
AFTER ACTION REPORT

FY2009 TCN 09238

Workshop 6



**From Preparedness to Performance: Assessing Individual and Team Performance in
Disaster Medicine and Public Health Preparedness and Response**
A National Consultation Meeting

August 3, 2011 • Walter Reed Army Institute of Research, Silver Springs, MD

The views, opinions, and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Defense position, policy or decision, unless so designated by other documentation.

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INTRODUCTION

PREFACE

This workshop was conducted through the Integrated Civilian-Military Domestic Disaster Medical Response (ICMDDMR) program of the Yale New Haven Center for Emergency Preparedness and Disaster Response (YNH-CEPDR) under TCN 09238 funded by the United States Northern Command (USNORTHCOM). This task requires conduct of a study to: (1) clarify the federal disaster medicine and public health education and training products currently in existence, (2) identify needs and explore strategies to fill education and training gaps and (3) synthesize long-term expectations of competencies. The means to accomplish this study is through a series of at least six (6) workshops where federal and non-federal stakeholders would convene. This workshop served as the final in the series of six. It was co-sponsored by the National Center for Disaster Medicine and Public Health (NCDMPH), the Federal Education and Training Interagency Group for Public Health and Medical Disaster Preparedness and Response (FETIG), USNORTHCOM and YNH-CEPDR.

HANDLING INSTRUCTIONS

1. The title of this document is "FY'09 TCN 09238 Workshop #6: *From Preparedness to Performance: Assessing Individual and Team Performance in Disaster Medicine and Public Health Preparedness and Response: A National Consultation Meeting*". For additional information, please consult the following points of contact:

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EXECUTIVE SUMMARY

OVERVIEW

Workshop Title: “From Preparedness to Performance: Assessing Individual and Team Performance in Disaster Medicine and Public Health Preparedness and Response: A National Consultation Meeting”.

The topic and format for workshop #6 were developed by the Workshop Planning Committee based on feedback from facilitators and participants and a review of the findings from workshop #5.

Location and Date: Walter Reed Army Institute of Research (WRAIR) and the Uniformed Services University of the Health Sciences (USUHS) National Capital Area Medical Simulation Center, Silver Springs, Maryland. Dr. Kenneth W. Schor facilitated access to these two strategically located facilities.

Workshop Format: Workshop #6 was designed as a one-day intensive participatory consultation meeting (see [Appendix 1](#) for complete agenda) with two plenary sessions that were each followed by a moderated roundtable integrated with audience response technologies and guided by skilled moderators. The moderated roundtables allowed two groups of five accomplished subject matter experts (SMEs) to share key information on the topic and engage in discussions with the attendees (see [Appendix 2](#) for Facilitator, Moderator and Speaker Biographies). The workshop also included a guided tour of the state of the art USUHS National Capital Area Medical Simulation Center (SimCenter). The SimCenter is on the vanguard of medical simulation research with initiatives that address training requirements of military medical providers, improving learner assessments and measuring teamwork skills.

Several meeting strategies were employed to maximize dialogue and interaction among participants and to increase exploration of the topic. These strategies included limiting attendance to no more than 50 participants and using an audience response system to fully integrate audience members into discussions. Questions posed via the audience response system were integrated into panel discussions, which allowed subject matter experts and audience members to discuss their different responses. This kept the audience engaged and spurred additional creative thoughts from both sides. Participants commented on the positive value of this approach.

Target Audience: Members of the Emergency System for Advance Registration of Volunteer Health Professionals (ESAR-VHP) professions were targeted for participation.

The Planning Committee also made a special effort to engage representatives of professional organizations and academic institutions that focus on providing continuing education to members of the ESAR-VHP professions.

TABLE 1: TARGET AUDIENCE

APRNs	Dentists	LPNs	Physicians
Behavioral Health Professional	Diagnostic Medical Sonographers	Medical and Clinical Laboratory Technologists	Physician Assistants
Cardiovascular Technologists & Technicians	Emergency Medical Technicians and Paramedics	Pharmacists	RNs
Veterinarians	Respiratory Therapists	Radiologic Technologists and Technicians	

Meeting Objectives

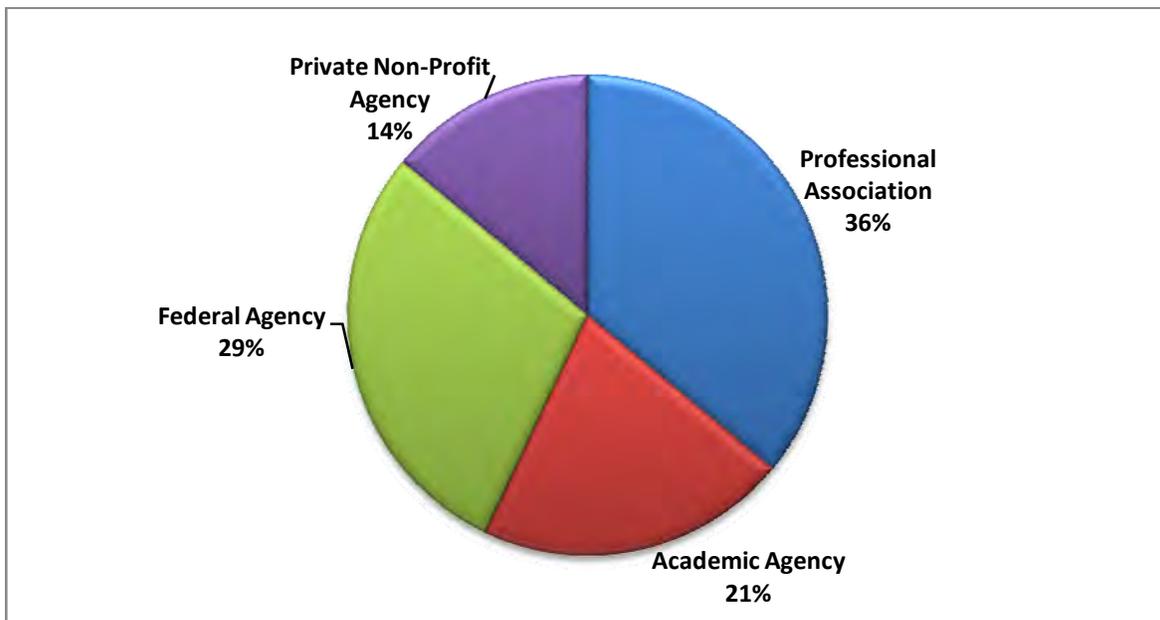
- To explore the state of the art in individual learning assessment in the context of disaster medicine and public health preparedness and response
- To explore the state of the art in team learning assessment and performance in the context of disaster medicine and public health preparedness and response

Target Meeting Outputs

1. Broad sample of existing methods for conducting assessments of team and individual learner competency and performance in medical disaster preparedness and response
2. Catalogue of challenges associated with assessment of the team and individual learner
3. Inventory of long-term approaches to effective assessment of team and individual learner competency and performance in disaster medicine and public health preparedness and response education

Workshop attendees represented the following types of organizations:

CHART 1: ATTENDEE ORGANIZATIONS



BACKGROUND

The overarching mission of the ICMDDMR program is to enhance the ability to develop integrated civilian/military approaches to large-scale disasters and to maximize the coordination, efficiency and effectiveness of a medical response. This mission is being implemented through various activities, including:

- Developing a national strategy for civilian/military collaboration on integration of medical/public health preparedness education and training programs with USNORTHCOM
- Developing models for education and training that can be modified, replicated and made scalable for the civilian/military health delivery workforce
- Determining appropriate evaluation modalities for education and training programs that are implemented
- Capturing and utilizing a best practices approach across the civilian/military continuum to implement education and training programs
- Integrating civilian/military emergency preparedness strategies for medical and public health delivery

Both the military and the civilian sectors have significant resources that can be mobilized in the event of an emergency or disaster. Unfortunately, their respective organizational structures and lack of integration with each other have the unintended consequence of an ineffective mass casualty response in the homeland. In recognition of the importance of education and training as a strategy and tool to assist civilian and military organizations to better prepare to work together during a disaster, Homeland Security Presidential Directive 21 (HSPD-21): Public Health and Medical Preparedness called for the coordination of education and training programs related to disaster medicine and public health and the establishment of the NCDMPH to lead those coordination efforts. The FETIG serves in an advisory role to the NCDMPH and worked closely with USNORTHCOM to craft ICMDDMR TCN 09238 to support and further the work of the NCDMPH.

ICMDDMR TCN 09238 entitled “Study to determine the current state of disaster medicine and public health education and training and determine long-term expectations of competencies” establishes the following Statement of Work (SOW) and charges YNH-CEPDR with the following task:

Conduct a study to: (1) clarify the federal disaster medicine and public health education and training products currently in existence, (2) identify needs and explore strategies to fill education and training gaps and (3) synthesize long-term expectations of competencies. The means to accomplish this study should be through a series of at least six (6) workshops where federal and non-federal stakeholders would convene.

The results of this study will:

- Provide the structure needed to address core curricula, training and research in disaster medicine as set forth in HSPD 21
- Ensure USNORTHCOM is prepared to provide continuous health service support in meeting its homeland defense and civil support missions

The workshop development plan for TCN 09238 builds on the work done by the NCDMPH in its inaugural workshop entitled, “*A Nation Prepared: Education and Training Needs for Disaster Medicine and Public Health*”. During its initial meeting, the NCDMPH performed a needs assessment and brought together federal partners in a dynamic workshop intended to support networking across federal agencies and gathering of data that would be useful to the assessment. In addition the inaugural meeting was structured to facilitate its replication and the collection of comparative data.

A Workshop Planning Committee made up of representatives from the FETIG, the NCDMPH and YNH-CEPDR was convened to design a series of workshops to meet the stated objectives of TCN 09238. This integration of civilian, military and federal partners supported the development of workshops and other outputs that are meaningful to all sectors. The Workshop Planning Committee held weekly conference calls to conduct workshop planning activities.

The first workshop conducted under TCN 09238, entitled “*Education and Training Needs for Disaster Medicine and Public Health Preparedness: Building Consensus, Understanding and Capabilities*” was designed to bring together federal and non-federal stakeholders for discussion of key issues, information sharing and networking related to disaster medicine and public health education and training. Participants were expected to:

- Receive the latest update regarding key federal activities and legislation
- Share federal and private sector education and training integration strategies
- Develop recommendations and a way ahead for future collaboration

The outputs of workshop #1 and feedback from the FETIG were used to design the structure and content of workshop #2 “*Building a Framework for the Development of Core Capabilities and Competencies for Medical Disaster Preparedness and Response: A National Consultation Meeting*”. Workshop #2 used a scenario-based format to elicit the following desired outputs:

- Framework for identification and validation of core capabilities and competencies for the clinical workforce responsible for medical preparedness and response to a disaster event
- Process for identification and validation of core competencies for the clinical workforce responsible for medical preparedness and response to a disaster event
- Draft set of core capabilities and recommended associated competencies for selected capabilities for the clinical workforce in attendance at the meeting
- List of perceived barriers to attaining core capabilities and competencies
- List of core capabilities and potential gaps identified for ESAR-VHP professionals

Workshop #3” *Building a Framework for the Development of Core Capabilities and Competencies for Medical Disaster Preparedness and Response: A Continuing National*

Consultation Meeting” continued the discussion begun in Workshop #2 and followed a similar format to achieve the outputs listed below:

- Process for identification and validation of core competencies for the clinical workforce responsible for medical preparedness and response to a disaster event
- Draft set of core capabilities and recommended associated competencies for selected capabilities for the clinical workforce in attendance at this meeting
- List of perceived barriers to attaining core capabilities and competencies
- List of common core capabilities and potential gaps identified for ESAR-VHP professionals

Workshop #4 was entitled “*From Process to Practice: Implementing Core Competencies for Medical Disaster Preparedness and Response*”. This workshop included the use of an audience response system, separating participants into smaller groups for more focused discussions and the use of brief plenary sessions followed by moderated panels to provide a strong evidence base for the discussions.

Questions posed via the audience response system were integrated into the panel discussions and encouraged SMEs and audience members to discuss differences in their responses. This approach engaged the audience and spurred additional creative thoughts from both sides. Participants commented on the value of this approach, and it was effective in supporting achievement of the outputs described below:

- Revised recommended framework and process for competency development
- List of long-term expectations of competencies for medical disaster preparedness and response from practitioners in the field
- List of recommendations on how to disseminate, coordinate, update and evaluate core competencies (acknowledging the dynamic nature of disaster response)
- List of practices used to implement core competencies for medical disaster preparedness and response

Workshop #5 was designed as a one-day intensive participatory consultation meeting with three plenary sessions that were each followed by a moderated roundtable that incorporated the use of audience response technologies. The moderated roundtables allowed three groups of four to six SMEs to effectively share key information on the topic and concurrently engage in a dialogue with the attendees.

From Preparedness to Performance: Assessing Individual and Team Performance in Disaster Medicine and Public Health Preparedness and Response - A National Consultation Meeting

Several strategies were employed to maximize dialogue and interaction among participants and to increase exploration of the topic. These included limiting attendance to no more than 55 participants and using the audience response system to fully integrate audience members into discussions. Questions posed via the audience response system were embedded into panel discussions, which encouraged subject matter experts and audience members to discuss their responses. Participants reacted positively to this approach, which was effective in achieving the following outputs:

- Representative sample of existing methods for conducting evaluation of competency-based education focused on medical disaster preparedness and response
- Catalogue of challenges associated with evaluation of educational programs
- Inventory of long-term approaches to effective evaluation of professional disaster medicine and public health preparedness and response education

Outputs from the preceding workshops and feedback from key stakeholders were used to design the structure and content of workshop #6. Care was taken to ensure that the objectives outlined in the SOW for this task were met. A list of the topics explored during the workshop series is provided in the table below:

TABLE 2: WORKSHOP SCHEDULE

Workshop	Date	Location	Topic
2010 Workshops			
1	May 5-6	Gaithersburg, MD	Education and Training Needs for Disaster Medicine and Public Health Preparedness: Building Consensus, Understanding and Capabilities
2	Sept. 22	McLean, VA	Disaster Medicine and Public Health Preparedness Workforce Definition and Required Capabilities: A National Consultation Meeting
3	Nov. 17	McLean, VA	Disaster Medicine and Public Health Preparedness Workforce Definition and Required Capabilities: A Continuing National Consultation Meeting
2011 Workshops			
4	March 23	McLean, VA	From Process to Practice: Coordinating Core Competencies for Medical Disaster Preparedness and Response – A National Consultation Meeting
5	June 8	McLean, VA	From Practice to Preparedness: Evaluating Competency Based Education for Disaster Medicine and Public Health Preparedness and Response
6	August 3	Silver Springs, MD	From Preparedness to Performance: Assessing Individual and Team Performance in Disaster Medicine and Public Health Preparedness and Response – A National Consultation Meeting

From Preparedness to Performance: Assessing Individual and Team Performance in Disaster Medicine and Public Health Preparedness and Response - A National Consultation Meeting

All six workshops were held in the National Capital Region. This central location proved to work well for the target audience and drew participants from the 48 contiguous states and Hawaii.

Workshop attendees have included, but were not limited to, civilian, federal and military representatives from accredited academic institutions, accrediting groups, professional organizations and members of the ESAR-VHP professions as well as representatives of state and local organizations and the member organizations of the FETIG.

Following an analysis of the aggregated data collected from the six workshops, a comprehensive final report will be developed that addresses the key findings relative to the statement of work for this TCN.

SUMMARY OF WORKSHOP RESULTS

The tools and technologies available for individual and team assessment have become more sophisticated over time. However, key process and organizational issues have limited their effectiveness in assessing individual and team performance in disaster medicine and public health preparedness and response.

A review of workshop objectives and desired outputs reveals the following:

OBJECTIVE #1 – To explore the state of the art in individual learning assessment in the context of disaster medicine and public health preparedness and response

OUTPUT #1: Broad sample of existing methods for conducting assessments of team and individual learner competency and performance in disaster medicine and public health preparedness and response

Existing and New Methods of Individual Learning Assessment

Performing individual learner assessments requires measurement of knowledge, skills and attitudes. Methods used to measure gains in these domains include:

- High fidelity healthcare simulation
- Cognitive diagnostic modeling
- Computer simulations
- Competency-based assessments via simulation pre- and post-hire
- Retrospective cohort studies of responders
- Gaming technology
- Videotaping during an exercise
- Advanced human patient simulators
- Hybrid Kirkpatrick Model
- Retrospective cohort studies applied to actual event responses
- In situ simulation
- Experiential learning
- Procedural simulation
- Computer screen-based simulation
- Immersive environments
- Self-assessment and learner portfolios
- Online pre- and post-test
- Post-event survey of responders
- Blended approach between gaining knowledge and owning knowledge

- Longitudinal impact analyses
- **OBJECTIVE #2** - To explore the state of the art in team learning assessment and performance in the context of disaster medicine and public health preparedness and response

OUTPUT #2: Inventory of long-term approaches to effective assessment of team and individual learner competency and performance in disaster medicine and public health preparedness and response

Existing and New Methods of Team Learning Assessment

Participants indicated the above individual assessment methods could also be applied to assessment of teams. The following additional team-specific methods were identified:

- Collaborative virtual environments
- Scenario-based exercises with reliable and accurate outcome measures and rigorous evaluation methods

OUTPUT #3 - Catalogue of challenges associated with assessment of the team and individual learner

Challenges to Assessment of the Team and Individual Learner

- Lack of staff time
- Lack of funding and other critical resources
- Lack of standardized, straightforward, valid assessment tools
- Lack of buy-in at the administrative/decision-maker level
- Lack of or limited training in learner assessment methodologies and tools
- Lack of consistent approach among reviewers
- Siloed approach to performance measurement and assessment Questionable reliability of self-reporting
- Changing roles of public health responders (role changes event to event)
- Inability to measure the gap between knowledge and application of skills
- Poor reliability of tests when administered across different institutions or cycles of testing
- Dearth of practical applications of test results
- Over-reliance on quantitative assessment techniques
- Difficulty in measuring retention of knowledge gains over time given infrequency of disasters during which knowledge can be applied

The SMEs attending this workshop readily articulated the following long-term goals of this field:

- Identify evidence-based/best practices for individual and team evaluation
- Develop standardized metrics
- Demonstrate that emergency preparedness training, and its associated evaluative activities, is essential.
- Support a business case for assessment
- Assess the impact of training
- Assess at the systems (e.g., public health systems) and organizational level
- Support a national training curriculum and consistent evaluation approach that supports development of team and organizational competency across disciplines

RECOMMENDATIONS AND CONCLUSIONS

RECOMMENDATIONS

The workshop identified the following key recommendations:

1. Build programs with assessment in mind (look at program from beginning to end)
2. Expand academic and practice partnerships
3. Apply new and innovative techniques to the assessment of gains in individual knowledge, skills and attitudes during a real event
4. Integrate the training and assessment of various disciplines (training and exercising away from silos)
5. Map measurement of knowledge, skills and attitudes directly to competencies
6. Develop an application for self-assessment during an exercise or real event (instead of relying on observers)
7. Utilize video in assessments
8. Conduct longitudinal post-event surveys
9. Create safe environments in which to assess
10. Conduct research to determine if training individuals has an impact on the system
 - In addition, the general recommendations and observations in the chart below were made regarding education and training in disaster medicine and public health preparedness and response:

CHART 2: GENERAL RECOMMENDATIONS

General Recommendations/Observations Related to Education and Training in Disaster Medicine and Public Health Preparedness and Response

- Develop and propagate a single competency model with a common core set of competencies for all health professionals
- Work with national associations and credentialing bodies to develop a plan to implement a core curriculum with appropriate incentives and mandates
- Develop and rigorously validate measures for competence
- Mandate a baseline level of emergency preparedness education- not clinical skills- in all health professions' academic education
- Widely disseminate information on a recommended approach that can be implemented to prepare all disciplines in working together in public health and disaster medicine preparedness
- Develop and disseminate assessment techniques and tools that produce meaningful data and lead to improved performance of individuals and teams such as disaster training using simulation in a multidisciplinary fashion in professional schools

Conclusions

The results of this workshop are congruent with those of workshop #5, which focused on the evaluation of programs. The findings and recommendations of both workshops point to a need for the development of integrated cross-disciplinary programs in disaster medicine and public health preparedness and response that reflect effects-based planning and training and build in rigorous methods for individual and team assessment from inception.

Participant feedback for this workshop was overwhelmingly positive. Overall, the objectives and outputs were attained, and this workshop has positively contributed to the achievement of the statement of work for this TCN. For the final report, the planning committee will aggregate, analyze and summarize the results of all six workshops in the context of the overall SOW.

APPENDIX 1

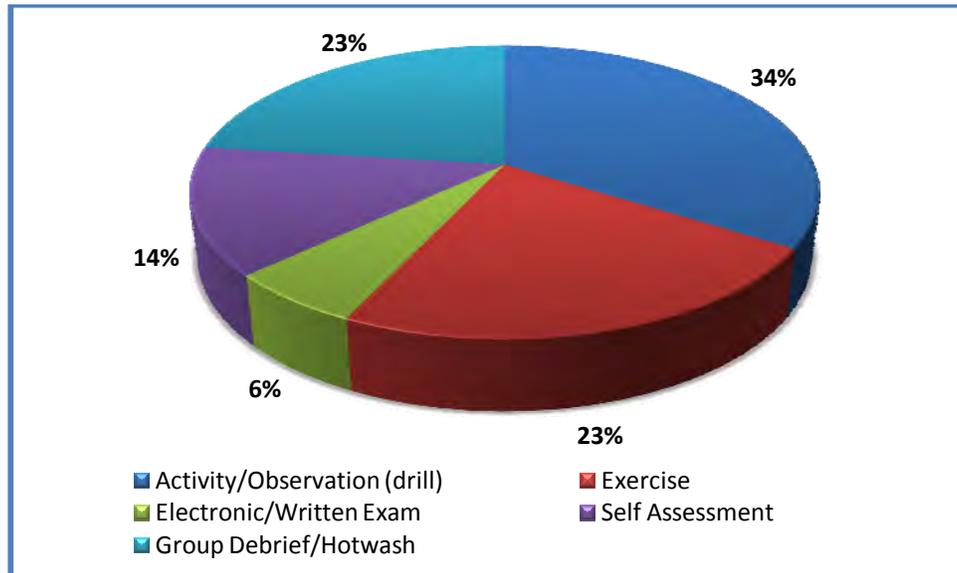
AUDIENCE RESPONSE QUESTION RESULTS

APPENDIX 1

AUDIENCE RESPONSE QUESTION RESULTS

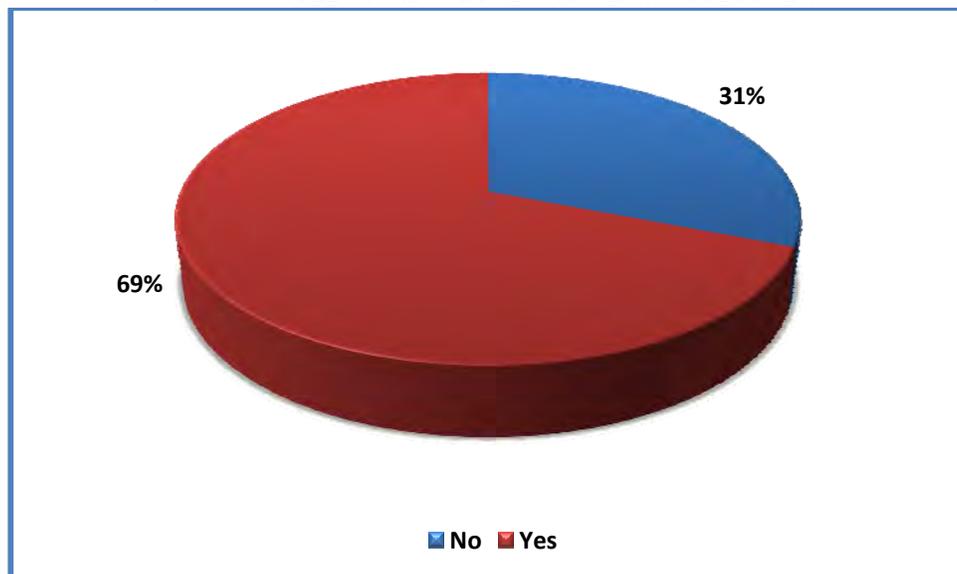
How do you prefer to be assessed?

CHART 3: PREFERRED ASSESSMENT METHOD



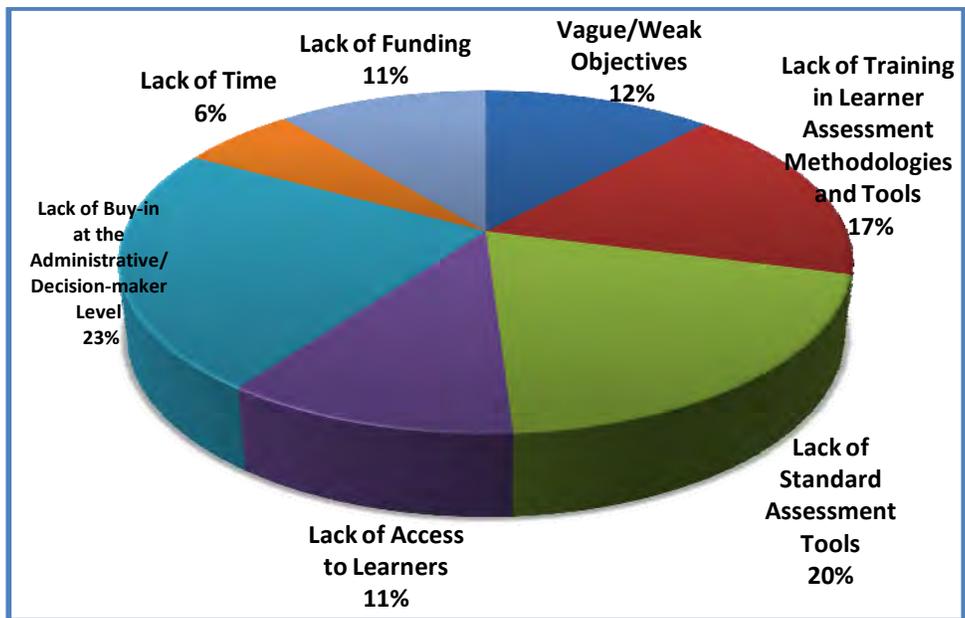
Does your current role require you to perform individual learner or team assessments?

CHART 4: ROLE IN INDIVIDUAL AND TEAM ASSESSMENT



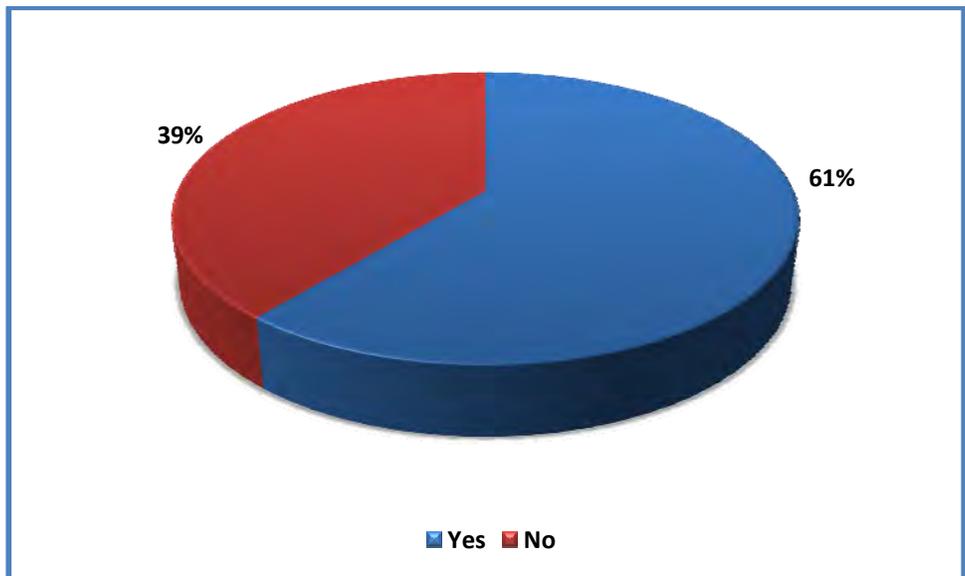
Please identify your biggest challenge to conducting and acting on individual training assessments

CHART 5: BIGGEST CHALLENGE



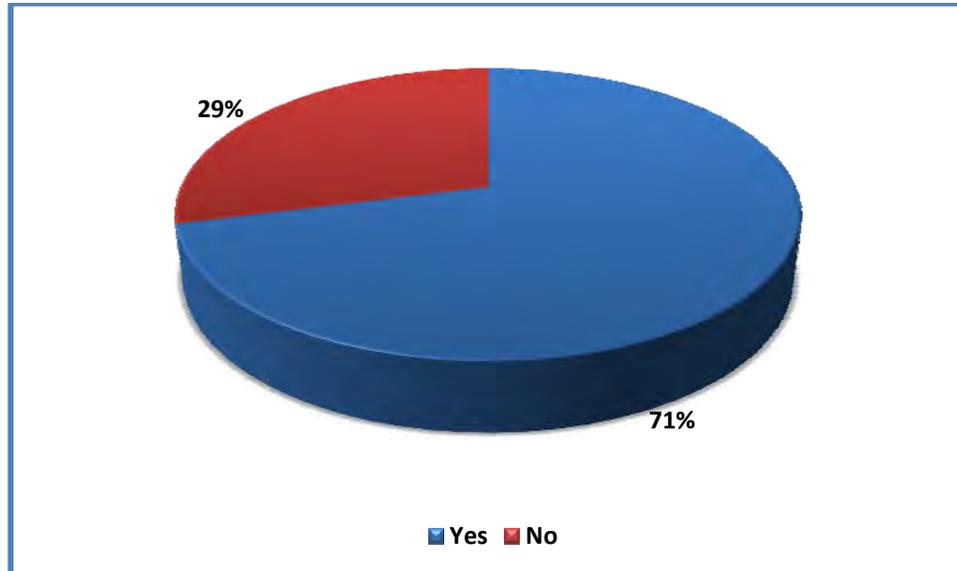
Have you participated in formal team building training specific to disaster medicine and public health preparedness and response?

CHART 6: PARTICIPATION IN FORMAL TEAMBUILDING TRAINING



Have you participated as a member of a professional team via a social media platform (e.g., blogs, social networking, news-sharing sites, photo-sharing sites, video-sharing sites)?

CHART 7: SOCIAL MEDIA



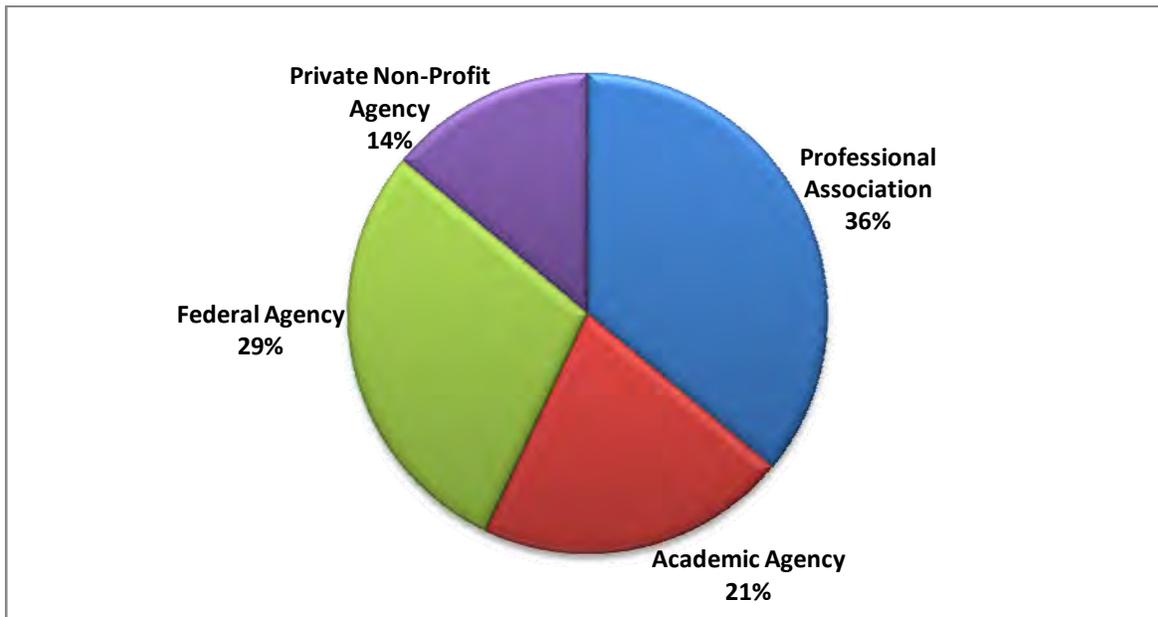
APPENDIX 2

Participant Survey Results

APPENDIX 2

PARTICIPANT SURVEY RESULTS

CHART 8: THE AGENCIES
Agency Types represented by workshop participants



Participants submitted the following comments in response to the questions that were posed to inform the final report:

“Identify the top three gaps/needs in disaster medicine and public health preparedness and response.” (Responses are unedited)

- Unified evaluation and assessment framework
- Clear adoption of terminology across all levels of public and private sectors
- Discuss incentives and policy application
- Provide a common language
- Clarify the community leadership
- Interconnectedness ———> communication. Include all those in the field
————> partnerships
- National standard for education and training evaluation of effectiveness of education and training
- Inter-professional teamwork body of knowledge
- Integration of medicine into community preparedness and response

- Interdisciplinary trainings and exercises
- Teamwork training
- Humanitarian assistance
- Real time data collection
- Buy-in at multiple levels of support driving this forward
- Standardization or unification of capabilities and competencies expectations and requirements
- Appropriate assessment methodologies
- Integration
- Vernacular – is the language a common one
- Silos how do you break them
- Multidisciplinary teams – med, police, fire, etc
- Lack of a national health surveillance program
- Lack of active community resilience programs
- Lack of regional disaster exercises
- Funding
- Resource
- Standards of assessment based on best practices
- Preparedness standards for all areas of disaster medicine and public health
- Focus on non-governmental organizations who respond to disaster- are they prepared?
- Public private partnerships
- ? business sector (including healthcare)
- Coordination amongst states – potentially at a national level in regards to licensure and paperwork to receive qualified assistance during a disaster as well as utilization of the same equipment in stockpiles so that anyone that comes to assist can jump right in with no questions or training (i.e., ventilators, IV pumps, monitors, etc)

“Provide your long-term expectations of emergency preparedness competencies response.” (Responses are unedited)

- Necessity for a single competency model
- Validated (rigorously) measures for competence
- Have they made a difference with system
- Increased preparedness within communities
- That they will be the gold standard among preparedness professionals

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- Provide a common core set of competencies for all health professionals in disasters
- Will become a standard/baseline to identify gaps in a communities level of preparedness and develop improvement plans
- A baseline level of emergency preparedness education- not clinical skills- in **all** health professions academic education
- Competency ———▶ adaptability
- Publication in either multiple publications simultaneously, or in a widely read journal that crosses disciplines, to identify the needs and a recommended approach that can be implemented to prepare all disciplines in working together in public health and disaster medicine preparedness
- Lifelong learning
- Not static
- ID competency
- ID risk/benefits
- The national center for disaster medicine and public health will follow through with issues from this workshop series as they coordinate the development of core competencies and a standard curriculum
- Data that can be measurable and leads to increased performance of ind/team preparedness and response
- A national standard will be developed, set of
- An outline of what the minimum curriculum is necessary for all disciplines and with national association and credentialing bodies to come up with a plan to implement--- there needs to be teeth behind the recommendation to ensure follow through or all of this work is for nothing
- Have simulation and disaster training done multidisciplinary in schools

APPENDIX 3

Workshop Agenda

APPENDIX 3

WORKSHOP AGENDA

From Preparedness to Performance: Assessing Team and Individual Performance in Disaster Medicine and Public Health Preparedness and Response – A National Consultation Meeting

August 3, 2011 • Walter Reed Army Institute of Research (WRAIR) • Silver Springs, MD

Meeting Objectives:

- To explore the state of the art in individual learning assessment in the context of disaster medicine and public health preparedness and response
- To explore the state of the art of team learning assessment and performance in the context of disaster medicine and public health preparedness and response



Desired Outputs:

- Broad sample of existing methods for conducting assessments of team and individual learner competency and performance in medical disaster preparedness and response
- Catalogue of challenges associated with assessment of the team and individual learner
- Inventory of long-term approaches to effective assessment of team and individual learner competency and performance in disaster medicine and public health preparedness and response education

This meeting is co-sponsored by the National Center for Disaster Medicine and Public Health, Federal Education and Training Interagency Group for Public Health and Medical Disaster Preparedness and Response, United States Northern Command and Yale New Haven Center for Emergency Preparedness and Disaster Response.

From Preparedness to Performance: Assessing Individual and Team Performance in Disaster Medicine and Public Health Preparedness and Response - A National Consultation Meeting

Agenda: Wednesday, August 3, 2011 Walter Reed Army Institute of Research (WRAIR) • Silver Springs, MD	
7:30 am- 8:00 am	Registration and Networking Breakfast LOCATION: WRAIR 1 West 81
8:00 am- 8:15 am	Introduction and Meeting Overview <i>Beverly M. Belton, RN, MSN, NE-BC</i> – Program Manager, AHRQ ACTION Projects, Yale New Haven Center for Emergency Preparedness and Disaster Response Brief Review of Overall Workshop Roadmap <ul style="list-style-type: none"> • <i>Stewart Smith, MPH, MA, FACCP</i> – Yale New Haven Center for Emergency Preparedness and Disaster Response WRAIR 1 West 81
8:15 am – 8:45 am	Plenary Session #1: Individual Learner Assessment in a Training Context <ul style="list-style-type: none"> • <i>Speaker – Debra Olson, DNP, MPH, RN, COHN-S, FFAOHN</i> – Professor and Associate Dean for Education, University of Minnesota School of Public Health and Director of the University of Minnesota: Simulations, Exercises and Effective Education Preparedness and Emergency Response Learning Center (U-SEEE PERL) WRAIR 1 West 81
8:45 am- 10:00 am	Moderated Roundtable I: Individual Learner Assessment <ul style="list-style-type: none"> • <i>Moderator: Stewart Smith, MPH, MA, FACCP</i> – Yale New Haven Center for Emergency Preparedness and Disaster Response Panelists: <ul style="list-style-type: none"> • <i>Debra Olson, DNP, MPH, RN, COHN-S, FFAOHN</i> – Professor and Associate Dean for Education, University of Minnesota School of Public Health and Director of the University of Minnesota: Simulations, Exercises and Effective Education Preparedness and Emergency Response Learning Center (U-SEEE PERL) • <i>Matthew S. Prager, BSc Ed</i> – Chief of Distance Learning, FEMA Emergency Management Institute • <i>Jonathan Sury, MPH, CPH</i> – National Center for Disaster Preparedness, Columbia University Mailman School of Public Health • <i>Barbara Quiram, PhD</i> – Professor, Director, Office of Special Programs and Director, USA Center for Rural Public Health Preparedness Texas A&M University Health Science Center • <i>Jason Zigmot, PhD, NREMT-P</i> – Manager of Simulation Center at Yale New Haven: Advancing Patient Safety and Education (SYN:APSE) WRAIR 1 West 81
10:00 am- 10:15 am	Break WRAIR 1 West 81
10:15 am- 10:30 am	Move to USU National Capital Area Medical Simulation Center

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Agenda: Wednesday, August 3, 2011 Walter Reed Army Institute of Research (WRAIR) • Silver Springs, MD	
10:30 am-12:15 p.m.	Tour USU National Capital Area Medical Simulation Center
12:15 pm-12:30 pm	Move back to WRAIR
12:30 pm-1:45 pm	<p>Lunch and Debrief of Visit to USU National Capital Area Medical Simulation Center</p> <p>Facilitator: Kandra Strauss-Riggs, MPH – Joint Program Coordinator, National Center for Disaster Medicine and Public Health</p> <ul style="list-style-type: none"> Special Guest: Gil Muniz, PhD – Deputy Director, NCA Medical Simulation Center, Assistant Professor, School of Medicine and Assistant Professor, Graduate School of Nursing Uniformed Services <p>WRAIR 1 West 81</p>
1:45 pm-2:15 pm	<p>Plenary Session # 2 – The Emerging Science of Teams</p> <ul style="list-style-type: none"> Speaker – MG, USA (Ret) Donna F. Barbisch, DHA, MPH – President, Global Deterrence Alternatives, LLC <p>WRAIR 1 West 81</p>
2:15 pm-3:30 pm	<p>Moderated Roundtable II: Team Assessment</p> <p>Moderator: Debbie Hettler, OD, MPH, FAAO – Clinical Director, Associated Health Education, Office of Academic Affiliations, VA Central Office</p> <p>Panelists:</p> <ul style="list-style-type: none"> John Armstrong, MD, FACS – Associate Professor of Surgery, University of South Florida College of Medicine LTC (Ret) Joanne McGovern – ESF 8 Planning and Response Program at Yale University and Tulane University Jason Zigmot, PhD, NREMT-P – Manager of Simulation Center at Yale New Haven: Advancing Patient Safety and Education (SYN:APSE) BG (Ret) Michael H. Walter, MD – VP, Operations Department of Medicine, Loma Linda University Medical Center MG(Ret) Lester Martinez-Lopez, MD, MPH – Chief Medical Officer, Brandon Regional Hospital <p>WRAIR 1 West 81</p>
3:30 pm-4:00 pm	<p>Closing Question and Remarks</p> <ul style="list-style-type: none"> Kenneth W. Schor, DO, MPH – Acting Director, National Center for Disaster Medicine and Public Health <p>WRAIR 1 West 81</p>
4:00 pm-4:30 pm	<p>Recognition and Networking Break</p> <p>Beverly M. Belton, RN, MSN, NE-BC – Program Manager, AHRQ ACTION Projects, Yale New Haven Center for Emergency Preparedness and Disaster Response</p> <p>WRAIR 1 West 81</p>

APPENDIX 4

BIOGRAPHIES: FACILITATORS, MODERATORS AND PRESENTERS

APPENDIX 4

BIOGRAPHIES: FACILITATORS, MODERATORS AND PRESENTERS

John Armstrong, MD

John H. Armstrong is a medical educator and trauma/critical care surgeon at the University of South Florida (USF), Tampa, FL, where he is Associate Professor of Surgery and Medical Director of the USF Center for Advanced Medical Learning and Simulation (CAMLS). CAMLS brings together all forms of simulation for specialty-specific and inter-professional education and training within a 90,000 sq ft building. Dr. Armstrong came to USF from the University of Florida & Shands Medical Center in Gainesville, FL, where he was Trauma Medical Director. He has internationally recognized expertise in curriculum development and system implementation, casualty simulation, medical team training and public health preparedness for disasters.

Dr. Armstrong is Co-Editor of the American College of Surgeons (ACS) Disaster Management and Emergency Preparedness course; Editor-in-Chief of the American Medical Association (AMA) Advanced Disaster Life Support, v.3.0; consultant to the ACS Committee on Trauma Ad Hoc Committee on Disaster and Mass Casualty Management; executive committee member of the AMA National Disaster Life Support Educational Consortium; and founding editorial board member of the AMA journal, Disaster Medicine and Public Health Preparedness. He has served on US Centers for Disease Control and Prevention (CDC) expert panels in surge capacity, field triage and blast injury and is a principle author of the CDC curriculum, Bombings: Injury Patterns and Care, v.2.0. He is State Faculty for ATLS, a course director for the ACS Advanced Trauma Operative Management (ATOM) course, an instructor for the ACS Advanced Surgical Skills for Exposure in Trauma (ASSET) course and a faculty member for the Definitive Surgical Skills in Trauma course of the Royal College of Surgeons of England. Dr. Armstrong serves as Chair of ACS Political Action Committee (SurgeonsPAC); Chair of the ACS delegation to the AMA House of Delegates (HOD); ACS Governor from Florida; member of the ACS Health Policy and Advocacy Groups; and host of ReachMD (XM 160) radio programs. He has recently been appointed to the Accreditation Council for Graduate Medical Education Residency Review Committee for Surgery. He is a former trustee and executive committee member of the AMA.

Dr. Armstrong completed his career in the US Army Medical Corps at the rank of Colonel in 2005. His final assignment was Director, US Army Trauma Training Center (ATTC), in association with the Ryder Trauma Center, Jackson Memorial Hospital, Miami, FL. He led the development and implementation of a two-week bona fide inter-professional team training program in trauma casualty care for military medical units deploying to Iraq and Afghanistan. This incorporated elements of the AHRQ TeamSTEPPS program. Under his leadership, the ATTC was named the Department of Defense (DOD) Center of Excellence for Combat Casualty Care Team Training (2004, and received the DOD Patient Safety Award for Team Training (2005). He is an in-residence graduate of the US Army Command and General Staff College and remains on faculty at the Uniformed Services University of the Health Sciences, Bethesda, MD, where he was a Distinguished Visiting Professor in August 2010.

Born in Montana, Dr. Armstrong graduated from Princeton University with an economics degree in 1984 and the University of Virginia School of Medicine in 1988. He completed his surgical

residency at Tripler Army Medical Center in Hawaii in 1993, his fellowship in trauma/surgical critical care at the University of Miami/Jackson Memorial Medical Center in 1997 and a Master Educators in Medical Education fellowship at the University of Florida in 2008. He is a member of the Alpha Omega Alpha Honor Medical Society. He is recertified by the American Board of Surgery with added qualifications in surgical critical care and is a fellow of the ACS and the American College of Chest Physicians. He is a member of the American Association for the Surgery of Trauma, the Eastern Association for the Surgery of Trauma, the Florida Medical Association, the American Medical Association, the American College of Physician Executives and the Association of Military Surgeons of the United States.

Donna F. Barbisch, DHA, MPH, MG, USA (Ret)

Dr. Barbisch is among the nation's most distinguished experts in disaster and terrorism related preparedness and response. Her focus is on interoperability in national and international programs and building resiliency to catastrophic events. She has more than 30 years experience in the public and private sectors facilitating organizational change related to complex disasters and emergency management. Her expertise spans civilian and military communities in combating weapons of mass destruction, emergency management, health and medical integration and strategic and operational planning and implementation. She guides modeling and simulation for complex disasters and develops best outcomes and evidence-based programs in catastrophic events. Dr Barbisch uses research based theory and practice reinforced by modeling and simulation to drive decision support tools at all levels from individual preparedness and response to executive decision-making. Her integrated training and operations modeling is designed to produce a cultural shift in preparedness. Dr Barbisch retired as a Major General in the US Army and is currently President of Global Deterrence Alternatives.

Dr. Barbisch works with private and public, local, regional, state, national and international clients to define their vision and develop implementation strategies. She gives them the tools to assess the environment and optimize their end state. She worked at every level of command and staff in the military while climbing the corporate ladder in the civilian sector. Representative examples of her efforts include:

- Deputy Chief of Party, Project Prepare, a USAID initiative to improve pandemic preparedness in Africa and South East Asia
- Senior subject matter expert, California Department of Public Health Standards and Guidelines in Emergency Management
- Senior advisor/reviewer, After Action Review of the 2009 Presidential Inauguration
- Senior analyst in review of Iraq's Mosul Dam emergency preparedness. Developed process to improve outcomes from a projected dam breach affecting a population of more than 5 million in Iraq's Tigris River Valley

Beverly M. Belton, RN, MSN, NE-BC

Ms. Belton is a Program Manager at Yale New Haven Health System, Center for Emergency Preparedness and Disaster Response. She has more than twenty-five years experience in healthcare management and leadership with experience in a variety of settings across the healthcare continuum – including the United States Army Nurse Corp. She has a demonstrated capacity to lead change with a focus on patient safety, employee satisfaction and regulatory compliance. She is a certified Six Sigma Green Belt who has successfully applied the principles

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of Six Sigma in healthcare improvement projects. She is also a skilled presenter who has presented to international audiences. Ms Belton applies her clinical expertise, leadership and project management skills to oversight of the AHRQ ACTION and DOD TCN 09238 projects.

She received her Bachelor of Science in Nursing from the University of Pennsylvania and her Master of Science in Nursing Policy, Management and Leadership in 2010 from Yale University. She is board certified in nursing executive practice.

Debbie L. Hettler, OD, MPH, FAAO

Dr. Debbie Hettler's education includes a BS and OD from The Ohio State University College of Optometry and an MPH from University of Illinois. Her professional practice experience includes optometric education, clinical practice in HMOs and the VA as well as quality assurance activities. She has over 100 scientific presentations including such topics as clinical techniques, ocular disease, public health issues, contact lenses and managed care and authored articles published concerning public health, primary care coordination and ocular disease topics.

She has served in many professional organization leadership roles including the American Academy of Optometry, American Optometric Association and American Public Health Association. She has been with the Veterans' Administration since 1994 as a clinical optometrist and associated education affiliations with University of Missouri Department of Ophthalmology and Internal Medicine. As Optometry Residency Supervisor there, she was associated with four optometry schools for optometric externships and residencies. Currently, she is the Clinical Director, Associated Health Education, Office of Academic Affiliations, VA Central Office located in Washington, DC.

LTC(Ret) Joanne McGovern

Lieutenant Colonel (Retired) McGovern enlisted in the United States Army as a private in 1975 and served as an electrical engineer and a combat medic. In 1979 she was accepted to the Military College of Vermont, Norwich University and transferred from active duty to the Vermont National Guard to become one of the first military members to participate in the Simultaneous Membership Program in the fall of 1979. She received her commission as a Lieutenant in September 1981 and completed her Bachelor of Science (Earth Science) from Norwich University in December 1981. She returned to active service as a Medical Service Corps officer in January 1982.

Her initial assignment was as a platoon leader in the Medical Company, 498th Support Battalion, 2nd Armored Division (FWD), Garlstedt, Germany. While serving in the Division, she established the Family Health Clinic and served as its Executive Officer. In 1985 Lieutenant Colonel McGovern became Chief of Plans, Operations and Training for the Supreme Headquarters Allied Powers Europe Medical Activity Center (SHAPE MEDDAC). In 1986 she became the Commander of the Medical Company at SHAPE. She returned to the United States in 1987 to serve as the Senior Medical Advisor, Readiness Group, Ft Sill, Oklahoma.

Lieutenant Colonel McGovern returned to Europe in 1991 and was assigned as the Chief of Operations to the 45th Field Hospital, Vicenza, Italy. She deployed on several contingency and humanitarian missions to Southwest Asia, the Balkans and Africa while serving as the Executive Officer for the contingency hospital. In 1992 she established the Airborne Forward Surgical

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Team, the first in Europe, and became the Deputy Surgeon, Southern European Task Force (SETAF). In that role she was instrumental in writing the initial Health Service Support Plans for operations in the Balkans to include Operation Able Sentry. As a result of this expertise, she was assigned as the Chief, 1st Armored Division Medical Operations Center (DMOC), Bad Krueznach, Germany, in 1993.

As the DMOC for 1st Armored Division, Lieutenant Colonel McGovern played a pivotal role in preparing the Division to deploy to Bosnia. She spearheaded training initiatives to better prepare medical personnel for operations in a non-permissive environment and developed the Health Service Support Plan for the Division. In 1995 Lieutenant Colonel McGovern was transferred to Headquarters, V Corps, to develop the Health Service Support portion of the Campaign Plan for Operation Joint Endeavor, the United States forces entry and operations into the Balkans. Lieutenant Colonel McGovern deployed as a member of USAREUR (FWD) and served as the Chief of Medical Plans and Operations for one year. Upon her redeployment she was assigned as the Executive Officer, 212th Mobile Army Surgical Hospital.

She returned to the United States in 1998 to serve as the Chief of Plans and Current Operations, US Southern Command. She deployed several times to Central and South America in support of Humanitarian Assistance Operations and Disaster Relief as a result of Hurricane Mitch, the volcano eruptions in Ecuador, the Venezuelan floods and chemical disaster, the earthquakes in El Salvador and US counter drug actions in Colombia. She served as a member of the SOUTHCOM's Deployable Joint Task Force Augmentation Cell (DJTFAC) and was a member of its Joint Interagency Task Force (JIATF) working both counter drug and counter terrorism issues. LTC McGovern was one of the founding members of the Center for Disaster Management Humanitarian Assistance, a collaborative endeavor between SOUTHCOM, Tulane University and the University of South Florida, and one of our country's Centers of Excellence.

LTC McGovern was then assigned to the United States Army Medical Department Center and School, FT Sam Houston, TX, where she has served as the Deputy Director for Healthcare Operations, and after September 11th assumed the position as the Chief of the Homeland Security Branch for the Army Medical Department's Center and School. She also served as an Adjunct Professor for the U.S. Army Baylor University Program in Healthcare Administration, where she taught courses in Readiness, Homeland Security and Counter-terrorism.

LTC McGovern volunteered to serve in Operation Iraqi Freedom and was deployed in April 2003. She became the Chief of Medical Plans and Operations for the Coalition Forces Land Component Command and was deployed forward with its command post to Baghdad. She returned to Kuwait and was part of the planning team that spearheaded the largest force rotation of its kind. When Multi National Force – Iraq was established in the spring of 2004, LTC McGovern was asked to establish the Surgeon's Office and serve as its Deputy Surgeon/Chief of Operations. She returned to Iraq in March 2004 and by May 2004 had the office fully operational. During the Battle of Fallujah in the fall of 2004, LTC McGovern was in charge of all Iraqi Ministry of Health Forces deployed forwarded and was tasked with the medical evacuation of all civilian and Iraqi soldiers. For her actions she was awarded the Bronze Star. She redeployed in May 2005 and was assigned to 5th Army as the Deputy Surgeon/Chief of Operations. Her first mission was to serve as the Senior Medical Operations Officer for Hurricane Katrina, where she was responsible for coordinating the evacuation of over 26 hospitals and thousands of sick and injured. In 2008 she became the ARNORTH Surgeon and retired in September 2009 having served thirty-four years in the Army.

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LTC (RET) McGovern is currently the Chief Operations Officer for the ESF#8 Planning and Response Program at Yale University's School of Public Health and is a staff associate at Yale University, Department of Emergency Medicine, Section of Emergency Medical Services. She also serves as a consultant to the Yale New Haven Center for Emergency Preparedness and Disaster Response.

MG (Ret) Lester Martinez-Lopez, MD, MPH

Dr. Martínez-López is currently the Chief Medical Officer of the Brandon Regional Hospital in Brandon, Florida. Previously he was Senior Vice President & Administrator of the Lyndon B. Johnson General Hospital Houston, Texas. In 2005 he retired from the Army with the permanent rank of Major General. Dr. Martínez joined the active Army in 1978 at Fort Bragg, North Carolina. He is the first Hispanic to head the Army Medical and Research Command at Fort Detrick, Maryland. His responsibilities included overseeing the Army Medical Research Institute of Infectious Disease, which develops antidotes and vaccines for diseases soldiers might face on the battlefield.

Awards: Legion of Merit with three oak leaf clusters, Defense Meritorious Service Medal, Army Meritorious Service Medal with three oak leaf clusters, Army Commendation Medal with one oak leaf cluster, Army Achievement Medal with one oak leaf cluster and Senior Flight Surgeon Badge. Dr. Martínez-López earned his MD from the University of Puerto Rico and his MPH from Johns Hopkins University. He is a diplomat of the American Board of Family Practice and the American Board of Preventive Medicine. Major General Martínez is also a fellow of the American Academy of Family Practice.

Gil Muniz, PhD

Dr. Gilbert M. Muñoz, a recognized expert in military medical readiness and medical education simulation technology, was selected as the Director of Administration for the National Capital Area Medical Simulation Center (SimCen) in July 2000. Today, he serves as Deputy Director as well as the Director of the Computer Laboratory and the Video Tele-Conferencing Advanced Distributive Learning Laboratory. Dr. Muniz was the project officer who managed the design, construction and initial operation of the SimCen. His additional current responsibilities include serving as the primary project manager for the new SimCen expansion project. The project seeks to establish a Computer Aided Virtual Environment (CAVE) designed to teach medical teams in triage, mass casualty and biochemical training scenarios. He is also the principal managing an Internet 2 initiative in collaboration with the National Library of Medicine and the National Institutes of Health. Dr. Muniz holds an Associate Degree in Nursing, a Bachelor of Arts (Political Science major), a Masters of Urban and Regional Planning (Health Systems Planning) and a Doctorate in Urban and Regional Science (Health Policy Analysis). Dr. Muniz also holds an appointment as assistant professor in the USU Department of Military and Emergency Medicine and the Graduate School of Nursing.

Debra Olson, DNP, MPH, RN, COHN-S, FAAOHN

Debra Olson, DNP, MPH RN, COHN-S, FAAOHN, is the Associate Dean for Education at the University of Minnesota School of Public Health and is responsible for developing strategic partnerships for the delivery of lifelong learning opportunities for interdisciplinary health professional students and the public health practice community. These programs are

developed to increase the availability of public health education and to enhance the capability of working professionals through the application of innovative teaching techniques such as technology-enhanced learning. Her years of experience in the practice of public health and an extensive background in the delivery of public health academic and professional education allow for leadership both in the community and the University.

Dr. Olson is Center Director and PI for the University of Minnesota Simulations, Exercises and Effective Education (U-SEEE - <http://www.sph.umn.edu/research/centers/u-seee.asp>) CDC funded centers for public health preparedness research (2008-2013) and preparedness education and training (2010-2015) and the Midwest Center for Life-Long-Learning in Public Health, a public health training center funded in part by the Health Resources and Services Administration (2001-2011). Dr. Olson is a Professor in the Division of Environmental Health Sciences, School of Public Health and adjunct instructor in Public Health Nursing, School of Nursing and the University of North Dakota, School of Medicine and Health Sciences. As an occupational and environmental health specialist, Dr. Olson was the inaugural chair of the major in Public Health Practice in the School of Public Health providing dual-degree options for veterinary and medical students who wish to integrate population science into their clinical careers and public health certificates for working professionals who wish a credential in public health. In addition, she has extensive experience in the application of new information technologies and competency-based curriculum development. She has published numerous articles relating to occupational and environmental health and the roles and credentialing of public health professionals.

Michael S. Prager, BSc Ed

Matthew S. Prager is the Chief of Distance Learning for FEMA's Emergency Management Institute, Emmitsburg, Maryland, where he oversees the programs used to provide online training to state, local, tribal, federal and non-government personnel in incident management, preparation, mitigation, response and recovery operations. These programs serve over 5 million students with an average of 3 million course completions per year. Mr. Prager also manages the Institute's Master Trainer Program, providing advanced skill training in the areas of instruction, instructional design and training management.

Prior to this position he was the Director of Training for the U.S. Navy's Mine Warfare Training Center, Ingleside, Texas, where he was responsible for the proper implementation, delivery and administration of Mine Warfare technical and tactical training. He had also previously been a staff member of Commander, Mine Warfare Command as the lead for Doctrine/Tactics Development and Concept Development/Experimentation for the Mine Warfare Center of Excellence, where he was responsible for development and evaluation of concepts of operation, tactics, techniques and procedures for the Mine Warfare force.

Mr. Prager retired from active naval service, where he served in a variety of operational and technical billets ashore and afloat, including combat operations in support of OPERATION IRAQI FREEDOM. During his military and civil service careers, he has earned numerous awards including multiple awards of the Meritorious Service Medal and the Navy Meritorious Civilian Service Medal. Mr. Prager completed a Bachelor of Science degree in Education at Southern Illinois University and an Associate of Applied Science degree in Emergency Management at Frederick Community College in Frederick, Maryland.

Barbara Quiram, PhD

Dr. Barbara Quiram serves as Director of the Office of Special Programs and Director the USA Center for Rural Public Health Preparedness at the School of Rural Public Health, Texas A&M Health Science Center and is responsible for identification of partnership opportunities for the school with communities, organizations and agencies. Dr. Quiram has over 30 years of experience in healthcare and public health. She serves as Principal Investigator/Project Director on a wide range of research projects, in particular, leading the school's efforts in areas of emergency preparedness/bioterrorism, rural public health systems and public health workforce competencies. Her research, training and evaluation interests include rural emergency preparedness, rural public health infrastructure, health policy and rural community development.

Kenneth Schor, DO, MPH

Dr. Schor is a federal civilian faculty member of the Uniformed Services University of the Health Sciences (USU) having retired in May 2009 after 27 years active duty service in the US Navy Medical Corps. His appointments at the nation's federal health sciences university include: Acting Director of the National Center for Disaster Medicine and Public Health, Assistant Professor in the Department of Preventive Medicine and Biometrics and Deputy Public Health Emergency Officer. He is the immediate past Associate Program Director, National Capital Consortium, USU General Preventive Medicine Residency.

Dr. Schor graduated cum laude from Allegheny College, Meadville, PA; received his Doctor of Osteopathic Medicine (DO) degree from the Philadelphia College of Osteopathic Medicine; is a Distinguished Graduate of the National Defense University Industrial College of the Armed Forces (MS, National Resources Policy); and received a Master of Public Health (MPH) degree from USU with a Health Services Administration concentration.

His graduate medical education includes a non-categorical medicine internship at Naval Medical Center, San Diego; completion of a Family Practice Residency at Naval Hospital, Jacksonville; and completion of a General Preventive Medicine Residency at the Uniformed Services University of the Health Sciences. He is a Diplomate of the American Board of Preventive Medicine.

Stewart Smith, MPH, MA, FACCP

Mr. Smith is the Founder, President and Chief Executive Officer of Emergency Preparedness and Response International, LLC (EP&R International) offering customized all-hazards expertise that emphasizes collaborative partnerships and coordinated programs with federal, regional, state, local and international markets. Targeted areas include consultative services in strategic planning to include facilitation, business development, planning (medical and public health planning and business continuity planning), assessments and evaluations, learning, drills and exercises and program management. These services are dedicated to help ensure clients are fully prepared to meet the challenges of crises and disasters of any kind.

A retired Navy Commander, Medical Service Corps Officer, his previous military work history spans over 25 years of progressive assignments that include Chief of the Joint

Regional Medical Plans and Operations Division for the North American Aerospace Defense Command and the United States Northern Command (NORAD-USNORTHCOM), Surgeons Directorate; Director of International Health Operations Policy, Homeland Defense, and Contingency Planning Policy for the Assistant Secretary of Defense for Health Affairs; Branch Chief for the Joint Staff, Health Services Support Division; and Branch Head for the Deployable Medical Systems, Office of the Chief of Naval Operations, Medical Plans and Policy (OPNAV-N931).

Mr. Smith holds graduate degrees in Public Health Management and Policy from the Yale School of Medicine, Department of Public Health and Epidemiology; the Naval War College in National Security and Strategic Studies; is a Doctor of Health Sciences (Global Health) candidate at A.T. Still University of Health Sciences; and is an alumnus of the Harvard Kennedy School of Government, Executive Leadership Education Program.

He is the co-founder of and past President to the American College of Contingency Planners (ACCP). His particular areas of interest and expertise include strategic medical planning; domestic consequence management operations, the National Disaster Medical System (NDMS) and the National Response Framework (NRF) with a focus on complex emergencies and calamitous events (including medical operations in the WMD/asymmetrical environment); and international Weapons of Mass Destruction medical countermeasures policy. Mr. Smith was selected as the first American to chair the North Atlantic Treaty Organization's (NATO's) Biomedical Defense Advisory Committee BIOMEDAC), holding that appointment from 2003-2005 while assigned to the Secretary of Defense and USNORTHCOM staffs.

Jonathan Sury, MPH, CPH

Jonathan Sury is a Research Assistant for the National Center for Disaster Preparedness at the Columbia University Mailman School of Public Health. Mr. Sury's skills and abilities allow him a leadership role in both the Center's Regional Learning Center and the Research Division. The Columbia Regional Learning Center (CRLC) is the CDC-funded program that provides education-training curriculum for the public health preparedness and response workforce. Mr. Sury serves in a leadership role in the CRLC's Learning Management System and assures that evaluation measures for all learning projects, both distance-learning and face-to-face trainings, align with curriculum objectives and goals. He is team lead for the 'embed team', a needs assessment team that literally 'embeds' itself within a health department to identify training gaps and to develop, deliver and evaluate customized learning project curriculum. Customized trainings include the use of current technologies, video, and social media.

He also contributes to a variety of disaster-related research, including determining unanticipated consequences of pandemic flu, analyzing the long-term resiliency and recovery issues of communities following a disaster as well as the measurement and mapping of social vulnerability. He received a MPH degree in Environmental Health Sciences with a concentration in Environmental and Molecular Epidemiology from Columbia University's Mailman School of Public Health.

Kandra Strauss-Riggs, MPH

Ms. Strauss-Riggs is developing the Academic Joint Program of the National Center for Disaster Medicine and Public Health in collaboration with Dr. Kenneth Schor and the entire Center team. She brings a particular focus on the issues that impact children and pregnant women in the event of a disaster.

She is also currently serving as an Adjunct Instructor in the Boston University Healthcare Emergency Management program in the Department of Anatomy and Neurobiology at the Boston University School of Medicine. Prior to joining the National Center, Ms. Strauss-Riggs served as Program Director for Research at the American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.), where she coordinated the growth of A.S.P.E.N.'s complex research program in nutrition support. Earlier in her career, Ms. Strauss-Riggs served as a Project Coordinator with the National Education Association's Health Information Network, where she implemented and evaluated programs serving the health education needs of the NEA's 3.2 million members.

Ms. Strauss-Riggs actively serves her community in Prince George's County, Maryland through membership on the board of a developing women's health and birth center. She has a bachelor's degree in sociology/anthropology from Guilford College and a Master's in Public Health degree from George Washington University School of Public Health and Health Services.

BG (Ret) Michael H. Walter, MD

Dr. Walter's educational background includes a BS from Walla Walla College in College Place, Washington, an MD from Loma Linda University in Loma Linda, California, and an MSS from U.S. Army War College. Dr. Walter's training includes an Internship at Loma Linda University Medical Center, a Residency in Internal Medicine at Fitzsimmons Army Medical Center in Denver, Colorado, and a Fellowship in Gastroenterology at Walter Reed Army Medical Center in Washington, DC. Dr. Walter holds board certifications from the American Board of Internal Medicine and the American Board of Gastroenterology.

Dr. Walter served in the U.S. Army - Active Duty from June 28, 1975, to July 29, 1988, and in the U.S. Army - Reserve from July 30, 1988, to May 2005 with a rank of Brigadier General. Dr. Walter's assignments included service as a Resident in Internal Medicine at Fitzsimmons Army Medical Center, Chief, Outpatient Clinic at the 130th Station Hospital in Heidelberg, Germany, Internist at the 130th Station Hospital, Fellow in Gastroenterology at the Walter Reed Army Medical Center, Instructor at the Department of Medicine at the Uniformed Services University of Health Sciences in Bethesda, Maryland, Staff Gastroenterologist at the Dwight David Eisenhower Army Medical Center in Augusta, Georgia, Assistant Clinical Professor in the Department of Medicine at the Medical College of Georgia in Augusta, Georgia, Assistant Chief of Gastroenterology at the Madigan Army Medical Center in Tacoma, Washington, Assistant Professor at the Department of Medicine, Uniformed Services University of the Health Sciences, Clinical Instructor at the University of Washington, Chief of the Endoscopy Clinic at the Madigan Army Medical Center, Associate Chief of the Section of Gastroenterology at the Loma Linda University School of Medicine, Director of the GI Fellowship Training Program and Associate Professor of Medicine at the Loma Linda University School of Medicine, Chief of the Division of Gastroenterology at the Loma Linda University School of Medicine, Director of the GI Fellowship Training Program at Loma Linda University Medical Center, Associate Professor of Medicine at

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the Loma Linda University School of Medicine, Chief Financial Officer at LLUPMGI in Loma Linda, California and VP, Operations at the Department of Medicine at Loma Linda University.

Dr. Walter is a Fellow of both the American College of Physicians and the American College of Gastroenterology and a Member of the American Gastroenterological Association and the American Society of Gastrointestinal Endoscopy.

Jason Zigmot, PhD, NREMT-P

Dr. Zigmot is the Manager and Educator for SYN:APSE. Simulation at Yale New Haven: Advancing Patient Safety and Education (SYN:APSE), a multi-disciplinary state-of-the-art healthcare simulation and experiential learning center. SYN:APSE consists of over 10,000 square feet of training space across three campuses. Last year SYN:APSE completed 1200 simulations for 3600 students. Current and past programs include hospital-wide interdisciplinary TeamSTEPPS[®] training, measuring and improving nurse competency, improving staff responses to codes and rapid responses and pre-hire testing of nurses. All programs are outcomes-based, focused on improving healthcare delivery.

He earned his PhD at the University of Connecticut in Adult Learning. His academic interests focus on the role of Experiential Learning, Analogical Reasoning and Mental Models in improving daily practice. He is also an active Nationally Registered EMT-Paramedic and has published extensively on EMS issues.

APPENDIX 5

Meeting Evaluation Survey

APPENDIX 5

MEETING EVALUATION SURVEY

**From Process to Practice: Assessing Individual and Team Performance in Disaster Medicine
and Public Health Preparedness and Response**

August 3, 2011

National Consultation Meeting Evaluation

Thank you for taking the time to participate in this evaluation. Your comments will enable us to better plan and execute future meetings and tailor them to meet your needs.

1. Do you represent (check all that apply):

- Professional association (e.g., American Public Health Association)
- Academic agency
- Federal agency
- Private non-profit agency
- Private for-profit agency

2. How do you rate the representativeness of the meeting participants (the right people in terms of level and mix of disciplines)?

- Excellent
- Good
- Average
- Below Average
- Poor

Comments

**From Process to Practice: Assessing Individual and Team Performance in Disaster Medicine and Public Health Preparedness and Response
August 3, 2011
National Consultation Meeting Evaluation**

3. To inform the final report:
 - a. Identify the top three gaps/needs in disaster medicine and public health preparedness and response

 - b. Provide your long-term expectations of emergency preparedness competencies

4. Please rate the visit to the USU National Capital Area Medical Simulation Center
 - Excellent**
 - Good**
 - Average**
 - Below Average**
 - Poor**

THANK YOU FOR ALL OF YOUR SUPPORT!

APPENDIX 6

Evaluation Plan

APPENDIX 6

EVALUATION PLAN

ICMDDMR 09238 Workshop #6 Evaluation Plan

OBJECTIVES:

#1 : To explore the state of the art in individual learning assessment in the context of disaster medicine and public health preparedness and response

#2 : To explore the state of the art in team learning assessment and performance in the context of disaster medicine and public health preparedness and response

DESIRED OUTPUTS:

#1 : Broad sample of existing methods for conducting assessments of team and individual learner competency and performance in medical disaster preparedness and response

#2 : Inventory of long-term approaches to effective assessment of team and individual learner competency and performance in disaster medicine and public health preparedness and response education

Roundtable 1: Individual Learner Assessment – Panel Questions

1. What are some of the methods you use for conducting individual learning assessments?
2. How could these techniques be applied to the assessment of gains in individual knowledge, skills and attitudes during real-time disaster response events or exercises?
3. Describe the three most critical issues related to learner assessment in your environment.

Roundtable 1: Individual Learner Assessment – Audience Response Questions

- How do you prefer to be assessed?
- Does your current role require you to perform individual learner or team assessments?
- Please identify your biggest challenge to conducting and acting on individual training assessments.

Roundtable 2: Team Assessment – Panel Questions

1. Discuss the challenges and barriers of bringing a team together.
 - a. What are the unique challenges associated with team formation and functioning in a disaster setting?
2. How have you assessed gains in knowledge, skills and attitudes of teams during real-time disaster response events and exercises?
3. Describe the three most critical issues related to team assessment in your environment.

Roundtable 2: Team Assessment – Audience Response Questions

1. Have you participated in formal team building training specific to disaster medicine and public health preparedness and response?
2. Have you participated as member of a professional team via a social media platform (e.g., blogs, social networking, news-sharing sites, photo-sharing sites, video-sharing sites)?

ICMDDMR 09238 Workshop #6 Evaluation Plan (continued)

DESIRED OUTPUTS (continued):

#3 : Catalogue of challenges associated with assessment of the team and individual learner

Roundtable 1: Individual Learner Assessment – Panel Questions

- What challenges have you experienced with assessment of the individual learner, specific to gains in:
 - a. Knowledge
 - b. Skills
 - c. Attitudes

Roundtable 2: Team Assessment – Panel Questions

- What challenges have you experienced with assessment of teams?
- Describe the strategies that you have used in the workplace to overcome these challenges.