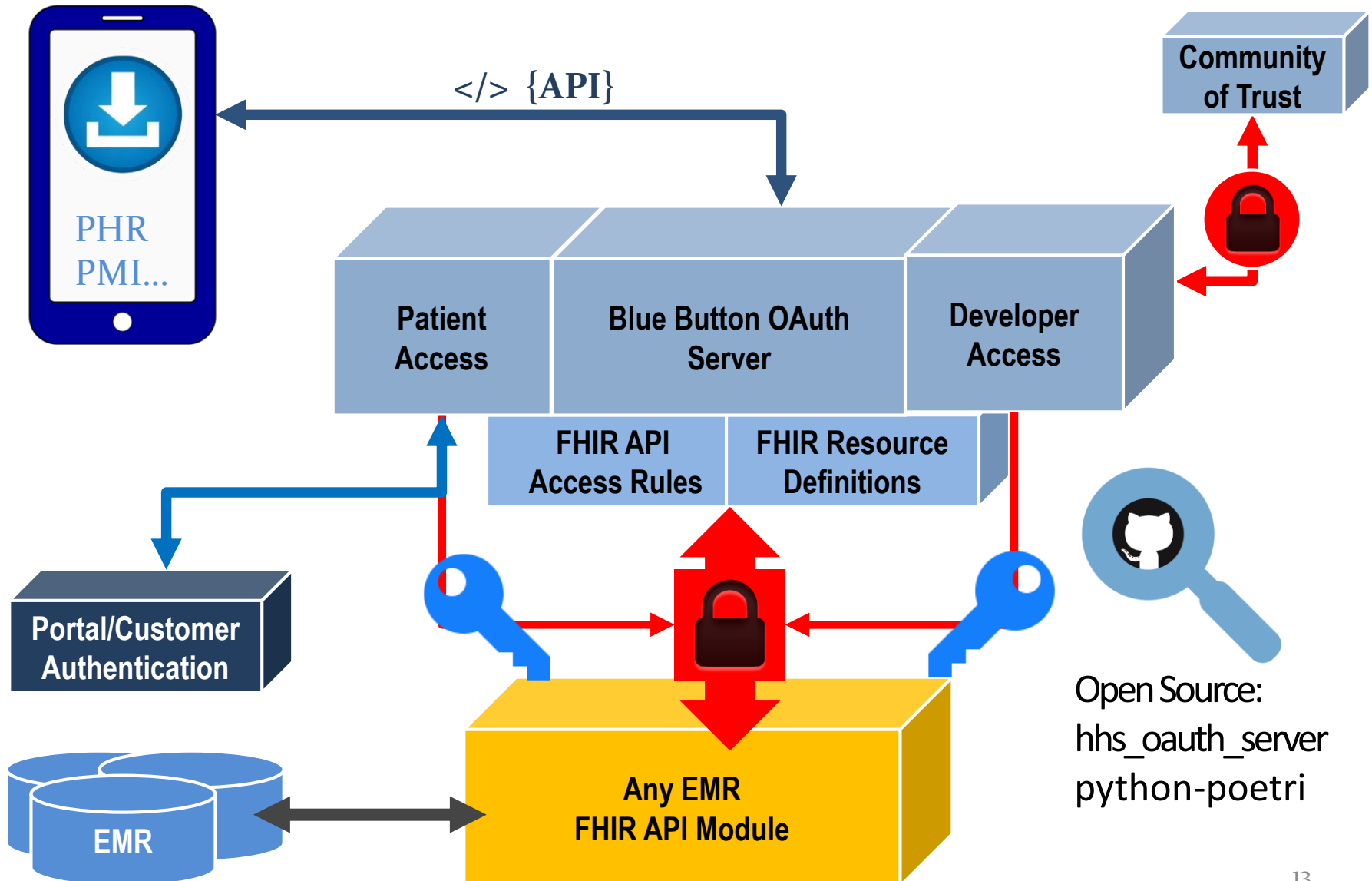
Under Construction

# Building a Tiered Blue Button Platform





# Build Your Own Blue Button on FHIR Gateway



# CMS Blue Button API: The Summary

- Building on industry and web standards
- Providing a blueprint for patient access to their data
- Designing solutions with the health care community



- Utilizing open source solutions
- Using FHIR positions CMS at the heart of health interoperability

# Contact Info

Learn more about Blue Button API using FHIR

**<http://go.cms.gov/bluebutton>**

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