

National Medicaid Enterprise Hub Presents:

# WALK IT LIKE YOU PLAN IT A FLEXIBLE APPROACH FOR ENTERPRISE DATA MANAGEMENT STRATEGY

Debra Dixon, NMEH MITA SWG Co-Chair



#### Welcome

#### Debra Dixon, Moderator

- In this session, you will hear the methods and approaches that, Washington, California, and West Virginia have developed to operationalize their Data Management Strategy and meet both business and enterprise data needs.
- Please remember to silence your cell phones.
- We will manage the session by holding all questions until the last 10 minutes.
- When asking questions please identify yourself and use the microphones to ensure that all attendees and the presenters can hear the question.



### **Speakers**

- SPEAKER 1 Cathie Ott, Assistant Director, Washington State Health Care Authority, Division of ProviderOne Operations & Services
- SPEAKER 2 Dwayne Carter, Managing Partner, Blu Consulting; Debra Dixon, Chief - IT Branch, Department of Health Care Services, State of California
- SPEAKER 3 –Zachary J. Rioux, Senior Consultant, BerryDunn, State of West Virginia
- SPEAKER 4 Edward L. Dolly, Centers for Medicare & Medicaid Services

Note that all speakers will have approximately 10 minutes to present their portion of the session.



## Implementing Data Management Strategy & Operations

Cathie Ott
Assistant Director
Division of ProviderOne Operations and Services
August 14, 2018



#### Establishing a Data Management Foundation

- Plan and lead using a formal governance structure
  - Define mission, vision, core principles, goals, objectives
- Document business value to organization, enterprise, state, CMS
- Authority for Data Management/Data Governance
  - Define roles, responsibilities
  - Documented escalation path for decisions
- Define data domains, data sets
- Change management and training plan
- Support and conduit for cross-agency data governance topics
- Communication!!!



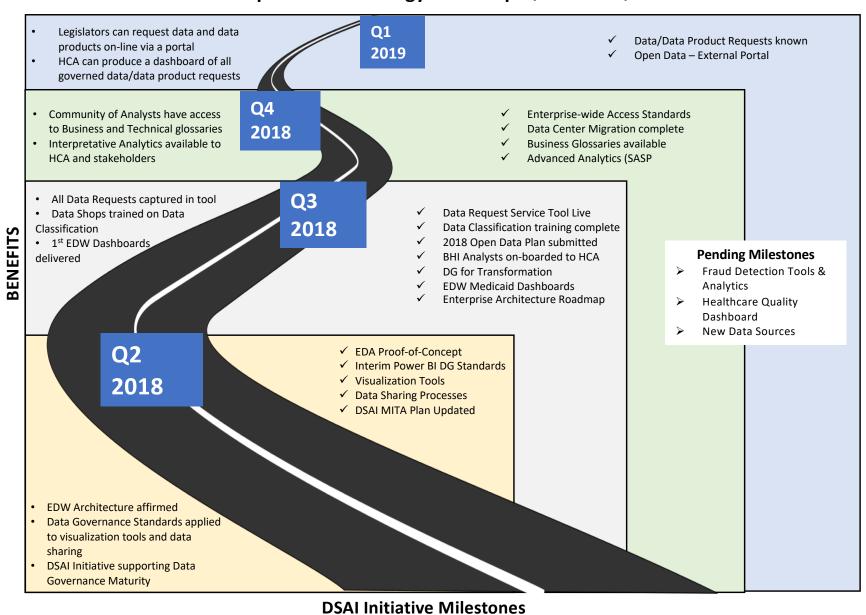
HCA consistently uses
enterprise data to make informed decisions
and to provide trusted information to our
external partners.

People

Processes

**Enterprise Data Management and Analytics** 

#### **Enterprise Data Strategy Roadmap Q2 2018 - Q1 2019**

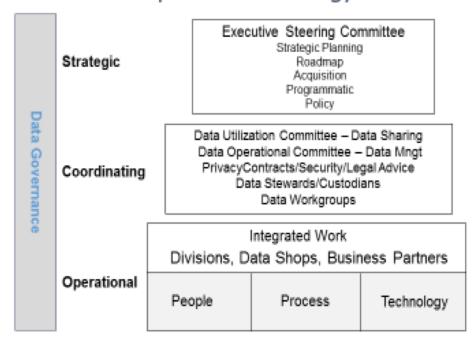




#### **Establishing Organizational Structure**

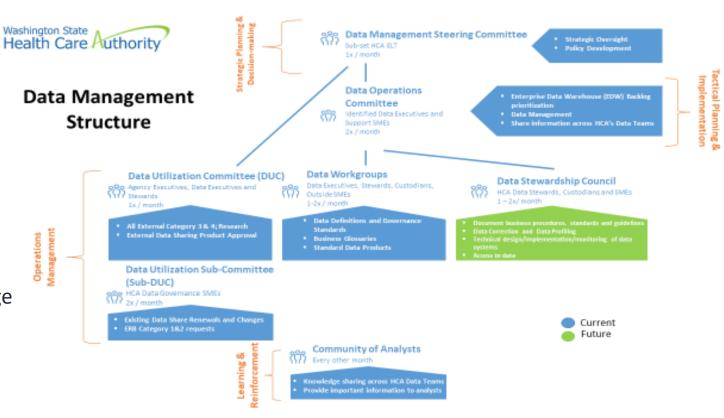
- Utilized the Data Management Association (DAMA) framework
- Established organizational structure with represented data users, data security and privacy, data sharing, open data, legal/contracts, data ownership and stewardship
- Identify enterprise data management/governance issues and where to focus first – high risk areas
- Initial scope and boundaries balance between efficient data provision and data controls
- Communication!!!

#### Enterprise Data Strategy



#### Establishing Business Processes & Technical Infrastructure

- Org structure membership selection
- Develop Data
   Management and Data
   Sharing
   policies/procedures
- Develop technical infrastructure and tie to data management
- Implement BI tools and governance of tool usage and publishing
- Communication!!!





#### **Data Management Structure**

| Committee/<br>Group                   | Role                                                                                                                                                                                                                                                                             | Functions                                                                                                                                                                                                                                                                                                           | Decision Making Authority                                                                                                                                           |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Data Management<br>Steering Committee | Provide agency-wide perspective and leadership for the Enterprise Data Warehouse project, the Data Governance program and projects within the HCA Data Roadmap – Support & Governance work                                                                                       | Strategic Oversight Policy Development                                                                                                                                                                                                                                                                              | Decision Maker, escalation to Coordinating Team for enterprise guidance                                                                                             |
| Data Operations<br>Committee          | Provide a cross-agency perspective and business unit view<br>for tactical planning and implementation for the Enterprise<br>Data Warehouse (EDW) project, Data Workgroups and the<br>Data Stewardship Council                                                                    | EDW Prioritization process Data Management Sharing information and business priorities across HCA Data Teams                                                                                                                                                                                                        | Decision Maker, escalation to the Data<br>Management Steering Committee for agency-<br>wide impact                                                                  |
| Data Utilization<br>Committee         | Provide guidance and oversight of the data release practices at HCA                                                                                                                                                                                                              | Vetting of all external requests for Category 3 or 4 data, research requests, external data publications and dashboards                                                                                                                                                                                             | Decision Maker, escalation to the Data<br>Management Steering Committee and/or<br>Coordinating Team for requests with enterprise-<br>wide implications              |
| Data Utilization Sub-<br>Committee    | Responsible for validating that existing external requests for data are complying with current governance, privacy and security standards                                                                                                                                        | Review contract renewals and modifications dealing with data sharing Vetting of ERB Category 1 & 2 requests                                                                                                                                                                                                         | Decision Maker, escalation to the Data Utilization<br>Committee for guidance                                                                                        |
| Data Workgroups                       | Formed to provide an agency-wide definition for a specific topic Comprised of SME's from across the agency and in some cases, includes partner agency participants Vary in duration - some are temporary and some long term depending on the goals and objectives for each group | Develop Data Governance standards (e.g., small numbers) Governing specific Data Domains (e.g., Opioids) Develop business and technical glossaries Cross-agency collaboration - ensuring clinical, program, fiscal, technical and business are represented Knowledge transfer/sharing across data domains or subject | Escalation to Data Operations Committee for approval of recommendations or Data Management Steering Committee for recommendations with enterprise-wide implications |
| Data Stewardship<br>Council           | Business Data Stewards are designated and participating from every business function that owns data Data Custodians are designated for all enterprise applications, data stores, data lakes, data warehouses, data marts, data products and ETL processes                        | Stewards: Define and document business procedures, standards and guidelines. Data Correction. Data Profiling. Custodians: Provide technical design, implementation and monitoring of data systems. Ensure access to the data is authorized and controlled                                                           | Escalation to Data Operations Committee for approval of recommendations or Data Management Steering Committee for recommendations with enterprise-wide implications |
| Community Of<br>Analysts              | Provide data specific business unit, subject matter expertise                                                                                                                                                                                                                    | Knowledge sharing across HCA Data Teams                                                                                                                                                                                                                                                                             | Participant<br>Subject Matter Expertise                                                                                                                             |



#### Implementation/Accomplishments To Date

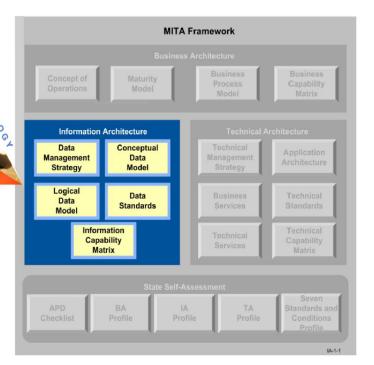
| HCA Capabilities                                                                                                                                             | Policy, Process, Procedures & Tasks                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>PEOPLE:</b> HCA's Data Governance Management structure is in place – supports agency's strategic direction and manages day-to-day operations              | Strategic Planning/Decision Making by the Executive Steering Committee  Day-to-day operations established in Office of Enterprise Data  Management and Analytics (EDMA) and supported by Data Utilization  Committee, Sub-Committees, and Data Workgroups  Learning and Enforcement provided by written policies/procedures and supported by Community of Analysts, Data Stewards and Custodians                                            |
| <b>POLICY &amp; PROCESS:</b> Business driven governance process that provides consistent, reliable data for internal and external data requests              | <ul> <li>Launched <u>Data Utilization Committee</u> (DUC) &amp; Sub-Committees</li> <li>Data Request Form (DRF); Data Visualization Standards for Tableau</li> <li>Data Product Review and Release Process; Data Publish Approval</li> <li>Standard Technical and Compliance review processes</li> <li><u>Data Workgroups</u> provide guidance for complex data issues: data categorization, sensitive data, small numbers, etc.</li> </ul> |
| <b>TECHNOLOGY:</b> Data Infrastructure works behind the scenes to create efficiency and provide transparency for all aspects of the data governance process. | Enterprise Data Warehouse procurement and implementation plan completed Dec 2017  Master Data Management system and tools launched and supporting data quality for Client and Provider data.  Data Request Service Project (provided by ServiceNow) – Q1 2018  Launch                                                                                                                                                                       |



#### **Enterprise Strategy**

HCA's Data Management Strategy informs the Information Architecture of the MITA Framework:

- MITA Vision: Achieve optimal sharing of Medicaid Enterprise information
- HCA Programs:
  - Establishing Data Management Foundation
  - Establishing Organizational Structure
    - Both at Agency and Cross-Agency levels
- Technology:
  - Development of technical infrastructure tied to data management processes





### CALIFORNIA / BLU STRATEGIES: ENTERPRISE DATA MANAGEMENT STRATEGY

Dwayne Carter, Blu Strategies
Debra Dixon, California Department of Health Care Services



### Defining the EDMS

#### Establishing an EDMS is great in theory

- Difficult to operationalize
- Easy to become static document that is not used
- Many strategy documents not enough results

#### DHCS wanted an EDMS that:

- Produces more action than documentation
- Articulates stakeholder expectations
- Results in meaningful and measurable benefits



### **EDMS** Components

**Core** (Enterprise Data Management Strategy (EDMS))

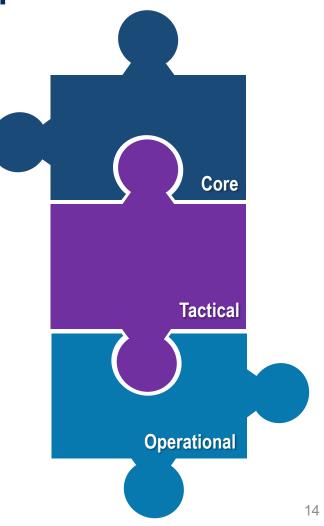
- High-level vision, goals and principles
- Based primarily on best practices

#### **Tactical** (EDMS: Supplement)

- Detailed plan for a single function customized to current environment
- Established performance measures and adoption expectations

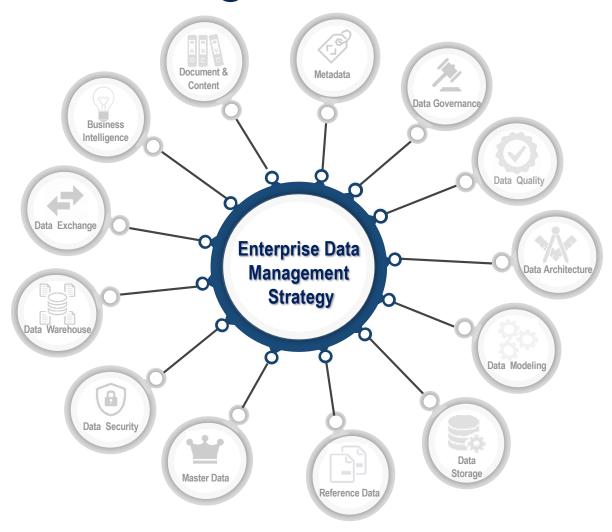
#### **Operational** (Project Data Management Plan)

- Each project required to develop data management plan
- Detailed plan that includes project data artifacts (Models), role assignments, etc.





### Defining the Core Strategy





## **Defining Tactical Strategies**





## T-MSIS Drives Data Quality Strategy

#### We leveraged T-MSIS to:

- Assess enterprise data quality
  - Identified current data quality activities and tools
  - Set data quality goals
  - Identified gaps and opportunities
- Define data quality roadmap
  - Identified data quality initiatives
  - Prioritized initiatives
  - Identified funding sources to support initiatives



## T-MSIS Drives Data Quality Strategy

#### Hire data quality resources

- Leveraged T-MSIS to establish new Data Quality Team
- Focused team on tracking data quality issues
- Engaged data stewards and source system owners to help resolve data quality issues

#### Define data quality processes & rules

- Established enterprise data quality policies and processes
- Allow enterprise to submit known data quality issue
- Developed enterprise (T-MSIS) DQ requirements and rules for future procurements



## T-MSIS Drives Data Quality Strategy

- Transform data quality issues
  - Drive current and planned project requirements
  - Set potential initiative priorities
- Promote data quality results
  - Dramatically decreased number of data quality issues reported through T-MSIS
  - Implemented tool to report and publish data quality measurements (Quality Measures for Encounter Data)





August 14, 2018

1:00 - 2:00 p.m.

B113/B114

## Track 4: Analytics to Drive Improvement Walk It Like You Plan It – A Flexible Approach for Enterprise Data Management Strategy

West Virginia Department of Health and Human Resources (WV DHHR)

Data Visioning and Warehouse Request for Proposals (RFP) Development

and Procurement Assistance Project





#### **Project Vision**

To create and maintain a useful, objective, and comprehensive enterprise data solution that can be used to promote better care, better health, and lower costs for West Virginians.





#### **Project Goals**

- Enterprise Integration & Modernization: To create and maintain a modernized and comprehensive enterprise data solution for the Department of Health and Human Resource's (Department's) use in promoting quality and cost-effective care.
- 2. <u>Increased Shared Use:</u> To maximize, promote, and improve the use and reuse of Department resources across the enterprise, while minimizing unnecessary duplicity of information databases.
- 3. <u>Improved Analytics & Reporting Capability:</u> To enhance and achieve users' confidence in the Department's health data analytic capabilities, reporting, and services.
- 4. <u>Long-Term Stability, Performance, and Use:</u> To enhance the Department's health information enterprise, analytic capabilities, and associated infrastructure to help ensure the long-term stability and performance.
- Common Governance Structure: To standardize the governance, management approach, and integrated change control processes that govern the Department's data management enterprise.





#### Strategy & Approach

- Establish a project management framework from which the project can be managed and governed.
- Conduct visioning sessions with stakeholders to define, document, and analyze the current and future state of the Department's data.
- Gather information on systems documentation, interview personnel, and conduct research.
- Define and document a common data governance structure.
- Define and document data sharing requirements and processes.
- Assist stakeholders in standardizing data dictionaries into a standard data dictionary template that details information including, but not limited to:
  - Database name, application name, platform, owner, database description, primary users,
     recovery time, and impact rating
  - Table name, field name, field description, data type, and field length
  - Field level identification of privacy information such as protected health information (PHI),
     personally identifiable information (PII), federal tax information (FTI), and social security
     administration (SSA) information





#### Strategy & Approach Continued

- Develop tools to assist in the automated creation and analysis of data dictionaries.
- Conduct an analysis to identify field-level information that appears similar, duplicative, and/or unique across databases.
- Develop a data integration roadmap that details objective recommendations on the integration and retirement of duplicative and similar databases as well as the overall data management strategy.
- Based on objective recommendations within the data integration roadmap, consider next steps and options for consolidation and/or retirement of similar and duplicative databases.
  - To the extent possible, leverage existing resources to support the consolidation of duplicative tables and fields.
  - If necessary, explore procurement options.





#### **Targeted Outcomes**

- A Department-wide data governance structure.
- A Department-wide data sharing process.
- A standard Department-wide data dictionary template.
- A library of the Department's applications and their associated databases.
- A database, table, and field-level map of the location of Department's data (inclusive of both sensitive and non-sensitive data).
- An objective analysis of each database and it's associated tables and fields.
- A 360°-view and roadmap of the Department's data to assist the State in making health IT policy, program, and procurement related decisions.

#### **CONTACT NMEH MITA SWG CO-CHAIRS**

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Thank You!

