

# Strategies for Using Mobile Apps to Meet API and VDT Requirements for Meaningful Use Stage 3 / QPP ACI

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# Agenda

- Application Programming Interface (API) and View/Download/Transmit (VDT) Requirements
- What is an API?
  - Where to Find Out About Your EHR's API
  - Using an API
  - App Development API Challenges
- Business/Clinical Strategy: How to Meet MU/QPP Requirements
- Story: Parent of Child with Epilepsy
- Implementation Strategy: Engaging Patients Through Mobile Apps

# Application Programming Interface (API) and View/Download/Transmit (VDT) Requirements

## Meaningful Use - Modified Stage 2

### Objective 8 – Patient Electronic Access

**Measure 1:** More than 50% of patients provided timely access to **view, download, and transmit** their health info

**Measure 2:** More than 5% of patients **view, download, or transmit** their health info

## Meaningful Use - Stage 3

### Objective 5 – Patient Electronic Access

**Measure 1:** For more than 80% of patients: (1) the patient is provided timely access to **view, download, and transmit** their health info; and (2) the patient's health info is available for the patient to access using any app of their choice configured to meet the technical specs of the **API** in the provider's CEHRT

### Objective 6 – Coordination of Care through Pt Engagement (must meet 2 of 3 measures)

**Measure 1:** More than 5% of patients: (1) **view, download, or transmit** their health info; (2) access their health info through apps chosen by the patient and configured to the **API** in the provider's CEHRT; or (3) a combination of 1 and 2. (2019: increases to >10%)

**Measure 2:** For more than 5% of patients, a **secure message** was sent to the patient (2018: increases to >25%)

**Measure 3:** **Patient-generated data** or data from nonclinical setting is incorporated into CEHRT for more than 5% of patients

## Quality Payment Program (QPP) – Advancing Care Information (ACI)

### Provide Patient Access

At least 1 patient\* is provided timely access to **view, download, and transmit** their health info and the info is available to access using an app that is configured to meet the technical specs of the **API** in CEHRT

### View, Download, Transmit (VDT)

At least 1 patient either (1) **views, downloads or transmits** their health info; (2) accesses their health info through an app chosen by the patient and configured to the **API** in CEHRT; or (3) a combination of 1 and 2

### Patient-Generated Health Data

**Patient-generated health data** or data from a non-clinical setting is incorporated into CEHRT for at least 1 patient

### Secure Messaging

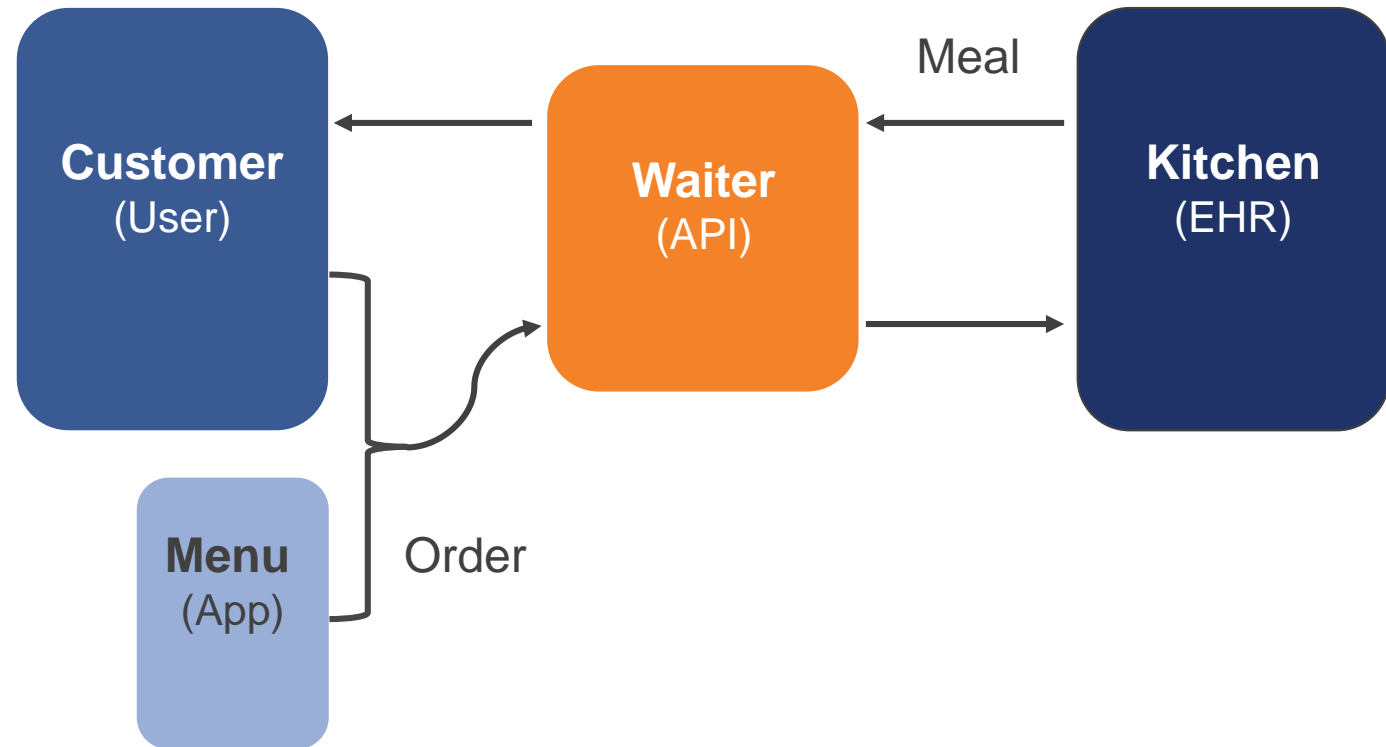
For at least 1 patient, a **secure message** was sent to the patient

\*While there are no minimum thresholds in QPP, higher percentages result in higher scores. The 1 patient is an interim requirement for the first QPP year.

# What is an API?

## A Restaurant Analogy

- User = Customer
- App = Menu
- API = Waiter
- EHR/backend = Kitchen

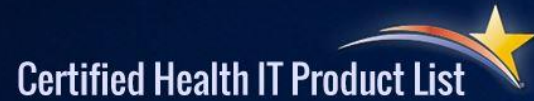


[video: what is an API?](#)

# What is an API?

- A set of requirements that governs how one software application interacts with another software application
  - Allows developers to create Apps to use data in the EHR system
  - All the specifications for working with the EHR system
  - Published and available
- APIs widely used to exchange data but APIs are not standardized
  - Developers need to support APIs of each EHR vendor
- Example: Patient Portals are often interfaced to the EHR via an API
- ONC requires a fully functioning API for 2015 Certification
  - Ideally portal-hosted
- Links to CEHRT APIs on Certified Health IT Product List (CHPL) website
  - <https://chpl.healthit.gov/#/collections/apiDocumentation>

# Where to Find Out About Your EHR's API



## API Information for 2015 Edition Products

This list includes all health IT products that have been certified to at least one of the following API Criteria:

- §170.315 (g)(7): Application Access - Patient Selection
- §170.315 (g)(8): Application Access - Data Category
- §170.315 (g)(9): Application Access - All Data Request

The Mandatory Disclosures URL is also provided for each health IT product in this list. This is a hyperlink to a page on the developer's official website that provides in plain language any limitations and/or additional costs associated with the implementation and/or use of the developer's certified health IT.

Please note that by default, only listings that are active or suspended are shown in the search results.

Certification Status ▼

1 - 50 of 74 Results

[Previous](#)
[1](#)
[2](#)
[Next](#)

Developer	Product	Version	CHPL ID	API Documentation	Mandatory Disclosures URL
eMedPractice LLC	eMedicalPractice	2.0	<a href="#">15.02.02.2898.A042.01.00.1.170929</a>	170.315 (g)(7), 170.315 (g)(8), 170.315 (g)(9) <a href="https://stage.emedpractice.com/Fhir/FhirHelpDocument.html">https://stage.emedpractice.com/Fhir/FhirHelpDocument.html</a>	<a href="http://www.emedpractice.com/EHR.html">http://www.emedpractice.com/EHR.html</a>
Agastha, Inc.	Agastha Enterprise Healthcare Software	15.1	<a href="#">15.04.04.1056.Agas.14.00.1.171231</a>	170.315 (g)(7), 170.315 (g)(8), 170.315 (g)(9) <a href="http://www.agastha.com/api">http://www.agastha.com/api</a>	<a href="http://www.agastha.com/certifications.html">http://www.agastha.com/certifications.html</a>
AntWorks Healthcare	AntWorks Healthcare EHR	7.1	<a href="#">15.04.04.1144.AntW.71.01.1.171219</a>	170.315 (g)(7), 170.315 (g)(8), 170.315 (g)(9) <a href="http://prognosis.com/ehr-interoperability/">http://prognosis.com/ehr-interoperability/</a>	<a href="http://healthcare.ant.works/industries/healthcare-services/electronic-health-records-">http://healthcare.ant.works/industries/healthcare-services/electronic-health-records-</a>
CareEvolution, Inc.	HIEBus™	2015	<a href="#">15.04.04.1200.HIEB.15.00.1.171127</a>	170.315 (g)(7), 170.315 (g)(8), 170.315 (g)(9)	<a href="http://www.careevolution.com/technology-mu.html">http://www.careevolution.com/technology-mu.html</a>

# Using an API

- Who: developers = entrepreneurs = patients/providers
- Why: provide access to patient data for external applications
  - Connection to a Personal Health Record (PHR)
    - **HealthVault**
  - Export health data to a Personal Health App
    - Tool to manage diabetes or a heart condition
  - Provide access to health data for Provider/Patient developed applications
- How:
  - API accessible to patients from the EHR/Provider's Portal
  - Provider-generated list of external apps



# App Development API Challenges

- Privacy/Security
  - Authorization
  - Authentication
- HIPAA regulations
- App registration with provider's EHR
- Technical compatibility with EHR

## Moral of the Story: Talk to Your EHR Vendor!

- Which Mobile Apps are vetted by the EHR vendor?
- Ensure capability to track patient access via App:
  - Access is recorded and appears on EHR dashboard

# For More Information

- <http://hl7.org/fhir/>
- <https://smarthealthit.org/>
- <https://www.healthit.gov/>
- <https://chpl.healthit.gov>

# Business/Clinical Strategy: How to Meet MU and QPP Measures

Provide patients with list of pre-vetted Mobile Apps that interface to your EHR to:

- Increase your ability to help patients in using **VDT**
  - MU Objective 5 Measure 1 Part 1: Patient Electronic Access - Provide VDT access to patient
  - MU Objective 6 Measure 1: Coordination of Care through Patient Engagement - Patient uses VDT
- Increase your ability to **Securely Message** with your patients
  - MU Objective 5 Measure 1 Part 1: Patient Electronic Access - Provide VDT access to patient
  - MU Objective 6 Measure 1: Coordination of Care through Patient Engagement - Patient uses VDT
- Increase your ability to **Incorporate Non-Clinical Patient Generated Data into your EHR**
  - MU Objective 6 Measure 3: Coordination of Care through Patient Engagement - Patient-generated data incorporated into CEHRT

Provide your CEHRT's API technical specification to patients to meet **API** requirements

- MU Objective 5 Measure 1 Part 2: Patient Electronic Access - Provide API specification to patient
- MU Objective 6 Measure 1 Part 2: Coordination of Care through Patient Engagement - Health info available/accessed by patients using App of their choice configured to technical specs of CEHRT's API

# Business/Clinical Strategy: How to Improve Care and Exceed MU/QPP Measures

Passive Electronic Patient Engagement (EPE) Strategy	Pro-Active EPE Strategy	Increased ability to meet your EPE related measures
Provide Patient Portal Access	<ul style="list-style-type: none"> <li>▪ Provide Patient Portal Access</li> <li>▪ Provide list of pre-vetted Mobile Apps that                             <ul style="list-style-type: none"> <li>▪ Support VDT, Patient Input, Secure Messaging</li> <li>▪ Connect to your EHR via API</li> </ul> </li> </ul>	If connected to your dashboard, the Mobile Apps-based activity counts towards patient VDT, Patient Input, Secure Messaging
Provide pamphlet on how to use the Patient Portal	<ul style="list-style-type: none"> <li>▪ Physicians actively explain how these EPE tools enable them to provide better care</li> <li>▪ Staff available to assist patients who need to select and learn to use the EPE options</li> </ul>	Improves EPE use, as patients trust physicians/staff and tend to follow their advice
Dump the patient info and lab results into the Patient Portal	<ul style="list-style-type: none"> <li>▪ Upload patient info and lab results into the Patient Portals and Apps in meaningful way</li> <li>▪ Add educational info; use EPE to assist in:                             <ul style="list-style-type: none"> <li>▪ interpreting data/trends</li> <li>▪ care adherence</li> </ul> </li> </ul>	Raises interest in using Patient Portal and Mobile Apps as it involves patients in their care and enhances understanding
Provide API information to patient	Provide API information to patient	Must be done to meet API measure
Let patient decide what Mobile Apps to use and answer their API questions when Apps don't work	Avoid these questions by helping patients select from your pre-vetted Mobile Apps	The Q&A overhead is not likely to improve patient care, and is your staff even equipped to answer?

# Story: Parent of Child with Epilepsy – Imagine the EPE Possibilities



## Toby's Story

- First seizure Sept 2011; formal diagnosis Nov 2011
  - Generalized Epilepsy; primary seizure type – myoclonic
  - Suspected Myoclonic-Astatic Epilepsy (MAE or Doose Syndrome)
  - Tried and failed 7 medications
- Began ketogenic diet – summer 2012
  - Dramatic reduction in number & severity of seizures
- Seizure-free since January 2015; clear EEG at last neuro visit

## What About an App?

- Ketogenic diet requires daily testing of ketone levels
- App for parents
  - Track and report daily ketone levels
  - Record meals and recipes
  - Document and describe seizure activity & other symptoms
  - Communicate with physician (VDT & Secure Messaging)
- Work with a developer to create an app
  - Would need API specifications from neurologist's EHR



# Implementation Strategy: Engaging Patients Through Mobile Apps

- Design your EPE Strategy for using Patient Portals and Mobile Apps
  - How can the Apps enhance your ability to provide care and engage patients?
- Talk to EHR Vendor to:
  - Get their API Technical Specification
  - Get list of Mobile Apps the vendor knows work well
- Review and select the Mobile Apps:
  - What are the Apps that would enable your EPE strategy?
  - What would your patients be likely to use?
- Implement your EPE strategy
  - Define and set up the inputs/outputs of the VDT, Secure Messaging, Patients Data
  - Define and set up the workflow process that enables its use
- Recommend the Mobile Apps to your patients
  - Physician discussion, pamphlet, website, patient portal, etc.
  - Don't forget to still give patients the API Technical Specification

# Questions?