Medicare Health Support: Technology Accomplishments and Challenges

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Legislative Mandate

"The Secretary shall provide for the phased-in development, testing, evaluation, and implementation of chronic care improvement programs in accordance with this section. Each such program shall be designed to improve clinical quality and beneficiary satisfaction and achieve spending targets with respect to expenditures under this title for targeted beneficiaries with one or more threshold conditions."
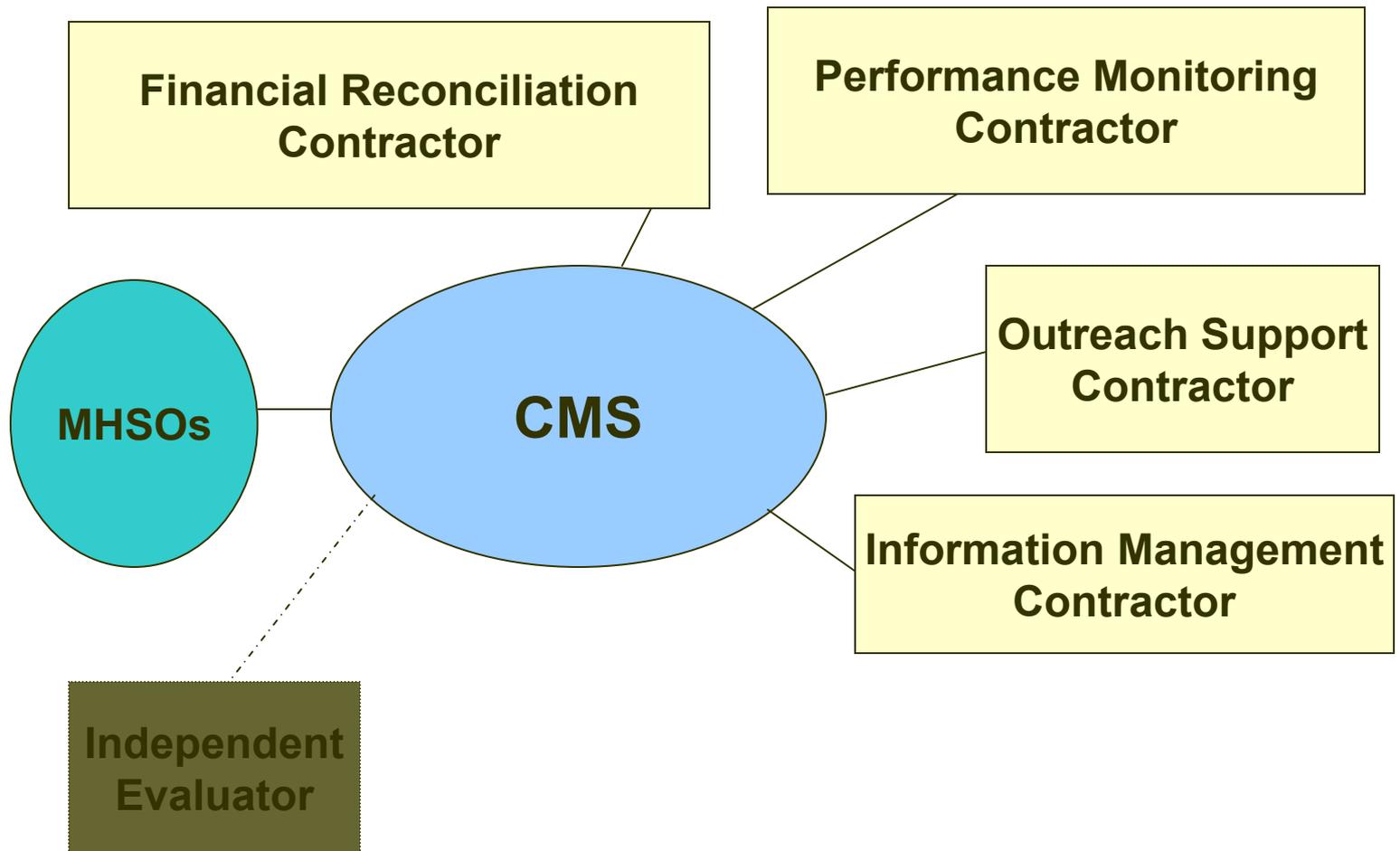
*Section 721 of P.L. 107-183, Medicare Prescription Drug, Improvement and Modernization Act of 2003

Medicare Health Support Key Features

- **Pilot programs**

- **24/7 personalized support for chronically ill beneficiaries**

- **Voluntary participation**

- **Free of charge**

- **No change in plans, benefits, choice of providers or claims payment**

- **Holistic approach**

- **At-risk program fees**

Program Infrastructure

Financial Reconciliation Contractor

Performance Monitoring Contractor

MHSOs

CMS

Outreach Support Contractor

Information Management Contractor

Independent Evaluator

MHS and Healthcare Issues and Trends

| Issue	Impact on MHS Operations
Quality and cost transparency initiatives, such as pay-for-performance	• Data and information are shared between CMS and its program partners. • The organizations are at fee risk for performance on quality, satisfaction and savings targets. • Initiative seeks to help transform Medicare from a passive payer to paying more for performance to get improved outcomes.
More pervasive use of health IT across provider and payer communities, combined with a more technology savvy beneficiary population.	• The organizations incorporate the use of health information technology including clinical decision support tools, and promote the exchange of information among providers seeking to improve continuity of care.
Fee-for-Service Medicare environment	• Claims, EDB, PDE • Data sharing constraints (PHI, privacy)

MHS Technology Journey

- **MHS has been on a journey to identify the needs of its private sector business partners, and to support the CMS program monitoring objectives . . .**

- **Key accomplishments:**
  - CCI-IMS
    - Performance Monitoring
    - Financial Monitoring and Reconciliation
    - Claims and EDB
    - PDE

  - Work around solutions
    - FI Agreements

  - Performance Metrics
    - Clinical Quality
    - Financial Reporting

CCI-IMS at a glance

The CCI-IMS is a prime example of how the innovative use of information management systems and business intelligence tools are improving healthcare for CMS Medicare beneficiaries
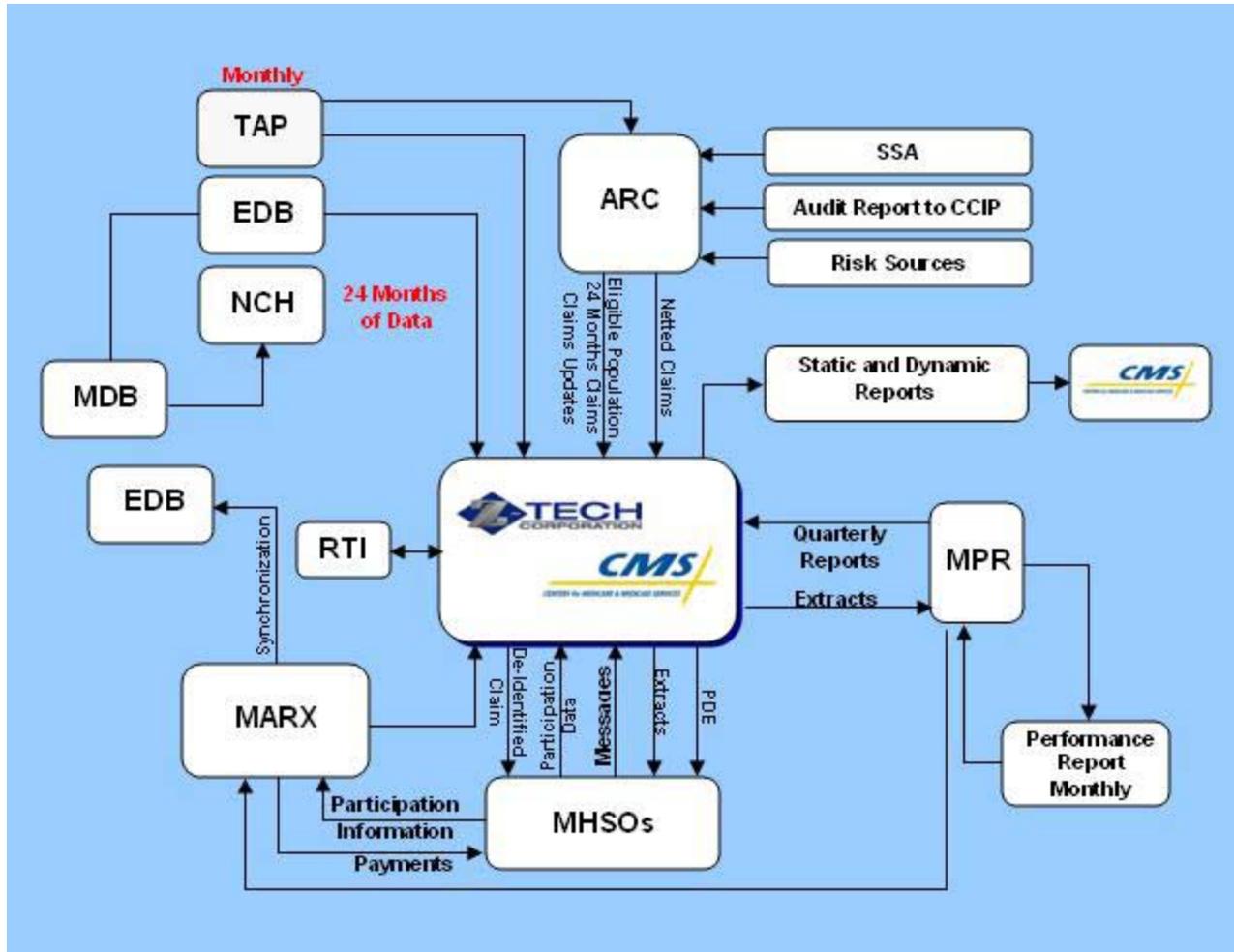
CCI-IMS
Technology & Tools

- **Medicare Data Communications Network (MDCN) - Backbone**

- **Java 2 Enterprise Edition (J2EE) - Application**

- **Oracle – Relational Database Management System (RDBMS)**

- **Websphere – Application Server**

- **Informatica – Extract Transfer Load (ETL) Tools**

- **Cognos Reporting**

CCI-IMS
Design & Implementation

- Designed using CMS's Technology Framework
  - Technical Reference Architecture
  - Software Development Lifecycle SDLC
  - CMS approved COTS

- Implemented as a CMS compliant 3-Zone Architecture
  - Multi-zone security architecture
  - Firewall separation
  - Isolated Zone traffic
  - Received 'Internal System Accreditation'
  - Certified to Operate until October 1, 2010

CCI-IMS Highlights & Achievements

- **CCI-IMS designed and implemented to support the mission (Chronic Care Improvement)**

- **Implemented using CMS technology framework as a Three Zone Architecture**

- **CCI-IMS was the primary project reviewed in Z-Tech Corporations successful assessment for Capability Mature Model Integration (CMMI) Level 3 certification.**

- **CCI-IMS Certificate to operate (providing data in a Safe & Secure environment)**

- **Serving the beneficiary through 'Quality Improvement & Satisfaction'**

Current Activities and Priorities

- **Continue to support the operations of MHS**
- **Begin to phase down the three-year programs implemented in 2005.**
- **Collecting information on performance**
- **Awaiting results of the Independent Evaluation to determine if the conditions for expansion have been met**
- **Beneficiary support**
- **Share learning to improve other initiatives being developed in and across the Agency and Federal Government**

For More Information

- **For more information:**
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