Zoom Meeting Interface and Basic Logistics

*image above is a publicly available tutorial image obtained from Zoom website

- **VIDEO:**
  - **Panelists/Presenters/Facilitators - Please enable your video using bottom left video button with camera icon.**
  - **Attendees** - If you did not receive an invitation to be a panelist, you are in attendee only mode and **will not have access to enable video**

- **AUDIO:**
  - **Panelists/Presenters/Facilitators -** Adjust your audio settings as needed (choose computer audio, call in, mute, etc.) using **audio button bottom left, microphone icon. Please remain muted unless speaking.**
  - **Attendees** - If you did not receive an invitation to be a panelist, you are in attendee only mode and **will not be able to enable audio**

- **CHAT:** The chat function is open to *ALL* participants (bottom, middle right, highlighted in orange in this image). Those in Attendee only mode are encouraged to provide feedback and questions via chat throughout the discussion. Chat will be monitored by the *FAST* team and key themes will be pulled into the discussion.

- **TECHNICAL DIFFICULTIES:** Having trouble hearing the presenters or seeing the shared screen? Put your issue in chat and the Meeting Host will help you.
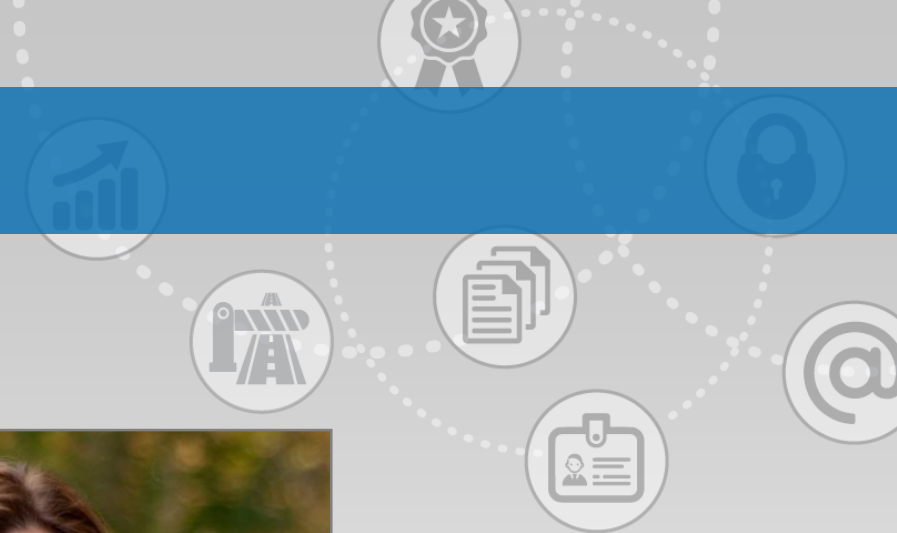
Session Facilitators

Lee Barrett

Executive Director, CEO

EHNAC

Sandy Vance

Director, Interoperability

AEGIS

FAST Taskforce Antitrust Notice

- The ONC FHIR At Scale Taskforce (*FAST*)
  (Hereinafter "Taskforce") is committed to full compliance with existing
  federal and state antitrust laws.

- All members involved in the Taskforce effort, including its advisory groups, will comply with
  all applicable antitrust laws during the course of their activities. During Taskforce meetings and other
  associated activities, including all informal or social discussions, each member shall refrain from discussing or
  exchanging competitively sensitive information with any other member. Such information includes, but may not
  be limited to:
    - Price, premiums, or reimbursement charged or paid for products or services
    - Allocation of customers, enrollees, sales territories, sales of any products or contracts with providers
    - Any other competitively sensitive information that is proprietary to a member company

- If you have any specific questions or concerns, seek guidance from your own legal counsel.

- Members should not bring confidential information or intellectual property (hereinafter "Intellectual Property")
  owned by their respective member companies into Taskforce meetings. To the extent such Intellectual Property
  is shared with the Taskforce that shall not be construed as a waiver of member company's rights to, or ownership
  in, the Intellectual Property.

Agenda

- **Welcome & Introductions**

- **Session Goals**

- **Overview**

- **Discussion Topics**
  - Interactive Panel
  - Participant Q&A

- **Wrap Up/ Key Takeaways**

FAST Panelists

FAST Panelists	
Christol Green	Anthem, *FAST Ecosystem Tiger Team Lead*
Carmen Smiley	HHS| ONC, *FAST Ecosystem Tiger Team Member*
Rose Marie Nsahlai	HHS	ONC, *FAST Security Tiger Team Lead*
Durwin Day	HCSC, *FAST Exchange Tiger Team Lead*

Roles & Logistics: Panelist vs. Attendee Modes

FAST Key Panelists

- Invited to join, actively engage and support the conversation
- Encouraged to communicate verbally (mics on) and to turn on video
- Monitor the attendee chat box for feedback, address questions via chat or promote questions that are significant to the discussion topic or warrant a verbal debate /reaction with the panel group

Industry Expert Reaction Panelist (in panelist mode)

- Invited to join the live interactive discussion with the *FAST* team
- Encouraged to communicate verbally (mics on) and to turn on video
- Provide their industry expertise and feedback
- Discuss or debate the topic with the facilitator and the panelist group
- Raise questions or concerns
- Feedback will inform *FAST* next steps

General Audience and *FAST* Technical Learning Community Members (in attendee mode)

- Encouraged to engage and contribute feedback and questions via the chat box
- Do not have the ability to contribute verbally to the conversation (mics off)
- No ability to be on video

Testing & Certification

Session Description

How do we test and ensure conformance for FHIR based solutions at scale? What is the right level of conformance and how can we test the *FAST* core capabilities at scale?

By way of an active discussion around the solution proposed by the *FAST* Testing and Certification team, we would like to explore further what are the current industry needs for scalable FHIR testing and the capabilities to be in place to meet these needs.

We invite all attendees to contribute or ask questions provide feedback in the chat box.
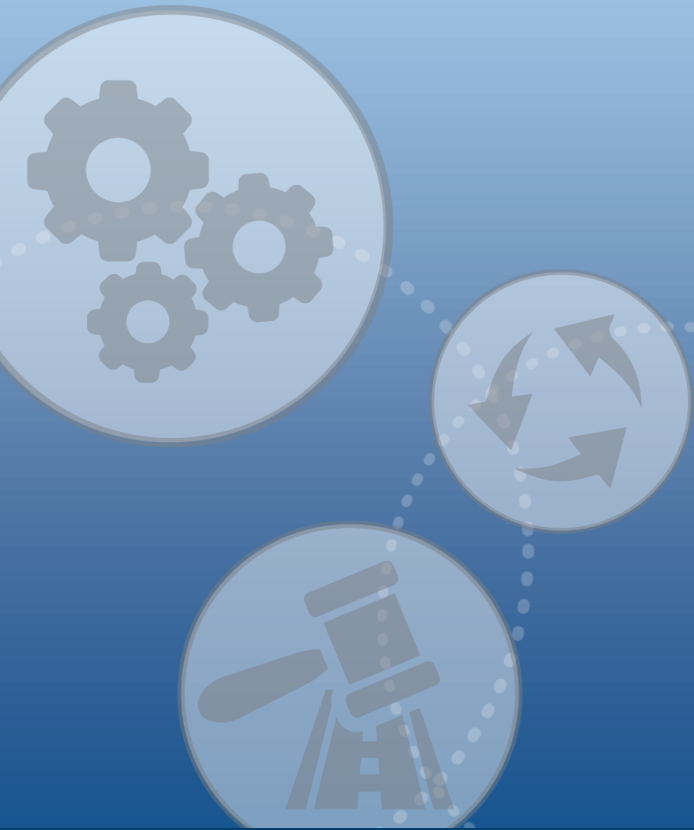
FAST Testing & Certification

Session Goals

1. Confirm scope of testing & certification proposed solution is appropriate.

2. Validate if it can be done without undue burden/adding another process step for organizations.

3. Consider the pros and cons of automated, ongoing certification.

4. Discuss the potential role of sanctioned bodies in supporting certification.

FAST Testing & Certification Barriers to FHIR Scalability

TESTING/CERTIFICATION BARRIERS	→	IMPLICATIONS
Maturity of Requirements	→	FHIR specification itself is continually evolving. Any conformance process needs to account for versioning with full backward compatibility
Lack of Minimum Level of Conformance	→	Need to be able to assume Conformance to BASE FHIR prior to working on scaling, but this pushes the limits for this group's scope
Tooling	→	Needs to support validation of several layers, multiple versions and standard tests
Certification Governance	→	Define steps and levels to achieve certification, what or whom is being certified (i.e., FHIR implementation approach or participants, stakeholders, and intermediaries)
Costs	→	Costs must not be prohibitive to vendors who are developing systems for payers, providers, or patients

Steps to FHIR Scalability

FHIR SPECIFICATION CONFORMANCE

+

INFRASTRUCTURE USE CASE CERTIFICATION

+

FUNCTIONAL USE CASES

=

RAPID INDUSTRY ADOPTION

HL7® FHIR®

1. Conformance statements
2. Resources, Profiles and Operations
3. FHIR Versions

FAST — FHIR AT SCALE TASKFORCE

1. End Point Discovery
2. Authentication
3. Authorization
4. Resource Version Identification
5. Reliable Patient Identity Management
6. Data Provenance
7. Reliable Provider Identity Management
8. Event/Message/Topic Subscription/ Publication
9. Guaranteed Message Delivery
10. Role/Context Identification
11. Readiness Credential
12. Standard Based Endpoint Access
13. Synchronous Transaction Support
14. Asynchronous Transaction Support
15. Reliable Payor Identification

FHIR Solutions for VBC

DA VINCI
HL7® FHIR®
Payers/Providers
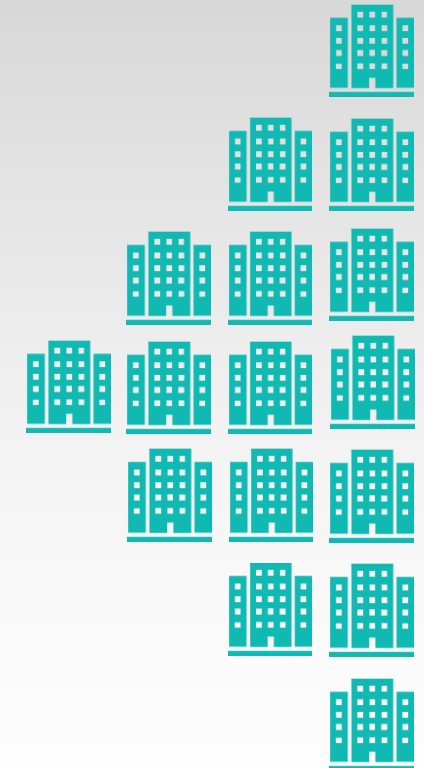
Core Data Services

ARGONAUT PROJECT
HL7® FHIR®
Provider/Provider

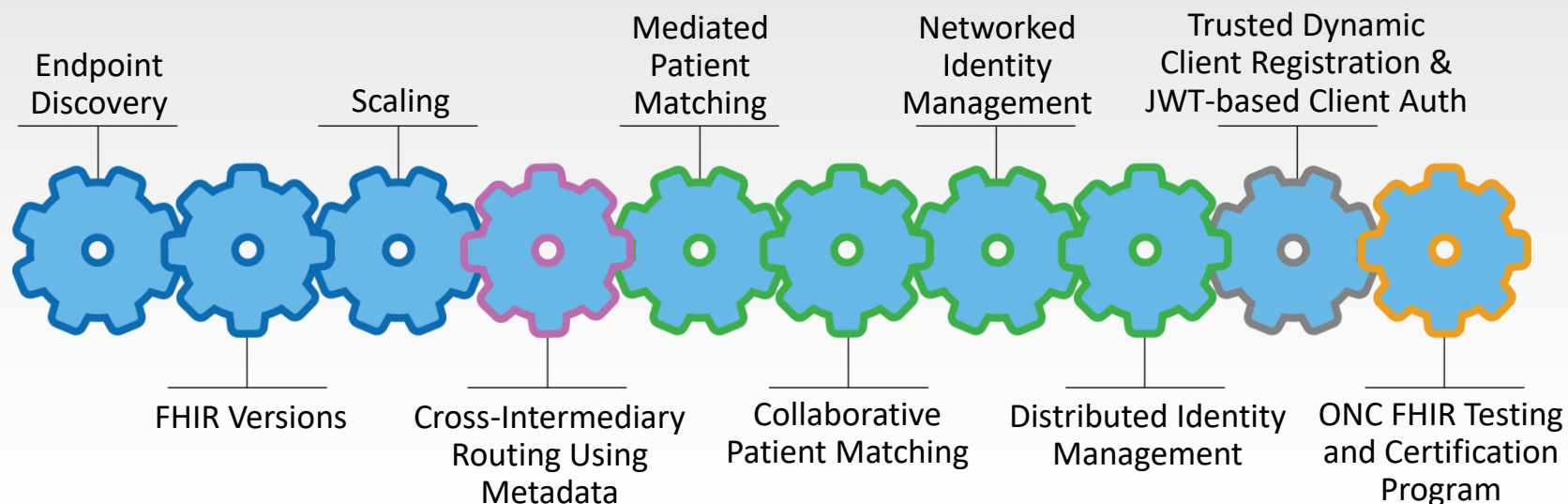**FHIR Consumer Solutions**

carin
Consumers

Other Collaborative Efforts to Develop & Implement FHIR Solutions

FAST Core Capability Validation

- Comprehensive set of criteria from *FAST* Tiger Teams
- Focused on Scalability of the Infrastructure NOT functional use cases
- Foundation of baseline test assertions for *FAST* Certification

Proposed Solution: Automated FHIR Testing Platform – Scope

In Scope

- Base FHIR Specification
- *FAST* Readiness Criteria

Out of Scope

- HL7 FHIR Validation Engine
- RFP development to select entity to provide services
- Validate ease of establishing connections
- Validate conformance to non-blocking requirements
- Validate conformance to HIPAA patient privacy regulations

Assumptions

- Easy to use and submit FHIR transactions
- Dashboard Review of transaction with feedback
- Cost of certification is low and is not a barrier

Pre-Conditions

- This program must either commit to validating Base FHIR conformance or use a separate conformance assessment
- Specifications and requirements are agreed upon
- FHIR Validation Engine is determined
- Certifier(s) are selected
- Developers involved in reviewing and beta testing of platform are committed to process

Post-Conditions

- Systems will become ONC *FAST* Certified, which ensures interoperability with other ONC *FAST* Certified systems
- Reporting process and mechanism will be in place
- Feedback mechanism for developers/users will refine and streamline the process
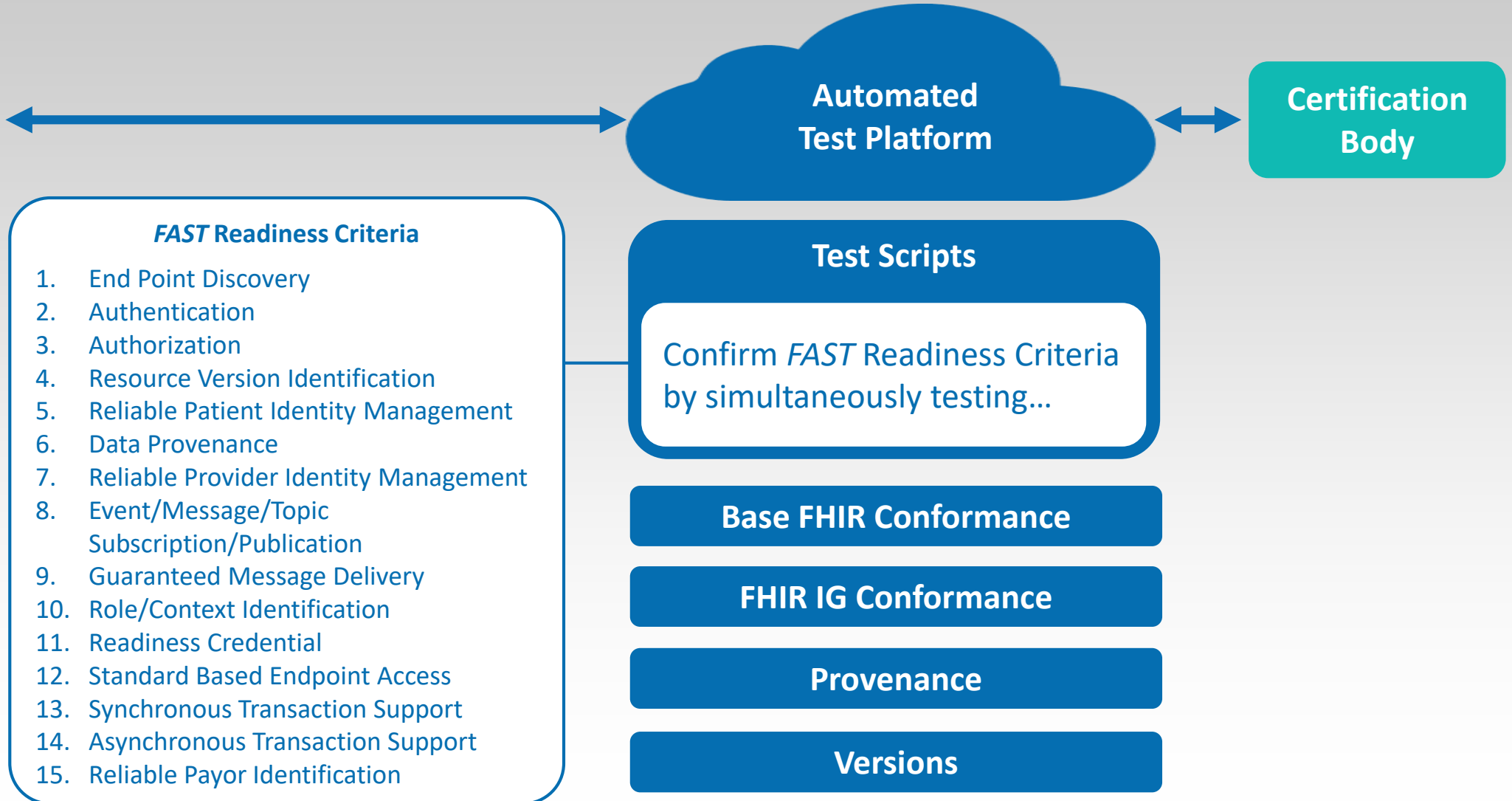- Ongoing interaction will occur with HL7, ONC, developers and other key stakeholders

Complexity: High

Proposed Solution: *FAST* Testing & Certification

DEVELOPER

Automated Test Platform

Certification Body

FAST Readiness Criteria

1. End Point Discovery
2. Authentication
3. Authorization
4. Resource Version Identification
5. Reliable Patient Identity Management
6. Data Provenance
7. Reliable Provider Identity Management
8. Event/Message/Topic Subscription/Publication
9. Guaranteed Message Delivery
10. Role/Context Identification
11. Readiness Credential
12. Standard Based Endpoint Access
13. Synchronous Transaction Support
14. Asynchronous Transaction Support
15. Reliable Payor Identification

Test Scripts

Confirm *FAST* Readiness Criteria by simultaneously testing...

Base FHIR Conformance

FHIR IG Conformance

Provenance

Versions

Base FHIR Validation

- **Value Set** – Defines a set of coded values

- **Structure Definition** - Makes rules about how a resource (or type) and its data elements are used in a particular context, including defining how extensions are used. A structure definition references value sets for the coded elements in a resource

- **Capability Statement** - A statement of the kinds of resources and operations provided and/or consumed by an application. The Capability Statement references profiles to describe specific use of resources by the application

- **Implementation Guide** - A single coherent collection of capability statements, profiles, extensions, value sets, and documentation describing a set of interoperable applications
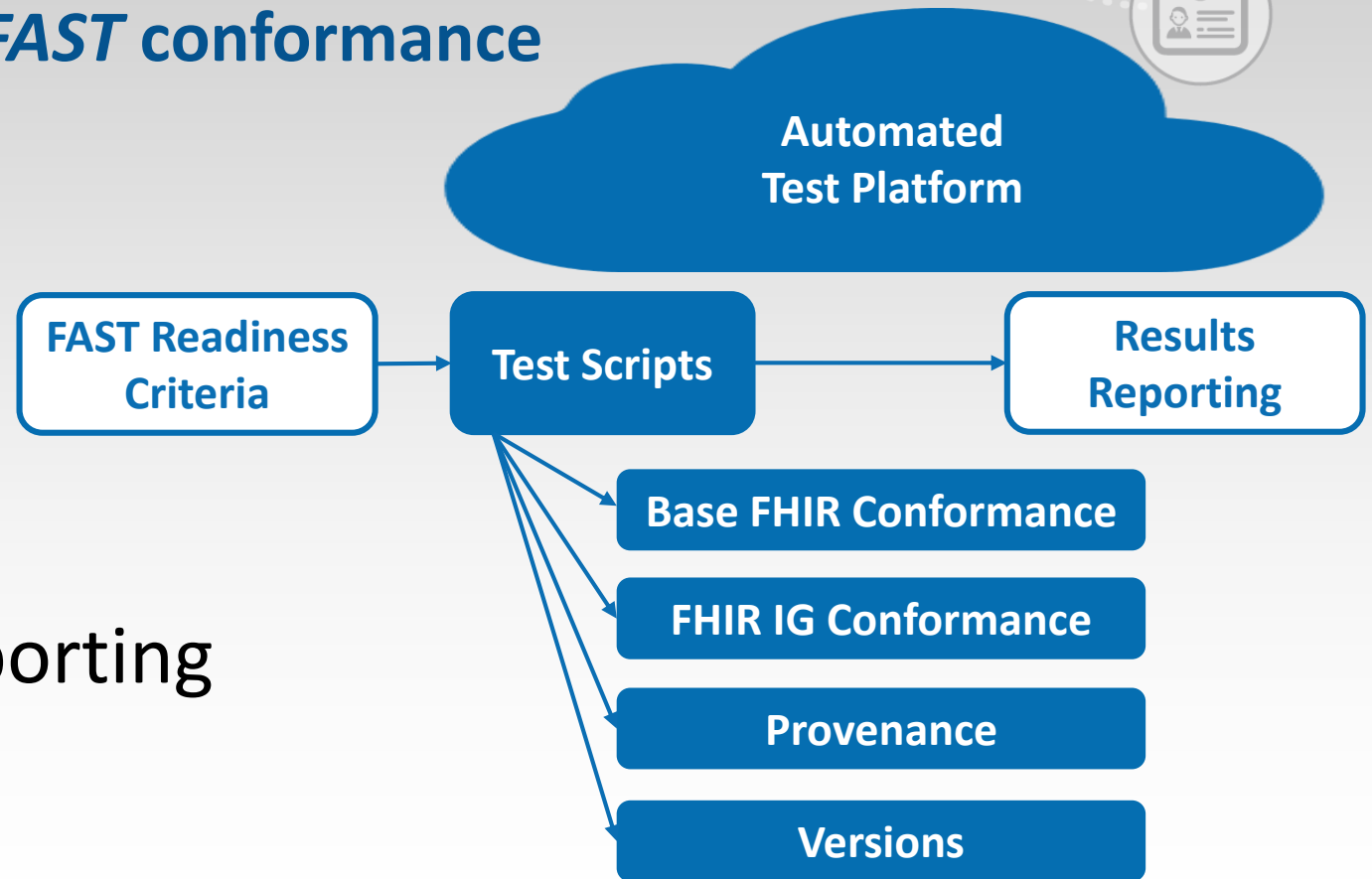
Automated Test Platform

The automated test platform enables concurrent testing of all components of *FAST* conformance

- Base FHIR
- Supporting IGs
- Other aspects such as versioning and provenance
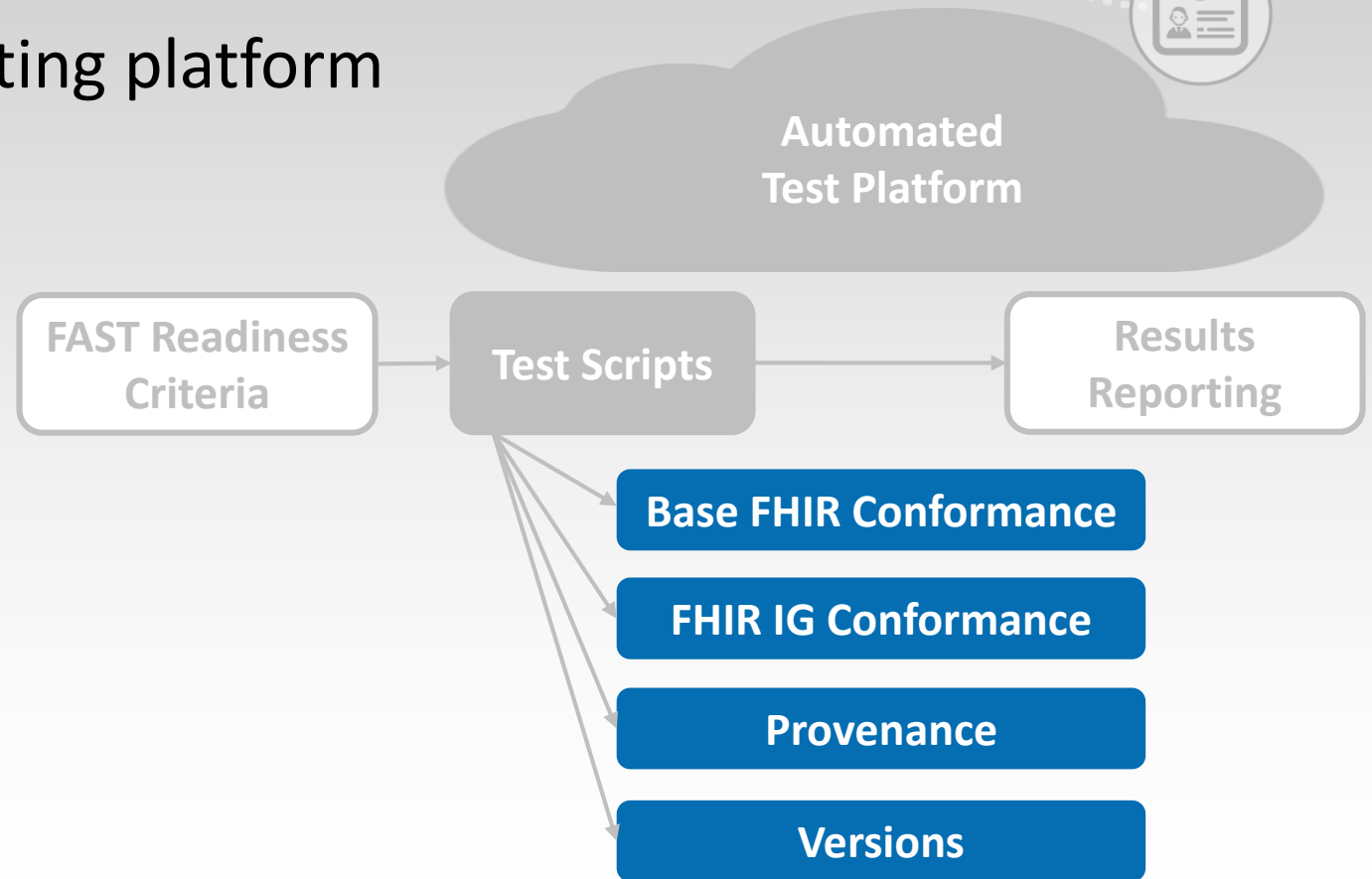
… and provides results reporting

Automated Test Platform

FAST Readiness Criteria → **Test Scripts** → **Results Reporting**

- **Base FHIR Conformance**
- **FHIR IG Conformance**
- **Provenance**
- **Versions**

FHIR Validation Engine

The FHIR Validation Engine…

- is one component of the testing platform
- validates specific aspects of base FHIR conformance

Automated Test Platform

FAST Readiness Criteria → Test Scripts → Results Reporting

- Base FHIR Conformance
- FHIR IG Conformance
- Provenance
- Versions

Example: *FAST* Endpoint Discovery

- This Readiness Criteria leverages the Validated Healthcare Directory FHIR IG

- That IG is dependent on components of the base FHIR spec

- Need to test those base FHIR aspects in the context of the Directory IG and *FAST* Endpoint Discovery

Discussion

Discussion: Session Goal 1

Session Goal 1: Confirm that the scope of the Testing & Certification proposed solution is appropriate

?

Does it make sense to validate all three aspects together, on a single platform?

The solution covers...

Base FHIR conformance

FHIR Implementation Guides supporting *FAST* Readiness Criteria

Conformance to *FAST* Readiness Criteria

Discussion: Session Goal 2

Session Goal 2: Validate if it can be done without undue burden/adding another process step for organizations.

?

What would be a reasonable range for testing costs?

Could early testing actually reduce overall development costs?

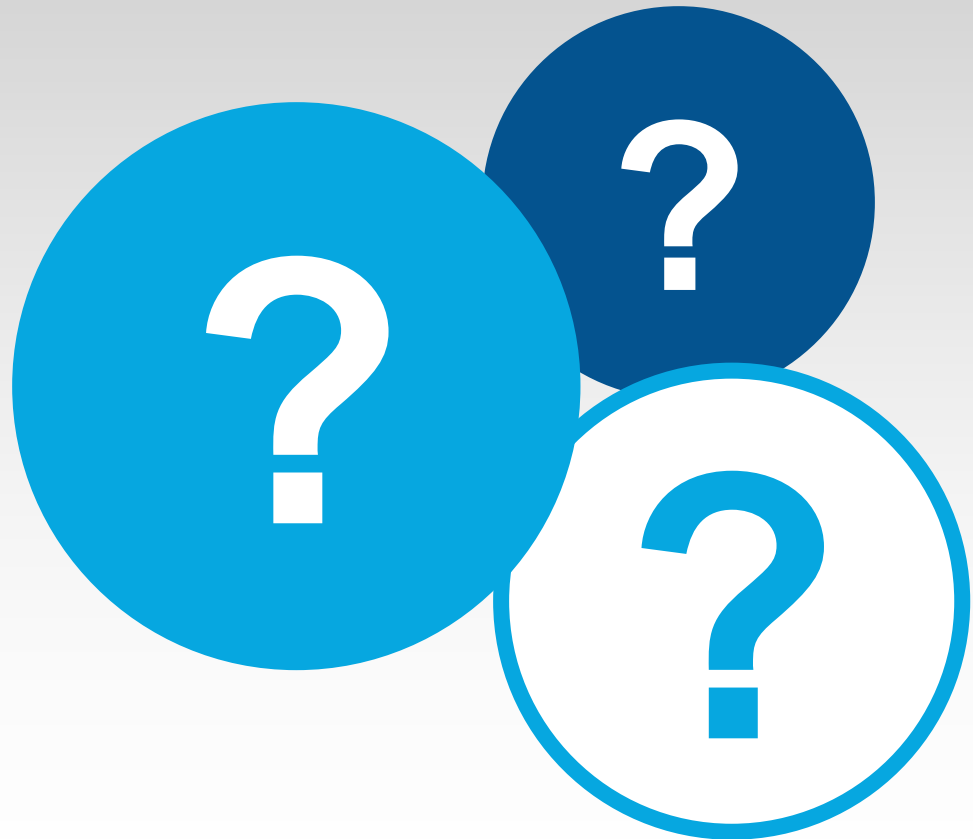**Testing Platform Savings Offset Certification Costs**

Discussion: Session Goal 3

Session Goal 3: Consider the pros and cons of automated, ongoing certification.

Is there an alternative?

What will be the impact if we don't?

Wrap Up

Breakout Sessions Schedule

12pm – 1pm: **Lunch Break**

1:00pm – 2:30pm: Afternoon Breakouts Part 1 - *FAST* Pathways to Implementation (limited attendance, concurrent)

Room #1: *Standards*	Room #2: *Regulations*	Room #3: *Process*
Session Goals: 1. Discuss why the *FAST* community proposes that standards are key 2. Discuss and propose where the *FAST* standards should reside long term	**Session Goals:** 1. Consider the current regulatory landscape and how it presents opportunities or challenges related to each of the proposed solutions 2. Explore policy concepts and considerations that would allow for transparent and predictable update cycles in response to industry need. 3. Discuss ways to mitigate impact of understanding and implementing regulatory requirements for smaller organizations.	**Session Goals:** 1. Explore process related elements for implementation of FHIR-enabled interoperability at scale (e.g. process related governance, funding, and operational considerations, etc.) 2. Identify key things necessary to deploy solutions in a sustainable manner. 3. Explore limitations and opportunities to convene related groups that need to avoid any implication of anti-trust.

FAST Workshop – Full Day Agenda and Resources

- View the *FAST* Workshop Summary and Detailed Agenda
  - Morning and Closing Plenary
  - Breakout Room Sessions Schedule
  - Handouts and Resources
- Explore these *FAST* resources
  - New to *FAST*? Breakout sessions target interactive discussion and references the *FAST* work to date. Please consider exploring any of the following *FAST* artifacts before attending these breakout sessions:
    - The *FAST* 2020 Mid-Year Report
    - The *FAST* 2019 End of Year Report
    - SME Panel Session Pages

CONTINUE THE CONVERSATION!

Join the Technical Learning Community to stay up to date – receive updates about FAST presentations & events, provide additional input and follow our progress.

JOIN THE LINKEDIN GROUP

&

SIGN UP FOR THE TLC

All content is available on the **FAST Project Page** *or* **https://tinyurl.com/ONC-FAST**

Thank You

Connect with _FAST_ on LinkedIn to stay informed

For more information on the _FAST_ Initiative,
visit the _FAST_ Project Page or https://tinyurl.com/ONC-FAST

Have any further questions/suggestions?

Please contact Stephen Konya at Stephen.Konya@hhs.gov
& Diana Ciricean at Diana.Ciricean@hhs.gov

SK