

Headquarters U.S. Air Force

Integrity - Service - Excellence

MHS GENESIS Strategic Implications for the AFMS



2016 Defense Health Information
Technology Symposium

U.S. AIR FORCE

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Air Force Medical Operations Agency



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Air Force Medicine

Mission:

**Ensure medically fit forces,
provide expeditionary medics,
and improve the health of all
we serve to meet our Nation's
needs**

Vision:

**Our supported
population is the
healthiest and highest
performing segment of
the U.S. by 2025**



Trusted Care Anywhere



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Learning Objectives

- **Consider the AFMS quality journey and the role of Information Technology and Trusted Care**
- **Consider how existing and new capabilities will be leveraged to support the military mission, service member and families**
- **Consider how the daily practice of military medicine will evolve over time**
- **Consider how integral information technology is in supporting the changes in military medicine**



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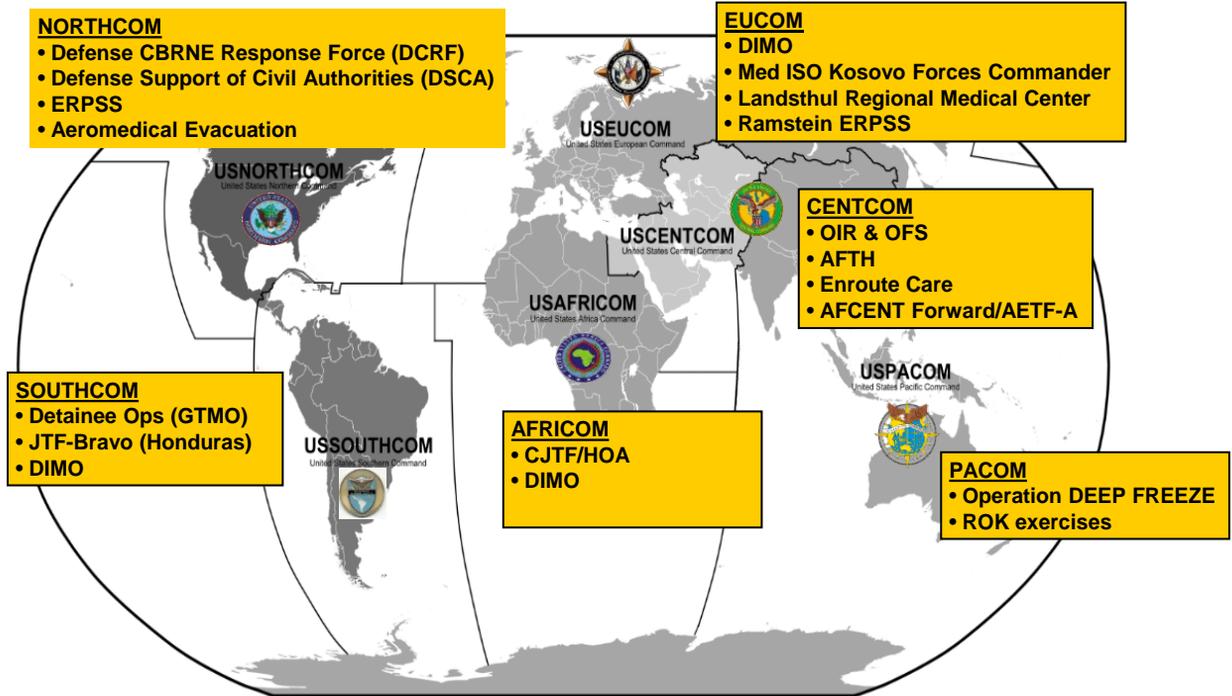
Agenda

- **Mission Agility**
- **Information Challenges**
- **Human Performance**
- **Trusted Care**
- **Better Patient Outcomes**
- **Conclusion**



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Current Operations



*Providing Critical Support To Our Combatant Commanders and
Bringing Patients To The Best Possible Care*



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Agility in Meeting the Mission

■ Aeromedical Evacuation System

- Over 85,000 patients transported since 2001
- Long-range critical care movements often within 24 hours of injury
- AFMS en-route care has significantly contributed to the lowest “died of wounds” rate in the history of warfare

“Air Force Medicine is evolving to meet the needs of evolving requirements.”

Lt Gen Ediger



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Agility in Meeting the Mission

- **MHS GENESIS will play an important part in the AFMS Mission:**
 - **Manage information in a consistent view with integrated data across the continuum of care**
 - **Store and forward the patient record from low communication environments**
 - **Update and store record during transport**
 - **Synchronize updates to permanent record**



Information Challenges

- For continuity of care the patient record has to be:
 - Readily available
 - Complete
 - Integrated
- To meet this challenge we need:
 - Robust and reliable infrastructure
 - Ability to store and forward patient information in all environments



- **MHS GENESIS capabilities**
 - **Store and forward data**
 - **Provide a complete, user friendly, integrated record across the entire continuum of care**
- **Medical Community of Interest (MEDCOI)**
 - **Creates a reliable, robust infrastructure to support MHS GENESIS “go-live”**
 - **Modernizes and provides a common health network for all three Services**
 - **First AFMS site is Fairchild AFB**



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Human Performance

- The environment where patients are recovered and medical staff work impacts patient outcomes
- MHS GENESIS analytics will:
 - Support mission planning
 - Shape training and equipment usage



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Human Performance

- Personnel equipment impacts operational performance
 - Impacts full range of military operations
 - Effective use of equipment key to mission success
- Flight environment impacts patient transport
 - Seven stressors of flight
 - Low acceleration forces from take-offs, turns, and landing
- Operational environment impacts human performance
 - Define basic performance metrics over time
 - Maximize performance

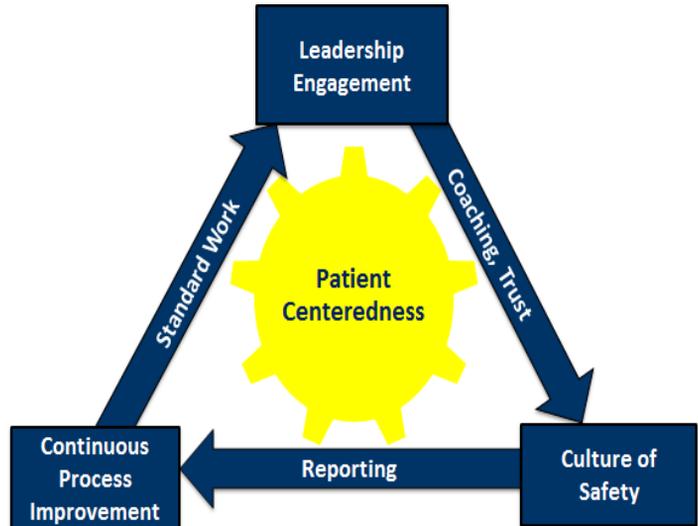


Trusted Care

■ Transformation to Trusted Care requires change in four domains

- Leadership Engagement
- Culture of Safety
- Continuous Process Improvement (CPI)
- Patient Centeredness

Trusted Care is a vision of the AFMS as a continuous learning and improving organization with a single-minded focus of safety and Zero Harm





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Trusted Care

- **MHS GENESIS supports Trusted Care**
 - **Maintains standardized workflow processes**
 - **Reduces variability in high risk processes**
 - **Feeds data analytics and root causes analyses**
 - **Provides dashboard of unit's daily performance**



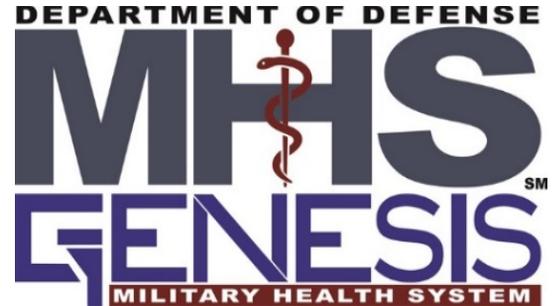
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Better Patient Outcomes

- MHS GENESIS consolidates and streamlines multiple systems
 - Ambulatory, inpatient, surgical, emergency, and dental
 - Referral Management
 - Patient Portal
- Replacing legacy systems optimizes delivery of health care
- Enhanced ancillary support integration improves patient safety
- MHS GENESIS will lead to better patient outcomes



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Better Patient Outcomes

- **Better outcomes through evidence based practice**
 - **For example: reduced intravascular catheter-related infections through the use of:**
 - **Education and Training**
 - **Sterile barrier precautions**
 - **Use of Chlorohexidine skin prep for antisepsis**
- **Evidence based practice lowered Healthcare-Associated Infections by over 50% from 2008 to 2014**



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Better Patient Outcomes

- Increased patient safety through continuous process improvement (CPI) and standardized workflows
- MHS GENESIS analytics will support CPI and standardization of workflows



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Better Patient Outcomes

- **Clinical Practice Guidelines (CPGs) combine evidence based practice and standardization**
- **Eight of those CPGs will be converted for use in MHS GENESIS for the Pacific Northwest pilot sites**
- **Offers flexibility for providers to move outside the CPGs based on clinical judgement**



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Better Patient Outcomes

- **Healthcare-Associated Infections (HAIs) have impacted 1.7M patients**
 - **Adding to length of stay**
 - **Increasing costs**
 - **Reducing patient satisfaction**
 - **Impacts morbidity and mortality**
 - **Almost 99,000 deaths a year are attributed to HAIs**
- **Information technology can play an important role in reducing these numbers**



Better Patient Outcomes

- Healthcare IT systems provide opportunities for analyzing key information for analytics
- Analytics can include:
 - Tracking staff interaction with the patient
 - Care provided
 - Facilities and supplies used
- Analytics and clinical decision support systems can identify potential care deficiency areas and highlight areas of improvement
- IT support of patient safety initiatives have drastically decreased mortality



Conclusions

- **MHS GENESIS will increase agility and improve patient care throughout the full range of military operations**
- **Part of the Trusted Care journey is to prepare and embrace change**
- **Analysis of enterprise level prevention and care data will lead to better patient outcomes**
- **A comprehensive health information technology strategy is the foundation for improved medical support to the U.S. military**



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Evaluations

- Please complete your evaluations



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QUESTIONS?



A large, stylized graphic in the shape of a pentagon with a metallic, brushed-metal texture. At the center is a globe divided into four quadrants. The top-left quadrant shows a soccer player in a white jersey kicking a ball. The top-right quadrant shows a medical professional in a white coat using a handheld device. The bottom-left quadrant shows a person in a military-style uniform. The bottom-right quadrant shows a person in a white uniform, possibly a nurse or doctor, interacting with a patient. Surrounding the globe are four text labels: 'BETTER HEALTH' (top-left, blue), 'BETTER CARE' (top-right, red), 'BEST VALUE' (bottom-right, yellow), and 'TRUSTED CARE, ANYWHERE' (bottom, blue). On the left side of the pentagon, the word 'READINESS' is written vertically in green. The entire graphic is set against a background of a satellite-style view of Earth from space, showing a coastline and a body of water.