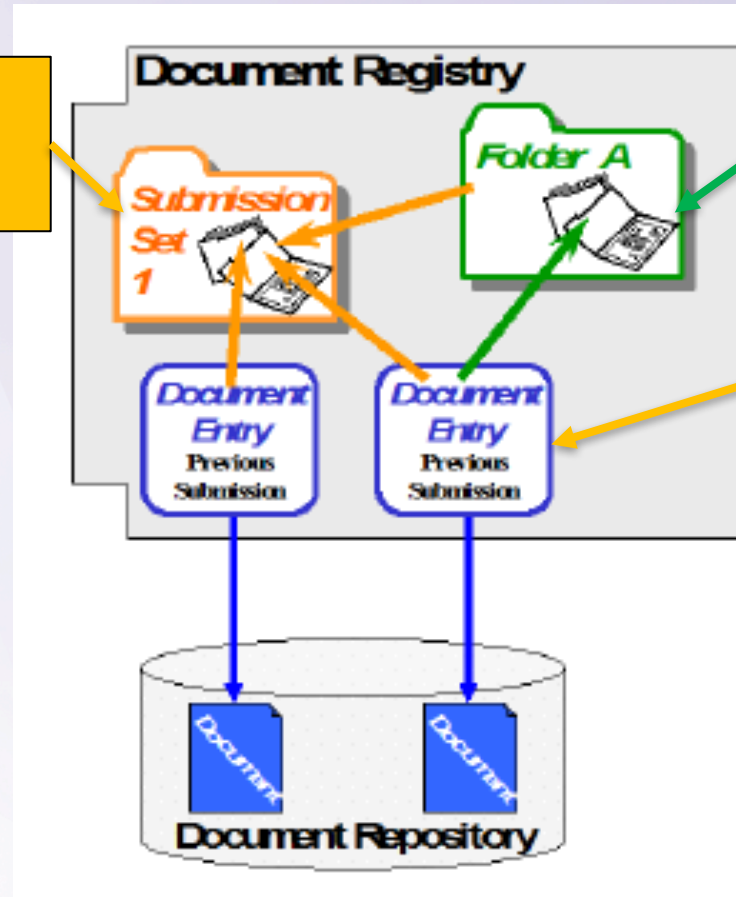# IHE | Integrating the Healthcare Enterprise

DEUTSCHLAND

Value Sets für Metadaten in IHE XDS

- Dr. Frank Oemig, IHE-D IT-I Caretaker
- Tarik Idris, ICW
- Dr. Angela Merzweiler
- Vincent van Pelt, IHE NL

Welche Metadaten gibt es?

Metadaten SubmissionSets / Folder

Metadaten Submission Set
author
availabilityStatus
comments
contentTypeCode
entryUUID
homeCommunityID
intendedRecipient
limitedMetadata
patientId
sourceId
submissionTime
title
uniqueId

Metadaten Folder
availabilityStatus
codeList
comments
entryUUID
homeCommunityID
lastUpdateTime
limitedMetadata
patientID
title
uniqueId

Metadaten eines Dokuments

Attribut Teil 1	Attribut Teil 2
author	mimeType
availabilityStatus	objectType
classCode	patientID
comments	practiceSettingCode
confidentialityCode	referenceIdList
creationTime	repositoryUniqueId
entryUUID	serviceStartTime
eventCodeList	serviceStopTime
formatCode	size
hash	sourcePatientId
healthcareFacilityTypeCode	sourcePatientInfo
homeCommunityId	title
languageCode	typeCode
legalAuthenticator	uniqueId
limitedMetadata	URI

Wer pflegt und ändert die Value Sets?

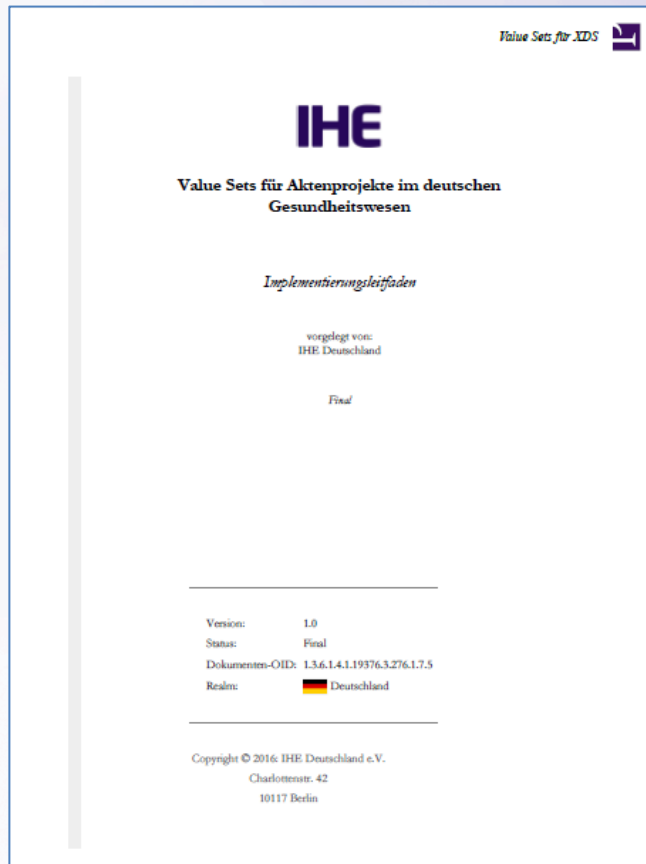IHE Value Sets Arbeitsgruppe

Harter Kern:

- Tarik Idris (ICW)

- Frank Oemig (T-Systems)

- Antje Brandner (Uniklinikum Heidelberg)

- Angela Merzweiler (IHE Deutschland)

- Arnold Rösner (Uniklinikum Freiburg)

- Stefan Müller-Mielitz (DMI)

Weitere Mitarbeiter:

Peter Geibel (BVITG), Bernd Schütze (T-Systems), Christof Gessner (GEMATIK), Daniel Hellmuth (Cerner), Marc Kämmerer (Visus), Simon Roschu (HS Niederrhein), Samrend Saboor (Siemens), Veronika Daxner (ITH-ICOServe), Miriam Kaufmann (Aachen), **und viele mehr!**

Aktueller Stand

- Version 1 2016 kommentiert und veröffentlicht

Value Sets für XDS

IHE

Value Sets für Aktenprojekte im deutschen Gesundheitswesen

Implementierungsleitfaden

vorgelegt von:
IHE Deutschland

Final

Version:	1.0
Status:	Final
Dokumenten-OID:	1.3.6.1.4.1.19376.3.276.1.7.5
Realm:	Deutschland

Copyright © 2016 IHE Deutschland e.V.
Charlottenstr. 42
10117 Berlin

Metadatum
DocumentEntry.classCode
DocumentEntry.typeCode
DocumentEntry.healthcareFacilityTypeCode
DocumentEntry.practiceSettingCode
DocumentEntry.formatCode
DocumentEntry.languageCode
Folder.codeList

Mehrere nationale Publikationen.
Von Frank auch international (IHE Eu) als
Metadata Best Practice Guide (als Whitepaper
beantragt) veröffentlicht.
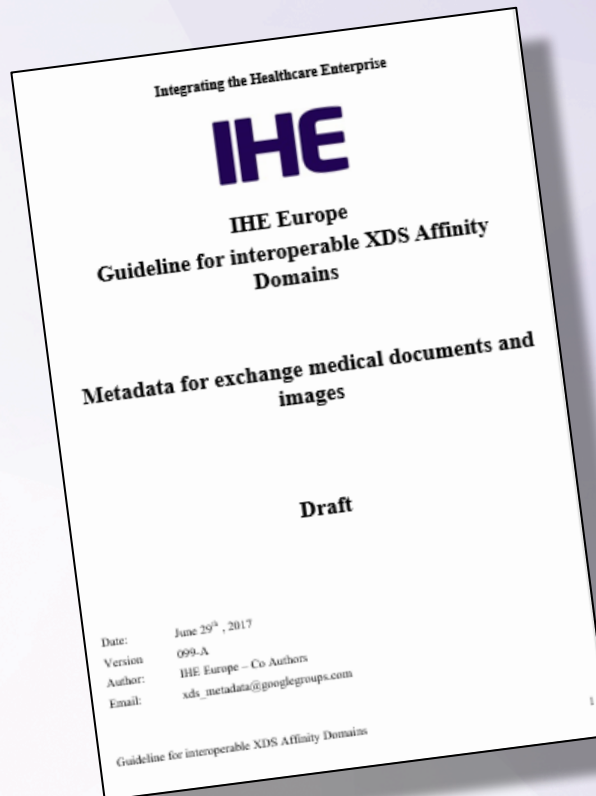
Womit beschäftigen wir uns derzeit?

- Erstellung eines Value Sets für die **authorRole**

„A string that represents the role of the author with respect to the patient at the time the document or SubmissionSet was created.”

- **Viel über Definition diskutiert** ☺
- **Beispiel aus anderen Ländern angesehen**
- **Benötigte Konzepte gesammelt**
- **Potentielle Codesysteme identifiziert**
  - *ParticipationFunction* Hl7V2 / V3
  - *ParticipationType* HL7V3
  - *RoleCode* HL7V3
  - RoleClass HL7V3
  - ObjectRole FHIR
  - ContactRole HL7v2

Perspektive

- VESTA: Bis Ende Dezember soll der bereits verabschiedete Implementierungsleitfaden eingereicht werden.

- Bis zur ConhIT soll die zweite Version des Leitfadens verabschiedet werden:
  - Überarbeitete Codes
  - DocumentEntry.ConfidentialityCode
  - Author.Speciality
  - SubmissionSet.contentTypeCode
  - DocumentEntry.eventCodeList

Metadata Guideline

- 2015: erste Überlegungen zur Nutzung von Metadaten in Affinity Domains
- 2016: Sammlung von Einzelinformationen + Ausarbeitung
- 2017: offizieller Request for Comment

Integrating the Healthcare Enterprise

IHE

IHE Europe
Guideline for interoperable XDS Affinity Domains

Metadata for exchange medical documents and images

Draft

Date: June 29th, 2017
Version: 099-A
Author: IHE Europe – Co Authors
Email: xds_metadata@googlegroups.com

Guideline for interoperable XDS Affinity Domains

Task Force Members:

- Karima Bourquard, IHE-Europe
- Abderrazek Boufahja, IHE-Europe
- Pablo d'Alcantara, Abrumet, Belgium
- Samuel Danhardt, Agence eSanté, Luxembourg
- Didi Davis, Sequoia, USA
- Emma Harris, IHE-UK
- Marko Jalonen, Salivirta&Partners Oy
- Manuel Metz, ASIP Santé France
- Frank Oemig, IHE Germany
- Charles Parisot, GE Healthcare
- Konstantin Hyppönen, Kela Finland
- Neil Robinson, IHE-UK
- Thor Schliemann, Danish Health Data Authority, Denmark
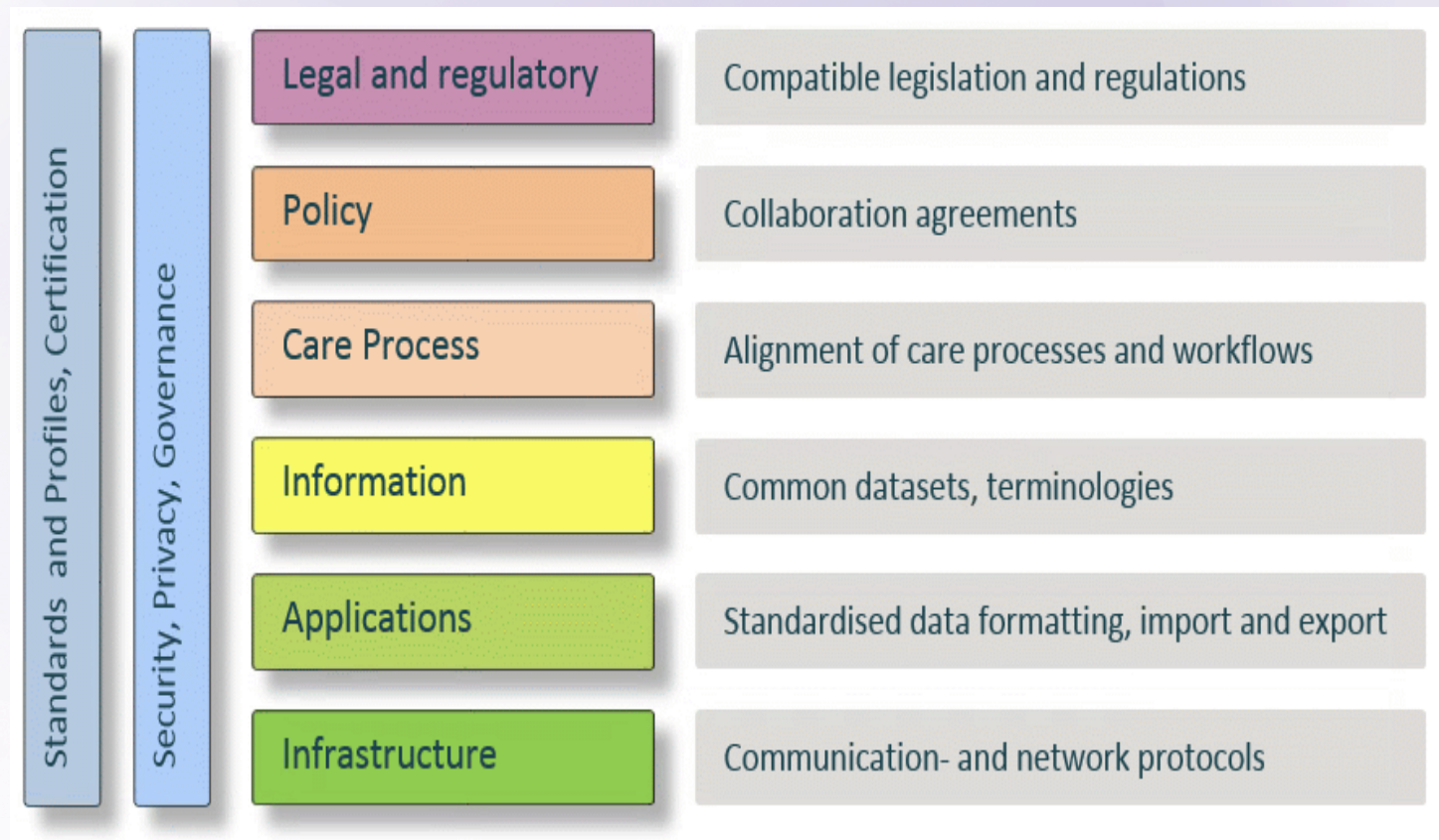- Vincent van Pelt, Nictiz, the Netherlands

Rationale

- Shared metadata definitions are key to the interoperable exchange of documents between Affinity Domains.

- Current profile specification does not warrant interoperability between XDS Affinity Domains

- Several countries in Europe have started initiatives for national specifications of XDS metadata but are looking for guidance and cooperation

- IHE XDS profile provides guidance for the use of metadata but let a lot of freedom for key elements (classCode, typeCode, eventCodeList):
    - Improvement and better use of the artefact within the affinity domain
    - Lack of practical guidelines is a barrier to cross community exchange in Europe and beyond
    - Impact on other integration profiles

- First guideline available on June 2017 with 9 European countries +US

Courtesy of Vincent van Pelt

Inhalt

- *Chapter 1 is an **introduction** to the project and its goals, organization, objectives, expected benefits, target audience, scope and approach;*

- *Chapter 2 contains a short introduction to the **concept of interoperability** and to the interoperability model used in Europe validated by the eHealth network (eHN);*

- *Chapter 3 contains a generic introduction to medical documents and their **categorization**, some theory on organizing and structuring metadata, and some guiding principles;*

- *Chapter 4 focuses on the IHE XDS profile, specifically on the XDS **metadata**;*

- *Chapter 5 looks at the different **national initiatives** and looks at patterns;*

- *Chapter 6 provides **recommendations** for an international reference implementation of XDS metadata attributes;*

- *Appendix A Provides an overview of XDS and XDS-I metadata;*

- *Appendix B Links specific XDS metadata to levels of filtering;*

- *Appendices C, D, E and F list relevant terminology listings from DICOM, Radlex, SNOMED-CT and LOINC;*

- *Appendix G contains a list of relevant links;*

- *Appendix H is a list of relevant terms and abbreviations.*

eHN Interoperability Model

White Paper
XDS *Metadata guidelines for affinity domain and cross-community information exchange*
06 October 2017 - conference call
Alexander Berler, Karima Bourquard and Vincent van Pelt

Guideline: Metadata for exchange medical documents and images

- Collecting and analysis of existing initiatives in Europe and beyond
- Categorization of documents and images
  - Collecting choices on terminologies
  - Choices on level of granularity
- Metadata and folder concepts
- Harmonization of national initiatives
- Etc.

International XDS Metadata Taskforce

- Initiative of 10 European countries, and the USA.
- After the publication of the *IHE Europe Guideline for interoperable XDS Affinity Domains 2015*, the Taskforce proposes to write a White Paper that works towards a concerted proposal for the refinement of the definition of some categorization metadata elements for (inter-) national use, as a reference implementation guide.

Authors	From the International XDS Metadata Taskforce:
	• Vincent van Pelt, Nictiz, the Netherlands
	• Samuel Danhardt, Agence eSanté, Luxembourg
	• Karima Bourquard, IHE-Europe
	• Pablo d'Alcantara, Abrumet, Belgium
	• Manuel Metz, ASIP Santé France
	• Emma Harris, IHE-UK
	• Frank Oemig, Germany
	• Neil Robinson, IHE-UK
	• Charles Parisot, GE Healthcare
	• Didi Davis, Sequoia, USA
	• Thor Schliemann, Danish Health Data Authority, Denmark
	• Abderrazek Boufahja, IHE-Europe

Courtesy of Vincent van Pelt

Objectives of the white paper

- Refinement of the definition of some XDS metadata elements for a set of use cases

- Increase interoperability for exchanging medical documents cross-community

- More uniform approach towards the categorization of medically related documents and images

- Better use of the XDS metadata for better use of solutions and products

Courtesy of Vincent van Pelt

Use cases

- Interoperable exchange of information between XDS Affinity Domains, nationally and internationally

- Better searching of certain types of documents across different Affinity Domains

- Uniform and logical from the end users perspective, including the citizen/patient

- Better use of the XDS metadata for better use of solutions and products

Courtesy of Vincent van Pelt

Writers of the white paper

In alphabetical order:
Alexander Berler, IHE-Europe
Karima Bourquard, IHE-Europe
Samuel Danhardt, Agence eSanté, Luxembourg
Marko Jalonen, Salivirta, Finland
Vincent van Pelt, Nictiz, The Netherlands

Further assistance from

The Taskforce:

Authors	From the International XDS Metadata Taskforce:
	• Vincent van Pelt, Nictiz, the Netherlands
	• Samuel Danhardt, Agence eSanté, Luxembourg
	• Karima Bourquard, IHE-Europe
	• Pablo d'Alcantara, Abrumet, Belgium
	• Manuel Metz, ASIP Santé France
	• Emma Harris, IHE-UK
	• Frank Oemig, Germany
	• Neil Robinson, IHE-UK
	• Charles Parisot, GE Healthcare
	• Didi Davis, Sequoia, USA
	• Thor Schliemann, Danish Health Data Authority, Denmark
	• Abderrazek Boufahja, IHE-Europe

Courtesy of Vincent van Pelt

Vielen Dank!

HEALTHCARE SOLUTIONS

DR. FRANK OEMIG
Senior eHealth Architect
www.telekom-healthcare.com

DEUTSCHE TELEKOM HEALTHCARE AND SECURITY SOLUTIONS GMBH
Am Fernmeldeamt 10-18, 45145 Essen
Telefon: +49 201 8145-3282
Mobil: +49 151 7855017
E-Mail: Frank.Oemig@t-systems.com