Conformant Reconciled Medication List (cRML) Project Update

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cRML Project

- Initial use case of the EHR Reducing Clinician Burden WG
  - Med rec at scheduled, outpatient visit of patient to clinician
- Multiple artifacts created by RCB WG
  - “As Is, To Be” narrative
  - Derivatives description (NCPDP)
  - Use Case worksheet
- UNMC – Center for Intelligent Healthcare (CIHC) project
  - Reference model specifications, associated artifacts
- Accuracy and authenticity (Reed Gelzer)
- Next steps
cRML Project

• Multiple artifacts created by RCB WG
  – cRML initiative project summary
  – “As Is, To Be” narrative
  – Derivatives description (NCPDP)
  – Use Case worksheet
  – Figma mockup (low-fidelity)

• Pathway to delivery – organization and modeling
  – https://confluence.hl7.org/display/EHR/Medication+List+Management+and+Reconciliation
  – Mindmap (Lucid Spark)
UNMC CIHC - cRML Project

• Objective – develop specifications to position cRML to become a reference model (not app/solution per se)

• Artifacts
  – Conceptual (high-level) model
  – Data architecture (detailed) model including representations among actors, workflows, data, and functionality
  – Functional (style guide) specifications – articulating system behaviors
  – High-fidelity wireframe (proof of concept) – including FHIR endpoint calls
cRML Wireframe (Bootstrap)

• End-to-end, full function, high-fidelity, .js wireframe
• Patient authentication (Oauth)
• Retrieval of appointment, EHR medication list (Epic sandbox)
• Markups: add, remove, edit, request refill, admin instructions
  – “Type ahead” name matching, dosages via NLM RxNorm
  – RxCUI as medication index (not NDC code)
• Printed reports (time sort for patient, alpha sort for MA, delta sort for clinician)
• Output: FHIR resource
cRML Project

• CIHC next steps
  – Refining reference representations (conceptual model, data architecture model, style guide)
  – Refining wireframe – usability
  – Manuscript (theme: patient safety) – targeting AMIA Clinical Informatics conference (May 2024)
  – Accuracy & authenticity – incorporation into reference representations
  – Developing / integrating .js into end-use systems (Saperi Systems, Story Health), with feedback to further inform cRML
cRML Project

• Next steps
  – Informing Pharmacy WG Standardized Medication Profile (ontology of medication lists – including “patient reported”)
  – Accuracy & authenticity – conformance specifications
  – Initiating an HL7 project to develop the HL7 EHR cRML functional profile – represented as tabs on spreadsheet:
    • Use case scenarios – events, actors, data requirements/input, data requirements/output, EHR action, mapping to EHR-S FM functions, EHR system functional requirements, conformance criteria
    • Action categories – trust and record infrastructure, record lifecycle events
If you don’t know where you are going, chances are you will end up somewhere else.

-- Yogi Berra (1925-2015)