



German FHIR® Specification of the Laboratory Report

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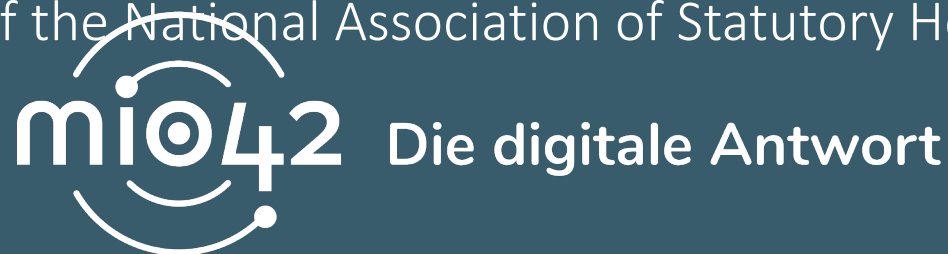
HL7 Europe WGM

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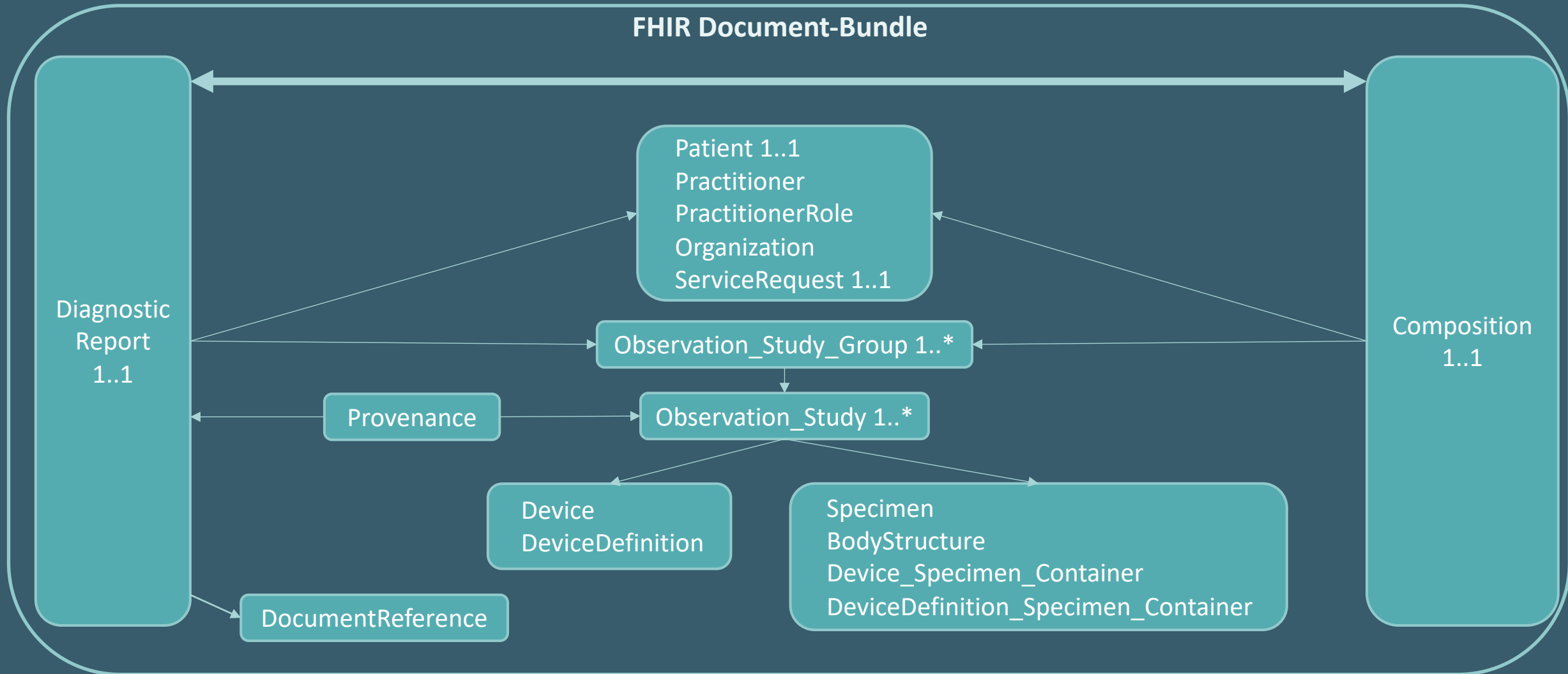
Background

- Multiple national projects tackle FHIR for laboratory data
 - Different scopes and use cases
- Harmonization kicked-off with national working group and currently ongoing
- We focus on laboratory reports in the German national patient record (ePA)
- Current scope: General laboratory reports, specialized results (e.g. microbiology) pending

„We“ – mio42, sub-company of the National Association of Statutory Health Insurance Physicians



Resources in the FHIR® Specification




















Participation in HL7 Europe Laboratory Report

- Frequent participation in HL7 Europe Meetings
- Adopted European decisions & propose national solutions for discussion
- Ongoing compatibility check for national specification

ARTEFAKTE			
eHN Guideline (Section Level) / Logical Model	MIO Informationsmodell	FHIR Ressource	Vergleich HL7 EU IG
Laboratory report Not mapped to IG: - Legal authenticator - Result validator - Document title - Report custodian - Confidentiality - Version	Komposition Laborbefund Laborgesamtbefund	Composition DiagnosticReport (Bundle) (Bundle Extension: Receiver Laboratory Result)	Kompatibel
Subject of care	Patientin	Patient	Kompatibel Abweichung: in MIO keine Tiere (Patient: Animal) vorgesehen, in HL7 EU IG schon
Health insurance and payment information Not mapped to IG: - Health insurance information - Health insurance code - Health insurance name	Patientin	Patient.identifier	Kompatibel Nur Versicherungsnummer
Information recipient	Laborauftrag-Informationen	ServiceRequest Bundle Extension: Receiver Laboratory	Kompatibel Abweichung: in HL7 EU IG über Extension in Composition, in

National Contributions to HL7 Europe Spec: BodyStructure

- Result of national discussion on BodyStructure brought into HL7 Europe working group
- Preadoption of R5 structure with laterality, body site, localisation, morphology

 BodyStructure	I			BodyStructure
  meta	Σ	1..1		Meta
  text		0..1		Narrative
  extension	S I	0..1		Extension
  laterality	S I	0..1		Extension
  morphology	S Σ	0..1		CodeableConcept
  location	S Σ	0..1		CodeableConcept
  locationQualifier	S	0..*		CodeableConcept
  patient	S Σ I	1..1		Reference(KBV_PR_MIO_LAB_Patient)

Harmonisation with HL7 Europe Spec: Composition

- Preparation of Bundle-free transmission in national FHIR-server-based eHR
- Follows HL7 Europe Spec, e.g. with Extensions for ServiceRequest & DiagnosticReport
- Sections for attachments (DocumentReferences), study groups and annotations

Composition	I	Composition
meta	Σ	1..1 Meta
text		0..1 Narrative
extension	S I	0..* Extension
basedOn-order-or-requisiti...	S I	0..* Extension(IdentifierReference(ServiceRequest))
diagnosticReport-reference	S I	0..1 Extension(Reference(DiagnosticReport))
status	S Σ ?!	1..1 code Binding
type	S Σ	1..1 CodeableConcept Binding
subject	S Σ I	1..1 Reference(KBV_PR_MIO_LAB_Patient)
date	S Σ	1..1 dateTime
author	S Σ I	1..* Reference(KBV_PR_MIO_LAB_Practitioner KBV...
title	S Σ	1..1 string Pattern
custodian	S Σ I	0..1 Reference(Organization)
section	S I	1..* BackboneElement
(All Slices)		
anhaenge	S I	0..1 BackboneElement
lab-no-subsections	S I	1..* BackboneElement
annotations	S I	0..1 BackboneElement



Thanks for the exchange!

For more let's chat later or meet again at the FHIR DevDays.

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