



Set Your Lunch on FHIR

Lunch and Learn Series Session 1: FHIR 101

Friday, May 29th 2026



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Session 1 ~ FHIR 101

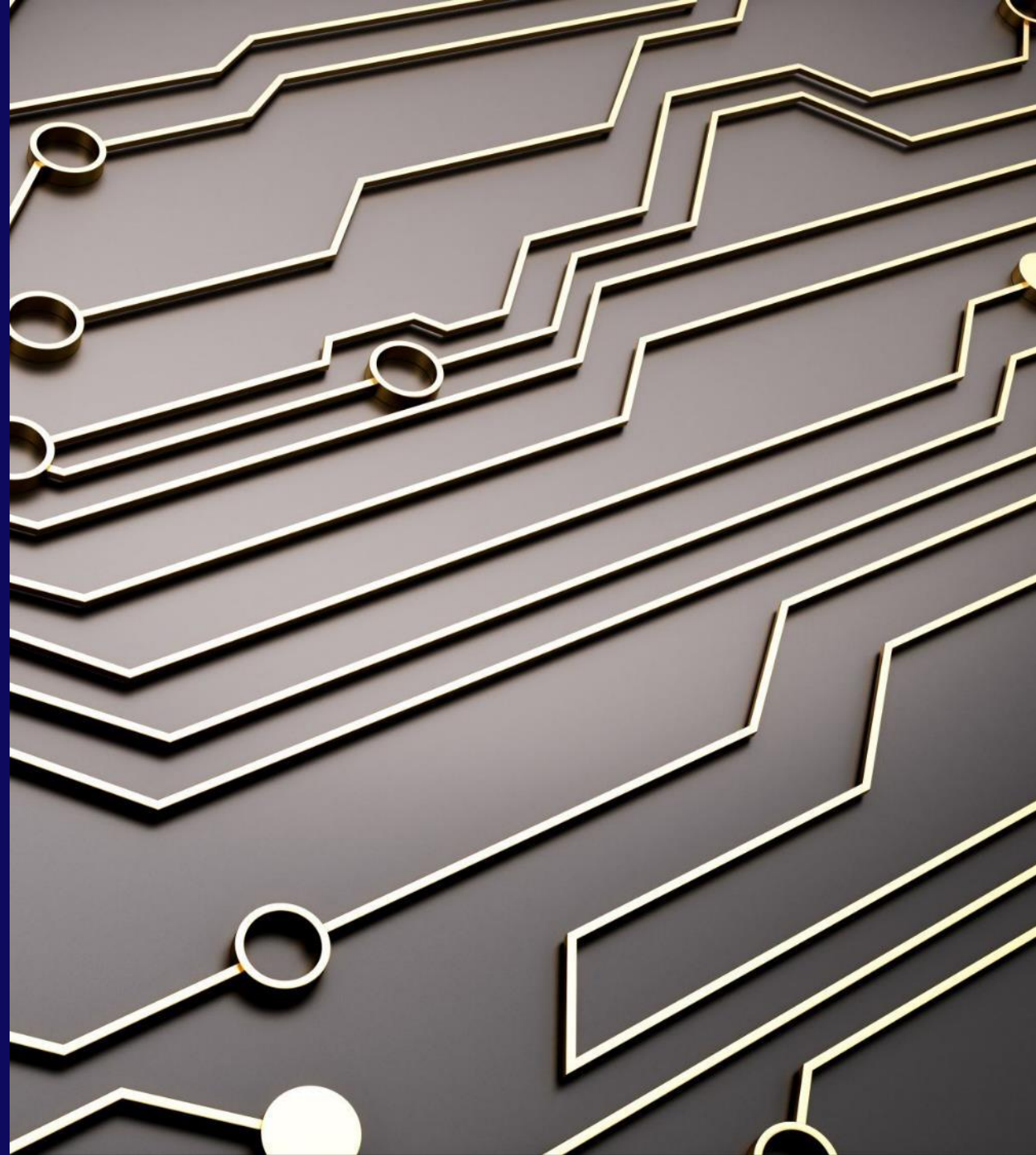
May 29, 2026

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Next Level Health Innovations

Goal for this Session

Ensure a shared understanding of Fast Healthcare Interoperability Resources (FHIR), what it is, what forces are behind it, what its intended to solve with adoption and implementation.



What have NYS Health Centers shared about their EHR's FHIR Readiness?

FHIR API Access Status		
1	We are on a recent/version-supported release, and our FHIR APIs are enabled (We can access FHIR endpoints such as Patient, Observation, Encounter, etc.)	20
2	We are not sure what EHR version we are on or whether FHIR API access is available (We will need CHCANYS and/or our vendor to help determine this.)	11
3	We are on a recent/version-supported release, but our FHIR APIs are not enabled (We believe access is turned off, restricted, or requires vendor action.)	9
4	We are on a recent/version-supported release, but we are not sure whether FHIR APIs are enabled (We may have access, but do not know what is configured or available.)	8
5	We are on an older/outdated version that may not support full FHIR API access (We may need to upgrade before using FHIR capabilities.)	1

Major EHRs and population health platforms like those across CHCANYS -- Epic, OCHIN, eCW, athena, Azara, etc.-- already have FHIR-based Patient Access, SMART app, and often Bulk Data APIs as part of certification and vendor roadmaps.

Which of these response groups does your health center fall into at the moment?

Why is FHIR more likely to last and achieve wide use?

Health IT sometimes feels like one promise after another, and after 10 years of interoperability discussion, many of us are still chasing consult notes and results by phone. So, why might FHIR be different?

FHIR is an international standard.

FHIR is a Health Level Seven International (HL7) standard for exchanging health information electronically, used globally in initiatives like the International Patient Summary.

FHIR is already required in several ways.

ONC's Cures Act rules and CMS's Interoperability and Prior Authorization Final Rule explicitly require HL7 FHIR APIs including Patient Access, Provider Access, Payer-to-Payer, Prior Authorization and related specs like USCDI, SMART on FHIR, and Bulk Data.

FHIR uses modern web APIs, and ONC is pushing CEHRT toward them.

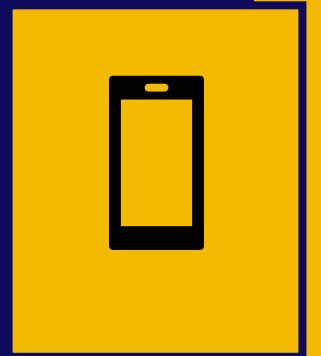
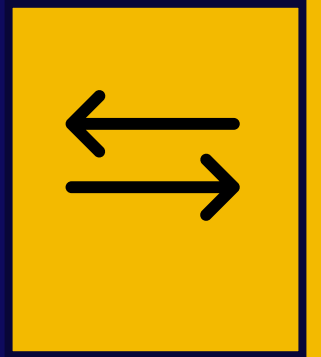
Despite deregulatory efforts like ONC's HTI-5 proposal to reduce health IT certification requirements, FHIR-based APIs remain central to the regulatory strategy, positioned to enable AI-driven interoperability going forward.

CMS Interoperability and Prior Authorization Rule Summary

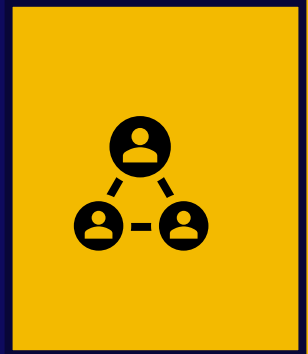
- Impacted payers (MA, Medicaid/CHIP, QHPs) must implement four specific FHIR APIs: Patient Access, Provider Access, Payer-to-Payer, Prior Authorization.
- FHIR R4, Bulk Data, SMART on FHIR, and USCDI undergird the required APIs.

ONC Cures / Information Blocking Summary

Certified EHRs must expose FHIR-based APIs for patients and apps; blocking access is prohibited unless an allowable exception applies.



FHIR is a standard way for systems to make clinical and claims data available over web APIs, using common data FHIR data models like Patient, Encounter, Observation, etc.



FHIR may be best thought of as the data dictionary and the standard, shared pipelines that define what health IT vendors use, and therefore reduces the need for custom interfaces, custom builds, etc.





What examples can you think of **where FHIR is used or has been used?** (whether your health center has engaged with it or not)

Considering the Different Categories of FHIR APIs

Patient Access FHIR APIs

What they are: FHIR APIs that let patients pull their own clinical data or claims into apps of their choice.

Example of how it works on the patient side: A member downloads an app (or uses Apple Health), chooses their plan or provider and logs in.

Behind the scenes, the app uses SMART on FHIR and OAuth2 to get an access token, then calls the payer's Patient Access API:

From the provider side: No direct build is required to "turn on" patient access, but does require policies and education so staff understand that patients can authorize third-party apps to pull their data from FHIR APIs.

Fairly mature– EHRs and many payers support patient access at this point. Patient-facing SMART on FHIR apps to provider EHRs (e.g., Apple Health to EHR records) are quite mature.

Payer FHIR APIs

Provider Access API: A FHIR API from payer to in-network providers that supports provider access to patient information for treatment and care coordination. Maturity is in early stages, though a central IG exists.

Prior Authorization API: A FHIR API to submit, track, and receive prior auth decisions electronically. Maturity is emerging but high priority.

Payer-to-Payer API: A FHIR API for plans to exchange a member's history when they change or add coverage. Maturity is early stages, health centers are unlikely to see impacts of this yet.

Not as mature, but has regulatory focus.

Provider FHIR APIs

FHIR APIs used directly between provider organizations—for example, hospital and health center, or health center and HIE—to exchange clinical data.

These often build on the same FHIR R4 resources (Patient, Encounter, Observation, DocumentReference, CarePlan, etc.) but are typically governed by local agreements or networks, or frameworks like TEFCA.

Maturity varies a lot here. Direct provider-to-provider FHIR APIs (e.g., query an external FHIR server for clinical records) exist in some HIEs and networks and are being reinforced via TEFCA and other FHIR-based exchange options, but capabilities differ widely based on many different factors

High Value Use Cases Identified by Health Centers

Are you doing or looking into any of these? How so?



Population Health/ Dashboards

Many are already using Azara and similar tools, sometimes FHIR enabled

FHIR and FHIR Bulk Data creates a more standardized, scalable extract path over time.



Social Need Screening/ PRAPARE

PRAPARE and other social need screens can be represented using FHIR,

If these are aligned to USCDI SDOH data elements it could set you up for future payer use of SDOH for risk management and care coordination



Patient Facing Apps

EHR vendors' SMART on FHIR use plus ONC/ CMS rules make patient access via apps a reality,, particularly through Apple Health and portal apps. Some patients may even be moving to AI health apps.

Scenario:

A patient at your health center says, “My diabetes app can connect directly to my medical record using an API. I’d like you to let this app access my record.”

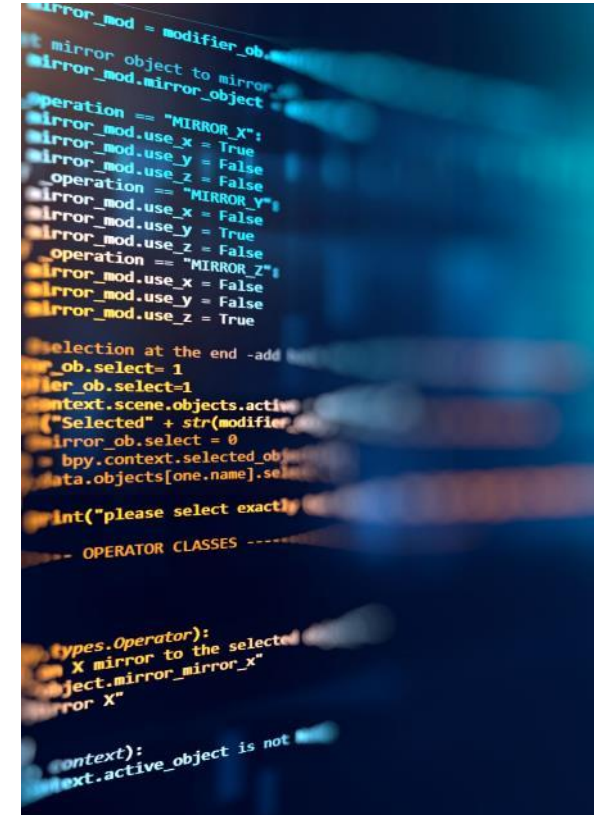
They ask: How do I get API access to my record from your EHR—can you turn that on for me?

Who in your organization would handle responding to that request today (front desk, portal help desk, IT, etc?) and what steps or questions would you need to walk through to decide whether and how to enable that connection?



Let's Look at an Example

- `GET [base]/Observation?code=4548-4&patient=123` is a FHIR search for **Observation** resources that match both the LOINC code 4548-4 and the patient with id 123. In practice, this returns that patient's HbA1c observations when the server supports standard Observation search parameters.
- Break that down
 - `GET [base]/Observation` means a search on the Observation endpoint.
 - `code=4548-4` filters to observations whose code is LOINC 4548-4, commonly used for HbA1c in the US.
 - `patient=123` filters to observations associated with Patient/123, assuming the server supports the patient search parameter on Observation.
- What is this used for?
 - A typical use case is retrieving a patient's HbA1c results for diabetes monitoring. The result set would usually include final, preliminary, or other observations depending on what the server stores and how it indexes the search.



```
mirror_mod = modifier_ob...
mirror object to mirror...
mirror_mod.mirror_object...
operation == "MIRROR X":
mirror_mod.use_x = True
mirror_mod.use_y = False
mirror_mod.use_z = False
operation == "MIRROR Y":
mirror_mod.use_x = False
mirror_mod.use_y = True
mirror_mod.use_z = False
operation == "MIRROR Z":
mirror_mod.use_x = False
mirror_mod.use_y = False
mirror_mod.use_z = True

selection at the end -add
ob.select= 1
er_ob.select=1
context.scene.objects.active
("Selected" + str(modifier
mirror_ob.select = 0
bpy.context.selected_ob
ata.objects[one.name].se

int("please select exact)

-- OPERATOR CLASSES -----

types.Operator):
X mirror to the selected
object.mirror_mirror_x"
ror X"

context):
ext.active_object is not
```

What are examples of where this exists? And how are they defined?

- **US Core Implementation Guide (IG):** the foundation for U.S. clinical interoperability and the minimum set of constraints on FHIR resources used across many workflows, including primary care.
 - Used to define a minimum standard for the US, other countries have their own version (like UK Core exists as well)
- **QI Core Implementation Guide:** used for quality measurement and clinical data representation on top of FHIR/US Core, which matters for primary care reporting and performance measurement. (Moving towards US Quality Core)
 - Used for defining quality reporting for CMS, NCQA, etc.
- **Da Vinci Project guides:** Accelerator created IGs for value based care making them especially relevant to primary care organizations participating in care coordination, coverage, and utilization workflows.
- **SMART on FHIR:** commonly used to launch apps inside EHRs, which is useful for primary care decision support, screening tools, and workflow apps.
 - Allows apps to work with different EHRs, has learning community: <https://good-neighbor.smarthealthit.org/>
- **Argonaut Scheduling:** useful if your primary care use case includes appointment booking and scheduling interoperability.

These IGs are not necessarily something that you need to read, but are something that vendors build upon.

So, how does all of this touch health centers?

- It may not just yet, but it means there is a lot of movement toward standardization.
- Beyond provider-to-provider exchange which has fairly clear value, CMS is implementing payer-focused requirements:
 - The CMS Interoperability and Prior Authorization Final Rule (CMS-0057-F) requires payers serving health center patients—including Medicaid/CHIP, Medicaid managed care, and QHP issuers—to stand up FHIR APIs for Patient Access, Provider Access, Payer-to-Payer data exchange, and Prior Authorization by January 1, 2027.
 - The intended results are more streamlined electronic prior authorization, smoother access to patient claims and clinical data across payers, and a standardized FHIR-based workflow that can reduce administrative burden and improve care coordination.
- It also standardizes the underlying technical stack around FHIR R4, USCDI, SMART on FHIR, Bulk Data, and OpenID Connect, while recommending Da Vinci and CARIN implementation guides to reduce burden and improve interoperability.
 - Many of these are things health centers are already somewhat familiar with (or at least have some relationship to)— where do you know of these existing?



Scenario:

One of your Medicaid MCOs notifies you that starting in 2027, all high-volume prior auth will be supported via a FHIR Prior Authorization API.

They ask: 'Can your EHR integrate with our FHIR endpoints?'

Who in your organization would handle answering that, and what questions would you ask your vendor?



Q4.1: Current FHIR/API Tool Usage			
Response Category	Count	Percentage	
Not currently using FHIR	19	24%	
Bulk FHIR data submissions	8	10%	
Population health reporting	19	24%	
eCQM extraction	13	17%	
Referral management	11	14%	
No response	8	10%	
Q4.3: Technical Standards Used for Data Exchange			
Standard	Count	Percentage	
HL7 v2	33	45%	
FHIR (excluding non-FHIR APIs)	6	8%	
APIs (non-FHIR)	16	22%	
Unsure	10	14%	
No response	8	11%	
Q4.4: Interest in Piloting FHIR-Based Workflows with CHCANYS			
Response	Count	Percentage	
Yes	19	36%	
No	11	21%	
Unsure	15	28%	
No response	8	15%	
Q4.5.a: FHIR Knowledge Level (1=None, 5=Full Understanding)			
Level	Count	Percentage	
1 (No knowledge)	6	11%	
	2	10	19%
	3	19	36%
	4	8	15%
5 (Full understanding)	2	4%	
No response	8	15%	
Average Score	2.78		
Total Respondents	45		

Review of Where We Are as a Network in NYS

24% “not currently using FHIR,” but similar percentage using population health reporting and eCQM extraction.

For those who know, most report using HL7 v2 and non-FHIR APIs for data exchange.

Average FHIR knowledge 2.78, plus a many reporting they are unsure.

If you could move *one* FHIR effort forward in the next 12–18 months, which would you pick?

What assistance would be most helpful? What do you need?



Actions to Take Following this Session

Learn more about what others have done through available case studies:
<https://good-neighbor.smarthealthit.org/case-studies/>

These case studies include great tips.

Identify *one* FHIR-related capability you want to confirm in your primary EHR/ health IT system.

Identify *one* workflow (population health, SDOH, prior auth, referrals) that you would nominate as your health center's first or next FHIR-enabled use case if someone were to ask.