





AFMMAST AIR FORCE
MEDICAL MODELING &
SIMULATION TRAINING




Validating Training Effectiveness of Wide Area Virtual Environment (WAVE) in Medical Simulation

Briefing for
MMVR Conference
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Background




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- \$610,000 was funded by DHP 6.7
- Funds included:
 - 3-Screen WAVE Upgrade
 - Optical tracking system
 - 1 FTE support for data collection
 - Training supplies
- Study kicked off Aug 14th 2013
- Scheduled to complete July 2014

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Purpose




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- To evaluate training effectiveness and measure sense of realism of the WAVE to better prepare medical staff for deployed duties compared to currently used field environment
- To assess the impact of the WAVE on students' satisfaction with their training exposure



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Hypotheses




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- Students will feel training in the WAVE environment is more realistic compared to previous medical training
- Students will feel better prepared for cognitive and affective functioning after training in the WAVE environment
- Students will perform (time & medical skills) better in field environment vs. WAVE environment
- Student communication will be better in the field environment vs. the WAVE environment

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Significance/Potential Impact




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- Demonstrate the impact of the WAVE on efficacy of training to prepare warfighters for deployed medical duties.
- Potential for positive patient outcomes in theater due to augmentation of training for deploying personnel
 - Additional stressors (sights, sounds, smells) may impede performance compared to a non-stressful training environment
 - On-the-job training is not an option with patients
- Results could be used to enhance other DoD training platforms if learning modality is proven efficacious.

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Data



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- **Required sample (80% power):**
 - Need minimum of 400 students
 - Team N=100 (50 per training environment)
- **Current status:**
 - 350 students and N=70 teams (5 individuals per team)
 - 175 students and N=35 teams per training environment (WAVE and field)

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Questions?



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Please give us your feedback on the AFMMAST Program!

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For current contact information spreadsheet, check out the AFMMAST
Portal Secure – <https://secure.afmmast.mil>



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