



IHE International

Einblicke und Ausblicke



Jürgen Brandstätter

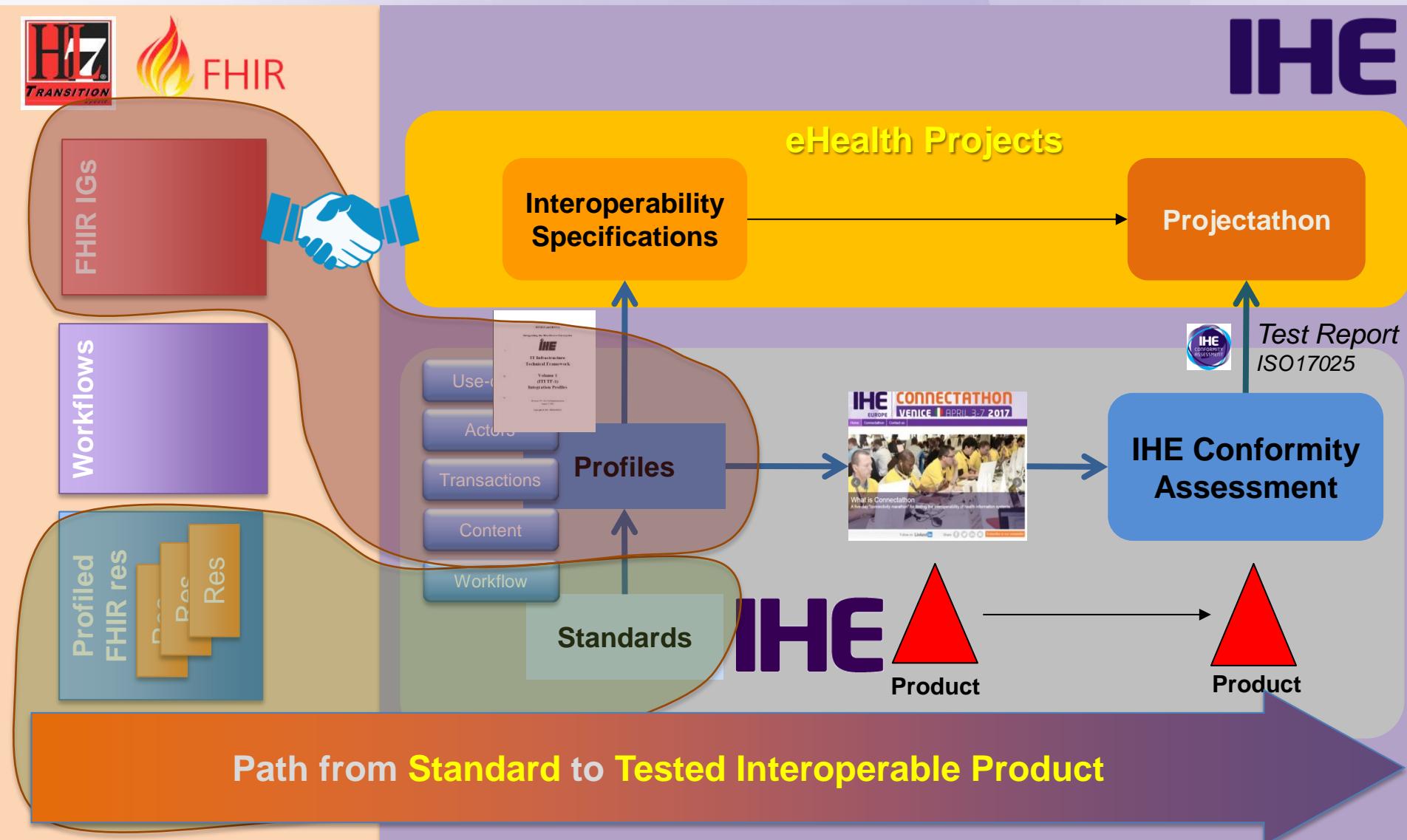
Gemini Steering Committee
Co-chair, IHE Europe
Member, IHE International Board

Gemini

**A Joint Initiative of IHE and HL7
to Advance Use of FHIR for
Interoperability**



In the special case of FHIR



Mandate, Mission, Parity

- **Mandate**
 - Project GEMINI operates under the Statement of Understanding between IHE and HL7
- **Mission**
 - Tighten collaboration between IHE and HL7 in the context of FHIR
- **Parity**
 - **GEMINI is a „Joint“ IHE / HL7 project**
 - Joint ownership and steering under equal parity
- **Main work**
 - Coordinate! Establish connections!

About Gemini

- **Area 1: Development and Tooling of „FHIR-based IHE profiles“**
 - FHIR-based IHE profiles remain under IHE governance, but participation and contribution of HL7 shall be encouraged (as well as participation of IHE in HL7)
 - This includes collaborative work, alignment of tooling, mutual notification of new work-items, etc.
- **Area 2: Publication of „FHIR-based IHE profiles“**
 - Align publication of FHIR Implementation Guides and FHIR-based IHE profiles by referencing FHIR-based IHE profiles on fhir.org
- **Area 3: Testing**
 - Positioning of the current testing initiatives, such as HL7 FHIR Connectathons, IHE Connectathons, IHE Conformity Assessment and coordination of the test tooling ecosystem across both organizations
- **Area 4: Pilot projects**
 - Identify, agree and execute joint IHE/HL7 pilot projects and demonstrations
- **Area 5: Joint Messaging and Marketing**
 - Maintain joint messaging/marketing/education on HL7 FHIR and FHIR-based IHE profiles on fhir.org

Gemini Projects

- **Medical Imaging for Cancer Care**
 - Gemini shall coordinate ...
 - Specification development
 - Progressively more rigorous interoperability testing
 - Implementation activities
 - Appropriately timed communications and public demonstrations
 - Partners
 - SMART on FHIR/Sync for Science
 - HL7 Imaging Integration WG/DICOM WG20
 - FHIRcast
 - Clinical Interoperability Council/Clinical Information Modeling Initiative
 - ACR-RSNA Common Data Elements Steering Committee
 - IHE Radiology
 - IHE-USA and IHE-Europe



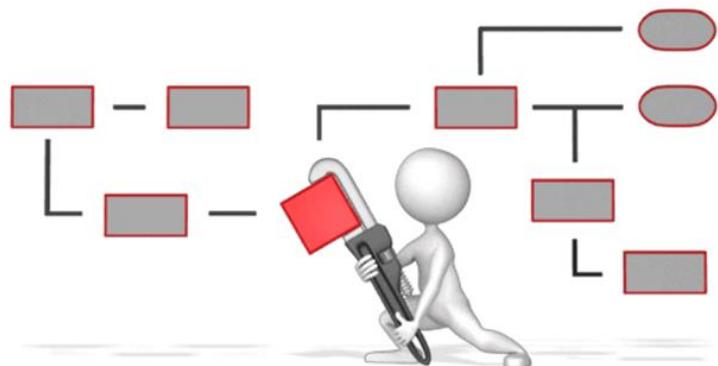
IHE's CCG Profile

(in 300 seconds or less!)

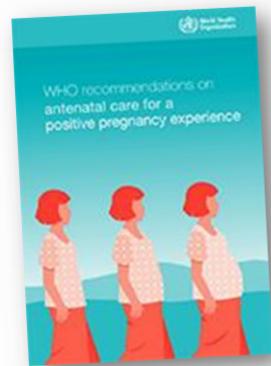
IHE QRPH Webinar

September 12, 2019

Derek Ritz, P.Eng., CPHIMS-CA
ecGroup Inc.



Gemini Projects



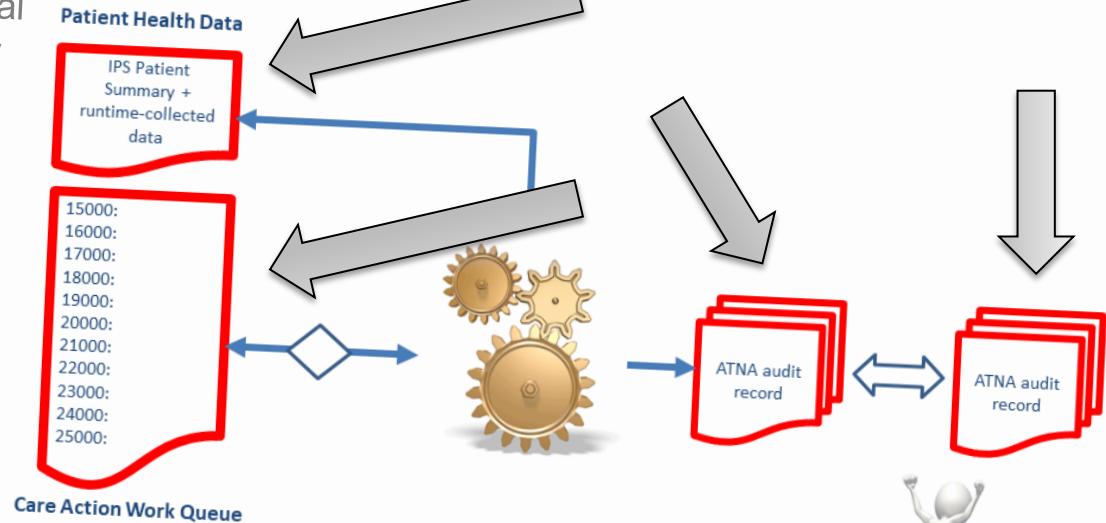
Narrative Text
Understandable by humans



Collection of XML or json files
Understandable by software applications

Gemini Projects

IPS – International Patient Summary



IHE
INTERNATIONAL

Making
Healthcare
Interoperable



Source: QRPH Presentation on CCG Profile, Derek Ritz

19.11.2019

IHE Day 2019 - Austria

Gemini Projects

IPS – International Patient Summary



Patient Health Data

IPS Patient Summary +
runtime-collected data

15000:
16000:
17000:
18000:

See detailed explanation video at
<https://vimeo.com/356829962>



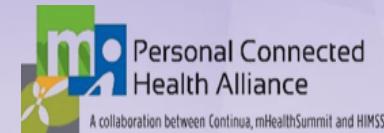
Making
Healthcare
Interoperable



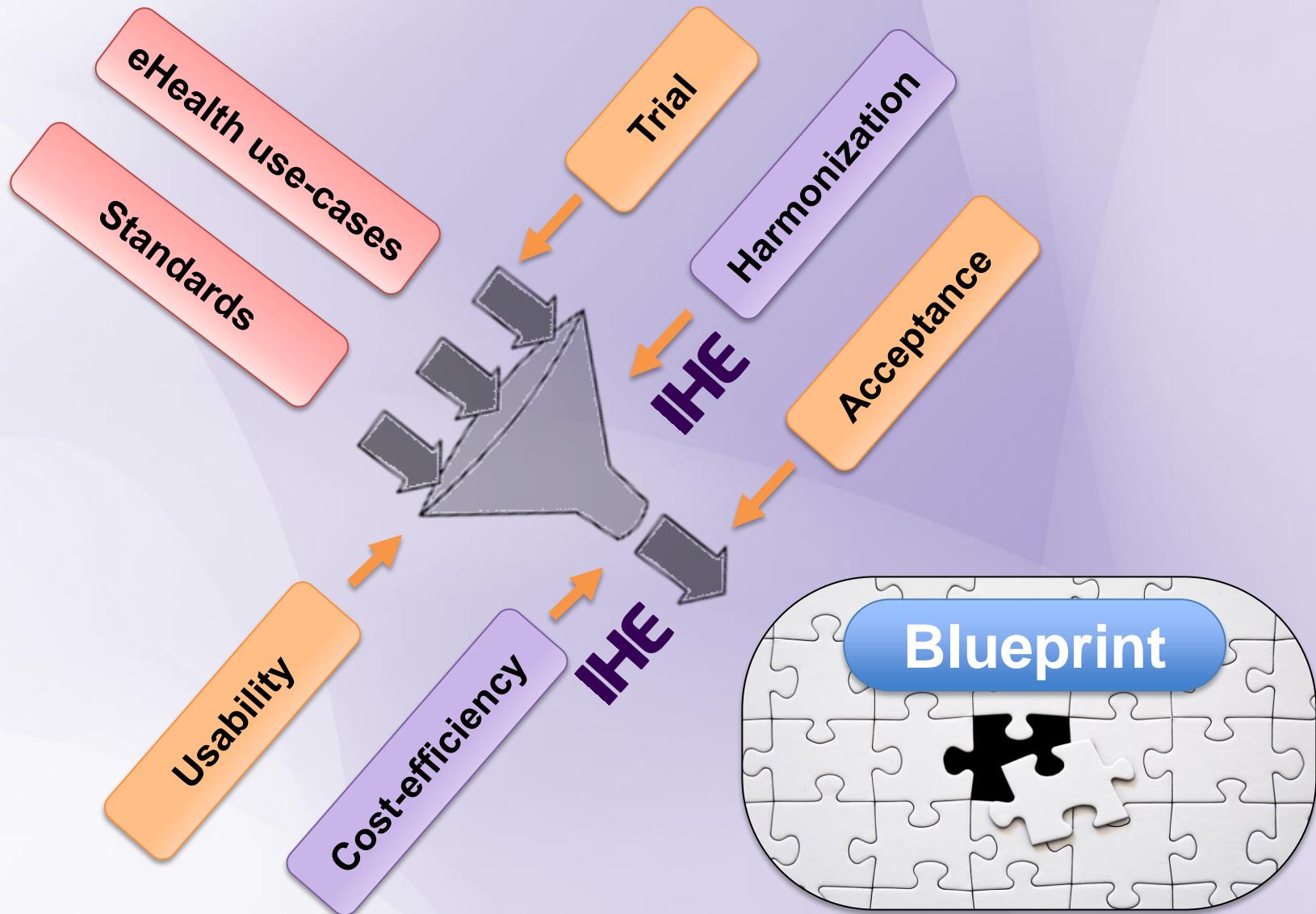
FINA audit
record

Source: QRPH Presentation on CCG Profile, Derek Ritz

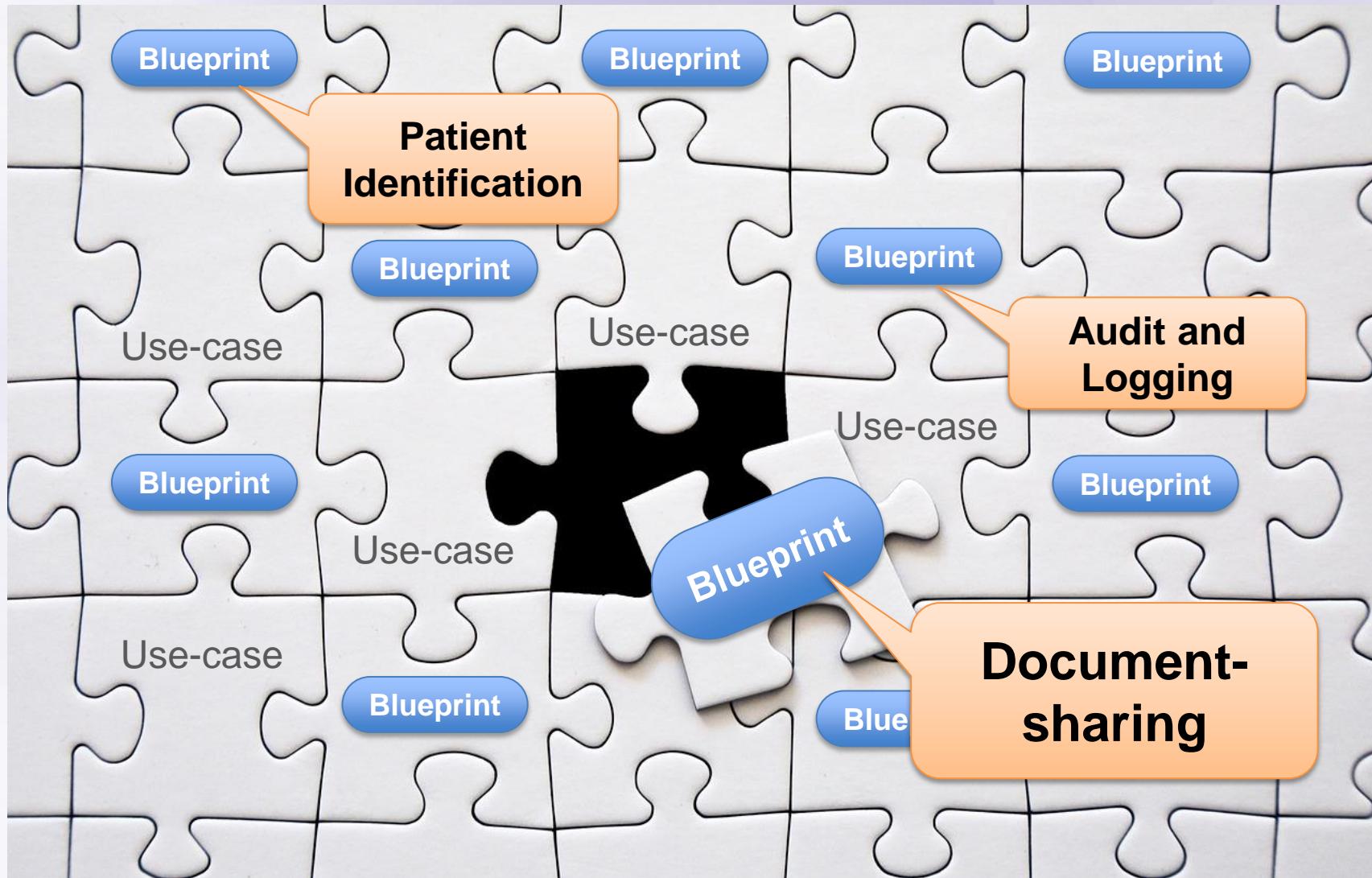
Global Blueprints



What is a „global“ blueprint?



eHealth Landscape



Governance needs blueprints

- **EC Recommendation on EHRxformat**
 - eHDSI cross-border of ...
 - Patient Summary
 - ePrescription / eDispense
 - Medical Imaging and Reports
 - Laboratory Results
 - Hospital Discharge Reports
 - Based on
 - Established IHE Profiles
 - HL7 CDA content
 - Future developments: FHIR
 - -> Blueprints need yet to crystallize first!



FHIR-based IHE profiles

ITI**PCC****QRPH**

MHD

QEDm

CORE

PIXr

PDQm

BFD

mRFD

mACM

mXDE

mADX

PRQ

FHIR ATM

mCSD

SOLE

NPFSm

ACDC

RIPT

VRDR

GAO

RECON

DCTM

CMAP

DCP

PHARM

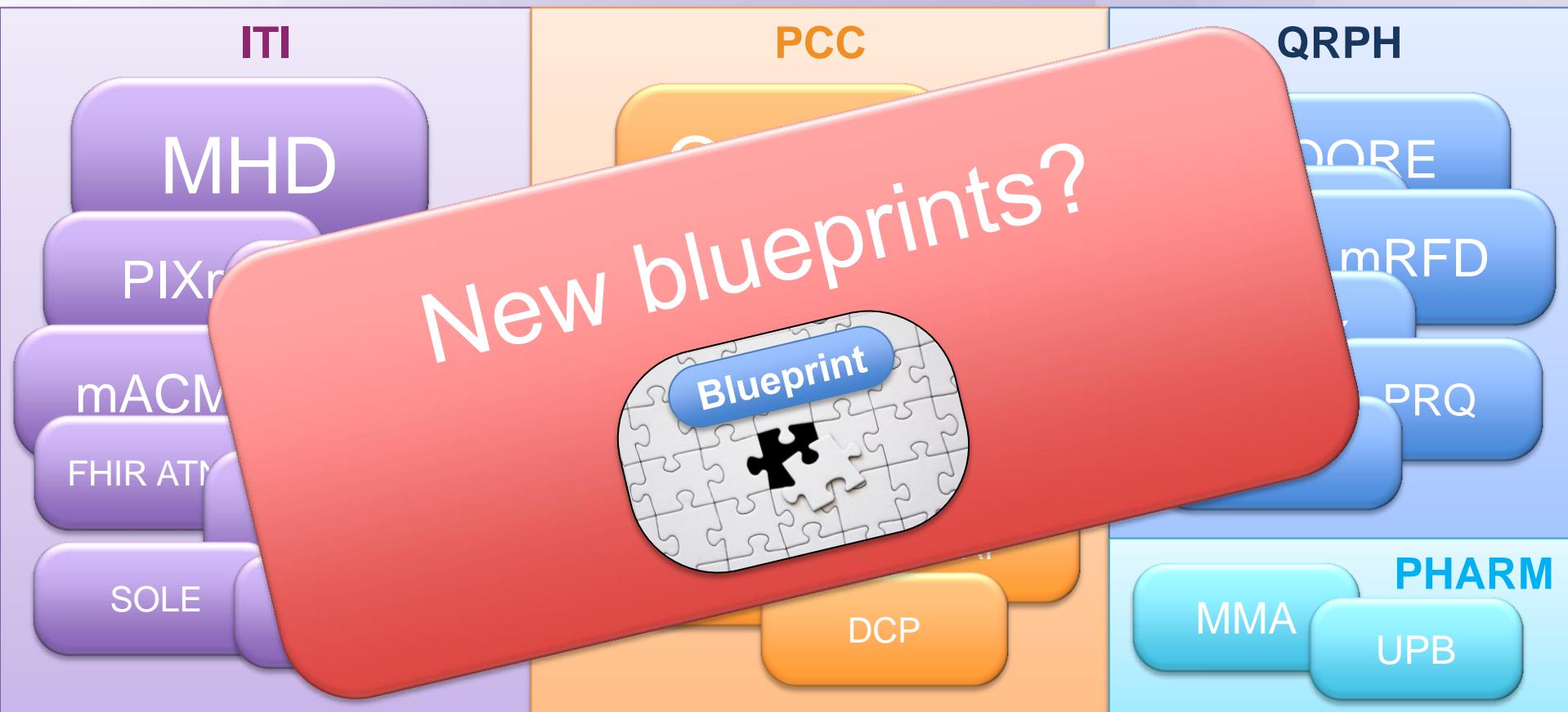
MMA

UPB

Overview on IHE Profiles: <https://wiki.ihe.net/index.php/Profiles> (marked with )

FHIR IG Overview on fhir.org: <http://www.fhir.org/guides/registry>

FHIR-based IHE profiles



Overview on IHE Profiles: <https://wiki.ihe.net/index.php/Profiles> (marked with 🔥)

FHIR IG Overview on fhir.org: <http://www.fhir.org/guides/registry>

- **IHE-Continua Alignment Efforts**
 - Integrating PCHA Continua into IHE PCD
- **HIMSS / IHE / HL7 collaboration**
 - Statement of principles approved by all three parties
 - Currently work on
 - Announcement
 - Website
 - Governance

Links

- Gemini
 - <https://confluence.hl7.org/display/GP/Project+Gemini>
- GDHP, Global Digital Health Partnership: <https://www.gdhp.org>
- Interesting publications
 - eHealth Suisse Auslegeordnung IHE / HL7 / FHIR
 - https://www.e-health-suisse.ch/fileadmin/user_upload/Dokumente/D/auslegeordnung-ihe-hl7-fhir.pdf
 - The 3 Legs of the Health Informatics Standards Process
 - <http://www.healthintersections.com.au/?p=2921>
 - The 4 aspects that change the game in eHealth Interoperability
 - <https://www.linkedin.com/pulse/4-aspects-change-game-ehealth-interoperability-j%C3%BCrgen-brandst%C3%A4tter>
 - European Commission recognizes 27 IHE profiles that should be referenced in public procurement documents
 - http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:JOL_2015_199_R_0011

Links

- IHE Homepage
 - <http://www.ihe.net/>
 - <http://www.ihe-europe.net/>
- IHE Wiki
 - <http://wiki.ihe.net/>
- IHE International Social Media
 - YouTube channel: <https://www.youtube.com/user/IHEIntl>
 - IHE Webinars: <http://www.ihe.net/Webinars/>
 - Twitter: <https://twitter.com/IHEIntl>
- Google groups
 - <https://groups.google.com/forum/#!search/ihe>



The screenshot shows the homepage of the IHE International website. At the top, there's a navigation bar with links for 'About IHE', 'Participate', 'Resources', 'Testing', 'IHE Domains', 'IHE Worldwide', and 'News'. Below the navigation, there's a large banner featuring two healthcare professionals (a man and a woman) looking at a tablet. The banner has text about 'IHE International' enabling seamless access to health information. To the right of the banner, there's a 'Spotlight' section with a link to register for educational webinars. At the bottom, there's a 'Volunteer Spotlight' section and a calendar for 'IHE Meetings and Events' showing sessions for July 18th and 17th.



Changing the Way Healthcare CONNECTS

<http://www.ihe.net>



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