

CDA ↔ FHIR TRANSFORMS

FHIR Application Roundtable Presentation

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Mission:

- Improve healthcare through health information technology (IT)
- Lead through our consulting and volunteer practice

Value Proposition:

- Interoperability for care coordination, system integration, and a comprehensive, longitudinal record
- Information extraction for measurement and reporting, decision support, and improvement

Services:

- Strategic planning
- Implementation
- Specification development and testing

An ONC High Impact Pilot grant

- Create a pharmacist care plan (PhCP) to support the move to value based care
- Pilot with implementers to test and refine a standard for pharmacist care plans
- Collaborators:
 - Community Care of North Carolina (CCNC)
 - PioneerRx
 - QS/1

Project Objectives

Improve practice efficiency

- Eliminate duplication of effort by pharmacists
- Allow pharmacists to focus on high risk patients
- Support greater patient engagement

Improve clinical quality

- Increase structured data capture
- Support shift to automated, electronic quality measurement

Support interoperable exchange

- Close a gap in current standard specifications
- Support sharing of structured data from patient interactions between providers, pharmacist and payers


Three key tools placed into the public domain:

- CDA (Clinical Document Architecture) and FHIR® (Fast Health Interoperable Resources) implementation guides (IGs) for PhCPs
- A library of bi-directional transformations converting PhCP FHIR to and from PhCP CDA
- PhCP FHIR and PhCP CDA training for implementers delivered in person and materials delivered to ONC

Dual CDA/FHIR IGs

- First dual CDA/FHIR IG development project
- Included CDA and FHIR examples
- Demonstrated a viable pathway for CDA/FHIR integration and transition planning

CDAR2_IG_CCDA_MTM_CAREPLAN_R1_01_2017SEP_Introductory_Material

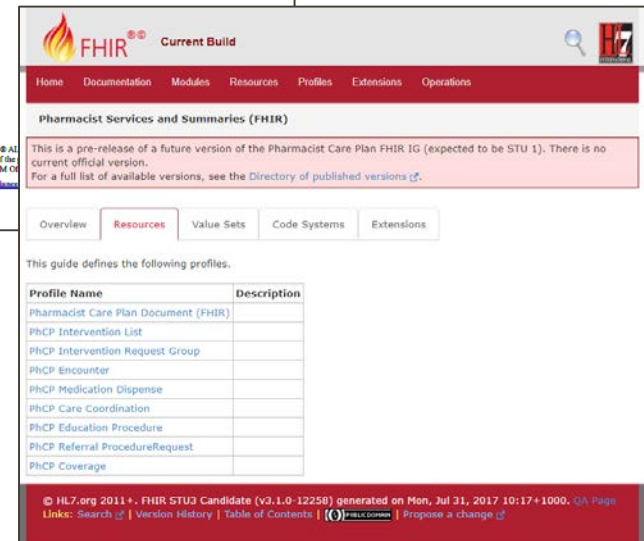


HL7 CDA® R2 Implementation Guide: Pharmacist Care Plan Document, Release 1 - US Realm
Volume 1 — Introductory Material
September 2017

1st Comment-Only Ballot

Sponsored by:
Structured Documents Work Group
Pharmacy Work Group

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FHIR Current Build

Home Documentation Modules Resources Profiles Extensions Operations

Pharmacist Services and Summaries (FHIR)

This is a pre-release of a future version of the Pharmacist Care Plan FHIR IG (expected to be STU 1). There is no current official version.
For a full list of available versions, see the [Directory of published versions](#).

Overview **Resources** Value Sets Code Systems Extensions

This guide defines the following profiles.

Profile Name	Description
Pharmacist Care Plan Document (FHIR)	
PhCP Intervention List	
PhCP Intervention Request Group	
PhCP Encounter	
PhCP Medication Dispense	
PhCP Care Coordination	
PhCP Education Procedure	
PhCP Referral ProcedureRequest	
PhCP Coverage	

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CDA ↔ FHIR Transformations

- Open Source
- Targets the PhCP document type, but extendable to others
- Bi-Directional
 - FHIR to CDA: Comply with existing C-CDA standards while moving early to FHIR
 - CDA to FHIR: load FHIR systems and servers with C-CDA data
- <https://github.com/lantanagroup/PhCP-Public-Transforms>

- **Live**
 - Convert CDA document to FHIR document using XSLT
 - Convert FHIR documents to CDA document using XSLT.

CDA to FHIR Transformation

```
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  <code code="5
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  <translatio
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  </code>
  <statusCode c
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Successful ONC High Impact Pilot

- Pilot Period: June 1 – August 31, 2017
- Vendor interest: grew from three initial adopters to 22 participating vendors
- ~4,000 messages received from 100+ pharmacies

Successful incorporation of structured pharmacy data into the clinical record

Alignment efforts in IGs allowed for easy uptake in CDA or FHIR

Uptake of PhCPs

Month	Number of PhCPs Shared	Participating Pharmacies
June	537	30
July	999	61
August	2308	53
September	2035	88
October	3837	102