IHE Work Item Proposal (Short)

# Proposed Work Item: Data Access Framework Document Access Implementation Guide

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Domain: IT Infrastructure Technical Framework and Patient Care Coordination.

# The Problem

The nation is reaching a critical mass of Health IT systems (EHRs, Data Warehouses etc.) that comply with data and vocabulary standards. The wide deployment of Health IT systems has created unique opportunities for Providers, Provider Support Teams, Healthcare Professionals and Organizations etc. to access and use the patient data that is already collected during clinical workflows. This information (represented as clinical encounter documents) may not be readily accessible through the applications to which the relevant party has access. Allowing access to these documents can enable a Provider to further analyze the collected data to understand a patient’s overall health, the health of a Provider’s collective patient population, and use the data to power innovative analytics applications and tools to take better care of patients and populations.

A single IHE profile typically does not address all of the document access requirements outlined in [DAF use cases](http://wiki.siframework.org/DAF+Use+Cases), however a Data Access Framework using multiple existing IHE profiles will enable document access for a wide variety of use cases and reduce integration costs by encouraging standards based integration both within an across communities. This has been documented as part of the [Data Access Framework IHE white paper](http://www.ihe.net/uploadedFiles/Documents/PCC/IHE_PCC_White_Paper_DAF_Rev1.0_2014-03-28.pdf). While the DAF IHE white paper identifies the various combinations of IHE profiles that can be used to accomplish various [DAF use cases](http://wiki.siframework.org/DAF+Use+Cases), it does not specify detailed conformance requirements across the various profiles for implementers to achieve interoperability. In other words specific profiles have to be chosen (for e.g XCA vs XDS, EUA vs XUA vs IUA) and implemented by vendors to achieve interoperability for DAF use cases.

# Key Use Case

The following are some key use cases that DAF is expected to support

* Allow healthcare professional to access patient encounter documents using ad-hoc queries for the past 5 years to check for their HbA1C levels both within and across enterprises.
* Allow healthcare professionals to extract all healthcare records (documents) for a patient who is moving from one state to another state and requires the records to establish a health baseline.

# Standards & Systems

The following is an excerpt from the [Data Access Framework IHE white paper](http://www.ihe.net/uploadedFiles/Documents/PCC/IHE_PCC_White_Paper_DAF_Rev1.0_2014-03-28.pdf) identifying the various standards that are applicable to DAF Document Access.

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| --- | --- | --- | --- | --- | --- |
| Data Access | Behavior Model | Network Transport | Implementable Information  Model | IHE Profile | |
| Patient | Population |
| Encounter Documents and Metadata | Request/Response | SOAP | ebXML RIM+CDA | XDS/XCA | MPQ |
| REST | FHIR+CDA | MHD | Gap3 |
| SMTP | Gap10 | | |
| Publish/Subscribe | SOAP | ebXML RIM+CDA | DSUB | Gap4 |
| REST | FHIR+CDA | Gap5 | |
| SMTP | Gap11 | | |

# Discussion

IHE PCC in collaboration with ONC S&I Framework developed [Data Access Framework IHE white paper](http://www.ihe.net/uploadedFiles/Documents/PCC/IHE_PCC_White_Paper_DAF_Rev1.0_2014-03-28.pdf) and the above proposed work is follow-on work to the white paper. The proposed work involves specifying requirements across multiple existing IHE profiles for accessing documents across systems. Specifically the DAF Document Access Implementation Guide would specify the requirements for Requestors and Responders for querying Encounter Documents using Encounter Metadata both IntraEnterprise and across Enterprises using the existing IHE profiles. This activity will not address any of the gaps in the above table and is not expected to change any of the existing profiles.