The Office of the National Coordinator for Health Information Technology

ONC Medication List Effort: Bringing Interoperable Medication Lists to Consumers

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ONC Office of Standards and Technology

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Medication List Effort in a Nutshell

- Over 75 organizations from the health care industry came together to demonstrate patient access to health information in an interoperable manner.
  - » Demonstrated at the HIMSS 2017 - Federal Health IT Pavilion, Listening Session
- Demonstrated 3rd party apps being able to access patients' medication information using FHIR-based APIs developed by EHR vendors.
- Strong commitment from app developers, EHR vendors and providers to expand access and enhance usability for patients in 2017.

Background

Industry stakeholders committed to three principles of

Consumer Access

No Information Blocking

Common, Federally Recognized Standards

We Listened

What we heard from stakeholders:

- **Support** a broad, national use case of importance
- **Empower** individuals
- **Focus** on areas where standards are already strong (e.g., medications)
- **Acknowledge** current stream of work by leveraging existing efforts
- **Coordinate** the administration's activities around information flow

Summary: Empower people to access their current medication lists comprehensively in one place from different providers or health care systems that have provided care to them

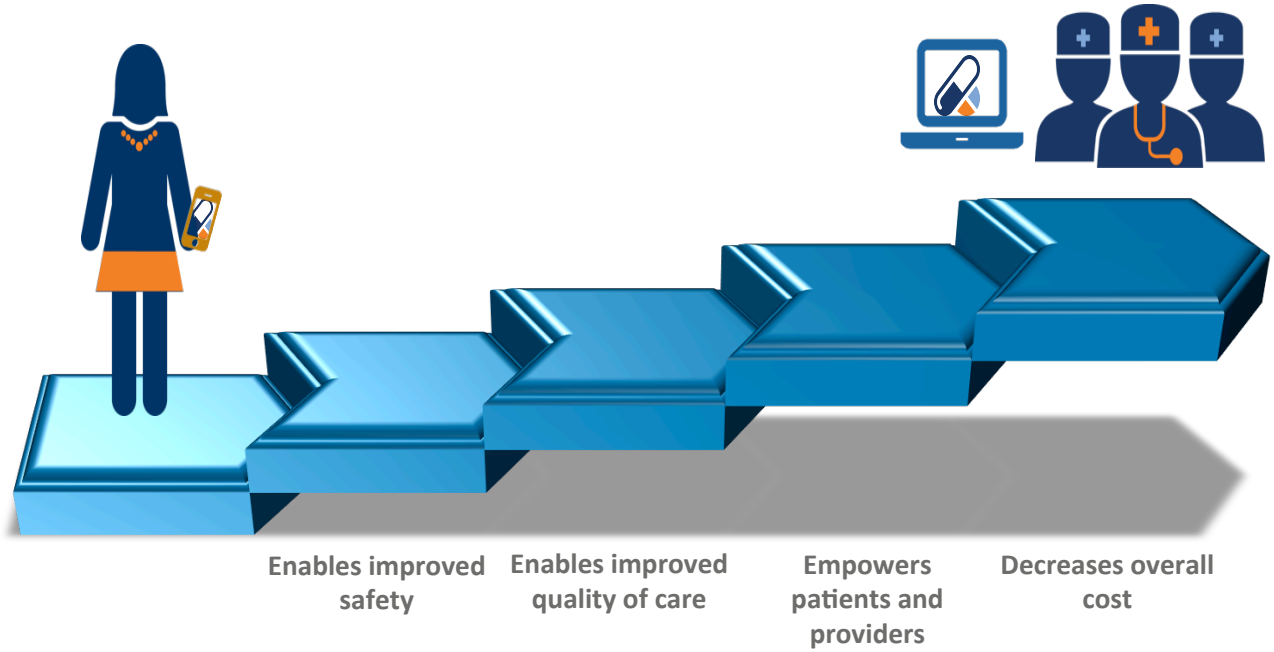
Broad Participation

American Association of Nurse Practitioners (AANP)	Dartmouth Hitchcock Health	National Community Pharmacists Association (NCPA)
American College of Physicians (ACP)	Duke	National Partnership for Women and Families
American Hospital Association (AHA)	Electronic Health Record Association (EHRA)	New York Presbyterian Health System
Allscripts	EOP U.S. Digital Service	Oracle
American Medical Association (AMA)	Epic	Partners
American Medical Informatics Association (AMIA)	First Data Bank	Patients Like Me
American Nurses Association	Fresenius	Pharmacy Quality Alliance
Apex Data Solutions	GE Healthcare	Physicians EHR Coalition
Ascension Health	Geisinger Health System	Polyglot
American Society of Health-System Pharmacists (ASHP)	Get My Health Data	Praxify
athenahealth	Hackensack Meridian Health	Providence Health & Services
CareEvolution	Hospital Corporation of America (HCA)	PSMI Consulting
CARIN Alliance	Healthcare Information and Management Systems Society (HIMSS)	Qualcomm
Carolinas HealthCare System	Intermountain Healthcare System	Rite Aid
Cerner	Kaiser Permanente Managed Care Consortium	RxRevu
College of Healthcare Information Management Executives (CHIME)	Marathon Health	Surescripts
Centers for Medicare and Medicaid Services (CMS)	Marshfield Clinic	Trinity Health System
Clinovations Government + Health	MediSafe	Walgreens
CommonWell Health Alliance	MEDITECH	WellSheet
CVS Caremark MinuteClinic	National Association of Chain Drug Stores (NACDS)	Wolters Kluwer Lexicomp/Medi-Span

Core Use Case Scope

Addresses the value proposition

Empowers patients to access and manage their medication list collaboratively with their doctors



Interoperability In Action Day

PLEASE REFER TO SESSION RECORDING FOR PRESENTATION DEMOS

Epic

Industry & Regulatory Input

FHIR Resource Maturity

Now available

Patient & provider facing context

- Patient
- Practitioner
- Condition
- Observation (Vitals)
- Observation (Smoking Hx)
- Observation (Lab Results)
- Immunization
- Diagnostic Report
- Device (Implants)
- Family Member History
- Allergy Intolerance
- Medication Order
- Medication Statement
- Medication
- Document Reference
- Care Plan
- Goal
- Procedure

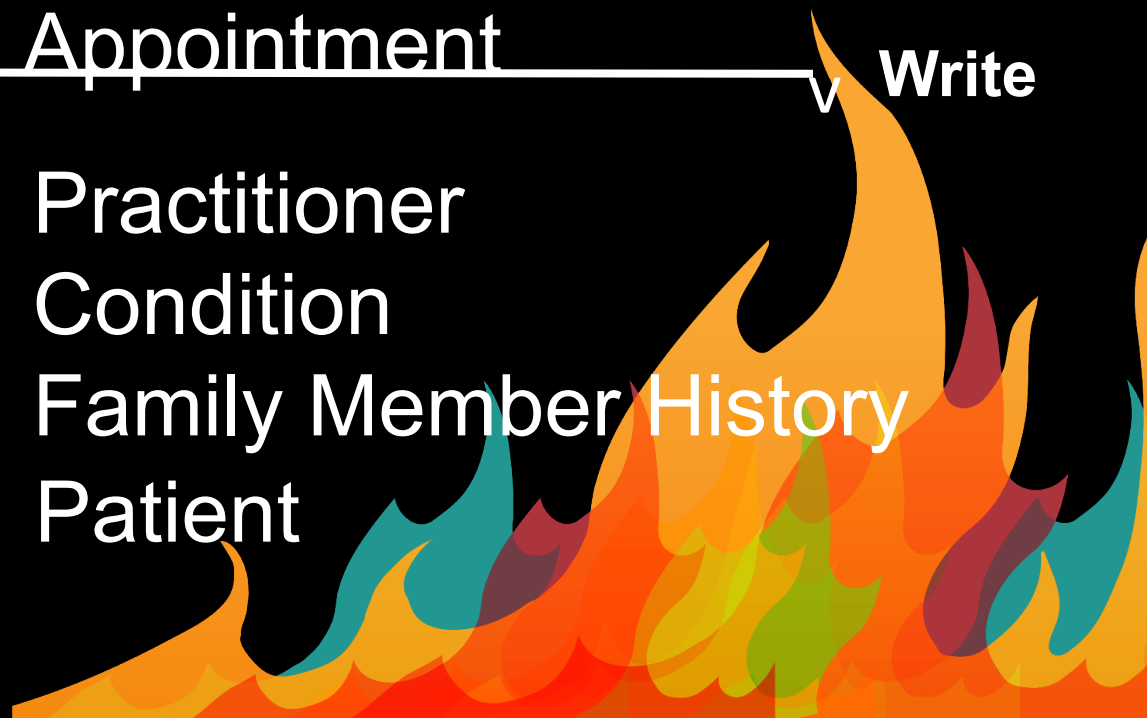
Read^

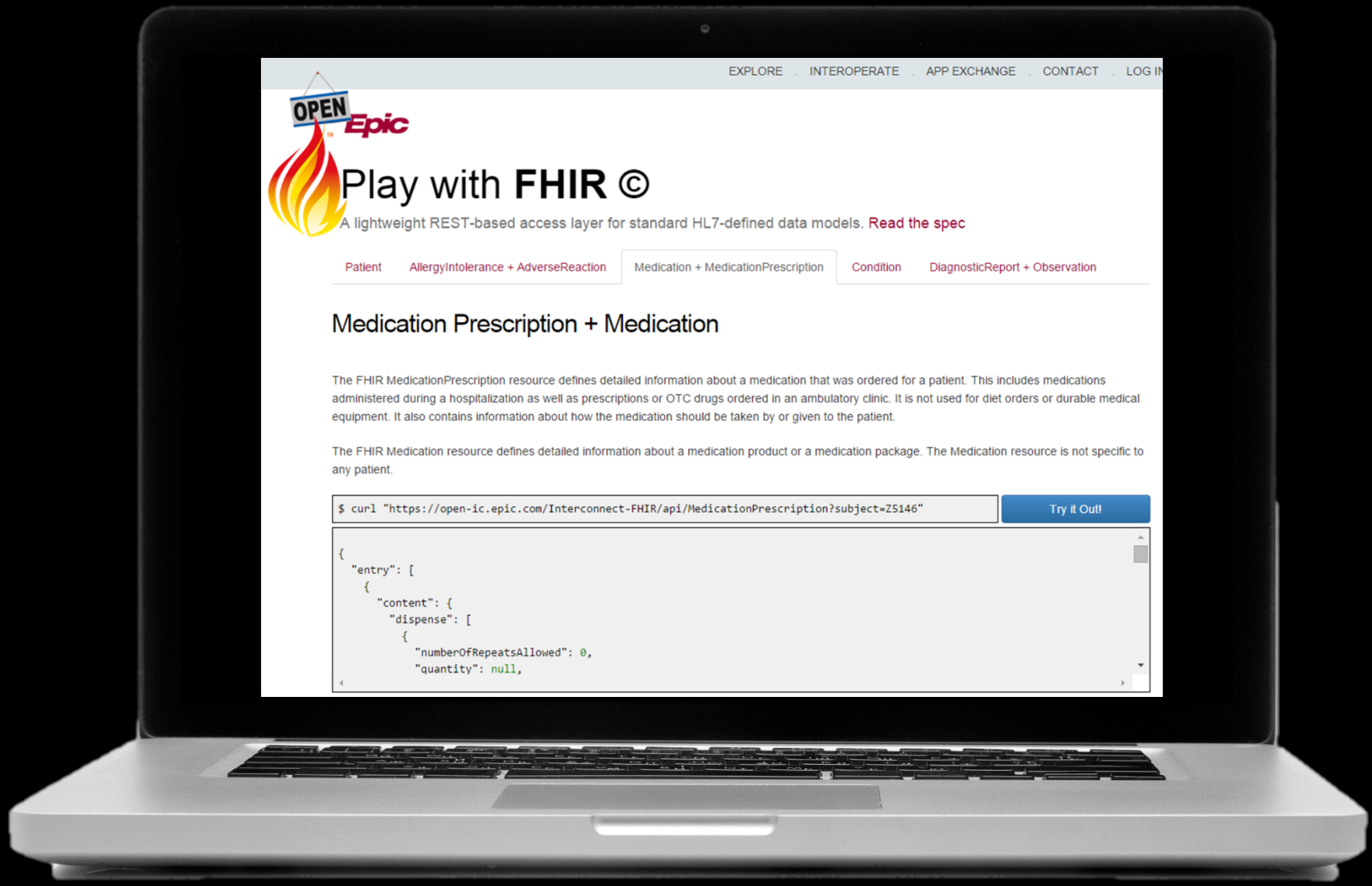
Future FHIR Plans

- (Patient) Lists
- Value Set
- Encounter
- Diagnostic
- Request
- Location
- Appointment

Read^ ——— v **Write**

- Immunization
- Medication Statement
- Allergy Intolerance
- Observation (Vitals)
- Appointment
- Practitioner
- Condition
- Family Member History
- Patient





open.epic.com

Coming up next

CEDARS-SINAI®

Hackensack Meridian
HEALTH

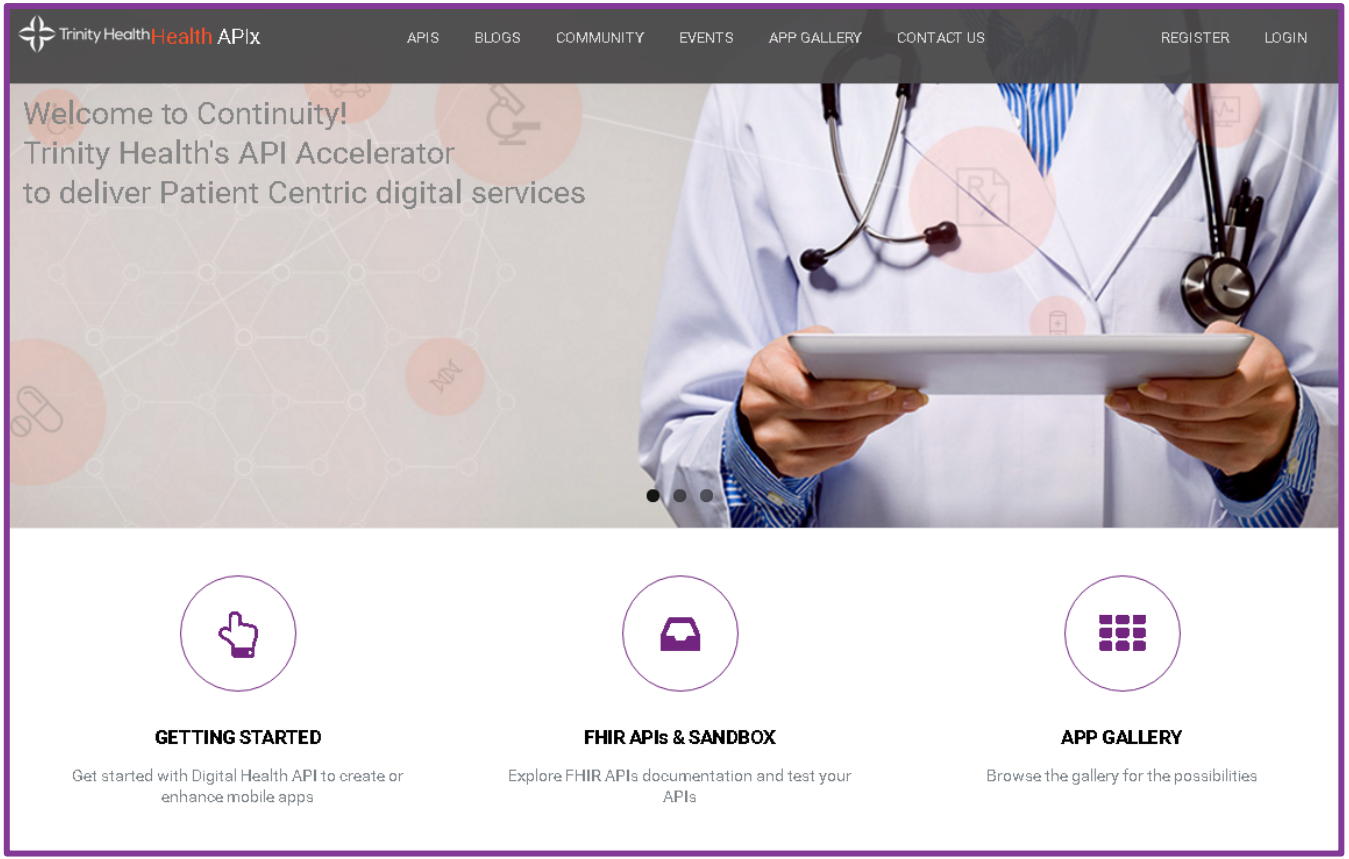
Trinity Health

Trinity Health Continuity Environment

Combined Medication Demonstration

March 15, 2017

Trinity Health API “Continuity” Environment



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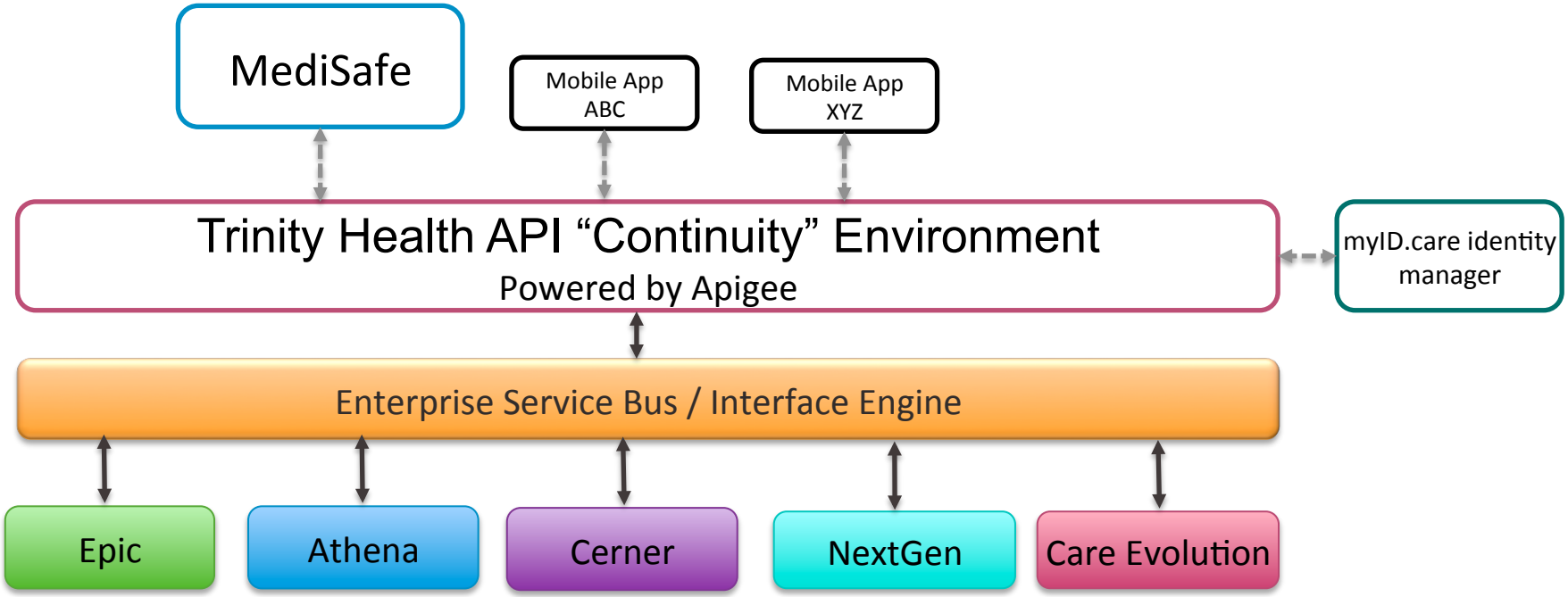
API Management



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Provider View
Cerner mPages

Active	Source
acetaminophen-HYDROcodone (Norco 5 mg/325 mg) 1 Tab PO Q4h PRN Pain/Discomfort	C
allopurinol (Zyloprim) 300 mg PO Daily	C
ALLOPURINOL 300 MG TABLET (ALLOPURINOL) take 1 tablet by mouth once daily	NG
allopurinol 300 mg tablet take 1 tablet by mouth once daily, prescribed 11/07/2016 - 3 refills	A
Klor-Con 10 mEq tablet,extended release (POTASSIUM CHLORIDE) take 2 tablet by oral route every day with food	NG
losartan (Cozaar) 25 mg PO Daily	C
losartan 25 mg tablet (LOSARTAN POTASSIUM) take 1 tablet by oral route every day	NG
losartan 25 mg tablet 1TPO QD, prescribed 11/07/2016 - 4 refills	A
Macrobid 100 mg capsule Take 1 capsule every 12 hours by oral route for 7 days., prescribed 11/17/2016 - 0 refill	A
mupirocin 2 % topical ointment APPLY A SMALL AMOUNT TO each notsil twice a day 5 days prior to your knee surgery., prescribed 11/03/2016 - 0 refill	A

Page 1 of 2

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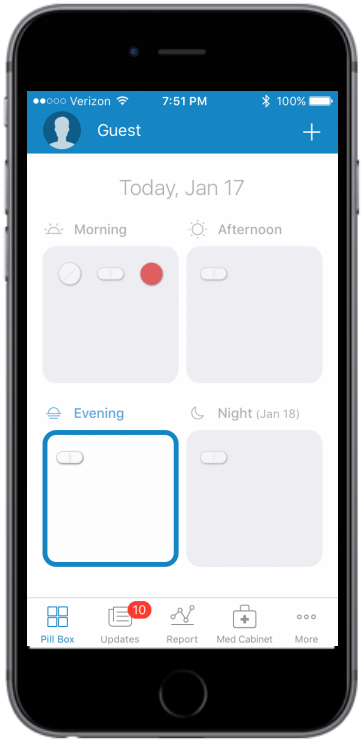
Consumer View
Medisafe



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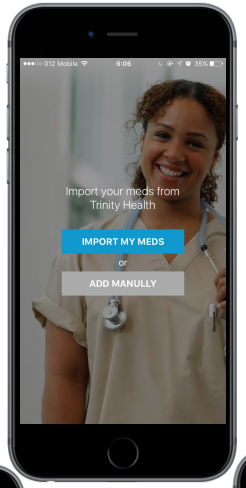
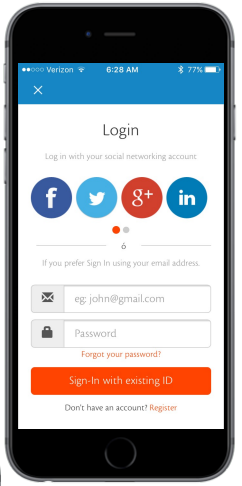
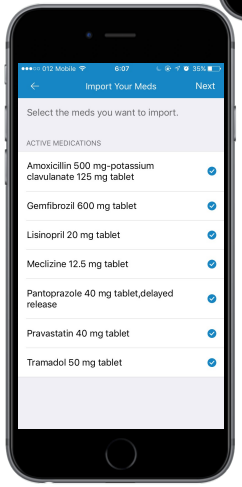
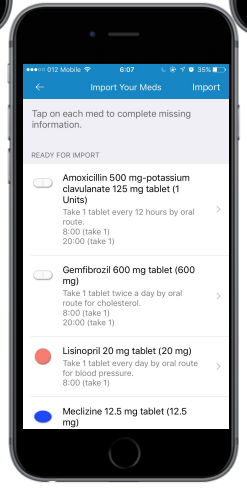
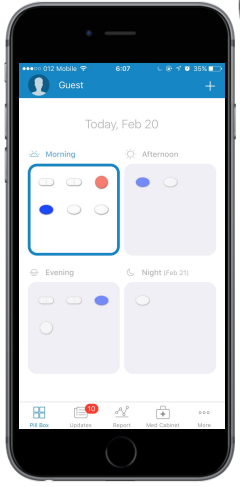
Combined Medication Experience











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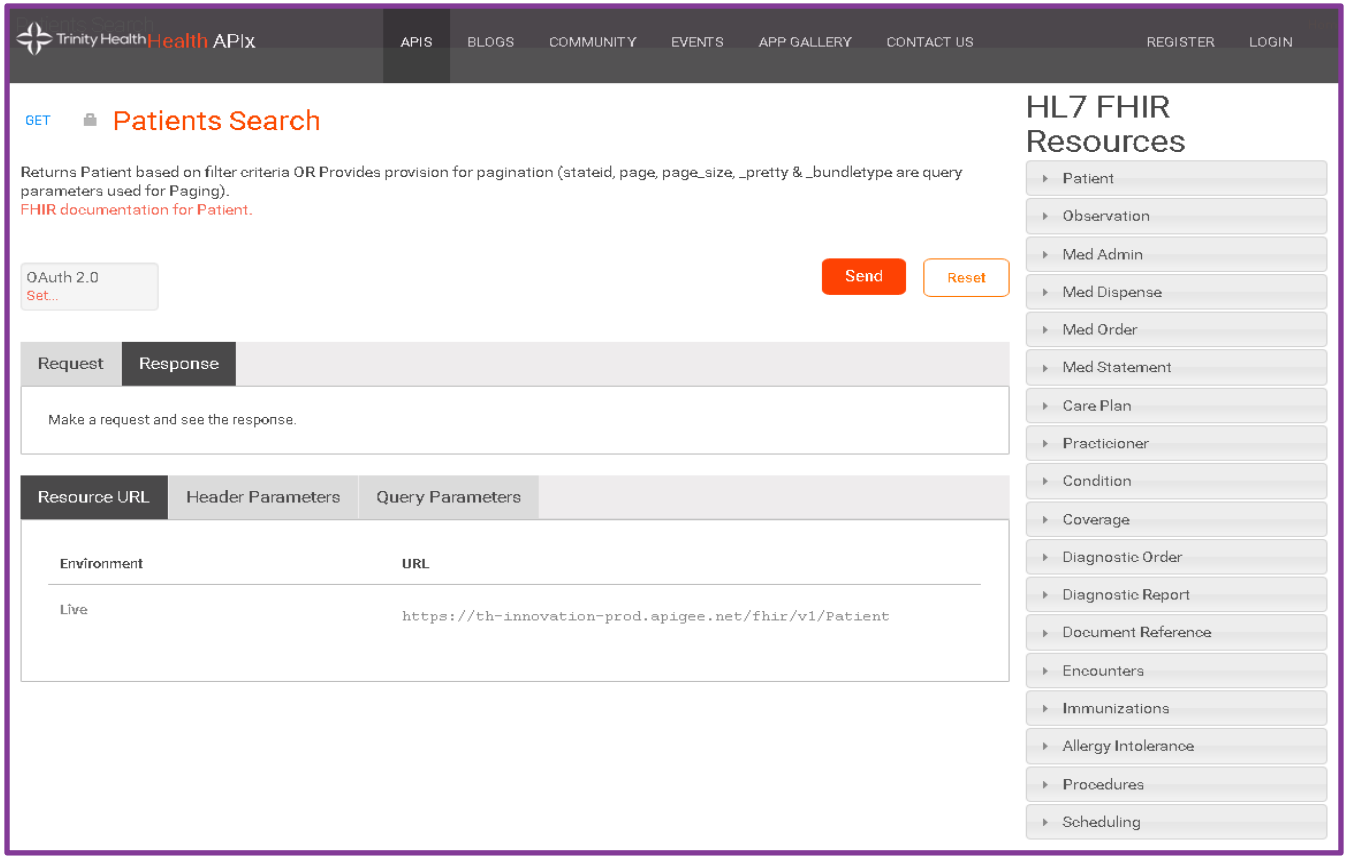
Continuity - HL7 FHIR Library

- Enabling the FHIR Draft Standard for Trial Use (DSTU)v2 within our current sandboxes.
- Trinity Health Consumer oAuth Identity Management Solution
- Developer Portal inviting others



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Guiding Principles

Digital Health Guiding Principles

- An interoperable and integrated suite of best of breed Electronic Health Record (EHR) systems or components
- One Operation Management Platform consisting of one resource allocation, financial, supply chain, and human resources system that are integrated seamlessly with the EHR
- One Customer Relationship Management system
- One Call Center
- One Analytics system
- **One open Application Programming Interface (API) framework, based on open standards that facilitate interoperability and data exchange among different products or services, that provides seamless integration with internal and external systems**

API Management Guiding Principles

- All vendors will need to support API Management as their primary communication between applications
- All API Management needs to be bi-directional
- FHIR API's will be recommend as first connectivity
- API will need to adhere to the oAuth Auth / Grant workflow security requirements

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Cerner mPages

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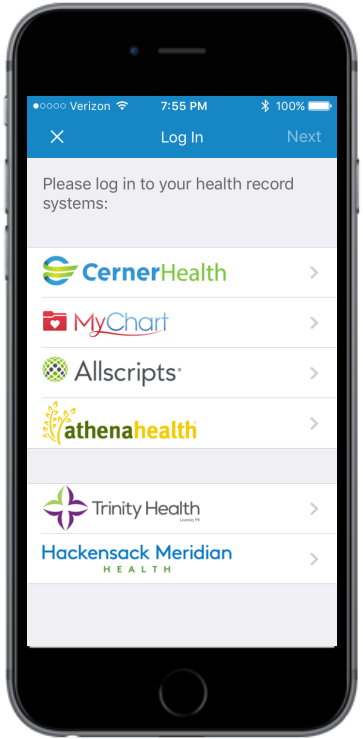

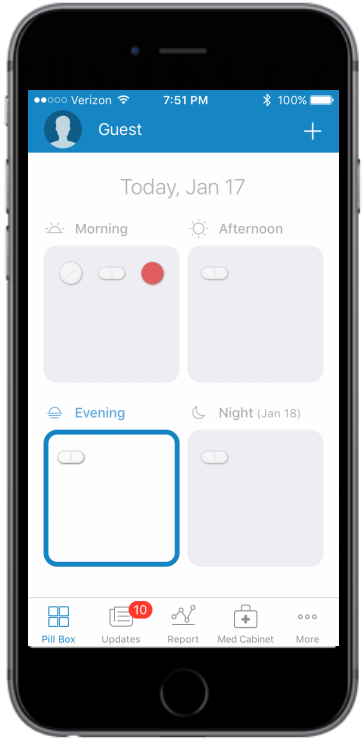

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Experimenting with Patient Centered Medication Reconciliation in New York City

AMAZING THINGS ARE HAPPENING HERE

NewYork-Presbyterian

Our ONC Med-Rec Experience

- Watched
  - As EHR and App vendors proved sandbox connectivity and providers began to experiment.
- Experimented
  - Worked with CSC's med rec app with sandboxes and then our own instance of Allscripts SCM
- Noticed Key Success Ingredient
  - Standards

HL7 FHIR "Argonaut" specification

AMAZING THINGS ARE HAPPENING HERE

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We Formed a New Hypothesis

Assuming standards are used:

1. We *should* be able to pick an app we never ever tried before.
2. With *multiple* EHRs.
3. At *multiple* sites.
4. It *should* work.
5. It *should* be easy.

Experiment

- Chose app: MyFHR by CareEvolution.
- Choose Weill Cornell Medicine – they have Epic.
- And NewYork-Presbyterian - has Allscripts.
- Involved collaboration between 3 vendors and 2 provider organizations!

Conclusion

- **It was easy.**
- In only 4 days and minimal work:
  - MyFHR integrated patient information from our two distinct healthcare sites pulling information from our two distinct EHRs.
  - And created a single med list
- We see the potential.

Connect your FHIR app with Allscripts

- Go to: https://developer.allscripts.com
- Sign up for a free account
- Start building
  - Documentation
  - Sandboxes
  - Technical support
- Questions: AllscriptsDeveloperProgram@allscripts.com

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