



- Please keep your microphone **muted**
- **Questions during the session?** Please use the chat box. We will address the questions in the second part of the webinar
- Note that this webinar will be **recorded** and made available on our IHE-Europe [YouTube channel](#)
- Slides will be **sent to you by email** early next week

AI in Radiology & takeaways from Trieste Plugathon and AI Interest Group for Imaging

Marc Kammerer

Friday 8 November
1PM CEST

Kevin O'Donnell



- Senior R&D Manager, Canon Medical Research USA, focused on standards and interoperability in medical imaging (IHE, DICOM, HL7)
- Fellow of the College of SIIM, Member, SIIM Board of Directors.
- Member, IHE Radiology Technical and Planning committees, IHE International Board.
- Chair, DICOM WG-10 (Strategy), Member, DICOM Board, WG-01/12, 02/28, 06, 14, 20, 21, 27
- Member, AdvaMed Medical Imaging Informatics Section, AI Working Group.

Steven Nichols



- Leads GE HealthCare engagement in the IHE, DICOM and HL7 standards development organizations.
- Chair of the Medical AdvMed Medical Imaging and Informatics Section and member of the COCIR, COCIR Security and Interoperability Workgroup.
- Member of the IHE Radiology and ITI Technical and Planning committees, IHE Europe, and the IHE Europe SHARAZONE Task Force.
- Member of the AAMI Interoperability Workgroup.
- Member of DICOM workgroups: WG-01/12, 02/28, 06 14, 16, 20, 21, 27, 31
- Registered radiologic Technologist: ARRT RT(R)(CT)

IHE[®]

EUROPE



WEBINARS

IHE Domains: how are profiles developed - how can you participate?

Focus on IHE Radiology and ITI Domain

IHE Europe Webinar Series
11-Oct-2024

Kevin O'Donnell
Steven Nichols

IHE = Integrating the Healthcare Enterprise

IHE = Tailoring & Testing Standards

Tailoring = writing implementation guides
for how to solve specific integration problems
using existing standards

} **“Profiles”**

Testing = coordinating formal test events
for many implementers
to confirm conformance (to the Profiles)

} **“Connect-athons”**

IHE International

IHE Domains

Radiology,
Pathology and Lab,
IT Infrastructure,
...

**Develop
Profiles**

IHE Regions

France,
Netherlands,
Europe,
...

**Conduct
Connectathons**

(... and do other things)

IHE Domain (e.g. IHE Radiology)

**Planning
Committee**

Solicit & Select
Profile Proposals

**Technical
Committee**

Create Profiles

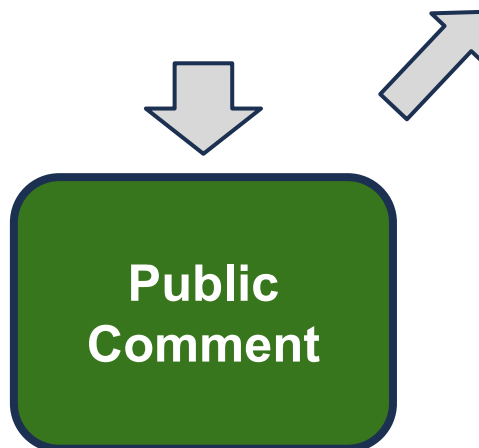
**Planning
Committee**

Promote Profiles

IHE Profiling Process Phases

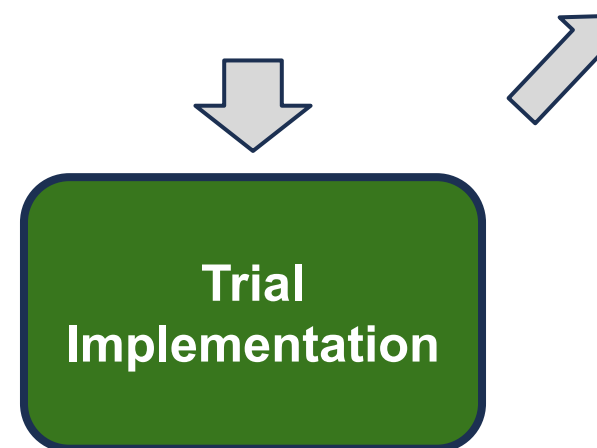
Drafting / Brainstorming:

- Document Use Cases
- Identify Transactions, Actors, & Content
- Select Standards
- Write normative text to apply & constrain standards
- Highlight Open Issues



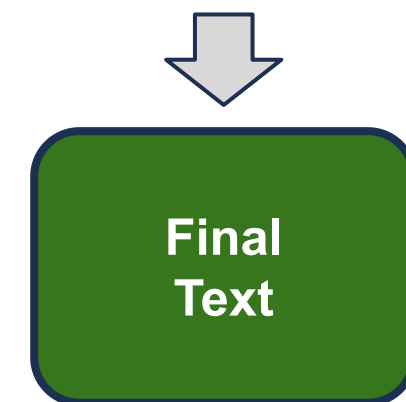
Comment Resolution:

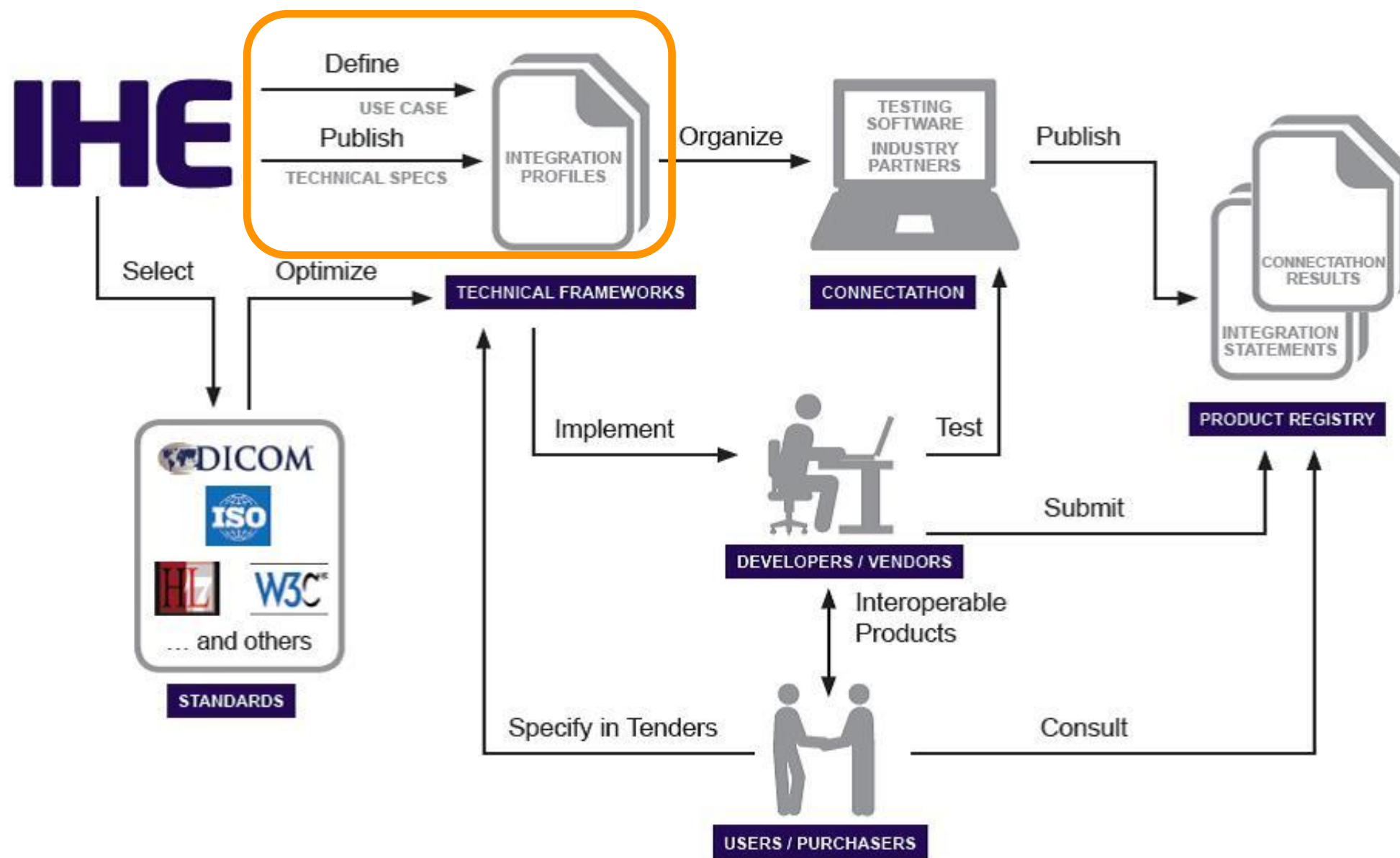
- Review & Resolve Comments
- Revise profile text
- Close Open Issues



Testing (the Spec):

- Recruit implementers
- Review Connectathon feedback
- Confirm implement ability
- Confirm clarity of text (ideally multiple implementations of each actor)
- Revise Profile if needed





IHE Radiology Wiki Tour: Kevin O'Donnell

Radiology (RAD), Devices (DEV), Pathology and Laboratory Medicine (PaLM), Radiation Oncology (RO)

- Single annual intake and selection of new work items.
- Plan Cmte ranks proposal priorities; Tech Cmte works only on top 2-3 to focus & finish quickly
- Proposals must be scoped down to something useful and completable in one cycle.
- Fixed schedule for brainstorming, public comment and trial implementation.
- TI publication target: 8-months after selection of proposal.
- Unselected proposals can be resubmitted next cycle.
- “Phase 2” proposals can be submitted to work on “scoped out” parts of past large proposals.
- Monthly CP (change proposal) meetings.
- Exceptions needed when synchronizing with HL7 cycles (e.g., Gemini)

IHE IT Infrastructure Wiki Tour: Steve Nichols

https://wiki.ihe.net/index.php/Continuous_Development_Process

Quality, Research, and Public Health (QRPH), Patient Care Coordination (PCC), IT Infrastructure (ITI)

- New work items can start at four points throughout the year.
- More flexibility for project timing and resource availability.
- Faster turnaround for smaller projects and ability to handle larger ones.
- Work items move through phases independently.
- Quarterly face-to-face meetings for planning, technical review, and public comment.
- Supplements published as ready, not tied to an annual release.
- Monthly Planning Committee meetings to assess work items.
- Monthly CP (change proposal) meetings.
- Flexibility to synchronizing with HL7 cycles (e.g., Gemini)
- Longer time to Trial Implementation (2-2.5 years from assessment to TI)

https://wiki.ihe.net/index.php/Continuous_Development_Process

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IHE / Projects / ITI Project Planning

ITI Project Planning

View 1

+ New view

Filter by keyword or by field

Under assessment by planning 6

IT-Infrastructure #212

Validate workflow document updates

IT-Infrastructure #155

Convert MACM to an IG published

IT-Infrastructure #124

Re-Document XDS Metadata Update

IT-Infrastructure #192

Federated Directory Grouping

IT-Infrastructure #201

Feature: mCSD Explicit Endpoint Accessibility Option

IT-Infrastructure #213

ITI MHD option to support ITI RMU capability

+ Add item

Planning Assessed Work Items 8

IT-Infrastructure #156

XCA federation of MHDS community

Dev-M Review-M Testing-L

IT-Infrastructure #126

Federate MHDS using FHIR including Patient and User federation

Dev-L Review-L

IT-Infrastructure #211

XDW with FHIR

Dev-M Review-M Testing-S

IT-Infrastructure #214

mCSD additional transaction for Feed

Dev-M Review-M Testing-L

IT-Infrastructure #145

Convert RESTful ATNA supplement to an IG published

Dev-M Review-M Testing-S

IT-Infrastructure #168

Whitepaper: multiple choices of Patient id/identifier to use with server queries

Dev-M Review-M Testing-S

IT-Infrastructure #193

XD* On-Demand Delta Detection Option

Dev-S Review-M Testing-S

IT-Infrastructure #170

Abandonment process for old TI supplements

+ Add item

In development by Tech 4

IT-Infrastructure #171

CP-Maintenance

Dev-S Review-S

IT-Infrastructure #187

ITI sex and gender profiling

Dev-S Review-S Testing-S

IT-Infrastructure #210

Align DSUB with DSUBm (updates)

Dev-M Review-M Testing-M

IT-Infrastructure #215

Sharing Verifiable Health Links

Dev-L Review-L Testing-L

+ Add item

Public Comment 3

IT-Infrastructure #195

DSG handling of JSON signature

Dev-M Review-S Testing-L

IT-Infrastructure #139

Scheduling for Mobile

Dev-M Review-L Testing-L

IT-Infrastructure #190

Finance and Insurance Services

Dev-L Review-L Testing-L

+ Add item

Published (e.g. Trial Implementation) 11

IT-Infrastructure #209

Update HIE Whitepaper based on recent profiles and updates.

Dev-S Review-S

IT-Infrastructure #163

Use \$match in PDQm

Dev-M Review-M Testing-M

IT-Infrastructure #123

RESTful document subscription (DSUBm)

Dev-L Review-L Testing-L

IT-Infrastructure #197

IG for Accessibility to IPS

Dev-M Review-M Testing-S

IT-Infrastructure #154

Convert NPFS to an IG published

Dev-S Review-S Testing-S

IT-Infrastructure #173

Convert mXDE to html or IG

Dev-S Review-S Testing-S

IT-Infrastructure #183

Privacy Consent on FHIR (PCF)

Dev-L Review-M Testing-M

IT-Infrastructure #188

Move XCPD Revoke Into Its Own Transaction

Dev-S Review-S Testing-S

+ Add item

Task complete 14

IT-Infrastructure #208

Discuss experimenting with R5 on IGs

Dev-L Review-S

IT-Infrastructure #194

approved CPs integration

IT-Infrastructure #175

MHD Improvements

Dev-M Review-M Testing-M

IT-Infrastructure #178

mCSD public-comment with Endpoint/OrgAff

Dev-S Review-M

IT-Infrastructure #125

Update MHD from DocumentManifest to List(s)

Dev-S Review-S

IT-Infrastructure #172

quality improvements on html TF

Dev-S Review-S

Draft

Update core set of IHE-on-FHIR profiles to FHIR R4

Draft

Convert FHIR XML conformance resources to FHIR R4

IT-Infrastructure #122

+ Add item

16

In Development

- Sharing Verifiable Health Links
- Align DSUB with DSUBm

In Public Comment

- DSG handling of JSON signature
- Scheduling for Mobile
- Finance and Insurance Services

- **Implement [Profiles](#):** Implement IHE profiles to ensure conformance and interoperability with industry standards.
 - Click on Domain
 - Click on TI Profiles and/or Technical Framework Volumes to view
- **[Join IHE](#):** Your organization can assign someone to any domain committee to attend meetings and contribute either virtually or in person.
- **Participate in [Public Comment](#) Periods:** Actively engage by submitting comments during the public review of draft profiles and technical frameworks.
 - Click on Domain ☐ Scroll to “Public Comment”
 - Click on draft Profiles to view (note when comments close)
 - Click on “here” to submit comments
- **Submit Change Proposals (CPs):** Provide [CPs](#) to improve existing profiles or address gaps that affect your implementation. Use the IHE Change Proposal process for structured feedback.
- **Participate in Underlying Standards:** Participate in the development of [DICOM](#) or [HL7](#).

- **Join Mailing Lists:** Subscribe to relevant IHE domain mailing lists to receive updates on profile progress, meeting announcements, and change proposals.
 - [ITI Technical Google Group](#)
 - [ITI Planning Google Group](#)
 - [MHD Implementers Google Group](#)
 - [IHE XDS Implementors Google Group](#)
 - [IHE Radiology Planning Committee](#)
 - [IHE Radiology Technical Committee](#)
- **Join Domain Planning Calls:** Attend the IHE domain-specific Planning Committee calls to stay informed on new profile proposals and ongoing developments.
 - [ITI Current Meetings](#)
 - [Radiology Current Meetings](#)
- **Monitor Profiles in Development:** Regularly review the IHE Technical Frameworks for updates on profiles currently in development and identify areas of interest.

Contact us and follow us

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AI in Radiology & takeaways from Trieste Plugathon and AI Interest Group for Imaging

Marc Kämmerer

Friday 8 November
1PM CEST