# Proposed Agenda

Given the short time until the May ballot, I believe we may wish to start the meeting identifying in what ways the vMR requires modifications and specifying what is in and out-of-scope. Let me propose an initial list for discussion purposes:

1. Enhanced expressivity
   1. New concepts (e.g., ‘Education/Training’ or QDM Interventions, ‘Radiology’ as opposed to Procedures?, ‘Laboratory’ as opposed to Procedure?)
   2. New attributes for existing concepts (e.g., ‘Radiation Dose’)
   3. Renaming and semantically disambiguating existing attributes (e.g., criticality, priority, severity, etc…)
   4. How does one address composite concepts such as a complex IV. vMR has an elegant approach that differs from the QDM.
   5. There are several questions that arise here: (1) How does one keep the model generic enough to not ‘overfit’ specific use cases (and become a DCM)? (2) How does one determine when (and how) to add a new concept or an attribute for a given concept so as to not unnecessarily bloat the model (80/20 rule)? (3) If one follows the 80/20 rule, how easy is it to extend the model to address the 20% not covered by the model? How can one ‘document’ and ‘validate’ extensions (e.g., profiles and profile registries).
2. Extensibility
   1. How does one extend the model? In particular,
      1. Can new concepts be added and how? (New clinical statements, specialized clinical concepts via extension of the model)
      2. Can new attributes be added and how?
   2. Should we change the current mechanism for attribute extension? What mechanism should we propose?
3. Changes to support richer Inferencing
   1. How to model two hierarchies: Concept hierarchies and state hierarchies? That is, a Substance Administration Proposal IS-A Proposal, a Substance Administration Proposal IS-A Substance Administration Clinical Statement which IS-A Clinical Statement
4. Machine-Processable Constraints
   1. How to represent them – last week we proposed JSON
   2. What are the pros and cons of the proposed approach (whether JSON or something else)
   3. Are there limitations in expressivity in the proposed approach
   4. How are other models solving this problem

# Polyhierarchies for Inferencing

Problem:

1. Need way to infer that a SubstanceAdministrationProposal is a Proposal.
2. Would like to retain the knowledge that both a SubstanceAdministrationProposal and SubstanceAdministrationOrder pertain to the administration of a substance.
3. Need consistency of stage-specific fields – (e.g., eventTime vs ProcedureTime, SubstanceAdministrationTime, etc…)
4. Other approaches?

Method 1 – Composition with Stage-Centric Tree

Illustrated here with generics.



Method 2 – Composition



Method 3 – Interfaces

