

# HEALTH CARE ENTERPRISE ARCHITECTURE

## Enterprise Architecture Office (EAO)

### Department of Health Care Services (DHCS), California

**INDUSTRY** - Government -  
Healthcare

**STATE** - CALIFORNIA

#### SUMMARY

California Department of Health Care Service (DHCS) adopts Enterprise Architecture practice to manage the enterprise changes via strategic transformation through the development of optimal business capabilities over time, which gives the enterprise its strategic edge.

#### CHALLENGES

CA DHCS is a huge organization with an annual budget over \$104 billion. Establishing EA practice required collaboration and alignment of large number of branches and departments with varied priorities.

#### OUTCOME

DHCS successfully established Health Enterprise Architecture practice that served as a foundation for managing the enterprise changes via strategic transformation and advance MITA maturity level.

#### THE PROBLEM

The California Department of Health Care Services' (DHCS) provides Californians with access to affordable, high-quality health care, including medical, dental, mental health, substance use treatment services, and long-term care. With an annual budget of \$104.5 billion for the support of DHCS programs and services, DHCS Medi-Cal (Medicaid) program supports 13M+ Californians with high quality health care.

CA DHCS established the Enterprise Architecture (EA) practice to manage the enterprise changes via strategic transformation. The transformation plan provides the required expectations, prioritization, and trade-offs for the planned deliverables. The aim is to develop optimal business capabilities over time, which gives the enterprise its strategic edge. This requires investment in people, process, technologies, and information with an expectation of returns.

In addition to setting a long-term vision and goals, DHCS wanted to establish implementation Strategy that describes the department's approach and roadmap to accomplish department's goals and vision to advance Medicaid Information Technology Architecture (MITA) maturity levels for its Business, Information and Technology Architecture through business process automation, enterprise governance, information management, and establishing required technology capabilities.

## SERVICES PROVIDED

xFusion was engaged to provide Enterprise Architecture Service. Our solution for the engagement included the following.

### Establish DHCS Enterprise Architecture and Governance Model

Established DHCS Enterprise Architecture Organization (EAO); assessed various EA Reference Models Such as Medicaid Information Technology Architecture (MITA), Federal Enterprise Architecture (FEA), TOGAF, Zachman, Pragmatic EA Framework and Service Oriented Architecture (SOA) etc. and establish DHCS Service Oriented Enterprise Architecture (SOEA) Reference Model, DHCS EA Lifecycle Model; Established EA Governance Model including organization structure, roles and responsibilities, Architecture Review Board (ARB) to Integrate EAO with various projects within the department.

### Implement Architectural Assurance Program

Implemented Architectural Assurance Program (AAP) for the ARB to ensure strategic alignment of goals and objectives of individual projects, business technology alignment, and alignment to the EA Reference Architecture Models etc.

### Develop Enterprise Technical Architecture and Strategy

Develop Target Enterprise Technical Architecture; Develop Enterprise Technical Strategies that includes Architecture Reference Models (ARM), Target Architecture, Technology and Product Mapping, Standards, Best Practices etc. in alignment to MITA 3.0 and the State of California Enterprise Architecture Reference Framework (CEAF 2.0)

Established Infrastructure Strategy, Access and Delivery Strategy, SOA Strategy, Enterprise Integration Strategy, Business Process Management (BPM) Strategy, Enterprise Business Rules Strategy, Legacy Modernization Strategy etc.

### Establish Risk Based Security and Privacy Framework

Established a Risk Based Security Framework for based on HIPAA, California State HIPAA standards, NIST, FIPS, FISMA, HITECH ETC.

### Establish EA Repository

Established an EA Repository to store and manage all The EA artifacts as Enterprise Assets including Business Process Models (BPM), Logical and Physical Data Models, Metadata Definitions, Service Interface Definitions (WSDL, XML schema) using Sparx Enterprise Architect, SQL Server Database, UML, BPMN, XML, MS SHAREPOINT etc.

### Establish MITA Capability Maturity Roadmap

Worked with the MITA State self-assessment (SSA) team and defined the capability maturity roadmap for business, technical and information architecture.

### Tools, Standards and Best Practices Used:

Enterprise Architecture (FEA), ToGAF, Zachman, Pragmatic EA Framework, MITA, CMS Seven Standards and Conditions, NIEM, BPMN, BPEL, UML, SOA, HL7, NIEM, HIPAA, FISMA, NIST, HITECH, Business Rules Management System (BRMS), Business Process Management System (BPMS), Enterprise Service Bus (ESB), XML, MS Project, UML, Enterprise Architect , Business Process Analysis and Design, Service Oriented Analysis and Design, Service Oriented Software Development Life Cycle and Service Portfolio Management, Service Oriented Governance Model.

## OUTCOME

DHCS successfully established Health Enterprise Architecture practice that served as a foundation for managing the enterprise changes via strategic transformation and advance MITA maturity level; established target Architecture for its Business, Information and Technology Architecture; established Health Care Innovation Strategy that defines the approach, principles and roadmap for the transformation of the Health Care Enterprise from its current state to the target state to achieve higher level of MITA maturity.

**IN NEWS**

- [Department of Health Care Services Unveils IT Enterprise Architecture Plan](#)
- [YouTube Video – DHCS Unveils Enterprise Architecture Plan](#)
- [DHCS Wins National Award for Health Care Innovation Strategy](#)