Defense Health Agency

ADMINISTRATIVE INSTRUCTION

NUMBER 6000.01 March 11, 2022

J-7 E&T

SUBJECT: Medical Modeling and Simulation Requirements and Implementation Guidance for

Training

References: See Enclosure 1.

- 1. <u>PURPOSE</u>. This Defense Health Agency-Administrative Instruction (DHA-AI) based on the authority of References (a) and (b), and in accordance with the guidance of References (c) through (l), establishes the Defense Health Agency's (DHA) procedures to:
- a. Oversee, manage, and administer Medical Modeling and Simulation (MM&S) functions across the Military Health System (MHS).
- b. Identifies, develops, and implements medical training MM&S strategies to improve outcomes, determine measures of effectiveness, reduce training variability, and optimize return on investment.

2. APPLICABILITY

- a. This DHA-AI applies to the DHA, DHA Components (activities under the authority, direction, and control of DHA), DHA Military Medical Treatment Facilities (MTFs) staff involved in direct medical training within the MHS and all organizational entities within the DoD that align with or are satellites of an MTF for the purposes of conducting or administering MM&S training are to comply with this DHA-AI.
- b. This DHA-AI does not apply to the Service specific entities identified with medical readiness responsibility.
- 3. <u>POLICY IMPLEMENTATION</u>. It is DHA's instruction, pursuant to References (d) through (k), that, the Defense Medical Modeling and Simulation Office (DMMSO) will centralize, coordinate, and consolidate, as appropriate, MM&S training requirements for the MTFs.

- 4. RESPONSIBILITIES. See Enclosure 2.
- 5. PROCEDURES. See Enclosure 3.
- 6. <u>PROPONENT AND WAIVERS</u>. The proponent of this publication is Director, J-7 Education and Training (E&T). When activities are unable to comply with this publication the activity may request a waiver that must include a justification, to include an analysis of the risk associated with not granting the waiver. The activity director or senior leader will submit the waiver request through their supervisory chain to the Director, J-7 E&T to determine if the waiver may be granted by the Director, DHA or their designee.
- 7. <u>RELEASABILITY</u>. **Cleared for public release**. This DHA-AI is available on the Internet from the Health.mil site at: https://health.mil/Reference-Center/Policies and is also available to authorized users from the DHA SharePoint site at: https://info.health.mil/cos/admin/pubs/SitePages/Home.aspx.
- 8. <u>EFFECTIVE DATE</u>. This DHA-AI:
 - a. Is effective upon signature.
- b. Will expire 10 years from the date of signature if it has not been reissued or cancelled before this date in accordance with Reference (c).

/S/ RONALD J. PLACE LTG, MC, USA Director

Enclosures

- 1. References
- 2. Responsibilities
- 3. Procedures

Glossary

ENCLOSURE 1

REFERENCES

- (a) DoD Directive 5136.01, "Assistant Secretary of Defense for Health Affairs (ASD(HA))," September 30, 2013, as amended
- (b) DoD Directive 5136.13, "Defense Health Agency (DHA)," September 30, 2013
- (c) DHA-Procedural Instruction 5025.01, "Publication System," August 24, 2018
- (d) DoD Instruction 6000.18, "Medical Modeling and Simulation Requirements Management," August 22, 2018
- (e) Public Law 114-328, "National Defense Authorization Act for the Fiscal Year 2019", August 13, 2018
- (f) Public Law 115-232, "National Defense Authorization Act for the Fiscal Year 2017", December 23, 2016
- (g) DHA Procedural Instruction 6430.04, "Use of Defense Medical Logistics Standard Support (DMLSS) as the Authoritative Information System (IS) of Record for Medical Logistics (MEDLOG) Enterprise Activity (EA)," December 20, 2019
- (h) DoD Instruction 1322.24, "Medical Readiness Training (MRT)," March 16, 2018
- (i) DoD Instruction 6000.19, "Military Medical Treatment Facility Support of Medical Readiness Skills of Health Care Providers," February 7, 2020
- (j) Joint Requirements Oversight Council Memorandum 126-17, "Defense Trauma Enterprise DOTmLPF-Change Recommendation," December 11, 2017
- (k) Joint Requirements Oversight Council Memorandum 125-17, "Forward Resuscitative Care in Support of Dispersed Operations DOTmLPF-Change Recommendation," December 11, 2017¹

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ENCLOSURE 1

¹ This reference can be found at: https://jts.amedd.army.mil/assets/docs/policies/JROCM-126-17-DOTmLPF-P-Change-Recommendation.pdf

ENCLOSURE 2

RESPONSIBILITIES

- 1. <u>DIRECTOR, DHA</u>. Under the authority, direction, and control of the Under Secretary of Defense for Personnel and Readiness through the Assistant Secretary of Defense for Health Affairs, the Director, DHA, will:
- a. Develop management models to effectively, and efficiently assume responsibilities for MM&S functions and processes as outlined in Reference (b).
- b. Seek to maximize efficiencies in and sustainability of the joint medical E&T requirements, processes, procedures, and MM&S while ensuring Service-specific equities are maintained by establishing the DMMSO which centralizes, coordinates, and consolidates, as appropriate, all MM&S requirements pursuant to Reference (d).
- c. Budget annually to implement and maintain the MHS' MM&S enterprise requirements capture, oversight, and approval of the MM&S portfolio for planning, decision-making, and E&T solutions pursuant to Reference (d).
- 2. <u>ASSISTANT DIRECTOR, HEALTH CARE ADMINISTRATION (HCA)</u>. The AD, HCA through the Joint Trauma System will:
- a. Coordinate with MM&S representatives for any MM&S requirements, resources, and training regarding combat casualty care and expeditionary skills sustainment in accordance with Reference (i).
- b. Provide standardization and interoperability capability assessments of MM&S equipment and resources in support of MTF training regarding combat casualty care and expeditionary skills sustainment in accordance with Reference (h).
- c. Advise MM&S organizations on the establishment and maintenance of a baseline list of DoD MM&S capabilities for use while operating in hospital and pre-hospital trauma training and skills sustainment platforms.
- d. Assist in the development of MM&S solution sets, as requested by the Combatant Commanders through the MHS Request Submission Portal, for potential inclusion in planning for exercises, demonstrations, training, and military operations regarding combat casualty care and expeditionary skills sustainment.
- e. Endorse all MM&S requests prior to entering the MHS Request Submission Portal regarding combat casualty care and expeditionary skills sustainment.
- f. Direct use of standardized training and utilization of MM&S capabilities to meet required proficiency training in support of combat casualty care and expeditionary skills sustainment.

3. DIRECTOR, J-7 E&T. The Director J-7 E&T will:

- a. Provide functional oversight and strategic direction to the Medical Modernization and Simulation Division (MMSD), DMMSO, and MTF Simulation Centers across the MHS regarding MM&S training requirements and implementation..
- b. Provide policies and procedures for planning, prioritizing, documenting, and reporting MM&S training.
- c. Review unfunded, validated MM&S requirements recorded into the MHS Request Submission Portal and recommend a disposition for funding.
- d. Ensure utilization of the MTF Simulation Centers is made available to all MHS personnel (assigned or attached) to include the independent Dental Treatment Facilities (DTF) and the Veterinary Treatment Facilitates (VTF) for Health Care Providers.
 - e. Approve MM&S metrics and review metric data quarterly.
- f. Coordinate with Director, DHA Research & Development, and Component Acquisition Executive to assess Defense Health Program (DHP) funds expended on MM&S capabilities.
- g. Provide recommendations for adjustments to the DHP budget for MM&S related functions to include establishment of unique Program Objective Memorandum lines, under the management of DHA, J-7 E&T, MMSD, for funding of initial MM&S acquisition activities directed by MM&S Requirements and Management pursuant to task 5 of Reference (f).

4. <u>DIVISION CHIEF, MEDICAL MODELING AND SIMULATION DIVISION.</u> The Division Chief MMSD will:

- a. Provide strategic direction, functional oversight, and policy execution for the DMMSO.
- b. Communicate MM&S requirements, revisions, and updates to the MTF Directors to support compliance with all DHA MM&S training requirements.
- c. Collaborate on planning and prioritization of training activities for all MTF Simulation Centers, as necessary.
- d. Ensure the centralized MM&S document management platform displays key updates, schedule of activities, tools, and resources.
- e. Ensure screening of all MHS E&T requests and supporting data recorded into the MHS Request Submission Portal for quality control, relevance to MM&S, and alignment to leadership priorities.

- f. Provide and prioritize recommendations to the Director, J-7 E&T on unfunded, validated requirements recorded into the MHS Request Submission Portal.
- g. Assist the Director, J-7 E&T in monitoring DHP funds expended on MM&S capabilities and provide recommendations for adjustments to the DHP budget regarding MM&S.
 - h. Approve and report MM&S metrics to the Director, J-7 E&T.
- i. Promote synergistic partnerships with DoD elements, Service MM&S liaisons, and federal and civilian partners to improve delivery of MM&S throughout the MHS.
- j. Serve as the DHA Representative on the DoD MM&S Steering Committee and coordinate with the Director, DoD Modeling and Simulation Coordination Office, concerning existing MM&S capabilities pursuant to Reference (d).
- k. Promote and support MHS efforts to use MM&S technology, to the maximum extent practicable, before the use of live tissue training pursuant to Reference (e).
- 5. <u>BRANCH CHIEF, DEFENSE MEDICAL MODELING AND SIMULATION OFFICE</u>. The Branch Chief, DMMSO will:
- a. Review, verify, and validate all MM&S requests submitted to MHS Request Submission Portal to determine requirement validation.
- b. Coordinate with appropriate subject matter experts (SMEs) to validate or reject whether MM&S requests meet or exceed a MM&S requirement.
- c. Provide DHP budgetary requirements, in coordination with the Program Manager for Medical Simulation and Training (PM MST), to Chief for new MM&S acquisitions, and research and development projects.
- d. Communicate and collaborate to promote partnerships with DoD activities, Service MM&S liaisons, and federal and civilian partners to improve the delivery of MM&S throughout the MHS.
- e. Coordinate with Market Representatives on MM&S standardization and interoperability capability assessments of equipment and resources in support of readiness related training within the MTFs training.
- f. Advise MM&S organizations on the establishment and maintenance of a list and a baseline of DoD MM&S capabilities, in conjunction with the Services, and centralize MM&S acquisitions to meet MHS requirements as outlined in Reference (d).
- g. Assist in the development of MM&S solution sets, as requested by the Combatant Commanders through the MHS Request Submission Portal, for potential inclusion in planning for exercises, demonstrations, training, and military operations.

- h. Assess the reliability, availability, and maintainability of MM&S equipment.
- (1) Define life expectancy of MM&S equipment and modify as needed based on actual usage.
- (2) Establish inventory and maintenance processes utilizing the Defense Medical Logistics–Enterprise Solution.
- (3) Assess, develop, and implement strategies that decrease equipment downtime and facilitate real-time troubleshooting.
- i. Standardize MM&S products, resources, and tools (e.g., MM&S scenario catalog, Joint Medical Simulation Instructional Methods (JMedSIM) course).
- j. Oversee MM&S staff at the MTFs and, in coordination with the Market, Small Market and Stand-Alone Medical Treatment Facility Organization (SSO), or Defense Health Agency Region (DHAR), (known collectively throughout this publication as "Markets"), E&T staff, approve sharing of MM&S staff, resources, and capabilities.
- k. Coordinate and collaborate in the development of educational MM&S products, as needed (e.g., new equipment user guides, onboarding standardization, JMedSIM course).
 - 1. Establish and coordinate required MTF metrics to be collected by MM&S staff.
 - m. Identify and provide oversight to MM&S Markets Representatives.
 - n. Create and maintain a scenario catalog and repository of MM&S tools and resources.
 - o. Support sustainment of a professional MM&S staff.
- p. Serve as the MM&S representative for the Live Animal Use in Medical Education and Training Working Group.
- q. Collaborate with Live Animal Use in Medical Education and Training leadership in the coordination of medical simulation optimization efforts to reduce the use of live animals in medical education and training pursuant to Reference (e).
- 6. <u>DIRECTOR, PROGRAM MANAGER FOR MEDICAL SIMULATION AND TRAINING.</u> The Director, PM MST will:
- a. Coordinate with DMMSO to establish joint programs of record (POR) and budgetary requirements for approved MM&S capability requirements.
 - b. Program Objective Memorandum for the total life cycle of MM&S PORs.

- c. Manage cost, schedule, performance, and risk of MM&S PORs.
- d. Coordinate with DMMSO for MM&S life cycle upgrades, technology insertions, sustainment, and disposal of MM&S POR capabilities.

7. DIRECTORS, MARKETS. The Markets Directors will:

- a. Receive MTF Director endorsed MM&S requirements, resources, and training requests from the MTF Directors.
 - b. Review and submit approved MMS requests to the DMMSO for processing.
 - c. Provide MTF-level metrics to DMMSO.
- d. Communicate and coordinate updated policies, procedures, taskers, and other relevant information received from E&T leadership to appropriate personnel.

8. <u>DIRECTORS, MEDICAL TREATMENT FACILITY</u>. The Directors, MTF will:

- a. Coordinate with MM&S Representatives for all MM&S requirements, resources, and training.
 - b. Endorse all MM&S requests prior to recording into the MHS Request Submission Portal.
 - c. Review any MM&S metrics quarterly as per local guidance.
- d. Ensure independent DTF have a process to coordinate, use and train in local MTF Simulation Center.
- e. Ensure independent VTF have a process to coordinate, use and train in local MTF Simulation Center.

9. <u>MM&S REPRESENTATIVE</u>, <u>MEDICAL TREATMENT FACILITY</u>. The MM&S Representatives, MTF will:

- a. Identify MM&S training opportunities and capabilities to support specific learning outcomes and objectives.
- b. Consult with MM&S representatives from the Services; AD, Combat Support; and other SMEs to determine standardized training across the MTF and Markets to ensure integration of MM&S capabilities in training for healthcare delivery and readiness.

- c. Follow MHS Request Submission Portal procedures.
- d. Review and submit metrics from the Markets MM&S Representative to MTF Director.
- e. Direct use of standardized training and utilization of MM&S capabilities to meet required proficiency training in support of healthcare delivery.

10. <u>DIRECTORS, INDEPENDENT DENTAL TREATMENT FACILITIES (DTF)</u>. The Directors, DTF will:

- a. Coordinate with Market Directors for needed dental MM&S requirements, resources, and training for the use of MTF Simulation Centers.
- b. Endorse Dental related MM&S requests prior to recording into the MHS Request Submission Portal.

11. <u>DIRECTORS, INDEPENDENT VETERINARIAN TREATMENT FACILITIES (VTF)</u>. The Directors, VTF will:

- a. Coordinate with Market Directors for needed veterinarian MM&S requirements, resources, and training for the use of MTF Simulation Centers.
- b. Endorse veterinarian related MM&S requests prior to recording into the MHS Request Submission Portal.

ENCLOSURE 3

PROCEDURES

- 1. <u>OVERVIEW</u>. This DHA-AI supports the oversight, management, administration, promotion, and standardization of MM&S training functions, processes, training, collaboration, and communication across the enterprise. In addition, this DHA-AI will improve MM&S training collaboration between DHA Headquarters (Director, J-7 E&T and DMMSO), Service MM&S representatives, and end users to enhance MM&S sustainability, measures of training effectiveness, and return on investment.
- 2. <u>TIMELINE</u>. Full compliance with this DHA-AI is required within 12 months of signature for all DoD MM&S entities.
- 3. <u>GOVERNANCE</u>. DMMSO will coordinate MM&S requirements with the MMSD and Director, J-7 E&T and report to the MM&S Senior Requirements Board.
- 4. <u>VALIDATION PROCESS FOR MM&S REQUESTS</u>. DMMSO will utilize a standard process to validate MM&S requests:
- a. Review MM&S requests once received from the DHA E&T MHS Request Submission Portal Triage Representatives.
- b. Consult with Service MM&S representatives and/or SMEs to determine optimal MM&S training capability utilizing standardized decision tools (e.g., Simulation Procurement Equipment Request Matrix, market analysis).
- c. Leverage accredited capability or consider need for new training capability to meet the requisite demand.
 - d. Validate requests as requirements.
- e. Determine if DMMSO funding is available, if not, provide an unfunded requirement prioritization list to the MMSD Division Chief and Director, J-7 E&T.
 - f. Coordinate with the acquisition office to acquire the capability.
 - g. Notify MTF Director requestor of timeline for delivery.
 - h. Close out the requests in MHS Request Submission Portal.
 - i. Follow-up with requestor to ensure the request was fulfilled and MM&S needs were met.

- 5. <u>STANDARDIZED PROCESSES FOR MTF/DTF/VTF STAFF E&T/SITE MM&S REPRESENTATIVE</u>. Implement standardized MM&S training, promotion, and reporting to support E&T capability portfolios and site-specific training needs/populations by:
- a. Completing an annual organization-wide training needs demands analysis including an inventory of all available E&T resources (e.g., MM&S equipment, consumables, manning, and facilities).
- b. Ensure DMMSO input is included and describes optimal training modalities (e.g., MM&S, integrated learning environments) when entities other than simulation professionals are developing curriculum.
- c. Coordinating with Markets MM&S Representative and DMMSO on MTF MM&S staffing.
- d. Requesting approval from Markets MM&S Representative and DMMSO to share MM&S staff, resources, and capabilities within and across markets.
- e. Supporting MM&S training coordination, sharing best practices, and providing effectiveness data on return on investment training. Analysis of effectiveness data will improve training outcomes, determine measures of effectiveness, and reduce training variability by utilizing the DMMSO community resources (e.g., centralized SharePoint site, MM&S scenario catalog, JMedSIM course).

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f. Utilizing standardized process set by the DMMSO for progressive professional development across the disciplines of MM&S professionals (e.g., JMedSIM course).

GLOSSARY

PART I. ABBREVIATIONS AND ACRONYMS

AD Assistant Director

DAD Deputy Assistant Director DHA Defense Health Agency

DHA-AI Defense Health Agency-Administrative Instruction

DHAR Defense Health Agency Region

DHP Defense Health Program

DMMSO Defense Medical Modeling and Simulation Office

DTF Dental Treatment Facility

E&T Education and Training

JMedSIM Joint Medical Simulation Instructional Methods

MHS Military Health System

MM&S Medical Modeling and Simulation

MMSD Medical Modernization and Simulation Division

MTF Medical Treatment Facility

PM MST Program Manager for Medical Simulation and Training

SME Subject Matter Expert

SSO Small Market and Stand-Alone Medical Treatment Facility Organization

VTF Veterinary Treatment Facility

PART II. DEFINITIONS

Unless otherwise noted, these terms and their definitions are for the purpose of this issuance.

<u>DMMSO</u>. The lead organization for the centralized management of shared service MM&S capabilities and solutions to support medical education and training. The management of MM&S by this office:

- a. Supports the development, management, and integration of requirements, capabilities, and systems for health care operations
 - b. Promotes the use of MM&S across the Department; and
 - c. Improves medical readiness, survivability, quality of care, patient safety, and efficiency..

12 GLOSSARY

<u>MM&S</u>. The medical discipline that comprises the development or use of medical modeling and simulations. It involves the equipment, including hardware, and the software, that implements a model or simulation or an adjunct tool. The hardware or software that is either used to provide part of a simulation environment (e.g., to manage the execution of the environment) or to transform and manage data used by or produced by a model or simulation. Adjunct tools are differentiated from simulation software; they do not provide a virtual or constructive representation as part of a simulation environment. Simulation is a method for implementing a model over time.

13 GLOSSARY