

Introduction to **SMART on FHIR®**

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08:30 - 09:00	Registration and Welcome Coffee
09:00 - 09:20	Welcome by Community (Adi / Ronen)
09:20 - 09:50	Introduction to SMART on FHIR
09:50 - 10:20	Understanding FHIR
10:20 - 10:50	Understanding OAuth 2.0 and Identity Providers
10:50 - 11:10	Coffee Break
11:10 - 12:10	Deep Dive into SMART
12:10 - 13:00	Lunch Break
13:00 - 14:30	Hands-on Session: Building a SMART App & Setting-up OAuth
14:30 - 15:00	Coffee Break
15:00 - 16:30	Hands-on Session: Integrating with FHIR Server
16:30 - 17:00	Q&A and Closing Remarks



1	What is SMART on FHIR
2	Why is it important in healthcare?
3	Key use-cases and real-world applications
4	Challenges and future directions

'Interface between Data & Innovation'



*“An innovative app developer can **write an app once** and expect that it **will run anywhere** in the health care system. Further, that one app should be readily **substitutable** for another.”*

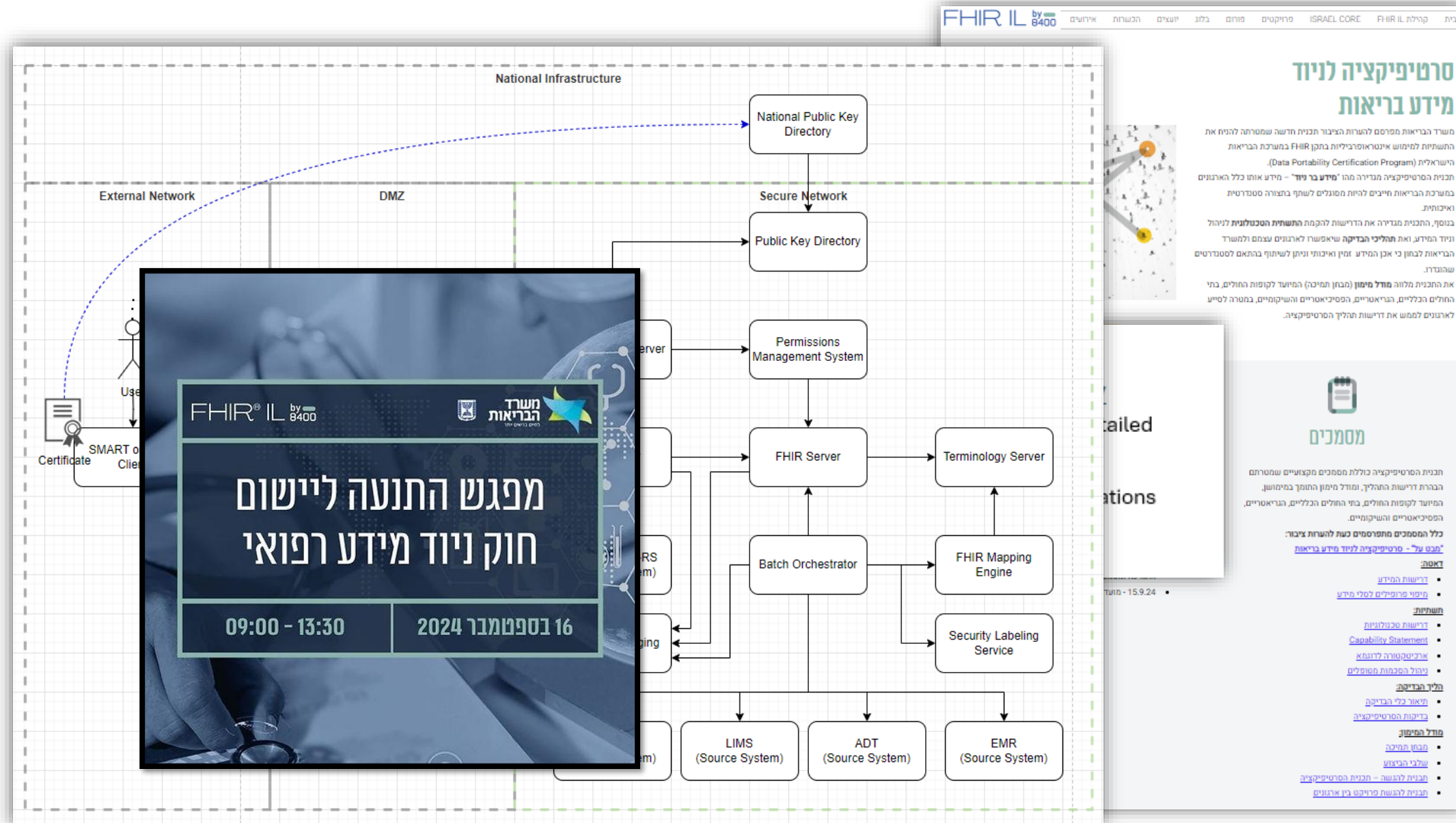


Boston Children's Hospital



Computational
Health
Informatics
Program

Background – New Law & Certification



FHIR Background



- **Definition:** Fast Healthcare Interoperability Resources (FHIR) standard.
- **Key Features:**
 - Modular, scalable framework for healthcare data.
 - RESTful APIs.
 - Interoperable data exchange.

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SMART on FHIR Intro



- **Definition:** Substitutable Medical Apps, Reusable Technologies.
- **Key Benefits:**
 - Simplifies app development.
 - Provides plug-and-play functionality with EHR systems.
 - Enhances patient data access.

SMART on FHIR = FHIR + OpenID Connect + OAuth 2 + HTML5



Why SMART on FHIR Matters



- **Importance:**
 - Improved interoperability.
 - Supports innovation in healthcare IT.
 - Reduces vendor lock-in.
 - Enhances patient care.

Benefits of SMART on FHIR



- App Creators / Innovators

- Easier entry
- Multi-vendor
- Patient-centric as well as physician-centric



- Healthcare Orgs

- Plug & Play with new offerings
- No vendor lock



- Patients

- Choice
- Innovation at hand

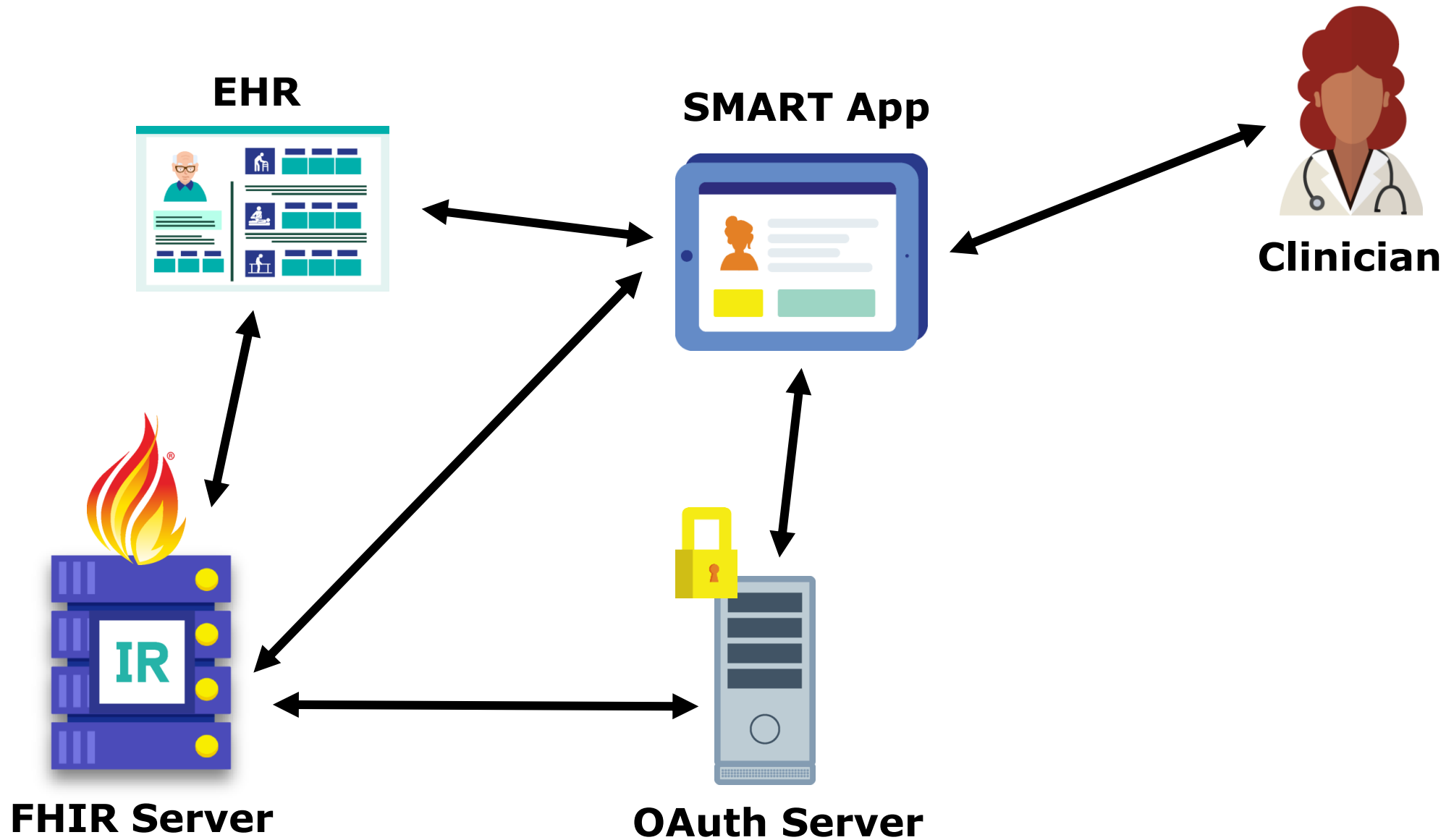


SMART on FHIR Usage Types/Flows



- Users
- Apps
- Systems / Orgs
- EHRs

SMART on FHIR Architecture



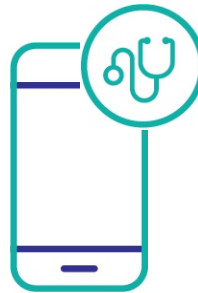
SMART on FHIR Roles



User
Resource Owner



Device
User Agent



App
Client

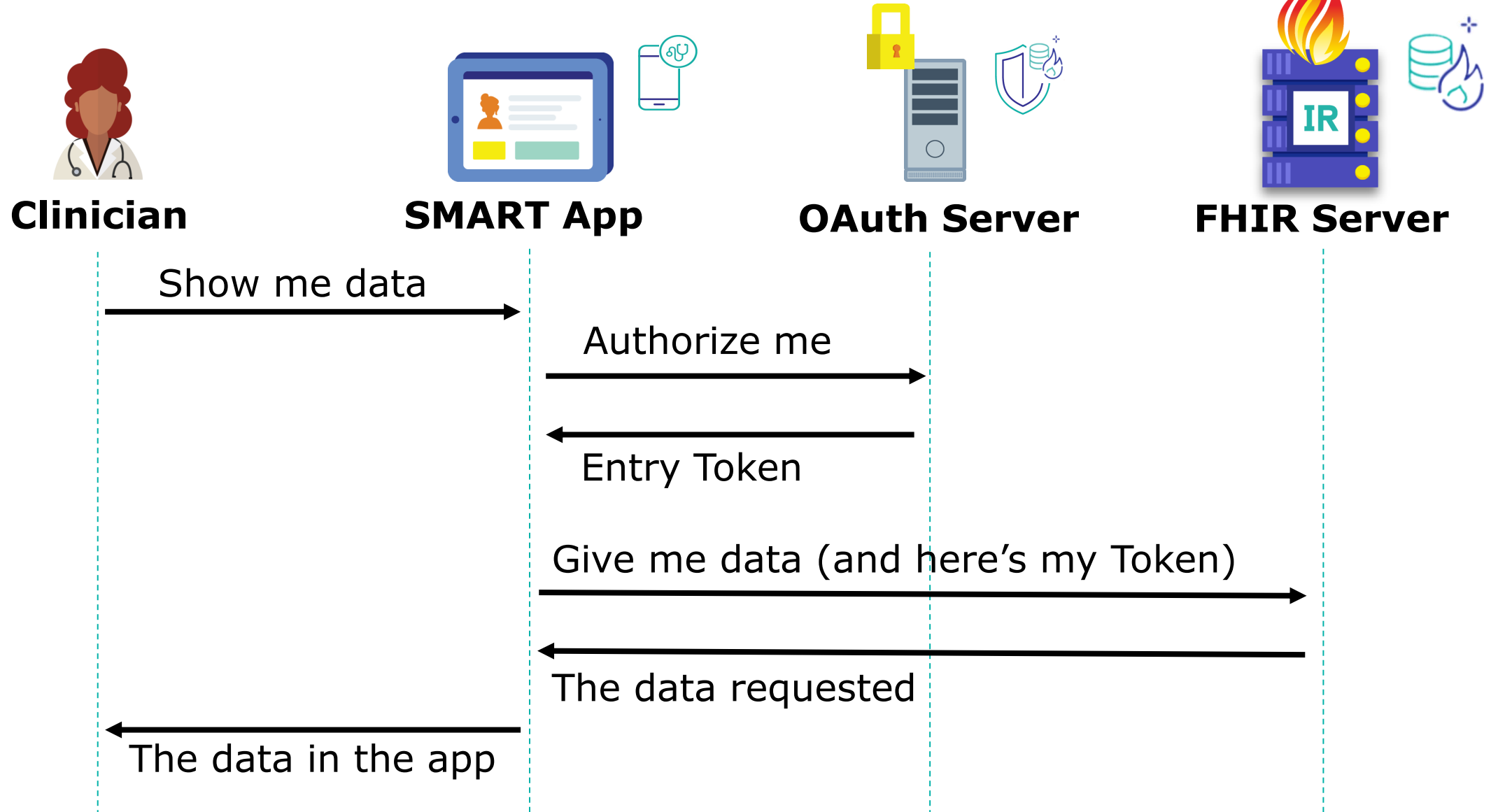


OAuth Server
Authorization Server



API
Resource Server

SMART on FHIR Workflow



Key Use Cases for SMART on FHIR



- **Use Cases:**

- Population Health Management.
- Medication Management in Clinical Trials.
- Telemedicine Apps.
- Clinical Decision Support.

Challenges and Limitation



- **Challenges:**
 - FHIR implementation variability.
 - Security concerns.
 - Complexity in large systems.

Conclusion



- **Summary:**
 - SMART on FHIR is driving interoperability and innovation.
 - Enables easier app development and better patient care.
 - Overcoming challenges will unlock even greater potential.



Q & A

Thank you