



UK/US Standards Comparison

Strategic Context

Under the auspices of the 2016 Memorandum of Understanding, NHS England and HHS have agreed to work as collaboratively on various data initiatives with the area of 'Interoperability' being a key shared areas of focus. As a first activity, it was agreed to set out across the US-UK the current available standards to provide clarity to the supplier market on the alignment across the US-UK and how to look to align the use of these standards where appropriate. The table below sets out some of the standards currently in use across both countries. In some cases there is already a clear convergence in the use of standards so the work will focus on defining the semantic content of the standard or the profiling to ensure that they are interoperable in practice. Where the standards are not convergent, there may be a clear reason such as the UK specific NHS Number for patients and for others this indicates that there is work to do in these areas to understand how to begin to align them.

As part of the National Information Board roadmaps, the Interoperability Strategy outlines the key building blocks for information sharing based upon open interfaces "Open API" and open industry standards.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/465064/Work_Stream_2.1_Final.pdf - Appendix C)

At the same time, the Office of the National Coordinator for Health IT has developed its Interoperability roadmap <https://www.healthit.gov/sites/default/files/hie-interoperability/nationwide-interoperability-roadmap-final-version-1.0.pdf> and listing of the "Best Available Standards and Implementation Specifications" for clinical health IT. See www.healthIT.gov/standards-advisory for the latest version of the ISA and greater detail about the use of standards in the United States.

Next steps

Within this collaborative project, we will focus on areas of alignment. We are already trialling this approach in the area of open interfaces using FHIR-based standards. The intention is to then outline the Open APIs roadmaps across both geographies and the alignment between them.



Standards Group	Functional Area	UK Standard(s)	US Standard(s)
Identifiers	Patient Identifier	NHS Number	
	Staff Identifier	SDS (Structured Directory Service)	NPI (National Provider Identifier)
	Organisation Identifier	ODS (Organisational Data Service)	
Clinical Terminology	Diagnoses	ICD-10 SNOMED-CT	ICD10-CM SNOMED-CT
	Procedures	OPCS SNOMED-CT	SNOMED-CT CPT-4/HCPCS ICD-10-PCS
	Medications	dm+d	RxNorm NDC NDF-RT
	Allergies	SNOMED-CT	SNOMED-CT
	Lab Tests	PBCL/NLMC	LOINC
	Numerical references and values	UCUM	UCUM



Standards Group	Functional Area	UK Standard(s)	US Standard(s)
Administrative Terminology	Ethnicity	Data Dictionary	OMB standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity, Statistical Policy Directive No. 15, Oct 30, 1997
	Language	ISO 639	RFC 5646
	Sex	Data Dictionary	HL7 v3 Value Set: Administrative Gender
	Gender	Data Dictionary	SNOMED-CT
Structured Messaging	Admission	HL7 v2 (internally) HL7 v3	HL7 v2.5.1 (or later)ADT message
	Discharge	HL7 v2 (internally) HL7 v3	HL7 v2.5.1 (or later)ADT message
	Transfer	HL7 v2 (internally) HL7 v3	HL7 v2.5.1 (or later)ADT message
	Electronic Prescribing	HL7 v3 (national)	NCPDP SCRIPT Version 10.6
	Images	DICOM	DICOM

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Structured Messaging	Lab tests	HL7 v2	HL7 2.5.1
	Summary care record	HL7 v3 CDA FHIR	HL7 C-CDA 1.1 HL7 C-CDA 2.1*
Transport and infrastructure Standards	An unsolicited “push” of clinical health information to a known destination	W3C (SOAP et al) ebXML (OASIS) HTTP TLS SMTP FHIR RESTful API	Applicability Statement for Secure Health Transport v1.1 (“Direct”) IHE-XDR
	Data sharing through Service Oriented Architecture (SOA) - that enables two systems to interoperate together	W3C (SOAP et al) ebXML (OASIS) HTTP TLS SMTP FHIR RESTful API	SOAP-Based Secure Transport RTM IHE-XDR NwHIN Specification: Messaging Platform NwHIN Specification: Authorization Framework FHIR DSTU 2*



Standards Group	Functional Area	UK Standard(s)	US Standard(s)
Transport and infrastructure Standards	Query for documents within a specific health information exchange domain	W3C (SOAP et al) ebXML (OASIS) HTTP TLS SMTP FHIR RESTful API	IHE-XDS IHE-PDQ IHE-PIX IHE-MHD*

* designates an “Emerging Alternative” standard or implementation specification. More information and detail can be found in the latest ISA.