

2019-Q2 Quarterly Report



HYPERLEDGER Healthcare SPECIAL INTEREST GROUP

Hyperledger HC-SIG Quarterly Report

Special Interest Group

Healthcare Special Interest Group (HC-SIG)

HC-SIG Overall Health

The HC-SIG continues to evolve as it grows its membership participation, and SIG engagement activities. We have successfully completed our transition to structure the general group to serve as a “front door” to better engage and keep prospective new members active in the community, align them with resources, and connect them more directly with our three HC-SIG subgroups and various ad hoc teams.

HC-SIG General Meetings are held regularly and are well-attended. It is clear that meeting topic and/or special guest speaker typically drives attendance numbers.

HC-SIG Subgroups

HC-SIG Subgroups continue to evolve and include:

- The Patient/Member Subgroup
- The Payer Subgroup
- The Healthcare Interoperability Subgroup (new)

Both the Patient/Member Subgroup and the Payer Subgroup are meeting regularly and seeing repeat member participation. Patient/Member Subgroup leadership changed hands in June, and so, we expect the cadence of this subgroup to slow temporarily before it picks up again with renewed momentum and leadership. The Healthcare Interoperability Subgroup--the newest HC-SIG subgroup--has been delayed in its initial planned debut (leadership had unexpected professional obligations), but is due to come online in mid-to-late July.

HC-SIG Ad Hoc Teams

HC-SIG Ad Hoc Teams are developed around a specific need or use case, generally of a fixed duration. Ad hoc team leadership, if necessary, may determine that through their investigations, the team should become more regularly established for the sake of membership, and request to become a subgroup. HC-SIG Ad Hoc Teams include:

- Active
 - **Academic Research Team:** developing a white paper to identify how best to engage the academic/healthcare community as the topic relates to blockchain technologies. This team was temporarily on hold as leadership stepped away on sabbatical.
 - **Wiki Redesign Team:** initially convened to redesign the HC-SIG wiki, now working to manage wiki page conversion to Confluence, and sync with other SIG design efforts.
 - **Use Case Development Team:** charged with the discussion and development of use cases as applicable in the context of the healthcare industry. This is a new HC-SIG ad hoc team for 2019-Q2.
- Inactive
 - **Charter Review Team:** charged with reviewing, rewriting, and maintaining the HC-SIG Charter (in recess)
 - **Subgroup Review Team:** convened to review the status of the EMR Subgroup, and to consider how other subgroup models may influence future HC-SIG subgroup designs (disbanded after making recommendations to leadership team)

Of Merit

- Special recognition to HC-SIG member Wendy Charles, for:
 - Developing and maintaining a very useful 100+ page academic resource for HC-SIG membership: [blockchain article citations](#)
 - Kicking off the [HC-SIG Use Case Team](#), with the goal of developing and publishing healthcare use cases implementing blockchain technologies best practices

- HC-SIG General Meetings hosted the following guest speakers to present on topics relevant to the blockchain technologies in healthcare community:
 - Raveesh Dewan, CEO of [Joget, Inc.](#)
 - Walter Montes, CEO of [WorldSibu](#)
 - Brian Bentow, Head of Innovation at [InstaMed](#)
 - David Houlding, CISSP, CIPP and Principal Healthcare Lead at [Microsoft Corporation](#)
- Engaged HC-SIG membership with relevant professional opportunities to:
 - Participate in the [Global Blockchain Benchmarking Study](#), an empirical study analysing the enterprise blockchain ecosystem, offered through the [University of Cambridge](#)
 - Work with Joe Guagliardo, Partner with Pepper Hamilton LLP, who is interested in developing and teaching an online *Blockchain in Healthcare Certification* through [Jefferson University's Digital Health Institute of Emerging Health Professionals](#)

Issues

None to date.

Overall Activity in the Past Quarter

General Group

The general group serves as an entrée for prospective members in the global healthcare community interested in understanding how best to educate themselves and participate in the implementation of blockchain technologies—ostensibly using the Hyperledger Project umbrella of frameworks, tools, and extensive community—in order to create secure and healthcare-compliant enterprise solutions. For more established members, the general group serves as a resource for the notification and publication of relevant community healthcare activities (e.g., healthcare conferences and related events), as well as a means for promoting and encouraging the project engagement and accomplishments of each of its HC-SIG subgroups and ad hoc teams.

The general group holds a regular meeting on a bi-weekly basis on Friday mornings at 0700 (Pacific Time). As a regular agenda item, HC-SIG subgroup leads (or their proxy) “roll up” their subgroup activities so as to educate prospective new members on active project opportunities.

Membership and activity across the listserv(healthcare-sig@lists.hyperledger.org) appears to be stable. Listserv membership is currently at ~1050 members. Our chat channel, #healthcare-sig (<https://chat.hyperledger.org/channel/healthcare-sig>), is seeing semi-regular exchanges.

Patient/Member Subgroup

Active since June, 2018 and led by Deniz Coskun, the Patient/Member Subgroup continues to work towards a build effort leveraging Hyperledger tools in the healthcare space. We have meetings every other week and we are active in the healthcare Special Interest Group mailing list (see [#patient-member-subgroup](#) and for details).

The Patient/Member Subgroup underwent a transition in leadership in January and again in June, so we are again in the midst of a leadership pivot. Since the start of this quarter, subgroup membership has been surveyed on topics to investigate, and we believe to be settling around a work effort that will investigate the workflow of clinical trials utilizing blockchain technologies as a means to harmonize disparate clinical trial management software (CTMS) solutions.

Payer Subgroup

The Payer Subgroup continues to work on the white paper and refine the use cases and to ensure the right use cases are being selected for POCs.

- We are working on the Block Chain Decision paper that will help payers understand and identify the need for blockchain.
- Link to the work in-progress white paper - [Link to White Paper - IN-PROGRESS](#)
- Integration of Payer Subgroup activities with local Hyperledger Meetup group

New Hyperledger Meetup started in Maryland

Meet Up Link - <https://www.meetup.com/Hyperledger-Maryland/>

First Meet Up meeting will include the Payer Sub Group meeting and an effort to invite local leaders in Healthcare to sponsor Use Case POC. This is a kick-off event for the Hyperledger - Greater Baltimore Area Meetup Group to help support the local Blockchain and Hyperledger Community.

The meetup will start with blockchain introduction and how to get started with blockchain and Hyperledger. It will further be followed by a focused Hyperledger HealthCare Payer Subgroup Meeting. This event is especially open to anyone who is interested in use cases in Payer industry and would like to share what they have done and hear about experiences with others.

Healthcare Interoperability Subgroup

The Healthcare Interoperability Subgroup has no new progress to report at this time. Work is still being done to prepare for the first meetings anticipated to be held towards the end of July. A general announcement will be made with the meeting date, roadmap and agenda.

Planned Work Products

General Group

Continuing activities planned by the general group include:

- The establishment of regular speaker presentations from across the healthcare community to provide “real world” experiences in the design, implementation and establishment of a Hyperledger Project solution within their enterprise context. To date, our HC-SIG Guest Speaker presentations have been very successful at driving new HC-SIG membership interests
- The establishment of additional HC-SIG subgroups or ad hoc teams that appeal to membership healthcare specialties
- The ongoing redesign of the HC-SIG Wiki in order to:
 - Provide a more meaningful “front door” experience for new members to quickly discover HC-SIG resources and subgroups
 - For established members, serve as a dashboard of activities and accomplishments
 - Better separate (and highlight) our subgroups and ad hoc teams (where the real action is) from general group coordinating activities and governance

Patient/Member Subgroup

With the shift to new leadership in June, the subgroup team has been active in identifying a clinical trials use case. The plan for this upcoming quarter will be to explore and mature the use case to a point where a POC can be defined and requirements expressed. A very preliminary architecture is already in place.

Payer Subgroup

- We are looking to expand the membership to include team members
- Local Payer Subgroup event in Maryland scheduled for Thursday, July 18, 2019
- Finalize the POC/Prototype for a use case and kick off that effort in this upcoming quarter

Healthcare Interoperability Subgroup

The HIS team plans to deliver the following work products:

- Documentation describing the requirements for a semantically interoperable healthcare ledger including:
 - Policies that guarantee interoperability
 - Transactions needed to complete an episode of care
 - Semantically interoperable Assets that can represent clinical artifacts whether or not the actual artifact is stored on or off chain
 - Use-cases that reflect real-life episodes of care
- POC : A functional (minimally viable) blockchain
 - Multiple health systems capable of storing / retrieving assets
 - Software and system design documentation (SDD)
 - Git code repository
- Lessons Learned and next steps

Participant Diversity

This is a very diverse membership with global representation (including, but not limited to, member participation from England, Canada, Switzerland, and India). The majority of membership represents corporate healthcare entities, though we do regularly see regular (and perhaps increasingly so) participation from smaller healthcare startups.

Additional Information

None to date.