

Google Health Plan Data Interoperability Kick-off

March 2021

Prepared for



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Introductions



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Business Situation

Leverage Google's interoperability solution to meet the July 1st requirement.

Situation:

Humana's Author division must implement a solution to meet the new interoperability standards by July 1st. Humana has chosen to leverage Google and Maven Wave's expertise to put this solution in place.

Creating the correct solution will involve significant infrastructure set up as well as a good understanding of complex data so that it can meet the FHIR framework. Since the final data set will have significant privacy implications, it must be handled with care.

In addition to setting up infrastructure, Humana Author would like a branded developer portal that can take advantage of the integrated data sources.



Project Goals

A Google Health Plan Data Interoperability solution is necessary to help achieve a number of benefits.



Compliant GCP Solution by July 1st



A production ready solution that meets CMS rules and requirements will be able to better leverage benefits from GCP, through targeted prioritized initiatives. A clear project plan will action these initiatives in a timely manner.



Understand and map existing data



In order to enable a minimum viable product, there must be a clear understanding and mapping of existing data, from using de-identified data. A strategy is needed to ensure data harmonization specification and code meets FHIR standards.



Branded developer portal creation



An understanding of integration requirements, branding guidelines and validation of portal interface with FHIR APIs are necessary requirements to implement a customized portal based on the GCP provided generic HPDI portal.

Project Structure Details

Maven Wave recommends the following structure. The project will be managed according to key milestones with a MW Project Manager & Author Project Manager.

Infrastructure Architecture

Data Engineering

Portal Design

Objectives

- The Infrastructure Architecture team will be responsible for:
- Conduct workshops to understand current GCP arch/ constraints, existing IaC TF artifacts
 - Review architecture with Security team for approval of architecture
 - Determine data transfer strategy from current infrastructure to GCP
 - Determine Author capacity requirements for the HPDI GCP environment
 - Apigee API endpoints implementation

- The Data Engineering team is responsible for:
- Analyzing & documenting source system data access options
 - Documenting data mapping between source data structures & data format standard
 - Understand data sources, format & transformation & mapping requirements to meet FHIR standard
 - Prototype data mapping pipelines & develop whistle mapping templates
 - Review data harmonization specification & code
 - Develop test plans to validate data integrity & mapping
 - Resolve defects in the test environment with Author supplied test data

- Representatives from portal design team will be responsible for:
- Understand integration requirements & implement the GCP provided generic HPDI portal including consent tracking
 - Customize portal with branding guidelines provided by Author
 - Test plans development to validate portal interface with FHIR APIs
 - Test plans & document results execution

Key Deliverables

- Production ready solution to meet CMS rules & requirements on test data
- High-Availability Deployment
- End-to-end auto-scaling platform / pay-as-you-go
- Infrastructure manifest & architecture diagram
- Technical Design Document
- Provide best practice help for new process creation

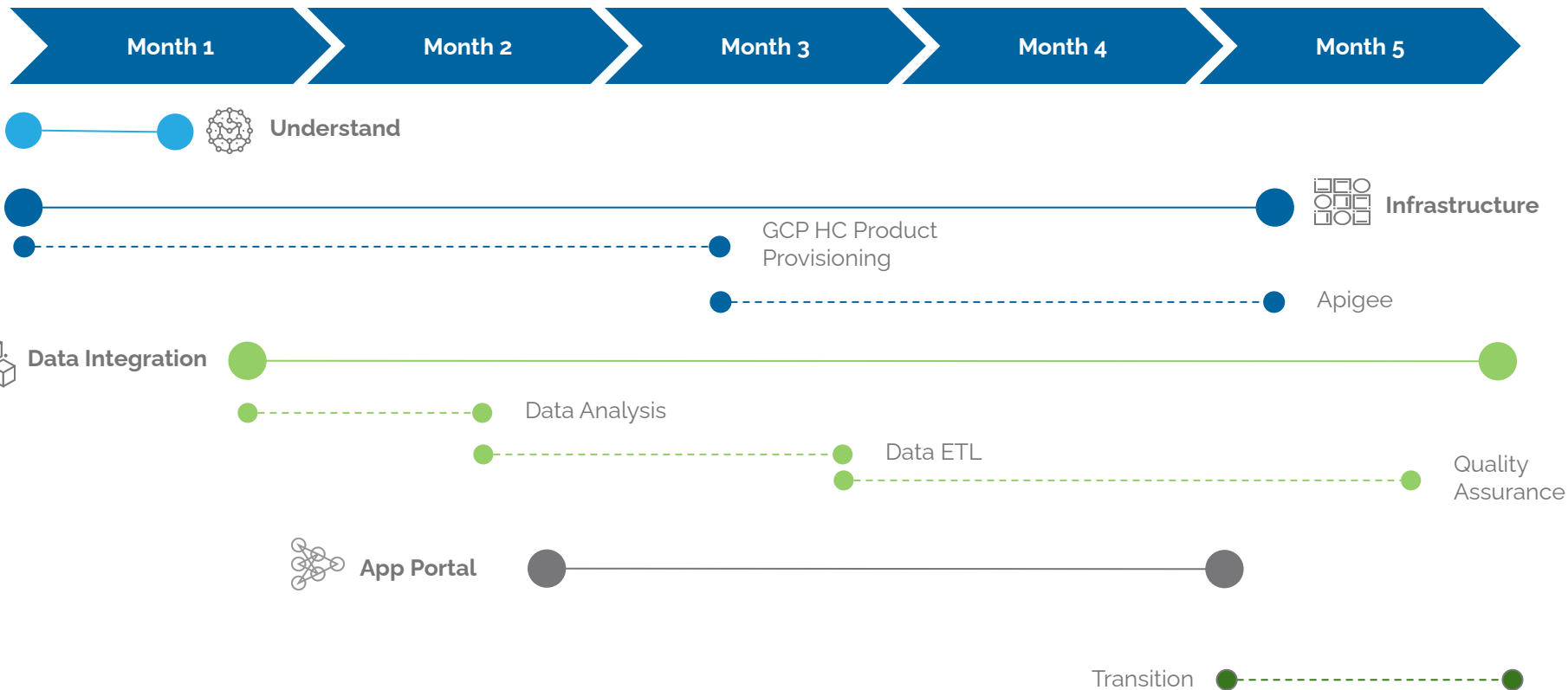
- Data engineering & data integration to FHIR format
- Apigee integration with Author Input Data Management solution
- System will conform to CMS Interop requirements on test data provided
- Data access design & implementation recommendations
- Recommendations for a testing framework to validate data quality & transformation.
- Best practices for data mapping & harmonization

- App portal setup with custom Customer branding
- Raise points where adoption may be difficult & provide best practices

- Review project deliverables and working prototype in dev environment
- Provide consulting services to customer for a maximum period of 4 weeks to enable customer to implement the solution

Proposed Timeline

Maven Wave proposes a 5 month Assessment and Strategy creation.



Team Structure

Project Manager - Amita Venna

Infrastructure Architecture

Alex Neihaus
Infrastructure
Architect

Greg Jordan
Solution Architect

Dominique Schulz
Infrastructure
Engineer

Roland Wittmann
Infrastructure
Engineer

Data Engineering

Daniel Bouckaert
Data Architect

Atul Goyal
Data Engineer

Vishesh Garg
Data Engineer

Santosh Dubey
Data Engineer

Portal Design

Maya Murali
Visual Design

Daniel Ly
Application
Architect

Offshore

Next Steps

1

Technical Kick-off and Onboarding

(to be scheduled within the next two weeks)

2

Access to all relevant data documentation, data set and systems

(Full system access)

3

Program Governance Creation / Implementation

(Milestones and project plan)

Questions?

