

Joint Medical Simulation Instructional/ Operational Methods (JMedSIM)



SIMULATION:
BRINGING LEARNING TO LIFE

#IMSH2021

WELCOME



SIMULATION:
BRINGING LEARNING TO LIFE

Presenters

- ❑ **Mr. Ruben Garza**, Defense Health Agency (DHA) J-7/Chief, Defense Medical Modeling and Simulation Office (DMMSO), ruben.garza44.civ@mail.mil
- ❑ **Dr. Joseph Lopreiato**, Uniform Services University (USU) Director, Val G. Hemming Simulation Center, joseph.lopreiato@usuhs.edu
- ❑ **Mr. Geoffrey Miller**, Army Telemedicine and Advanced Technology Research Center (TATRC) Medical Modeling, Simulation Informatics & Visualization Laboratory (MMSIV), geoffrey.t.miller4.civ@mail.mil
- ❑ **Mr. Joseph Ruisi**, Deputy Chief, Air Force Medical Modeling and Simulation Training (AFMMAST), joseph.ruisi.civ@mail.mil
- ❑ **Mr. Thomas Soto**, Army Central Simulation Committee (CSC) Executive Council Representative, thomas.j.soto6.civ@mail.mil
- ❑ **Ms. Daphne McGill**, DHA J-7/DMMSO Program Analyst, daphne.r.mcgill.ctr@mail.mil

#IMSH2021

DISCLAIMER

Presenter have no financial disclosures or conflicts of interest with the presented material in this presentation.

The opinions or assertions contained herein are the private views of the author and are not to be construed as official or as reflecting the views of the Defense Health Agency or the Department of Defense.

OBJECTIVES

- ❑ Discuss the background of JMedSIM and MHS simulation programs
- ❑ Review the JMedSIM project development goals/plan of action
- ❑ Outline current project development efforts

HISTORY / BACKGROUND

Problem:

- No standardized curriculum for healthcare sim facilitators in the military

Solution:

- 2018 – Army Telemedicine command funded a needs assessment
 - JMedSIM project is born
 - Goal: 1. Improve facilitator training (instructors and operators)
2. Develop a central repository that all can access asynchronously
- 2020 – Defense Medical Modeling and Simulation Office assumed the project.
 - Coordination among the Army, Navy, Air Force and VHA.
 - Establishing roles, career expectations, and professional development.
 - Host an e-learning platform for all.
 - Supplement with hands-on courses at worldwide military sim centers.

JMedSIM GAPS

Lack of knowledge, skills and confidence in utilizing simulators for medical modeling and simulation (MM&S) education & training

- ☐ Equipment sits in closets because trained operators/ instructors moved (no continuity/ frequent change over)
- ☐ No way to consistently/ continuously teach new personnel at sites on a variety of equipment and training practices (travel not realistic, costly)
- ☐ No standardized roles/ responsibilities/ expectations for the MM&S team and support elements
- ☐ No standardized simulation template/ scenarios or development processes
- ☐ No centralized way to share approved/ vetted scenarios and training materials/ resources

JMedSIM PLAN OF ACTION

JMedSIM Online Learning

MM&S Operator and MM&S Facilitator Tracks

DHA LMS/ Joint Knowledge Online

Pre-Requisite to Hands-On Learning

JMedSIM Hands-On Learning

Regional Simulation Centers

SME Over-the-Shoulder Practice on MM&S Equipment & Students

Prep for MM&S Certification

Continuing Education Hours

MM&S Data Repository, Community of Interest

Simulation Development Tools

Simulation Scenario Library

Best Practices/ Lessons Learned

SME Support/ Mentoring

Joint MM&S Professional Development/ Certifications

Standardized Roles/ Requirements

Special MM&S Experience Identifying codes

MM&S Career Progression Tracks

Sustainment/ Progression Training Opportunities/CEs

ONLINE LEARNING TRACKS



Foundations

Completed by Operators and Facilitators to stress importance of teamwork and shared tasks

- MM&S in Joint Healthcare
- Healthcare Concepts
- Non-Technical Skills
- MM&S Advocacy
- MM&S Equipment/Tools
- MM&S Resources/Mgmt
- Instructional Design Concepts
- Feedback/Analysis

Operators

- Healthcare Sim Operator in the MHS
- Maintenance/ troubleshooting equipment
- Technology (A/V, IM/IT, Simulators)
- Moulage and Simulated Environments
- Overview of common simulation equipment/ manikins

Facilitators

- Healthcare Sim Facilitator in the MHS
- Facilitation
- Simulation-Based Ed concepts/ theories
- Simulation-Based Curriculum
- Scenario/Case Design
- Scenario Execution
- Debriefing
- Inter-professional education (IPE)

HANDS-ON LEARNING/PRACTICE



Regional Sites

- Capitalize on large sim centers already conducting hands-on training
- High volume of student throughput and MM&S capabilities
- Standardize hands-on curriculum across the MHS

Subject Matter Experts

- Multiple SMEs at regional sites
- Different disciplines for breadth of knowledge

Certifications

- Review of certification opportunities
- Graduates primed and able to challenge certifications

MM&S DATA REPOSITORY/CoI



MM&S Development Tools/ Library

- Simulation development tools
- Library of pre-developed scenarios
- Multimedia and resources to support MM&S activities



Best Practices/ Lessons Learned

- Capture and share MM&S knowledge and experiences
- Frequently asked questions answered



SME Support/ Mentoring

- SMEs across the MHS who specialize in all aspects of MM&S training
- Volunteers to mentor/assist MM&S community

JOINT MM&S PROFESSIONALS



Standard MM&S Roles/ Experience Codes

- Establish standard MM&S roles and expectations across the MHS
- Associate Joint or Service special experience identifier/code for MM&S



MM&S Career Progression Tracks

- Develop Joint or Service MM&S career progression tracks for AD (Officer/Enlisted) and CIV



Sustainment/ Progression Training Opportunities

- Develop, share, and support professional development opportunities
- Continuing education hours for certification renewals

CURRENT EFFORTS

- **PADDIE (plan, analyze, design, develop, implement, & evaluate)**
 - MHS Request Submission Portal: J-7 Education/Training & J-5 Analysis/Evaluation
 - Gathering expert insight from MM&S SMEs
 - Job/Task Analysis to end users
 - Understand roles/expectations/how MM&S is utilized in MHS
 - Understand audiences across a variety of training sites
 - Determine gaps to address/stress with courses
 - Review current courses developed in silos (don't reinvent wheel)
- **Ahead:** from analysis results, will design/develop courses then implement, evaluate and sustain

SUMMARY

- Discuss the background of JMedSIM and MHS simulation programs
- Review the JMedSIM project development goals/plan of action
- Outline current project development efforts

QUESTIONS?

For more information, contact the
Defense Medical Modeling and Simulation Office
(DMMSO):

dha.ncr.education-trng.mbx.dmmso@mail.mil

#IMSH2021

SIMULATION:
BRINGING LEARNING TO LIFE



Joint Medical Simulation Instructional/ Operational Methods (JMedSIM)

THANK YOU!

SIMULATION:
BRINGING LEARNING TO LIFE

#IMSH2021

