Collaborative Project Candidate

Medication List Management and Reconciliation

<Documentation> Burden Reduction Focus Team

Status Update

April 12, 2021
Current Team (alphabetical)

Gary Dickinson
Reed Gelzer, MD
Lisa Masson, MD, MBA (Cedars-Sinai)
Brooke Penney, MSW, LGSW, MHSI (University of Alabama-Birmingham/UAB)
Keith Salzman, MD
David Schlossman, MD (Ind)
Noa Segal, PhD (Duke)
James Tcheng, MD (Duke)
Lincoln Weed (Ind)

With special thanks for additional end-use requirements input from UAB’s Dr. James Willig
Project Origination

Reducing Clinician Burden

• Challenge from CMS Representatives: Practical (utility and scale) project to address documentation burden

• Convened clinician interest group, reviewed options that met “utility and scale”

• Settled on “Trusted, accurate current medication list” as impactful
  • EHR “Medication Lists” are often out of date, untrustworthy
  • A lot of work and rework in curating current medications is difficult to find or lost in EHRs

• Very high utility for clinical decision making

• Good starting point for incremental address of complex interoperability challenges that also cause extensive burden (ex: Problem List, integration into Problem-Oriented Health Record)
Progress to Date

• “Minimum necessary for utility, impact” parameters
  • Capturing initial scope inclusions,
  • Capturing “parking lot for next steps” Ex: Inpatient, Outpatient non-Rx/OTC meds)

• End-user/implemender representation (Thank you University of Alabama at Birmingham, HIV Clinic)

• Basic environmental scan via participants’ experience with current systems

• User Scenario

• User Story Formalisms Framework

• Usability Factors Formalisms (Failure Mode and Effects Analysis-Thank you Dr. Segal)
Incremental Lessons Learned

Current systems capture useful, impactful clinical information that’s inaccessible, easier to re-do (over and over) than find.

“Re-work” is a huge drag rarely identified or measured thus rendering burden partially invisible while also expanding risk

Commitment to “Closed Loop” modeling and execution is critical, effective

• An information requirement identified must be methodically managed to closure
• “Truth” is dynamic, continuously maintained, revalidated to assure continuous trust
• Usability science captures these requirements, renders them actionable
Incremental Lessons Learned

Extraordinary amounts of information out there about “Burden”

Usability Science is mature and can be merged early into R&D for real world use projects.

Deep-dive project reveals:

- Complexity and additional risks, harms
- Solutions exist, in whole or in part
  - Ex: Universal queries for all-state Controlled Substances registries exist
  - Ex: NCPDP confirms existence of electronic “Rx never picked up by patient” message in pharmacy systems.
Current and Proposed Nexts

Closing out the Usability Failure Mode and Effects Analysis (FMEA)

Integrate the FMEA into the Use Case Formalisms which, in turn, map to development towards a Reconciled Medication List (RML) FHIR IG (Formal name remains TBD)

Update with CMS

Proposed: Convene a Pilot Development subgroup
• Establish Project Plan
• Translating the Usability-Informed Use Case into a Conformance-testable FHIR IG.
• Identifying support resources
• Creating, testing a lab version of the RML
• Implementing a pilot at UAB
Thank you

Questions, input welcome

Especially:
End-use/end-user interest, commitments
Resource commitments

Primary POCs are Gary Dickinson and Reed Gelzer

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