HEART proposal Example 2

Justin proposed that team members propose suggested resources, scopes and what they mean. The objective is to suggest positive solutions. None will be totally ‘correct’ but that is OK because together these suggestions can be combined and adjusted to reach the ‘correct’ solution. Based on that, I will create another stab as an alternative.

1. First, since HEART is based on FHIR, we should not expect any changes in FHIR, at least for the 1.0 version. The resources should be the FHIR resources. I am stating this as a discrete point. I think we all agree, but I would like to know that we do indeed concur.
2. In an attempt to simplify, my original list of resources was the list of FHIR resources that are implemented by the Argonaut group. Since this is the set that most of the current servers have implemented, we could expect them to be supported first. (I have no objection to the list being the complete list of FHIR resources, if that is preferred by the group.) This subset list also happens to correspond to the Common Clinical Data set. (I am suggesting that we start with this limited set in the assumption that we could implement HEART as soon as it is specified.)

* Patient demographics (Known as ‘patient’ per FHIR)
* Allergies
* Problems & Health concerns (Conditions)
* Vital Signs  (Category of Observations)
* Labs
* Smoking Status
* Care Team  (Some vendors have Care Plan of which Care Team is a subset.)
* Medications
* Immunizations
* Goals  
  ---- this next subset of resources could expand on the above list and are a continuation of the Argonaut implementation list.
* UDI  (Device)
* Procedures
* Plan of Treatment
* Assessment

1. The chart below is simply to demonstrate to those less familiar with FHIR how this might work. All of these results are per patient.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Common Name | FHIR Resource | Category if applies | Other filter |  |
| Patient demographics | Patient |  |  |  |
| Allergies | AllergyIntolerance |  |  |  |
| Problems and Health Concerns | Condition |  |  |  |
| Vital Signs | Observation | Vital-signs |  |  |
| Lab Results | DiagnosticReport | Lab |  |  |
| Smoking Status | Observation |  | Code=72166-2 |  |
| Care Team | CarePlan | CareTeam |  |  |
| Medications | MedicationStatement |  |  |  |
| Medications | MedicationOrder |  |  |  |
| Immunizations | Immunization |  |  |  |
| Goals | Goal |  |  |  |
| UDI | Device |  |  |  |
| Procedures | Procedure |  |  |  |
| Plan of Treatment | (Still being defined in re-sprint) |  |  |  |
| Assessment | (Still being defined in re-sprint) |  |  |  |

There are different filters for each resource type. These should not be addressed by HEART in terms of having our patient, Alice, provide varying permissions at that level.

1. Terminology: This group often uses different terminology which causes confusion. Eve has suggested several times that we focus on clarifying terminology and has begun that effort in her use case document. One term that has bothered me in the past is the term ‘Resource Set’. At the HL7 conference, Josh clarified this for me. My current understanding is that UMA uses ‘Resource Set’ for the same purpose as FHIR uses ‘Resource Type’, or as is often shortened in FHIR as ‘Resource’. So in FHIR, if we request medications for the patient Alice, we refer to the resource ‘Medications’, while UMA refers to this as a ‘Resource Set’ for the patient Alice. (The result would be a list of medications for Alice.) If this understanding is currently incorrect, can someone please correct it?
2. Grouping of resources: Let’s assume that we have agreed on the list of FHIR resources. I propose that we allow Alice to select which of the list she desires to share, with the addition of choices ‘all’ or ‘none’. The requests for the resources by the client would still be made individually for each resource. (To me the notion of ‘resource set’ implied that we would define a set of individual resources – say by some category. I would advise against using such a notion as it only complicates and does not add any benefits.)
3. Scopes
   1. Read/Write
4. In last week’s meeting, Justin referenced the current scope stream: individual, bulk, read, write. Since we are specifying HEART, I would assume this is always what the patient is specifying. So for HEART, the scope of ‘bulk’ is not relevant. Further we have scopes of Read, Write, or \*. I suggest that we allow Alice to specify Read, Write, and have the ability to specify both. These settings can be set either per resource or for all resources.  
     
   Two points should be noted:
5. Current implementations are supporting ‘Read’ and do not yet support ‘Write’. We may be fine with starting with just ‘Read’ for version 1.0.
6. Since Alice is defining what she is willing to share – wouldn’t that be the ‘Read’ case? I can imagine that we will see implementations where Alice controls her RS and in that case could specify ‘Write’ permissions. For the immediate future, I would be surprised if the EMR would allow Alice to give permissions to Dr. Bob to write to an EMR. There may be a case where Alice can give Dr. Bob permission to write to her PHR.
   1. Dates
      1. My understanding from yesterday’s conversation was that we do not want to include dates in the scopes on resources, per HEART. There are date filters available for some resources, but that is within the FHIR query specification, an outside of the HEART spec.
      2. Eve raised the objective of having expiration dates associated with the permissions granted, but that functionality does not apply to resource date scopes
      3. So ‘dates’ are not considered as a scope per this discussion.
   2. Confidentiality codes: I was the culprit that initially raised the case of Alice not wanting to share her HIV condition, but only sharing her non-HIV condition. I believe most of us would like to provide such a feature in HEART, but since that original discussion I am now of the opinion that we should NOT include this feature in version 1.0.
7. Confidentiality codes were suggested as a potential solution to this issue. It has been stated that some additional ‘magic’ needs to occur to make this viable. Since it is not currently supported in current FHIR implementation, adding this to HEART in version 1.0 could derail the effort.
8. Confidentiality codes are defined in FHIR as tags.
9. Confidentiality codes are not implemented in most of the current servers. Even if they were, there is not a consistent method to consistently code values across servers. This could lead to inconsistent results and be worse that not providing the feature at all.
10. If Alice desired to not share her ‘HIV’ condition, we would need to add a scope to the resource request asking the server to withhold data that matches the requested confidentiality settings. This scope is not currently defined in FHIR and we should not be attempting to change FHIR as part of our HEART 1.0 specification.
11. If I were running a RS, I certainly would not be willing to send Alice’s HIV condition to the client tagged as confidential and expect the client to not share it – instead I would want to not send the data at all – thus the requirement to add a new scope – which we should definitely avoid.