

# FHIR Alignment with USCDI Panel

## **C-CDA on FHIR**

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# Consolidated CDA (C-CDA)

- HL7 Consult Note
- HL7 Diagnostic Imaging Report
- HL7 Discharge Summary
- HL7 History and Physical
- HL7 Operative Note
- HL7 Procedure Note
- HL7 Unstructured Documents
- HL7 Progress Notes
- HL7 Continuity of Care Document
- HITSP/C84 Consult and History & Physical Note Document
- HITSP/C32 - Summary Documents Using HL7 CCD
- HITSP/C48 Referral and Discharge Summary Document constructs
- HITSP/C62 Scanned document



Consolidate and harmonize various standalone documents into one master implementation guide for the primary care use case.

Later versions added additional document types:

- Care Plan
- Transfer Summary
- Referral Note

### Grahame's Law:

- You can hide complexity, or **make it worse**, but you can't make it go away.

### HL7 V3 was more complex than necessary.

- Simple technical problems became road-blocks for many implementers.

### CDA was the stable, simpler part of HL7 V3.

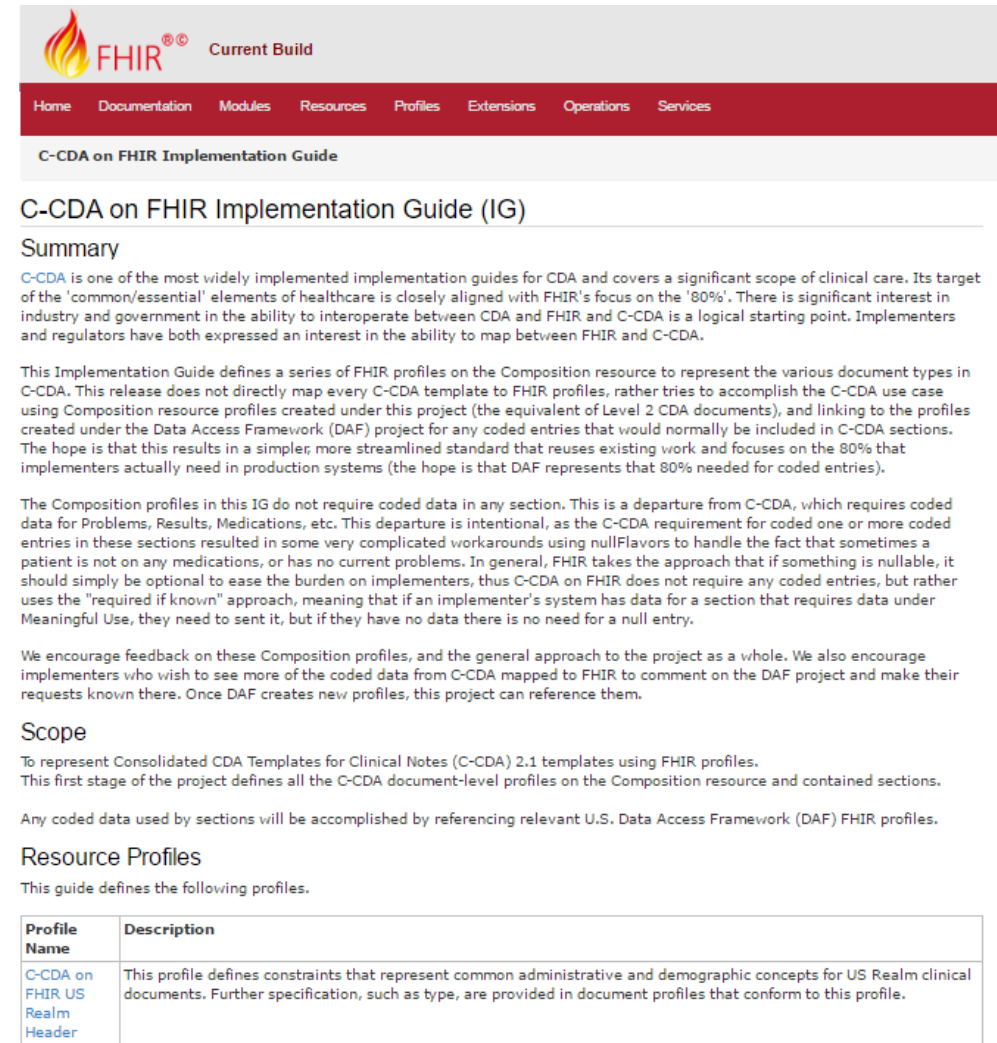
- But inherited much of the V3 complexity
- Never had a viable API complement
- Filled vacuum including inappropriate use cases

### FHIR makes many simple problems simple again.

- Lets implementers focus on solving the hard problems.
- Lets CDA be about documents; FHIR be about data transfer
- CDA can use the V3 syntax or FHIR

## US Realm FHIR Implementation Guide (IG)

- Goal
  - FHIR profiles for the C-CDA use case
  - Foundation for transitional roadmap
- Scope
  - Represent C-CDA templates using FHIR profiles.
  - Focus on C-CDA document-level profiles using the Composition Resource.
  - Use US Core profiles for coded data.
  - Where no US Core profile exists, point to appropriate unprofiled resources.
- Location
  - <http://hl7.org/fhir/us/ccda/>



The screenshot shows the FHIR Current Build website. The header includes the FHIR logo and the text "Current Build". A navigation menu contains links for Home, Documentation, Modules, Resources, Profiles, Extensions, Operations, and Services. The main content area is titled "C-CDA on FHIR Implementation Guide" and includes a "Summary" section. The summary text states that C-CDA is one of the most widely implemented implementation guides for CDA and covers a significant scope of clinical care. It also mentions that the implementation guide defines a series of FHIR profiles on the Composition resource to represent various document types in C-CDA. The "Scope" section indicates that the guide represents Consolidated CDA Templates for Clinical Notes (C-CDA) 2.1 templates using FHIR profiles. The "Resource Profiles" section states that the guide defines the following profiles:

Profile Name	Description
C-CDA on FHIR US Realm Header	This profile defines constraints that represent common administrative and demographic concepts for US Realm clinical documents. Further specification, such as type, are provided in document profiles that conform to this profile.

## Why?

- HIE in a heterogenous environment:
  - Use preferred syntax/format
  - Bi-directional transforms as bridge.
  - Get US Core resources into FHIR
  - Continuity with better syntax and API
  - Comply with regulation
- CDA implementers
  - Create in CDA
  - Can convert to FHIR to support transition
- New implementers
  - Create in FHIR
  - Convert to CDA

## Example:

- ONC-HIP Pharmacist Care Plan (PhCP)
  - <https://www.healthit.gov/techlab/ipg/node/4/submission/1376>
- Dual IG development
- Open source transformations (XSLT)
  - <https://github.com/lantanagroup/PhCP-Public-Transforms>
- 22 vendors engaged
  - Most chose FHIR IG
  - Those with CDA infrastructure used CDA
- Care plan recipients
  - Community Care of North Carolina
  - Planned CDA back end; switched to FHIR
  - EHRs could receive either

### **C-CDA to FHIR mapping project**

- CDA logical model
- HL7 sanctioned mappings using FHIR Mapping Language
- May 2018, completion planned for September 2019

### **Creating dual CDA/FHIR IGs with transforms**

- Updated Pharmacist Care Plan (PhCP) – (STU ballot May 2019)
- Healthcare Associated Infection (HAI) Reports – (STU ballot Sept 2018)
- Electronic Initial Case Report (eICR) – (STU ballot Sept 2018)

### **Adding Unstructured Documents (US Core DocumentReference profile)**

### **Updating C-CDA on FHIR**

- FHIR R4
- Updated US Core Profiles
- Create profiles not covered by US Core deemed high priority