

**California Health and Human Services Agency  
Draft Systems Interoperability and Integration Plan**

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## 1. Executive Summary

Why are CHHS Agency and HHS County leaders (Directors and Deputy Directors) and employees' alike going to want to read this?

Review of project

Ask Daniel to provide content

## 2 Introduction

Explain what a Planning Phase artifact is

Explain what the ACF Grant Project entails

### 2.1 Background

Ask that Linda/Glenn to provide content or direction on this section

### 2.2 Purpose

This document provides a framework for agency heads to move from planning to implementation of a program with the scope of moving CHHS in the direction of seamless systems interoperability and integration that orchestrates strategic drivers, business requirements, and information technology standards.

This framework provides conclusions and recommendations collected from collaboration with CHHS department, county representatives and public interest delegates. The ACF Grant Project for SIIP is a one-time event but offers the opportunity for continuous improvement.

### 2.3 Intended Audience

The primary audience for this document is California state and county Health and Human Services Agency employees who leverage systems and solutions provided by Information Technology to provide HHS services to constituents. Other California state employees involved in planning, approving, executing and overseeing agency programs, and those in industry who support these activities can also benefit from this document.

### 2.4 Document Organization

TBD: the brief narrative of this section will be completed upon the completion of writing this document.

### 2.5 Future Directions

Interoperability Plan will be progressively refined, based upon plans for addressing other change drivers.

Additionally, work is underway to address the scope of an implementation plan for the first 24 months.

## 2.6 Deferred Decisions

One deferred decision is to implement the first step of the Organizational Change Management plan which sends out a survey to collect information from CHHS Agency stakeholders. Based upon the finding of this effort, we would know best how to address the stakeholder analysis (who, where, when)

## 2.7 Acknowledgements

Project Team key contributors

Linda Hockman

Glenn Freitas

Valerie Barnes

Laura Beeman

Richard Gold

Richard D. Schleusener, PhD

Daniel Stein

Michael Kerr

Bill Parcell

Gretchen Hernandez

Shell Culp

Larry Bolton

Dr. Linette Scott

## 3 California Health and Human Services (CHHS) Agency Interoperability Roadmap

Visual representation of the Interoperability Roadmap (compiled from symposia)

Implementation Plan for next steps

Synopsis of where CHHS is headed

What does an InterOptimability Look Like???? Anthony and Daniel and Valerie are brainstorming

Can we leverage one of the personas ?

## 4 Systems Interoperability and Integration in California Health and Human Services

The primary objective of the project to create a community of practice for breaking down information silos that adversely affect the ability of programs within the California Health and Human Services (CHHS) Agency to serve beneficiaries optimally and cost-effectively. Within the CHHS Agency there are hundreds of information systems ranging from the highly complex, like Medi-Cal Eligibility Data System that tracks Medicaid and Medicare eligibility for over 7.1 billion beneficiaries, to the relatively simple, stand-alone database that tracks a moderate number of county-reported child fatalities each year. This project addressed creating the plan for the implementation phase of the program. In doing so, two major obstacles were overcome:

1. Identifying the funding needed to research the plan and
2. lack of governance structure and policy to address cross domain aspects of business, information, application and technology requirements.

### 4.1 Governance and Leadership Landscape

Leadership & governance are intimately linked to the organization's ultimate mission and vision. Governance provides the policies, systems and decisions that establish that vision, authority and responsibility, and affects how initiatives are measured. Leadership guides the implementation and strategies provided by the governance structure.

Much work was already underway in this area. Leveraging models and resources was key to our success.

#### 4.1.1 Governance Committee (Richard Gold / Gretchen Hernandez (Linda Hockman))

Work plan and Committee Report

### 4.2 Technology Landscape

Technology framework encompasses all hardware and software architecture, systems and functionality that enable the organization's IT processes, including data collection, storage and sharing.

Much work was already underway in this area. The Enterprise Architecture (EA) Program model and resources were key to our success. Connecting with the California Technology Agency enterprise architects early in our work assured our plan would align with the larger CA State EA Framework

#### 4.2.1 IT Committee (Valerie Barnes / Dr. Linette Scott (John Rousel/Linda Hockman))

Work plan and Committee Report

### 4.3 Confidentiality and Privacy Landscape

Confidentiality & privacy information management addresses an organization's need to store, use and share regulated information. It covers policies and practices about safeguarding sensitive data and



## 4.5 The Six Other Change Drivers (SOC to leverage industry BKM content)

A successful implementation plan will consider other major change drivers, such as these.

### 4.5.1 Consumer-Centric Focus

Customer-centric focus makes better client outcomes the foremost goal of the InterOptimability process. By improving organizational awareness of, and sensitivity to, consumers' strengths, limitations, resources, needs and preferences, it helps ensure that clients can communicate openly with agency personnel and that services are delivered in a meaningful and satisfying manner.

### 4.5.2 Bridging Service Silos

Bridging service silos involves planning and providing services in a streamlined, coordinated way across multiple programs. It addresses the organization's ability to work holistically and collaboratively across programs, increasing data portability and securely linking people, information and services to maximize efficiency and effectiveness.

### 4.5.3 Building Open and Inclusive Processes

Building open and inclusive processes refers to the degree to which all external stakeholders, including those outside the organization — the courts, funders, legislators, private providers and the public at large — can access information about a department's services and accountability measures. It also relates to the depth of communication and collaboration in which the organization routinely engages.

### 4.5.4 Data and Performance Measurement Systems

Data & performance measurement systems help determine how much and how well the organization and its users work with data, including data collection, storage, access, sharing, usage and analysis. The output from this driver informs performance metrics for individual workers, programs and the organization as a whole.

### 4.5.5 Public and Political Will

Public & political will refers to the degree to which government leaders and their constituents understand and have confidence in the organization. Contributing factors include the groups' awareness of organizational direction, the strength of each group's belief in that direction, and the ability of the organization to deliver the results promised.

### 4.5.6 Funding and Resources

Funding and resourcing focuses on the organization's ability to pay for the people, systems and tools fundamental to ongoing operations and innovation. It includes the department's ability to maximize funding from local, state, federal and alternative sources

## 5 Symposia: CHHS As-Is (May) – Michael??

Overview of Symposia, what was the objective, what was the audience, etc...

## 5.1 Information Technology Landscape

2010 document listing an inventory to date of the systems the project team found. Included in this section will be evaluation of (Bill Parcell)

- which systems are ready to be interoperable,
- which are needing some work, and
- those which will not become interoperable.

We have added and/or updated the above inventory, but it's not comprehensive

## 6 Symposia – To-Be (September) – Michael??

Agenda, POC Vendor Demo's – not exactly sure about this...

## 7 Proof of Concept (look to Laura 's POC team for content)

The Interoperability and Integration Project (Project) will result in a plan that provides the “big picture” vision for interoperability for health and human services. To demonstrate how interoperability might work, the Project has elected to focus a Proof of Concept on a foster care use case related to psychotropic medication. Based on practices in Alameda County, the project team will work with a wide variety of stakeholders to develop a Proof of Concept to show how electronic record sharing can be accomplished and ultimately improve services to children and youth in foster care. Alameda County, in consultation with other California counties, will serve as the basis for identifying potential problems related to business practices and workflow, technology, and confidentiality (privacy and security) discussed in this paper. This is the starting point for a model that has broader interoperability implication and potential application within health and human services.

### 7.1 Theory and process

The initial step in the InterOptimability process is prove that interoperability as a concept can work within the CHHS Agency organization. The theory used here is that if we can prove that it work on the case

### 7.2 'To-be' vision of process for integrated system

### 7.3 'As-is' business processes

### 7.4 'As-is' information technology assessment

### 7.5 Organizational readiness – OCM plan for data sharing

## 7.6 'To-be' business process

## 7.7 'To-be' information Technology solution(s)

## 7.8 Gap analysis – OCM, Governance, IT, Legal

## 7.9 Lessons Learned

# 8 Conclusions and Recommendations

This should include the Con/Rec of the 4 committees, but will also blend in some of the other change driver components for a larger perspective of conclusions and recommendations.

Specifically, we should be narrating the very next steps and actions the CHHS Agency should take.

## 8.1 Implications for Other States

As an ACF Grant Project, what key learnings have we learned that may help others accelerate their own interoperability and integration efforts.

# 9 Glossary

Borrowed from CEAF

**Application Architecture** – Defines the major applications or service components needed to manage data and support business functions.

**Architecture** – A set of design artifacts, or descriptive representations, that is relevant for describing an object such that it can be produced to requirements (quality) as well as maintained over the period of its useful life (change). [John Zachman & adopted by the Federal Chief Information Officer Council]

**Architecture Drivers** – The external component of the California Enterprise Architecture Framework representing an external stimulus, which causes the enterprise architecture to change. Architecture drivers consist of two sub-components: business and design drivers.

**Architecture Product** – The structure of components, their interrelationships, and the principles and guidelines governing their design and evolution over time. Architecture products include Business Models, Data Models, Application Models and Technology Models. [IEEE STD 610.12 and adopted by Federal Chief Information Officer Council]

**Architecture Segment** – Focus on a subset or a specific business area within the enterprise. It can be considered to be an event-driven process, such as grants, that crosses the enterprise and

has commonality of process, data, components, and technology. Each architecture segment is composed of current and target architectures, limited in scope by the focus of the segment.

**Architecture Services** – The services use the products for recommendations to information technology decision makers. Services will be more clearly defined as enterprise architecture matures.

**Business Architecture** – Defines business processes, information flows, and information needed to perform business functions.

**Business Drivers** – A type of architecture driver that identifies the strategic business needs an information technology environment must support.

**Business Reference Model (BRM)** – A function-driven framework for describing the business operations of the state government independent of the agencies that performs them. The Business Reference Model provides an organized, hierarchical construct for describing the day-to-day business operations. [Federal Enterprise Architecture Program Management Office]

**California Enterprise** – Defined as those agencies, departments, boards, bureaus and commissions within the Executive Branch of California government. However, the California Information Technology Council and the State Chief Information Officer may choose to expand the scope of the California Enterprise Architecture to include entities in other branches, cities, and counties.

**California Enterprise Architecture** – A blueprint to assist in optimizing the interdependencies and interrelationships among the state’s business operations and the underlying information technology that support these state operations.

**California Enterprise Architecture Framework** – An organizing mechanism for managing development, maintenance, and facilitated decision-making of the California Enterprise Architecture. The framework provides a structure for organizing state resources and for describing and managing state enterprise architecture activities.

**Current Architecture** – Represents the current state or baseline for the enterprise. In terms of the California Enterprise Architecture Framework, the current architecture includes business, data, application, and technology.

**Data Architecture** – Consists of among others, data entities, which have attributes and relationships with other data entities. These entities are related to the business functions.

**Data Reference Model (DRM)** – Describes the data and information that support the state’s business operations from a statewide perspective.

**Design Drivers** – A type of architecture driver that identifies a technology change that can represent revolutionary ways of meeting state business needs.

**Enterprise** – An organization supporting a defined business scope and mission. An enterprise is comprised of interdependent resources (people, organizations, and technology) that should coordinate their functions and share information in support of a common mission (or set of related missions). [Treasury Enterprise Architecture Framework]

**Enterprise Architecture** – A strategic information asset base, which defines the mission; the information necessary to perform the mission, the technologies necessary to perform the mission, and the transitional processes for implementing new technologies in response to

changing mission needs; and includes a baseline architecture, a target architecture, and a sequencing plan. [Federal Enterprise Architecture Framework]

**Enterprise Architecture Principles** – Represent the criteria against which all potential investment and architectural decisions are weighed.

**Federal Enterprise Architecture Framework (FEAF)** – The Federal Enterprise Architecture Framework is an organizing mechanism for managing development, maintenance, and facilitated decision-making of the Federal Enterprise Architecture. The framework provides a structure for organizing federal resources and for describing and managing Federal Enterprise Architecture activities.

**Federated Enterprise Architecture** – Defines common or shared architecture standards across autonomous program areas, enabling state government entities to maintain diversity and uniqueness, while providing interoperability. [Federal Enterprise Architecture Framework]

**Framework** – A logical structure for classifying and organizing complex information. [Federal Enterprise Architecture Framework]

**Goals and Objectives** – Part of the strategic direction describing opportunities to accomplish the vision.

**Information Management** – The planning, budgeting, manipulating, and controlling of information throughout its life cycle. [Federal Chief Information Officer Council]

**Information Technology Patterns** – Identifies how a set of technology elements should interact and be deployed to best deliver particular types of applications or systems.

**Line of Business** – The purpose of government in functional terms and the support functions the government must conduct in order to deliver services to citizens.

**Methodology** – A documented approach for performing activities in a coherent, consistent, accountable, and repeatable manner. [Treasury Enterprise Architecture Framework]

**Principles** – Statements that guide design decisions, serve as a tiebreaker in settling disputes, and provide a basis for dispersed, but integrated, decision-making.

**Reference Model** – A framework for understanding significant relationships among the entities of some environment, and for the development of consistent standards or specifications supporting that environment. A reference model is based on a small number of unifying concepts and may be used as a basis for education and explaining standards to a non-specialist. [Federal Chief Information Officer Council]

**Segment** – A targeted line of business that typically slices through all four architecture domains. For the architecture in five years, principles for guiding the architecture evolution, and goals and objectives for managing it and determining progress towards achieving the vision.

**System** – A collection of components organized to accomplish a specific function or set of functions. [IEEE STD 610.12]

**Target Architecture** – Represents a desired future state or "to be built" for the enterprise within the context of the strategic direction. In terms of the California Enterprise Architecture Framework, the target architecture includes business, data, application, and technology.

**Technical Reference Model** – A framework used to identify and organize the standards, specifications, and technologies that support and enable the delivery of the state’s business services and capabilities.

**Technology Architecture** – Defines the technology environment for the enterprise showing actual hardware and systems software at the nodes and lines and their systems software, including operating systems and middleware.

**Transitional Processes** – These processes support migration from the current architecture to the target architecture. Examples include: investment management review, segment coordination, market research, asset management, procurement practices and architecture governance.

**Vision** – A succinct and strategic statement describing the targeted end state for the architecture in five years. The vision provides strategic direction and is used to guide resource decisions, reduce costs, and improve mission performance.

## 10 References

California Enterprise Architecture Framework

CalOHII HIE Inventory of Systems (Bill Parcell can provide correct name)

Human Services 2.0

InterOptimability Handbook

*Personas: Practice and Theory*

by John Pruitt and Jonathan Grudin

## 11 Web Sites

National Interoperability Community of Practice – our projects committee’s share point site

[http://clients.stewardsofchange.com/AOC/California%20HHS%20Interoperability%20Symposium.aspx?utm\\_medium=email&utm\\_source=Stewards+of+Change&utm\\_campaign=2590313\\_CA+Survey+etc+from+SC&dm\\_i=14XM,1JIP5,A0VHAI,59UI7,1](http://clients.stewardsofchange.com/AOC/California%20HHS%20Interoperability%20Symposium.aspx?utm_medium=email&utm_source=Stewards+of+Change&utm_campaign=2590313_CA+Survey+etc+from+SC&dm_i=14XM,1JIP5,A0VHAI,59UI7,1)

## 12 Document History

Outline drafted for review 7/30/13; sent to core team for feedback

Included feedback to add specific reference to Roadmap

Integrated brief summary of each section. 7/31/13