INTEROPEN 5 KEY DISCUSSION POINTS

On 30th November 2016 an **INTEROPen 5 workshop** was convened to

1. Review current INTEROPen activity
2. Discuss the PRSB POC paper https://interopen.ryver.com/#posts/1205660
3. Discuss next steps for INTEROPen / NHS Digital work

IN ATTEDANCE
INTEROPen members active in the FHIR profile curation team:

Cerner, CSC, Endeavour Health, IMS MAXIMS, NHS Digital (inc GPConnect Team), Orion Health, Ripple, with email contribution from Stalis and Blackpear.

SUMMARY

INTEROPen FHIR Curation Methodology
1. Regular Google Hangouts on Friday mornings with FHIR profile curation team have been occurring to define and review CareConnect FHIR profiles candidates
2. Google Excel spreadsheets are populated to describe rational for modifications – made visible on RYVER forums
   1. *Process managed by Jonny Homer, Jonny Rylands, Farzanah Nahid, Ben McAlister*
3. Candidate CareConnect profiles are published on INTEROPen website as snapshot view for all members to see and offer feedback via RYVER forums
   1. http://interopen.org/candidate-profiles/care-connect/
4. INTEROPen CareConnect candidate profile structure definitions are visible in GitHub: https://github.com/INTEROPen/interopen.org/tree/master/candidate-profiles/care-connect/StructureDefinition
5. These will ultimately be submitted as Pull Requests to a Master HL7 Repository following a HL7 balloting process https://github.com/HL7-UK/CareConnect-profiles/tree/master
   1. Methodology https://s3-us-west-1.amazonaws.com/contattafiles/tnt373/JghbFLTBAjtEU2B/Care-Connect%20gitflow%20model.pdf
   2. *Process managed by Dunmail Hodkinson, Jonny Rylands, Jonny Homer*
6. GPConnect team is using a "child" version (*profiling*) of CareConnect V1.0 profiles for defining the structured data view of the GPConnect GetRecord API
   1. *Process managed by Farzanah Nahid*
7. RYVER platform for open communication was felt to be adequate for now

INTEROPen Supplier Engagement
8. Limited supplier engagement and feedback in response to published profiles – this might improve once implementation sites start to come on board
9. Suggestions to improve engagement included:

1. Request "volunteer" lead supplier from a particular care domain to engage their respective supplier colleagues and represent that particular domain (e.g. pharmacy, PAS, Community, etc)
2. No dedicated PM from INTEROPen community in place – who can volunteer?
3. Need for a test environment – perhaps combined with NHS Digital FHIR server being developed (**Adam Hatherly, Senior Technical Architect, NHS Digital**)

FHIR Tooling

10. Better FHIR tooling required to allow individuals to identify FHIR profile changes (differentials) more easily, provide comments (both as clinicians or technical experts) with clear version control process that feeds into an editorial team review process.
11. ClinFHIR from David Hay is being developed which could be an interim solution here.
12. OpenEHR CKM principles helpful to incorporate (**Ian McNicoll to bridge learning**)

13. **ACTION:** Richard Kavanagh and Amir Mehrkar to kick of a FHIR tooling specification workstream - will be shared for feedback as part of the C4H Interoperability Board work.

GPConnect website

14. Website shown to group: increasing content being added to describe and educate on the CPConnect FHIR specification approach
15. Cheat Sheet https://nhsconnect.github.io/gpconnect/development_deliverables.html
16. GitHub repo of GPConnect structure definitions including CareConnect profiles: https://github.com/nhsconnect/gpconnect-fhir/tree/develop/StructureDefinitions
17. Need to have more visible clinical use cases for these APIs
18. GPconnect team welcomes direct engagement from suppliers via gpconnect@nhs.net
19. Suggestion made that a 1 day workshop of clinicians, involving the PRSB, would be helpful to convene to establish a whole bunch of simple clinical use cases to inform the GPConnect/CareConnect API workstream

20. **ACTION**: Glenn Collett to ask internally about historical use cases that define the GPConnect workstreams and share with the INTEROPen Group; consider 1 day clinical workshop.

CareConnect API Programme

21. Recognition that a CareConnect API programme is the next immediate focus for INTEROPen but human/financial resource for this was identified as a challenge
22. It was proposed that a high level CareConnect API documentation guidance, or a framework approach, was necessary to help to move the OpenAPI programme beyond GPConnect and into a more cross-care setting initiative (ie CareConnect).
    1. It was proposed that 3 key APIs could be defined to kick start this, with a supported connectathon, e.g. Problem, Allergy, Medication Statement API
23. The framework guidance would need to include the following information:
    1. FHIR specs

2. API interactions
3. Implementation guidance
4. Tooling guidance
5. Contractual information
6. Governance processes for version control
7. Proof of concept/demonstrator

24. It was recognised there would be inevitable implementer forks/deviations from the framework in some cases due to technical, contractual or timeline issues, but that over time convergence would be likely towards a set of national standard APIs

25. The development of the CareConnect programme would involve collaboration between NHS Digital, PRSB, HL7UK, INTEROPen/Implementers – in line with the PRSB POC draft proposal **(see Figure 3)**

26. The 12 Digital Exemplar trusts could also be approached to create the necessary provider end pull (and financial investment) to help drive the CareConnect API programme

27. The scope of the API work should fit with Michael's Story as the use cases described within refer to the integrated care continuum and have had clinical validation
http://interopen.org/content/IO4%20-%20Michael's%20Story%20-%20Introduction.pdf

28. It was suggested that the learning from the GPConnect programme could be harnessed and adapted into a national CareConnect Programme of work

29. **ACTION**: Ian McNicoll to contact Dr Paul Miller, SCIMP, to discuss Scotland's use of SCI XML (FHIR like)

30. **ACTION:** Richard Kavanagh will lead on discussions for a CareConnect API programme with NHS Digital, with Amir Mehrkar to provide input via INTEROPen/C4H Board. This is most likely to be run out of NHS Digital but in collaboration with INTEROPen/implementers and HL7 UK.

Summary

Overall, there was a recognition that INTEROPen had established itself as a useful collaborative community to drive input and engagement for the C4H OpenAPI vision as demonstrated by the number of FHIR CareConnect profiles now published on www.interopen.org. Also, having now more than 60 suppliers interested in an Open Standards FHIR approach, as well as provider organisations and clinical informatics and central body staff aware of the work, it was seen to be important to harness the engagement of INTEROPen to benefit a National OpenAPI agenda.

A clear commitment for funding/resource from both vendors in INTEROPen and NHS Digital was deemed to be essential if we are to deliver the CareConnect APIs at pace. In addition, INTEROPen members working on real world FHIR implementation projects should share their work with other members to help drive the FHIR profiling/API work.

The outputs of the ACTIONS list above will be shared for review with the Code4Health Interoperability Board and INTEROPen members to establish next steps.

Dr Amir Mehrkar, GP, CCIO Orion Health
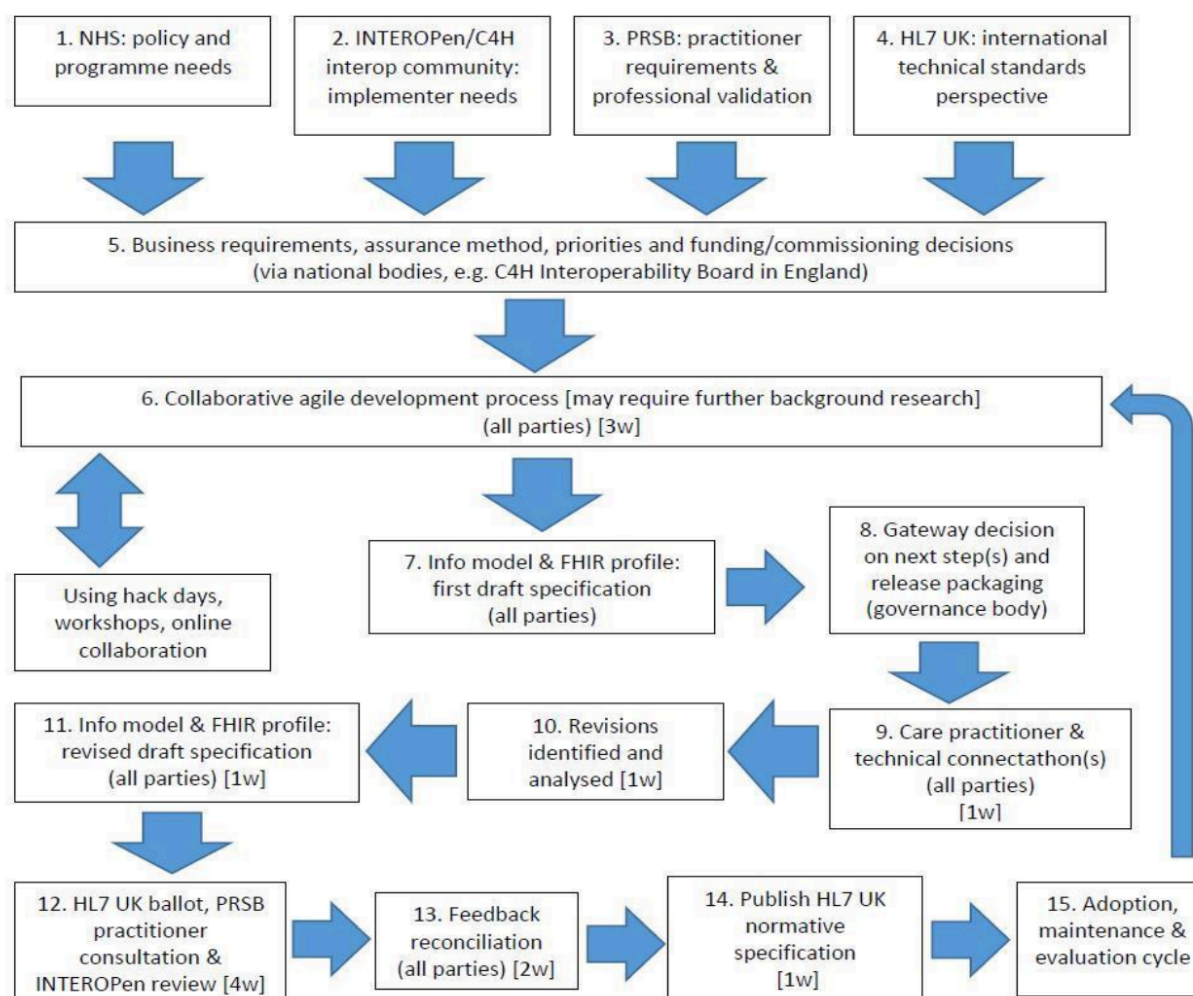INTEROPen & techUK C4H Interoperability Board Representative

Figure 3: Draft proposal for collaborative UK FHIR specifications (profiles and implementation guides).