

# **HL7 Ambulatory Oncology Functional Profile**

## **HL7 Task Group Kickoff Call**

January 14<sup>th</sup>, 2010

# Agenda

- 1:00 – 1:10 PM Welcome and Introductions
- 1:10 – 1:20 PM Background and Activities to Date
- 1:20 – 2:20 PM EHR-S Oncology FP Draft Overview
- 2:20 – 2:50 PM Task Group Operations
- 2:50 – 3:00 PM Engagement/Communication Tools

# Background and Activities to Date

- “Baseline” profile was devised as part of the National Cancer Institute’s (NCI) Cancer EHR (caEHR) project and incorporates:
  - Requirements from the Center for Cancer Prevention and Treatment (“Cancer Center”) at St. Joseph Hospital of Orange (SJO) EMR Request for Information (RFI) (January 2009).
  - Clinical Oncology Requirements (CORE) developed in collaboration with the American Society of Clinical Oncology (ASCO), NCI, and members of the NCI Community Cancer Center Program (NCCCP).
  - caEHR Domain Expert team input.
- Targeted business scope of “baseline” is **ambulatory oncology**.

# Background and Activities to Date

## Approach & Objective

- Methodology goal was to follow HL7 FM guidelines for profile development.
- Incoming objective was to establish a sound baseline suitable for submission as input to the HL7 community in order to seek broader community review and progression towards ballot.

# Background and Activities to Date

## Some of the Contributors ...

In addition to many ASCO and NCCCP contributors to the underlying requirements, caEHR core project team included (in alphabetical order):

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- Ann Setser
  - Bill Dumais
  - Brenda Duggan
  - Caterina Lasome
  - Charlie Mead
  - Christine Bester
  - Dianne Reeves
  - Dr. Raymond Lord
  - Dr. Anna Schorer
  - Dr. John Ellerton
  - Dr. Scott Herbert
  - Gene Kraus
  - Helen Stevens
  - Jean Duteau
  - John Koisch
  - John Speakman
  - Kevin Hurley
  - Lorraine Constable
  - Marc Koehn
  - Patrick Loyd
  - Paul Boyes
  - And others ...

# Background and Activities to Date

## Task Group Launch & Support Team

- Helen Stevens has led the work of getting approval for the project through the EHR Working Group and volunteered to facilitate the initial meeting(s).
- Paul Boyes has focused on ensuring architecture and (SA)EAF alignment and will be available as/when needed to support the Task Group in these areas.
- Christine Bester has lead caEHR business discussions with the domain expert team and will continue to provide a link to that team (some of whom may also be participating here!)

# EHR-S Ambulatory Oncology FP Draft Overview

## Overview Objectives

- Review / discuss storyboard work
- Understanding the structure of the Profile to enable offline review
- Identifying & tracking potential discussion topics / issues for subsequent calls
- ... Others?

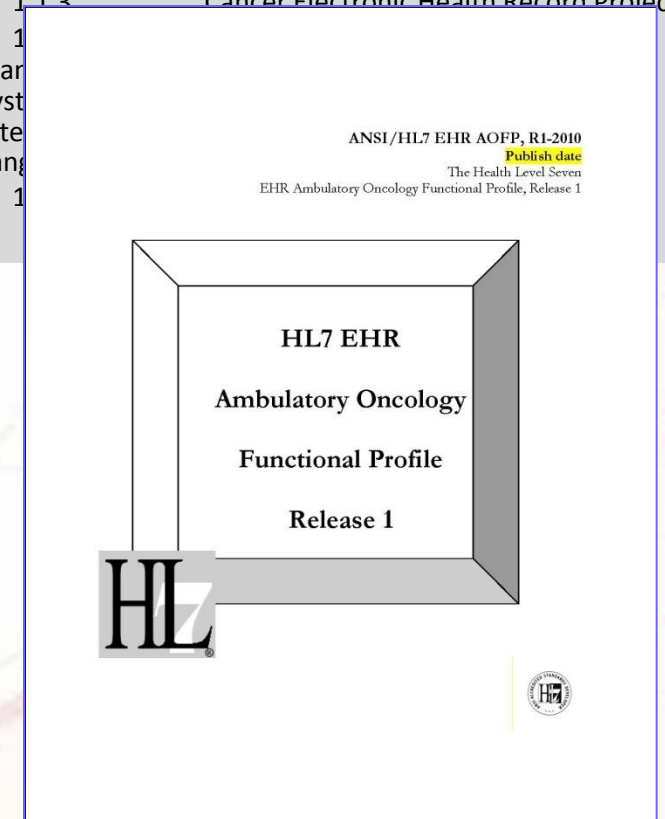
### Preface

- Notes to Readers
  - Reference and Normative Sections
- Acknowledgements
- Realm
- Changes from Previous Release

### 1 Introduction (Reference)

- 1.1 Background
  - 1.1.1 HL7 Electronic Health Record Functional Requirements
  - 1.1.2 Certification Commission on Health Information Technology
  - 1.1.3 Cancer Electronic Health Record Project

- 1.2 Star
- 1.3 Syst
- 1.4 Inte
- 1.5 Lang



# Use Case / Storyboard Development

- Traceability starts with the following pieces ....
  - Requirements – EHRs FM profiled as caEHRs FM
  - Business Concepts – Business Use Cases and Domain Model
  - User Scenarios – St. Joseph's User Scenarios, Transcend v1 Use Cases
- The Solution will comprise a set of services that support key capabilities that in turn support the caEHR
- The primary focus of traceability is the user stories and use cases
  - They are mapped to the caEHRs
  - They also are mapped to the capabilities that will emerge as services

## ■ Approach

- Develop baseline storyboard (Care of Oncology Patient)
- Develop hierarchy (structure & relationships) of use-cases required
- Develop use-cases with domain experts at multiple levels of detail.
- Outline behavioral, governance and informational details
- Review the use cases from an information flow perspective.
- Craft use cases to reflect architecture paradigm and system interactions
- Track use case progress, status and changes.

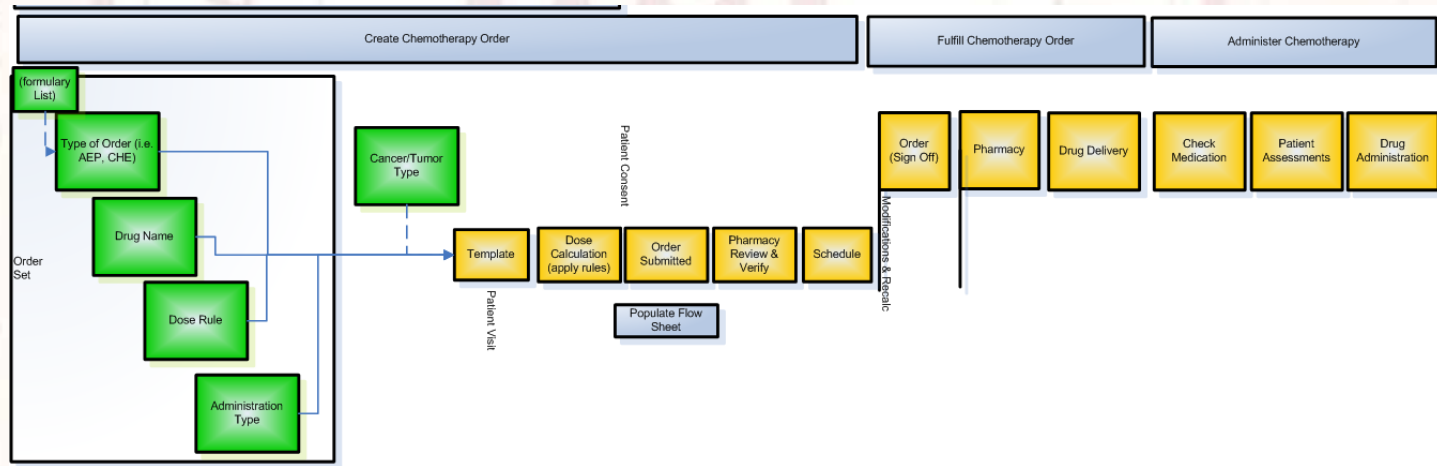
### caEHR Use Case

Title	Version	0.00
Scope	Level	0
FP Cross Ref		
Description		
Primary Actor		
Other Actors		
Triggers		
Preconditions		
Post Conditions		
Reader Notes		

Step	Business Narrative		
#	Issue & Progress Notes	Date Logged	Status
Ver	Author	Date	Comment

# 2. Ambulatory Oncology Storyboards (Reference)

- 2.1 Care of Oncology Patient
  - 2.2 Receive and Process Patient Referral
  - 2.4 Conduct Visit
  - 2.3 Manage Treatment
    - 2.4 Collect Diagnostic Data
    - 2.5 Administer Treatment Plan
      - 2.6 Create Chemotherapy Order
      - 2.7 Fulfill Chemotherapy Order
      - 2.7 Administer Chemotherapy
      - 2.8 Modify Chemotherapy Order



# 3. Ambulatory Oncology Narratives (Normative)

	Page		Page
3.1 Standard Assessments	19	3.13 Scheduling	24
3.2 Clinical Pathways/Guidelines	19	3.14 Report Generation	25
3.3 Treatment and Care Plans	20	3.15 Communications	25
3.4 Chemotherapy	20	3.16 Genealogical Relationships	25
3.5 Immunizations	21	3.17 Interpersonal Relationships	26
3.6 Clinical Research	22	3.18 Pain Management Tools	27
3.6.1 Research Identifiers	22	3.19 Adverse Event	27
3.7 Order Sets	22	3.20 Infrastructure	27
3.8 Templates	23	3.20.1 Data Elements	27
3.9 Order Alert	23	3.21 Regulation Criteria	27
3.10 Referrals	24	3.21.1 Privacy Functions	27
3.11 Medical Devices	24	3.21.2 Security Functions	27
3.12 Oncology Registries	24	3.21.3 Audit Trail Functions	28

# Profile Structure Sections

4. References (Reference)
5. Conformance Clause (Normative)
  - 5.1 Criterion Verbs
  - 5.2 Derived Profiles
6. Functional Profile Organization (Reference)
  - 6.1 Functional Types
  - 6.2 Functional Profile Attributes
    - 6.2.1 Change Flag
    - 6.2.2 Functional Priority
7. Direct Care Functions (Normative)
8. Supportive Functions (Normative)
9. Information Infrastructure Functions (Normative)

# Profile Development Methodology (todate)

- Phase 1 (Baseline Requirements):
  - Obtained baseline requirements from the Clinical Oncology Requirements for EHRs (CORE) group with membership from the National Cancer Institute (NCI) NCI National Cancer Community Center Programs (NCCCPs) and the American Society of Clinical Oncology (ASCO).
  - Obtained Functional Model from HL7 and created working worksheet (excel)
  - Solicited public comments of the CORE requirements
  - Vetted baseline requirements with NCI Domain Expert DE Team
  - Mapped baseline requirements to HL7 EHR-S FM R1.1
  - Mapped CCHIT Ambulatory Oncology to HL7 EHR-S FM R1.1
  - Validated mapping and resolve any questions/issues
- Developed General Profile information structure

# Creating the Conformance Clause

- Followed HL7 EHR-S Guidelines
  - Note: All Decisions are subject to ratification by the HL7 task group.
- Define Normative Verbs
  - Decision: Use HL7 EHR FM Normative Verbs unchanged (SHALL, SHOULD, MAY)
- Defined Priority Timeframe:
  - Decision: Use EN (Essential Now) for all functions required on 'day 1' for an operational Ambulatory Oncology EHR (AO-EHR)
  - Decision: Use EF (Essential Future) with "Release 2.0" for all future requirements – except –
  - Decision: Use EF with "Release 3.0" for all patient access to EHR requirements.
  - Decision: Use O (Optional) for all functions not required by an AO-EHR.
  - Decision: Use NS (not Supported) for all functions not desired in an AO-EHR
- Define Requirements for Claims:
  - Decision: Use similar requirements and language as existing Profile.
  - Language added to AO-EHR FP document
- Determine Extensibility:
  - Decision: AO-EHR FP will be explicit enough to be directly implemented; however, realms may choose to further constrain it.
  - Decision: Not to include specific requirements for terminologies, service specifications or interoperability standards in AO-FP.

# Validate Functions & Conformance Criteria

- Phase 2: Iterative review of all functions and their conformance criteria by analyst team and domain expert team
  - Validate requirements against use cases and storyboards
  - Does function need to be split to add children?
  - Are there changes/additions being considered for EHR-FM Release 2.0?
  - Are there changes/additions required based on Gap analysis and mapping with baseline requirements?
  - Determine if function language is adequate/appropriate
    - Adjust or develop profile comment or normative narrative to supplement
  - Develop conversation documents as needed to support discussions
  - Remove/constrain inappropriate or unnecessary Conditional SHALL statements
  - Remove /constrain inappropriate or unnecessary Dependant SHALL statements
  - Check language and use of verbs (Manage, maintain etc)
  - Determine if “Standards Based” can be specified / constrained
  - Check references to other criteria
  - Check that each function has at least one SHALL criteria
  - Review order/grouping of functions criteria
  - Check for dependencies co-relations
  - Assign priority to function (EN, EF, O, NS)
  - Validate conformance criteria normative verb is appropriate (constrain if needed)

# Deliverables production

- Excel: Workbook used to track each function against mappings, domain expert comments, functional profile development notes, EHR-S FM original language and FP proposed language.
  - Worksheet is large and quite complicated – not a good tool for soliciting input/comment, but useful for lead analyst to manage information and track changes.
- Word: Document to produce ballot candidate material
  - Track changes shows all changes from EHR-S FM Release 1.1
  - Column for FP Comment
  - Tool to solicit input/comments from task group members
- Word: Use Case, storyboard and conversation documents
  - Produced as-needed to support discussions within the task group

# Task Group Operations Discussion

- Co-chair / Project Lead(s) selection
- Meeting frequency and timing
  - Propose: bi-weekly, two hours, 1pm EST Thursday
- Review/discussion approach
  - Propose: Distribute Word document and solicit comments/input by Tuesday EOD before call. On call we will review all comments received in previous period and update materials. Conversation documents will be produced as needed to support discussion.
- Engagement / Communication Tools
  - HL7 list is setup: [ehroncology@lists.hl7.org](mailto:ehroncology@lists.hl7.org)
  - HL7 wiki is setup: [http://wiki.hl7.org/index.php?title=Oncology EHR Functional Profile](http://wiki.hl7.org/index.php?title=Oncology_EHR_Functional_Profile)

# Next Steps

- HL7 WGM Next week in Phoenix.
  - EHR WG Agenda Q4 on Tuesday.
- Project conference call in 2 weeks – Jan 28<sup>th</sup> at 1pm EST.
- Members to identify other potential interested parties – send link to the wiki.
  - Hospital view?
- Members to download documents from wiki and submit first comments by EOD Tuesday (Jan 26<sup>th</sup>).
  - Start with Overview document.
- Any questions issues – send to Helen & Carla
  - [Helen.stevens@gpinformatics.com](mailto:Helen.stevens@gpinformatics.com)
  - [cwood@altossolutions.com](mailto:cwood@altossolutions.com)