

*Healthcare Services Platform Consortium (HSPC) Summit*

December 2018

# Executive Summary

The Healthcare Service Platform Consortium (HSPC) Offsite was conducted on 4-6 December 2018, in Rochester, MN. The session provided an opportunity for leaders and personnel to connect as a team, focus on the larger scope of their work, and better define functions and products of the organization.

This offsite was an opportunity to work together in the realization of HSPC goals, in this time of transition. The three days as a team helped to define, overall, where HSPC is heading as an organization. This offsite provided an environment for individuals to get to know each other as teammates and understand best how to support each other. This offsite was designed to focus on defining the conformance criteria, identify priorities, and outline areas where others can build towards a goal and develop the overall framework for roles and responsibilities.

Tactically, this time together provided the opportunity to:

* review components implemented and determine what to apply towards the HSPC architecture,
* create a concrete plan to address current issues,
* think about standardization of processes,
* define conformance criteria,
* outline target architecture role and propose areas where others can build towards commitments and agreements that meet everyone’s needs,
* think about standardization of processes, prioritization of relationships, consistency in engagement, and a detailed look at the process steps required for successful outcomes.

The offsite, overall, produced actions for HSPC, along with outlining and supporting a set of goals that will meet the needs of the team and key stakeholders.

# Introduction and Overall Information

The Healthcare Services Platform Consortium (HSPC) Offsite was conducted on 4-6 December 2018. The session was developed as an opportunity for HSPC team to engage in open dialogue, work together on operational processes and procedures, and determine key functions and products as an organization.

Each participant was asked to spend time preparing for the offsite using a pre-work document capturing their individual functions and products, as well as initial thoughts on what to change in terms of processes and procedures.

**Meeting Attendees:**

* Russ Left
* Fei Wang
* Blackford Middleton
* Darryl Flaming
* Josh Pankratiz
* Scott Narus
* Bo Dagnall
* Andy Stein
* Ken Rubin
* Jane Shellum
* Tim Miksch
* Peter Haug
* Ben Meyer
* Oscar Diaz
* Christine Watts
* Laura Heerman- Langford
* Lorraine Constable
* Johnathan Neebeker
* Kirk Wyatt
* Tom Johnson
* Preston Lee
* Hadrian
* Robert Lario

**Published Agenda (Revised in session)**

**Day 1, Tuesday, December 4**

* Breakfast, Welcome, Introductions
* Experiences from Other Verticals – Making this work
* Level Set on Goals/Outcome Targets for this Summit
* Show & Tell – Institutional
  + VA
  + Mayo
  + University
  + Perspecta
  + Harmoniq
  + Intermountain Healthcare
  + Apervita
  + BPMN Health
  + Platform Models
* Identify duplication and overlap of previous presentations
* Present Architectural Concept Slide (HSSP)
* Work session 1: Mapping Institutional Architectures to Concept Slide
* Group Debrief/ Planning for Day 2

**Day 2, Wednesday, December 5**

* Guided Discussions: Identify shortcomings in the conceptual model that need to be addressed (Corrections/Revisions)
* Guided Discussions: Identify components of the architecture that don't exist (Gaps/Omissions/Additions/Extensions)
* Guided Discussions: Refine, Correct, Validate and Affirm HSPC Architecture Concept.  Harmonize new discoveries into HSPC concept
* Debrief from the Day, Plan for Day 3

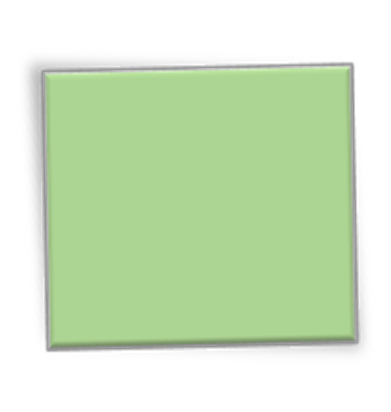
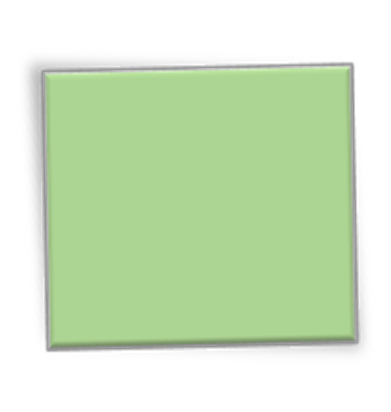
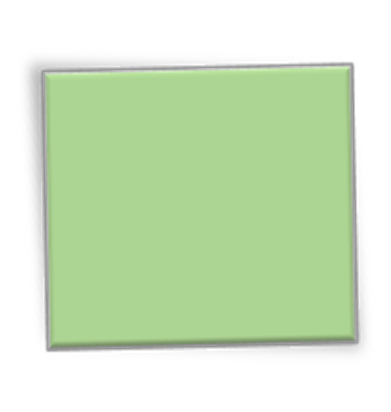
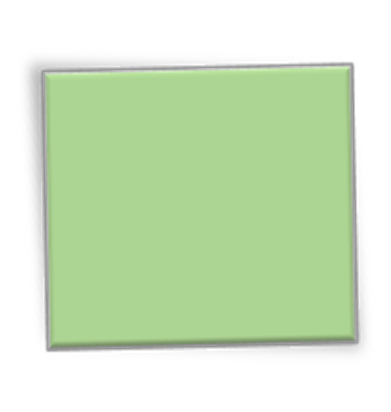
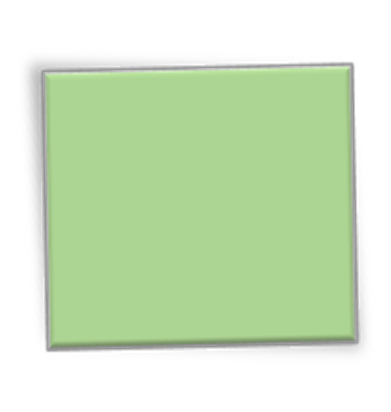
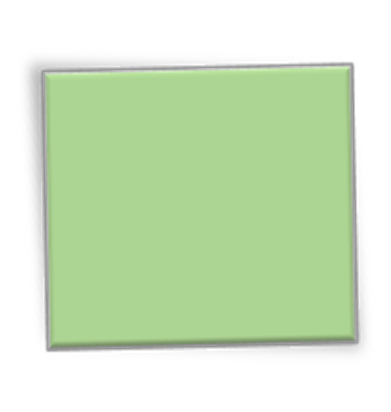
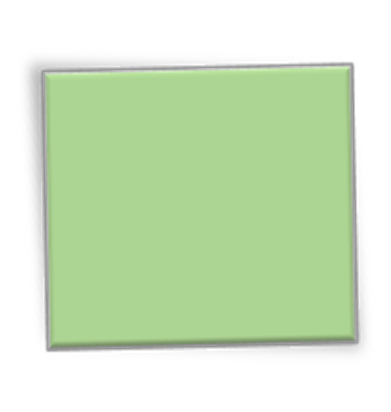
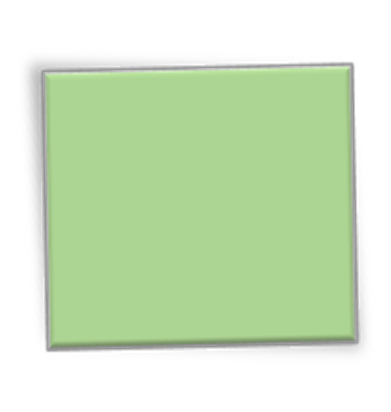
**Day 3, Thursday, December 6**

* Clarify Value Proposition
* Discuss Next Steps.
  + Brainstorm:  Potential Activities, Projects, Assumptions, Dependencies
* Identify a potential punch list of activities that are actionable and viable.
* Architectural Governance
* First-Pass “Lightning” RACI Analysis
* Establish Community Cadence/Schedule

**Input from Participants: Why are they here?**

* Ability to migrate risk
* Ability to gain credibility and visibility, validation participation
* Lower cost of entry for a vendor/provider into the HC community
* Ability to accelerate the sharing and acquisition of knowledge of healthcare industry
* Access to knowledge across the healthcare system people with best ideas (IT, Clinical, Informatics)
* Ability to address inconsistencies with the application of current standards to improve interoperability
* Real world examples of solving real world problems
* Ability to realize a cohesive ecosystem through reference architecture
* Access knowledge sharing environment forum
* Ability to address the portability and shareability to health information
* Participate in a forum to solve problems
* Ability to deal with changing dynamics the provisioning of healthcare
* Gain an understanding of where I fit into the ecosystem
* Gain an improved understanding of the broad complex ecosystem of Healthcare
* Ability to collaborate across multiple organizations to deliver healthcare
* Ability to amplify and coordinate the voice of an organization to solve problems/ deliver value
* Ability to partner with others to solve the technical problems we cannot do our own through clearly defined outcomes

# HSPC Common Architecture – High Level



Clarifying Operational

Mission

To facilitate the Sharing of Best Practices & Knowledge

To enable advancement of medical knowledge and core delivery

To remove the waste of duplication in the industry

To promote a dynamic that can continually improve Healthcare Delivery

To gain insight into the science of

Health & Disease.

Provide a collaborative environment for aligned growth.

To inform business with thoughtful technological considerations.

# 

To Favorably Influence the Cost/Benefit Ratio in Medicine

To

\*Simplify

\*Standardize

\*Streamline

Implementation and Management

To be able to focus on solving medical problems, not the technical ones.

# HSPC Action Items

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Action Items** | | **Owner** | **Assigned** | **Due** | **Status** |
| **1** | Homework for all – List of candidate services send to Bo and he will compile | Bo | 12/6/18 |  |  |
| **2** | Resurrect the platform email list |  | 12/6/18 |  |  |
| **3** | Help set up email & confluence. | Laura | 12/6/18 |  |  |
| **4** | Clean up of confluence and email | Laura, Preston | 12/6/18 |  |  |
| **5** | Technical component architecture working group | Bo (Leader)  Hadrian, Preston, Scott, Andy, Josh, Daryl, Keith | 12/6/18 |  |  |
| **6** | Business Architecture working group | Ken (Leader) Christine | 12/6/18 |  |  |
| **7** | Principles | Rob (Leader) Christine, David | 12/6/18 |  |  |
| **8** | Rationalize purposes for Architecture | Christine, Include Ken’s statement, Bo’s diagnosis | 12/6/18 |  |  |
| **9** | Ensure vision and mission support the purpose |  | 12/6/18 |  |  |
| **10** | Governance working groups operations (leverage the org chart from the merger committee) | Laura, Oscar | 12/6/18 |  |  |
| **11** | Assess impact of platform spec def on roadmap | Ken (Leader) roadmap committee | 12/6/18 |  |  |
| **12** | List the capabilities provided by HSPC and ensure that initiatives. Activities support them | Ken, Oscar, Jonathan, Tim, Preston | 12/6/18 |  |  |
| **13** | This group is SOA Initiative should meet twice yearly. Once during general meeting and another time. |  | 12/6/18 |  |  |
| **14** | Act on determining who needs to be at the table. |  | 12/6/18 |  |  |
| **15** | Schedule meeting to map out the next 60 days before the general meeting |  | 12/6/18 |  |  |

# Outcomes from Session

**Key Takeaways Overall**

* Architecture strives for modular, standardized, agnostic, (BEST OF BREED)
* Conversational nature (How to operate)
* Innovational top VEHR Platform to meet need as defined by people in the room
* Intersection B1TN, Non-data content
  + Assets & Tech Platform
* Curation of knowledge Ecosystem
* Utilization & Advancement of Tool??

**Key Overall Accomplishments**

1. Consensus on platform spec tooling implementation
2. Start on document architecture purpose
3. Visibility info path forward
4. Look at artifacts
5. Maturing group together

**Participant Critical Points to Remember**

* Ensure we do other steps, architecture, plan
* Roadmaps created
* Reference architecture (IN SPEC) & why use/connect?
* Don’t conflate tools & platform
* Don’t use cert body
* Careful on language platform vs. platform spec
* Platform must be able to support cert process
* “Platform Specification” now, maybe not later
* “Re-force architecture specification” RAS – Reference Architecture Specification
* Needs to be measurable in language, Sweet spot on criteria
* More to build
* AUD: providers (To get Ecosystem) & Vendors & 2 MSGS &
  1. Those who support in delivery of care (Why commit)
* Who is our customer?
* Conformant implementations
* BO Diagram
  1. How does this align with?
     + 1. Integrate
     1. Compete w/other opps…etc.
     2. Detail /flash out
* Need list of req’s for spec, what are we doing for architecture?

**Arch Visual Themes – Updates To Do**

1. Likely More Horizontal Layers
2. Need Some Verticals
3. ID Audience
4. Determine Business or Technical Architecture
   1. Value in Both, Time/Res permitting
   2. Scope down business cap inn
5. Need to be CERT possible

**Arch Visual and Arch Implementation for HSPC**

* Enables
* Compliant implementation
* Certifying body
* Software produced by Vendors, Providers, Open source

**Data Sources Need to Do**

Additions Flush out list of system data services

Patient Provided data Create logical grouping of capabilities &

Device data sources.

Quality data

Genomic data

Unified data platforms

Third party data (formal registries)

Unstructured

Integrated networks

Add Knowledge based services (layer or boys)

Knowledge catalog

Enablers Knowledge execution (DMN, ML, etc.)

Knowledge management

Some services are more Enterprise and cross all layers…. e.g. Security

**Business / Capability Layer**

* Supporting functions (Supply Chain)
* Personalized decision aids
* Research
* Get Mayo business architecture

# Additional Notes

**Industry Inputs Discussion**

1. Common Business Language
   1. To relate both business/operational sides
   2. Data, Systems & How they Connect
2. Semantic
   1. Interoperability
      1. Consistent, with the same context (manage change)
      2. What we do from business perspective
3. Architecture Principles
   1. Define Patterns
4. Architecture = Rules = Manage Risk

**Best Practices**

1. Scott’s Message
   1. Value proposition – How to apply
   2. Pursuit of constant innovation
2. Scalability, Supportability, Performance...etc.
   1. Performance Criteria for Platform
3. Separation of Concerns/ Modularity
4. Layered approach to knowledge structures
5. MAYO – Separation of Data, Logic & user exp.
6. PUB/SUB implementation
7. Business logic understand / to end user

**Situation**

* No Common Architecture
* Diff. Perspectives
* Diff. Stakeholder
* Diff. Use Cases
* Lack of Alignment
* Alignment investment/reward of resources
* Competing short term priorities
* Existing/Emerging market investment
* Architecture is “BIG”, Dynamic
* Overlapping, tangled issues
* VUCA – Change Fast
* Tech Debt

**Implications If No Change**

* HSPC irrelevant
* Don’t bend Cont./quality
* Reducing Life and curve
* Increased fragmentation and Asserted cost
* Dr’s Burden Explodes
* Stuffing more – crumbles
* Missed innovation layer…ex (Amazon, Apple)
* Gap between HER and Info that exist for IND/POP widens
* Patent impact: Duplicated test, etc.…
* Stake holder focus

**Key Considerations**

* Interoperability: How it improves care? What types there?
* How to encourage use? (dev reference model)
* Who interacts with whom and context
* What are req of architecture?
  1. Account for volatile nature
  2. Building blocks, house build and withstanding change
  3. Reconciliation of smart on FHIR; And HSPC reference implementation
  4. Figure out non- compete

**Risks**

* There was no common understanding, shared perspectives, no alignment.
* Dangers is if we don’t keep the energy behind us can we start to weigh-in again and lose track it could be the end of it. We must show success.
* Need governance process

**Solutions That Can Use Arch**

* Pure data vs. Not pure data
* Don’t have to use entire architecture, may use pieces
* (Which things apply to use case?)
* What are boundaries around being a building block? / What does it mean to be a block?
* Methods to describe clinical information so it is interoperable
* Clear definition of services and separations of concerns among them