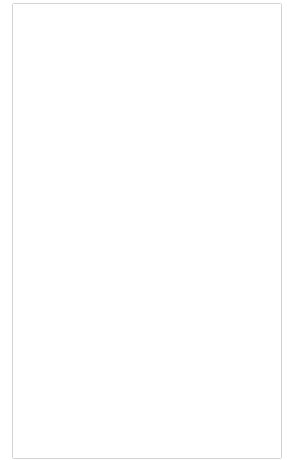




HL7 Deutschland e. V.



HL7 FHIR NACH AMERIKANISCHEM VORBILD: NOTFALLDATEN & MEANINGFUL USE

Simone Heckmann – Leitung Technisches Komitee

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REFERENTIN

Simone Heckmann
Geschäftsführerin Health-Comm GmbH
Leiterin des TCs für HL7 V2/FHIR
simone.heckmann@gefyrä.de





Was bedeutet Meaningful Use?

- Verbesserung von Qualität, Sicherheit, Effizienz in der Gesundheitsversorgung
- Patienten und Angehörige einbeziehen
- Verbesserung der Pflege-Koordination
- Personenbezogene Gesundheitsdaten adäquat absichern
- Verbesserung der Populationsgesundheit



Meaningful Use - Staging

Stage 1 (2010)

- Promotes basic EHR adoption and data gathering

Stage 2 (2014)

- Emphasizes exchange of patient information

Stage 3 (2018)

- Improves healthcare outcomes



Anreizsystem

“The incentive payments range from \$44,000 over 5 years for the Medicare providers and \$63,750 over 6 years for Medicaid providers (starting in 2011). Participation in the MIPS EHR incentive program is totally voluntary, however if EPs or EOs fail to join in by 2015, there will be negative adjustments to their Medicare/Medicaid fees starting at 1% reduction and escalating to 3% reduction by 2017 and beyond.”

tl;dr
Wer mitmacht bekommt
Geld, wer nicht mitmacht
verliert Geld



JASON

- Gruppe von Elite-Wissenschaftlern, die die US Regierung in sensiblen Fragen der Wissenschaft und Technologie beraten
- Besteht seit 1960 und hat zwischen 30 und 60 Mitgliedern
- Berät hauptsächlich in militärischen Themen, aber auch in Umweltschutz, Informatik, erneuerbaren Energien, Cyberwarfare und Health-IT



Der JASON-Report (2014)

*“The JTF recommends that Meaningful Use Stage 3 include certification and incentives for inclusion of a Public API in Certified EHR Technology.[..] We believe that Meaningful Use Stage 3 and associated certification will be important drivers in the **long transition to a Public API-based health information exchange model.[..]** “*



Der JASON-Report (2014)

“We are at an awkward moment in standards development: Older standards such as XDS/XCA are mature but inherently limited, whereas newer API-based standards are not yet ready for large-scale adoption.”



Der JASON-Report (2014)

*“We believe it would be detrimental to lock the industry in to older standards, and thus, **we recommend that ONC mobilize an accelerated standards development process to ready an initial specification of FHIR for certification to support MU Stage 3.**”*



Das „Argonaut Project“

- Privatwirtschaftliche initiative zur Förderung der Verbreitung moderner Standards in der Industrie
- Ziel: schnelle gemeinsame Entwicklung einer ersten FHIR-basierten API für den Datenaustausch mit EHRs (Minimalkonsens)
- Umsetzung der Empfehlungen des JASON Task Force Reports



Argonaut Project Sponsors

- Accenture
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- Beth Israel Deaconess Medical Center
- Boston Children's Hospital Computational Health Informatics
- Cerner
- Epic
- Intermountain Healthcare
- Mayo Clinic
- MEDITECH
- McKesson
- Partners HealthCare System
- The Advisory Board Company
- Surescripts



Argonaut Implementation Guide





Argonaut Results

- SMART App Authorization Guide
 - ▶ OAuth 2.0 profile for authorizing apps to access FHIR data
- Argonaut Data Query Implementation Guide (v 1.0.0)
 - ▶ Security and Authorization
 - ▶ Data element query of the ONC Common Clinical Data Set
 - ▶ Document query of static documents
- Argonaut Provider Directory Implementation Guide (v 1.0.0)
- Argonaut Scheduling Implementation Guide
- Argonaut CDS Hooks Implementation Guide

Argonaut Data Query Implementation Guide Version 1.0.0

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This is the current officially published version of *The Argonaut Data Query Implementation Guide* Version 1.0.0. For list of available versions, see the [Directory of published versions](#) 

Argonaut Data Query Implementation Guide

The Argonaut Data Query Implementation Guide is based upon the core [FHIR DSTU2 API](#) and its documents:

- Security and Authorization
- Data element query of the ONC Common Clinical Data Set
- Document query of static documents

Use Cases

This specification describes four use cases and sets search expectations for each. For complete details and background, see [Use Cases](#) for the Argonaut Project.

1. Patient uses provider-approved web application to access health data
2. Patient uses provider-approved mobile app to access health data
3. Clinician uses provider-approved web application to access health data
4. Clinician uses provider-approved mobile app to access health data

Note, the Common MU Data Set referenced in the Use Cases is now the ONC 2015 Common Clinical Data Set .

Security

Argonaut uses SMART on FHIR authorization for apps that connect to EHR data. For details, see [SMART on FHIR Authorization Guide](#) and the [Argonaut Sprint Definitions](#).



US Core Implementation Guide CI Build



- Home
- General Guidance
- US Core Profiles
- Extensions
- Terminology
- Search Parameters
- Capability Statements
- Security
- Downloads

This is the Continuous Integration Build of the US Core FHIR Implementation Guide, based on [FHIR Version 3.0.0](#). (will be incorrect/inconsistent at times). See the [Directory of published versions](#) [↗](#)

US Core Implementation Guide

Introduction

The US Core Implementation Guide is based on [FHIR Version 3.0.0](#) and defines the minimum conformance requirements for accessing patient data as defined by the [Argonaut](#) pilot implementations and the [ONC 2015 Edition Common Clinical Data Set \(CCDS\)](#). These profiles are intended to be the foundation for future US Realm FHIR implementation guides. In addition to Argonaut, they are used by [DAF-Research](#), [QI-Core](#), and [CIMI](#). Under the guidance of HL7 and the HL7 US Realm Steering Committee, the content will expand in future versions to meet the needs specific to the US Realm.

These requirements were originally developed, balloted, and published in FHIR DSTU2 as part of the [Office of the National Coordinator for Health Information Technology \(ONC\)](#) sponsored [Data Access Framework \(DAF\)](#) project. For more information on how DAF became US Core see the [US Core change notes](#).

Profiles defined as part of the US Core Implementation Guide

The following profiles set the minimum expectations to record, search and fetch health data associated with a Patient:

- [US Core AllergyIntolerance Profile](#)
- [US Core CareTeam Profile](#)
- [US Core Condition \(a.k.a Problem\) Profile](#)
- [US Core Device Profile](#)
- [US Core DiagnosticReport Profile](#)
- [US Core Goal Profile](#)
- [US Core Immunization Profile](#)
- [US Core Location Profile](#)
- [US Core Medication Profile](#)
- [US Core MedicationRequest Profile](#)
- [US Core MedicationStatement Profile](#)
- [US Core Practitioner Profile](#)
- [US Core Procedure Profile](#)
- [US Core Results Profile](#)
- [US Core Smoking Status Profile](#)
- [US Core CarePlan Profile](#)
- [US Core Organization Core Profile](#)
- [US Core Patient Profile](#)
- [Vital Signs Profile](#) (From FHIR Core Profiles for Observation)

Text Summary

Differential Table

Snapshot Table

All







Name	Flags	Card.	Type	Description & Constraints
 AllergyIntolerance		0..*		US Core Allergies Profile
 clinicalStatus	S	0..1	code	Binding: AllergyIntoleranceClinicalStatus (required)
 verificationStatus	S	1..1	code	Binding: AllergyIntoleranceVerificationStatus (required)
 code	S	1..1	CodeableConcept	Binding: US Core Substance-Reactant for Intolerance and Negation Codes (extensible)
 patient	S	1..1	Reference(US Core Patient Profile)	

Text Summary

Differential Table

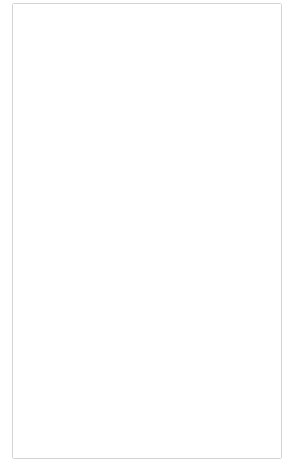
Snapshot Table

All

Name	Flags	Card.	Type	Description & Constraints
 Condition	I	0..*		US Core Condition Profile
 clinicalStatus	S	0..1	code	us-core-1: A code in Condition.category SHOULD be from US Core Condition Category Codes value set. Binding: Condition Clinical Status Codes (required)
 verificationStatus	S	1..1	code	Binding: ConditionVerificationStatus (required)
 category	S I	1..*	CodeableConcept	Binding: US Core Condition Category Codes (preferred)
 code	S	1..1	CodeableConcept	Binding: Problem Value Set (extensible)
 subject	S	1..1	Reference(US Core Patient Profile)	



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