DHA Total Learning Architecture (TLA)

Anita L. Fligge, Brig Gen, USAF, NC
Deputy Assistant Director, Education & Training

Paul R. Cordts, MD, MSS
Deputy Assistant Director, Medical Affairs
Disclosures

• Brig Gen Anita Fligge and Dr. Paul Cordts have no relevant financial or non-financial interests to disclose.

• Disclosure will be made when a product is discussed for an unapproved use.

• This continuing education activity is managed and accredited by AffinityCE in collaboration with AMSUS. AffinityCE and AMSUS staff as well as Planners and Reviewers, have no relevant financial or non-financial interests to disclose.

• Commercial Support was not received for this activity.
Learning Outcomes

At the conclusion of this activity, participants will be able to:

1. Define the Military Health System (MHS) high level requirements that for an infrastructure that can enable lifelong blended, data driven training tailored to the individual and the educational and operational goals of the services and the MHS as a whole.
   - Are there existing systems/efforts that can be leveraged?
   - What needs to be acquired?

2. Define the Science and Technology gaps that must be addressed for this infrastructure to be successful.

3. Define the roles of Defense Health Agency (DHA) and the infrastructure requirements to support MHS Graduate Medical Education (GME).
MHS TLA Initiation and Background

1. Lack of Complete, Enterprise level Readiness Data for MHS or Services
   - Lack of ability to capture complete and integrated readiness data
   - Lack of ability to identify education/training needs and provide offerings to medical force in a timely manner

2. Training Content is not Optimized or Standardized
   - Content is primarily outdated (e.g. PowerPoint) and needs to be modernized
   - Training courses are taught differently across locations and need standardization

3. Learning Data is Isolated throughout the MHS Continuum and Lacks Granularity
   - Many learning experiences are not recorded or data is in disparate data repositories
   - Learning experiences are often marked as completion only and discrete performance data is not captured
Throughout the DOD, many organizations are working on their own version of a “Learning Architecture or Ecosystem”
Completed initial research to identify:

- Best practices, standards, technology, and complementary efforts that can be leveraged
- Lessons learned and best practices from learning science perspective
- Systems engineering lessons learned / infrastructure / interoperability that can be leveraged from past/current efforts

Completed TLA Requirements Document

- Version 1 of the High Level TLA Functional Requirements Document

Completed a draft roadmap which consists of gaps to be resolved by DHA or S&T efforts

- Need for more granular performance data
MHS Total Learning Architecture Concept

**Total Learning Architecture:** A modern, modular, interoperable ecosystem that can support the full continuum of interconnected learning opportunities

![Diagram of MHS Total Learning Architecture Concept]
Results: MHS Training & Education Gaps

Incomplete Enterprise Infrastructure and Analytics
- The MHS processes and systems that are currently in place have no ability to report enterprise-wide education, training, and human performance metrics
- Data is isolated across disparate, stove-piped systems that do not have sufficient connectivity to provide data and information exchange and analytics
- Data is not granular enough for performance measurement

Fragmented linkages between education, training, and operational goals:
- Mission-> Education/Training Goals-> Measurement Strategy-> Data Strategy-> Analytics

Inconsistencies and inefficiencies in performance measurement/ talent management
- The MHS needs to employ standardized performance metrics and thresholds along with a strategic approach to data driven training and education
Stepwise Approach to Data-Driven Training and Education

Now

Limited Readiness “Check the box”
- Required Completions

Near Term

Role Based Readiness
- Course Completions
- Sub-Course Completions

- Leverage Existing Efforts (KSA project, ICTLS)

Future

Individualized Readiness
- Course Completions
- Sub-Course Completions
- KSAs

Foundation for Performance Measurement

- SME Provided / Organization Approved
  - Clinical & Readiness Critical Tasks/Experiences
  - Standardized Metrics/Thresholds

Results

- Annual Requirements for Credential / Certification Tracking
  - Role based proficiency calculations
  - Targeted training per role type
  - Data driven training and education:
    - Media selection (e.g. 80% Sim, 20% Live)
    - Assessment selection
    - AAR selection
TLA Path Forward

Scope of Warfighter Journey
- Previous Training/Education
- Basic Training
- Home Station
- On the Job
- Deployed

Performance Metrics/Thresholds
- Key Performance Areas
- KSAs
- Competency Models
- Assessment Strategy

Data Strategy
- Training Effectiveness Models
- xAPI Selection
- xAPI Profiles
- xAPI Metadata

Training Delivery/Deployment
- Technologies for Deployment
- Training Content
- Optimal Spacing/Timing
- Performance Data Collection

Enterprise Data Aggregation/Storage
- Data Aggregation Strategy
- Data Exchange Library

Data Analysis & Visualization
- Data Visualization
- Training Effectiveness Evaluation
- Human Factors Analysis
Graduate Medical Education (GME)

- DHA transformation
- Progress
- Challenges
- Future
DHA Transformation

• GME is the primary force generator for the Services’ Medical Corps.

• DHA provides oversight of MHS GME programs.

• GME programs may be reshaped based on operational needs of the Services, as well as other tenets of NDAA17, Section 749.
NDAA17 Sections 702 & 749

• **Sec 702**
  – DHA via DAD-MA is responsible for policy, procedures and direction of GME.

• **Sec 749**
  – Develop oversight process to ensure:
    • Programs focus on operational medical force requirements and are conducted jointly to the extent practicable,
    • Minimize [unwarranted] duplicative programs among the MILDEPs
    • Coordination of assignment of faculty, support staff, and students
    • Optimization of resources by appropriately using MTFs as training platforms
    • Reviewing and restructuring/realigning programs if/when necessary
DHA GME Responsibilities

• Provide oversight of DoD GME programs
• Administration of GME Advisory Boards
• Execution of all aspects of JSGMESB, except Service Selection Boards
• Policy development for DoD GME
• Analyze DoD GME data to develop initiatives and policies
• Tracking of all accreditation decisions and other metrics
• Preparation of all requests for information re: DoD GME
Service Responsibilities

• Title 10: recruit, train, equip, and organize

• Services will:
  – Recruit new Medical Corps officers
  – Decide how many and what type of specialties to train
  – Support GME with military faculty and support staff
Progress

• Oversight infrastructure
  – **Oversight Advisory Council (OAC)**
    • DHA Deputy Assistant Director - Medical Affairs
    • Service Medical Corps Chiefs
  – **Integration Advisory Board (IAB)**
    • DHA GME Director
    • Service GME Directors

• OAC primary duties
  – Focus on **Medical Force Readiness**
  – Review Service-specific training plans
  – Evaluate recommendations for policy, procedures, and direction of GME

• IAB primary duties
  – Draft recommendations for policy, procedures, and direction of GME
  – Develop **Joint Training Plan** by coordinating Service Training Plans
  – Review training plans and make proposals for **restructuring/realigning** programs *if/when necessary*
Evaluation of the Number & Size of GME Programs

• Each specialty is reviewed at least every other year
  – Operational training requirement = total number of new starts/year for the three Services combined
  – Total training capacity = total number of training positions/year available across all the programs in that specialty across the MHS

• Too little capacity in MHS for that specialty?
  – Expand existing partnerships, open programs, establish new partnerships

• Too much capacity in the MHS for that specialty?
  – Evaluate programs to determine if programs could be restructured or realigned
    • Operational, academic, and market criteria
    • Includes consideration of required program interdependencies
Challenges

• Volume of patients treated in the MTFs with the needed acuity and complexity

• Staffing of medical personnel and funding at MTFs to support GME programs

• DHA is actively working with Services, Veterans Affairs (VA) and civilian partners to address these challenges and others.
Future

• Strengthen VA and civilian partnerships

• Reform business practices in MHS to sustain GME

• Reduce unwarranted duplication of GME programs

• Increased integration with professional military education
How to Earn CE

• If you would like to earn continuing education credit for this activity, please visit: http://amsus.cds.pesgce.com.

• Hurry, CE Certificates will only be available for 30 Days after this event!