ARMY MEDICINE
Serving To Heal...Honored To Serve

Army Medicine G-6
Defense Health Information Technology Symposium 2014

LTC Rich Wilson

Army Medicine CIO

29 July 2014

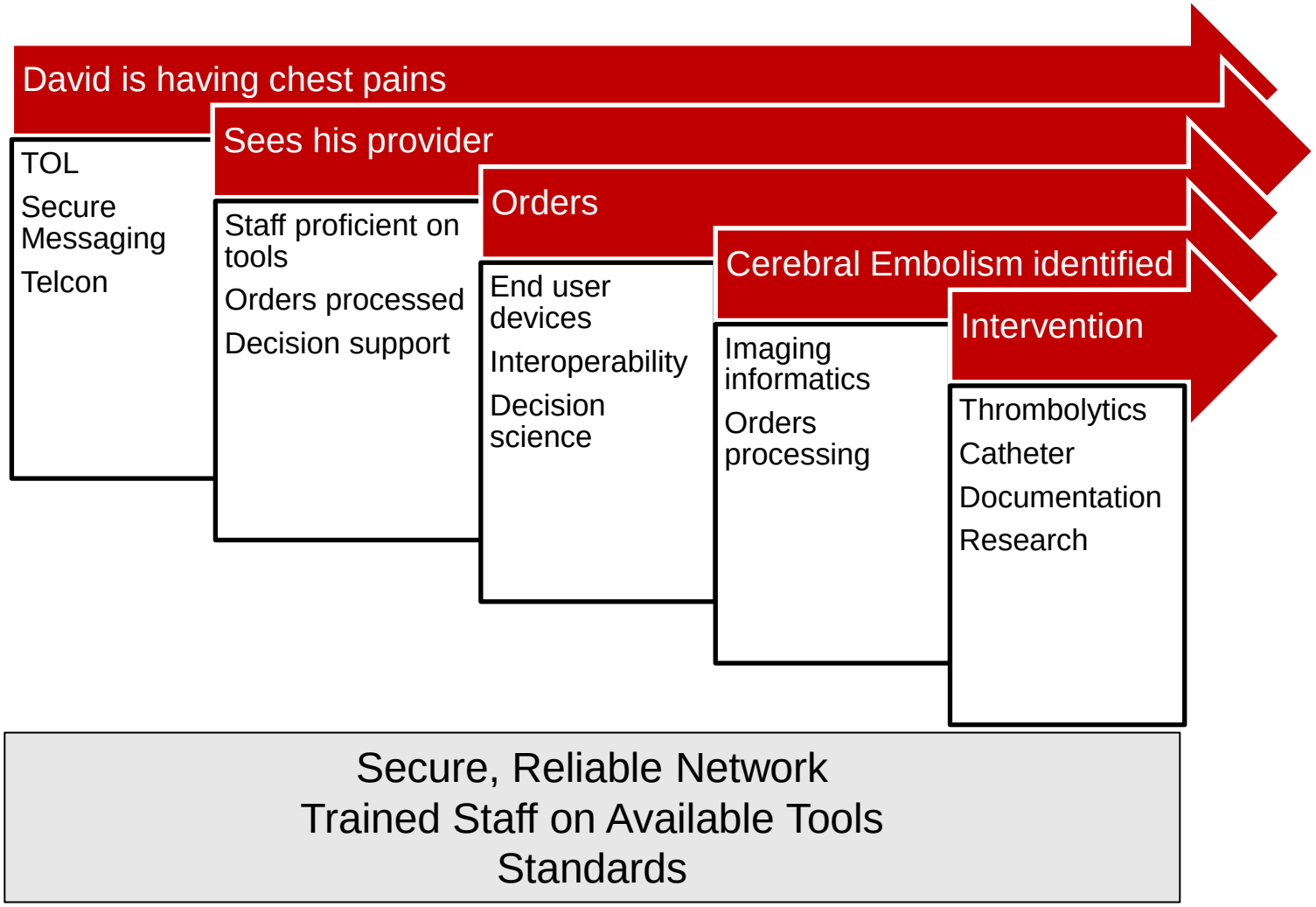
SECURITY CLASSIFICATION:
UNCLASSIFIED

BRIEFING OUTLINE

PURPOSE: To provide information and guidance to incoming MTF commanders on AMEDD Information Management/Information Technology (IM/IT) at the enterprise level; describe IM/IT expectations at the unit level; and solicit your support for critical transformation initiatives.

1. Army Medicine CIO/G6
2. DHA
3. EHR Modernization
4. CMIO
5. Operational Medicine
6. Future State

“IT Save Lives”



Average Day in Direct-Care MEDCOM

Outpatient Care

48,773 Encounters

74 Births

58,866 Laboratory Procedures

43,428 Outpatient Pharmacy Prescriptions

12,686 Radiology Procedures

7,901 Telephone Consults & Electronic Messages

Inpatient Care

1,201 Beds Occupied
402 Patients Admitted

Dental Services
7,318 Patients Seated

Veterinary Services
3,097 Veterinary Outpatient Visits
$28.2 Million of Food Inspected
369 Food Safety Visits

Medical Logistics Services
150,000 Supply Transactions
2307 Medical Maintenance WOs

Deployments
1,232 Soldiers Deployed

Army Medicine Global Footprint

Key Facts:

- 2nd largest active component command in the US Army
- 151,000 personnel
- Care for more than 3.95 million beneficiaries
- Global presence encompassing 11 times zones
- World renowned research and development
- Health & science diplomacy in more than 40 countries
- Almost $2 Billion in Research and Development funding

IM/IT Mission & Vision

AMEDD CIO/G-6 Mission:

Provide outstanding services, support and information to our stakeholders at the right time and place to:

- *Promote, sustain and enhance Soldier health*
- *Train, develop and equip the medical force that supports the full spectrum of operations*
- *Deliver leading edge health services to our warriors and family members to optimize outcomes*

AMEDD CIO/G-6 Vision:

Transform the AMEDD into an Outcomes-Focused, Knowledge-Driven, Systems-Based Organization Leveraging Health Information Technology to Enhance Our System of Health

DHA HIT Directorate Mission:

Implement, manage, and sustain an integrated and protected medical information enterprise in order to ensure the right information is accessible to the right customers at the right time and in the right way.

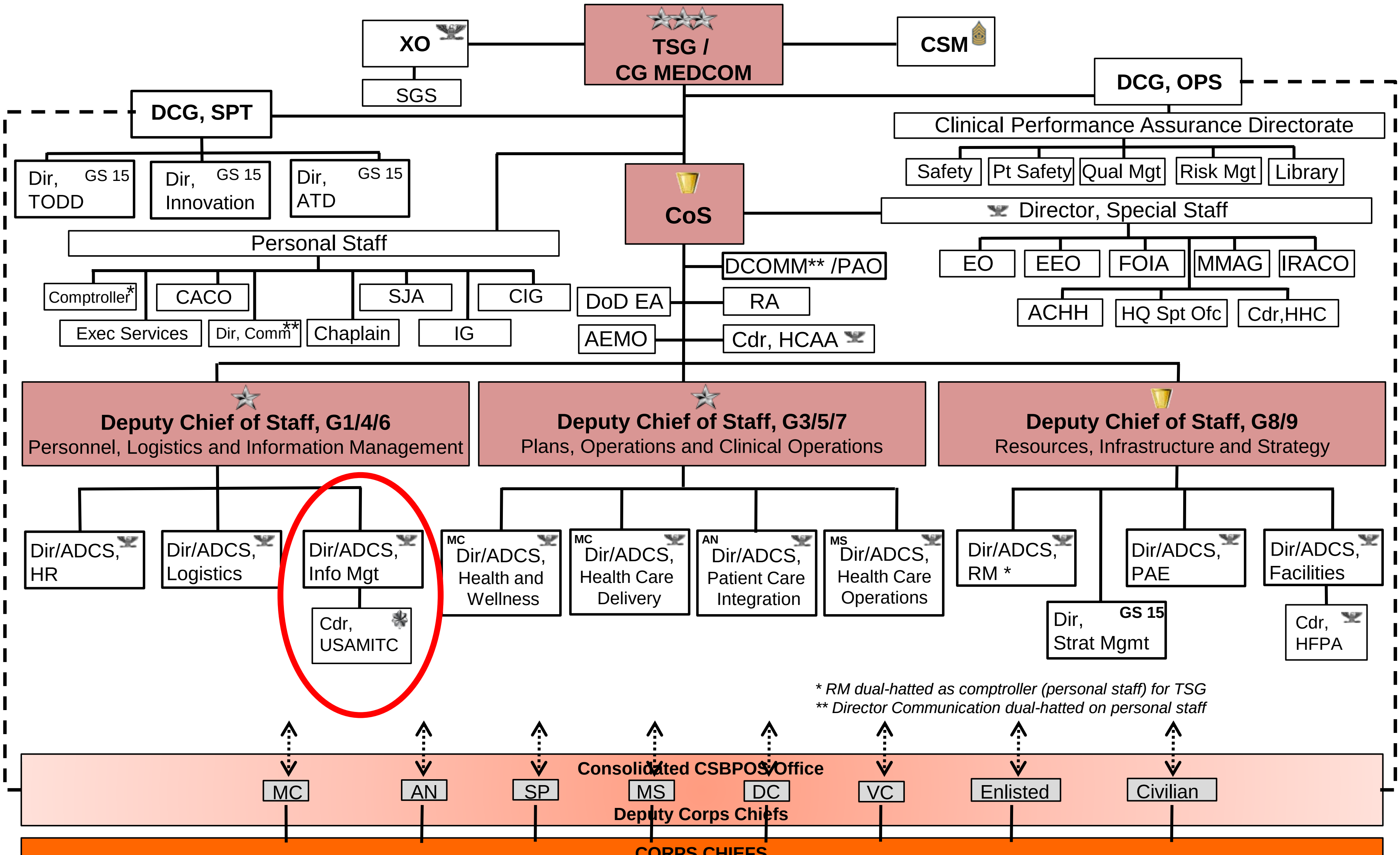
DHA HIT Directorate Vision:

A premier system of health information technology, enabling integrated health care delivery for those who serve in the defense of our country, retirees, and their families.

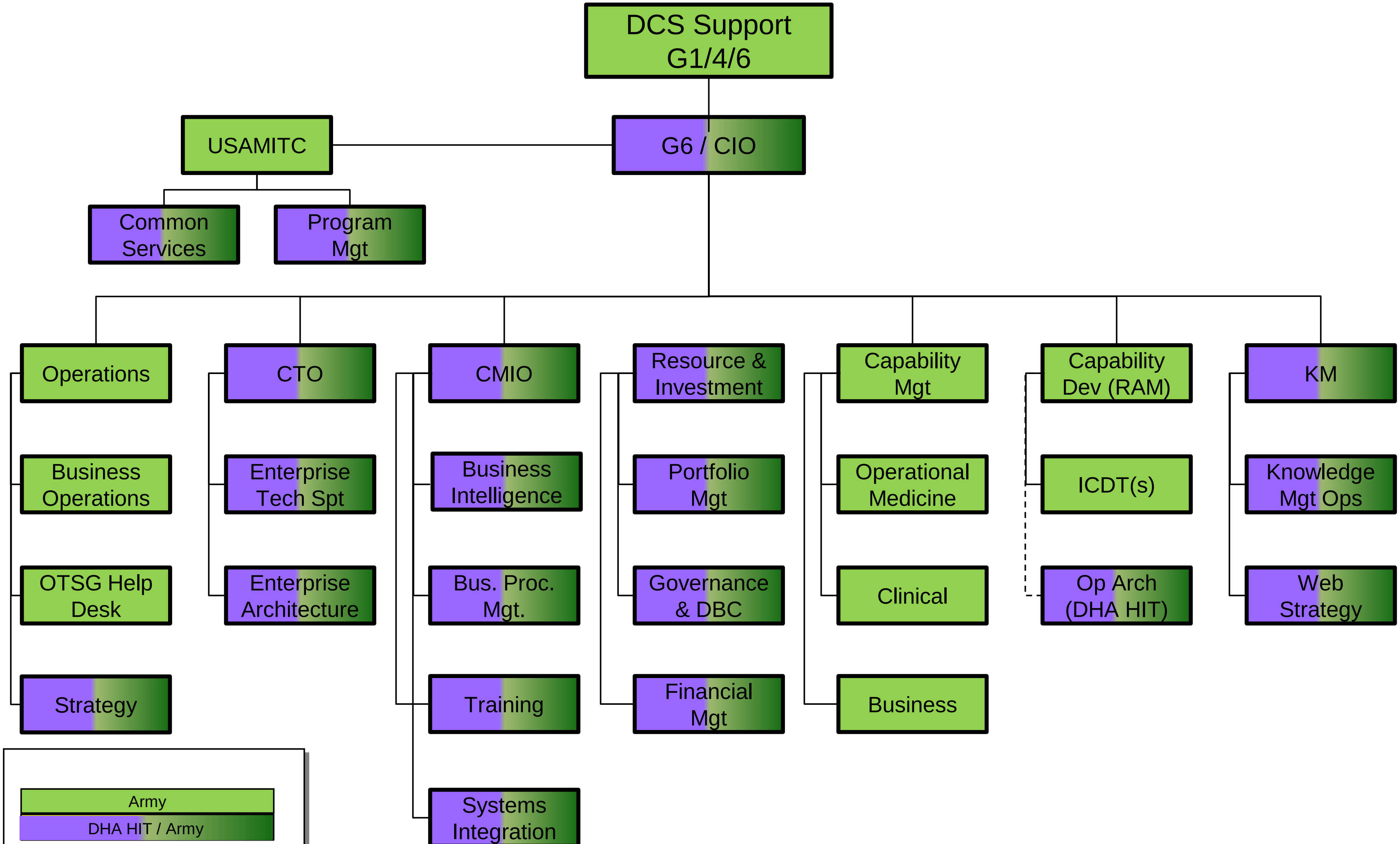
Strategic Engagements:

- EHR Modernization
- DHA HIT Shared Service Transition
- PCMH/SCMH IT Support
- Information Assurance
- Telehealth
- Pain Management System and Registry
- IM/IT Portfolio Rationalization
- Operational IM/IT Support
- MEDCOM VNC Support
- Functional Requirements Baseline Creation

Organization



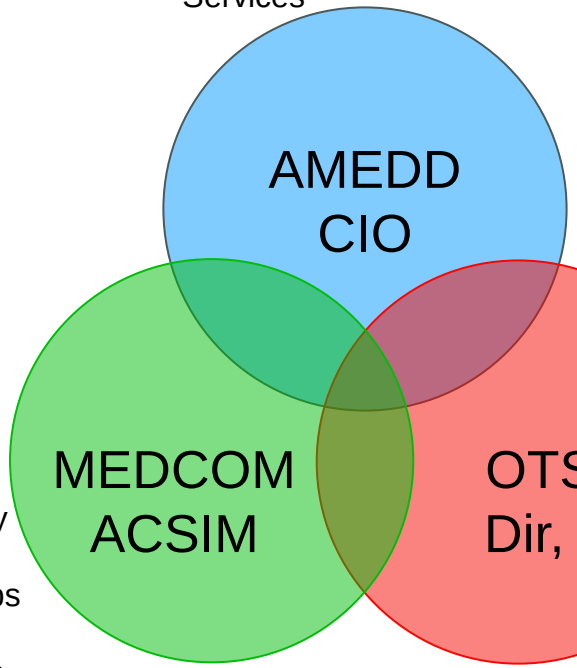
AMEDD/MEDCOM CIO/G-6 & DHA HIT



AMEDD CIO Roles

Defense Health Agency (DHA) Health Information Technology (HIT)

- Clinger-Cohen responsibilities
- AR 25-1
- MEDCOM Reg 25-1
- Synchronize AMEDD Information Services



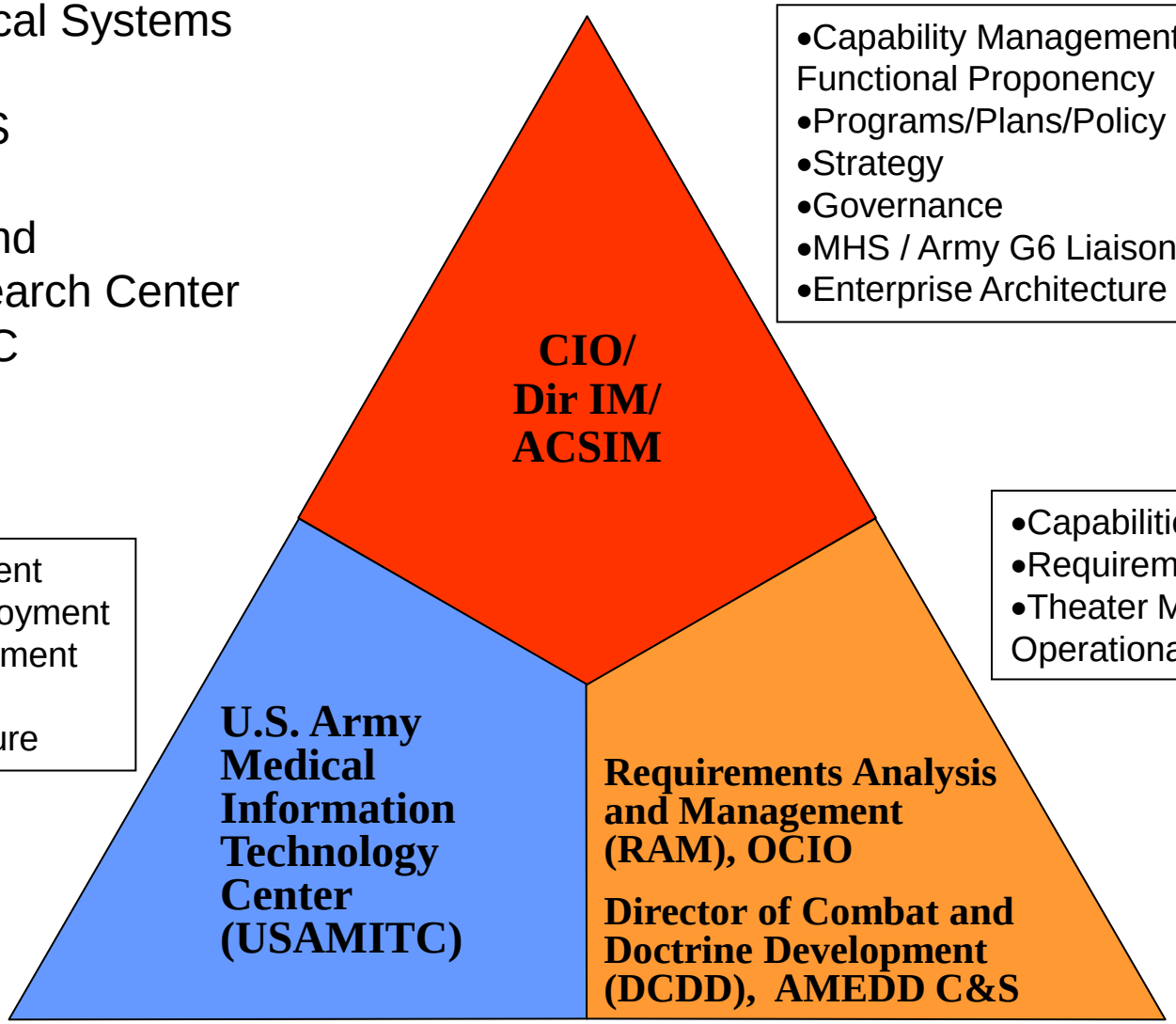
- MEDCOM IM/IT Plans and Policy
- TECHCON of Activity IM/IT Ops
- Augmentation of Deployed Forces

- DA Staff Coordination
- MHS Integration
- Support for TSG Title 10 Responsibilities
- Support automation needs for Deployed Forces

MEDCOM IM/IT – Principal Connection for MTFs

Other MEDCOM Players

- Integrated Clinical Systems (ICS)—MRMC
- MC4—PEO-EIS
- MODS PM
- Telemedicine and Technology Research Center (TATRC)—MRMC



- Capability Management / Functional Proponency
- Programs/Plans/Policy
- Strategy
- Governance
- MHS / Army G6 Liaison
- Enterprise Architecture

- System Development
- MHS System Deployment
- Life Cycle Management
- Operations
- Systems Architecture

- Capabilities
- Requirements Definition
- Theater Medical Operational Architecture

IM/IT Linkage with Army

HQDA, CIO-G6 ☆☆☆

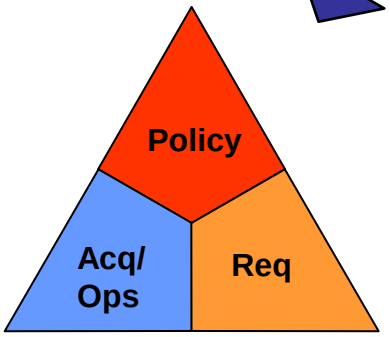
(US Army Network Enterprise Technology Command/ 9th Signal Command)

NETCOM ☆☆

Policy

TECHCON
Enterprise Tech Services

Liaison with G-6 for Army IT policy and regulatory guidance



Liaison with NETCOM for IT policy and security guidance and cooperative operations

CIO/G-6

Army Medicine Campaign Plan Strategy Map

Vision | **Lines of Effort** | **Outcomes** | **Endstate**

Strengthening the health of our Nation by improving the health of our Army

Army Medicine = Army Health = Army Readiness

Operating Company Model (OCM) Methodology

Unity of Effort

System For Health

1. Create Capacity - Capabilities / core competencies that optimize healthcare & health

Patient / Soldier Centered Medical Home | Behavioral Health System of Care | Integrated Disability Evaluation System | Leverage Technology | Transform Reimbursement System

- **CO 1-1** Maintain Health Restore Health improve Health
- **CO 1-2** Accountable, Reliable, and Effective Health Services
- **CO 1-3** Consistent Patient Experience

2. Enhance Diplomacy – Lead the conversation on health and healthcare delivery

Medical Diplomacy | Partnering, Communicating, and Leading Health

- **CO 2-1** Shape the Narrative
- **CO 2-3** Develop, and Strengthen Partnerships

3. Improve Stamina – Increase organizational depth and individual resiliency

Performance Triad (Activity, Nutrition, Sleep) | Health Infrastructure

- **CO 3-1** Improved Performance and Resilience
- **CO 3-2** Healthy Communities and Environments
- **CO 3-3** Increase Healthy Behaviors

4. Develop Leaders and Organizations

Officer Leader Development | Talent Management | Organizational Development

- **CO 4-1** Leverage the Best Talent
- **CO 4-2** Develop Leaders and Organizations

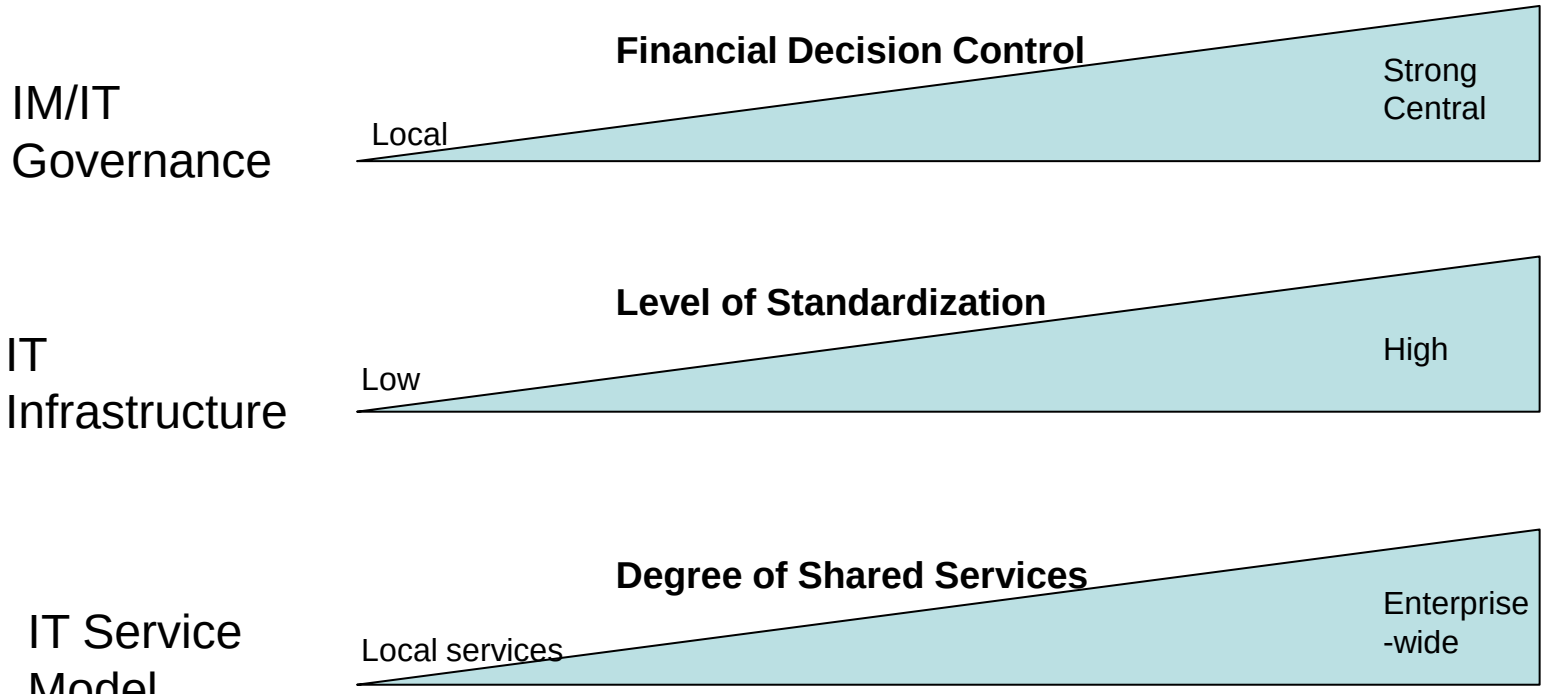
System For Health

- Strategic enabler that maintains, restores, and improves Army health
- Army Medicine recognized as a national and international health leader to advance Army values, interests, and objectives
- Ready and Resilient Forces, Families, and Communities
- Leaders and organizations trained and developed to meet future needs

A System For Health that enables Ready and Resilient Soldiers, Families, and Communities in order to Prevent, Shape, and Win.

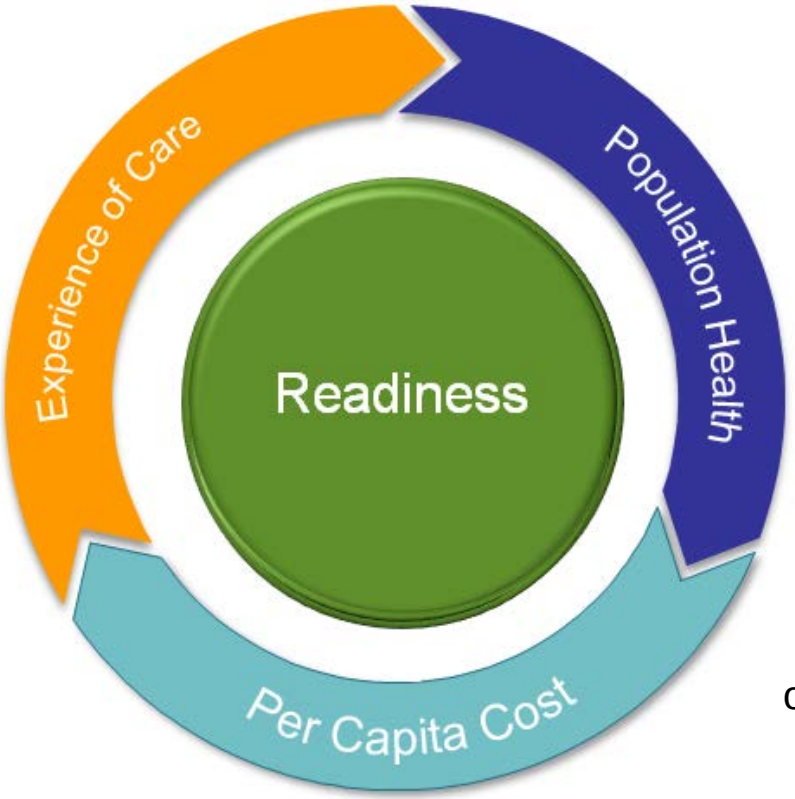
IM/IT Operating Company Model

Holding Company → AM 2020 CP → Operating Company



The Quadruple Aim is the Strategic Vision and Value Model for the MHS

Readiness
Ensuring that the total military force is medically ready to deploy and that the medical force is ready to deliver health care anytime, anywhere in support of the full range of military operations, including humanitarian missions.

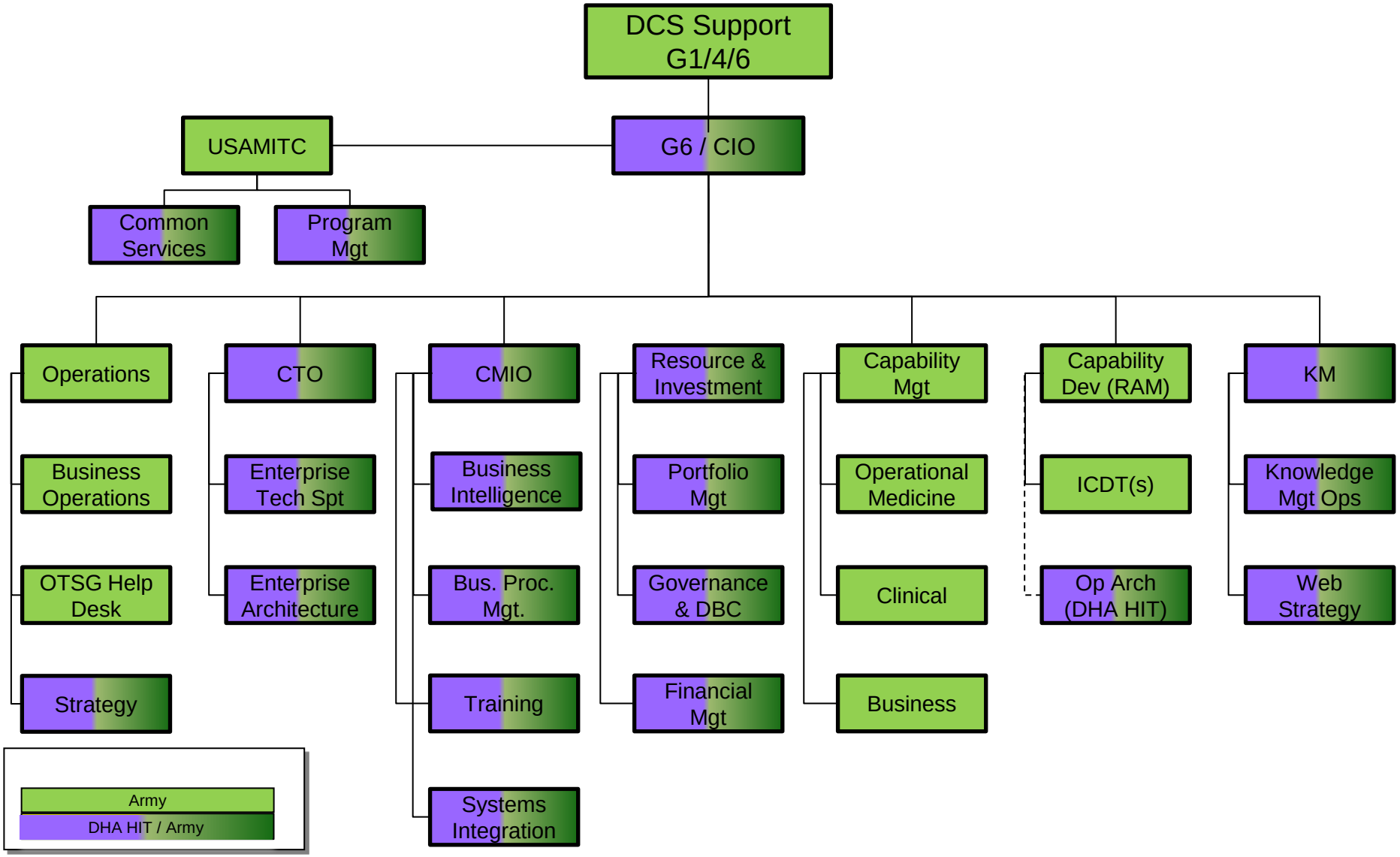


Population Health
Reducing the generators of ill health by encouraging healthy behaviors and decreasing the likelihood of illness through focused prevention and the development of increased resilience.

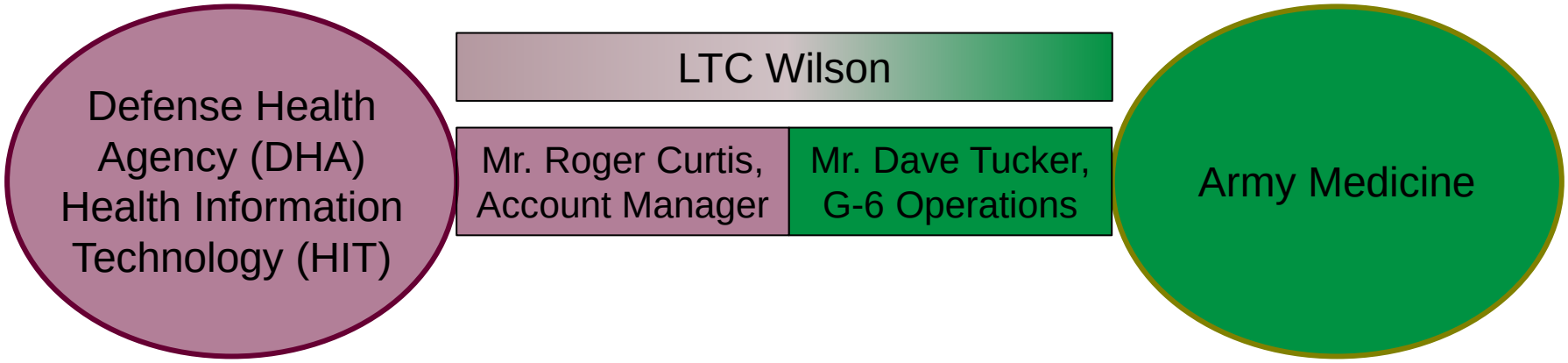
Experience of Care
Providing a care experience that is patient and family centered, compassionate, convenient, equitable, safe and always of the highest quality.

Per Capita Cost
Creating value by focusing on quality, eliminating waste, and reducing unwarranted variation; considering the total cost of care over time, not just the cost of an individual health care activity.

AMEDD/MEDCOM CIO/G-6 & DHA HIT



AMEDD Linkage to DHA HIT



Background / Current State

The MHS spends approximately $2.2 B on Health IT annually. The HIT Shared Services team has identified three business cases that will yield an estimated annual steady-state net savings of $268 M.

Baseline Costs and FTEs

IT Management & Enablers	Infrastructure	Application Portfolios	Total
$243 M	$884 M	$1,118 M	**$2.2 B**
784 FTEs	2,391 FTEs	381 FTEs	**3,556 FTEs**

BCA Summary

HIT Business Case		Description	Estimated Savings (Annual)
#1	Reengineering IT Management	Consolidate IT management functions into DHA, reengineer management processes.	**$11 M***
#2	Infrastructure Consolidation	Consolidate and standardize IT infrastructure down to the desktop.	**$134 M**
#3	Portfolio Rationalization	Rationalize all applications in MHS portfolio (clinical and non-clinical, garrison and theater, investment and sustainment).	**$123 M**
TOTAL			**$268 M**

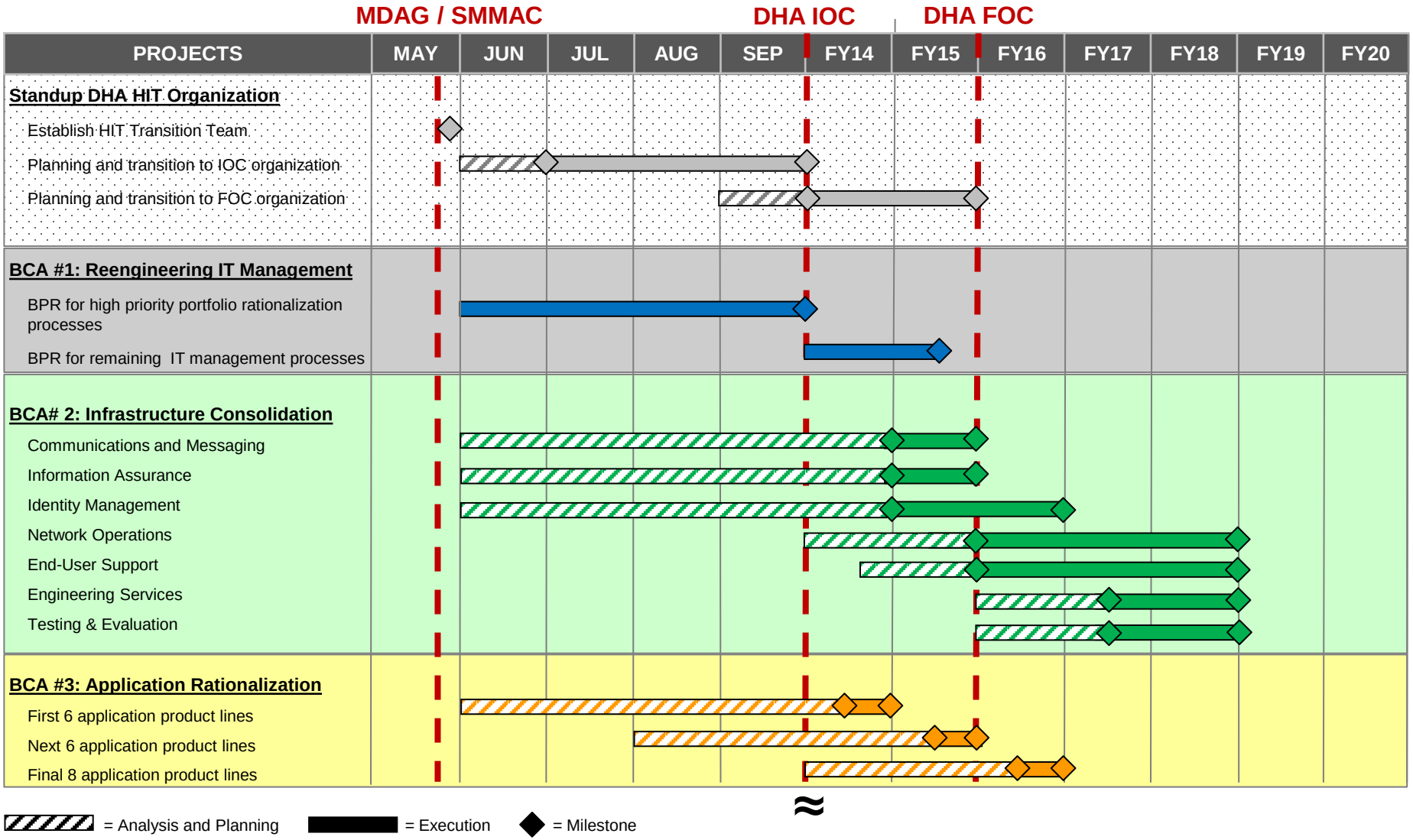
*Refers to percentage reduction in FTEs from IT management functions

Operating Model

The end state is a fully consolidated HIT operation under the management of the DHA. The first part of the transition will move IT management functions under the DHA at IOC. This allows the CIOs and management functions to be put in place first before transitioning the rest of the HIT workforce.

Phase	Personnel Required	Portion of HIT Under Management of DHA
IOC	523 FTEs	All TMA and JTF resources, plus IT management resources from Army, Navy, Air Force
FOC	TBD	All HIT resources

Implementation Timeline



MHS Shared Services Assessment Update

- Initial assessment of shared services will lead to major process reengineering work that must lead improved efficiencies and cost savings
- DSD March 2013 memo directing that “the DHA will assume management responsibility for shared services, functions, and activities”
- The goal is to improve access-to-care while maintaining quality care and shift beneficiaries from Private Sector Care to the Direct Care (MTFs) system.
- Ten Shared Services
  - Health Facilities Planning
  - Medical Logistics
  - TRICARE Health Plan
  - Health IT
  - Pharmacy

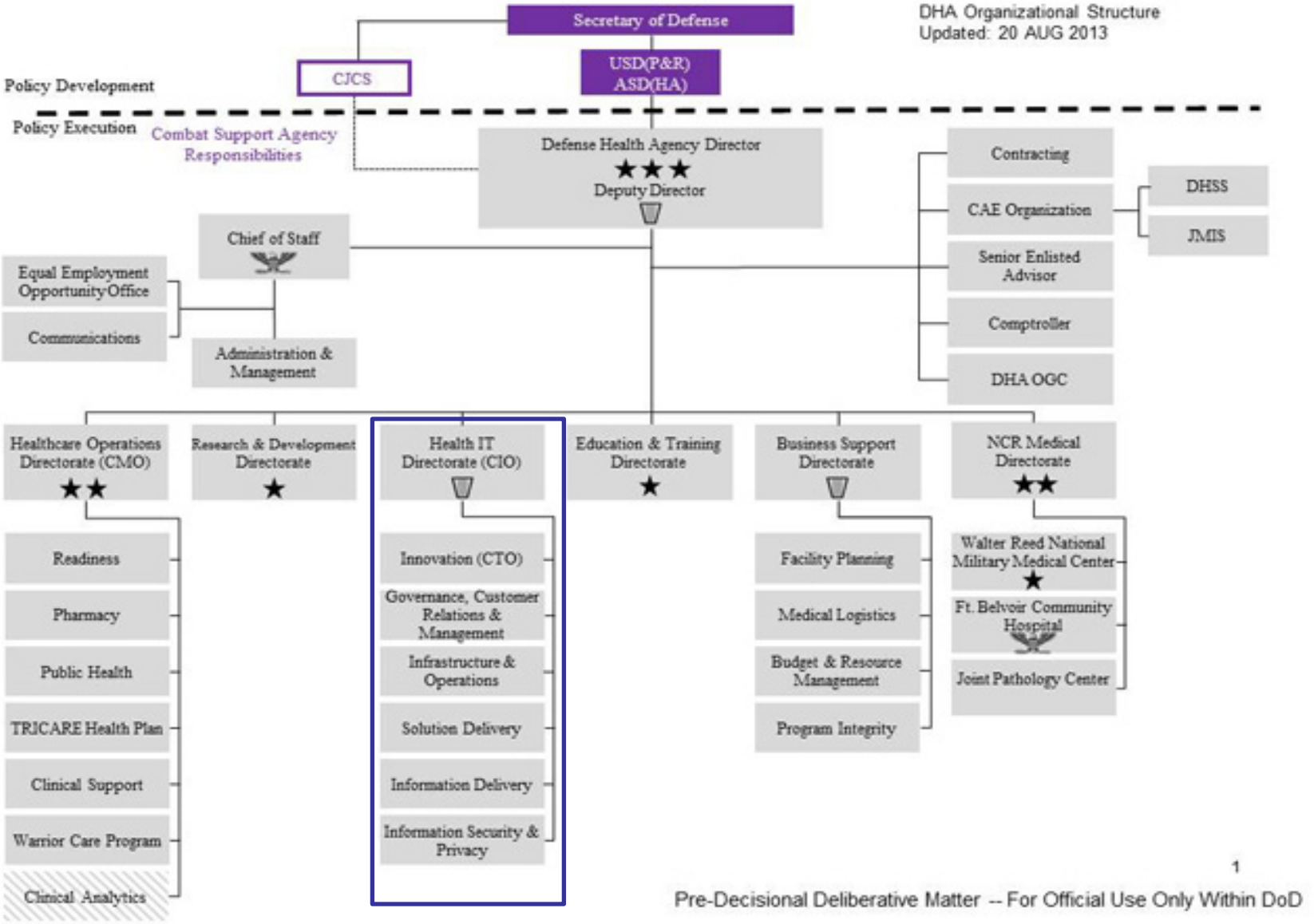
  Business Case Analyses - Complete
  Business Process Re-engineering Plans – Complete
  DHA Plan Execution Starts at IOC – 1 OCT 13

  - Contracting
  - Public Health
  - Resource Management

  Business Case Analyses – NLT July 13
  DHA Plan Execution Starts at IOC – 1 OCT 13

For Official Use Only Within DoD

Defense Health Agency



DHA HIT IOC Organizational Structure

Director
Defense Health Agency
★ ★ ★

Dep Dir
COO

Deputy Director, HIT
(Deputy CIO)
CAPT Beaubien

Director HIT (CIO)

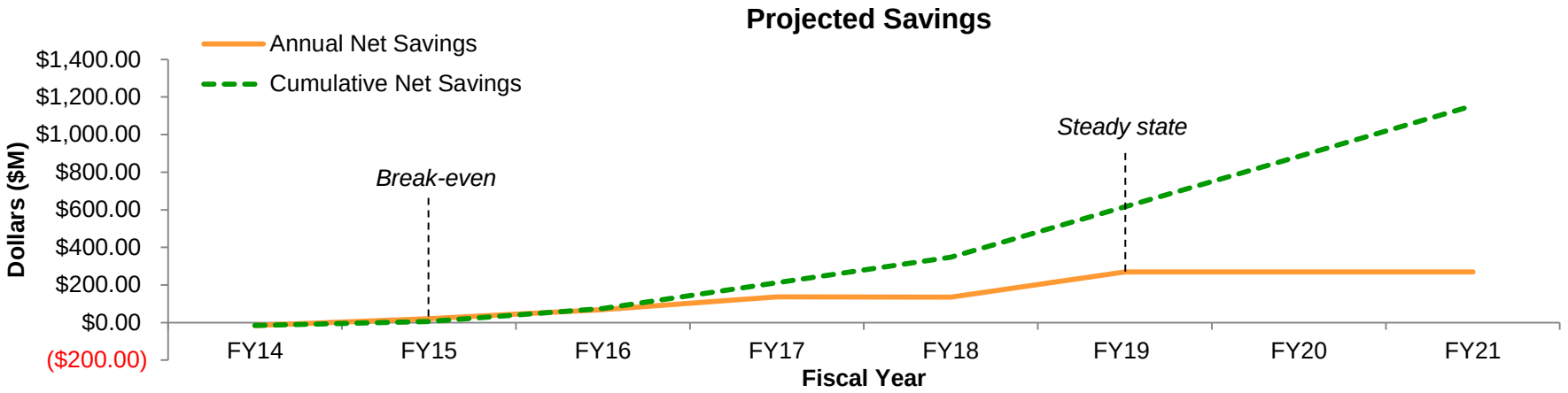
Dave Bowen

Plus Legacy PEOs
(DHCS, DHSS)

Innovation & Advanced Tech Mark Goodge CDR Ellzy	Governance, Customer Relations & Management COL Chip Terry Sharon Larson	Infrastructure & Operations CDR Tony Thornton P{ete Marks	Deputy CIO, Solution Delivery LTC Rich Wilson Dr. Dan Magee	Information Delivery COL Bonnema	Information Security & Privacy Frank Rowland LTC Stone
Strategy/Planning Branch • Innovation and SOA Realization Section • Innovation and SOA Transition and Program Mgmt Section **Execution Branch** • Research and Development (R&D) Section • Alliance, Coordination, and Execution (ACE) Section	**Enterprise Architecture Branch** **Communications & Customer Relationship Branch** **Investment Management Branch** **Strategy & Process Management Branch** **HIT Operations Support Branch** **--Sections on Slide 13--**	**Business Operations Branch** **Security Operations Center Branch** **Engineering, Design and Deployment Branch** **Operations and Sustainment Branch** **--Sections on Slide 14--**	**Solutions Integration, Implementation, and Sustainment Branch** • Systems Integration Section • Change Management (Organizational Integration) Section • User Integration Section **Clinical Portfolio (Current PEO) Branch** **Non-Clinical Portfolio (Current PEO) Branch**	**Modernization Branch** • Requirements Liaison Section • Project Liaison Section **Informatics Branch** • Intelligence & Analytics Section • Knowledge Management Section **Operations Branch** • Data Governance & Management Section • Platform & Apps Section	**Cyber Security Policy, Coordination and Compliance Branch** **Privacy Office & Policy Collaboration - HIPAA Security Branch** **Information Assurance – (Converts to Cyber Security Control Assessor with new DoDI 8510) Branch** **Cyber Security Operations Branch**

Projected Savings and Implementation Costs

The execution of the three BCAs will produce net savings in FY15, and will yield annual steady-state net savings of $268M in FY19.



BCA	Category	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Total	Primary Drivers of Implementation Costs
#1: Reengineering of IT Management	Savings ($M)	6.50	11.00	11.00	11.00	11.00	11.00	11.00	11.00	**83.50**	• IT costs to invest in tools (portfolio management, EA) needed to support and automate reengineered business processes.
	Cost ($M)	4.30	2.50	2.00	2.00	2.00	0.00	0.00	0.00	**12.80**	
	Net Savings ($M)	**2.20**	**8.50**	**9.00**	**9.00**	**9.00**	**11.00**	**11.00**	**11.00**	**70.70**	
#2: Infrastructure Consolidation	Savings ($M)	6.00	12.00	28.00	31.00	31.00	134.00	134.00	134.00	**510.00**	• Contract support for transition planning and PMO (e.g., product line analysis, scheduling, risk management). • IT costs for product line consolidation (e.g., additional servers, storage, bandwidth).
	Cost ($M)	0.00	17.00	13.00	27.00	29.00	0.00	0.00	0.00	**86.00**	
	Net Savings ($M)	**6.00**	**(5.00)**	**15.00**	**4.00**	**2.00**	**134.00**	**134.00**	**134.00**	**424.00**	
#3: Portfolio Rationalization	Savings ($M)	0.00	41.37	76.74	123.90	123.90	123.90	123.90	123.90	**737.61**	• IT costs for decommissioning and promotion of system to enterprise level (e.g., migrating/archiving data, increasing capacity of target system, hardware disposal, training, change management, BPR**).**
	Cost ($M)	23.58	23.58	31.44	$0.00	0.00	0.00	0.00	0.00	**78.60**	
	Net Savings ($M)	**(23.58)**	**17.79**	**45.30**	**123.90**	**123.90**	**123.90**	**123.90**	**123.90**	**659.01**	
GRAND TOTAL NET SAVINGS	**Annual ($M)**	**(15.38)**	**21.29**	**69.30**	**136.90**	**134.90**	**268.90**	**268.90**	**268.90**	**1,153.71**	
	Cumulative ($M)	**(15.38)**	**5.91**	**75.21**	**212.11**	**347.01**	**615.91**	**884.81**	**1,153.71**	**--**	

Scope of Infrastructure Consolidation

IT Service	To-Be Service Definition
Directory Services & Enterprise Management	• Common Directory Services will create a unified and secure platform to manage the identity and access privileges for providers as well as staff across the Military Health System boundaries and enhance security, productivity, and the end user experience. Enterprise Management will establish the required set of IT capabilities that enable DHA to govern, manage, measure, and secure the IT services supporting the medical mission
Network Consolidation	• Centralized management of a consolidated high-availability, low-latency network, which includes the local area networks (LAN) and wide area networks (WAN) for the military health community, will connect users to local and enterprise applications, network peripherals, network drives, and the internet/intranet, behind a single security architecture under a single Defense Approval Authority (DAA)
Hosting	• A standardized approach to providing and managing hosting environments for systems/applications will provide a reliable and monitored environment that supports three-tiered architectures (web/presentation layer, application layer, and data layer)
Desktop Management	• A managed to-the-desktop strategy that will deliver a standard image as well as application and operating system updates. Furthermore, this strategy will provide centrally managed releases, virtual end points, personalization ability, and lifecycle management for all End User Devices (EUD)
Web Hosting	• A hosting capability for customer interfaces, including internet (public facing), intranet (internal collaboration), and extranet (external collaboration with business partners)
Email	• The transition to a DoD Enterprise Email (DEE) service managed by the Defense Information Systems Agency (DISA) will allow users to access a single enterprise email platform from any government-managed computer.
Audio and Video Conferencing	• A single platform to provide audio and video bridging and IPV services across the DoD military health community
Enterprise Service Desk	• A single point of contact for all DoD military health community users to request DHA IT services and report technical issues
Test & Evaluation	• An integrated test and evaluation strategy to provide environment (s) which emulate production to improve operational availability, reduce time to field applications, and provide a seamless deployment transition of MHS centrally managed applications

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Directory Services/Enterprise Management (DS/EM)

Problem Statement	Future Vision
Disparate Directory Services and inconsistent approaches to Enterprise Management are at the core of the DoD medical's inability to effectively share information, manage, and deliver standard business and clinical capabilities to providers throughout the Military Health System	Existing medical applications have defined logical boundaries, which limits interoperability and perpetuates conflicting and duplicative technology decisions. The inability to share health information seamlessly and securely across medical entities leads to limited ability for providers and staff to operate and access clinical systems across service lines, an inconsistent IT experience for providers and staff moving between MTF locations and inefficient clinical workflows

Current Inventory of Solutions	Way Ahead
• MHS Joint Active Directory and Enterprise Management (JAD) • MEDCOM Active Directory (NOS) • MEDCOM Enterprise Management (MEM) • Navy Medical Active Directory Forest & Enterprise Management (CIP) • Air Force Active Directory Forest and Enterprise Management (AFNET) • TMA Active Directory Forest & Enterprise Management (NSS)	• Adopt and expand the MHS Joint Active Directory as the DHA Directory Services and Enterprise Management service offering • Migrate Army, Navy, Air Force, TMA medical users, workstations and servers to MHS Joint Active Directory • Consolidate funding and support personnel to DHA to expand, migrate, and maintain the Joint Active Directory

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Standard Medical Desktop

Problem Statement	Future Vision
As medical providers and staff move between patient rooms and MTFs they experience inconsistent computing configurations and performance. The non-standard, decentralized desktop environment is difficult to manage, costly, less secure, unpredictable and inflexible causing an adverse impact on health care providers' performance to meet the health care mission	Provide a standard desktop across the MHS to support clinical systems and the new iEHR. The desktop configuration will be centrally managed and maintained through an enterprise management framework. This will facilitate a predictable and reliable deployment of the new iEHR. Additionally, it presents substantial opportunities to drive reductions in IT lifecycle costs, rationalize application portfolios and improve clinical business practices through a standardized user experience

Current Inventory of Solutions	Way Ahead
• MHS Application Virtualization Hosting Environment (AVHE) • MEDCOM AHLTA and Clinical Application Virtualization (ACAV) • Navy Clinical Desktop Program (CDP) • Air Force Medical Application Virtualization (AFMAV) • Air Force Desktop Management • AHLTA EUD Life-cycle program • MEDCOM Desktop Standardization Initiative • Local MTF Desktop Management	• Consolidate Application and Desktop Virtualization efforts into a single DHA Desktop service offering • Establish a centrally managed and maintained standard image and baseline configuration for all medical EUDs • Expand life-cycle management of EUDs to all Medical EUDs • Centralize and standardize essential desktop support functions like user data, printing, and DHCP

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Consolidated Network

Problem Statement	Future Vision
Service Medical and MHS currently field separate networks each with unique security architectures, capabilities and support functions. Information Assurance policies are oriented toward defining clearer lines of separation as opposed to integration and interoperability. Last Mile issues continue to present supportability issues for central programs of record	Network consolidation will result in a single, enterprise-wide Medical Community of Interest (Med-COI) network. Med-COI will leverage/extend Military Health System Internet (MHSi) security architecture to all medical enclaves providing equal access to current and future health information systems and common services. The solution will incorporate/leverage DISN Private Internet Protocol (IP) MPLS service, replacing NIPRNet and other DISN transport. It will achieve the security, efficiency and effectiveness objectives of the Joint Information Environment (JIE) through a single security architecture (SSA) and reduction of network and computing infrastructure

Current Inventory of Solutions	Way Ahead
• MHS Medical Community of Interest (MEDCOI) • MHS Network Security Operations Center (NSOC) • MEDCOM Intranet (MEDi) • MEDCOM Network Operations & Security Center (MEDNOSC) • Navy WAN Modernization (CIP/WANMOD) • Navy Enterprise Security Operations Center (ESOC) • AFNET • MHS Infrastructure Program • MEDCOM LAN Infrastructure Program • Air Force LAN Infrastructure Program • TMA Network Support Services (NSS) • MTF LAN Management	• Consolidate Wide Area Networks (WAN) to MEDCOI • Establish Single Security Architecture and Single Network Operations capability with End to End monitoring capability • Consolidate LAN Infrastructure programs • Extend centralized management to the LAN • Consolidate cyber-security authority under a single DAA

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Hosting (HSTG)

Problem Statement	Future Vision
The DoD CIO Information Technology (IT) Strategic Objectives, Federal Data Center Consolidation Initiative (FDCCI) and the National Defense Authorization Act (NDAA) are driving all DoD components to realize efficiencies through consolidation efforts and “cloud first” strategies. Current architecture characterizes the inefficiencies and business drivers for these DoD and Federal initiatives.	Hosting Services will result in a standardized approach for the DHA to optimize existing, federated approaches for central IT support functions, virtualize Data Centers in concert with emerging DoD JIE architectures and enhance business agility throughout DHA’s transformational phases.

Current Inventory of Solutions	Way Ahead
• DISA Capacity Services (Core) • DISA MILCLOUD (Core) • FEDRAMP Certified Commercial Cloud Hosting (Commercial) • MHS Application Access Gateways (MAAG)(Regional) • MHS Server Virtualization Hosting Environment (SVHE) (Regional) • Navy Clinical Infrastructure Program (CIP) (Local) • MEDCOM/USAMITC Hosting Services (Core) • Air Force Hosting (AFNET) (Core) • TMA Hosting (NSS) (Local) • Local MTF Hosting Capabilities (Local)	• Consolidate and standardize on a regionalized core data center service for CONUS and OCONUS requirements • Ensure adequate hosting capacity at all potential DHMSM hosting sites • Leverage Commercial, Core, Regional and Local hosting capabilities for DHMSM based upon application architecture

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Risks & Mitigations

Risks	Mitigation
Continued emphasis on self-funded infrastructure consolidation, could result in deployment delays	Shifting from business case development and self-funded implementation to program initiation, with an emphasis on schedule to support the deployment of DHMSM with upfront investment capital for infrastructure consolidation
Lack single DAA from desktop to data center could result in delayed deployment timelines and increase sustainment costs	Consolidate the DAA authorities from the Services to the DHA for certification and accreditation consolidated infrastructure (D2D)
Lack of proper Coordination between DHMSM and DHA could result in inadequate infrastructure capability for the new iEHR	Working to established a weekly call with DHMSM Engineering team and DHA infrastructure team
Site resistance to centralized management of local infrastructure (D2D) could result in deployment delays	Affective workforce transition planning and support from all levels of chain of command for DHA mission and mandate

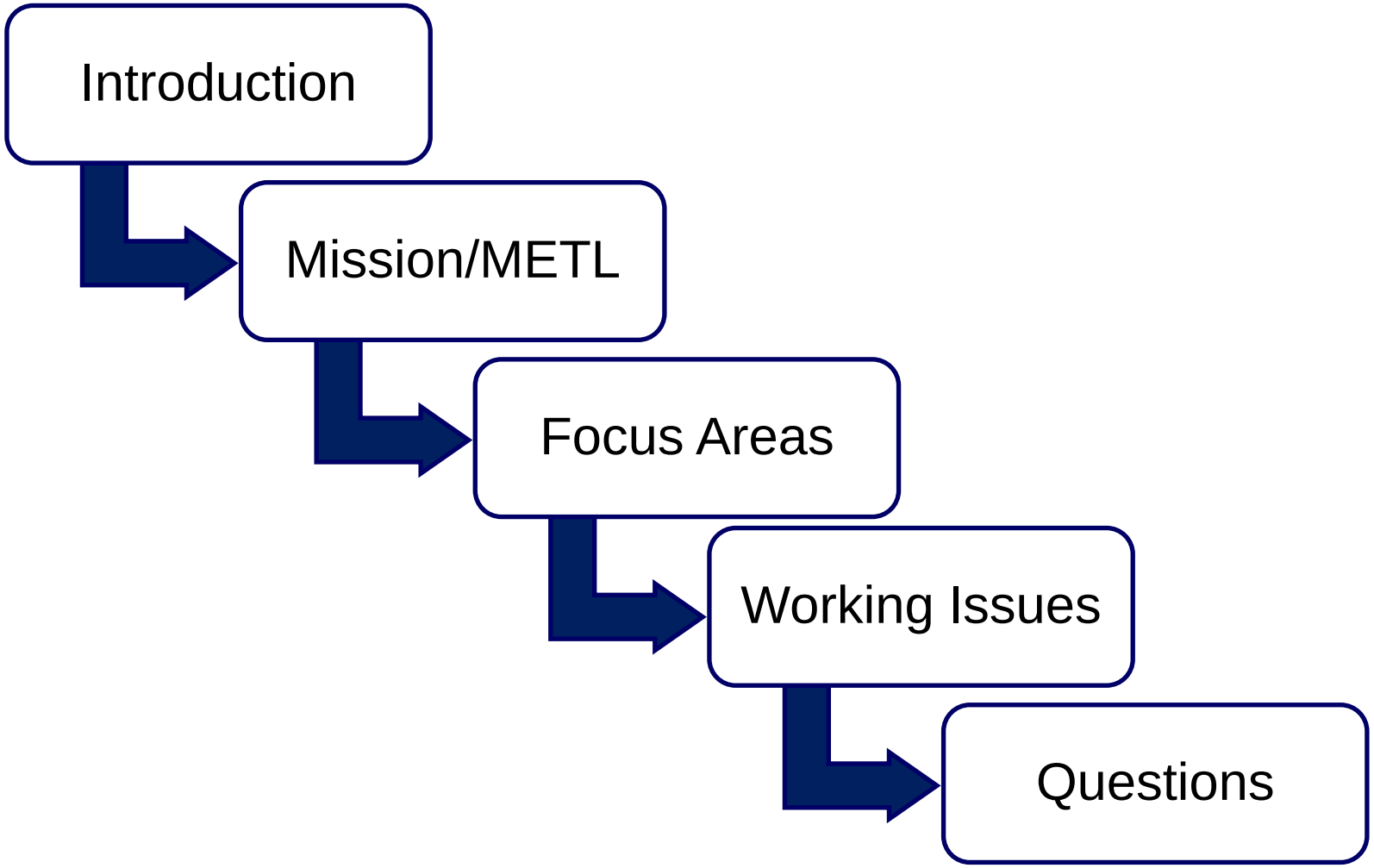
ARMY MEDICINE
Serving To Heal...Honored To Serve

Chief Medical Information Officer

LTC Angela Icaza
CMIO, Army Medicine

SECURITY CLASSIFICATION: FOUO

Agenda



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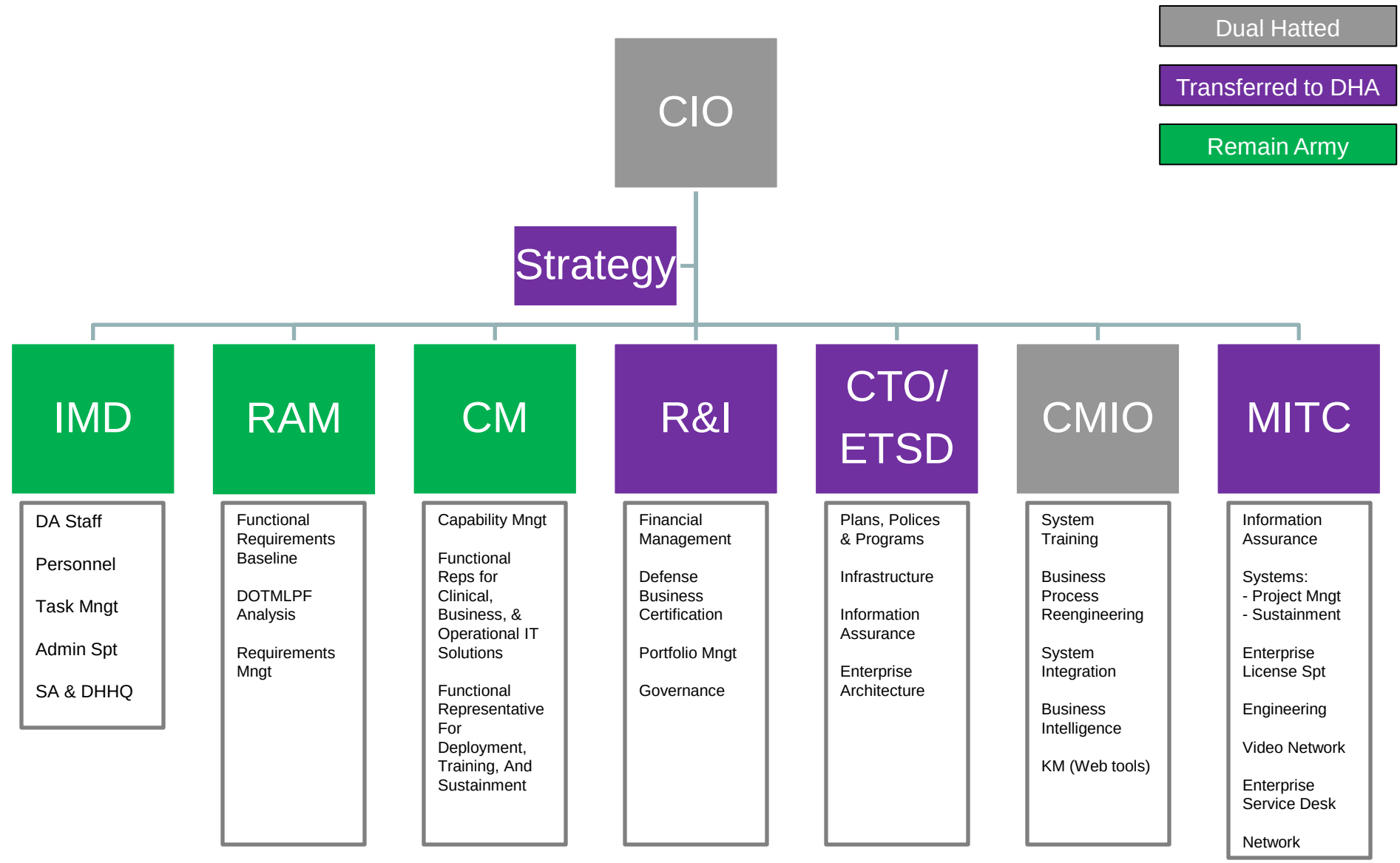
Introduction



Introduction

CMIO

LTC Icaza

EHR CM

COL (Ret) Wolford-Connors

CNIO

LTC Watkins

Clinical System Training

Business Process Reengineering

System Integration

Business Intelligence

Mission and METL (draft)

MISSION: *The CMIO will be the premier advocate for clinical information systems for providers and serve as the liaison between the healthcare community and AMEDD leadership.*

METL:

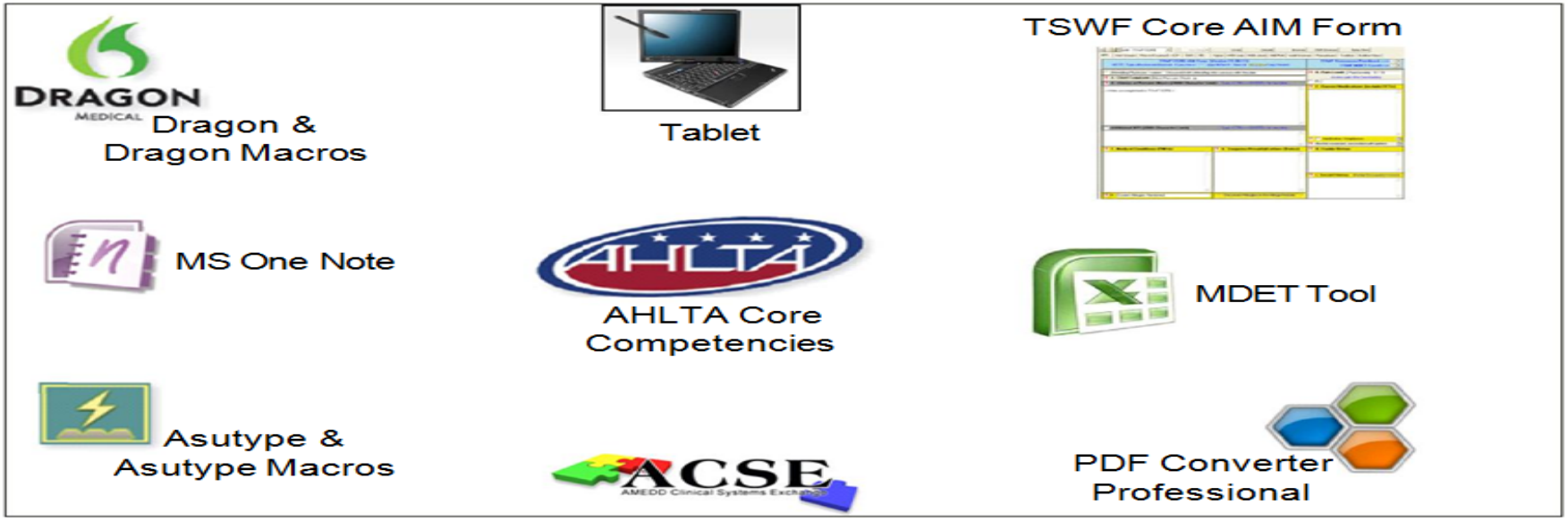
- Establish and maintain trust among the healthcare provider community
- Advocate for improving provider/user satisfaction by improving meaningful use of information systems, with focus on improving the DoD Electronic Health Record (EHR)
- Improve business and clinical information systems by engaging the user population, the IM governance bodies, and the program management offices
- Improve business and clinical processes by leveraging systems, best practices, training, and business intelligence tools in the daily workflow of providers and users

Focus Areas

- TSG Directive for MAPS at EHR Summit Jan 2010

- OPORD 11-47, MAPS published 5 Jul 2011 with 3 subsequent FRAGO's to expand workflow re-engineering training to the clinical support staff

- Central Funding covers: AHLTA trainers to 197 GS Clinical Workflow Analysts and created 71 Clinical System Trainers



Essential Elements for Successful OCM Integration of EHR Technology, Clinical Workflow and Meaningful Use

EHR Modernization Guiding Principles

- **Standardization** of clinical and business processes across the Services and the MHS
- Design a **patient-centric** system focusing on quality, safety and patient outcomes that meet readiness objectives
- Flexible and open, single enterprise solution that addresses both garrison and operational healthcare
- Clinical business process reengineering, adoption, and implementation over technology
- **Configure not customize**
- Decisions shall be based on doing what is best for the MHS as a whole – not a single individual area
- Decision-making and design will be driven by frontline care delivery professionals
- Drive toward rapid decision making to keep the program on time and on budget
- Provide timely and complete communication, training, and tools to ensure a successful deployment
- Build collaborative partnerships outside the MHS to advance national interoperability
- **Enable full patient engagement** in their health

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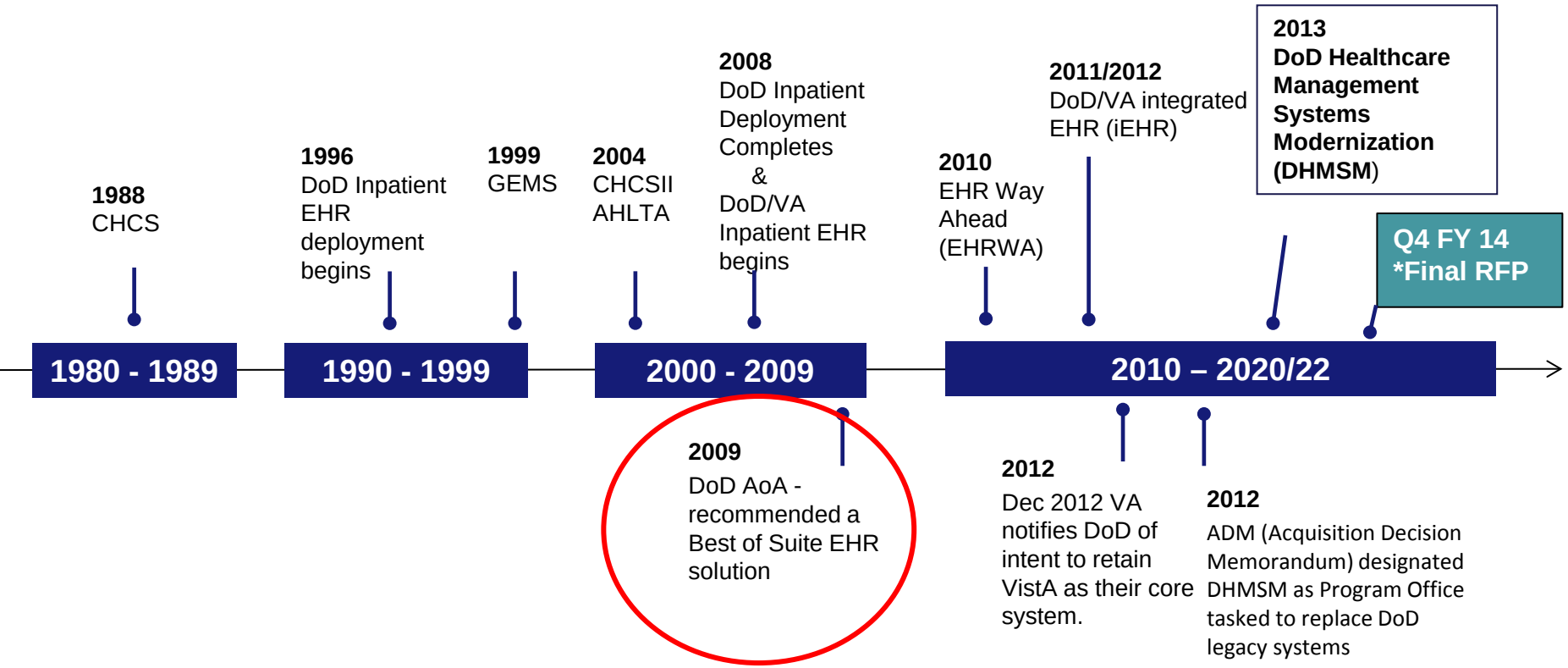
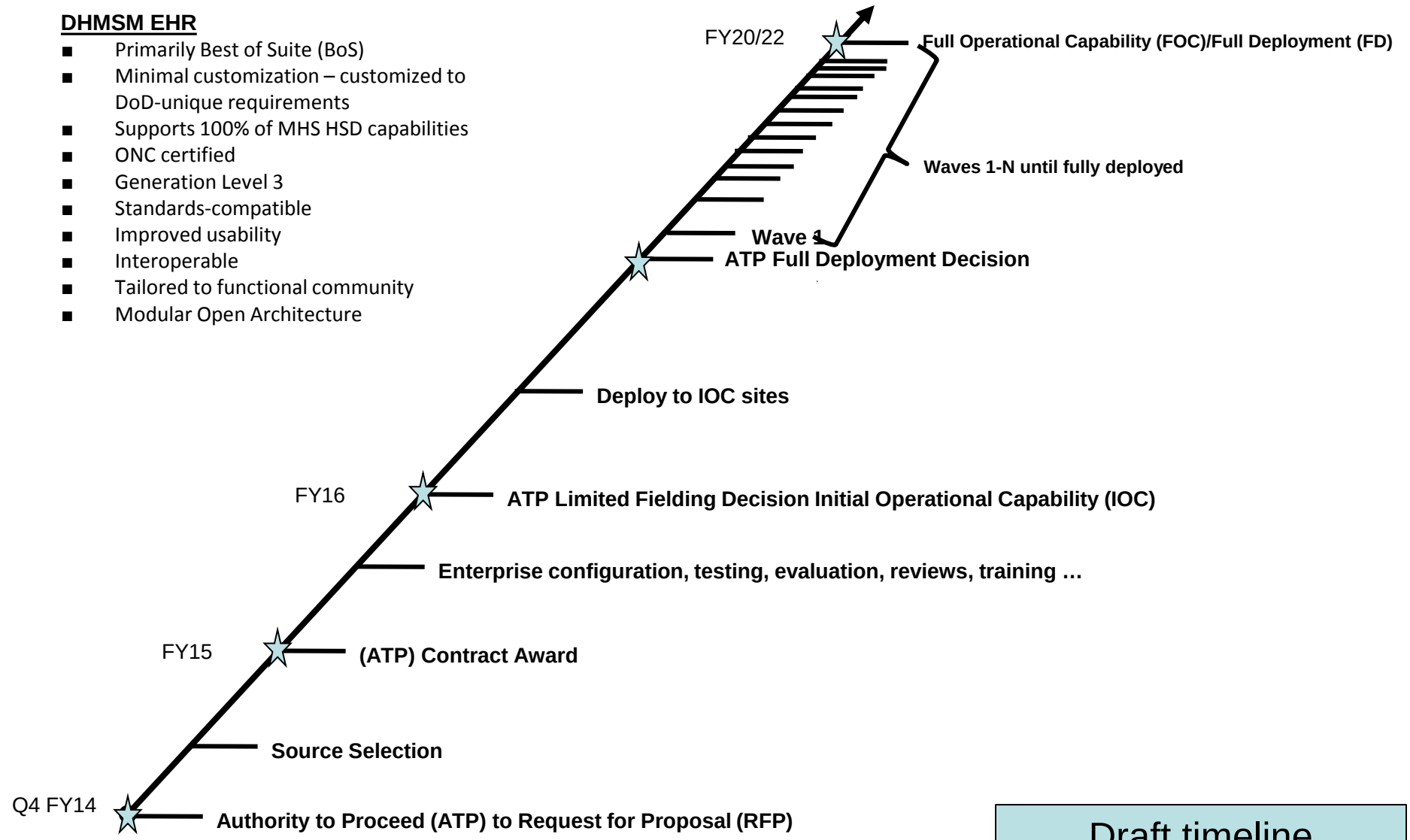
Background:
Our Path to Modernization



EHR Modernization Future Timeline (draft)

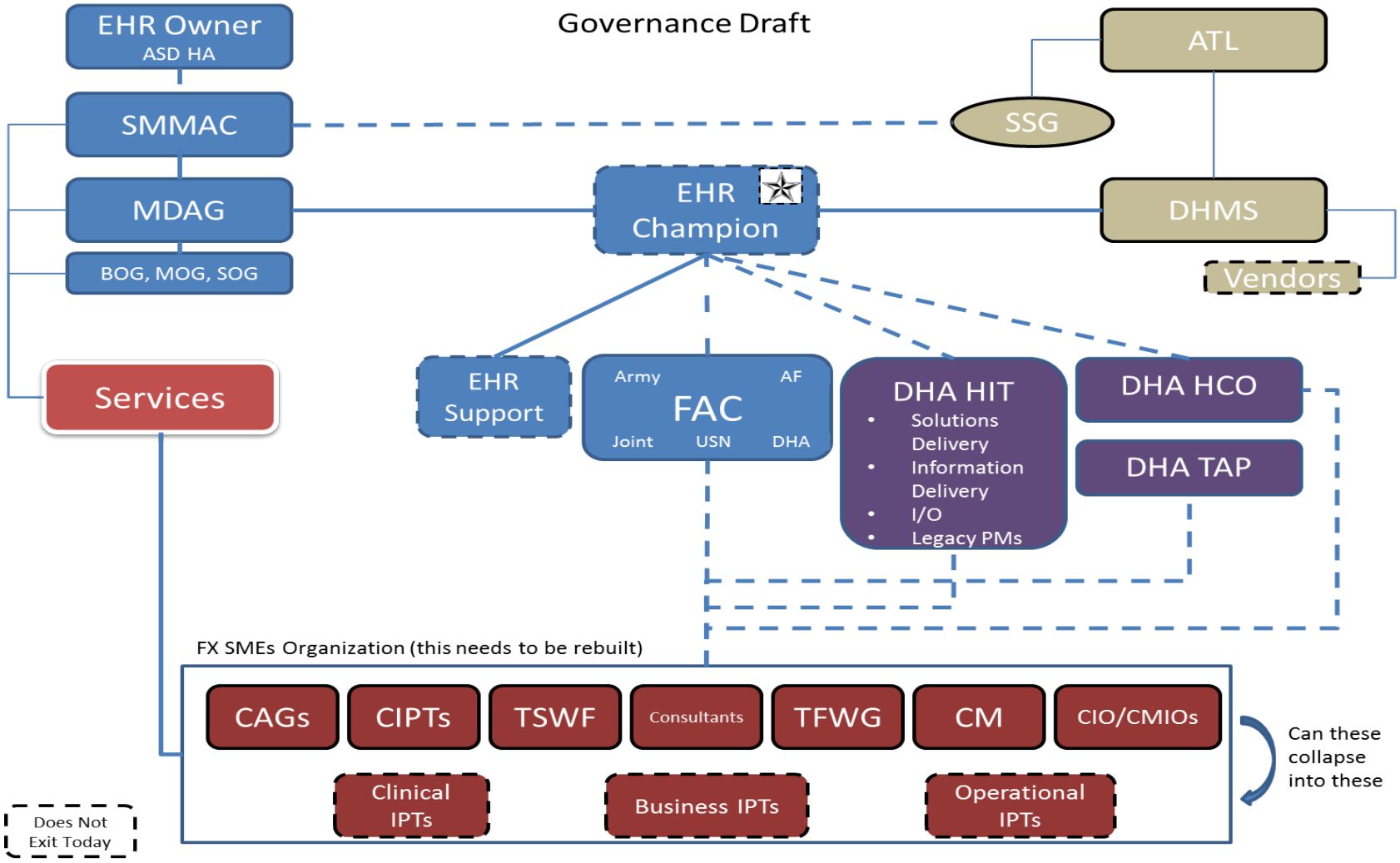
DHMSM EHR

- Primarily Best of Suite (BoS)
- Minimal customization – customized to DoD-unique requirements
- Supports 100% of MHS HSD capabilities
- ONC certified
- Generation Level 3
- Standards-compatible
- Improved usability
- Interoperable
- Tailored to functional community
- Modular Open Architecture

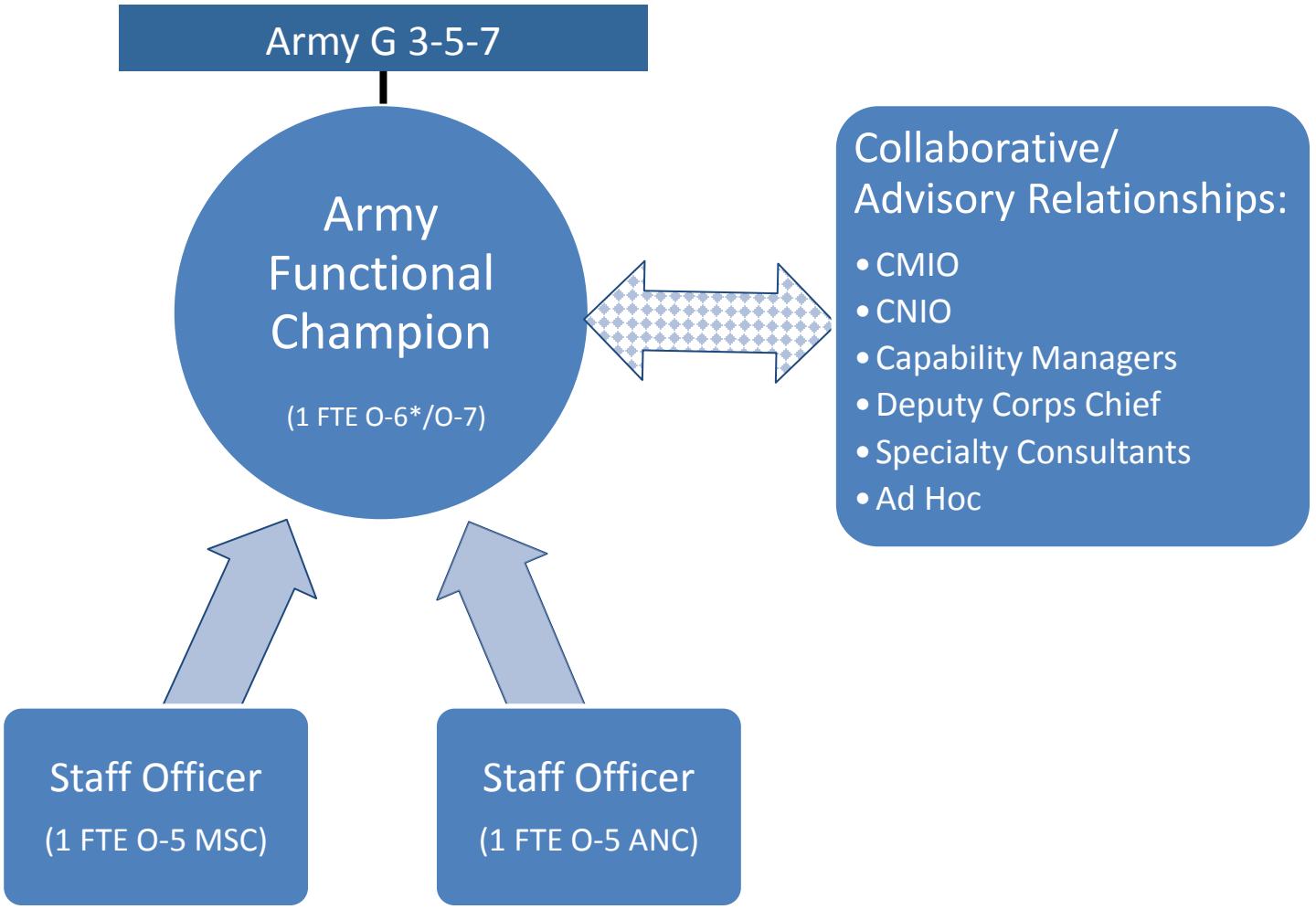


Draft timeline

MHS Functional Champion



Army Medicine Functional Champion (draft)



MTF Implementation Teams (draft)

MTF Leaders:

- Chief Medical Officer
- Chief Nursing Officer
- MTF CIO
- MTF CMIO

Team Members:

- Physicians
  - Surgeon
  - Primary Care
  - Behavioral Health
  - Subspecialists (as needed)
- Nurses
- Ancillaries
- Patient Administration
- Coding
- Quality/Patient Safety
- Dental (if applicable)

Additional Projects

- Emergency Department Information System
  - SMMAC approval for Service execution
  - Pending DBC
  - Estimated deployment FY15
- Patient Centered Medical Home Tool
  - Signed Business Case
  - Out of Cycle DCMO (approval)
- Survey Tool
  - Survey Monkey – need to replace
  - Army versus DHA governance
  - Multiple survey tools in portfolio

Working Issues

- Strategic Planning
  - Workforce Development - Skills
  - Standardization of CMIO – TDA
- Support to MTF, RMC and MSC
- DHA mandate
- Resources
  - Personnel
  - Budget
- Innovation vs Standardization

Questions?

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ARMY MEDICINE
Serving To Heal...Honored To Serve

Deployable Health Information Systems Update

Information Brief

LTC Kevin Peck

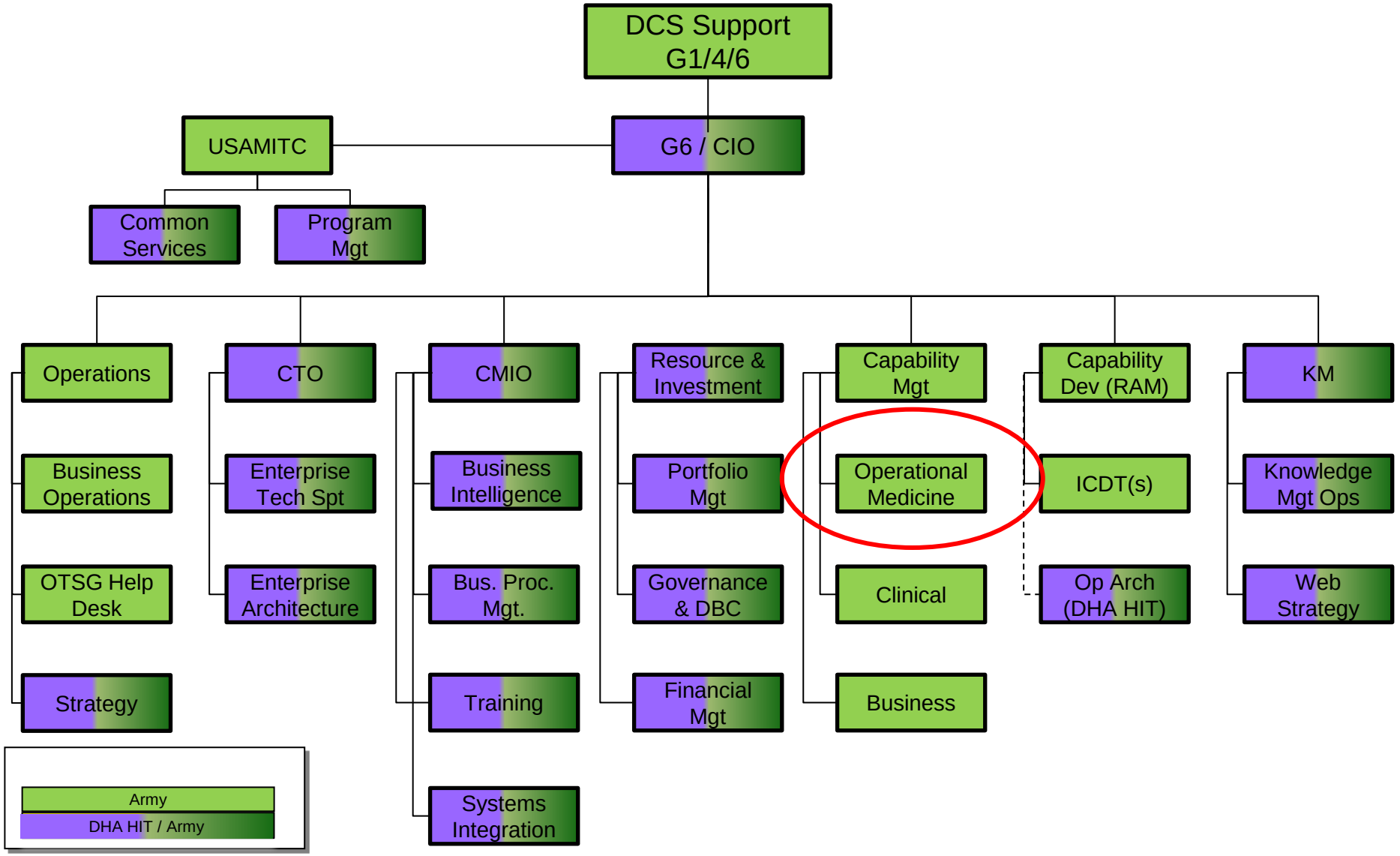
29 July 2014

UNCLASSIFIED // FOUO

Overview

- CIO Organization & Functions (Where We Fit)
- Current Army Environment
- Network & Operational Medical Network Priorities
- DHA & Portfolio Management Influence
- Army Network Enablers
- Medical Network Enablers
- AMEDD CIO/G6 Operational Medicine Activities
- Current Theater Support Issues

AMEDD/MEDCOM CIO/G-6 & DHA HIT



Current Army Environment

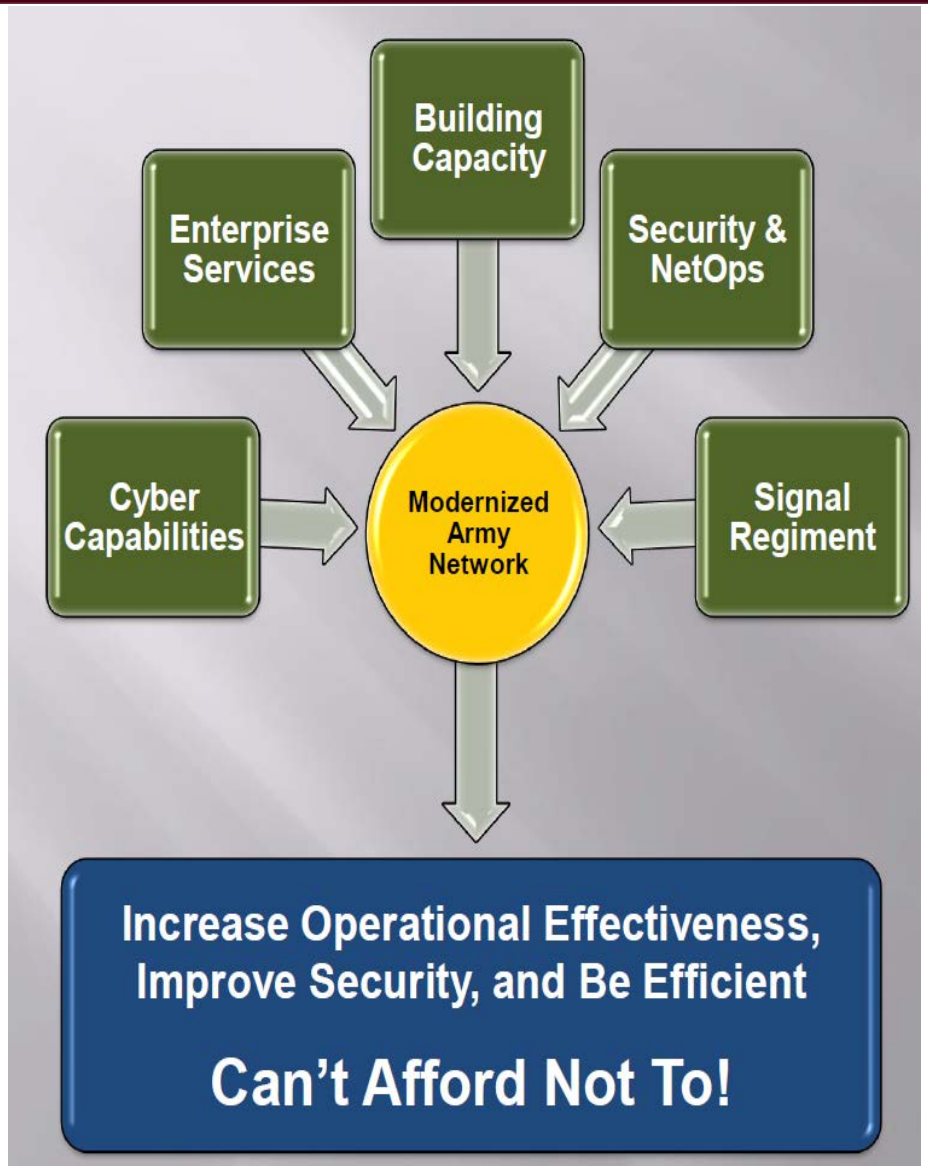
Unique Challenges

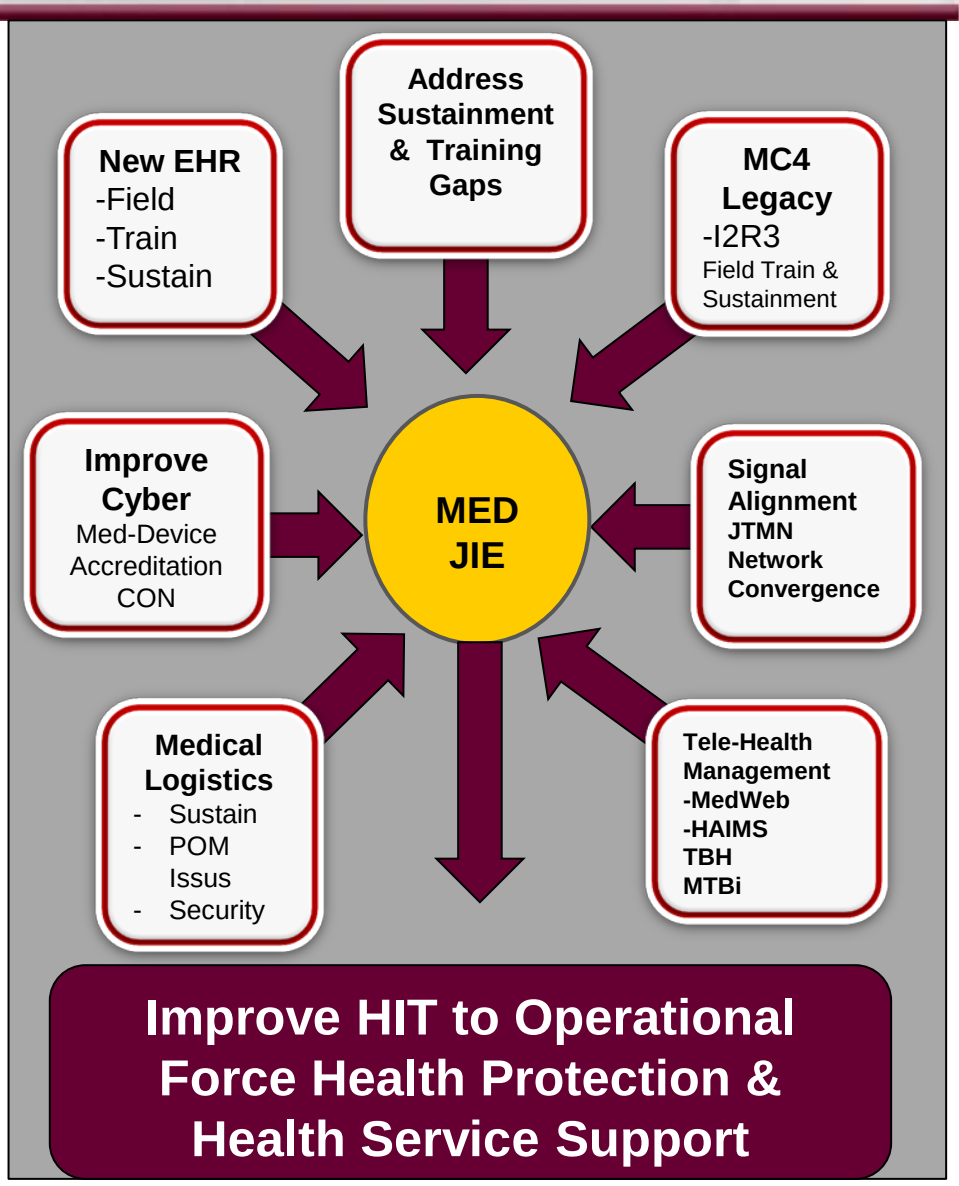
- **Largest Organization in the World – 1.4M (150K+) in 150 Countries (with 345 deployable units and over 1,200 personnel currently deployed)**

- **Budget Constraints Makes Where, When and How We Can Invest Complicated**

- **IT Modernization – Tactical and Institutional Highways with Limited Intersections**

Network & Operational Medical Priorities





DHA & Portfolio Management Influence

- Army representative for all DHMSM related Segment 2 activities
  - Operational Environment Working Group
  - Operational Environment Technical Working Group
- Operational Health Information Technology (HIT) Future Working Group
- Readiness & Force Support Portfolio Management Board Voting Member
  - $500 Million Portfolio
  - 35+ Systems
  - Direct input 2-Star level and DHA Joint Portfolio Board
- Theater Functional Working Group (TFWG)
- Operational HIT Working Group
- Theater Management Information Program – Joint (TMIP-J) PMM
- TMIP-J Operation Technical Working Group

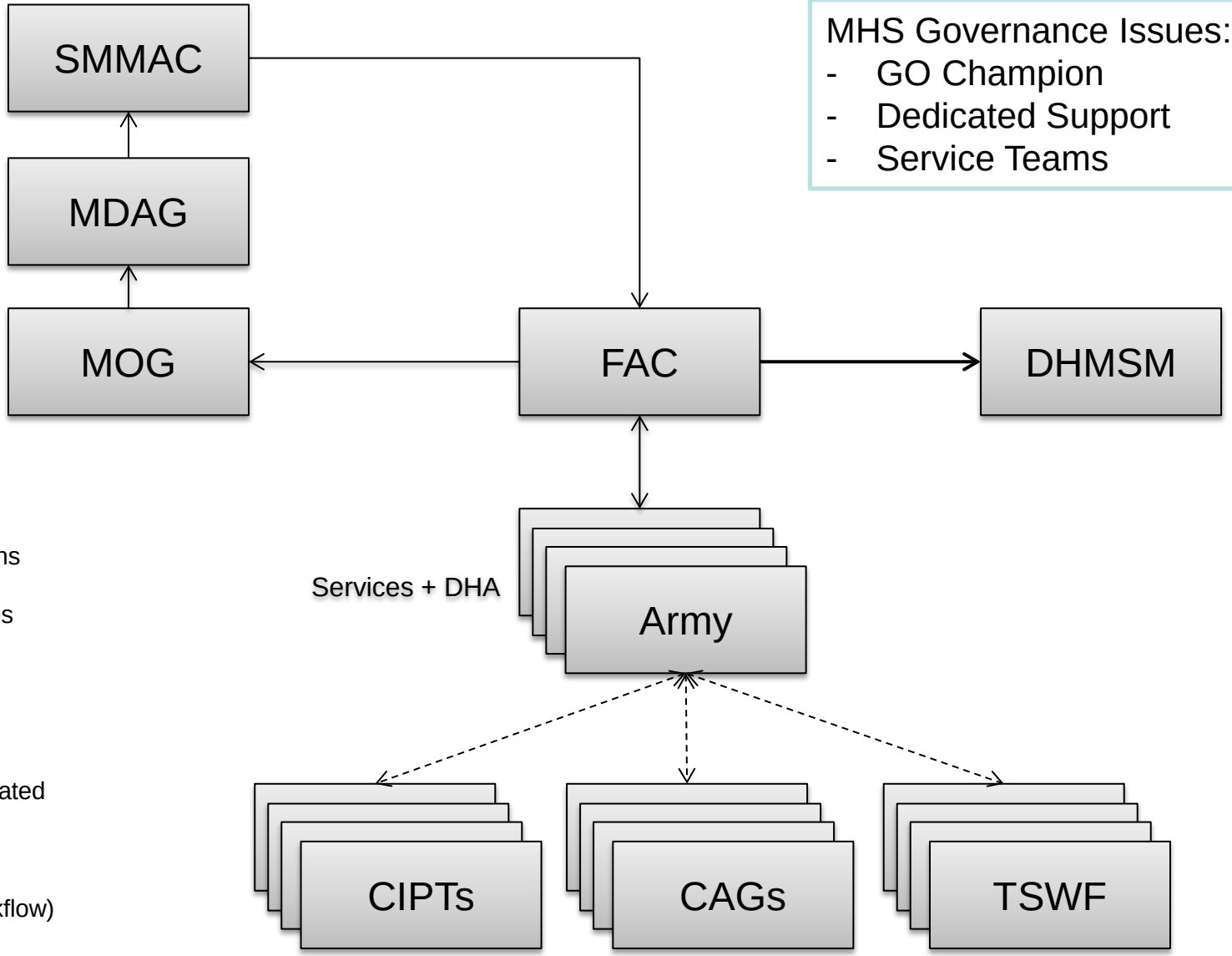
Segment 2

- Acquire a replacement system for Department of Defense (DoD) legacy Military Health System (MHS) clinical systems including, but not limited to, the Armed Forces Health Longitudinal Technology Application (AHLTA), inpatient, Composite Health Care System (CHCS), and the Electronic Health Record (EHR) component of the Theater Medical Information Program (TMIP), with the objective of fielding a modernized replacement by 2017

- Collaborate with the Interagency Program Office (IPO) and Defense Medical Information exchange (DMIX) to ensure compatibility and interoperability with the standardized healthcare data framework and exchange standards as they evolve and are available via the DMIX program

https://www.fbo.gov/

Governance & SME Input

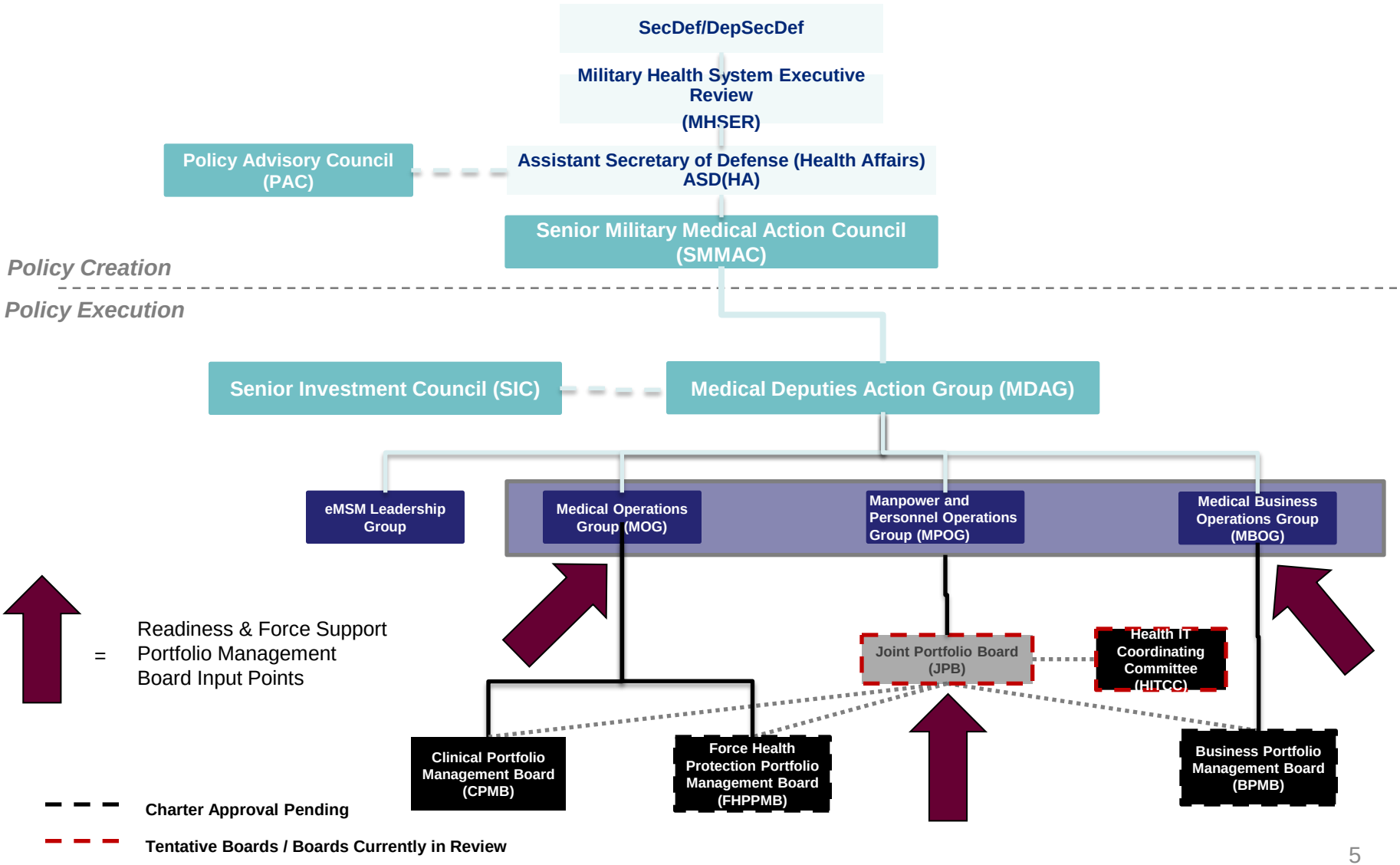


MHS Governance Issues:
- GO Champion
- Dedicated Support
- Service Teams

MOG (Medical Operations Group)
MDAG (Medical Deputies Action Group)
SMMAC (Senior Military Medical Action Council)

CIPTs (Capability Integrated Product Teams)
CAG (Content Advisory Group)
TSWF (Tri-Service Workflow)

DHA Governance Board Structure



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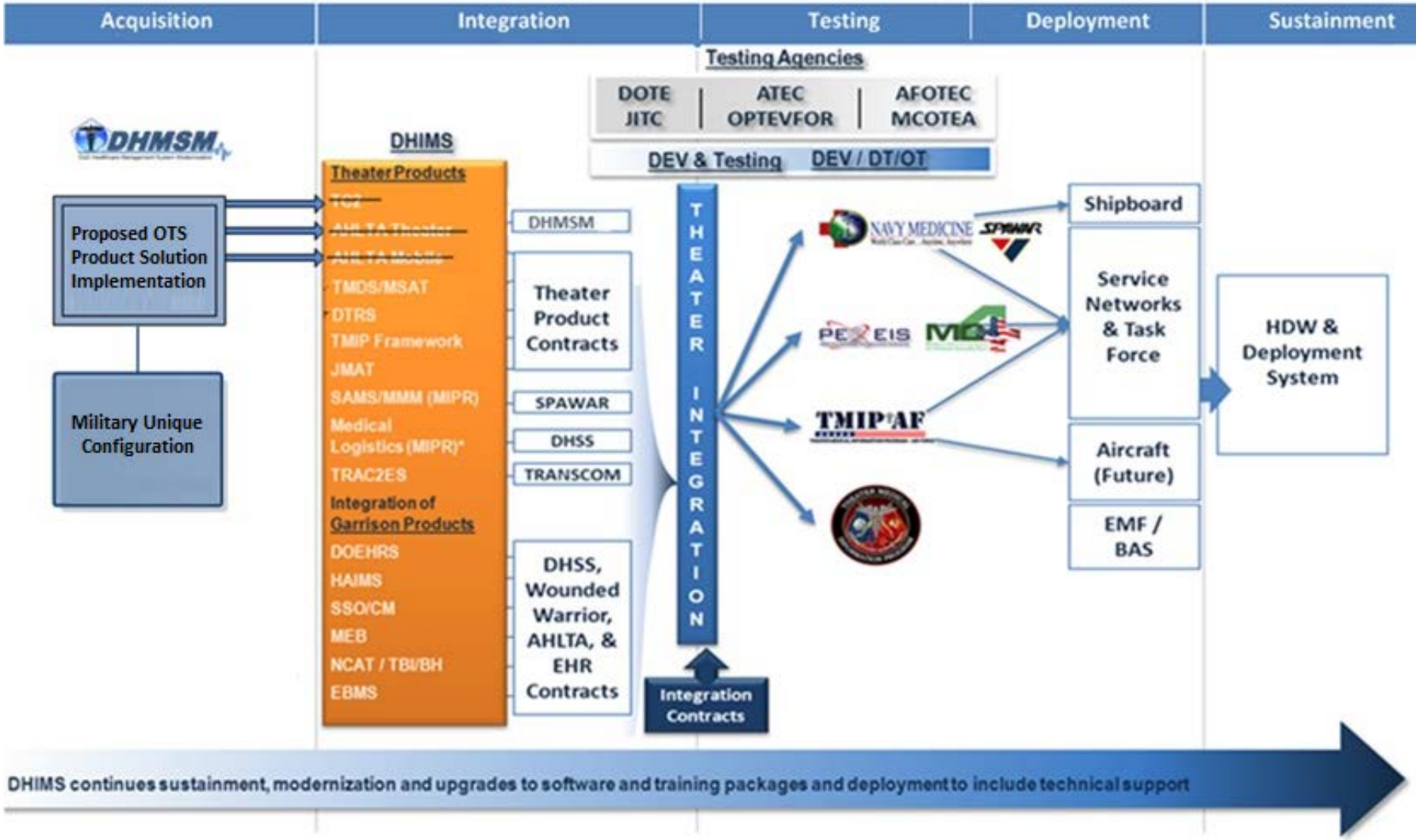
DHMSM Integration into the TMIP-J Program

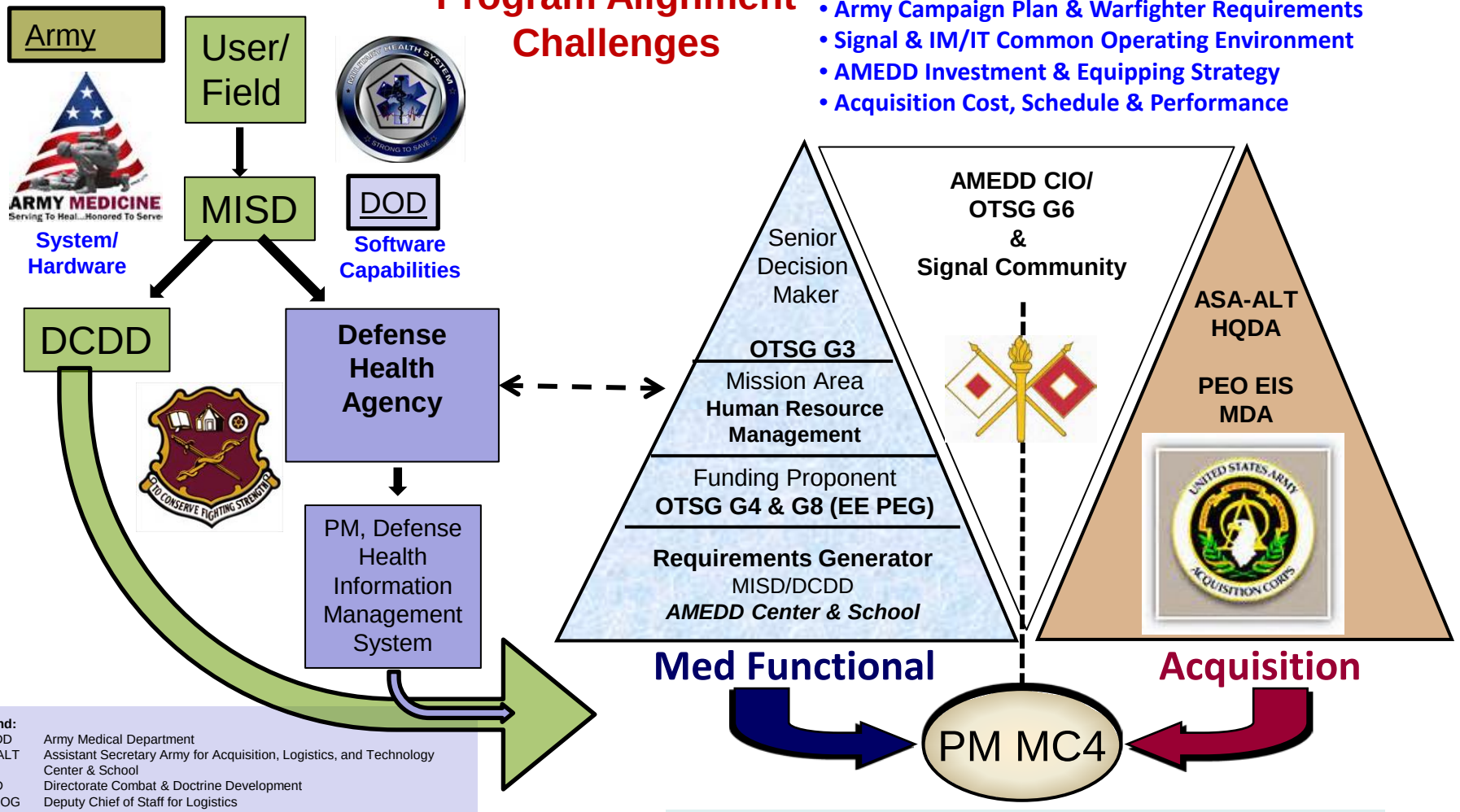


DHMSM Service Provider Integrator (SPI) support

Synchronizing Requirements Flow and Acquisition

Program Alignment Challenges

- 10 USC Section 1074f (1997) & DoD Military Health System
- Army Campaign Plan & Warfighter Requirements
- Signal & IM/IT Common Operating Environment
- AMEDD Investment & Equipping Strategy
- Acquisition Cost, Schedule & Performance

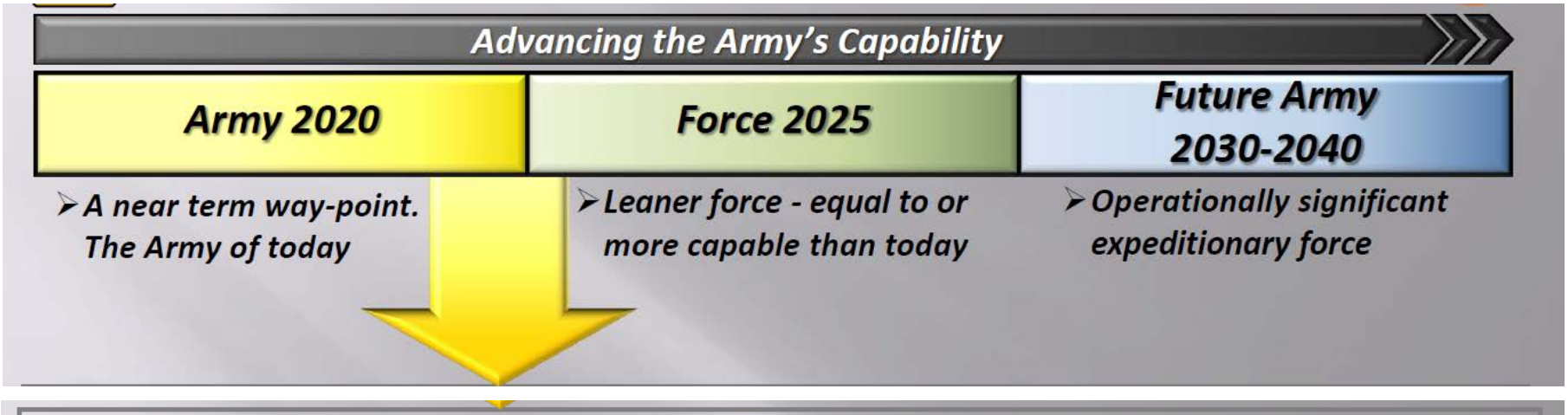


AMEDD C&S Operational Requirements Document
(Joint Requirements Oversight Council Approved)

Legend:

AMEDD	Army Medical Department
ASA-ALT	Assistant Secretary Army for Acquisition, Logistics, and Technology
C&S	Center & School
DCDD	Directorate Combat & Doctrine Development
DCSLOG	Deputy Chief of Staff for Logistics
DCSOPS	Deputy Chief of Staff for Operations
EE	Equipment Equipping
MDA	Milestone Decision Authority
MISD	Management Information Systems Division
OTSG	Office of The Surgeon General
PEG	Program Executive Group

Army Network Enablers



- Established Single Identity – DoD Enterprise Email *(Completed Jul 2013)*
- Implementing Unified Capabilities (UC)
- Consolidating/Closing Data Centers
- Killing Legacy/Redundant Applications
- Moving Data & Applications to Cloud
- Developing Enterprise Licensing Agreements (ELAs)
- Boosting Capacity Through Multi-Protocol Label Switching (MPLS)
- Closing Security Gaps with Joint Regional Security Stacks (JRSS)
- Enabling a Robust Mobile Environment – Devices and Apps

Medical Network Enablers

Army 2020	Force 2025	Future Army 2030-2040
• DHMSM Segment 2 • Sustainment Training • Tele-Health Enabled • HIT Enterprise Support	*Well Trained and Equipped Medical Force*	*Operationally Significantly Effective Medical Force*

MC70

Standard Mobile Environment

Medical Common Desktop
Multiple EHR Aps
Environment
-AHLTA-T
-TC2

Medical Common Desktop
Single EHR Application

Mobile Environment

- Shifting Focus to Data – Secure and Accessible
- Should be a Device Agnostic Environment
- Transitioning from Hardware to a Software-Based Environment
- Real-Time Collaboration Is Critical to Army Success
- Biggest Challenge is Getting There Fast Enough
  - Two-Factor Authentication is a Must
  - Limited RDT&E Funds – Industry Has to Help

Untether the Soldier – Empower the Army Workforce

AMEDD CIO/G6 OPERATIONAL MEDICINE ACTIVITIES

4th Quarter FY14

- DHMSM Segment 2 Planning
- Sustainment Training Legacy MC4 and Medical Logistics Platforms
- Deployable Tele-Radiology Systems (MEDWEB) Refresh
- AVHE staffing assistance in support of LRMCs Theater mission in the short-term.

1&2 Quarter FY15

- Continue work towards Signal Convergence (JTMN Accreditation/5th Signal)
- POM Development to Support Known Gaps (TBH, Image Management, Transport, AVHE, Virtual Training)
- Establishing linkages between DCDD, DHA, CIO, G-6, TRADOC, Net Warrior, etc…
- DHMSM Segment 2 Planning
- DHCS I2R3 OT

Current Theater Support Issues

• Critical systems beyond LCM without an enterprise solution in place to refresh and sustain the fight in theater.

- •DTR&S – MedWeb Light hardware is not supportable and still running XP
- •DEVAA – Server 2003 requires a Special OU Exemption every 30 days

•Current systems in theater require substantial technical support from contractors both in theater and those flown in from CONUS for every major upgrade, and or, new facility establishment

•Signal community support is dwindling and having avers effects on JTMN, TBH, etc…

• Systems and Servers are being deployed to lower Roles prior to S-6 personnel receiving the minimal technical training (Security +, Network +, etc.) required to administer the systems.

CIO Closing Remarks

- Peace dividend is coming!
- Embrace partnerships
- Standardization
- Thriving vs Surviving
- IT Saves Lives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