2 focus- scope conceptual model.  Extend beyond the healthe decisions.

HL7 and API4KB model.

Any thoughts or comments around the scope of what we shall be capturing around conceptual model.

Bryn- HED or clinical reason, the notion of defining the artifact without content.  Describing what it is so you have an identifier so you can associated responses.  So you can guide the message back from CDS based on the identifier.  We track the artifact and not the response back.

Yesterday CDS presentation by evolent, worked w deaconess health systems on Decision support, integrating it into their system.  Not interested in representing the content of the artifact but interested in tracking the multiple systems and response of the module.  So had module identifier.  W/I specific decision support modifier.  Drug to drug interaction and it is "xyz."

Have a registry of knowledge modules and relate that. Describe the content of the artifact.  Take DS form multiple sources and define the result to ensure they are identifying care gaps without replicating the care gaps.

VA -- had something Lorraine mentioned.

Having something like that.

Behavior of system and ability to track responses in

Interested in taxonomy for describing the types of derivations and deviations from a guideline that an artifact would have.  w/I the metadata the closest w have in clinical reasoning is to say the artifact from some reference.

Wanted to go further (Davida has done work on the metadata side).. What kinds of derivations you could make.  There was interest in using that type of information to describe those artifacts.  Describe the behavior so it can be used so you can understand on semantic level.

Attestation of the source material, the

Characterize the type of derivation.. With this , how did it deviate and what ways is the artifact used to derive.  We can say the artifact is derived from.  We used the threshold and can modify them for local usage.  Types of deviations used.  Can imagine the derivision .. All we can say semantically about the process is that it is derived.  Asked for more details, the work Davide has been doing captures more detail than the clinical reasoning than it is just derived.

At some level the CDS author can refer to the -- have to be in position to validate.  When they produce the CDS rule and it is their signature that they have created the derived.

(Emory Fry)

In KNART, able to document the journal article is based on, more than just a reference in a journal article but it is the paragraph and line that support the criteria of incl/exc criteria.  This presentation was asking for if you had that , is there a way to incorporate the derived work, then annotate this derived work as modified the work from the journal article.

Validate the reference was valid.

Charactering what the derivation looked like, we used the exclusion criteria but ignored the exception because it did not apply.  Ignored constraints. These types of deviations.

Robert-- there is an effort at the beginning of OMG, working on the requirements of what that would look like.  Showing how the artifact was created, derived, their original source, what was the chain of custody across the artifact, this underway to start developing the requirements.

Encourage bringing  "Pedigree and Providence " they are trying to support.  Project it was debated some time ago.

One is derivation of the provenance across artifacts and derivative works-- provenance issue.

What is the characteristic c of the data the rule or logic is being applied to … institutional, different of data from unknown -- clinical perspective, large degree of

Robert Lario -- that is what we are trying to capture..  Sources of data, underdesirable and highly reliable, trying to capture in that spec-- represent the confidence you have  in the info provided.

Lorraine's original question, what is the scope of work being done.  Initial step is to articulate the implementation of provenance for the representation of logic and explore the logic based on the provenance of data.  The artifact needs the metadata about the expectation against the rule was applied.  This rule should only be applied from this source or this type of source. In addition to the more common discussions around evidence.  Where and how much of that data we

The metadata needs to extend to the data that supports it.  With the caveat that this is being discussed at OMG (how not to have two separate conversations-- maybe best place to have this conversation is at OMG).  Scope is to make sure we document the touch points of knowledge efforts.

Current clinical reasoning model is a broader scope that includes measures -- or is this out of scope for us.

Emory Fry- if conceptual model across the catalog of HL7 across technology should be included.  Otherwise the FHIR has no conceptual model to relate to or

Bryn-- agree, the conceptual model will serve as a basis for including this.  It was excluded for HeD because of scope.  Given the clearly identified requirements from the space.  It is easy to incorporate from the conceptual model.  In sync w clinical reasoning and supported by terminologies.  Does not add scope to describe conceptually in this work.

Task for Lorraine was to go thru the existing spec and have an initial model from the current spec.

H…. Is a V3 spec.  Measure resource is based on the measure.  Measure resource used the HeD.

Emory Fry- q: when QDM and the measures conceptual work, how did they distinguish (assumptions based on bias), how did they measure as something distinct from a rule?  In their conceptual world.  A rule being used as included just calculations.  General agreement on what the difference is and how it is conceptualize.  The measure use a specific measure structure with well-defined calculations and methods.  In space in general , lots of vendors and tools that do what evoluent was showing yesterday. Rules are pt focused and inversion of the measure logic to say did they hi the numerator (Bryn).  There is general difference between the rule and measure itself.  Rules used to calculate and validate the measures are all part of the same taxonomy tree?  No, different-- a measure is a query you expect results from.  A rule is description of behavior you want to happen.  This is the part path makes a measures a different class.  Saying, I want a report.

On quality side of house, there is a ceiling these are separate classes.  Behaves us in our conceptual model not just to represent it but to describe it in how it works together.  Conceptual model develop scope that we can clearly articulate the difference between measures and rules.  If we borrow work from the quality arena, will not just adopt but work through how they work together.  Do we have good definitions. Measure resource itself describes the resource itself.  Especially around the metadata.  This has been across all resources.  Metadata structure. One place to work HTMF spec itself provides clear description about what a measure is and what it represents.  Formative spec.

Emory: ask Floyd offline to help us ID where that material might be documented.

To Lorraine)-- if this is the case, should we limit the scope of this new PSS to elucidate the difference between rules and measures and not address workflows that we want to include in operations the logical model needs to include it the next version?

Lorraine-  APMM work discussions in OMG for HC in knowledge artifact in relation to behavior, this might be something we care about.

Emory- agree whole heartedly, it has a value.  Impact for HC is being able to orchestrate that in health care which is workflow based.  Would advocate having workflow.

What is out of scope-

Bryn- is workflow an artifact.

Emory-yes, w caveat that workflow is prescriptive and has limited degrees of freedom, more aligned with a policy or a procedure.  An knowledge artifact or at least clinical knowledge or diagnosis aligns better with case management at OMG.  Knowledge artifact needs to discern when the KA (knowledge artifact) describes a behavior vs defining a boundary of prescriptive behaviors.  When do you correct the provider for not following a prescribed course? Vs when to follow the providers behavior?

Case management and bpms out of omg is knowledge artifacts.  Should discuss this to include case management.  Very prescriptive: this is how the form looks, this is how you document.  CM = this is the goal, as long as your course of action, we will leave you along.

Knowledge artifacts: how will you use (Robert Lario)-- or KA very autonomous.  AT a specific, some decisions lightweight y/n.  Clinical pathways, decision process may be very elaborate.  Can it consist of decision model.

Emory - agree, sometimes we conflate a CDS what we are talking about is actually 3 domains of knowledge that can be combined.  Head trauma, there are clinical justifications based on pathology about the workup . Independent from operational artifacts, within the current standard of care CT w/wo contrast is the expectation of how the workup is performed.  Regulatory knowledge that further constrains the diagnostic workup based on legal law.  Are we representing clinical, operationally or regulatory.  Where is the boundary of CDS artifact  vs the representation of the artifact.  Are they distinguishable, his bias is yes we need to do that.

What is out of scope?  What is in, then what is pulled out within the time.  For statement of scope that goes with the conceptual model, keep notes in mind and then look at what we covered within,

Workflow

Predictive models

Reconciling conceptual model around rules

Operational is out

Predictive model is out

Good scope boundary: things in the realm of the artifacts we currently represent within the specification of what we currently represent.

Provenance is in scope.  If include the metadata in addition to evidence behind the rule and the logic so we do not end up with tacked on as far as data.

Where in OMG is this discussion going.

For next week- -will have what is in the print spec.  Will reach out to Davida for conversation around API4KB