Open@Epic CONFERENCE

FHIR Roadmap

Presenters



Brian Swinkels

EDI Web Services



Casey Fitzgerald

FHIR R&D

Agenda:

- Brief history and how FHIR is used by the Epic community today
- What we're doing
- Where we think industry's headed and how we're getting ready

To give away the ending…

- Expanded datasets
- New exchange patterns and workflows
- Much greater scale of exchange
- Greater reliance – increased focus on resiliency

Icon Guide

1. Existing capabilities **in some Epic version**



2. Planned **in an upcoming release**



3. **Still just an idea** (and we'd value input)



What is FHIR?

1

FHIR Resources

AllergyIntolerance

Patient

Immunization

MedicationAdministration

2

Exchange Methods

REST API

Bulk Export

CDS Hooks

Document Exchange

3

Implementation Guides

US Core

European Health Data Space

International Patient Summary

DaVinci PAS and CRD

4

FHIR *is a* Community



HL7 FHIR Connectathon 2017



FHIR DevDays 2024



App Orchard Conference 2017



FHIR DevDays 2016



FHIR DevDays 2025



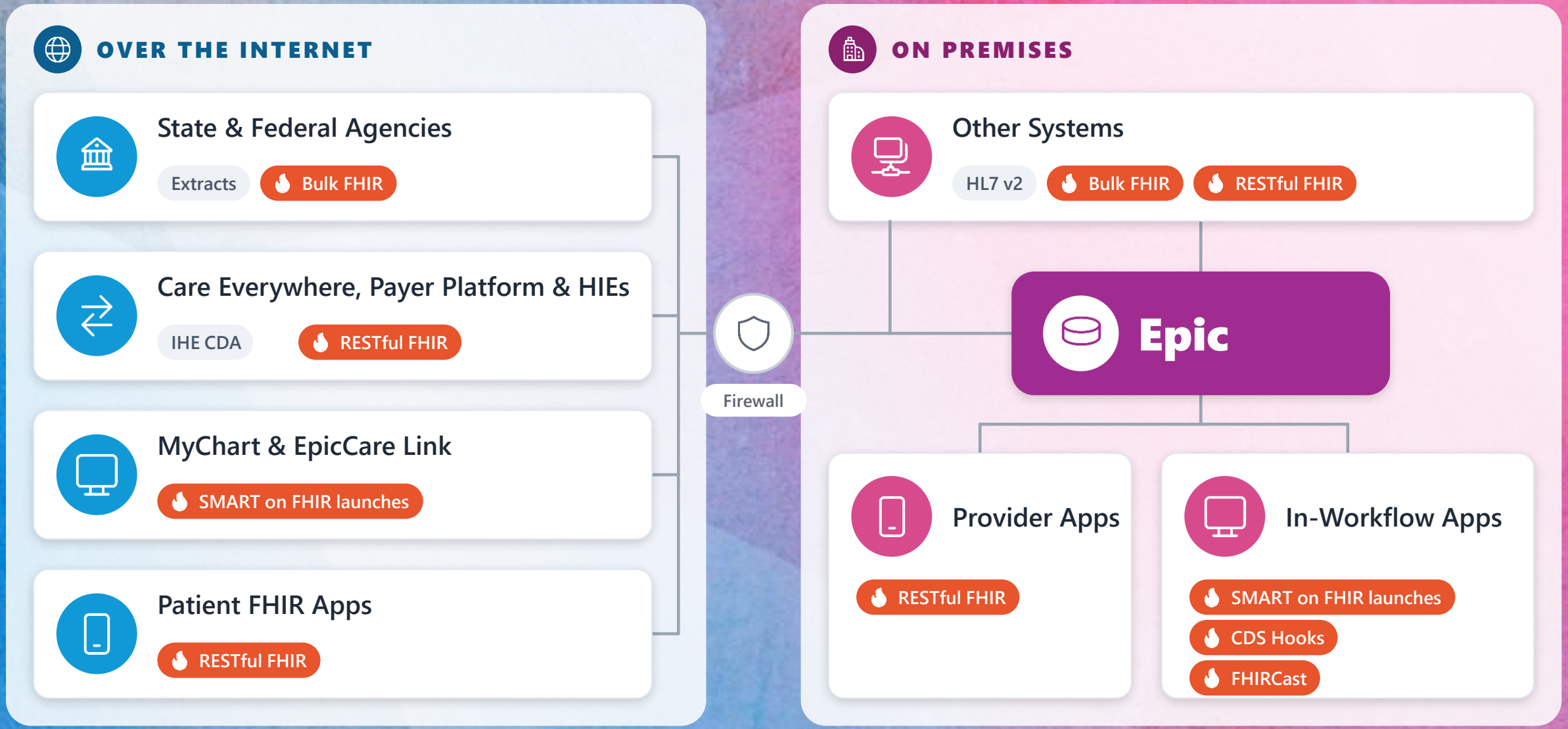
Epic FHIRWorks 2015

600+ FHIR APIs

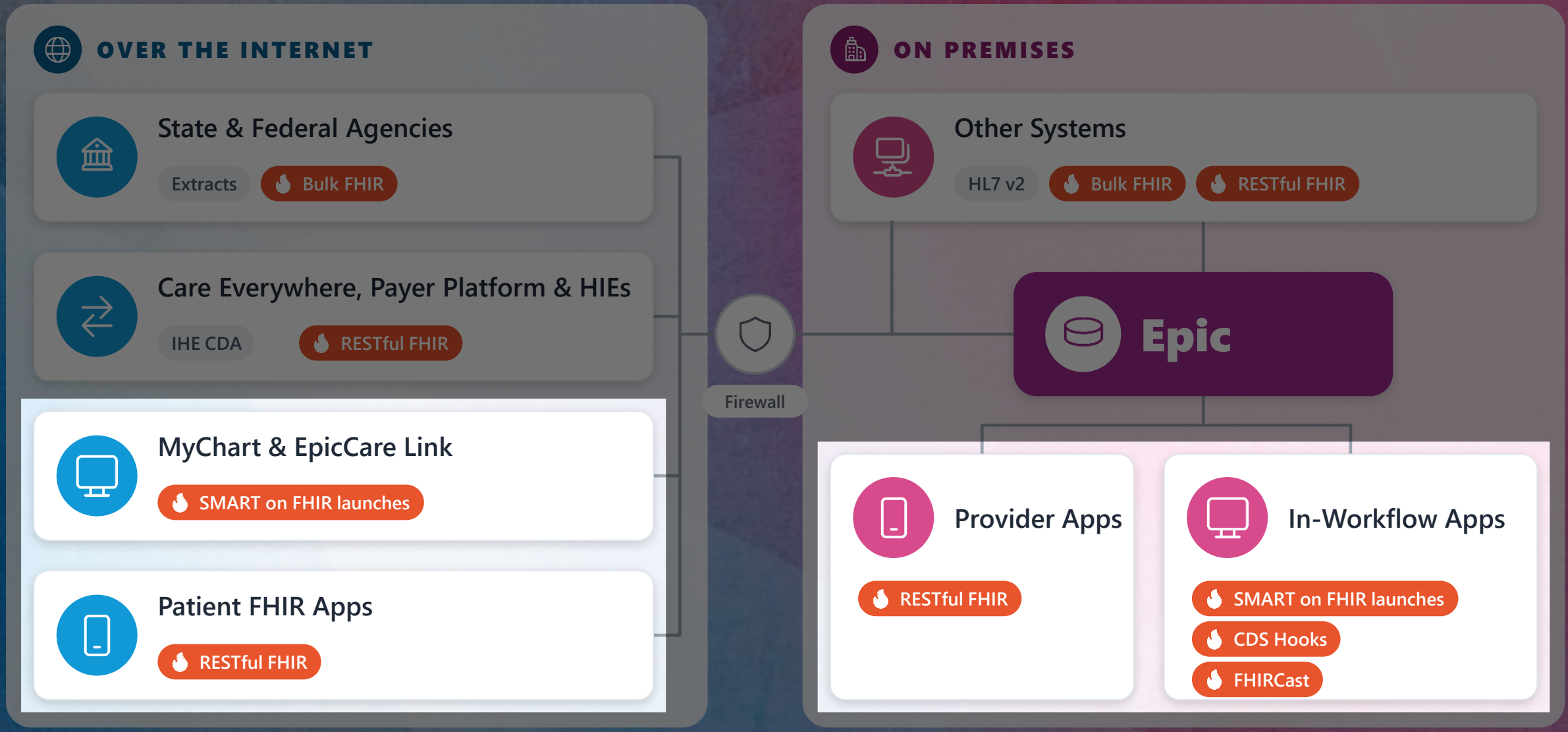
Account
AdverseEvent
AllergyIntolerance
Appointment
Binary (CCDA Documents)
Binary (Clinical Notes)
Binary (Handoff)
Binary (HIS)
Binary (Labs)
Binary (OASIS)
Binary (Practitioner Photo)
BodyStructure (Tooth)
CarePlan (Dental)
CarePlan (Encounter-Level)
CarePlan (Inpatient Pathway)
CarePlan (Inpatient)
CarePlan (Longitudinal)
CarePlan (Oncology)
CarePlan (Outpatient)
CarePlan (Questionnaires Due)
CareTeam (Longitudinal)
Communication (Community Resource)
Condition (Care Plan Problem)
Condition (Dental Finding)
Condition (Encounter Diagnosis)
Condition (Genomics)
Condition (Health Concern)
Condition (Infection)
Condition (Problems)
Consent
Coverage
Device
DiagnosticReport (Results)
DocumentReference (CCDA Documents)
DocumentReference (Clinical Notes)
DocumentReference (External CCDA)
DocumentReference (Handoff)
DocumentReference (HIS)
DocumentReference (Labs)
DocumentReference (OASIS)
Encounter
Endpoint
EpisodeOfCare
ExplanationOfBenefit
FamilyMemberHistory
Flag (Patient FYI)
Goal (Patient)
Goal (Care Plan)
Goal (Pathway Step)
Immunization
List (Allergies)
List (Family History)
List (Hospital Problems)
List (Immunization)
List (Medications)
List (Patient List)
List (Patients With Questionnaires Due)
List (Problems)
Location
Medication
MedicationOrder
MedicationRequest (Orders)
MedicationRequest (Unsigned Order)
MedicationStatement
Observation (ADLs)
Observation (Core Characteristics)
Observation (Labs)
Observation (LDA-W)
Observation (Obstetric Details)
Observation (Periodontal)
Observation (SmartData Elements)
Observation (Smoking History)
Observation (Vitals)
Organization
Patient
Practitioner
PractitionerRole
Procedure (Orders)
Procedure (Surgeries)
Procedure (Surgical History)
ProcedureRequest (Orders)
ProcedureRequest (Unsigned Order)
Questionnaire (Appointment and Series)
QuestionnaireResponse (Appointment and Series)
RelatedPerson
ResearchStudy
ResearchSubject
Schedule
ServiceRequest (Community Referral)
ServiceRequest (Dental Procedure)
ServiceRequest (Order Template)
ServiceRequest (Orders)
ServiceRequest (Referral)
ServiceRequest (Unsigned Order)
Slot
Specimen
Substance
Task (Community Referral)
ValueSet
and more....

Aug 2026

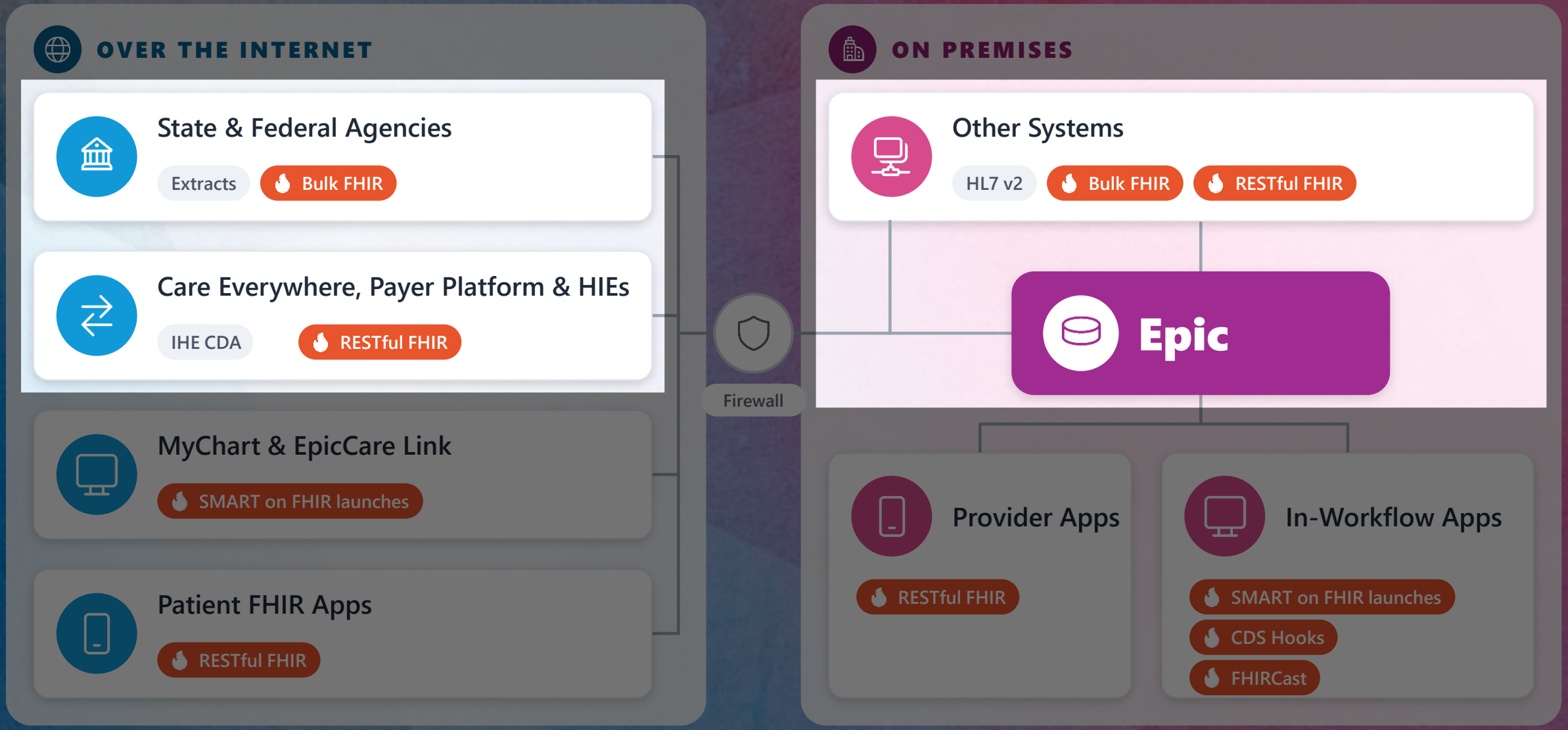
Typical FHIR Deployment



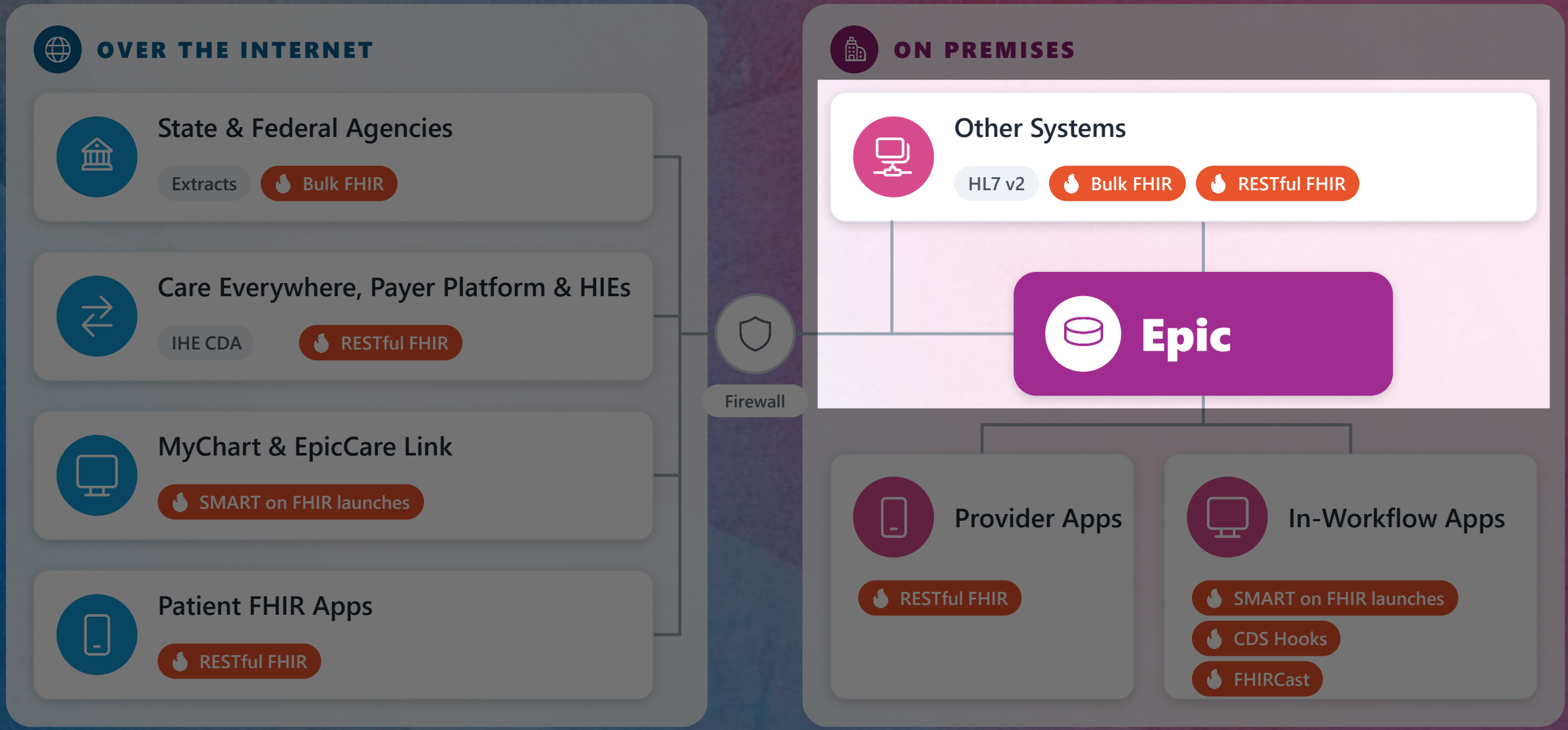
Typical FHIR Deployment



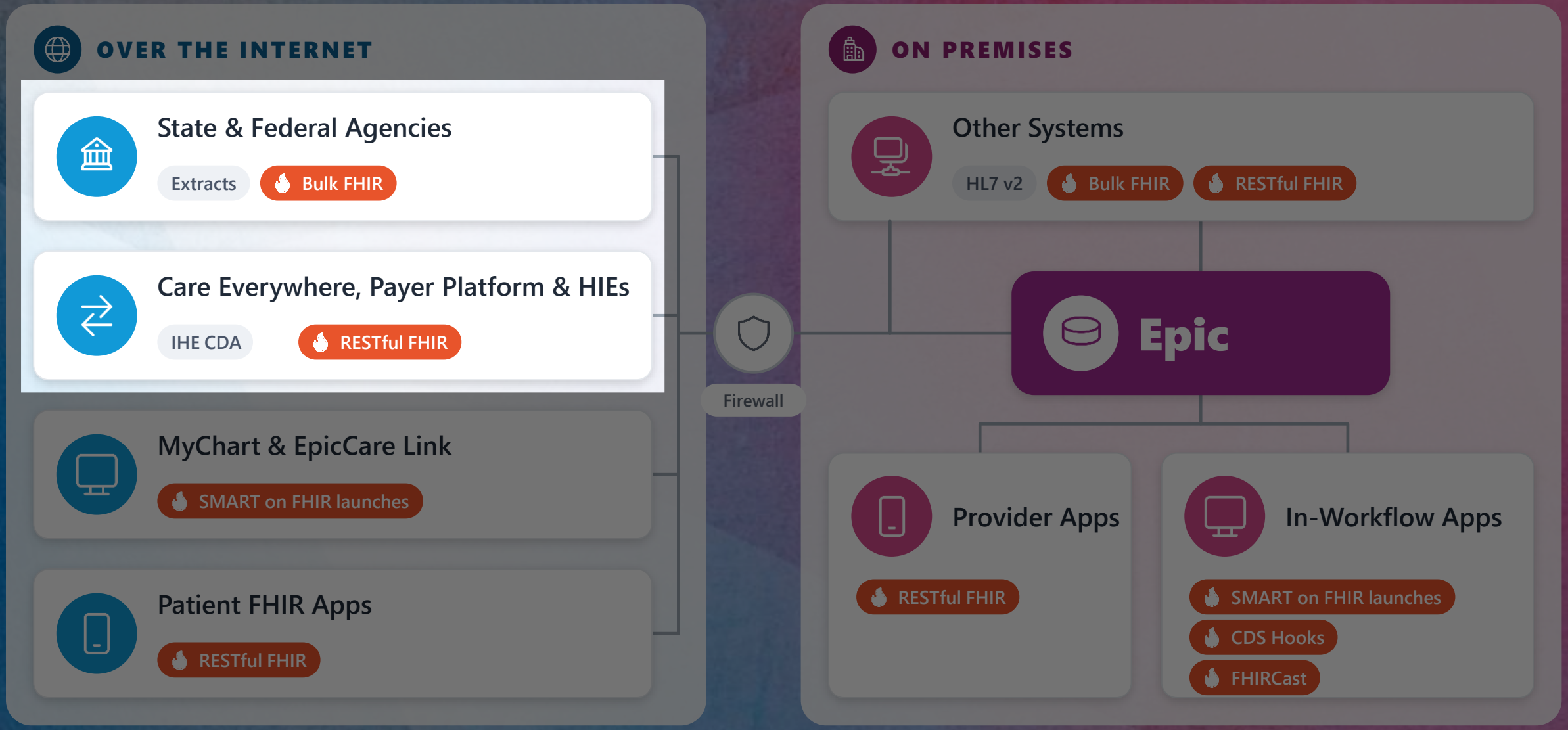
Typical FHIR Deployment



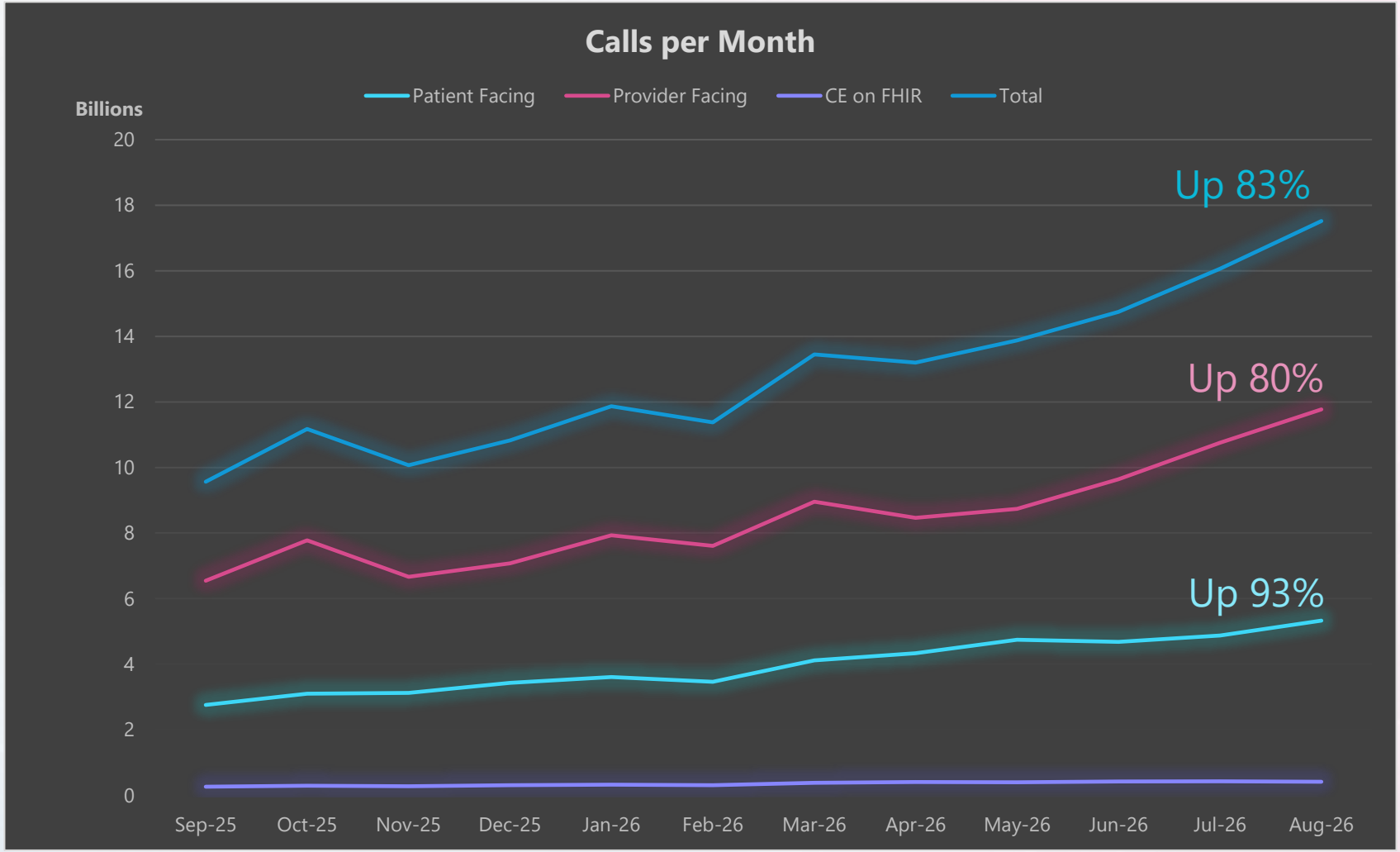
Typical FHIR Deployment



Typical FHIR Deployment



Calls per Month



Open@Epic CONFERENCE

Recent Updates



US Core Implementation Guide

HL7® FHIR®

USCDI Versions

USCDI v3

- Supported since August 2024
- Nationwide baseline as of Jan 1, 2026

Aug 2024

USCDI v5

- Available now
- 3 new data classes
- 30+ new data elements

Aug 2026 SU

Available

USCDI v7

- US Core profiles balloting soon
- Data set continues to expand

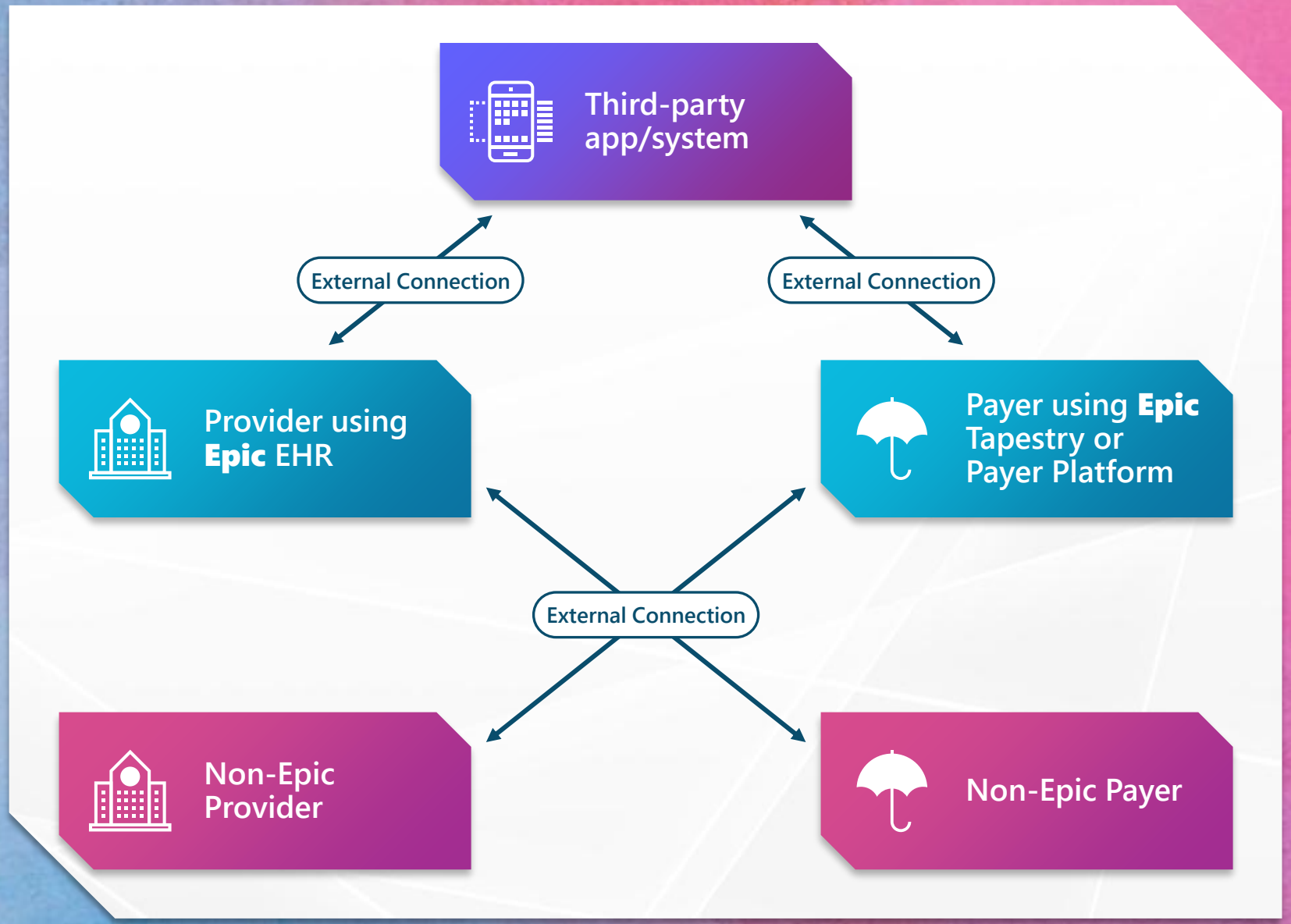
Future

Payer APIs

USCDI v3

Payer APIs Feb 2026

Feb 2026



FHIR Support for Prior Authorizations

Is prior auth needed?

Coverage Requirements Discovery

Aug 2025

What information is Needed?

Documentation Templates and Rules

Feb 2026

Submit Authorization.

Prior Authorization Support

Feb 2026

FHIR Support for Prior Authorizations

Is prior auth needed?

Coverage Requirements Discovery

Aug 2025

OEC25

FHIR Prior Authorization (CMS-0057)

Tomorrow, Oct 22

10:30-11:10 PM

Updates on Epic's work with Health Plans and Health Systems implementing Prior Authorization specifications

Feb 2026

Submit Authorization.

Prior Authorization Support

Feb 2026

Streamlining Patient Access



App Registration

- Apps scoped to USCDI FHIR APIs are synced to all health systems using Epic



Patient Authorization

- Patients grant apps access using MyChart credentials

Streamlining Patient Access



App Registrati

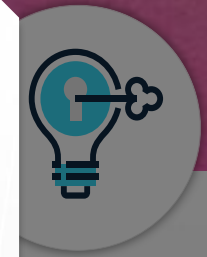
- Apps scope
  USCDI FHIR
  synced to al
  systems usi

over

2200

Unique patient-facing applications

made production API calls to systems using Epic

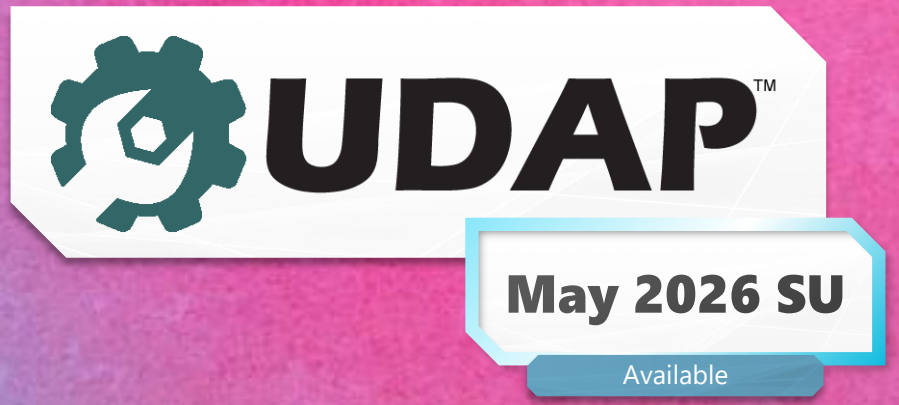


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grant apps
using MyChart
ials

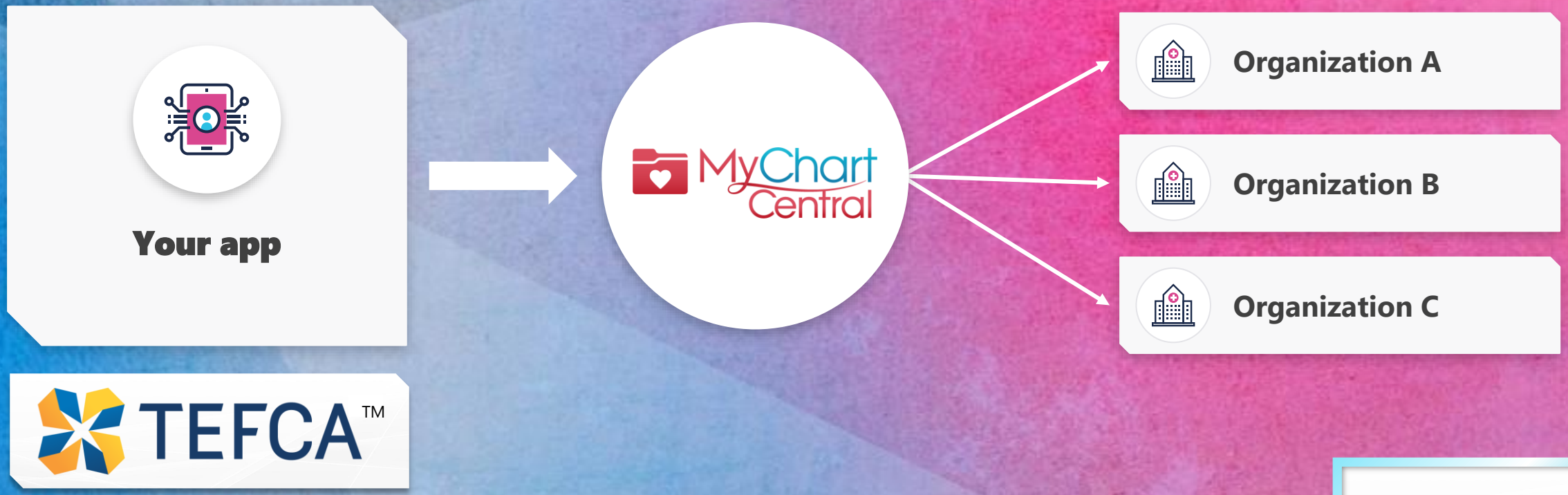
Streamlining Patient Access





Community Authorization

With MyChart Central, patients can share data from all their linked organizations at once

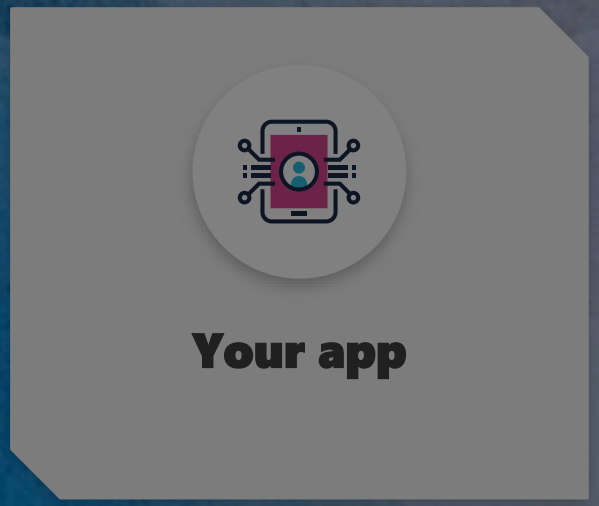


May 2026 SU

Available

Community Authorization

With MyChart Central, patients can share data from all their linked organizations at once



TEFCA™

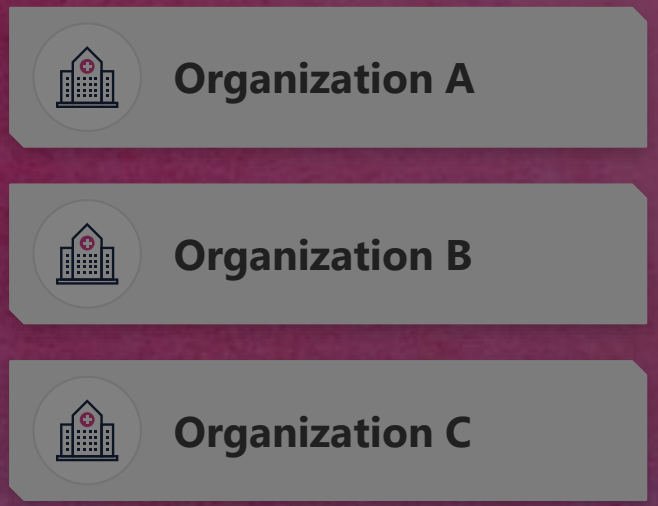
OEC11

OAuth2 in Healthcare

Today, Oct 21

11:30 AM -12:10 PM

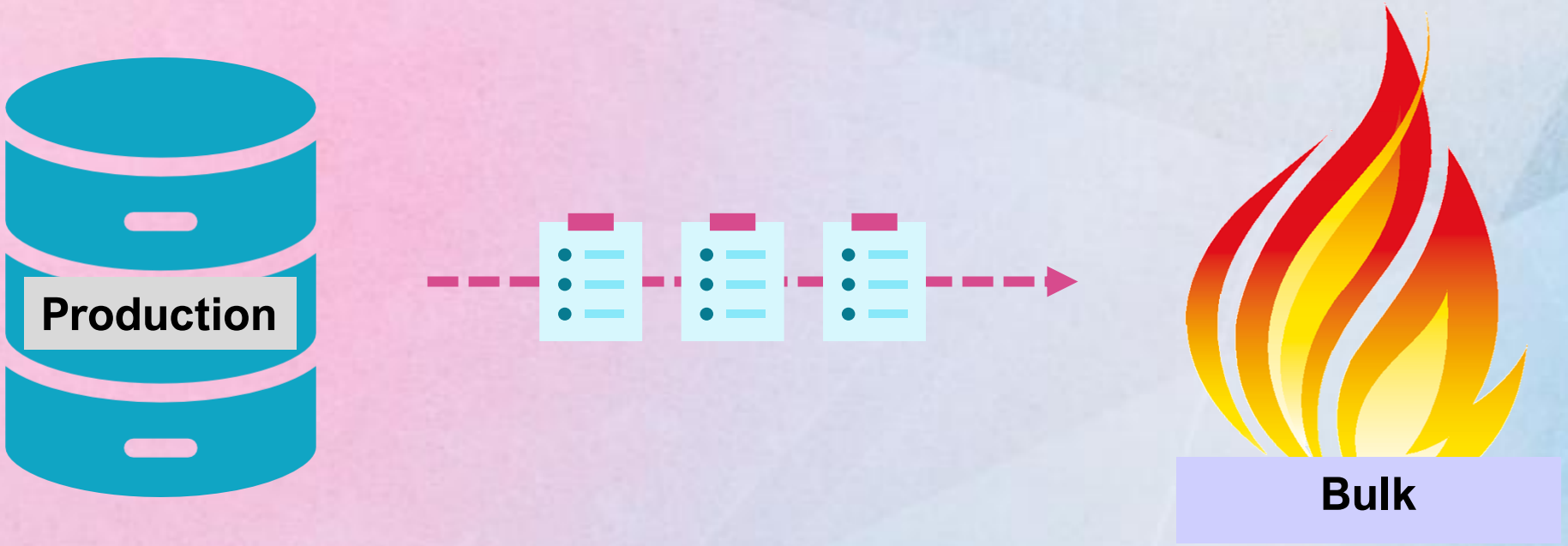
A technical deep dive on the latest security standards for interoperability with Epic



May 2026 SU

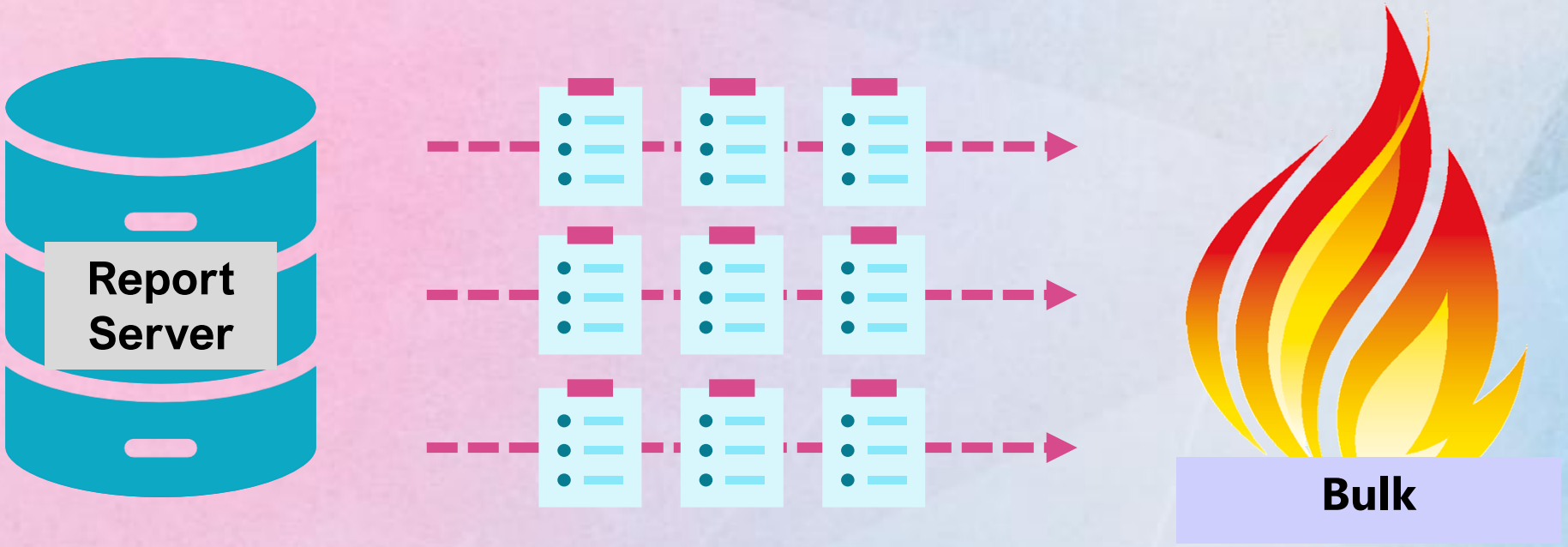
Available

Scalable Bulk FHIR



Nov 2026

Scalable Bulk FHIR



Nov 2026

Scalable Bulk FHIR

UP TO

5×

faster

Rate of FHIR resources processed on large exports



Epic internal testing, default configuration

Nov 2026

Scalable Bulk FHIR



OEC17

Bulk FHIR: Lessons Learned

Today, Oct 21

2:30-3:10 PM

Practical lessons from healthcare and public health implementations

OEC22

Bulking Up Your Data Extracts for Populations and Analytics

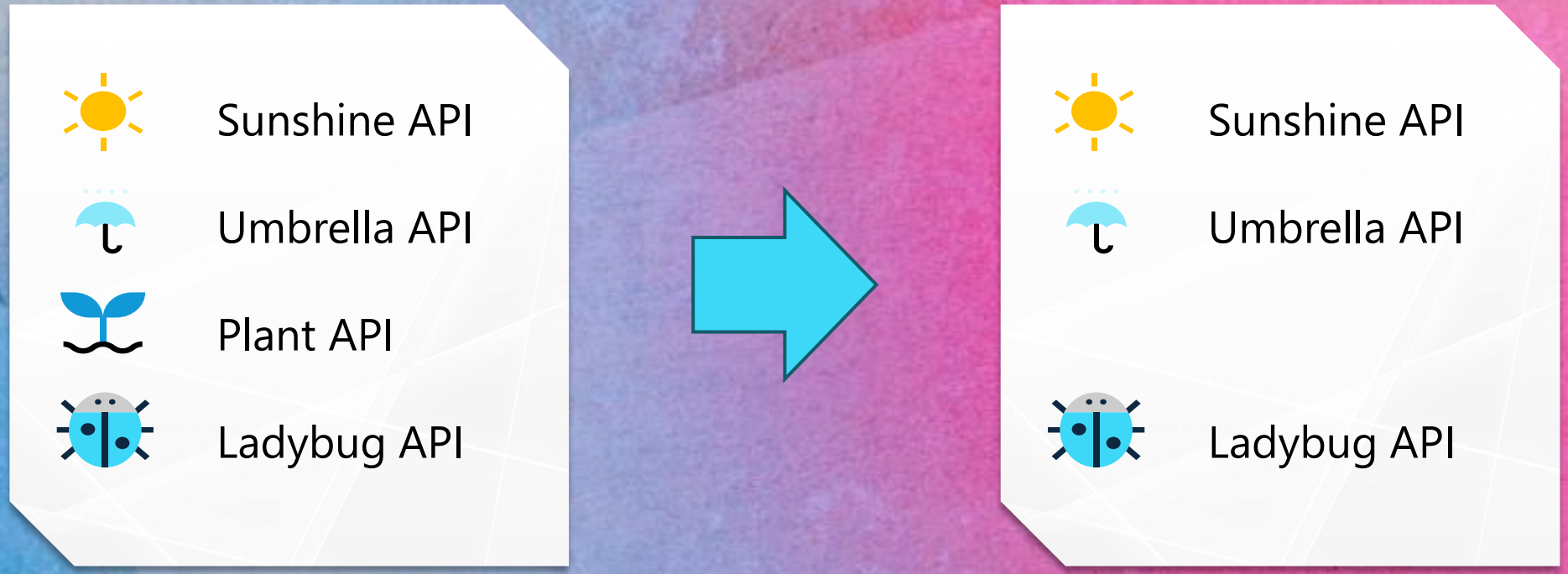
Today, Oct 21

3:30-4:10 PM

Learn more about Bulk FHIR, Kit, and Clarity

Nov 2026

Environment Specific Scopes



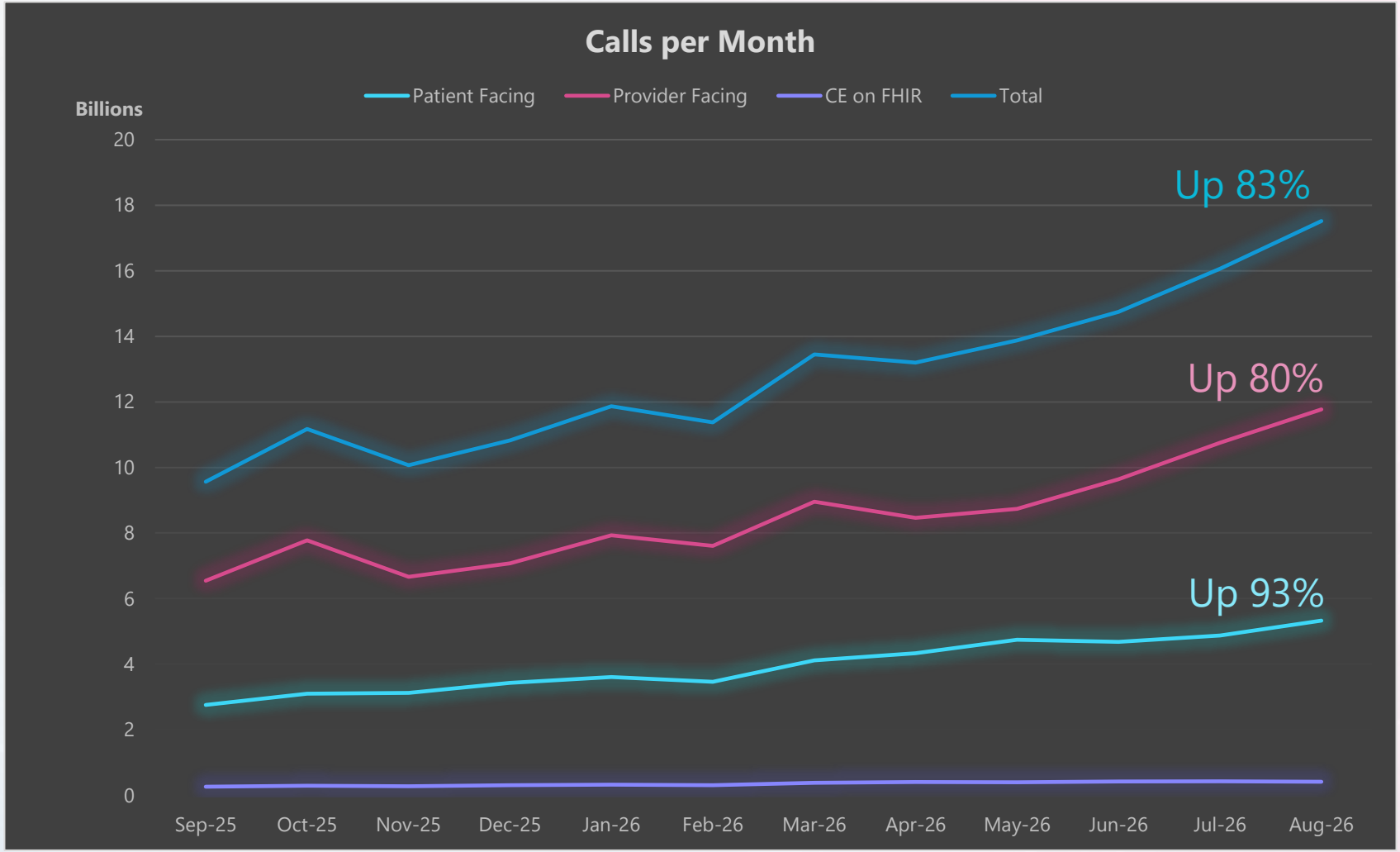
Client Scopes from Registration

Client Scopes in Health System

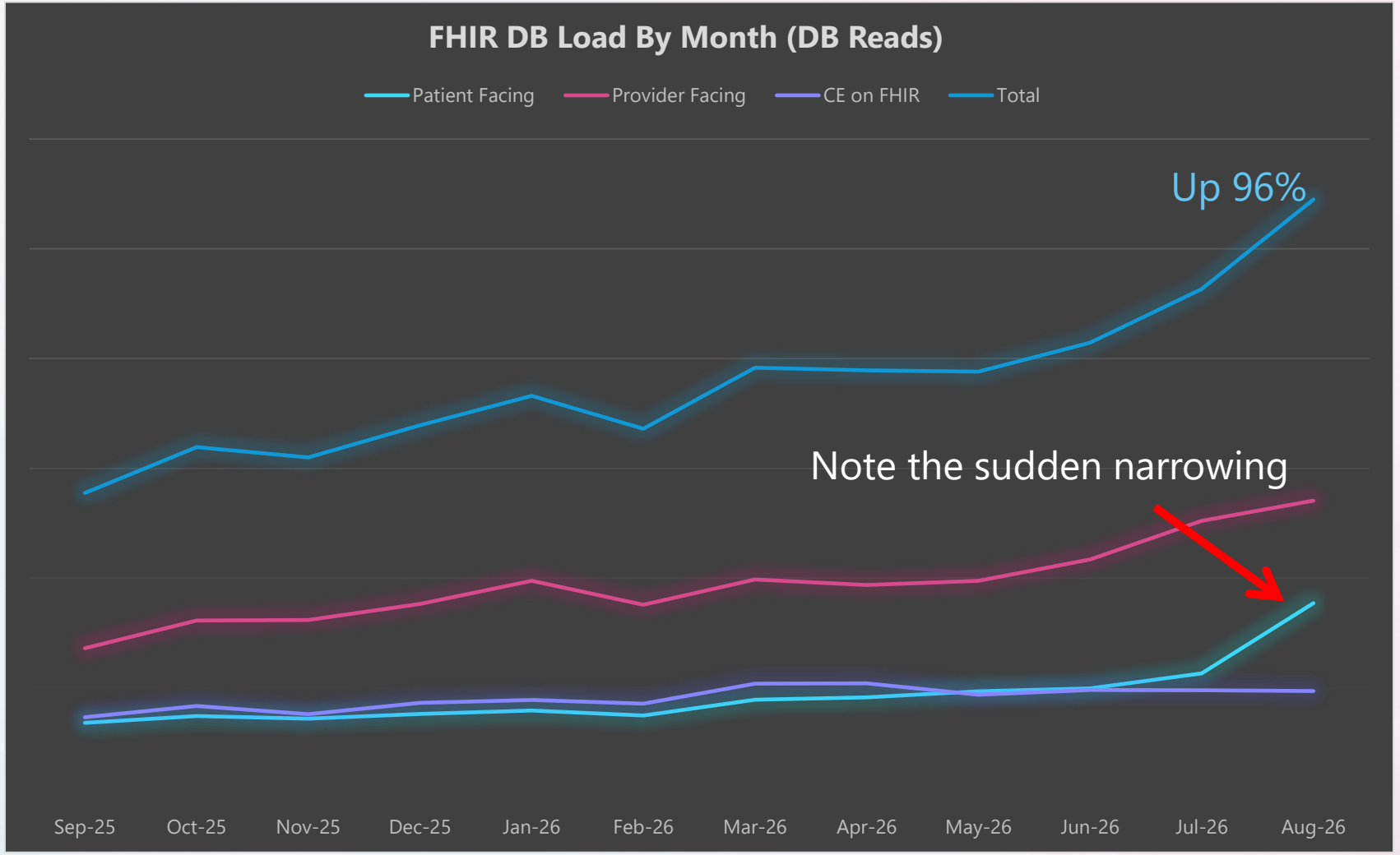
Aug 2026

Looking Forward

Look at Calls per Month Again



Compare to Database Load



So what can we do?

One part... process maturation

- Leverage experience of interface teams
- Better scoping, non-PRD testing, and change management.

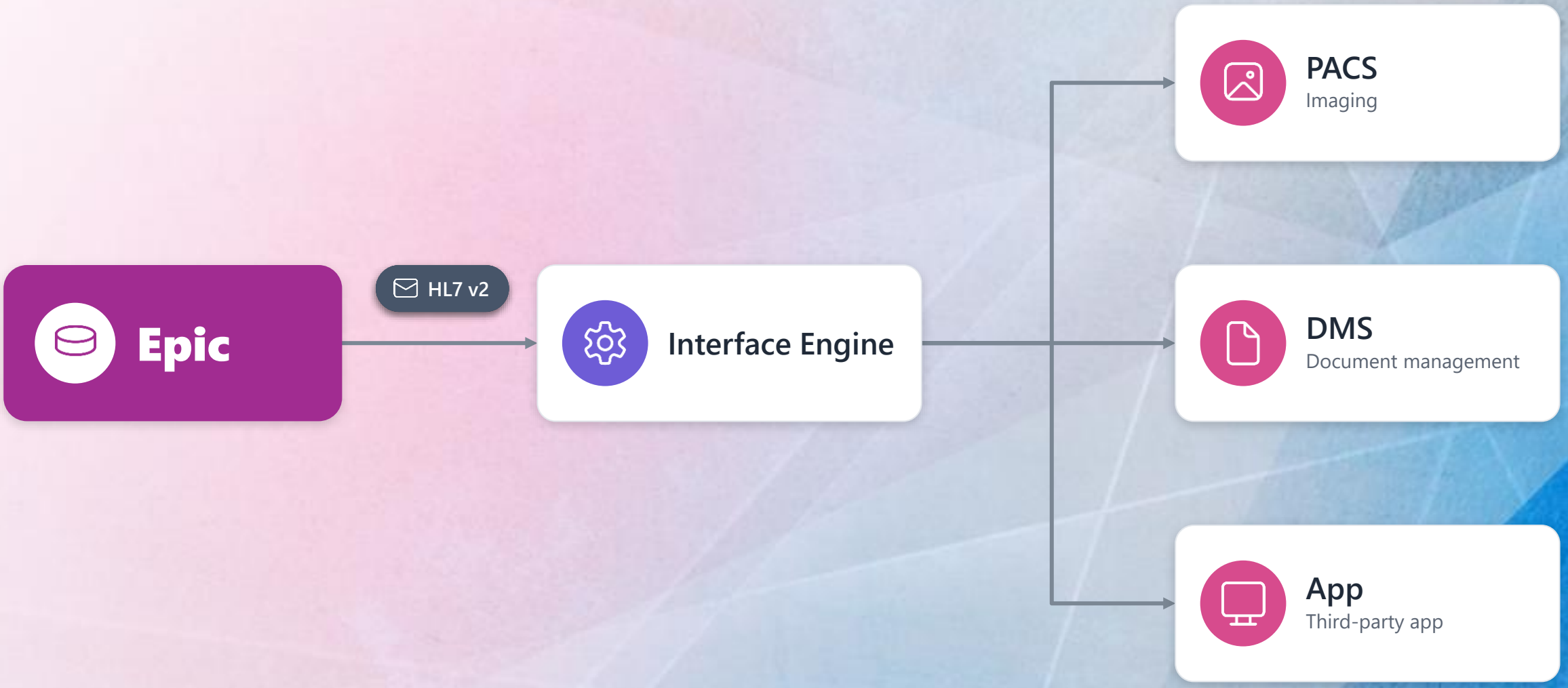
We can re-think some exchange patterns

- Additional use-cases for Bulk FHIR
- Adding support for _lastUpdated where it makes sense
  - DiagnosticReport (Results) and Observation (Labs)

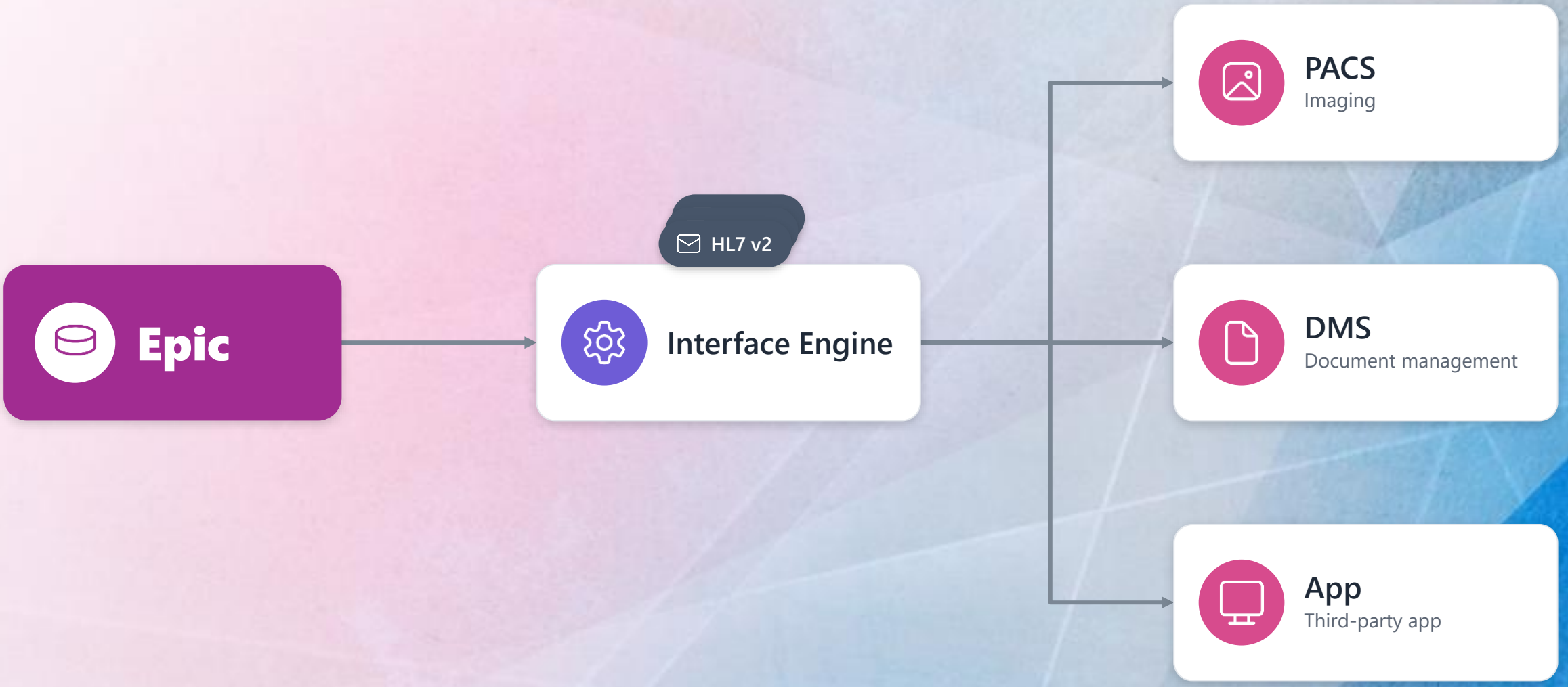
Aug 2026

- Polling is bad! How can we avoid it?

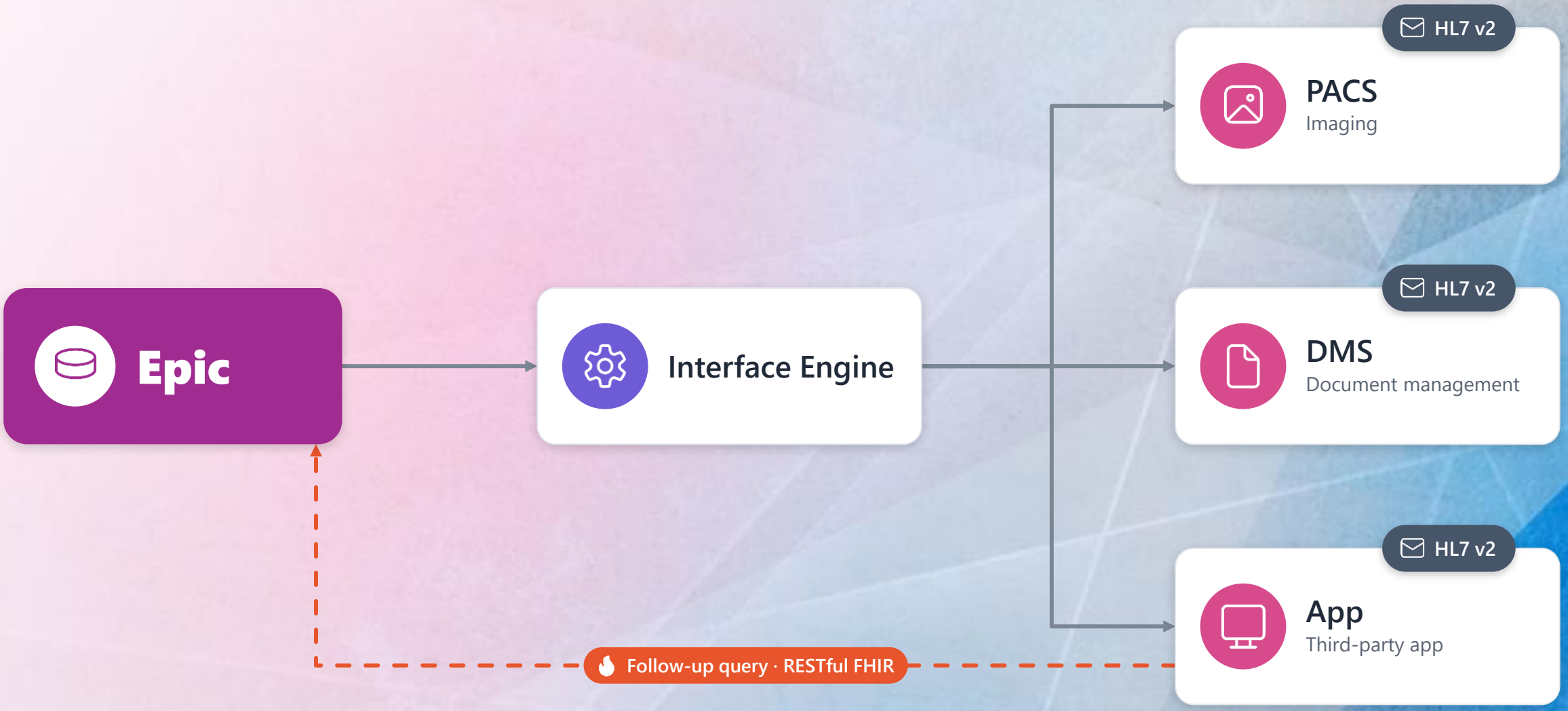
A Typical Architecture for HL7 v2



A Typical Architecture for HL7 v2



A Typical Architecture for HL7 v2

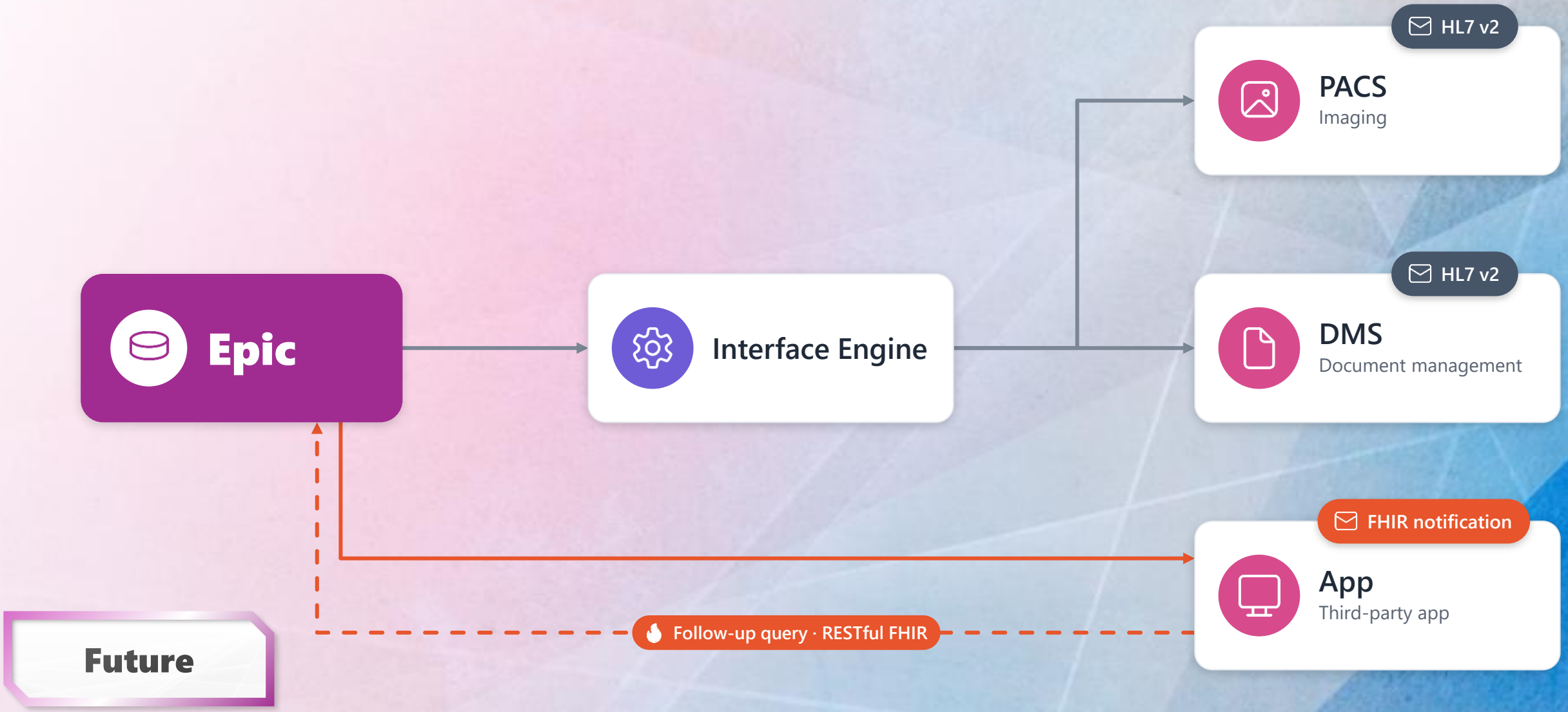


Administrative Notifications

- Analyst configured subscriptions:
  - Endpoints
  - Events – encounter create / close to start
- Excited to see how community uses it
- Groundwork for future use-cases (but want to be thoughtful)

Future

What Changes



Bulk Exchange Patterns

Export

- Industry standard
- Consumer specifies payload
- Existing API infrastructure

Current

Submit

- Upcoming ballot
- Provider determines payload
- Quality measures

Idea

Publish

- Upcoming Ballot
- Static Data
- Provider Directory

Idea

International Patient Summary

International Standard

Established Document Exchange Workflows

Global Investment

May 2025

European Health Data Space

EHDS

FHIR Versions

R4

- Well established globally
- Active IG development
- Lasting support

R6

- Next major version of FHIR
- Expected in ~~2026~~ 2027
- Strong push for normativity

How We Think About New FHIR Capabilities

What FHIR's Operating Alongside

Event-driven interfaces

CDAs via IHE Profiles

Use-Case Specific Protocols

- NCPDP
- DICOM

Custom APIs

SSO Protocols

Extracts

What FHIR's Operating Alongside

Event-driven interfaces

- HL7 v2, X12, etc.
- Outgoing Administrative Notifications

Cross Org Exchange

- CDAs via IHE Profiles
- CE Notes
- IPS
- Image Exchange

Use-Case Specific Protocols

- NCPDP
- DICOM

Custom APIs

- Often a drop-in FHIR replacement

SSO Protocols

- Encrypted querystrings
- SAML
- SMART on FHIR

Extracts

- Dedicated reports
- Bulk FHIR

Parts to an exchange

There's a lot to it!

1. Establishing trusted and relevant endpoints
2. User identity, authentication, access, and auditing
3. Consent and authorization
4. Record matching
5. Triggers for exchange
6. Message structure and exchange protocol
7. Message content (do we promise identifier X present?)
8. Workflow design (who should update what when?)
9. Agreements for error handling and remediation

How We Think About This

- If it's greenfield – FHIR's our default
- If not – understand how FHIR improves on what exists. Save the norm if we can. Build on what works.
- Improvement could be:
  - Addresses gap in existing workflow – might be complementary use
  - Additional exchange partners

Some Takeaways

1. FHIR's acting as the backbone for a lot of innovation
2. Use the right tool to solve problems *now*
3. Keep working with us and industry
4. Be mindful of system impact – plan for this!

Q&A

OEC32

Wrap-Up: Putting It All Together

Form closes today at 5:00 PM

Wrap Up

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Casey Fitzgerald | cfitzger@epic.com

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