



*Using Enterprise Architecture
To Improve Healthcare
Delivery and Build Better
Information Systems*

*Brief to NDIA
April 3rd, 2003*

Agenda

- Overview of Enterprise Architecture (EA)
- MHS Enterprise Architecture
- Using EA to support Strategic and Capital Planning
- Linking MHS ES with the FMMP EA
- Using EA to build better IT Systems
 - Common Infrastructure Patterns

Enterprise Architecture

- This is not an IM/IT Talk
- This is about documenting how we do our business of monitoring, analyzing, managing and changing the delivery of healthcare without duplicative business processes ... optimal efficiency and effectiveness
- You should think this is important (OMB does and funding will be determined by whether you have an architecture and your requirements align with it)
- By the way, it also helps you build better, faster and less costly IM/IT systems

The Burning Issue

Too Much Information!

“A weekday edition of the *New York Times* contains more information than the average person was likely to come across in a lifetime in seventeenth century England.”

The complexity of managing a large, geographically dispersed healthcare is beyond the capacity of the unassisted human brain

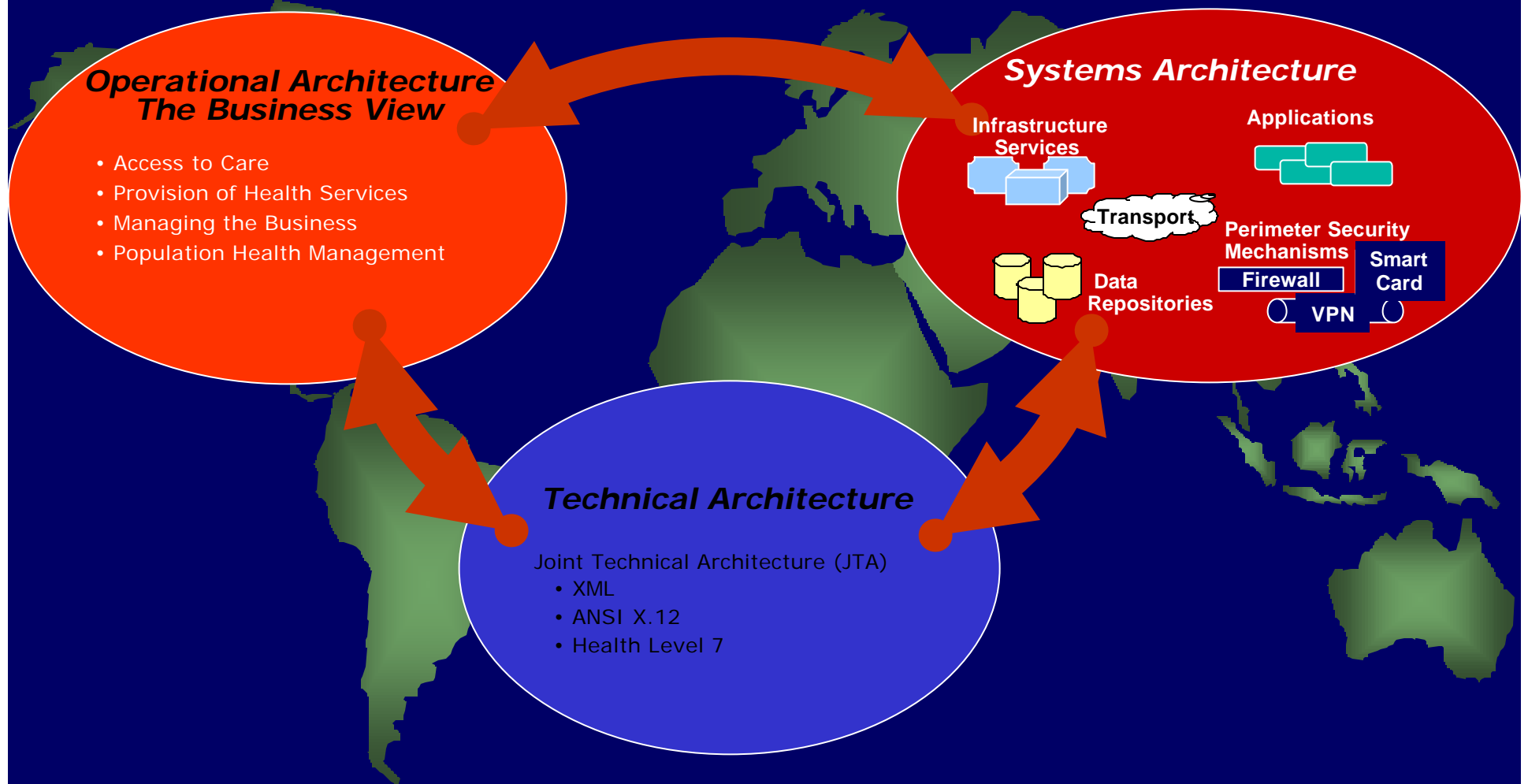
How Many of You Could Answer the Following Questions?

- What are the roles and training requirements of various members of a PCM team?
- What is the end to end business process for enrolling a patient and what information systems support it?
- I am looking to optimize my Critical Care Product line. How can I easily find out if anyone else in Navy Medicine has experience in doing this?
- If you change a data element in CHCS or DOES, will it affect any other business processes or IM/IT systems?

Benefits of an Enterprise Architecture

- EA Business (Operational) Component: Critical
 - ✓ Documents your organizational goals and business processes and aligns resources with them
 - ✓ Serves as a framework for knowledge management
- EA IM/IT Components (System and Technical): Supportive
 - ✓ Aligns IT systems with organizational goals
 - ✓ Crucial to interoperability of systems
 - ✓ Avoids duplication of functions in different systems
 - ✓ Allows for development of Common Services

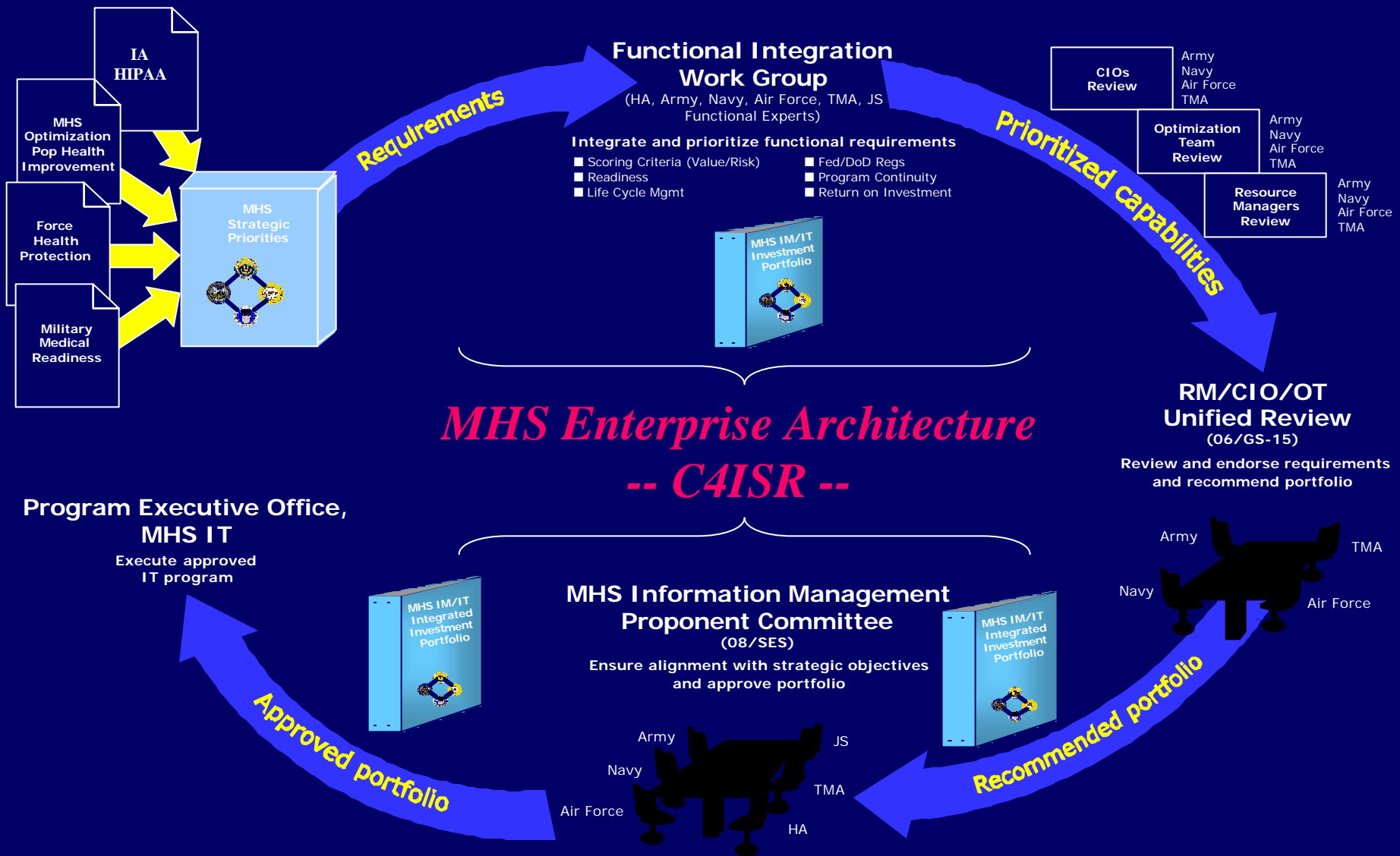
MHS Enterprise Architecture Strategy



MHS Enterprise Architecture Demo

<http://www.tricare.osd.mil/architecture>

MHS IM/IT Investment Portfolio Process Made Easier With an Enterprise Architecture



Program Objective Memorandum — Budget Estimate Submission — President's Budget — Annual Execution



- How to Use this Site
- ▼ PHI Clinic Fundamentals
 - Welcome to the Clinic
 - ▼ Roles & Responsibilities
 - Role Names
 - PCM
 - Nurse
 - Medical Support Staff
 - Clerk In (Admin)
 - Clerk Out (Admin)
 - Primary Care Team
 - Resource Manager (Admin)

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PHI Clinic Fundamentals: Welcome to the Clinic *(continued)*



Welcome to the Virtual Optimized Clinic. We represent a revolution in healthcare!

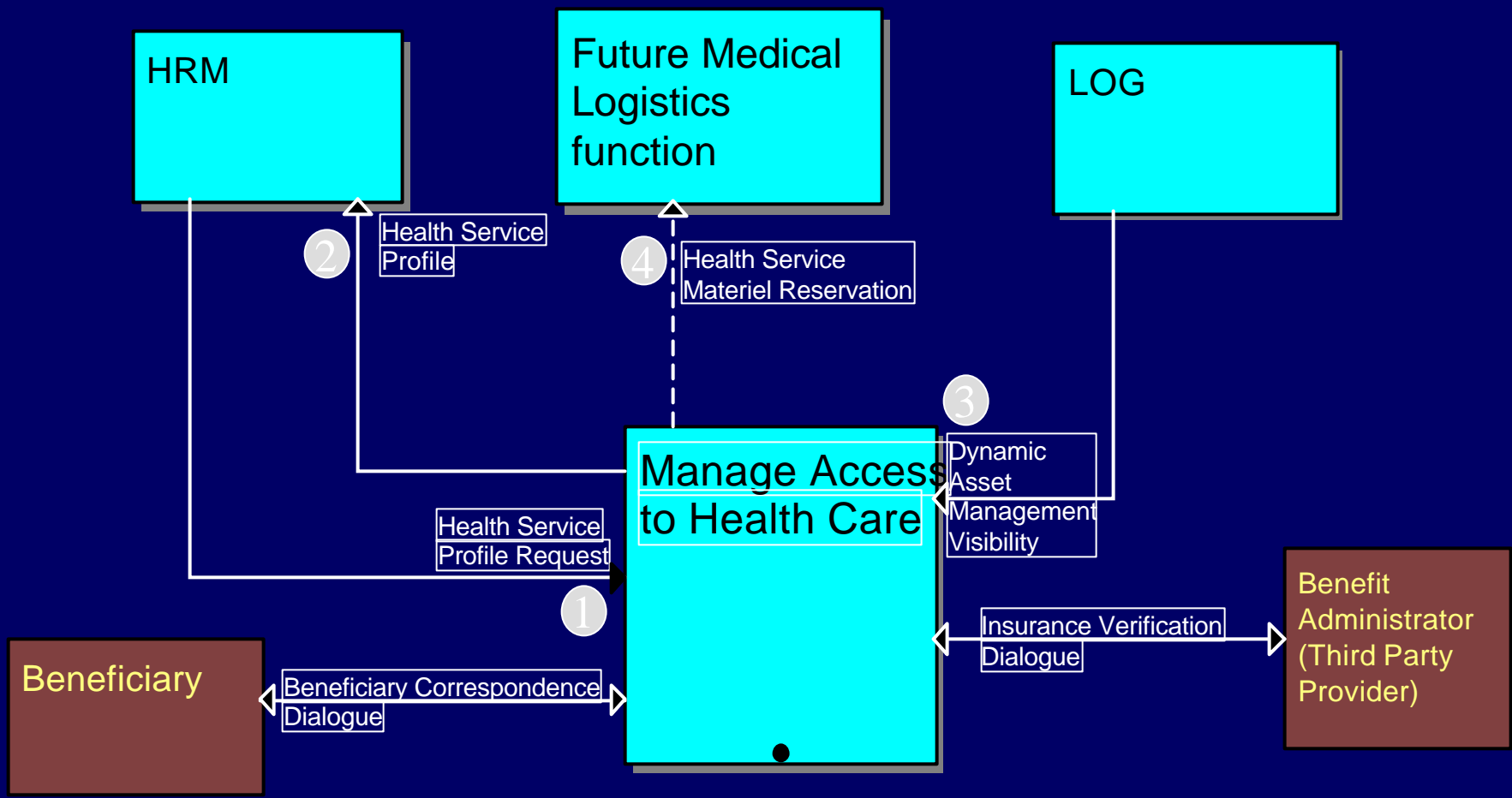
The entire DoD Military Health System (MHS) has changed to preventionist health delivery: *all three branches* of the military are working together to focus, promote, and enact this **change to Population Health Improvement (PHI)** and to create **one integrated health system** for our fighting forces and their families.

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The [Military Health System Web Site](#) is the Official Web Presence of the TRICARE Management Activity
The contents of this page were updated on 11/09/2001 10:24:00

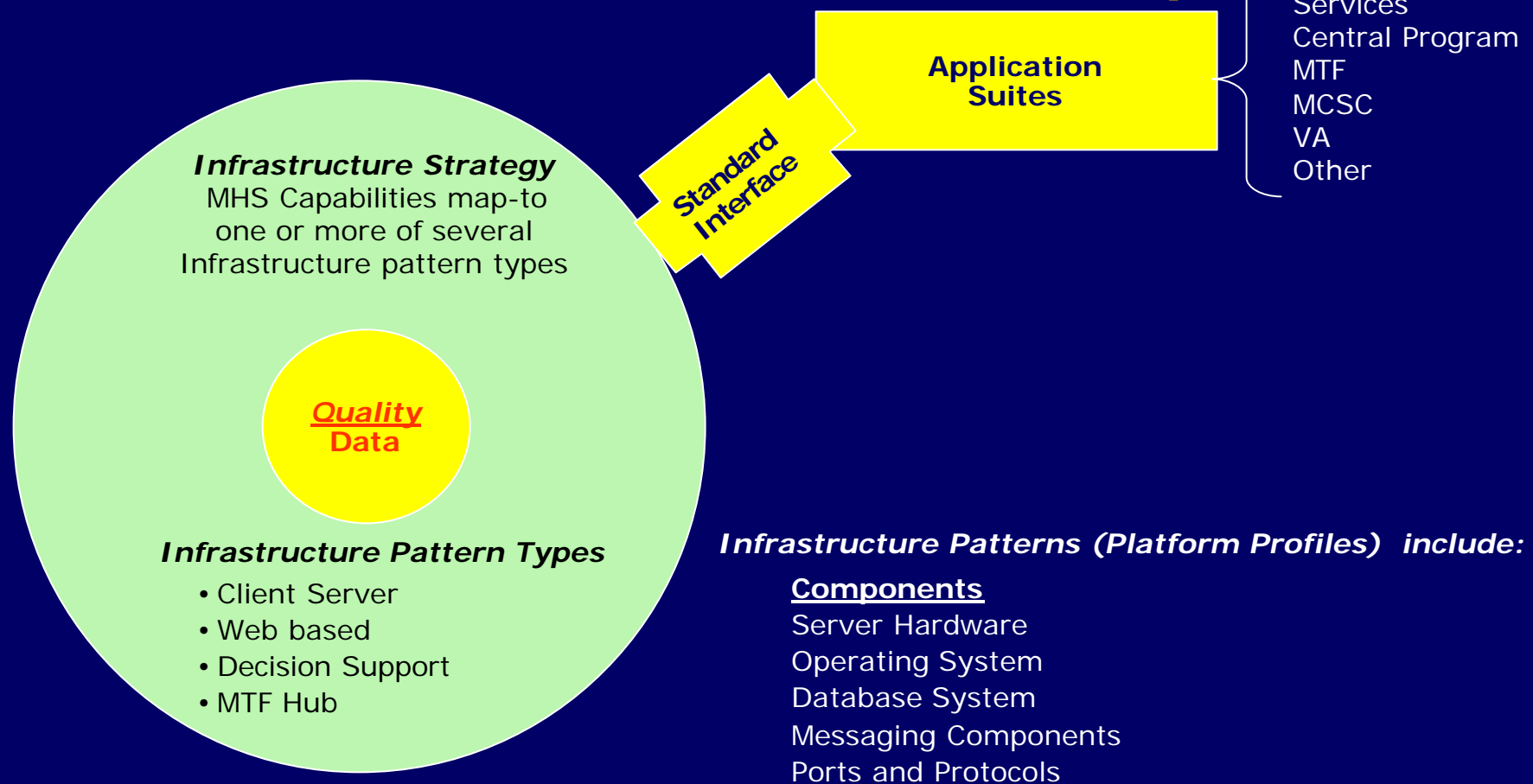
MHS Architecture and DOD's Financial Management Modernization Program (FMMP)

- FMMP is really DOD's EA for the sustaining base
- MHS has been working closely with DOD to map our EA to the evolving DOD Enterprise Architecture



Understanding the Strategic
Value of Standards-Based
Architecture and Platforms such
as TRICARE Online

MHS Common Operating Environment Concept



Infrastructure Strategy
MHS Capabilities map-to
one or more of several
Infrastructure pattern types

**Quality
Data**

Infrastructure Pattern Types

- Client Server
- Web based
- Decision Support
- MTF Hub

**Standard
Interface**

**Application
Suites**

Services
Central Program
MTF
MCSC
VA
Other

Infrastructure Patterns (Platform Profiles) include:

Components

Server Hardware
Operating System
Database System
Messaging Components
Ports and Protocols

TRICARE Online - Secure Portal to MHS Resources and Services



Welcome to TRICARE Online - Microsoft Internet Explorer

Address: <https://www.tricareonline.com/index.html>

TRICARE Online

Log On | Help | Appointments | Claims | Dental | Enrollment | Pharmacy

Search

Site Registration
My Personal Page
Services and Benefits
General Health Info
Be Well
RxChecker
Health Calculator
Anatomy Explorer
Get Answers
Kids
Providers and Administrators
Government Service Links

TRICARE is the healthcare program for active duty and retired service personnel, their eligible family members and survivors. TRICARE combines both military and civilian services to deliver high quality healthcare.

TRICARE Online is brought to you by your local Medical Treatment Facility, its civilian Managed Care Partner, and the Department of Defense. These entities form the TRICARE Healthcare Team dedicated to providing you with the best care possible.

TRICARE Online is currently in prototype testing at Camp Lejeune Naval Hospital, Cherry Point Naval Hospital, DeWitt Army Community Hospital - Rader Clinic, and Malcolm Grow Medical Center.

New users!
Click Here TO LEARN MORE ABOUT TRICARE ONLINE

TRICARE Online is a prototype web site in its early stages of development. As we begin to use it, we expect problems or "bugs" to surface. We ask for your earnest observations as you make use of the system. This is your opportunity to make a difference in the way the Military Health System takes care of its own. If you experience any problems while using this website, have any questions, or feel there are ways that we can do better, please do not hesitate to call the TRICARE Management Activity Call Center at 1-888-DoDEWeb. Agents are available from 7:00 am to 8:30 pm, Monday - Friday to assist you.

IT Benefits of Standards-Based Enterprise Architecture

- Any application wrote to standard specifications described in the Application Integration Guides can be easily integrated onto base platforms with no additional hardware and no new DITSCAP requirement
- Speed to market is greatly increased and costs are reduced
- Enterprise Wide Applications such as TOL's Learning Management System can be leveraged for *ALL* web-based training platforms
- Applications can be displayed based on Roles (Segmentation possible by Service, specialty, etc.)