Dental Interop Home

Dental home wayfinding ...

Overview

Dental care is common to everyone ... everywhere! Historically, though, the information created during every visit to a dentist is either relegated to paper record systems, or is increasingly captured and managed in a dental electronic health record. However, electronic dental record systems (EDRS) are almost universally islands of information with little to no connectivity outside a dentist's practice. This dental informatics interoperability initiative is a joint HL7 - ADA (American Dental Association) effort to address this gap and set the stage for improved care quality through the availability of granular dental care information across the ecosystem, from individual dental practices to hospital-based care, from private care to public agencies, from small standalone EDRS's to EHRs, and even between HIEs and CIEs.

Though early discussions around dental interoperability focused on the development of implementation guidance around HL7 V2 messaging as well as HL7 FHIR, it quickly became clear that the effort should first focus on the collection of storylines that illustrate the challenges and benefits from the seamless exchange and use of granular oral health and dental care information. Subsequent cross-paradigm storyboarding of high-interest use cases will help identify the stakeholder-actors, information exchanges, technologies involved, type of content, etc. With this in hand, we will be able to understand the specific interoperability guidance and standardization that should be pursued starting in 2019.

The effort is intended to be international in scope - as Dr. Ed Hammond said so eloquently: "Well ... *everyone* has teeth!" All are welcomed to provide their own stories - almost everyone has a dental story to tell - as well as perspectives on who should be actively involved, value propositions, technical challenges and opportunities, etc.

We invite you to participate in the initiative - we welcome and need ... everyone!

Participation in this *dental interoperability community of interest* is open to all those who want to help shape the direction and content of this initiative. To be added to the email listserv, please select the button below and provide your name, email address and "reason" for participating - in other words, anything from desire to monitor the discussion to providing stories that help understand the potential value of the seamless exchange of dental health and care information to participating in the development of content for the white paper (see below). NOTE: It may take up to 24 hours to be added to the email list - patience appreciated.

> ⓘ In order to add yourself to the listserv, you must have an HL7 Confluence/Jira account. To request one please navigate to https://confluence.hl7.org/ and select "Request an Account"

Sign Up for Dental-Interop Listserv

Dental Interoperability Investigational Project (DIIP)

The seamless exchange of detailed oral health and dental care information represents a very broad subject area, making it a challenge to understand the highest value "low hanging fruit" informatics standardization projects that should be pursued at the start of this leg of the interoperability journey. As a result, the near term task - leading up to the January 2019 HL7 WGM in San Antonio - is the creation of a broad community within HL7 that can capture and analyze dental care story lines and scenarios that clarify the stakeholders, the interactions, information exchanges, and interoperability opportunities that might be the targets of standardization. This effort will also help identify existing standards that can be directly leveraged from organizations such as HL7, the ADA and others.

This is the intent of the investigational project for dental interoperability (See DIIP Project Scope Statement (PSS)). The goal of this project will be to create a non-balloted white paper by the end of 2018, to enable a more informed examination of the topic during the January 2019 HL7 WGM in San Antonio. This project will pursue the identification of a representative set of use case scenarios, and the creation of cross-paradigm storyboards, such as this Payor Perspective for Value-Based Care document, for high-value high-interest use cases.   The resulting white paper will not only summarize this work but will provide prioritized recommendations for focused standardization projects.

Dental Interoperability White Paper (DRAFT)

Jira Issues / Tasking for White Paper

Dental Interoperability Stories

Dental care scenarios are being collected that illustrate the stakeholders and value propositions around the seamless exchange of dental care and related health information. The DIIProject above will select some of these scenario descriptions to perform more detailed cross-paradigm storyboarding, and ultimately the recommended standards and implementation guidance development will leverage use case analysis processes to ensure that work in the EHR-S space is coordinated and aligned to deliver on the recognized dental interoperability needs voiced by the community.

Interoperability stories are initially being captured in the white paper linked above, and reflect the broad range of dental care subject areas, ranging from young children and school-based health to our increasingly ageing population and clinics that focus on senior care. From referral and care coordination across a small region to international exchange when care is provided across the broadest geographies - planned or in response to emergencies. And information content that ranges from the simplest indicators of care provision, to detailed oral health assessment and care history to full imaging studies. All these areas provide opportunity for improved care and lives if dental interoperability is realized to connect disparate stakeholders (including primary medical care) and their digital health technologies.

Note: *use case stories / scenarios that were previously in a table here have been moved to the evolving DIIP white paper mentioned above*.

DentalFHIR Initiative

FHIR technology presents some excellent opportunities to engage a broader community of individuals and organizations than those who are engaged in informatics standardization, at HL7, the ADA, or elsewhere.

An initial Zulip stream has been created for #Dental - join in the discussion there!

Dental tracks at upcoming 2019 HL7 FHIR Connectathons are also under consideration.

International Coordination

There are pockets of activity around the world, especially focused on specific use cases and prototyping / implementation projects. Here are some of the countries interested and efforts underway:

	Geography	Areas of Interest / Projects	Contacts	Comments / References / Links
1	**Canada**	All Canadian dental care reimbursements are processed today using FHIR-based exchanges	Melva Peters Paul Knapp	The Canadian experience should provide a strong background in identifying the value of interoperable, granular dental information.
2	**Europe**	HL7 Europe & HL7 Foundation has had engagement with various dental care organizations and projects.	Catherine Chronaki	Catherine indicated that there were a number of areas of dental informatics projects in Europe, including the project in Portugal (see below)
3	**Norway**	Project for dental information registry (proposed using IHE XDS and HL7 FHIR)	Jørn Andre Jørgensen	Line Saele is the Norway delegate + co-chair for the HL7 International Council. Issue at the lack of FHIR profiles for dental informatics (e.g., issues @ dental anatomy); use cases will be added to the table above
4	**Portugal**	Dental Patient Summary (using HL7 FHIR)	Anabela Santos	Referred by Catherine Chronaki (HL7 Europe)
5	**U.S.**	American Dental Association (ADA)	Jean Narcisi	Working with HL7 on this joint initiative
6		Department of Defense	Nancy Orvis	U.S. military related use cases requiring access to granular dental care information

NOTE: As more information is available, links from this table to other Confluence pages will be added.

Related HL7 Projects

There are a number of other projects within HL7 that have focused on dental informatics, including the following:

Project #1274 **HL7 CDA® R2** *Periodontal Attachment* **Implementation Guide: Exchange of C-CDA Based Documents, Release 1** *(status: published STU; Attachments WG; US Realm)*

Project #1402 **HL7 CDA® R2** *Orthodontic Attachment* **Implementation Guide, Release 1** (status: ballot comment resolution; Attachments WG; US Realm)

Project #1406 **EHR System** *Dental Functional Profile* (status: active; HL7 EHR WG)

Resources & Background Materials

This initiative ... of course ... is not the first time the interoperability challenges and opportunities for dental informatics have been considered, nor the nuts-and-bolts of oral health and dental care informatics that form the basis for the content that could be exchanged. The items called out in this section have been identified as particularly informative for this dental interoperability initiative, and may be included in a Bibliography or other sections of the white paper.

<include references table here => a separate page with this information as the length increases>

Recent space activity

Harry Solomon

Dental Interoperability White Paper updated Mar 07, 2019 • view change

Todd Cooper

Dental Interoperability White Paper updated Feb 28, 2019 • view change

Dental Interoperability White Paper commented Feb 26, 2019

Dental Interop Home updated Feb 12, 2019 • view change

Joshua Procious

Dental Interop Home updated Feb 05, 2019 • view change

Space contributors

- Harry Solomon 3 (346 days ago)
- Todd Cooper 116 (353 days ago)
- Joshua Procious 26 (376 days ago)
- Matthew Graham 1 (401 days ago)
- Dave Hamill 3 (443 days ago)
- Anne Wizauer 1 (460 days ago)
- Scott M. Robertson 1 (500 days ago)