



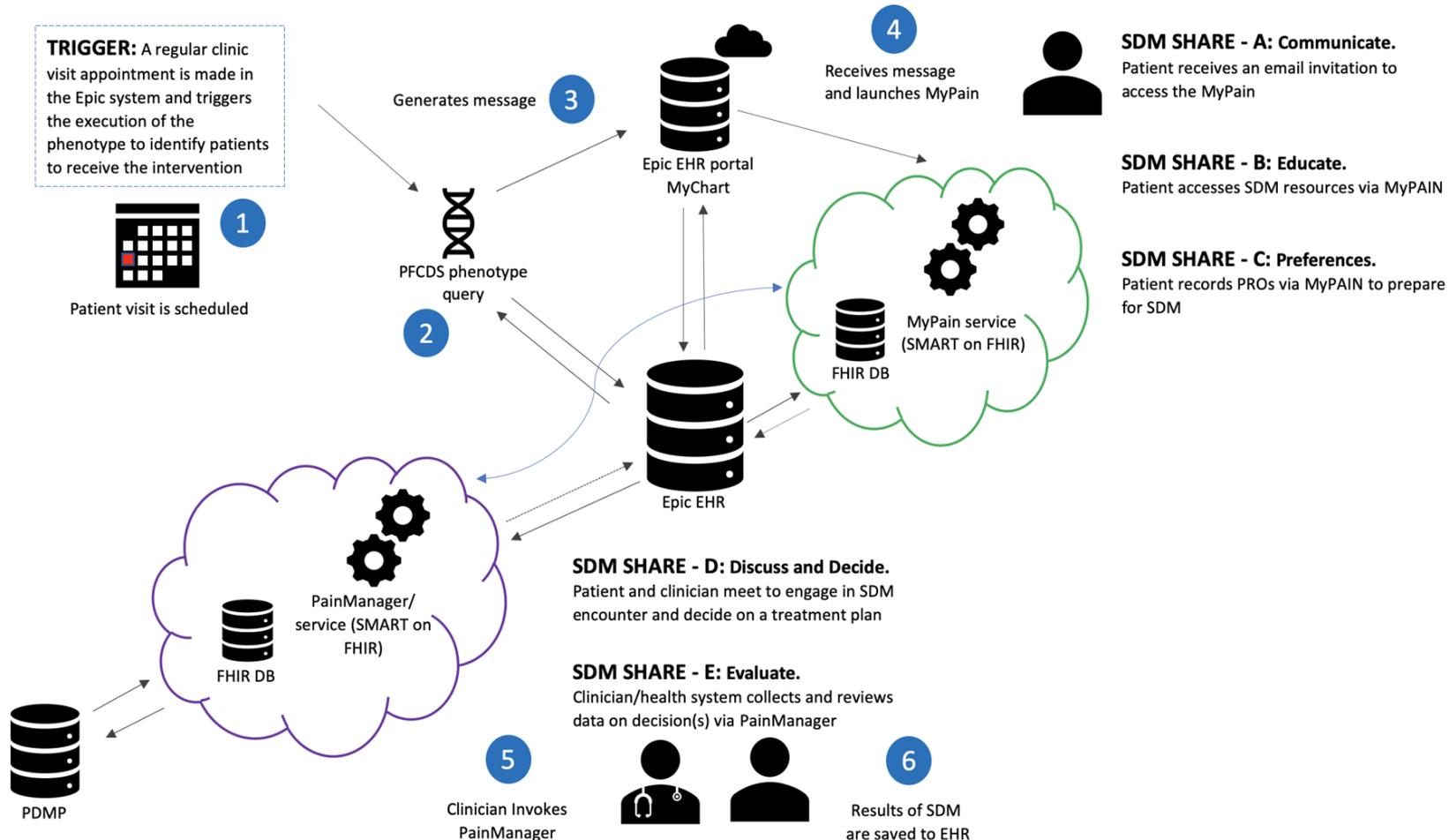
# Limitations on Access to FHIR Resources and the Impacts of the Final Rule

Focus on Implementation

Laura Haak Marcial, PhD and Barry Blumenfeld, MS, MD

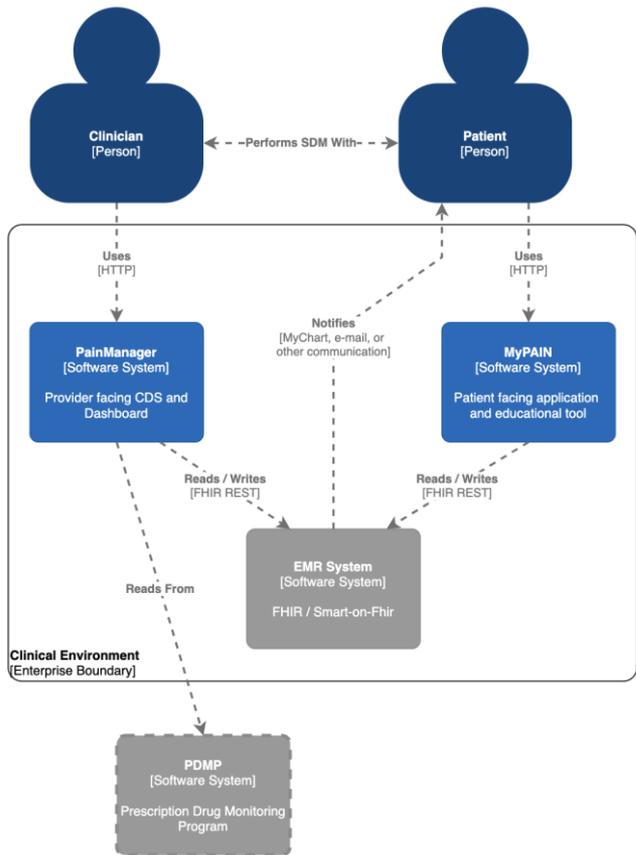
Situation, Background, Assessment and  
Recommendation (SBAR) Review

# Context – recent AHRQ-funded implementation projects

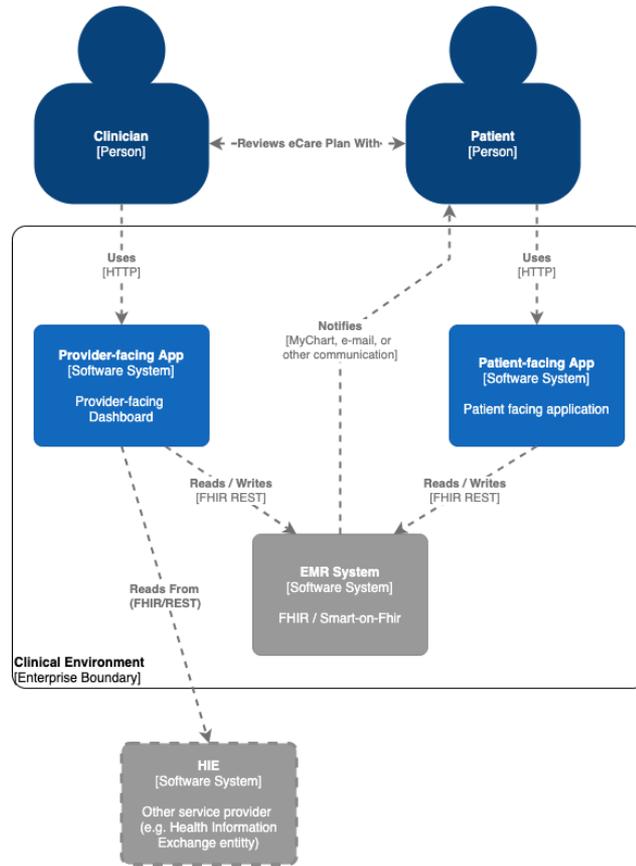


# Projects: Context Diagrams

DRAFT: CDS4CPM Context Diagram



DRAFT: eCare Plan Context Diagram



# Context: ONC Final Rule

ONC's Cures Act Final Rule supports seamless and secure access, exchange, and use of electronic health information.

**The rule is designed to give patients and their healthcare providers secure access to health information. It also aims to increase innovation and competition by fostering an ecosystem of new applications to provide patients with more choices in their healthcare.**

It calls on the healthcare industry to adopt standardized application programming interfaces (APIs), which will help allow individuals to securely and easily access structured electronic health information using smartphone applications.



**The rule includes a provision requiring that patients can electronically access all of their electronic health information (EHI), structured and/or unstructured, at no cost.**

Finally, to further support access and exchange of EHI, the rule implements the information blocking provisions of the Cures Act. The rule outlines eight exceptions to the definition of information blocking.

# Situation

- Shareable clinical decision support artifacts that leverage balloted and adopted FHIR resources (for instance, US Core or USCDI) are **limited by the level of support provided (and conditions on access) to those FHIR resources** in commercial EHRs.
- The current standards outlined by US Core and USCDI **leave gaps**, some more significant than others, that **lead to challenges** in implementation.

# Background

- **EHR vendor support of FHIR services is variable** in breadth, depth and quality, and bridging these gaps can sometimes be untenable or costly for customers.
- The ONC Final Rule has provided some **motivation for EHR vendors to expand and update the FHIR support they provide.**

# Assessment

- There are still limitations on support, **of data elements, of search parameters, of standardized codes and the ability to write back to the EHR via FHIR** and these are likely to remain for some time to come.
- While health systems have some flexibility in how they can leverage existing FHIR APIs, there may be **limitations such as unanticipated costs or changes to the business model**, to the use of EHR vendor proprietary APIs. In some cases these limitations extend to being unable to do any type of FHIR integration.
- While the new rule may serve to support the development of improved FHIR services for a wide variety of uses, **real barriers to implementation still remain** and vendor response to these is lagging.

# Challenges

- **US Core/USCDI still do not address many of the issues that need to be addressed for successful implementation**
  - Too much **variability** between what is allowed and what is finally implemented
  - Gaps often result in **non-standards-compliant implementations**
  - Technical integration may have other dependencies like still requiring the **use of some vendor-specific APIs**
  - Need to fill in gaps with **site-specific adapters**
  - Requires **additional development effort (and expertise) for each site**, only some of which may be reusable
  - Without this support, it is **hard to implement these tools at scale**

# Challenges

- Mandates like the Final Rule may not address many issues or may create **unintended consequences**
  - Changes for provider organizations may involve increases in cost

# Recommendation

## **Support is needed for the new model or ecosystem of FHIR-based shareable (non-commercial) applications that is emerging**

- Tools need to be **robust and accessible** including more full support of relevant FHIR data elements, search parameters, standardized codes, etc.
- Federal funding agencies need to:
  - Consider the **role policy might play in shaping behavior**
  - Anticipate **concerns from the vendor community** about how to achieve support
  - Address **unanticipated consequences** or reactions to the use of policy levers

# Responses to Challenges

- Better **align USCDI and US Core**
- Engage with vendors about **research pilots** as different from commercial development and address open source approach
- Consider how to **anticipate and mitigate impacts of policy** (e.g., final rule)
- Provide examples of **success cases**
- Determine **how EHR vendors are responding**
- Understand **potential impacts** such as increased costs to health systems and provider organizations
- Consider how costs to **support API access** can be managed (e.g., cost limits)

# More Information

**Laura Haak Marcial, PhD**

lmarcial@rti.org

**Barry Blumenfeld, MD, MS**

bhb@rti.org