
Part II - INFORMATION ARCHITECTURE

Chapter 1 - INTRODUCTION



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Introduction

The Medicaid IT Architecture (MITA) Framework contains three interrelated architectures: Business Architecture (BA), Information Architecture (IA), and Technical Architecture (TA), as shown in **Figure 1-1**. The business capabilities from BA define the data strategy of IA and design the business and technical services of TA. MITA uses all three architectures to develop a business-driven enterprise to provide consistency across the State Medicaid Enterprise.

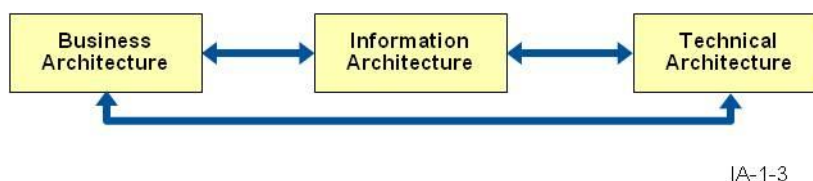


Figure 1-1. MITA Framework Relationship Diagram

The topics covered in this chapter include:

- ❖ Information Architecture Seven Standards and Conditions
- ❖ Information Architecture Components
- ❖ Connection Between Architectures
- ❖ Information Architecture Development Process
- ❖ Using the Information Architecture
- ❖ Next Steps in Developing the Information Architecture

Purpose

IA describes a logical architecture for the Medicaid Enterprise. The primary objectives of an IA are below:

- ❖ Align information requirements with Medicaid Enterprise vision and direction.
- ❖ Improve system effectiveness.
- ❖ Facilitate growth and innovation.
- ❖ Lower overall life cycle costs.
- ❖ Enable interoperability and data sharing.

This architecture provides a description of the information strategy, architecture, and data. These descriptions are necessary so that States can use them as guidelines to define the common data needs that will enable the future business processes of their State Medicaid Enterprises.

Scope

This section provides an overview of the key features and benefits of the IA in order to provide background for the remaining sections.

The IA is technology, organization, and location-neutral. MITA does not address these aspects because they are the responsibility of each state. It is extremely important that each state have the flexibility to address the technology, organization, and location aspects for its State Medicaid Enterprise implementation.

It is imperative for the States to review the Business and Information Architectures together. The MITA IA is a set of information system requirements, derived from the BA and fulfilled by the IA, connecting and aligning these two architectures. They are actually different views of the integrated enterprise architecture.

Just as the BA business model has sub-groupings of business processes called business areas, the IA models have sub-groupings of information called subject areas. The generic term that MITA uses to describe a business area or subject area is domain. These sub-groupings allow a portion of the model to be viewable as a whole, or the entire model to be viewable at an overview level, thereby eliminating some complexity involved in understanding a large model. All business areas or domains will align across BA and IA (e.g., the Provider Management business area aligns with the Provider domain in the information model). Each domain supports the others and properly aligns at each major system deployment to minimize redundancy and overlap. Given the transformation potential of information technology (IT), it is important to view the domains as interdependent.

Information architects are responsible for first understanding the BA and then creating and maintaining the IA in alignment with the BA. Solution architects, guided by the information and technical architectural methodologies, work with the business and information architects to maintain this alignment throughout the project. This cooperation continues through full deployment and ongoing operations.

As States evolve and begin aligning their technology with MITA, they will see a shift from traditional siloed methodologies to an enterprise approach that includes other health and human service-related systems. This shift results in the engagement of interoperability concepts to replace outdated data warehouse and data distribution methods with data sharing and Cloud Computing concepts.

The IA includes mechanisms to extend MITA to accommodate individual state needs where a common approach is insufficient.

Background

States, territories, and the District of Columbia (hereinafter referred to as States) are responsible for their own individual State Medicaid Enterprise, and all entities are different in important ways. Differences include:

- ❖ Organizational structure, covered programs, and lines of business
- ❖ Business rules, policies, and procedures affecting stakeholders
- ❖ Relationships with other state and local agencies
- ❖ Revenue sources
- ❖ Location of business units
- ❖ Work flow
- ❖ Range of outsourcing
- ❖ Technical solutions

These entities also differ in their concept of an enterprise, the roles and responsibilities of one or more Chief Information Officers (CIOs), adoption of data and technical standards, and the use of legacy versus state-of-the-art applications.

Given these differences, it is not possible or desirable, in the context of the MITA Framework, to develop a standalone business and technical model for each individual State Medicaid Enterprise. Instead, MITA establishes a national framework of common processes and enabling technologies to support improved program administration in all States.

The IA is a consolidation of principles, models, and guidelines that form a template for the States to use to develop their own enterprise IA. Some examples of principles include interoperability, data sharing, and data semantics. Part II, Chapters 2, 3, and 4, discuss these principles in more detail. Several data models shape the MITA Framework because of the complexity of the Medicaid Enterprise. The Conceptual Data Model (CDM) and Logical Data Model (LDM) illustrate the MITA IA. Within the Medicaid Enterprise IA, MITA provides guidelines to promote the alignment of a state's information and data with Medicaid business needs and the information and data needs of other States.

The State Medicaid Enterprise requires a rigorous and methodical approach to IA development because of interoperability requirements, the use of electronic health records, and developing standards. MITA supports these by providing an architecture or guideline that offers a common reference point for each state to leverage when building its own enterprise architecture, which is useful in defining and implementing its IT projects. The IA provides the overall guidance to support States individually while supporting the standards needed for interoperability.

Funding Requirements

The Health and Human Services (HHS) CMS 42 CFR Part 433 Medicaid Program; Federal Funding for Medicaid Eligibility Determination and Enrollment Activities modifies Medicaid regulations for Mechanized Claims Processing and Information Retrieval Systems effective April 19, 2011. The Medicaid Management Information System (MMIS) is a mechanized

claims processing and information retrieval system used by the States for Title XIX of the Social Security Act (The Act); therefore, the guidance set forth in CMS 42 CFR Part 433 applies to the MMIS as well as the Medicaid eligibility determination and enrollment activities as set forth in the Affordable Care Act of 2010.

The Centers for Medicare & Medicaid Services (CMS) expects States to meet the standards and conditions specified in §433.112(b)(10) through §433.112(b)(16). The standards and conditions are descriptive in nature; however, CMS recognizes that in order for the States to meet these standards and conditions, it is necessary to provide additional guidance that clearly articulates its criteria for meeting them in terms of timeliness, accuracy, efficiency, integrity, and performance standards for mechanized claims processing. In response to this need, additional guidance materials include:

- ❖ Enhanced Funding Requirements: Seven Conditions and Standards (a.k.a. Seven Standards and Conditions)
- ❖ Guidance for Exchange and Medicaid Information Technology (IT) Systems (a.k.a. IT Guidance)

CMS will continue to refine, update and expand this guidance in the future, based on feedback from stakeholders and with experience over time.

Information Architecture Seven Standards and Conditions

The MITA team evaluated and incorporated the 42 CFR Part 433 Medicaid Program; Federal Funding for Medicaid Eligibility Determination and Enrollment Activities in the IA for purposes of guiding the MITA stakeholders to apply the guidance to the Medicaid Enterprise.

The architectures align with the Seven Standards and Conditions. By utilizing best practices, industry standards, and technology advancements, the processes and planning guidelines that build the MITA framework provide a cohesive method for meeting Medicaid objectives. **Table 1-1** depicts the impact of the Seven Standards and Conditions on the MITA Business, Information, and Technical Architectures.

Table 1-1. Correlation of Seven Standards and Conditions with MITA

Correlation of Seven Standards and Conditions with MITA Architectures			
<i>Standards and Conditions</i>	<i>Business Architecture</i>	<i>Information Architecture</i>	<i>Technical Architecture</i>
Modularity Standard	X	X	X
MITA Condition	X	X	X
Industry Standards Condition	X	X	X

Correlation of Seven Standards and Conditions with MITA Architectures			
<i>Standards and Conditions</i>	<i>Business Architecture</i>	<i>Information Architecture</i>	<i>Technical Architecture</i>
Leverage Condition	X	X	X
Business Results Condition	X	X	X
Reporting Condition	X	X	X
Interoperability Condition	X	X	X

The IA includes:

- ❖ **Modularity Standard** – Uses a modular, flexible approach to systems development, including the use of open interfaces and exposed Application Programming Interfaces (API); the separation of business rules from core programming; and the availability of business rules in both human and machine-readable formats. The States commit to formal system development methodology and open, reusable system architecture.
- ❖ **MITA Condition** – States align to and advance increasingly in MITA maturity for business, architecture, and data.
- ❖ **Industry Standards Condition** – Ensures alignment with, and incorporation of, industry standards: the Health Insurance Portability and Accountability Act of 1996 (HIPAA) security, privacy and transaction standards; accessibility standards established under section 508 of the Rehabilitation Act, or standards that provide greater accessibility for individuals with disabilities, and compliance with Federal Civil Rights laws; standards adopted by the Secretary under section 1104 of the Affordable Care Act; and standards and protocols adopted by the Secretary under section 1561 of the Affordable Care Act.
- ❖ **Leverage Condition** – States solutions should promote sharing, leverage, and reuse of Medicaid technologies and systems within and among states.
- ❖ **Business Results Condition** – Systems should support accurate and timely processing of claims (including claims of eligibility), adjudications, and effective communications with providers, beneficiaries, and the public.
- ❖ **Reporting Condition** – Solutions should produce transaction data, reports, and performance information that contribute to program evaluation, continuous improvement in business operations, and transparency and accountability.
- ❖ **Interoperability Condition** – Systems must ensure seamless coordination and integration with the Exchange (whether run by the state or federal government), and allow interoperability with health information exchanges, public health agencies, human services programs, and community organizations providing outreach and enrollment assistance services.

Information Architecture Components

The IA maps enterprise data to the BA business processes. This architecture contains five (5) components:

1. Data Management Strategy (DMS)
2. Conceptual Data Model (CDM)
3. Logical Data Model (LDM)
4. Data Standards (DS)
5. Information Capability Matrix (ICM)

These are living models that will evolve throughout the MITA life cycle. The MITA Framework tailors the level of detail in each model to meet the specific needs of the intended audience. **Figure 1-2** provides an overview of the components of the IA. Chapters 2 through 6 describe each of these components in further detail.

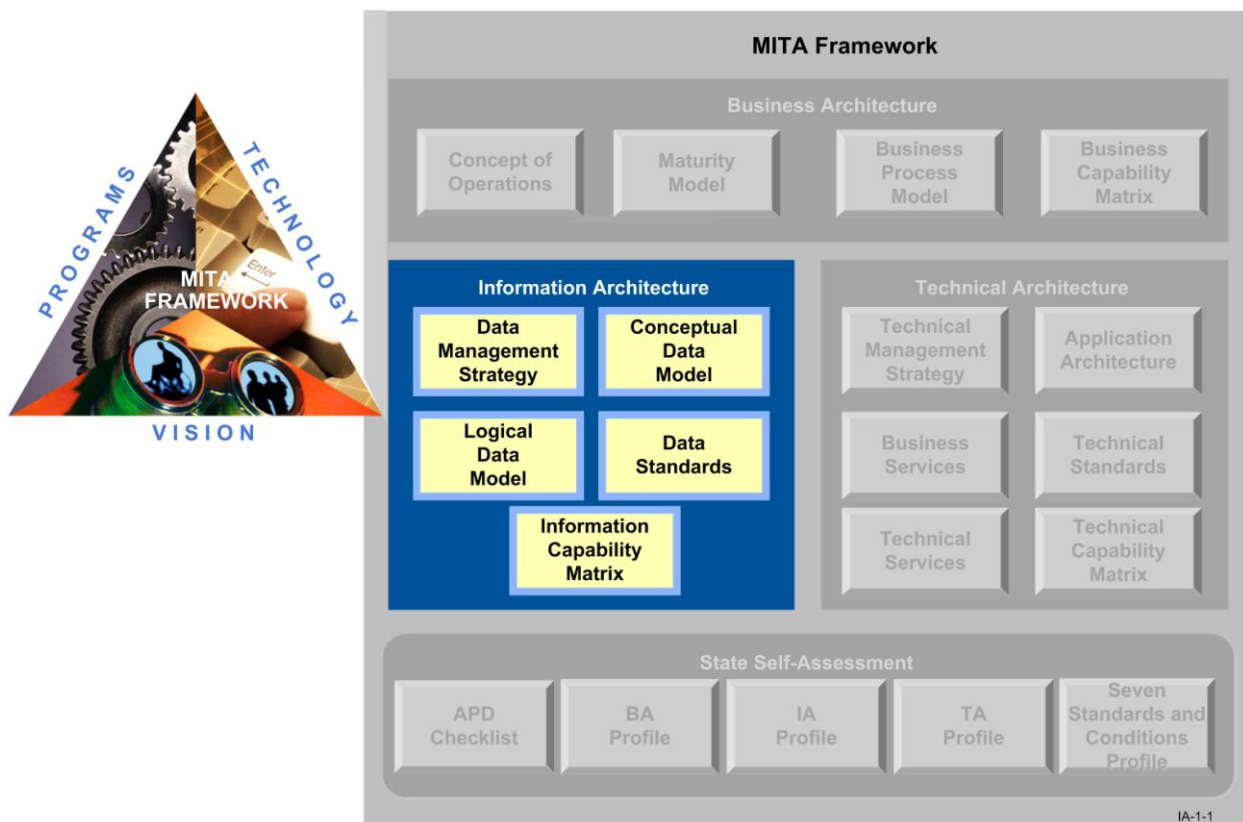


Figure 1-2. IA in the Context of the MITA Framework

The five (5) IA components deliver an integrated architecture that provides the standardization, data sharing, and interoperability required by the various State Medicaid Enterprises.

1. **DMS** – Provides a structure that facilitates the development of information to effectively share across State Medicaid Enterprise boundaries to improve mission performance. The DMS addresses fundamental areas necessary to enable information-sharing opportunities and to position the State Medicaid Agency (SMA) to operate in an environment of global information.
2. **CDM** – Represents the overall conceptual structure of the data, independent of any software or data storage structure, and provides a visual representation of the high-level data needed to run an enterprise or business activity.
3. **LDM** – Shows data subject areas broken down into the data classes and attributes needed for one drilled-down business process as well as the relationships between the classes. The LDM identifies all of the logical data elements that are in motion in the system or shared within the Medicaid Enterprise.
4. **DS** – Provides a discussion of the use of data standards. The MITA IA coordinates the identification and use of common data standards for the administration and operation of the Medicaid Enterprise.
5. **ICM** - Defines the information capabilities identified in the business process that enable technical capabilities. The ICM includes four (4) primary components: Data Management Strategy, Conceptual Data Model, Logical Data Model, and Data Standards.

Table 1-2 summarizes the components shown above.

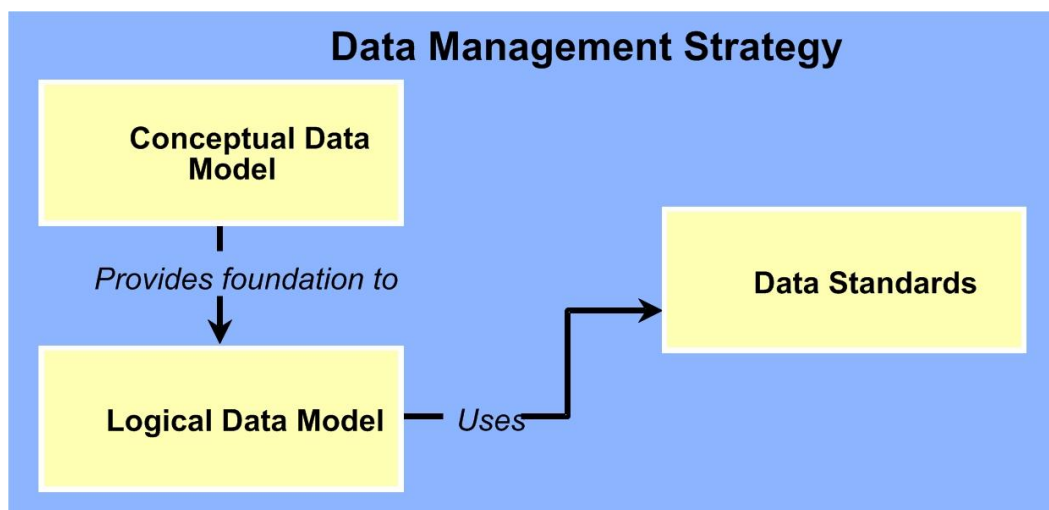
Table 1-2. Summary of the Components of the IA

IA Components Summary		
<i>Part/Chapter/ Component</i>	<i>Description</i>	<i>Role in the IA</i>
Part II, Chapter 2, Data Management Strategy (DMS)	The DMS is an enterprise-wide data strategy that addresses the business flow of data across the Medicaid Enterprise. It involves architecture, modeling, standards, metadata, management, interoperability, security and privacy, access methods, quality, and performance measurement. The three key parts of the DMS are as follows: • Data Governance • Data Architecture • Data-Sharing Architecture	Provides guidance that enables States to transition their current IA to MITA. A move that results in lower cost, improved outcomes, and reduced errors for State Medicaid Enterprises. The DMS also provides a roadmap for States to use as they transition their enterprise from one level of the MMM to the next.

IA Components Summary		
<i>Part/Chapter/ Component</i>	<i>Description</i>	<i>Role in the IA</i>
Part II, Chapter 3, Conceptual Data Model (CDM)	The CDM identifies subject areas and groupings of data important to the business and defines their general relationships. It serves as an overall conceptual structure independent of software or data storage structure. The CDM maps the interrelationship of the high-level data across business areas and business processes.	Provides guidance to do the following: • Bridge the gap between Medicaid subject matter experts, IT architects, and designers. • Develop an LDM for IT staff (e.g., States, or vendors) (discussed in Part II, Chapter 4). • Ensure the completeness of the business model and serve as a tool that enables the reengineering of Medicaid business processes.
Part II, Chapter 4, Logical Data Model (LDM)	MITA derives the LDM from the CDM, but the LDM contains more details (all entities, attributes, and relationships) broken down into the data classes and attributes necessary for every drilled-down business process, as well as the relationships between these subject areas. The LDM also references any associated data standards and code sets. Data organization rules apply to the data model. The data modeling term used for the application of these rules is “Normalization”. The objective of an LDM is to have a fully attributed and “normalized” data model. The parts of the LDM are as follows: • Entities • Attributes • Properties • Relationships • Definitions • Domains • Related Standards • Entity-Relationship Diagram (ERD)	Provides guidance and specifics to IT staff (e.g., States or vendors) on how to design MITA enterprise service interfaces. It does not include state-specific data objects and relationships. States will complete the LDM to include state-unique entities and relationships and detailed attributes. The LDM is the basis for development of the state’s Physical Data Model that describes how data flows to different processing nodes and how data structures meet performance objectives in a specific physical implementation. The LDM provides a mechanism for ensuring the completeness of the business model and serves as a tool that enables the reengineering of Medicaid business processes. States will achieve true plug-and-play capabilities of services and interoperability only when they start using a shared data model.

IA Components Summary		
<i>Part/Chapter/ Component</i>	<i>Description</i>	<i>Role in the IA</i>
Part II, Chapter 5, Data Standards (DS)	Key elements of a data standard are data element names, definitions, data types, and formatting rules. MITA data standards describe objects, features, or items collected, automated, or affected by the business processes of a State Medicaid Enterprise. MITA standards are either structured data standards or vocabulary data standards. The DS identifies the applicable standard for each data element. It is a collection of standards applicable to the administration and operation of Medicaid Enterprise data. The following attributes define each standard: • Title • Category • Objective • Source (i.e., standards organization) • Type • Versions and status • Applicability • References • Relationships to other standards • Key terms	Enables the sharing or exchange of information in a way that guarantees the mutual understanding of the information represented.
Part II, Chapter 6, Information Capability Matrix (ICM)	The ICM defines the information capabilities identified in the business process that enable technical capabilities. The ICM includes four (4) primary components: • Data Management Strategy • Conceptual Data Model • Logical Data Model • Data Standards	The ICM describes an IA component at a specific Level 1-5 of MITA Maturity for each of the business areas.

Figure 1-3 shows the interrelationships among the IA components.



IA-1-2

Figure 1-3. IA Components

Table 1-3 illustrates a logical vs. physical representation. The LDM is a representation of an organization's data, organized in terms of entities and relationships and is independent of any particular data management technology. Some examples of this component's logical "attributes" include:

- ❖ AD is a logical data type for a physical address that contains the Address Line 1, Address Line 2, City, State, Zip, County, and Country.
- ❖ ID is a logical data type for an identification number that contains the Assigning Authority Name, whether it is displayable, an extension, or root. An example of an ID would be Member ID issued by the SMA.
- ❖ PN is a logical data type for a person's name that contains the Prefix, First Name, Middle Name or Initial, Last Name, Suffix.

Table 1-3. Comparison of Logical vs. Physical Data Models

Logical vs. Physical Data Models	
<i>Logical Data Model</i>	<i>Physical Data Model</i>
Includes entities, attributes, and relationships.	Includes tables, columns, keys, data types, validation rules, database triggers, stored procedures, domains, and access constraints.
Uses business names for entities and attributes.	Uses more defined and less generic specific names for tables and columns, such as abbreviated column names, limited by the database management system (DBMS), and any company defined standards.
Is independent of technology (e.g., platform, DBMS).	Includes primary keys and indices for fast data access.
Is normalized to third normal form (3NF).	May de-normalize to meet performance requirements based on the nature of the database. If the nature of the database is Online Transaction Processing (OLTP) or Operational Data Store (ODS), States usually do not de-normalize. De-normalization is common in data warehouses.

Table 1-4 shows a few LDM attribute examples:

Table 1-4. Examples of Data Model Attributes

Data Model Attributes			
<i>Attribute</i>	<i>Data Type</i>	<i>Includes</i>	<i>Modeled As</i>
Address	AD	Address Line 1 Address Line 2 City, State, Zip County Country	address: AD
Person Name	PN	Prefix, First Name, Middle Name, Last Name, Suffix	contactName: PN
Enterprise Name	EN	Company Name	companyName: EN

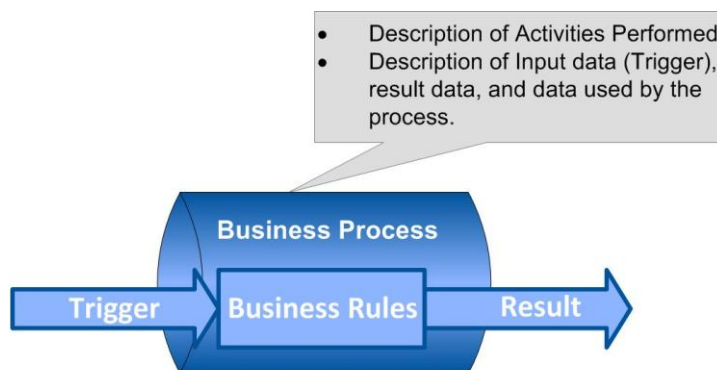
Connection between Architectures

The IA has a mandatory relationship with both the BA and the TA. The BA describes the business processes along with data input, data output, and shared data required. The TA describes the technology enablers associated with different levels of maturity. The IA provides the bridge between the business view of the information and the technical view of the data.

Business Architecture Link

The Business Process Model (BPM) requires a companion data model. For example, the business process Determine Provider Eligibility lists a set of input data coming from the application (e.g., name, address, date of birth, college degrees, licenses, affiliations, and other required data). The business capability for Determine Provider Eligibility at Maturity Level 1 states that this data adheres to state requirements and is nonstandard (i.e., it does not meet national standards). At Maturity Level 3, Determine Provider Eligibility data meets national standards as determined collectively by other provider eligibility and enrollment industry groups. At Maturity Level 5, stakeholders will standardize provider eligibility data across the nation, except for data from state-specific business processes.

MITA requires a data model linked to the BPMs listed in Part 1. **Figure 1-4** shows how the business process description links to data.



IA-1-4

Figure 1-4. MITA Business Process and Data Links

Technical Architecture Link

The TA requires a companion IA. The information model translates and defines the information needs of the BA into the data and message specifications for the TA. The IA also provides the vision and guidance for information management implemented in the technical functions and technical capabilities. The TA derives the data portions of the service specification from the LDM.

The CDM, together with the LDM, comprise the Medicaid Enterprise Data Model Layer.

The IA describes the current and future information and data needs of a State Medicaid Enterprise. Through a series of models, the architecture specifies the key components of information systems used by State Medicaid Enterprises to execute their business processes. These components include the principles, goals, access strategies, information, and applications that use the information to enable the business processes, and the ways that applications and information together support the enterprise's business functions.

Information Architecture Development Process

The BA BPM drives the IA. Because of the importance of successful data sharing, the architecture focuses on identifying the data elements needed by the MITA business processes so that the SMA can identify standards to enable successful sharing across enterprises. The following components as previously indicated are data models included in the architecture:

- ◆ CDM

- ◆ LDM

The identified subject areas construct the As-Is operations and To-Be environment CDM. Next, as BA defines the data needed by business processes and their business capabilities in detail, the MITA As-Is and To-Be CDMs break down the data into subject areas or domains, then the LDMs breakdown the domains further into classes and their attributes. Entity relationships and class diagrams model relationships. The LDM development is an ongoing process that MITA will continue to refine as it develops end-to-end business processes.

Completing the IA requires the definition of data standards and a data management strategy. Data standards describe objects, features, or items collected, automated, or affected by the business processes of a State Medicaid Enterprise. A data management strategy identifies the patterns in the Medicaid Enterprise for the exchange and sharing of Medicaid information. Identifying the patterns allows the development of optimal data governance procedures, data architecture, and data-sharing architecture for the Medicaid Enterprise.

The MITA team took into consideration methodologies employed by several industry-accepted models including (but not limited to) the following:

- ◆ Zachman Framework Reference Model
- ◆ Federal Enterprise Architecture Reference Model (FEA)
- ◆ "National Association of State Chief Information Officers Architecture Handbook"
- ◆ National Information Exchange Model (NIEM)
- ◆ Federal Health Information Model (FHIM)
- ◆ Health Level Seven International (HL7)

❖ Veterans Health Information Modeling (VHIM)

Using the Information Architecture

The IA provides a conceptual and logical view of all of the data commonly used throughout the Medicaid Enterprise. It describes the integrated information requirements of the Medicaid Enterprise using general data objects and relationships. The architecture is the primary tool for strategic planning, communicating information requirements throughout the organization, implementing integrated systems, and providing an integrated information strategy.

The Medicaid Enterprise data model layer is the pivotal layer of the IA, as it connects reusable business concepts to application-level views of enterprise data through generalized content. Conceptual and logical design of individual processes and services builds the data model layer incrementally.

States use the LDM to build Logical Application Data Models including state-specific adaptations and extensions to provide application-specific details. Architects and designers build application data models at both the logical and physical abstraction levels and reuse data objects defined at the enterprise level. This ensures that application models have common keys, attributes, and definitions throughout the enterprise data architecture. A single entity in the data model exists in multiple application-specific models with attribute and code set variations based on business need (i.e., rules) or as subtypes of more generic enterprise entities. A single entity in the MITA data model supports data consistency and reuse.

The IA provides States with guidance on selecting a data management strategy that meets national standards for data sharing and interoperability. It also enables States to use common strategies (e.g., data hubs) when designing Medicaid information solutions.

States, CMS, vendors, legislators, and others will use the architecture's components to plan for improvements in the State Medicaid Enterprise, both in the delivery of services (i.e., to providers, beneficiaries, and citizens), and in its internal operations and exchanges of information with other external parties.

Table 1-5 summarizes how stakeholders will use the IA.

Table 1-5. Stakeholder Participation in the IA

Stakeholder Participation in the IA	
Stakeholder	How Stakeholders Use the IA
SMA	The SMA participates in workgroups defining and maintaining the IA. The SMA will extend the MITA data models to include their state-unique information and data requirements. Once the SMA has completed its State Self-Assessment (SS-A), determining its To-Be business process and capability level, the IA determines what information the new processes require. The IA also provides the detailed data specifications used in defining the MITA services to implement the business process. IA details are available for use by the States to use as

Stakeholder Participation in the IA	
Stakeholder	How Stakeholders Use the IA
	requirements in their Request for Proposals (RFP). States may request vendors to supply data models for proposed solutions. Architecture Review Boards (ARB) review proposed solutions for inclusion in the MITA repository.
CMS	CMS provides leadership in establishing the MITA guidelines and promoting them among States. Through the release of the MITA Framework, special workshops with States, Medicaid conference material, and working with early adopter States, CMS is creating the framework that Medicaid programs will utilize to meet current and future needs. CMS is developing a Master Data Management strategy for the Medicaid Integrity Group (MIG) Program Integrity (PI) efforts to detect and reduce fraud.
Vendors	The vendor community uses the MITA Framework as a reference in planning their research and development activities. They use the IA in particular as a guideline to identify the syntax, semantics, definitions, and relationships of all common Medicaid data used between the Medicaid Enterprise processes. This results in vendors having a common understanding of the data's syntax, function, and semantics that aligns their solution with the Framework and interoperability with other State Medicaid Enterprises.
Providers	Providers play an active role in the exchange of information with the SMA based on the definitions supplied by the IA. Provider directories will enable Medicaid plans to ensure access and coordination of care for beneficiaries who seek care and services from multiple locations.
Other Payers and Other Agencies	Invite others to review the IA to learn about the Medicaid plans for transformation with MITA. CMS envisions that other agencies and data standard organizations will collaborate increasingly with Medicaid to come up with a harmonized set of data standards that will promote interoperability of all health care functions. Enterprise Master Patient Indices (EMPI) contain a unique identifier for every patient in the enterprise. A complete view of a patient is possible by correctly matching patient records from disparate systems and different organizations. With this complete view, numerous benefits include the following: • Better patient care. • Improved customer service. • In emergency or other critical care situations, medical staff can be more confident they know medical conditions or other information that would be critical to providing proper care. • Organizations can obtain historical care-related information. The Council for Affordable Quality Healthcare (CAQH) develops and implements administrative solutions that produce meaningful, concrete benefits for physicians, allied health professionals, their staffs, patients, and plans. They have worked on:

Stakeholder Participation in the IA	
Stakeholder	How Stakeholders Use the IA
	- Committee on Operating Rules for Information Exchange (CORE) Phase I and II Rules – CAQH launched CORE with the vision of giving providers access to eligibility and benefits information before or at the time of service, using the electronic system of their choice for any patient or health plan. The CMS Administrative Simplification: Adoption of Operating Rules for Eligibility for a Health Plan and Health Care Claim Status Transactions [CMS–0032–IFC] mandates the use of Phase I and Phase II operating rules for the 270/271 Eligibility, 276/277 Claims Status Inquiry, 997 and TA1 ASC X12 transactions. - Universal Provider Datasource (UPD) – The UPD allows registered physicians and other health professionals in all 50 States and the District of Columbia to enter their information free of charge into a single, uniform online application that meets the data needs of health plans, hospitals, and other healthcare organizations. This provider data-collection service streamlines the initial application and re-credentialing processes, reduces provider administrative burdens and costs, and offers health plans and networks real-time access to reliable provider information for claims processing, quality assurance, and member services, such as directories and referrals.

Next Steps in Developing the Information Architecture

The MITA Framework delivers the starter kit for a controlled State Medicaid Enterprise transformation. MITA will always be a work in progress. CMS continues to collaborate with federal and state authorities, vendors, and data standards organizations to further develop and maintain the DMS, CDM, LDM, DS and ICM components. CMS envisions that teams of States will select various subsets of the IA, refine the activities, and standardize the information exchanges. This collaboration will produce data models that States and vendors will extend for state-specific data and use as a basis to develop physical data models. The CMS MITA team will continue to support state efforts by serving as a conduit for improvements to MITA models that all States and vendors can access.

The MITA Framework and the IA are ever evolving so that States can continuously improve the way they deliver services to beneficiaries and providers, account for outcomes, reward participants based on performance, and respond dynamically to requests for information.



IA-1-5