



U.S. DIGITAL SERVICE

Are Users on FHIR?

Designing standards with users at the forefront

U.S. DIGITAL SERVICE // MISU TASNIM and NICK ROBISON // JUNE 2021

SPEAKERS



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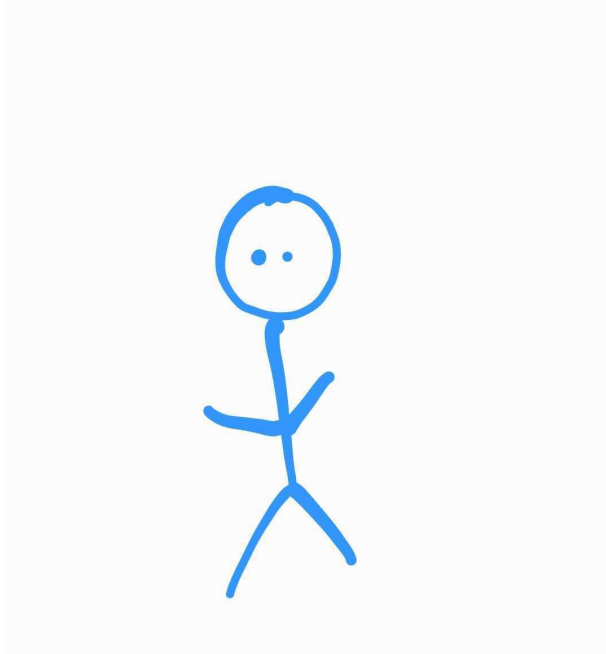
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WHAT DO HL7 AND GOVERNMENTS SHARE?



Users.



GOVERNMENTS ARE RESPONSIBLE FOR

Access

Equity

Interoperability



How do we define standards with these responsibilities in mind?

1 Design with the users, not for them.



1

Design with the users, not for them.

2

Stay relevant to users' needs



1
2
3

Design with the users, not for them.

Stay relevant to users' needs

Promote accessibility



1
2
3
4

Design with the users, not for them.

Stay relevant to users' needs

Promote accessibility

Reduce burden



1
2
3
4

Design with the users, not for them.

Stay relevant to users' needs

Promote accessibility

Reduce burden



A FEW FEDERAL INITIATIVES

1

Patient Access API

aka Claims

2

Provider Directory API

aka Provider Data

3

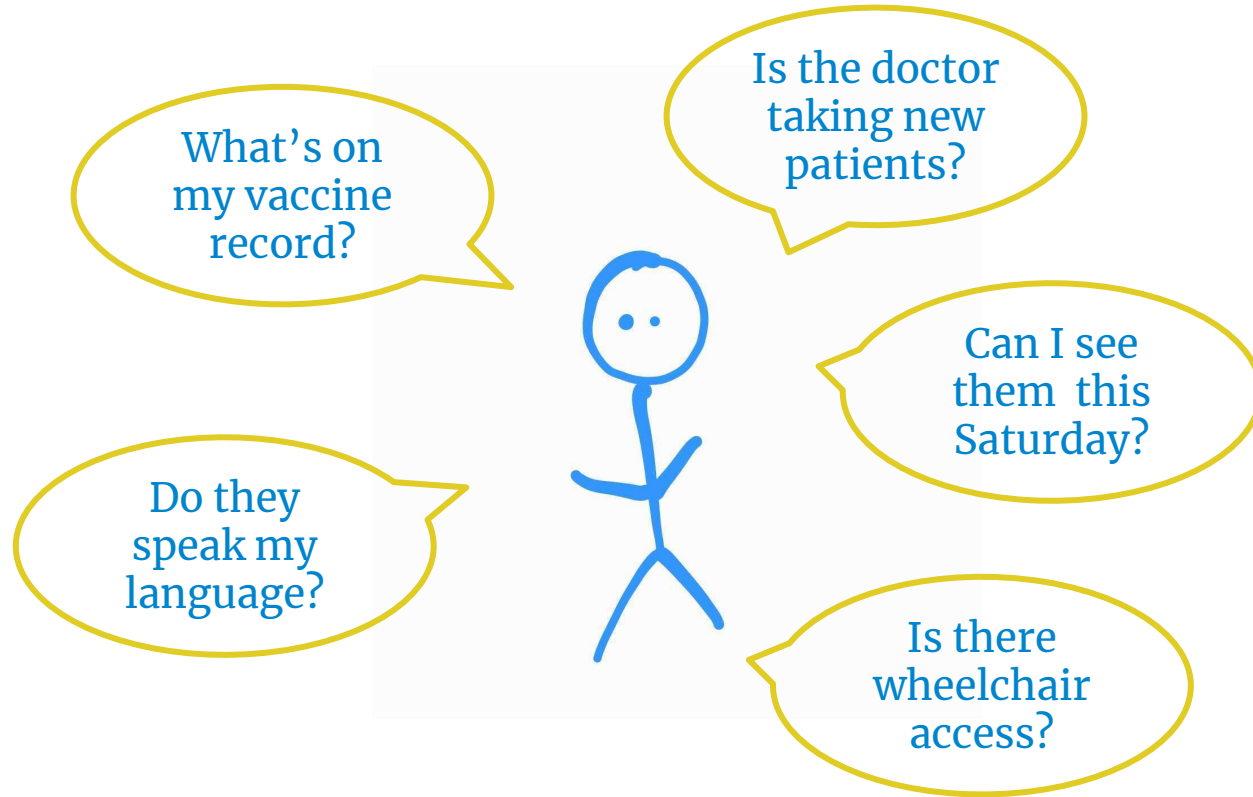
SMART Scheduling Links

aka Vaccine Scheduling



Users need answers, not APIs

USER NEEDS



Deep Dive into Scheduling API

Intro to the Scheduling Links API

- Built on the bulk-FHIR standard.
- Focused on representing collections of available locations and appointments.
- Defines 3 primary resources (Location, Schedule, Slot).
- Utilizes extensions to provide necessary information.



3 user needs from the Scheduling
API

Open-access

Data Granularity

Optional features



Open Access

1 Finding the data can be difficult



Open Access

1

Finding the data can be difficult

2

Some implementations expose production systems



Open Access

1

Finding the data can be difficult

2

Some implementations expose production systems

3

Who is responsible for the data?



Data Granularity

Data Granularity

How detailed should we make the slots?

How do we indicate capacity?

What does availability actually mean?



Optional Features

Optional Features



Language support



Optional Features

1

Language support

2

Geocoding



Optional Features

- 1 Language support
- 2 Geocoding
- 3 Update timestamps



Talk to the users



alexhooverUSDS commented 25 days ago



Hello all! I am a designer with USDS and thought I'd chime in with some UX considerations.

I agree with some of the comments that "interpreter services" is a bit too vague. If you are interested in interpreter services, you will undoubtedly want to know which languages are supported.

I have a few insights from user research on vaccines.gov on language barriers. I talked to predominantly Spanish speakers that could speak some English but were more comfortable in Spanish. Knowing a location has Spanish interpretation would probably be useful information, but not the determining factor. The people I talked to were still looking for the most convenient location. That is obviously not representative of all people. Just a little slice of observation. I imagine the balance of factors (vaccine availability, convenience, language) would be much different if someone did not speak any English and didn't have any friends/family available to help them.

The only other thing I'd call out as a potential issue in just saying "interpreter services" is the availability of those services. Maybe a location has someone who speaks Tagalog, but they're obviously not there on every shift. It wouldn't be great if someone traveled further because someone spoke their language only to find out that that interpreter wasn't there that day. If a location is marked as having "interpreter services," what does that mean for the public? Does that mean there is always someone at the location that can interpret? Someone on call? It'd be good to specify some parameters, and I am not able to do that at this moment. I don't know enough about interpretation standards/processes in healthcare.

All of that being said, I don't think I would completely ignore the proposed extension in the UI. It's just that the proposal leads the user down another information finding path to see which languages are supported. It would be nice to surface that information in the consuming UI. I'd probably put the proposed "interpretation services" info on the location details page as something like "Has interpreter services. Check with provider on languages and availability." That way, the person searching at least has some idea of where they can get interpretation help. I have not tested that idea at all with usability testing. So take it with the smallest grain of salt possible.

Thank you all for everything you're doing on this spec and for constantly pushing the spec to surface this kind of information so the public can have a better experience.



1

Add more commits by pushing to the **fix-21** branch on **smart-on-fhir/smart-scheduling-links**.



This branch has conflicts that must be resolved

Resolve conflicts



Q&A