UNITED STATES DEPARTMENT OF DEFENSE

DEFENSE HEALTH BOARD MEETING

Washington, D.C.
Monday, December 15, 2008
ANDERSON COURT REPORTING
706 Duke Street, Suite 100
Alexandria, VA 22314
Phone (703) 519-7180 Fax (703) 519-7190

PARTICIPANTS:
DR. GREGORY A. POLAND
Professor of Medicine and Infectious Diseases at the Mayo Clinic in Rochester, Minnesota.

ELLEN P. EMBREY
Designated Federal Official

CDR. EDMUND FEEKS
Executive Secretary

DR. GAIL WILENSKY
President-Elect.

GEN. RICHARD MYERS (Ret.)

DR. JAMES E. LOCKEY
University of Cincinnati

DR. WAYNE M. LEDNAR
Global Chief Medical Officer, Dupont.

DR. EDWARD L. KAPLAN
Professor of Pediatrics, University of Minnesota Medical School

DR. WILLIAM E. HALPERIN
Chair, Preventive Medicine, New Jersey Medical School

CMJ. LAWRENCE W. HOLLAND (Ret.)

DR. MICHAEL D. PARKINSON
President of the American College of Preventive Medicine

DR. JOSEPH E. PARISI
Pathologist, Mayo Clinic
Chair, Subcommittee of Pathology and Laboratory Services

PARTICIPANTS (CONT'D):
DR. THOMAS J. MASON
Professor of Environmental Epidemiology, University of South Florida, College of Public Health.

DR. WARREN BREIDENBACH, III
Associate Professor of Reconstructive Extremity Surgery, University of Louisville

DR. BONNIE BENETATO

DR. DENNIS O'LEARY
President Emeritus of the Joint Commission.

DR. JOHN DAVID CLEMENTS
Chair of Microbiology and Immunology, Tulane University School of Medicine, New Orleans.

DR. ROBERT G. CERTAIN.

DR. NANCY W. DICKEY
President, Texas State A&M Health and Science Center

DR. DAVID H. WALKER
Chair, Department of Pathology
Executive Director, Center for Biodefense and Emerging Infectious Diseases, University of Texas

DR. JOSEPH SILVA, JR.
Professor of Internal Medicine and Microbiology

and Dean Emeritus, School of Medicine, University of California

DR. ADIL E. SHAMOO
University of Maryland, School of Medicine.

HON. CHASE UNTERMEYER

PADDY ROSSBACH

PARTICIPANTS (CONT'D):
DR. DAVID BOONE
Chief Technology Officer for Arthro Care Innovations

DR. BARBARA COHOON
National Military Family Association

DR. TENLEY ALBRIGHT
Director of the Collaborative Initiatives at M.I.T.

DR. ROSE MARY PRIES
Office of Health Education and Information, Department of Veterans Affairs

DR. ANNE MOESSNER
Traumatic Brain Injury, Mayo Clinic.

DR. P.K. CARLTON
Texas A&M Homeland Security

DR. CHERYL HERBERT
President of Dublin Methodist Hospital in Dublin, Ohio

PHILLIP E. TOBEY
Smith Group

DR. KENNETH KIZER
Chairman, MCR BRAC Committee

DR. ROBERT REDDICK
University of Texas Health Science Center in San Antonio

DR. PATRICIA THOMAS
Professor and Chair of the Department of Pathology, University of Kansas

DR. ALAN J. RUSSELL
McGowan Institute for Regenerative Medicine
University of Pittsburgh

PARTICIPANTS (CONT'D):

DR. JOHN HERBOLD
University of Texas, School of Public Health

DR. CLIFF LANE
National Institution of Allergy and Infectious Diseases

DR. NILDA PERIGALLO
Dean and Professor at University of Miami, School of Nursing and Health Studies for Health Care Delivery.

DR. GREER GLAZER
Dean and Professor, University of Massachusetts, Boston

DR. MARY E. EVANS
University of South Florida, College of Nursing

DR. KENNETH R. MATTOX
Cardiovascular and Trauma Surgeon

DR. JOHN KOKULIS
Health Care Delivery Subcommittee.

DR. MARIAN E. BROOME
Dean of the School of Nursing at Indiana University

MAJ. GEN. GEORGE ANDERSON
Executive Director of the Association of Military Surgeons

DR. PIERCE GARDNER
Professor of Medicine and Public Health, Stoney Brook University, School of Medicine

DR. BRETT LITZ
National Center for PTSD, Boston.

PARTICIPANTS (CONT'D):
DR. THOMAS UDHE
Professor and Chair of the Department of Psychiatry and Behavioral Sciences, and Director of the Institute of Psychiatry at the Medical University of South Carolina.

DR. CHARLES FOGELMAN

DR. JAMES QUICK
Goolsby Professor of Leadership at the University of Texas

DR. PATRICIA RESICK
Director of the Women's Health Science Division. National Center for PTSD.

DR. SHELLEY McDERMID
Military Family Research Institute at Perdue University

DR. CHRISTOPHER COLENDA
Dean of the College of Medicine at Texas A&M Health Science, Professor of Psychiatry and Health Services Research

DR. RICHARDEAN BENJAMIN
Chair of the School of Nursing, Old Dominion University in Norfolk, Virginia

DR. THOMAS DETRE
Professor of Psychiatry, Sacropharmacologist

DR. MARY ANNE DUMAS
Chair, Adult and Family Nursing at Stoney Brook University

DR. SUZANNE E. COLLINS
Department of Nursing at the University of Tampa

DR. WILLIAM BLAZEK
Center for Clinical Bioethics at Georgetown University

PARTICIPANTS (CONT'D):
DR. RIDGLEY REYBOLD
Armed Forces Institute of Pathology

CMR. MIKE MEIER
Joint Staff J-4 Health Service, Support Division

DR. RICK ERDMAN
Institute of Medicine, National Academies

DR. MICHAEL KRUKAR
Director of Military Vaccine Agency

DR. DAVID McMILLAN
Bureau of Medicine for the Navy

CDR. ERICA SCHWARTZ
Preventive Medicine Officer for the Coast Guard

CDR. CATHY SLAWNWHITE
Canadian Forces, Medical Officer

LT. COL. MEL FOTINOS
Consultant to the Air Force Surgeon General for Preventive Medicine

ALAN COWAN
British Liaison Officer for Deployment Health

LTC. WAYNE HACHEY
Director of Preventive Medicine, OSD Health Affairs for Self-Protection and Readiness.

LTC. BECKY PORTER
JTF CAP MED, Behavioral Health Officer for Health Care Delivery Services

COL. BARB JEFTS
JTF CAP MED, J-3 Health Care Delivery Ops

CAPT. GEORGE McKENNA
JTF CAP MED, Force Health

PARTICIPANTS (CONT'D):
COL. STUART CAMPBELL
Office of the U.S. Army Surgeon General

CHUCK SCOVILLE
Chief EMT Care Service at Walter Reed

DR. FLORABEL MULLICK
Director of the Air Forces Institute of Pathology

MAJ. GEN. NANCY ADAMS (Ret.)

COL. CHRISTINE BADER
Executive Director of the Military Health Systems Senior Oversight Committee

PRAKASH JHA
Surgeon General's Office, Army.

NANCY BROWN

SUSAN MARTEL
National Research Council of the National Academy.

LYNN KITCHEN
Deputy Director of Military Infectious Disease Research Program

LT. CDR. THOMAS LUKE
Department of Virology, Naval Medical Research Center

COL. ROGER GIBSON

CHRIS MARTIN
Armed Forces, Health Surveillance Center

LTC. PHILLIP GOULD
Air Force, Medical Support Agency.

BRANKO SEKIS
Social and Scientific Systems

PARTICIPANTS (CONT'D):
CAPT. COLLIER
Public Health Nurse, Walter Reed

COL. MIKE BAYLES
Public Health Nurse, Department of the Army

MAJ. TELECIA HORTON-HARGROVE
Public Health Nursing, Walter Reed Army Medical Center

COL. WILL ROGERS
Armed Forces Pest Management Board

DENNIS DUFFY

MAJ. PAULINE LUCAS
Public Health Consultant, Air Force School of

Aerospace Medicine

COLLEEN WEESE
U.S. Army Center for Health Promotion and Preventive Medicine

CHRIS RENNIX
Navy and Marine Corps Public Health Center, Epidata Center

MIKE FISCHETTI
AFD Health Affairs and TRICARE

COL. JOHN SEVORAK
U.S. Army, Medical Research Institute of Infectious Diseases

OLIVERA JOVANOVIC

LISA PEARSE

PAULA UNDERWOOD
Army Surgeon General's Liaison Officer to Health and Human Services

PARTICIPANTS (CONT'D):
CRAIG MALLICK
U.S. Armed Forces Medical Examiner.

MAJ. CATHY WITHE
Legal Counsel for the Armed Forces Institute of Pathology

ERIC PEIPELMAN
Armed Forces Institute of Pathology, Director for Integration and Transitions

CAPT. KRIS BELLAN
Preventive Medicine Resident, Uniform Services

LT. COL. LOWELL SENSINTAFFER
Air Force Medical Support Agency, Deputy Chief of Preventive Medicine

GLEN DOWLING
Preventive Medicine Resident, Uniform Services University

ROBERT FOSTER

Office of the Secretary of Defense

DR. DAVID S.C. CHU
Undersecretary of Defense for Personnel Readiness

JOSEPH KELLEY
Deputy Assistant Secretary of Defense for Clinical and Program Policy

MAJ. GEN. DEBORAH WHEELING
Deputy Surgeon General
MAJ. GEN. DAVID RUBENSTEIN
Deputy Surgeon General

CAPT. ALI S. KHAN
Assistant Surgeon General.

BC PHIL VOLPE
Deputy Commander, Joint Task Force

P R O C E E D I N G S
(8:33 a.m.)

DR. POLAND: I'd like to welcome everybody to this literally full board meeting of the Defense Health Board. I'll ask Ms. Embrey to please call the meeting to order.

MS. EMBREY: Well, thank you, Dr. Poland. This is a very formal opening remark. As the Designated Federal Official for the Defense Health Board, which is a Federal Advisory Committee and a continuing Independent Scientific Advisory Body to the Secretary of Defense vis the Undersecretary of Defense and the Assistant Secretary of Defense for Health Affairs, and the Surgeons General of the Military Departments, I hereby call this meeting of the Defense Health Board to order.

DR. POLAND: Thank you very much. One of the traditions we started for the Board when it was the Armed Forces Epidemiological Board was the moment of silence. And I'd like to continue to carry on that tradition by asking all in the room

to stand for a few minutes that we might honor those that we are here to serve.

(Standing silence observance)

DR. POLAND: Thank you, all, very much. Since this is an Open Session, before we begin I would like to go around the table and have the Core Board and Subcommittee members introduce themselves. Core Board members will introduce themselves first, then Subcommittee members. Commander Feeks, our new Executive Secretary, will have some administrative remarks. We'll start with those and then the introduction.

CDR. FEEKS: Thank you, Dr. Poland. Good morning and welcome everyone. I want to thank the staff of the Ronald Reagan Building and International Trade Center for helping with the arrangements for this meeting and all the speakers who have worked hard to prepare briefings to the Board.

I also want to thank my staff, Lisa Jarrett. Olivera Jovanovic, Elizabeth Graham, and Farah Bader for helping with the arrangements for this

meeting. And I'd also like to thank Ms. Jean Ward for her invaluable assistance in putting the meeting together.

One of the requirements for holding a Federal Advisory Committee meeting is to record attendance. So I ask everyone please to sign the general attendance roster on the table outside, if you have not done so already. And I also ask members of the media to sign the media roster.

This open Session is being transcribed. Please make sure you state your name before speaking and use the microphones so our transcriber can accurately report your questions. If time allows, the Board will take comments from the audience here at the meeting room. Members of the public should also sign the speaker roster at the front table before speaking.

Thank you.

DR. POLAND: So we'll go around, have the Core Board members introduce themselves first so that people understand who's on the Core Board. We'll go back around for the Subcommittee members,

and then lastly audience members. So if I could, I'll start with the incoming President Dr. Gail Wilensky, and we'll proceed that way.

DR. WILENSKY: Thank you, Greg. My name is Gail Wilensky. I am the President-Elect of the Defense Health Board. My day job is a Senior Fellow at Project HOPE.

GEN. MYERS: I'm Dick Myers, retired three years ago as Chairman of the Joint Chiefs of Staff, and I'm self- employed.

DR. LOCKEY: Jim Lockey, University of Cincinnati, occupational pulmonary and lung disease specialist.

DR. LEDNAR: Wayne Lednar, Global Chief Medical Officer, Dupont.

DR. KAPLAN: Ed Kaplan, Professor of Pediatrics, University of Minnesota Medical School.

DR. HALPERIN: Will Halperin, Chair, Preventive Medicine, New Jersey Medical School in Newark, New Jersey, and Chair of Quantitative Methods in the School of Public Health, CDC,

Retired.

CMJ. HOLLAND: I am Commander Major, retired, Larry Holland. I look at myself as the one to lookout for our enlisted personnel and their families.

DR. PARKINSON: Mike Parkinson. I am currently the President of the American College of Preventive Medicine; formerly was a Medical Director with Lumeno, a consumer-driven plan and well point.

DR. PARISI: I'm Joe Parisi, pathologist at Mayo Clinic, and I'm Chair of the Subcommittee of Pathology and Laboratory Services for the DHB.

DR. MASON: I'm Tom Mason, Professor of Environmental Epidemiology, University of South Florida, College of Public Health.

DR. BREIDENBACH: Warren Breidenbach. I'm at the University of Louisville, Associate Professor of Reconstructive Extremity Surgery, and my area of interest has been hand transplantation and face transplantation.

DR. BENETATO: Bonnie Benetato -- sorry

about my voice -- I'm from the Department of (off mike) Repairs -- (off mike), and I'm here for Dr. Mark Brown.

DR. POLAND: Continue on to other Core Board members. We're not quite seated in that order, so we'll come up the line on this side. I don't know where to quite start it. Let's see, probably -- yes.

DR. O'LEARY: I'm Dennis O'Leary, President Emeritus of the Joint Commission.

DR. CLEMENTS: John Clements. I'm Chair of Microbiology and Immunology at Tulane University School of Medicine in New Orleans.

DR. CERTAIN: I'm Robert Certain, former combat aviator, a prisoner of war, a PTSD guy, then Air Force Chaplain, retired.

DR. DICKEY: Nancy Dickey, family physician by training, President of the Texas State A&M Health and Science Center.

DR. WALKER: David Walker, Chair of the Department of Pathology and Executive Director for the Center for Biodefense and Emerging Infectious

Diseases, University of Texas, Medical Branch at Galveston.

DR. SILVA: Joseph Silva, Professor of Internal Medicine and Microbiology and Dean Emeritus, School of Medicine, University of California, Davis.

DR. SHAMOO: Adil Shamoo, -- (inaudible) -- University of Maryland, School of Medicine.

HON. UNTERMEYER: I am Chase Untermeyer. I'm in private business in Houston, but in a former life I was Assistant Secretary of the Navy for Manpower, Reserve Affairs.

MS. EMBREY: I'm not exactly a Core Board member. I'm the Designated Federal Official on behalf of the Department of Defense to this Board, and it's been my pleasure to be associated with this Board for quite some time now, at least seven years.

DR. POLAND: And I'm Greg Poland, Professor of Medicine and Infectious Diseases at the Mayo Clinic in Rochester, Minnesota. So we'll take off where we left, right over here for

Subcommittee members.

MS. ROSSBACH: Paddy Rossbach, former CEO and President of the Amputee Coalition of

America.
DR. BOONE: David Boone, Chief Technology Officer for Arthro Care Innovations, and I'm on the panel for care of persons with amputation and functional limb loss.
DR. POLAND: I think we left off a couple people here. If we could --
DR. COHOON: I'm Barbara Cohoon. I'm with the National Military Family Association, and I sit on the TBI Caregiver Panel.
DR. ALBRIGHT: Tenley Albright. I'm on the Ethics Subcommittee, and I'm the Director of the Collaborative Initiatives at M.I.T.
DR. BREIDENBACH: Warren Breidenbach. I'm sitting on the Subcommittee that's looking at Biodefense Initiatives.
DR. PRIES: I'm Rose Mary Pries. I have the Office of Health Education and Information at the V.A., and I sit on the Family Caregiver Panel.

DR. MOESSNER: Good morning. Anne Moessner also from Mayo Clinic where I am the Traumatic Brain Injury clinical specialist. I also coordinate the TBI model systems at Mayo, and I am chairing the TBI Family Caregiver Panel.
DR. CARLTON: Good morning. I'm P.K. Carlton. I'm Texas A&M Homeland Security, retired, Air Force Surgeon General, and I sit on the National Capital Board.
DR. HERBERT: Good morning. I'm Cheryl Herbert, President of Dublin Methodist Hospital in Dublin Ohio, and I sit on the MCR BRAC Subcommittee.
MR. TOBEY: Good morning. I'm Phil Tobey with Smith Group. I'm an architect and health care planner. I sit on the MCR Health BRAC Committee. Thank you.
DR. KIZER: I'm Ken Kizer, Chairman of the MCR BRAC Committee, and I'm from California.
DR. REDDICK: Robert Reddick. I'm at the University of Texas Health Science Center in San Antonio, and a member of the Scientific

Advisory Board for Pathology and Laboratory Services.
DR. THOMAS: Good morning. I'm Patricia

Thomas, Professor and Chair of the Department of Pathology at the University of Kansas, and I'm on the Pathology and Laboratory Services Subcommittee.

DR. RUSSELL: Alan Russell of the University of Pittsburgh where I direct the McGowan Institute for Regenerative Medicine. I'm on the Occupational and Environmental Health and Medical Surveillance Subcommittee.

DR. HERBOLD: John Herbold, University of Texas, School of Public Health, Director of the Center for Biosecurity and Public Health Preparedness, retired Air Force.

DR. LANE: National Institution of Allergy and Infectious Diseases where I'm the Clinical Director and on the Biodefense Panel.

DR. PERIGALLO: Nilda Perigallo, Dean and Professor at University of Miami, School of Nursing and Health Studies for Health Care

Delivery.

DR. GLAZER: Greer Glazer, Dean and Professor, University of Massachusetts, Boston. I'm on the Health Care Delivery Subcommittee.

DR. EVANS: Mary Evans, University of South Florida, College of Nursing. I'm also on the Health Care Subcommittee.

DR. MATTOX: Kenneth Mattox, Houston cardiovascular and trauma surgeon; on the Health Care Subcommittee.

DR. KOKULIS: I am John Kokulis, and I'm a former Deputy Assistant Secretary of Defense, Health Affairs, and I'm on the Health Care Delivery Subcommittee.

DR. BROOME: I'm the Dean of the School of Nursing at Indiana University, and retired nurse from the Army Nurse Corps. And I sit on the Health Care Subcommittee.

MAJ. GEN. ANDERSON: George Anderson, Executive Director of the Association of Military Surgeons in Bethesda, and I'm on the Health Care Delivery Subcommittee.

DR. GARDNER: I'm Pierce Gardner. I'm a Professor of Medicine and Public Health at Stoney Brook University, School of Medicine, and I'm on

the Infectious Disease Subcommittee.
DR. LITZ: I'm Brett Litz. I'm at the National Center for PTSD, Boston VA, and Boston University.
DR. UDHE: Tom Udhe, Professor and Chair of the Department of Psychiatry and Behavioral Sciences, and Director of the Institute of Psychiatry at the Medical University of South Carolina.
DR. FOGELMAN: I'm Charlie Fogelman. I'm the Interim Chair of this subcommittee here, and I was asked by the members of the subcommittee to point out that this is an example, a living vivid example, of the stigma of psychological concerns. I asked Greg's permission and my colleagues' permission, since they've heard a little bit of this before, just to say this very briefly about why I'm here.
I'm here, professionally, because I have a broad

and varied career as a psychologist, including nowadays I volunteer one day a week providing clinical services at the Adult Behavioral Outpatient Clinic at Bethesda Naval Hospital. I make my living now as a coach and consultant in health care and mental health delivery, and leadership development and organizational development.
But the real reason that I'm here and that I serve on the committee is this: I am a very, very grateful first generation American. My parents were born on the other side, and were it not for this miracle of the country, they would have been trapped in land of endless oppression, and I would not have been born. And were it not for the generosity of my home town, New York City, my mother would not have become a teacher, my father would not have become a doctor, and I would not be here today.
So I have this sense of unrepayable debt, and I sort of think of this service as one of my small attempts to make a dent in that unrepayable debt.

It's a privilege to serve here with all of you and an honor to serve on behalf our military and their families.

DR. QUICK: I'm Jim Quick, Goolsby Professor of Leadership at the University of Texas at Arlington. I retired United States Air Force, expertise in Preventive Stress Management.

DR. RESICK: I'm Patricia Resick, Director of the Women's Health Science Division of the National Center for PTSD in Boston VA, and also Professor of Psychiatry and Psychology at Boston University.

DR. McDERMID: I'm Shelley. I direct to the Military Family Research Institute at Perdue University. I'm the former Cochair of the Department of Defense Task Force on Mental Health.

DR. COLENDA: Chris Colenda, Dean of the College of Medicine at Texas A&M Health Science, and Professor of Psychiatry and Health Services Research.

DR. BENJAMIN: I'm Richardean Benjamin, Chair of the School of Nursing, Old Dominion

University in Norfolk, Virginia, and I'm on the Psychological Health Subcommittee.

DR. DETRE: I'm Thomas Detre, Professor of Psychiatry, Sacropharmacologist. I'm a full Board member and a member of the Subcommittee on Psychological Health.

DR. DUMAS: I'm Mary Anne Dumas, and I am Chair Apparent of Adult and Family Nursing at Stoney Brook University, President of the National Organization Nurse Practitioner Faculties, and on the Medical Ethics Subcommittee.

DR. COLLINS: Good morning. I'm Suzanne Collins. I'm from the Department of Nursing at the University of Tampa, and I'm on Medical Ethics.

DR. BLAZEK: And I'm Dr. Bill Blazek from the Center for Clinical Bioethics at Georgetown University, and I'm also on the Subcommittee for Medical Ethics.

DR. REYBOLD: Ridge Reybold, Armed Forces Institute of Pathology.

CMR. MEIER: Commander Mike Meier

representing the Joint Staff J-4 Health Service, Support Division.

DR. ERDMAN: Good morning, Rick Erdman

from the Institute of Medicine, part of the National Academies.

DR. KRUKAR: Michael Krukar, Director of Military Vaccine Agency.

SPEAKER: -- Proponency Officer, Preventive Medicine of the Army Surgeon General's Office.

DR. McMILLAN: David McMillan, Bureau of Medicine for the Navy.

CDR. SCHWARTZ: Hi, I'm Commander Erica Schwartz and the Preventive Medicine Officer for the Coast Guard. And I also want to introduce the Chief Medical Officer for the Coast Guard, Admiral Mark Tedesco.

CDR. SLAWNWHITE: Good morning. I'm Cathy Slaunwhite, Canadian Forces, Medical Officer in a liaison role in Washington, D.C.

LT. COL. FOTINOS: Good morning. Lt. Colonel Mel Fotinos. I am the Consultant to the

Air Force Surgeon General for Preventive Medicine.

MR. COWAN: Good morning. Group (inaudible) Alan Cowan. I'm the British Liaison Officer for Deployment Health. I'm located in the (off mike) area in the Force Health Protection Readiness.

LTC. HACHEY: Wayne Hachey, Director of Preventive Medicine, OSD Health Affairs for Self-Protection and Readiness.

LTC. PORTER: Lt. Colonel Becky Porter from the JTF CAP MED, Behavioral Health Officer for Health Care Delivery services.

COL. JEFTS: Colonel Barb Jefts, JTF CAP MED, J-3 Health Care Delivery Ops.

CAPT. McKENNA: Captain George McKenna from JTF CAP MED, Force Health.

COL. CAMPBELL: Colonel Stuart Campbell, British Liaison Officer, Office of the U.S. Army Surgeon General.

MR. SCOVILLE: Chuck Scoville, Chief EMT Care Service at Walter Reed and the Executive Secretary for the Panel for the care of

individuals with amputation and functional limb loss.

DR. MULLICK: Dr. Florabel Mullick, the

proud Director of the Air Forces Institute of Pathology, and also the Executive Secretary of the Subcommittee on Pathology and Laboratories of this Board.

MAJ. GEN. ADAMS: Nancy Adams, Major General retired, member of the DOD Task Force on the Future of Military Health Care.

COL. BADER: Good morning. Colonel Christine Bader, Executive Director of the Military Health Systems Senior Oversight Committee.

MR. JHA: Prakash Jha, Surgeon General's Office, Army.

MS. BROWN: Nancy Brown, I'm line of Action 8 for the Air Force, part of Seth MRM.

MS. MARTEL: Susan Martel with the National Research Council of the National Academy.

MS. KITCHEN: Lynn Kitchen, Deputy Director of Military Infectious Disease Research

Program.

LT. CDR. LUKE: Lt. Commander Tom Luke, Department of Virology, Naval Medical Research Center.

COL. GIBSON: Roger Gibson, outgoing Executive Secretary, Defense Health Board.

MR. MARTIN: Chris Martin, Armed Forces, Health Surveillance Center.

LTC. GOULD: Lt. Colonel Phillip Gould, Air Force, Medical Support Agency.

MS. SEKIS: Branko Sekis, Social and Scientific Systems.

CAPT. COLLIER: Captain Collier, Army, Public Health Nurse, Walter Reed.

COL. BAYLES: Colonel Mike Bayles, Army, Public Health Nurse.

MAJ. HORTON-HARGROVE: Major Telecia Horton- Hargrove, Public Health Nursing, Walter Reed Army Medical Center.

COL. ROGERS: Colonel Will Rogers, the Armed Forces Pest Management Board.

MR. DUFFY: Dennis Duffy, concerned

citizen.

MAJ. LUCAS: Major Pauline Lucas, Public Health Consultant with the Air Force School of

Aerospace Medicine and Tech Analogy Consult Services.

MS. WEESE: Colleen Weese, U.S. Army Center for Health Promotion and Preventive Medicine.

MR. RENNIX: Chris Rennix, Navy and Marine Corps Public Health Center, Epidata Center.

MR. FISCHETTI: Mike Fischetti, Deputy Chief, Acquisitions, AFD Health Affairs and TRICARE.

COL. SEVORAK: Colonel John Sevorak, U.S. Army, Medical Research Institute of Infectious Diseases.

MS. JOVANOVIC: Good morning. Olivera Jovanovic, Defense Health Board, Support Staff.

MS. PEARSE: Lisa Pearse, Associate Program Director, General Preventive Medicine residency at USHUS.

MS. UNDERWOOD: Good morning. Paula

Underwood. I'm the Army Surgeon General's Liaison Officer to Health and Human Services.

MR. MALLICK: I'm Craig Mallick. I'm the U.S. Armed Forces Medical Examiner.

MAJ. WITHE: Major Cathy Withe. I'm the Legal Counsel for the Armed Forces Institute of Pathology.

MR. PEIPELMAN: Good morning. Eric Peipelman, Armed Forces Institute of Pathology, Director for Integration and Transitions.

CAPT. BELLAN: Captain Kris Bellan, Preventive Medicine Resident, Uniform Services.

LT. COL. SENSINTAFFER: Lt. Colonel Lowell Sensintaffer, Air Force Medical Support Agency, Deputy Chief of Preventive Medicine.

MR. DOWLING: Glen Dowling, Preventive Medicine Resident, Uniform Services University.

MR. FOSTER: Bob Foster, Office of the Secretary of Defense.

DR. POLAND: We'll start up here with Dr. Chu, and then we missed a few people that have come in.

DR. CHU: David Chu, Undersecretary of Defense for Personnel Readiness.

MR. KELLEY: Joe Kelley, Deputy

Assistant Secretary of Defense for Clinical and Program Policy.

MAJ. GEN. WHEELING: Major General Deborah Wheeling, Deputy Surgeon General, Army National Guard. Office of the Army Surgeon General.

MAJ. GEN. RUBENSTEIN: Major General David Rubenstein, Army, Deputy Surgeon General, and in my private live, Chairman of the Board of American College of Health Care Executives.

CAPT. KHAN: Assistant Surgeon General Ali Khan, U.S. Public Health Service, Ex Officio Member for the Health and Human Services.

BC. VOLPE: Phil Volpe, Deputy Commander, Joint Task Force, National Capital Region Medical JTF CAP MED, Integrating Health Care Army Air Force/Navy Medicine in this region, and overseeing a BRAC execution.

MS. EMBREY: That's a large group.

Before we formally start our meeting, I'd like to take this opportunity to honor the illustrious career of Dr. Poland to my left, to your right. He is the Mary Lowell Leary Endowed Professor of Medicine, Infectious Disease, Molecular Pharmacology and Experimental Therapeutics at the Mayo Clinic. He's also the Director of the Mayo Vaccine Research Group and the Translational Immunovirology and Biodefense Program. He was also the Associate Chair for the Research in the Development of Medicine and the North American editor of Vaccine.

Dr. Poland has devoted many years to the service to the Defense Health Board, first with a three-term membership with the Armed Forces Epidemiological Board, and currently as the president of this Board. His extensive background in immunology and vaccine development and delivery has contributed greatly to the Board's ability to provide recommendations, advice, guidance, and friendship to the Department of Defense on numerous Force Health Protection and Readiness

issues by serving on the Infectious Disease Subcommittee, the Pandemic Influenza Preparedness Subpanel, and most recently on the Task Force

Review of the Department of Defense's Biodefense Research portfolio.
For his numerous contributions in May of 2003, he was awarded the Secretary of Defense medal for outstanding public service and nominated for the Eugene G. Fubini Award in 2004. Dr. Poland is now going to be transferring his duties as President to the President-Elect, Dr. Gail Wilensky, but he's not going to leave us; he's going to continue to serve as the Vice-President to the Board.
Dr. Poland.

DR. POLAND: Thank you. If you'll bear with me for about 10 minutes here, I decided I would fly the flag, literally. Karen, if you could make sure no one throws a shoe at me, though.
Only some of you watched the news last night, okay. Beyond that of service, the one privilege or gift given to the Board president is time on

the agenda to make some remarks at the end of his or her tenure. I've spent some hours reflecting on what I want to say, typed it out so I don't miss anything. They are heartfelt words, so if you would bear with me.
First, words fail at adequately expressing the privilege it has been to serve as President of the Armed Forces Epidemiological Board and now the Defense Health Board. As many of you know, I grew up in a military family.
The family joke is that if you cut us, we bleed camel. You'll see why in a minute.
My family's military history dates back to the Civil War where my great, great grandfather, Zimmer Poland, was decorated for battlefield heroism. My father, Colonel James Poland, went to college on a Navy ROTC scholarship and retire 30 years later serving his entire career as a Marine Corps Infantry officer with two tours in Vietnam.
I was born in Quantico delivered by a Navy lieutenant. My brother, Sergeant Major Bruce Poland, recently retired from the Marine Corps

after 30 years, again as a ground pounder serving in multiple wars and on every continent except Antarctica. Now the family torch has been passed

to my middle son, Cadet 4th Class Eric Poland, now at the United States Air Force Academy. So for me the AFB and now the DHB was my opportunity to serve and to do my duty. So thank you for the opportunity you gave me for service.
But, importantly, my family history has also provided a critical guiding star. For me, the deliberations and recommendations of the Board always had to pass a critical test. Is this what I want for my dad, my brother, my son, and other families' fathers, brothers, sons and daughters? The answer to that question always influenced me to do the right thing even when I'm popular.
I also want to ruffle a few feathers and be a bit politically incorrect. I leave this office with some warnings: We've become big from over 30 -- a gather usually of 30 intimate members to some 150 members. And big is not always better. Clay Christensen, professor at the Harvard School of

Business said this: I will always vote against the big guy.
The processes people, politics of what he called "disrupted innovation" isn't in their culture or soul. The products always shaped the product, and it never works. The point is that we often miss the obvious, perhaps because we are sometimes more in love with our ideas about truth than truth itself, more adept at rationalizing than recognizing the insidious harm of organizational or even personal self- interest and stovepipe thinking rather than the larger advantages of self-effacement, courage, justice, and joint solutions to big problems.
George Weigel has written a book entitled The Cube in the Cathedral: Europe, America, and Politics Without God." It's a superb book, and I commend it to each of you.
Mr. Weigel observes that the West's, as he calls it "deepening anemia" is a consequence of living on the thin gruel of secular humanism that excludes transcendent reference points for

cultural and political life. These reference points are, he says, prerequisites for freedom understood this way: As the capacity to choose

wisely and act well as a matter of habit.
Mr. Weigel challenges us -- that is to say you and I -- by questioning -- really doubting whether it's possible to sustain a democratic political community absent transcendent reference points for ordering public life and political community. So the lesson is the need of guiding transcendent reference points in what we do: Concepts like truthfulness, justice, courage, and others before self. And in this regard I can truthfully say that I'm proud of the work that we've done together and accomplished.
I can't say "never," but at least rarely did I ever sense that politics played a significant part in reshaping or changing the Board's recommendations. It sometimes made people unhappy, and I understand that. But each of us has to be ever vigilant in this regard. With changes in our size, new members, new agendas, and

new administration, we must only and ever be true to the needs of the servicemen and women we're privileged to serve, and increasingly two key words must characterize the work of the Board: innovation and transformation.
Professor Christensen is right in history reinforces the truth, that the processes people in politics have disrupted innovation isn't in the culture of huge bureaucracies. The politics always shape the product, and it never works. So I implore you to do what needs to be done even when it makes politicians, generals, and others uncomfortable. Do the right thing. You have the every-day soldier -- airmen, soldier and Marine as well as history -- to hold us accountable. I have always felt that as a Federal Advisory Committee we had a singular overarching task that could be summarized very simply: Speak truth to power.
Second, change is a time for reflection on how the race has been run. It reminds me of G.K. Chesterton's maxim that with every step of our lives we enter into the middle of the new story

that we're almost certain to misunderstand.
The DHB now enters into that new story, a bigger and more influential Board than at any time in its

history, a Board more active than ever before; a Board intimately wrestling with the truly big issues DOD faces, issues like TBI and wounded warrior care, pandemic influenza, environmental hazards, health care delivery reform, biodefense and many others, issues whose story we're almost certain to misunderstand absent diligent, transparent, and open deliberations and critique. It remains to be seen how best to organize a Board of this size, how independent we're willing to be in raising and pushing important issues, and what questions the Board is willing to address and in what manner. Many changes are occurring, and the Board is being utilized in new and important ways than in the past, and yet more work needs to be done.

I want to end with a story, and those of you in the ministry know that when somebody says, "I want to end," it means there's about five more minutes

--
-- with a story and a final personal moment --
Bob, that was no personal reflection.

First the story. Steven Pressfield in his book Gates of Fire tells the story of the 300 Spartans about to go into battle against the overwhelming Persian army at Thermopylae. Only one Spartan would survive, a single slave. The King of Persia wonders with amazement how and why the 300 Spartans would fight, knowing they would all die violent deaths on the battlefield that day.

The captures slave tells the King of Persia hat a true king, what a true leader really is: It is how Roger Wayne and myself have tried to conduct ourselves with regard to the Board, and emblematic of many of our members -- people like General Bill Fox, like Joe Silva, who repeatedly put aside the difficulty of particular family hardships to get on a plane and contribute in important ways to the work of the Board.

People like Wayne Lednar and Mike Parkinson, who despite moving to new jobs of major corporate

responsibility, nonetheless never failed to say yes to service to the Board. In Wayne's case, particularly sacrificing as he continues to live

apart from his family during his job transition, and yet never once said no. And people like Ellen Embrey, who many times at personal sacrifice to her relentless schedule and family time, made it a point to come to our meetings, and that's very much appreciated. And finally, people like Roger Gibson, who almost never took any vacation time, and who had to deal with family illness and his own shoulder surgery and near chronic pain to be at work and ensure the work and administration of the Board, thank you, Roger. I hope that when I read this single survivor's description of what a true leader is that you, too, will judge that, on balance, these individuals in this Board did indeed conduct ourselves as the leaders you and DOD deserve. I will tell His Majesty what a leader is: A leader does not command his men's loyalty through

fear; he earns their love by the sweat of his own back and the pains he endures for their sake. That which comprises the harshest burden a leader lifts first and sets down last. A leader does not require service of those he leads but provides it to them. He serves them, not they him. And while Pressfield was talking about a leader's conduct during war, it's not a big stretch to see the importance that anyone who sits on he DHB must attach to the conduct of this office. In my opinion, with almost 14 years of service to this Board, four of them as president, the only leadership style that has worked is servant leadership. The idea that the needs of the Board and of the service men and women must always come first are nothing. Put another way, the mediocre leader tells, the good leader explains; the superior leader demonstrates, but the great leader inspires. And I hope that in at least small ways we as a team have inspired you and those we seek to serve, and

if it is judged that we served well, those who serve and the race we have run together will be rewarded one day with the resound: "Well done,

good and faithful servants."
I'll finish with one of my favorite poems -- if I can get through it. It was written by Ray Carver and, ironically, it was the last thing he ever wrote aptly entitled Late Fragment. And in it he expresses a universal truth -- I'm sorry to be emotional here. It goes like this:
"And did you get what you wanted from this life? Even so, I did.
"And what did you want? To call myself beloved, to feel myself beloved on earth."
To those of you I've gotten to know so well over these last years, have no doubt that I call you beloved in the sense of the strong bonds of friendship and the crucible of the often difficult and controversial work we have accomplished together.
I've been humbled by your support, your friendship and loyalty to the DHB and to our soldiers,

airmen, sailors, and marines. I want to particularly express my deepest gratitude to Ellen Embrey, Roger Gibson, Wayne Lednar, Mi,e Parkinson, Bill Halperin, Ed Kaplan, Joe Silva, Adil Shamoo, Pierce Gardner, John Clements, Dan Blazer, Mike Oxman, and many others. But those are individuals who I've particularly worked closely with. I personally know the many sacrifices you all have made when called upon, and I thank you each for what you've done for our Service members.
Well, we made it to the finish line. We successfully transitioned from the AFB to the DHB and congratulations to all for a race well run.
And now I will assume a supporting leadership role to DHB and to the new DHB president, Gail Wilensky, by serving as one of the vice-presidents. May our efforts continue to be rewarded in the future by the clear prism of history.
Thank you, each, and, Gail, congratulations.
(Applause)

DR. WILENSKY: Thank you very much, Greg. I will not attempt to in any way respond to those very moving words. I think it would be

impossible to have heard what you have said and to not recognize how important this position has been to you and how much you have brought to it during the course of the last 14 years, as we discussed this morning, that you've been involved with the predecessor board and the current board. Fortunately, for all of us and most fortunately for myself, you will continue to be actively serving. We have established and Executive Committee of Wayne, Greg, and myself. We will be meeting regularly between the Subcommittee and Core Board meetings and so, well, we are very grateful and thankful to you for all of the service that you've provided. We are in no way about to say goodbye to those services but just to have you continuing on in a slightly different position. And I know that your experience will serve us as we go forward in these activities and with a new Administration.

And so I am very honored to accept the gavel from you and to formally thank you for all of your efforts.

The first speaking this morning is Dr. David Chu, the Undersecretary of Defense for Personnel and Readiness. As a Secretary Senior Policy Advisor and as a Senate- approved presidential appointee, he is responsible for the recruitment, career development, and pay in benefits for active-duty Guard and Reserve personnel and DOD civilians. His additional responsibilities include overseeing the Defense Health Board, Defense commissaries and exchanges, the Defense education activity, and the Defense Equal Opportunity Management Institute. David has been very helpful to me in various activities that I have personally undertaken during these last several years. I am very grateful for his support, and without further delay, I present you David Chu.

DR. CHU: Gail, thank you, and let me take this occasion, if I may, to thank all the members of the Board for their service, their

willingness to help the Department and its people. My particular thanks, Dr. Poland, for your long service, for your willingness to continue serving.

It's a tribute to you that we've brought this group together. I realized it was large; I didn't realize quite how large. When I was told we were meeting in the ballroom, I thought no, that can't be true, and I wandered around some other rooms first thinking smaller than would be the case.
This is a challenge. I think one interesting thing for the Board is how it can be most effective in its many lanes and bringing those separate strands together to form a cohesive, but thank you, Dr. Poland. Thank you for your continued willingness to assist us.
I am delighted to have the privilege of working with Dr. Gail Wilensky. I've had the opportunity of working with her in several, not necessarily all, of her various incarnations. In every case, she's offered the Department the kind of trenchant, straightforward advice that Dr. Poland celebrated. I think we've taken a solid fraction

of that advice, but perhaps not quite every point. And we look forward to the new advice that she and you will give us.
This is, of course, a time of transition, as we all appreciate. It's a good time to ask, I believe, what the new challenges might be, and so I'll take if I may, 15 minutes this morning to outline the challenges I see in three areas.
Maybe they aren't new challenges, maybe they're rediscovered challenges or challenges to which we should have paid more attention to past and circumstances now compel us to give them the attention they deserve.
They fall, in my judgment, into three lanes, three dens, if you will:
A set of medical issues, a set of organizational issues; and a set of issues relating to the construct of the delivery of health care to our people.
Let me start with the medical set of issues. They are -- in my judgment recent events have asked us to refocus -- on old injuries that we now pay more

attention to, specifically, so-called traumatic brain injury and posttraumatic stress disorder. They've been with us before.

Perhaps we haven't seen them as injuries; perhaps we haven't seen them as circumstances that the medical community ought to address. We certainly see them that way now, and they have, as you know, preeminence in terms of our focus. And you can certainly see that in the agenda for this two-day meeting.

I leave it to you. I am not a physician. I leave it to you to get with the medical aspects, but I am interested in the social aspects and the question of how we best provide care. On the social front, some of you may have seen or have actually worked by the Center for Naval Analyses that looks at the relationship between various disqualifying conditions and civilian earnings. (off mike) -- economists of one measure to be always is: How well do you fare in civil society? What's fascinating to me about that work, as some of you may be aware, is that there's some

relationship between physical injury and civilian earnings. It's not very strong. In physical injury particularly in the era of computer-assisted technology, it does not necessarily mean that you cannot enjoy a satisfying civilian career.

Very different if the injury is psychological. What I'm stuck by in the Center for Naval Analyses work is that if the veteran is diagnosed -- and these are largely older veterans, I should emphasize -- if the veteran is diagnosed with some kind of psychological, psychiatric difficulty, the earnings effect is much more, much more pronounced.

I emphasize these are older veterans. In fact, one of the phenomenon CNA has separately identified for the Department is that we're entering an age of the Vietnam era veteran coming into his -- mostly his, a few her -- old age period, and they are being rated 100 percent disabled or unemployable at much higher rates than the generation before. We did not see service in

a combat theater, and so, obviously, one of the issues for the Department is, how do we ensure that this new generation of veterans that the

current conflict creates will not suffer a similar fate.
I do think we have an important helpmate in this regard, and that is the difference in the way the military was staffed in this most recent period versus how it was staffed during Vietnam. Vietnam was a conscript force; this is an all volunteer force. And I believe, in terms of the social aspects of how that force was treated over time, that's a key difference, one from which we are the benefit, but the power question is how can we build on that benefit?
How can we take the spirit of service and of volunteerism that impelled these young people to join and harness it to their lifetime benefit in the programs the Department, the country advances.
In terms of care they receive, particularly for posttraumatic stress disorder, as a nonphysician it is unfortunate to observe that we really only

have two, as I understand it, two therapies that have really been proven through evidence-based techniques, which ought to be our gold standard for medical therapies across the board.
One of our problems in the Department is how we assess the many proposals for therapeutic action that are coming forward. Proposals are always, of course, advanced with the best of intentions, although sometimes there is an important issue of conflict of interest to be direct, and the question is, how do we in an expeditious way reach the kind of evidenced-based conclusions on which clinical practice ought to be founded? How do we accelerate to the extent feasible the clinical trial process, and how do we organize that process so we use the skills, resources of the Department and the country in an effective way?
We cannot test every potential therapy, however promising it may seem in the eyes of its -- in the eyes of its proponents. I think this, in particular, is an area where the Board can help us sort through both what should be tested and how

best to carry out those clinical trials.
Second, organizational issues. Again probably not a new issue but an issue being rediscovered by the

force of circumstance, and that is, how do we act jointly? We are a department that's really composed, as you all appreciate, three proud, separate traditions -- the Department of the Army, Department of Navy, Department of the Air Force. How do we bring these together? And how do we bring ourselves together with other federal partners where that makes sense?
We have one, I think, bright shining model on the latter front, and that is the North Chicago Partnership with the Department of Veterans Affairs. We really have, with the Department of Navy's help, created a joint approach, including a joint command structure and a governance mechanism to deal with the issues conjunctively. We have challenged other locations around our system to ask themselves, can they learn from this North Chicago model? Can they apply the principles of the model, not necessarily the specific template

that was employed but can they employ the principles involved to assist their situation, so we as the federal government act together as opposed to separately with all the difficulties that that would otherwise imply?
We have a new model here in National Capital Region mentioned briefly in some of the opening -- in some of the introductions here and opening remarks, and that's the Joint Task Force for the Capital Region for Medical Affairs. Admiral Madison is its chief. Granted this is brought to us by the base realignment and closure process, but it is in my judgment an extraordinary opportunity to create a world-class enterprise of a joint nature. Our individual stovepipe processes often stand in the way.
And so the question where I hope the Board can be of assistance to us is, how do we benefit from the strong points of each of those processes, but how do we create a unified whole that is indeed more than the sum of its parts?
Because this is not the last area that our

external direction impels us to reconsider how we approach. We have been told to look at a similar solution for education in the Department. That

really is still, in my judgment, at very early stages in terms of how it might proceed. And the challenge -- the challenge you can see in the way the Department reacts to these instructions when they cut, the Base Realignment and Closure Commission told us to create as joint chaplains' school.

I was pleased (off mike) to visit Ft. Jackson where it's being erected and not quite so pleased to learn that basically there will be three chaplain schools and a central conference area. Not perhaps quite the spirit of the BRAC instruction.

There's a parallel issue out there in my estimation where again I hope the Board can be helpful because so much of our important business takes place in the field, and that is the question of the role of the command surgeons. There is enormously, it cannot to be senior in- grade often

outranked by the commanders of the facilities in their area of responsibility. How should we see the role of the command surgeons going forward, and how do we prepare individuals for that post and division that we might have forth.

Final subject, perhaps new, perhaps not so new -- when I started my professional career National Health Insurance was just around the corner. That was during the Nixon Administration. It's just around the corner again. It was just around the corner in the last Administration as well, and the issue I think for the Department is if there is a different national construct for the delivery and the financing of health care, how does the military, and the military community with its 9 million plus beneficiaries, fit into that construct? And the beneficiary list is growing, because thanks to the work of Ellen Embrey and others, the TRICARE benefit has been paid the wonderful back-handed compliment that more people wish to join. And so the Reserve community has been invited to join this benefit program.

I am struck that usually the bureaucratic imperative is to think about the implication of the military after the larger system is designed.

I do hope that on this round, perhaps helped by this Board, we can be somewhat more proactive and ask ourselves if that's going to be the national construct, how do we fit into that paradigm? What should we change about our system? Likewise, what lessons from our system might usefully be conveyed to those who will design other new?

I am concerned, obviously, with the issue of delivery and the various demands on the set of practitioners in the United States that change in the incentives for create [sic], as Massachusetts discovered, simply offering everybody health insurance doesn't mean everybody will get health care because there is, in the short run, a fixed set of health care providers, and you can make the line longer, but you may also have a lot of dissatisfied people, and its, as the Department of Veterans Affairs has discovered when it opened the doors in the '90s, you might as a result start

shutting out the people you most want to take care of with your new construct.

I do think in all these areas it would be very, very useful, taking Dr. Poland's challenge -- innovation transformation directly -- very, very useful if you could help us think boldly. We are always constrained by what the statutes currently say, by the practicality of getting those statutes changed by directions for higher authorities within the Executive Branch of the United States Government. So I do think a Board like this gives us an opportunity to think beyond normal bounds. At the same time, I hope you will help us tell our story so it's accurately appreciated as these national debates proceed. We've had mixed success in my judgment in that regard. You typically come from communities where the statistical evidence is the way you decide what is the trend. We live in a political environment in which the individual story is often the way in which political youth decide what is the trend. And I hope you can help us get more of the former, not to exclude the

important of latter as symbolic, and instructive as to how does the system affect individuals.

And let me take just two areas in where I think

you can both help us think yet more boldly, at the same time help us tell our story of what we today do well and don't want to lose in any kind of change set that occurs.

The first area is the care of those who are actually wounded or hurt during the course of deployed operations. We really have, I think, transformed the Department how we offer care to these individuals from an older paradigm which we tried to bring medical services forward to a present paradigm where we bring those who were injured back to a central point where it can better organize the best facilities, the best talent the country can bring to bear.

That story actually has been told fairly well to the American public. We were privileged to have a program on 60 Minutes -- I didn't think I would tentatively live to see a program on 60 Minutes that applauded the Department of Defense, but we

did, because it applauded how well this was done. It's an extraordinary -- I'm not a clinician, but I know enough to realize -- an extraordinary clinical achievement to stabilize these patients, to put them on a airplane to fly them for 12 to 24 hours back to a point where definitive care can be rendered. It's come to be an expectation, interestingly enough, and I congratulate the clinical staff of the Department for what really is a transformational change.

But they've produced other transformational changes haven't gotten quite the same attention. We have a low list disease nonbattle-injury-related issue. Not only in the history of military operations in this country -- I think any country in the world -- we have the highest survival rate of those who are wounded. At the same time we are struggling to deal with this question of exposure. In other words, what have you been exposed to during the course of your deployed service? And we don't do as good a job in both tracking that exposure and following up on

the exposure, especially if the wound isn't physical in character, as I alluded to earlier in these remarks this morning.

I hope you'll help us think about how we do yet better in the delivery of care in a deployed environment which will not always be the kind of environment we see. They may be some very different environment, particularly if some kind of pandemic disease should break out, and also how we get a balanced treatment of the issues involved in that set of challenges by the body politic so that we invest wisely in terms of capacity for the future as opposed to that which is politically salient today.

The second area where I hope you can help us think in a transformational way is how we ensure that our people are comfortable with the care they receive and the way they have been treated. We have, I think, and interesting conundrum in the Department in which, if you look at broad polls, we rate reasonably well in terms of satisfaction of our people with the health plan and with the

care they are receiving. At the same time, they are often very pointed in their criticisms of our shortcomings: lack of continuity of who the provider might be is one example; quote, "can't find a doctor" as another example; or "doctor won't take TRICARE" as a further example.

Perhaps this is partly a matter of education in the patient population. I am struck in the survey results that the older patients who have been through life's viscitudes, whom we actually offer the least generous package to, typically, in terms of access, they're our happiest customers. It's the younger patient, and whether this is just a matter of age or whether it's also generational phenomenon, it's the younger patients who are dissatisfied.

Some of the dissatisfaction, I would argue is the dissatisfaction of the American public with how medical care, generally, is rendered. It tends to be episodic, it tends not to be unified, it tends not only to be inconvenient from the patient's perspective. Records are generally not automated,

not electronic, hard to pull things together. You fill out the same information repeatedly, et cetera, et cetera. You all know the various

shortcomings that are there.
So how do we both improve our system in terms of dealing with our patients and how do we educate our patients what they might reasonably expect from any significant system in terms of what money might do? What, in short, is the delivery paradigm for those who benefit from the military health system now and in the future, and how should we change that paradigm over time?
The board challenge, in my judgment -- the broad challenge where I am very hopeful this Board can be of great assistance to the Department is, how do we use this public sector opportunity to create a role model for the country as a whole? We have an extraordinary degree of control over the system that is not generally mirrored in the civil sector either in terms of delivery system or in terms of how we can affect the lives of the patients. We can reach patients, we can educate patients, we

can train patients in the way that you could not in the civil sector. How do we benefit from that, and how do we use that opportunity to benefit the patient population so that it is happy with the care it receives and it enjoys the healthy lifestyle that every American deserves.
With that, Madam Chairman, I'd be delighted to answer one or two questions if you wish, in the time remaining. Otherwise I'll yield back the balance of my --
DR. WILENSKY: Thank you very much, Dr. Chu. Fortuitously, given the role I am playing, I very recently completed a chapter on the VA for this next Administration, and the last section is What might the future of the VA be with health reform adopted, and have been spending some time speaking both with the British and the Canadians about how they have responded in terms of both veterans' care and their military health care as a result of their national health care systems, including meeting with people in the U.K. twice over the last month on precisely that issue.

So there are areas in the world we can look to as to how they have adapted their military and health care environments with the adoption of a more

broadly-defined health care program, not because that may be what we want to do but to inform themselves of how they responded and see whether there are any lessons to be learned.

But I think you for the challenges and encouragement that our services will be needed as we go forward.

Seeing what happened with regard to the chaplains' school challenge and the Chicago positive example, do you have some thoughts about what you think has made the difference in what has been the successful model, what has been maybe not quite the model you envisioned, and what may be the future with the National Capital Region? Or is that something we're still too close to be able to discern?

DR. CHU: I do think -- let me take it from the last part back up -- I do think on National Capital Region we are bringing the

ingredients together. Now, whether they will work in the manner that we intend remains to be seen.

The key element in my judgment is giving out of Admiral Madison substantial degree of control of the people in the system.

To the larger question you raise, what do I think was behind the success in North Chicago as opposed to how we're coming out on the chaplains -- I don't mean to pick on the chaplains here, forgive me -- but it is symptomatic of how the Department often responds. I think in North Chicago it was the produce of a great deal of attention from the top and persistence. It took several years to get to this outcome. We were helped by the fact that the local congressman was very interested in the kind of outcome that we were advancing and so we had critical local political support. And we were also helped, if I may, Madam Chairman, by your first report in this Administration on DOD-VA cooperation -- put more bluntly, the need to have more of it.

And so everyone saw North Chicago as an

opportunity to demonstrate we could cooperate. I think that broader political impulse toward cooperation was very powerful in keeping people on

track, even though there were many times that the cars did threaten to go off the rails and not produce the result that we wanted.
I do think the interesting issue is, can we bottle our spirit, or have we succeeded in bottling our spirit in what we've asked either other locations to look at, not to do exactly the same thing because their individual circumstances are different, and all medical is in the end local, but to accept the spirit. And I'm, candidly, very encouraged at the long-term product of your early report in that there is in my judgment a different spirit there between the two departments and in terms of how a joint team with members from each department is approaching the solution at each of these locations.
The issue will be, can we sustain that into a transition to a new Administration? I do think the Joint Executive Council that Congress put into

statutes are helpful in that regard because it gave us -- it gave the VA (off mike) myself the venue within which to pursue this agenda. We had a forum in which we could hold people accountable, and we could say, you know, we want to do more here, we want to see more happen here. And we are seeing more happen, including, I'm pleased to say, as I understand it, they're actually going to construct a regular connection between the VA Clinic and the Tripler Army Medical Center in Honolulu, which as been missing for a number of years.
So some of the victories are small, but the symbolism in my judgment is powerful, and the trend I am hopeful will accelerate.
DR. WILENSKY: Is there another question? All right, Ken Kizer.
DR. KIZER: You know, while I think it's instructive to look at the success of North Chicago, there's perhaps more to be gained by looking at where these partnerships have not been so successful such as in Las Vegas and California

and Tripler and some other places. There's a longer list perhaps would be more helpful in looking at us as to what has not been working.

DR. CHU: I fully agree. That's one of the reasons we've concentrated on Tripler as, can they come up to something more similar to what North Chicago has? I think we're making progress in that regard. It is, typically, two steps forward one step backward. I would characterize Las Vegas as an example of that phenomenon, although I do think Las Vegas it was more the larger state political situation than necessarily the two cabinet agencies that played in this. But you may have a different view, sir, and I'd be interested to be instructed by your insights in that regard.

DR. WILENSKY: Any other questions for Dr. Chu?

(No response) Thank you very much for sharing the time, and we Hope we will prove of value to you and to your successor.

DR. CHU: Gail, thank you very much. The best to all of you.

(Applause)

DR. WILENSKY: Our next speaker today is Dr. Kenneth Kizer, Chairman of the Board of Medsphere Systems Corporation, the leading commercial provider of Open Source Information Technology for the health care industry. Previously, he served, as many of you know, as the Undersecretary of Health and the U.S. Department of Veterans Affairs. As a current Chairman of the National Capital Region Base Alignment and Closure, NCR BRAC Advisory Panel, he will provide an update on its activities. The group met a few times to review design and construction issues regarding the new Walter Reed National Military Medical Center at Bethesda and the new community hospital, Fort Belvoir. Dr. Kizer's slides may be located under tab 2 of the binders.

Ken?

DR. KIZER: Thank you, Gail. Good

morning. I presume, based on the sound here, that everyone can hear okay.

Let, me just as a note for those who are looking

in the syllabus or the notebook here, the slides, there appears at least in the mind and the couple I looked at next to me, there was a little bit of a mix-up in that the first -- I think there are 13 slides or so -- the first half is repeated and the second half was not included. I don't know whether that was a political statement or -- because the second half had to do with our conclusions or findings.

Also, I would note that the other attachment or statement in there about what does it mean to be a world- class health care facility should have draft on it and should also be noted that this is not to be cited or replicated. The version that is in the notebook actually has been superseded by another iteration. In the time to get this in here, there have been some further comments, and I'll explain that a little bit more when I get there.

The Appropriations Act of this 2009, as referenced in this slide, does call for an independent design review of the new or proposed Walter Reed National Military Medical Center as well as for the new hospital at Fort Belvoir with two primary questions that are stated in the legislation: Will the design achieve the goal of providing world-class medical facilities, and, if not, what should be done to fix that, in essence? -- which raises of number of corollary questions that were identified, not the least of which is, what is "world-class?"

"World-class" is a marketing term. I suspect that when it was used a few moments ago by Dr. Chu that there was, at best, a kid of nebulous idea as to what this meant, but not something that one might measure and objectively put in place and then decide whether billions of dollars of public moneys are going to be used against that. And indeed, when Congress put this in federal law, there was some reference to the best of what's done in the private sector, and that ostensibly

was the definition; but again, I don't think one that many of us would feel comfortable using as, in essence, a standard by which federal moneys

will be appropriated.
So much of our work to date has been around trying to define in more precise terms, what exactly does it mean to be a "world-class" health care facility?
This, by the way, has -- this term has been increasingly used in the private sector in recent years, and if you, just as a late-night exercise and diversion from my real work, I googled "world-class medical center," not that -- well, a couple of weeks ago -- and found over 100 different facilities that list themselves as either providing world-class care or described their facility as "world-class," none of which provided definition as to what that means.
Well, I'll come back to this in a moment. The second corollary question that we needed to focus on is the approach that's being used in the construction of this new facility which is, one

might say, a radical departure, certainly a substantive departure from how military hospitals have been built in the past. Does this make sense, and is this basically a good approach and something that we might want to replicate in the future? And with that in mind, because this is a more of a design/build approach that's typically used in the private sector with the full design plans not available. The Congress, in particular, was interested in knowing whether there is any reason that we should call a halt to the construction that is currently underway and finish the plans in the more of the traditional model, or whether things should continue as they are.
And then, finally, there is just kind of "capture all" question of, you know, are there other things that need to be done as we're undertaking this review?
I should probably note that when the Committee was convened three months ago or so, this was not the topic that we were intended to focus on. Indeed most of our focus and the reason for convening was

the design is integrated health care system that Dr. Chu talked about, can we actually achieve that, and we've been somewhat sidetracked,

although I think it's a very important diversion, into the issue of whether it's being designed and built -- are these two facilities being designed and built to be world-class -- because it does expose many of the issues that have to be dealt with as far as their being an integrated facility. Just quickly process, as I mentioned, the Committee was convened just about three months ago. Subsequent to that the Appropriations Act was passed, and there was significant debate as it was evolving to actually being signed. And in September and October a number of subject matter experts, those who are more architecturally inclined, if you will, were added to the Subcommittee. We've had a number of meetings in conference calls, and what we present today is more of a work in progress than the definitive answer, and with that, let me -- oh, and I would just add also that the Committee, as it has come

to pretty much satisfaction with the definition of "what is world class?," I did send it out to about 50 prominent individuals in health care to get their take and those -- that feedback is filtering back with some, by and large, a lot of support, but some minor modifications which are indeed reflected in the current iteration.
So with that, let me take a moment here to talk a little bit about, what does this world-class term perhaps mean? And I would encourage you to turn to the statement that's in the handout. I am not going to go through it in depth, but you may want to see what some of the detail is under some of these areas.
I think, and we after going through a long list of kind of these are the things that need to be -- we're unhappy with that and felt that there really needed to be some sort of general statement, a preamble if you will, that talked about what's world class mean in more general terms.
Some of the characteristics in a general term are, as noted here is: Consistent and predictable

superior care and outcomes routinely operating at the theoretical limit of what would be considered the best care; incorporating evidence-based design

and practices into the design of the facility as well as the processes and procedures; using state of the art technologies, not just in diagnosis and treatment but in all the other functions that are attendant to operating in a large and complex health care delivery system; that caregivers obviously have to be competent and well trained, and there has to be knowledge, management, and other aspects of that; that the care model and the institution is designed to be patient-centered -- and again lots of detail as to what exactly it means to be "patient- centered."
But I think that this gets to some of the intangible part of what at least the Committee feels is very difficult to lay out in a set of standards or set of criteria, and that's the intangible part of what's world class, or I think what most of us feel when something is world class that it's really more than the sum of its parts;

that when you put all these pieces together, you get synergies, and those synergies result in basically making the extraordinary ordinary, and doing things that would not -- that you would not see in a nonworld-class facility. And this means regularly going above and beyond what might be expected.
Getting into some of the specifics, there are a number of different categories. Some might be viewed as the floor or the bottom: You've got to have these things if you're even going to talk about this, and some might be a little bit more on the aspirational side. But certainly, we need to start with having all the accreditations and certifications and reporting or satisfying all of the federal government reporting requirements; having comprehensive and definitive acute care services across the aids spectrum from preterm infants to end-of-life care; that the term that we've called "facility readiness," that the facility has to be ready to provide superior quality care.

And there's a long list of items that fall in this category, and again in the interest of time, I'm not going to go through those, and you can refer

to the statement and what's included there relatively quickly.
We think it's also particularly important that our facilities today be "green," to use an overused term, but that they in fact do demonstrate environmental responsibility and sustainability; that they apply contemporary evidence-based and state-of-the-art technology in the design; assuring competence of caregivers; -- and again with each of these there's a menu underneath it -- having the governance body engaged, which is something that one might, looking at the private sector, probably unusual to actually have the governance body engaged to the extent that it should be. There's a major movement underway to get boards of directors and governing bodies much more again, particularly in the quality of care, which is something that most boards in the private sector tend to be chair to get involved in

because they feel inadequate to do that.
Going down this list further, operationalizing evidence-based practices and processes, whether those are things like the 30 -- or at least today -- the 30 safe practices that have been endorsed as national consensus standards by the National Quality Forum, to the patient safety objectives that the National -- or the Joint Commission has espoused are things that can be done to prevent the never-events. And again, there are a number of different buckets under there that were included really as a minimum, and that there is more that could be done.
Transparency of processes. This is felt to be critical, and this means having patients, patients's families, employers involved and out of those determining what is done in the delivery of care and other aspects of the operation of the facility.
Demonstrating superior performance against standard industry metrics, and again whether those are clinical metrics endorsed by the National

Quality Forum; whether it's patient satisfaction metrics, or again a number of other areas performing at the 90th percentile or higher was

felt would satisfy this notion of being superior. Gazing in the full range of scholarly activities, research, teaching, et cetera, and not just for physicians but for other health professionals as well. Having a high performance organizational culture, and indeed that's probably the longest list there. There is a robust literature on high-performing organizations, some of it coming from Navy Seals to chemical manufacturing, to aviation, other areas that is routinely not employed in health care, or these concepts are not employed in health care the way that they should be, and, as everyone in health care is finding out today, lots of opportunities to operationalize this in health care. And then, finally, the last category here or bucket is simply involvement in improving the public health of the community and the

stakeholders that are -- which the institution serves. As a whirlwind reader's digest 101 version of what's world-class facility, we have tried to be a little bit more articulate and thoughtful in the statement and, as I mentioned, there is a somewhat revised version that is currently the most up to date, and it will probably undergo further revision in our report that will be submitted in the not too distant future. So the questions, and I think in your handouts this is the last slide that you have, but one of the first questions that we needed to answer was whether the approach being used to design and construct these facilities, is it a good approach, is it sound? And the Committee enthusiastically endorses the approach being used, feels this is much more like what is done elsewhere today in health care facility construction. It certainly shortens the time line compared to the typical military construction process. While at the moment it is an article of faith, we do believe

this will also result in a better outcome than what has been done in the past as well, but since the facilities aren't yet constructed or

operational, that remains as an article of faith until that's actually done.
I don't think you have these -- if you do, great.
One of the other issues is -- and this is perhaps one of the most important issues at the moment -- is there a reason to halt construction until the plans or the design is at a more complete or final stage than it is at the moment? The Committee's judgment at this time is no, that there's no deal-breaker, if you will, issue that's been identified. We do have some concerns about what has occurred as is the case at the Bethesda site, and we're still evaluating that, and we will have an intense session in the first half of January to delve into that in some more detail. But all of our assessment to date leads us to believe that the issues there are such that they should be able to be addressed as the construction and design proceeds, and a lot of it has to do with the

historical way that different parts of this project have been funded, and that they haven't necessarily come together in the way that we will recommend that they perhaps should.
Will the design -- and this is really the key issue that the Congress asked us to respond to -- will the design achieve the goal of providing world-class medical facilities? And I think we have to preface that in very strong ways that facility design and construction only accounts for a part of what is a world-class facility. Indeed, I would posit that is the minority part, that the majority of what constitutes world class has to do with processes and procedures and the interactions of the staff, and a number of other things that you can't necessarily design or construct into a facility.
Having said that, though, looking at the Fort Belvoir hospital, our or the Committee's judgment at this point is that that should provide a very good foundation for being a world-class community hospital. The approach to that has been very

different than Walter Reed because, basically building at the nouveau on some green space as opposed to having to remodel and reconstitute

something within a number of -- or being limited by a number of parameters in doing that.
As I mentioned already, we're still evaluating the Bethesda site. We do have some concerns both in the bricks and mortar part, although perhaps more around some of the nondesign elements, some of the things relating to culture and integrating the different services and other issues which are paramount in actually delivering a world-class care.
Just a couple of additional slides.
Recommendations, at least at this point we believe that the statement describing what is world-class in whatever final form it evolves to should be used to guide the further evolution of these facilities, and indeed we believe that it may well have a lifetime beyond those two facilities as well.
We do think -- and this is reaffirming a comment

already made -- that the process, design and construction process that's been used for these two facilities should be the one that's used in future federal hospital construction projects, and the emphasis there is on federal, not just military. And I read with interest that the facility that I was involved in 15 years ago or so in Orlando, Florida, the VA facility they finally turned dirt on a few weeks ago, which is about the typical time line to construct a VA hospital, about 20 years to get it going which, by the time you start building, the plans are way out of date -- but I won't go there.
And while we don't feel, based on what we have seen, what the Committee has seen to date, there's any reason to halt construction. We do think there are a number of issues that do require urgent attention, indeed urgent action. Some of these are, as noted here, particularly at the Bethesda site there's a need for a master plan to bring together the different strings or threads of construction that are BRAC-funded, that are not

BRAC-funded, and their different plots there that these need to be brought together into a much more coherent whole than at least appears to be the

case, based on our review so far.
With that, we also need to finish the gap analysis of where the design is, where things are now and what that would entail if they really -- if the facility truly aspires to be world-class.
There are some issues that are related to handicapped accessibility, these, again, nothing that would be a show-stopper. These are just some additional things that need to be dealt with, indeed at both sites.
We are concerned about the information management, and feel that some additional attention needs to be focused on this, intimately familiar with the evolution of IT systems in DOD and VA, and whether they should ever be similar, but regardless of what ultimately is done in that regard, we want to make sure that the facilities are wired and appropriately designed so they can accommodate whatever applications ultimately are used.

We also are concerned about the transportation management plans, parking and other issues there, and need to look at that in more detail than we have to date.
And, finally, one of the observations that have been made by Admiral Madison and other is that this, particularly if we're going to view this as an opportunity or a learning opportunity for how one might integrate facilities in the future and develop a much more jointly- operated military health care facility, there is a need to put in place a research program. Some of that is not the bench-type research but much more of an HH R&D approach. But that needs a plan, it needs funding, and it needs to have been started yesterday. And at the moment that is -- well, I think there's certainly recognition of the need to do this. It had no t jelled or come together, and that is something that we feel really needs some urgent attention and action to get that moving.
Indeed, I think one of the -- if one wants to look at the transformation that occurred in the VA in

the latter part of the '90s, there were a number of research projects that were launched concomitant with the changes that have turned out

to provide very important and valuable lessons from everything from service lines to a number of other models that were being utilized or at least trying to learn from as part of an exercise.
So just in conclusion as far as where we see the further Committee process going, we need to continue to look at the data and do some further evaluation. We need to finalize at least an interim report in the very near term with the expectation that there will be some addendums or additional iterations to that. There, I think, is going to be a need to present our findings and discuss these at a number of different forums based on the seeming interest; in this topic, and continue to review this particularly for some of the nonconstruction/nondesign issues. And, obviously, the Committee will stand ready and do whatever else it's directed to do by the Board, or whatever else may come by this way.

With that, I'll be happy to try to address any questions, if there is indeed time for such, Gail.

DR. WILENSKY: Absolutely, time. Let me just understand the timeline before I open it up for substantive questions.
When do you need to have the interim report ready so that we can think about when the briefing for the Core Board might occur?

DR. KIZER: Last week. It will -- we anticipate having it done by just after the first of the year.

DR. WILENSKY: Okay. And when are you suppose to report as the interim?

DR. KIZER: I believe that we need something by about the middle of January, and indeed one of the reasons why we're having this intense architectural review in the first half of the month is we do need to wrap things up at least on a first pass by -- I forget the exact date, but it's about the middle of the month.

DR. WILENSKY: About the middle of January.

DR. KIZER: Yes.

DR. WILENSKY: Okay. Well, we can talk with you to make sure that we can have that

process go in a timely way, so we don't disrupt your time schedule but can do what we need to do as a Core Board.

DR. KIZER: Yeah, I think -- I want to applaud the Committee in their willingness to give up time, and this is not a simple task in reviewing a very large amount of both literature, a large number of plans, some detailed architectural plans as well as a lot of other stuff. And certainly for the folks who have real jobs or daytime jobs, they have been very generous in giving their time to the committee process.

DR. WILENSKY: Yes?

MS. EMBREY: I'm very fascinated with the inclusion of a world-class facility as focused on patient- centered care. That is a culture; it's a process, it's one I haven't seen practice widely even in private sector. So I would be interested if you could give us a little more

detail about what you mean by that so that we can make sure that we start the cultural transformation in about the time the building is ready we actually have a culture that can execute it.

DR. KIZER: Well, I think that the -- and how much time do I have here? One of the reasons for referring to the document is there's actually a fair amount of detail in the statement already about this. Some of it is imbedded in sets of standards and other things that there may be varying levels of familiarity with what is in there. But there are design aspects to patient-centered are from how one designs and constructs the rooms, the hallways, the way finding. I mean there's a number of things that do go to the design. There's obviously cultural issues about how one incorporates patients' background, their knowledge, their health literacy, their spiritual beliefs, other things into understanding or in fashioning the approach to care, to other

processes like how do you minimize the amount of movement of the patient. Again, this gets into some of the design issues,

but instead of sloughing the patient all over to x-ray and lab and whatever, how can you actually minimize that, particularly with some of the types of casualties or injured patients that we're talking about.

So there's a long list of things that goes into this, and I think in the interest of time maybe we can have that as a sidebar conversation or --

MS. EMBREY: I just wanted to make sure it was highlighted in the report to the Department because it's very important that, if you're designing to that, that we actually have the people thinking that way that go into the building.

DR. KIZER: I think that's one of a number of cultural issues that are going to have to be given a lot of thought if this facility is to be world-class. And again, the decision was made by others, including the Congress, that this

is to be a world-class facility. We have attempted to define that in ways that are both measurable and objective, but also captures some of the intangibles of what it means to be world-class.

And then the question, ultimately, is whether this can be operationalized by the folks who have to manage the facility. And there will be some challenges here, especially in the area of culture, how one brings the different services together, how one -- the longevity of command and a number of other things, at least in other organizations, have proved to be very important to building world-class organizations but at the moment are not necessarily the standard of practice in military settings.

DR. SILVA: So, thank you, Ken, for a very nice report. It's very heady, and hopefully we can achieve it in a 20-year time period.

But my question, related --

DR. KIZER: By 2011.

DR. SILVA: Okay, fine. My question

relates to the whole concept of public health. That's an important concept. I flew over the country yesterday, we've had disasters that are

weather-driven it seems like every few months, and in your thinking you mention that you're going to be prepared to deal with disasters. Does it take much architectural changes in the design of the facility to prepare for these events? I just don't know.

DR. KIZER: The answer is yes and no. You say architectural change. How one lays out this space and how one can convert a space that could be used either to deal with surge needs, for example if there is a particularly bad epidemic of the flu this year and you have many more admissions, there may be needs there. Or at some other mass casualty incident, can you convert in a timely manner existing space so that it could be used to deal with that extra number of patients that one might have within 24 hours or so? And there are definitely design considerations that go into that. Indeed, some of what we're looking at

or continue to look at relates to that particular issue.

DR. MATTOX: Ken Mattox, Houston. I would like to ask a question about something you did not say. I compliment everything you said. Many of us around the table in the civilian sector have been victims or drivers of acquisitions and mergers which is the same sort of thing you're dealing with. We were wanting to be more efficient, and we were wanting to be more competitive and productive. The BRAC should be, can be, and probably will be the poster child of what we heard Dr. Poland and Dr. Chu talk about and in -- the words "joint" were used, I think I counted 17 times.

The thing that destroys or sometimes makes the civilian mergers and acquisitions is how we deal with urban legends, past history, Silos, and personality. So I guess my question relates to protection of those old SILOs and egos that can be destructive when we try to do something like respond to the Katrina evacuees from New Orleans

to Houston, or when we try to merge major major centers or hospitals or residency programs. So the thing that I did not see in your report was

of perhaps you don't have them in the military, and that our Silos to protect, egos to protect --

DR. KIZER: None.

DR. SILVA: -- and past programs to protect, and, if so, then you will get to the joint program very quickly.

DR. KIZER: Nice to see you again. The last time I think I saw you we were in Saudi Arabia trying to set up trauma care systems 20 years ago or so.

Anyway, actually, there are pieces of this. For example, if you look under the Caregiver Competence, there are a number of things that -- or at least a couple of those bullets that deal with that in a politically polite way, perhaps, of dealing with some of those issues. The culture and the category dealing with culture is the one that is perhaps most relevant to what you say because most all those things that you mention

fall to one degree or another into culture.

And also, I would say that that is the area that we are perhaps least comfortable with at the moment. And it's not, though part of the charge of this report, this report specifically focused on design and construction issues because that train is moving quite quickly. But as part of our ongoing review, we do have -- and I think it's highlighted on one of the slides -- concern about the nonconstruction or nondesign issues, i.e. culture. And there are some very specific things as well as some more general concerns that we hope to detail in if not this report one of the subsequent addendums to it.

And I think that we're probably on the same page here as recognizing that these will do-in a medical center, and no matter how well it's constructed and designed, if we don't deal with these issues, it's never going to be world- class.

DR. MATTOX: If I may comment, Madam President and Chairman, perhaps each of our subcommittees could link and integrate together in

a unified way to help each other and help the BRAC to address some of these sticky cultural issues.

DR. WILENSKY: We will accept your offer

of help. Wayne?

DR. LEDNAR: Wayne Lednar. Thank you for your report. As we're talking kind of specifically about two facilities, two locations, Walter Reed and Fort Belvoir, what I didn't hear and I hope would be part of the thought process is the fact that these facilities have important design issues, obviously, on their campus, in their building movement of patients, those kinds of things. You talked about culture, caregivers, culture of patients.

The thought I would offer out there is a thought, actually that Dr. Poland mentioned in his remarks, and that's servant leadership. These facilities are a node. They are a piece of an end-to-end care solution, and how the governance of these facilities, their priorities, and how their eventual performance will be judged across the spectrum that they are there to serve, that's

tri-service that starts at the battlefield and ends up in rehabilitation centers. It involves the military and our civilian soldiers in the Reserve, the National Guard and their needs. So how is this part of the system that has all of that in view? And to the extent that at this point the design of the facility needs to attend to some of these issues is really an opportunity for leadership.

DR. KIZER: That sounded more like a comment than a question, and I will take it as such with just one friendly additional comment. And in the statement about what is world-class, the one area that I have felt that it was sufficient in had to do with leadership. It's also perhaps one of the most difficult to try to espouse in any sort of objective and measurable way in a statement like that.

But in the more later (off mike), there's some attempt in so working at some of that with regard to leadership, but it actually -- that's a key issue that we've identified already and we've

placed more or less under the nondesign category. But it's something that again, if the Department and the Congress have determined that this will

be, shall be, a world-class facility, then they're going to have to deal with some of these issues in perhaps more creative or different ways than they've been dealt with in the past.

DR. WILENSKY: Are you done with that? Okay, any other questions or comments?

DR. KIZER: I would probably be remiss if I didn't at least ask if other members of the Subcommittee didn't have any comments or want to correct me where I misspoke. Anyone?

(No response) Okay.

DR. WILENSKY: Ken, maybe --

HON. WEST: Ken, Togo West. Are we going to hear, perhaps in the Core briefing or as part of your -- one of your final reports more specifics on the nondesign concerns? Or I gather you're continuing to review?

DR. KIZER: We would hope so. Again, this particular report was very focused on design

and construction issues. I think that we will at most in this report identify some categories or some themes that need to be addressed. But as a pragmatic matter to do those any sort of justice in discussing them, it's just not going to be possible to incorporate it with the time line that we've been given for at least a round one of this assessment.

HON. WEST: Then perhaps I misunderstood. One almost gets the impression from -- well, an amateur such I is obvious -- from the way your report is presented that the nondesign concerns may well be of greater concern to you than were the compliance with the design and construction issues that you examined. Am I wrong about that?

DR. KIZER: I think you have corrected assessed what I said. But again, the task and the specific charge that's in the legislation has to do with construction and design, and it may reflect the level of familiarity of the authors of that language with what constitutes being

world-class.

DR. HALPERIN: Bill Halperin. You know, I've been looking at the report. There are

various places where issues of public health and prevention, et cetera, are mentioned, but with the sense that build it and they will come.
As a design issue, would it stand greater, a greater emphasis, for example, on facilities for something that's overarching like the continuous improvement of a facility that would incorporate things like preventive medicine and data analysis? And worry -- I've been looking at this very briefly, and I apologize -- that you wonder, gee, is this data analysis going to be part of IT? And we know what happens when it becomes part of IT. You know, they focus more on the computers and the telephones and less on the collection analysis of prevention-oriented data.
So I wonder whether a median between talking philosophy and talking concreteness is to make a clear statement that there needs to be a facility that can house adequate resources in the area of

continuous improvement, and continuous improvement includes all of the things that I've been talking about -- sorry to be lengthy.
DR. KIZER: I think if you -- and again I recognize that most of you probably haven't sighted this statement until five minutes ago or so, and haven't had a chance to digest it. But there actually is a bullet that is very specific through process improvement needing to be incorporated in everything that's done in the institution, and then reference in several other areas in a perhaps a little bit more oblique way to the same sort of thing. And we can go back and look and see whether we need to enhance the verbiage in that regard.
I think where we are at this point is trying to achieve a statement that is readable in one sitting and detailed enough that it has some teeth but at the same time isn't, you know, a tone that is something that no one's going to read. So there is some need for parsimony of language, but at the same time we're trying to make it as

complete and robust as possible.
And some of that is done by reference to other items that, if you're not familiar with those

other items, you may not appreciate what is covered in them.

DR. KAPLAN: Ed Kaplan. I'm a little bit confused. First, thank you for the report. Is the task of the Board as placed before us this morning to either accept the report, which I think we will, or is it to say there are a lot of questions that have been raised in this report about things that need to be addressed that progress should stop? Stop's a harsh word and probably an unrealistic word, but what is the Board supposed -- what is our job, I guess, in terms of looking at this report, because there have been a lot of questions raised as we've sat here and listened to it?

DR. WILENSKY: This is a progress report on the Subcommittee's work which is on a very fast time line. But it, as I indicated a comment or two ago, I'm aware that the Subcommittee has been

directed to report back to the Congress sometime in January. And when there is a subcommittee report, which there is not yet but will be in the next couple of weeks, I assume, then I will call a very quick Core Defense Health Board meeting so that we can, either virtual or in person, so that we indeed can be briefed on what is proposed to go to the Congress in response to the legislation. I recognize we are not going to have very much time to response, but we are going to carry out our fiduciary responsibility as a Core Board to be brief, even on this interim. This is only one part of what is or will be a set of ongoing reports from the NCR BRAC Subcommittee, but one that is responsive to a legislative request.

DR. KAPLAN: Excuse me, may I just ask one other question in follow-up, then? So if I understand you correctly, a final report will come to the Board, and the Board then has the option of saying we're concerned about his, we like this, accept it? Or does the Subcommittee report go directly to the Congress to meet the

deadline?

DR. WILENSKY: My understanding, although I, since I have sitting to my right a

federally-designated official, is that we do have the right as a Core Board to not approve a subcommittee report, any subcommittee report if we think there are serious questions.
On the other hand, I think we will be sensitive and mindful that they are responding as a subcommittee to a very short time line that was put in legislation. For any of you who have had the pleasure of having to respond to congressionally-mandated studies, you do what you can within the time frame and frequently indicate that there are a variety or areas that could usefully be explored further, but you are being responsive to the time line.
So I don't want us to be other than thoughtful and reasonable, but I do regard us as appropriately reviewing as we should anything that is a Subcommittee of the Defense Health Board. So if we have some concerns, we can at least make sure

that there is language that says that, you know, certain areas we think need to be further explored. They are not going out of business when they have this interim report. So you don't have to regard this as the last word, but we're not going to try to do anything other than facilitate their on-time delivery, but after we've been briefed.

DR. KAPLAN: Thank you for clarifying that.

DR. KIZER: Gail, if I might, just to perhaps further clarify it, our report that the Secretary of the Department is the one that actually has to transmit the report to the Congress with whatever additional verbiage the Secretary may choose, either accepting it, not accepting it, accepting it with caveats, et cetera. But again we are responding to a very specific query from the Congress that is primary focused on design and construction issues. And again, since they never defined the term "world-class" before it was put into federal

legislation, it's not necessarily surprising that their level of familiarity with some of the nonconstruction design issues might not be as

great as one would hope before one puts something, in essence a standard, into federal law. But it is what it is. We have to respond to it, and I think that there will be a number of areas where additional comments will be felt to be appropriate in the future, but it's just not possible to be done the time frame and may be not directly responsive to the particular concern. And I think -- and, Ray, you may want to comment on this as well, having more history -- but the real question that the Congress wants to know is whether construction needs to stop and whether they need to call a halt and finish the design plans until the design is complete. And as I said in the report, at this point we don't see a reason to do that. But I think that's kind the real threshold issue.

DR. WILENSKY: I think in general -- let me clarify what I guess I thought is understood

but make clear, we are a Committee of the Secretary through the -- Assistant Secretary for Health. Everything we do, basically, unless directed otherwise will be to report to the Secretary, in general who the secretary that makes the transmittal. But these are subcommittees of the Defense Health Board, and therefore we are an interim staff.

MS. EMBREY: If I could elaborate just -- and maybe we can end on this since we've talked about it longer than our budget -- but I think for the Core Board and the Subcommittee who is proposing this report, to the Department of Defense and to Congress, how we define "world-class" will become the new standard for us. And so it's very important that the Board understands what you are defining as world- class because that becomes the design baseline for the future. And so it's not the details so much as it is that you all, from your various perks and areas of expertise, view how world-class has been defined,

and because that will become something that Congress will then, I'm sure, hold the Department responsible for implementing. And that has fiscal

and other implications in terms of the transformation of the military health system. So it's very, very important that this Board understand what it says when it says was world-class is. And then whether or not we should stop construction at this time, I think that's a moving target. If your assessment is based on the current definition that we're good to go, that's fine. We know that that can be revisited at any time, so the more important issue is what is world-class and get your best advice on that.

DR. KIZER: And that is why we have spent a lot of time, actually, on this. And recognizing that, though, I would encourage any of you who have thoughts or comments or suggested edits for this that you send them to me posthaste so that we will have the benefit of considering those in whatever final statement is produced, because we do have to bring this to closure at

least as far as the Subcommittee is concerned in a very short period of time -- certainly within the next two weeks if not sooner.

Thank you.

HON. UNTERMEYER: Mr. President? Mr. President, I have a comment if we're still on the subject. I'm here. It's Chase Untermeyer commending Dr. Kizer for his and this Subcommittee's work.

It strikes me that the 13 items that are laid out here for a world-class health care facility is exactly what you'd want any health care facility to provide -- a county hospital would be the same. And I apologize since I wasn't on the subcommittee and I don't have any particular brilliant insight at this point, but it seems that there is a higher level of review which perhaps this whole Board needs to lend to the Subcommittee as to what takes it to that next level that the Congress had in mind but didn't define.

It seems that anything that the Department of Defense puts a great deal of priority and money to

and assigns top-flight people to will lead in the direction of being world-class; it certainly for us will be world-class.

So I would say the 13 items that the Subcommittee has given us are commendable, but there is something else that needs to be said to lift it to that level, and I'm not sure what that is.

DR. POLAND: Yeah, it's a good point, and one thing to consider would be site visits, not to be funny here, but it's a little bit like the old statement of pornography: It's hard to define, but you know it when you see it. You know world-class when you see it, even though it may be hard to define.

And so consideration for site visits and putting people who are designers -- not architects, that's a different function -- but people who know design thinking imbedded into this team.

DR. WILENSKY: Ken, go ahead.

DR. KIZER: Your comment is, Chase, is well-taken. One of the questions that was discussed in the Subcommittee was whether a

military facility could be world- class if it didn't first meet the requirement of being world-class, period. And the decision was that you had to meet the threshold of being a world-class health care facility. There may be some additional things or separate things that a military world-class facility might need to meet, but first of all you had to meet the threshold for being world-class.

So one, that there was some consideration to the question that you're asking, but also if you go through this list of 13 things, we would certainly agree with you that they are the things that should be done; however, I would posit that less than one percent, probably less than 1/10th of one percent, of the hospitals in the country today could meet what is listed here.

DR. WILENSKY: Okay, we will -- I think we need to move on -- and we will alert the Core Board when we're going to schedule a briefing after Ken and I and Wayne and Greg have had a chance to talk about timing with regard to the

drafting of a report or a final interim report will be available for us.

MS. EMBREY: Dr. Wilensky --

DR. WILENSKY: Yes.
MS. EMBREY: -- any time the Core Board meets, we have to announce it in The Federal Register.
DR. WILENSKY: So we need 15 days?
MS. EMBREY: Yes.
DR. WILENSKY: Since it will be -- we will have 15 days if we make the decision by the time that we leave here and I assume, given what he said, it will be sometime after January 5th that we can talk about when you think it will be available; we'll find a date to schedule, but we'll be mindful of The Federal Register needs -- although it is my impression on occasion you can skinny that down, but we'll try not to use this as an occasion.
I'm going to switch hats and report out as the Chair of the Health Care Delivery External Advisory Subcommittee meeting that we held October

20th. There is a review there. The slides I think are under Tab 3.
The membership which I'm pleased is well represented here mostly over on the far side of the room, many of the individuals who are on the Subcommittee and here today also were present at the meeting that we had in October. We were briefed by Colonel Bader, who is here, who at the time when I had worked with her previously was the Executive Director of the Task Force on the Future of Military Health Care. She is now, has responsibility for the Senior Oversight Committee on Military Health Care, which has the responsibility to implement the various recommendations that are accepted by the Department.
We reviewed the concept of operations plan, otherwise known as CON OPs for establishing the Health Care External Advisory Committee, and were presented with questions to the Board from Dr. Casscells.
Right now one of the major issues that we have

been waiting for is to have an assessment by the Department which, as I recall, was due either this month or next month, that will indicate of the 12

recommendations with various bullet points that were made by the Task Force on the Future of Military Health Care, which ones have been accepted and which not with some indication with regard to those accepted and those not, which will then provide information for us going forward. We have tentatively discussed meeting in January. Again my assumption now, given where we are, that we are probably talking about the last week in January or the first week in February, to convene again, hopefully to be responsive to the report that is released by Health Affairs. The Subcommittee tasks, we have been asked to look at the plan by DOD and to particularly focus on better efficiency and integration across the military health systems, an issue that's already come up today, and whether this can be achieved by the recommendations that were put forward by the Department as reflected in the final report of the

Task Force on the Future of Military Health Care. We were particularly asked to focus on the integration of direct and purchased care. This was the first recommendation of the Task Force as being one of the most important issues for the Department to address, and also to provide guidance for improving the integration of the purchased care and directly-provided care. We've been asked to look at methods to change the delivery of health care in ways that have been reflected in some of the earlier discussions suggested by Dr. Chu. We will also be serving to assess the strategic plan, as I've indicated, that the Department will be coming forward with. And we will be looking at finding best practices for both the direct and purchased care for military beneficiaries by both looking at and better integrating with other federal agencies, particularly HHS and VA, and with some of the strategies that are used by private companies. One of the issues that was included in the Task Force on Future of Military Health Care is that

while many of the military installations have very good preventive and other -- and wellness care, they are not always at the forefront of best

practices that has been observed in the private sector, and that this is something that needs to be pursued by the military. And it will require a better integration between the military and what goes on with these best practices in the private sector, but also recognizing that there is more that needs to be done to integrate across other federal agencies.

We are, as you can tell, very much at the beginning, in part because the major focus at least at this point has to do with the implementation of the Task Force on the Future of Military Health Care. As I've indicated, those recommendations went forward in March of this year to the Congress, but the Department has been reviewing precisely how to adopt and integrate the findings into their going forward plan, and as soon as that is available it will give us a clearer charge in terms of how we should monitor

the Department's action.

It will not be the only activity of this Task Force, but at least early on it will be the first focus of the Task Force. There are other activities that we may take on in addition in terms of assessing the effectiveness of delivery of care by the military to active duty, and dependents and also retirees.

There are a number of people here. As I have indicated, if any of you would like to comment on what happened in our October meeting, or, Colonel Bader, if you would also like to make a comment. Any of the Subcommittee members who would like to comment?

(No response) Colonel Bader?

COL. BADER: Good morning again.

Colonel Christine Bader.

We are wrapping up the Senior Oversight Committee report. We are preparing it now for coordination. It will be coordinated throughout the Pentagon, and then it will go to Dr. Chu, and then through Dr. Chu the report will be submitted to Congress,

and at that time it will be available to the public and to all of you for your review.

Thank you.

DR. WILENSKY: Well, that, that really will be the time in which we can then effectively mobilize going forward in terms of how that will affect our Subcommittee work.
Any questions or comments that you have?
MS. EMBREY: I just want to thank the Board and its predecessor for kick-starting this effort. We have a lot of opportunities in the next several years. Economically we are going to be challenged to do as much with less, and so what you do and what you have done is extremely important to us, and we thank you, Gail, for your leadership in that as well as you, Christine.
DR. WILENSKY: There's, I guess, an irony of having first been a part of putting together the recommendations on Task Force of Future Military Health Care and now having an opportunity to assess on how well the Department goes forward. So I look forward to that activity

and further working with Christine. Thank you.
We're a little ahead of schedule. I'm sorry -- I can't --
DR. HALPERIN: Bill Halperin.
DR. WILENSKY: Yes, Bill?
DR. HALPERIN: Is there a relationship between this to the innovation zones that Dr. Chu was mentioning, or is that something completely different?
DR. WILENSKY: It is not -- it is certainly not completely different, and the innovative delivery strategies were contained either by implication or by explicit directive in the recommendations. We can make sure you can access either the full report or the executive summary which indicates the 12 overall recommendations, each of which has five or six action points.
And so you can see for yourself how it was referenced in terms of the mean to better integrate and to make use of innovative delivery strategies to, as I indicated, make use of the

best clinical practices available, both in prevention and wellnesses. Other parts of care engage in a variety of demonstrations that were

indicated in the report.
So it's hard for me to think of very many other types of innovations that were not at least consistent with the spirit of the document, but there are specifics that may well come up that were not raised specifically within that set of recommendations.
My understanding is the first charge, but again not the only charge of the Subcommittee, is to monitor the effectiveness of the recommendations that the Department chooses to accept from this Task Force. As a Subcommittee, my understanding is we are free to come up with other ideas we think the Department ought to be considering, whether or not it chose to have those as recommendations it accepted from this Task Force, which any of the subcommittees or the full Board in looking at an issue we think is not covered appropriately under one of the existing

subcommittees can do.
Any other questions?
(No response) Why don't we take a 15-minute break now, and then Reconvene five minutes after 11:00.
(Off the record at 10:49 a.m.)
(On the record at 11:23 a.m.)
DR. WILENSKY: Okay, can we have people take their seats? We have used up our excess time from earlier.
(Long pause) We are going to reconvene. Before we go to our Next session, there are several people who have joined us since the time that we introduced ourselves. I'd like to have them have an opportunity to do so. Dr. Casscells?
DR. CASSCELLS: Dr. Wilensky, thank you, and I'm sorry I couldn't be here in the morning, but we had a big session with the Service Vice Chiefs on a topic that this Board is informing us about TBI and PTSD, so we had to clear the air on a couple of things there. But I will say, without

stealing General Sutton's thunder, that there is intense interest and a lot of desire that the military sustain their interest in this area and

be the best in the world, be the pathfinders for traumatic stress and head injury. So that's, I think, a tribute to this Board and to Loree Sutton. I want to thank you for that. Dr. Poland, again we'll have an opportunity to thank you at Mayo Clinic in front of your colleagues and Dr. Cortese out there. But please know that the Secretary and the Service Chiefs and everyone has the highest regard for the Defense Health Board and for the job that you have done. I will say something about that again tonight, but not everyone will be at the dinner, and there are some members of the public here; I think we want to say in public how we admire the integrity and energy and enthusiasm and wisdom you've brought to this job. Thank you very much.

(Applause)

DR. WILENSKY: Ray Dubois joined us after we had done our -- excuse me, I think he may

have stepped out for a minute. Is there anybody else who has joined us either around the table or among the audience before we go on?

DR. POLAND: Gail?

DR. WILENSKY: Yes.

BG. JAMES: Gail, Dr. Jim James with the American Medical Association. I am working on Dr. Kizer's World-class Subcommittee. Thank you.

DR. WILENSKY: Any other additions to the room since this morning's introductions? Please stand if you're new.

DR. MILLER: Mark Miller from the National Institutes of Health.

DR. WILENSKY: Okay. Our next speaker is Dr. Fogelman, who currently serves as the Executive Coach in Leadership Development and Management Consultant at Paladin Coaching Services. The Psychological Health Subcommittee has recently stood up and had its NARAL organizational meeting in late October. Dr. Fogelman will discuss the current status of the

Subcommittee, enumerate long-term goals and objectives, expand upon some things that have been developed and delve into detail about the assigned

tasks, questions surrounding use of the automated neuropsychological assessment metric, ANAM, as predeployment 204 Service members, and applied behavioral therapy for autism.
Dr. Fogelman's presentation slides may be found under Tab 4 of your binder. Thank you.
Dr. Fogelman?
DR. FOGELMAN: Thank you, and you just did my first two slides, so that will make it easier. The brevity of my presentation is inversely proportional to what I know is the importance of our task and all the folks on the back bench there, the folks on there can feel that very strongly. We really had not done a whole lot yet, which you will see.
That's us, and that's me. I'm the Interim Chair because in a process that many of you would be familiar with, I raised my hand. These are the people on the Subcommittee, many of whom are back

there on the back bench.
I do feel a little bit like I'm about to talk about preparations for a flood, knowing that Noah is in the audience. So if any of you back there want to say something about our meeting or anything we've done, I'd appreciate it.
Do you want to take a second to read who you are, but you have them on the slides?
As Dr. Wilensky said, I'll tell you a little bit about our status, how we're thinking about the long-term, some things we've already talked about, things we've already been asked and then ask you.
We had our organizational meeting on the date indicated. Mostly that was filling out paperwork and getting briefings on ethics, but we also had a briefing from Captain Ed Simmer from the Defense Centers of Excellence and Dr. Joyce Adkins of Ms. Embrey's staff to try to get us started. Between now and the next meeting, there's a lot of preparatory work going on. Again that's pretty straightforward.
I'm actually doing a lot of the leg work. I've

interviewed a number of people in this room, and I expect to interview some more so I can educate myself in my perhaps short-term role. We're

trying to get our next meeting together. We have originally decided that we were going to try to meet twice pretty quickly, in January and March, but it's beginning to look like late January and maybe late March.

Just let me speak a bit about what the next two slides represent. First of all, they represent what I think I heard my colleagues say and what I think might be a way to begin to address our very large task, so don't blame them if you don't like anything that's uphill. Fundamentally, we're going to try to wrap our brains around all the possible things that we might get involved in. We want to proceed, as the oxymoron goes, with all deliberate speed, but we do want to be as thorough and as well oriented as we can.

So the first substantive meeting, which is our next meeting is really doing to be devoted to understanding where we're operating. And that's

what understanding a landscape of psychological health means. These are some of the things that we think we're going to need to learn about, and I know that many of these things exist in print and people will be able to brief us about it, particularly notice about the relationship to other systems. That's something that's been talked about a lot today. I know it's a personal interest of mine and I suspect of many people on the Committee.

Once we get that sort of beginning sense of the landscape, we'll look at some of the rest of the things. We're interested in looking at the relevant research, figuring out what's happening in the rest of DOD and how we can relate to them and learn from them, interact with them in a productive way.

We understand ourselves to be fundamentally or functionally autonomous, even though we report to the Board and through the Board to the Secretary. So we're going to think a lot about setting our own agenda as well as responding to the questions

we've been asked.

These are a couple of things that have come up. I want to say something about leadership

development. There were a couple of conversations this morning about culture and changing cultures. On our Committee we have people who are clinically oriented and people who are interested in various aspects of research, but there are also people who are interested in organizational development and leadership development. So although that particular item was originally thought of as developing leaders within the military, we can probably be of assistance on the cultural change questions.

Even though we've spoken only briefly, there are a number of things that seem to be pretty clear that the Committee generally agrees on. I know I'm supposed to look at this rather than that (indicating), but it just feels more comfortable to do this. There's a very strong feeling on the Committee that we're not only about the business of clinical care -- that is, the repair end of

things -- but we're also about the business of strength-building, of resilience. You know, that's the building part, and in anything that we do we want to pay attention to both sides; as to whether we'll address it as a kind of independent path or not, I simply don't know. We want to keep both things in front of us.

We're very interested in research data and many of us represent folks and institutions who do research, we want to be sure to pay attention, as most people here do, to the basic stuff and the applied stuff. And again, forgive me for the redundancy in this statement about redundancy: We want to look at areas in which too many people are doing the same thing, or might be doing the same thing.

We have already, even before we started, two questions asked to us, so we will at our first meeting talk about how we will answer or at least begin to answer the questions. I won't read them to you, but one's from Dr. Kelly and one's from Ms. Embrey.

Do you want me to wait while you read the slide? Okay, time's up. And there you have it.

Fundamentally, we're just getting started. We

want to know what we have to do, and we're all prepared, taking it very seriously. And listening to what people said today, I feel even more daunted, but we're prepared to work very hard and do what we can.

So with that said, I will ask if there are questions, if there are things that people want to tell us to pay attention to, particularly offer some advice and assistance. And if you don't want to say anything now, I'm sure if you've sent an e-mail to the Defense Health Board, it will get to all of us.

DR. WILENSKY: I had a couple of questions and one piece of advice.

DR. FOGELMAN: Can you do it in reverse order?

DR. WILENSKY: I'll do it. The piece of advice is that you should feel free to raise questions that you think are relevant for your

subcommittee to address and to address them, but by all means please respond to the issues that you were requested to look at as a subcommittee.

DR. FOGELMAN: Um-hmm.

DR. WILENSKY: With regard to those, it may be in the slide that went by quicker than I could read, is there a time line with regard to the request either from Dr. Kelly or from Ms. Embrey?

DR. FOGELMAN: No, but there will be as of the next meeting. As I said, we were just sort of organizing ourselves, shaking each others' hands. But that is something that we will attend to at our next meeting.

DR. WILENSKY: Okay, thank you. Are there questions that people have? Yes, Mike?

DR. PARKINSON: Yes. Mike Parkinson. I really welcome the Committee's comment to explore both baseline at intake -- my words -- and progression through a successful military career of coping skills, resiliency, teamwork. Generations of Americans have said thank God for

the military, because I got into the military I didn't have the skills. I didn't realize I was capable. And we have never captured that in a way

that I don't think is compelling or quantifiable as the immunization, if you will successive stressors.
So having a robust psychological component of the DHB that looks at, quite frankly, what is not an equal representation of mental health in our society, without any stigma saying we are attracting people who are not the highest socioeconomic status sometimes, people who come from some psychological challenges, some childhood events which are very difficult and troublesome.
Accepting our people and helping them see in themselves the things they can do and the things they can improve through the military experience is as much a part as the back end of answering complaints about psychological ill health.
So I really welcome that and ask that you perhaps create a framework for the broader Board and for the American public to understand that this is a

national resource that improves health and improves lifetime productivity and resilience which is very big, as you know, in the corporate sector right now. You are more than your medical claims, you are more than your doctor's visit.
Capturing that in a standardized way is critical.
So I applaud that work and just cheer you on.
DR. FOGELMAN: Thank you very much, and that was much more well-said than I said it, but we will do that.
DR. WILENSKY: Yes?
DR. CERTAIN: I'm Robert Certain. I also serve on that committee, although I regret not having been present for the last time. On this Board is a reminder both as a combat veteran and ex-POW, I was a PTSD and a clergyman. That full, robust approach to psychological help necessarily, I believe, includes the faith communities that our people originate from and go back to.
And so in spite of whatever's going on with our Chaplain Services to understand how they can work

together, it would be -- I think it's very important that we enlist both the chaplains as we have them and also do some training with them to

help them better understand the nature of combat stressors and what role they have, naturally, to play and how they can enhance their understanding of it.

So I would hope that in our future meetings we also kind of try to ponder how it is that we raise the awareness of the clergy of all faith groups that serve in the military as how we deal with our Guard and Reserves as they go back home, to try to enlist that enormously complex system within the country that is there.

In a triage level, that's kind of first defense, or second right behind family members for the addressing of postcombat adjustment issues. The psychological wound is the one we need to face head-on now because we're doing so well with physical wounds. But the wounds that don't show last for a very long time and sometimes do not show up in any way that can be identified by the

person with the wound seeking help until much, much later in life.

It was after the September 11, 2001, that World War II veterans started showing up at Vet Centers in increasing numbers. We have this anecdotal information out there, but I think we can address it with this new generation more quickly than we did with either World War II or Korea or Vietnam, and I would hope that this particular committee is one of my hopes that we can do better.

So I look forward to sitting with Dr. Fogelman and the others in the future and trying to get some more comprehensive answers out there that are not quite so onerous. I think that the very existence of PTSD is a psychiatric diagnosis. As we've discussed before, it can be a barrier to help in the minds of our troops, and we need to find a way to overcome that and find a way around it, to -- if you will, to subvert our troops into getting the kinds of healing that they need and this country needs for them to have.

DR. WILENSKY: General Rubenstein?

GEN. RUBINSTEIN: Just on the heels of the two comments made and help inform this Committee, I would ask you to sit down and spend

some time with the Army's new Comprehensive Soldier Fitness program headed by Brigadier General Rhonda Cornum, not an Army Medical Department program but an Army program in our G-3 Army Operations, which takes a look at the soldier from commissioning or enlistment through separation to understand the skill sets and training and development that's required in a soldier as they go from the very first day on military service to the very last day in continuous training and development in resilience-building in that soldier through every step of a career, whether it's three years or 30 years. And we're very excited about this new effort.

DR. WILENSKY: Could you repeat what that's called?

GEN. RUBINSTEIN: It's called the Comprehensive Soldier Fitness Office, and it's led

by Brigadier General Rhonda Cornum, C-O-R-N-U-M. I can certainly get your her e-mail address now, and I'll share that with the Committee's --

DR. FOGELMAN: I'll appreciate that, but I should tell you that I know one of the members of our Committee, Marty Seligman, has already spoken with some of the folks involved in that activity. He sent me an e-mail about it which I'll be circulating to the Committee -- Subcommittee.

MS. EMBREY: Dr. Fogelman, I have to tell you, personally and professionally, I am so grateful not only for your leadership on an interim basis or a permanent, but also to all the members of your subpanel. You've brought in some world-class folks, and, frankly --

DR. FOGELMAN: How do you define that?

MS. EMBREY: Better than what we would expect. We in the Department have come to a crossroads where health hasn't been defined holistically, as both the physical and mental person, and it took the Mental Health Task Force,

I think, to socialize that cultural change. And although we are in the middle of that transformation, we hadn't had the horses to draw

upon to inform us about how to do that the right way.
And so we look to you to help us truly define what psychological health is because we deal principally with the medical community who says in their own nomenclature: Psychological health doesn't exist; it's mental health. But there's much more than the medical component to building psychological health, and so it's very important to the Department and to me, personally and professionally, to clarify that difference and to nonmedicalize a person's health, emotionally, psychologically, mentally, whatever, and physically.
And so the idea of this fitness not referring to any particular type of health is very important, and particularly the role of the individual in recognizing and understanding how to promote and sustain their health.

So from that perspective I thank you. I look forward to working with you and your people all the time, because we have a lot of opportunity.
DR. FOGELMAN: Thank you.
DR. CAHOON: I just want to make sure, going off Ms. Embrey's talking about holistic that you make sure that you include the family when you're looking at mental health and psychological health, because when you have a wounded Service member, you have wounded family members, too.
DR. FOGELMAN: Oh, absolutely.
DR. CAHOON: And so I just want to make sure that when you're looking at care that we're looking at it holistically, including the families, too.
DR. FOGELMAN: Absolutely, and the person who's been most helpful to me as I try to interim my way through things is Dr. Shellie McDermid, who represents that if nothing else on the Committee -- but plenty more she represents.
DR. WILENSKY: Are there any other comments?

DR. FOGELMAN: Oh, is it a red light?
DR. WILENSKY: Yes.
DR. MATTOX: I am a surgeon, and I tend

on my career, like all surgeons, to deny the terms that everyone's been using the last 15 minutes. But, having said that, let me tell you that 30 percent of our patients that are injured in the civilian sector have a mental health or a psychological deficit. During Katrina, although we had a lot of people who came to us with psychological/mental health problems, the rescuers themself, during every disaster, well- documented, up to 25 percent of those individuals manifest psychological and mental health deficits. That may not have ever been seen before. Even the toughest of the rescuers and cardiovascular surgeons succumb, sometimes unexpectedly. It does not mean unfit for duty. We do not kick them out of the medical profession; we do not kick them out of the residency if they now show some psychological problem. We send them home, and we

treat them. And in our society, the singular most eight-ton elephant in the living room that no one wants to talk about is what we're talking about right now. And it has been a problem for the last 20 years, and our approaches to it first are to define it and to talk about it and not to just sweep it under the rug. Or, if there is -- and I have no idea -- if there is a tendency to move them out of the military to say unfit for duty, many of these people manifest one psychological episode and then it's gone away. And that has to be addressed on the benefit of someone who's had some past history. This is throughout our society, and if there's a good solution that comes up from this subcommittee, it can be applied to every community in America as a model.

DR. FOGELMAN: You're not the only person to have talked about application broadly. Certainly that's something we've talked about, and I guess together we weigh as much as that

elephant, and we absolutely intend to stand up and be in the middle of the room.

DR. WILENSKY: Thank you very much, Dr.

Fogelman. Other people -- Ken, make it quick, we need to move on. If you want to make a quick comment, go ahead.

DR. FOGELMAN: I can listen quick.

DR. KIZER: Well, a quick question and after a question of context. Are you looking at, or do you plan to look at stress reduction techniques that are appropriate in the combat theater other than smoking? The context is that the Institute of Medicine is just finishing a report on reducing smoking in the military and the VA populations, a number of that group. And concommitantly there was an article just published in this month's issue of The American Journal of Preventive Medicine about smoking being a maladaptive stress reduction technique, looking particularly at combat soldiers.

In our work at IOM, we have found an absolute dearth of information on alternatives that folks

in combat situation might actually use, in ergo the recidivism to smoking.

DR. FOGELMAN: Well, I actually think there is already stuff going on, but the answer to your first question is I don't know, but I'd presume so because I don't really know exactly how we're going to understand the landscape and chart it, and I don't know the sequence in which we will address things.

We're probably going to come up with a list that's a long as this room is big and try to figure out what to take a cut at first. But that particular question you might want to address to General Sutton this afternoon, because there is training that goes on for psychologists who are deployed, and that's another small piece of it. I only know that because I went to the training.

DR. WILENSKY: Thank you very much. If anyone has further questions, you can use the next break time perhaps, to share them with Dr. Fogelman or to e-mail them to him.

Our next speaker is Dr. Greg Poland, who you know

quite well. He will cover the activities of the Defense Health Board's Task Force Review of the Department of Defense, Biodefense Infrastructure

and Research Portfolio. A task to provide an external review of the Department's biodefense research infrastructure and portfolio, this group answered a series of questions related to DOD Scientific and Strategic Investments, its processes and procedures related to product development and licensure and evaluated the scientific or strategic return on investment for previous and current research development and training efforts, findings from Task Force meetings and site visits to key bath defense labs were presented in a brief to the Service Secretaries on December 3rd by Dr. Poland. A few Core Board members on the phone were unable to have their questions answered when this was presented, so you may use this opportunity to ask your questions.
We will have this extend the 30 minutes. It was scheduled and will eat into a short part of our

lunch hour doing so.
DR. POLAND: Thank you, Gail. I think I can move it along pretty quickly, too, so let me just acknowledge a number of people, although the slide is missing, who served on this Task Force. It include Joe Silva, Wayne Lednar, John Clements, Wayne Breidenbach, Cliff Lane, Frank Ennis. I don't think I've forgotten anybody.
The Committee benefitted quite a bit actually from John Clements' participation. John's also a certified UN weapons inspector, and it was great, John, to have you on those visits as part of the Task Force.
Well, what we were asked to address are three questions, and I've sort of given each of them a label, so they're a little easier to remember.
But the first was Need, and that is: Was there a national or strategic need for the MSDs to own and operate and into structure and support of mission requirements for defense capabilities both abroad and in the homeland?
The second was Translation: Were the current

processes effective in transferring the results of basic biologic research into advanced products?
And the last was Return on Investment. Did the

current infrastructure provide scientific or strategic return on investment for all of the efforts that had gone on?
The actual surety questions were not addressed by our Board and are the subject of a separate review by the Defense Science Board.
We had a very tight time line within which to work. It really was not conducive to any in-depth review and discussion, so we made several decisions or guiding principles by which we worked:
One was that this would be a very high-level review with interim findings and recommendations.
The second, that the initial focus would be on biologic/biodefense products, so it would be basically vaccines and immunobiologics, not personal protective equipment, drugs -- and those are large areas where the Department has been very successful and very engaged in -- but we did not

address those.
We would focus only on unclassified programs again because of the time line, and later meetings would deal with issues that we couldn't deal with on this one.
Oh, here, it does show up -- and I did neglect John. John, I'm sorry. John Herbold, who is also a member of the Committee. This doesn't always want to advance.
Okay, so we had a number of meetings. First was a teleconference to review our charge and plan of work. November 7 we had face-to-face meetings where we received a variety of briefings from organizations you see listed there. On November 19th, three, I think, flag officers -- myself and John -- climbed in and out of that Black Hawk, me cracking my head on the hatch at one point. It's a special danger for those of us blessed to not have to worry about hair.
But we visited Edgewood, Walter Reed, and USAMRIID, and got to see first-hand the centers and issues that we were dealing with. And then

with the DOD virtual meeting that Gail mentioned, we had presentation and discussion, although some of the members couldn't get their questions

through, as we understand it.
So let me take the three areas, briefly go through them with you. The first question was of need. Our conclusion was that there was no dispute that DOD Biodefense Research was unique and that the DOD needed a BD infrastructure. There were both easy-to-explain tangible reasons for that and some that are a little less tangible. One of the little less tangible ones was we actually felt that, importantly, having that capability provided the perception of a deterrent capability, which was important.
There was also amazing responsiveness and turnaround of military laboratories to threats. For example, during the anthrax letter attacks, there was a huge surge capacity provided to the nation by the military BD labs that would not have been possible absent those laboratories.
The other was that we heard clearly that most of

the labs in academia, virtually all of them in industry, are unwilling to engage in this type of research that has a lot of risk associated with it, and primary among those reasons was there is no profit motive for orphan vaccine. So making a ebola virus vaccine does not interest industry because they're not going to be able to sell it and make a profit. And so there was this issue of buy versus make.
There is a surprisingly high demand for BSL4 containment laboratories. Part of this was driven by the FDA's two-animal rule. So, for example, if a ebola virus vaccine were to be developed, you can't ethically, obviously, challenge humans with the virus to see if the vaccine worked. You can do that with animals and license a drug or vaccine on that basis. And so that has driven a lot of demand for laboratories both for small and large animals that can handle this type of research.
DOD also has some unique, in fact singularly unique, aerosol and aeromedical isolation capabilities, some unique critical agent and

culture archive assets, and they're about the only place in the U.S. where a truly unknown but potentially dangerous and transmissible pathogen

can be sent, they'll accept it and identify it.
For the issue of translation, we found that the basic science research was sound but there were barriers toward advanced product development and licensure. Among those were a complex and unwieldy table of organization that had multiple and separate lines of authority, a fragmented organizations model that strayed from what we understood as industry-best practices.
There was lack of a single high-level person responsible for this, and senior leadership who had vaccine development expertise and experience, some complex management issues by DTRA, loss of intellectual capital oftentimes due to difficulty in retaining these scientists.
This is somewhat driven post-911 by the amount of NIH and other money available to the civilian community who sort of snatched up some of those folks who otherwise would have probably stayed in

the military.
Separate lines of funding from different entities making project sustainability difficult, and I'll have to explain this last line a little bit, but a sense that the processes were more concerned with inputs rather than outputs. So when we'd we briefed, we'd hear a lot about people, square feet, things like that, and a lot less about the actual output, which was the desired outcome in the first place.
In terms of return on investment, this was a very difficult one, needs to be looked at in more depth at another time. There were definitely objective markers of considerable return on investment, but more needed to be done. One was to define a set of metrics by which we would agree to judge this.
It was difficult to try to get a sense of results over time and reporting those results.
We found that there was difficulty in eliminating or killing products that might -- or programs rather that might not be as productive as they needed to be. No systematic evaluation metrics

processes or procedures to evaluate some of those programs. and part of all that difficulty -- and this is a nuance that might note be obvious to

many in the audience -- is that DOD has moved from a goal of develop products to the IND state, which makes a lot of sense for these sort of orphan biologics, to develop an FDA-licensed product. And that is a huge, huge chasm and step to take. As a result, the people process, these expectations and processes in the middle of this evolution were sort of difficult to sort out. Some other issues: Lack of communication between responsible entities, and again we would push very, very hard here for this being a great opportunity for joint programs, and the Integrated National Portfolio is a good start toward that. TMTI, which is the Transformational Medical Technology Initiative, I think, is really a very novel experiment and DOD deserves a huge amount of credit for something this transformational. It is early in their evolution. The results need to be evaluated, and, if successful, generalized. And

we also thought the whole process could benefit from additional external scientific review and input. Bottom line is that the DOD BD enterprise involves thousands of people and hundreds of millions of dollars every year. The clear expectation should be of a tightly focused, highly productive state of the art program with clear priorities, time lines, and accountabilities, and an obvious and timely return on investment to the war fighter and to the nation. In terms of the future, we heard about recent initiatives to integrate the BD portfolio with DHHS, which is referred to as the Integrated National Portfolio, and there're some opportunities there. We need to give more thought to being explicit about what we can and cannot accomplish within DOD for biodefense and DHHS in the interest of jointness. DOD's primary focus here is in preventing, as it should be, morbidity and mortality due to bioterrorism. So it's the prevention aspect, whereas DHHS has more of a

focus on once an event has occurred, what do we do? What vaccines, what kinds of things can we pull off the stockpile to do it? And that is

different, philosophically and conceptually, in terms of how you approach and staff things like this.

So our final point was this observation of a highly dedicated, very hard-working group of scientists and administrators who were determined to make a difference but who were failed by a system that's slow, tolerates complexity, lack of clear priorities, inadequate accountability, redundancy, and lack of experienced leadership.

So our draft early or interim recommendations are that the biodefense research infrastructure be retained; that there be greater centralization and joint programmatic planning; the development of evaluation metrics; sustained and identifiable leader accountability; a mechanism to provide education and training for future leaders; time lines and multiyear funding these.

For those in the audience not aware, a typical

biologic takes one to two decades and about $1 billion for one licensed product, so the idea of getting funding for a year or two or three does not cut it in terms of the length of science that needs to occur.

Collaboration and biosurety, because we saw the physical sites, although this was not our arena, we did recommend that they authorize some sort of a red team to define and exploit the vulnerability, some of which we saw.

And I will end there and solicit any questions you may have.

DR. WILENSKY: Yes?

DR. MATTOX: Would you comment on the need or the feasibility of a joint IRB?

DR. POLAND: That's actually an excellent question, which we hadn't dealt with. I can tell you from being one of the principal investigators for the anthrax vaccine study that's occurring that the lack of that issue alone probably slowed us down by two years. So that is a great idea, and I will record that idea. Thank

you.

DR. WILENSKY: Any other questions or comments? There were some people who had

questions that did not get raised in the November 20th meeting. If you're here and continue to have them, this would be an appropriate time to ask them.

(No response)

DR. WILENSKY: Okay, thank you very much, Greg. Yes? I'm sorry, yes.

CAPT. KHAN: Ali Khan, CDC. Greg, that was absolutely spot on.

DR. POLAND: Thank you. You worry when you're being so direct and the room is absolutely quiet.

CAPT. KHAN: Thank you for being so direct. The biodefense infrastructure of DOD is a national treasure --

DR. POLAND: Yes.

CAPT. KHAN: -- and resource. And we have squandered it. With your last statement that all the difficulties in that system and what they,

besides fixing funding and other issues -- I think it really is critical that, you know, you can't have metrics until you have a vision mission in goals and a real strategic plan on how do to sort of take care of this enterprise, and how you integrate it into what's going on in the United States.

So DOD is no longer alone in these efforts. Even though the mission is a little different from HHS, you know, many of us are working on ebola vaccines, but how do we decide it's going to be a FV vaccine, an admiral vaccine, a DNA vaccine, or viral biparticle vaccine? I mean that has to occur jointly with the full horizon of: These are the candidates we're going to take out to the end. And that has to occur strategically together. So again, excellent recommendation.

DR. POLAND: Thank you for that and absolutely right. I mean we clearly saw the science that's going on in DOD in regards to development of reagents, biologics, and vaccine is second to none. It truly is superb science.

But it falls through the cracks in terms of being directed toward the outcome of a licensed vaccine or biologic because there are so many stops and

starts within the system that are beyond the control of the scientists and administrators working in -- and that's where the jointness, and that's where sort of redesigning, as you were talking about with clear mission and vision and principles on how they're going to do this, would be very helpful.

DR. WILENSKY: Yes?

DR. SHAMOO: Regular laboratories and research laboratories are not known for high safety security, et cetera. Not all of us have done bench research, and this area it requires such a high degree of responsible conduct of research -- that's general term -- because there are estimates that somewhere between.05 to 5 percent of all research and development is sloppy work. And in this area you cannot afford, not even.01 percent is sloppy work. How you inculcate that kind of responsibility on all those involved

in that R&D from Day One?

DR. POLAND: Yeah. Well, it's a very good question. Everybody thinks of the external threat -- that is somebody, you know, breaking in to get a hold of those agents. There's clearly also an internal threat, and there are physical systems, including a two-person rule where no one's ever working alone.

But among the difficulties -- and this is something I think that lay people, the Press, et cetera, don't understand -- for some of the agents we're talking about, the amount of organism that you need is a spot next to the "E" on the penny where it says "E Pluribus Unum." It's not difficult if somebody wants to be evil to try to do evil.

And so the complexity of the programs that you need and the cost of that -- for example, two people always working in a room observed and recorded by a videocamera, those are in place, and a lot of programs to look at personnel and follow them over time to ensure that they're

psychologically stable, that they're, you know, not engaging in something unusual from their usual work habits, et cetera, were commendably in place.

And we didn't -- again, that's the DSB's review, and I've heard their briefing and so I can comment on some of those things. But that didn't seem to be the big issue, actually; the issue is with this fabulous science going on, how do we get it out to the level of a product that can be used and protect the war fighter?

DR. SHAMOO: Can I just comment, because I wasn't really talking about the pathological problems with that kind of research. I was talking really about sloppiness. From among all of us in the bench research that is few percent, some people have even estimated as high as 10 percent, and so I'm not talking about the pathology that there is somebody "evil," and he's going to --

DR. POLAND: I see. You mean --

DR. SHAMOO: Yes.

DR. POLAND: -- laboratory policies and

procedures.

DR. SHAMOO: Exactly. You want to inculcate --

DR. POLAND: What I can --

DR. SHAMOO: -- certain standards are not normal in the regular research laboratories currently in use.

DR. POLAND: Yeah.

DR. SHAMOO: And that's where all your personnel are going to come from.

DR. POLAND: So you may be actually interested to know -- and this was more depth than I'd planned to go into -- but DOD actually holds itself to a higher standard than the national accrediting bodies. So they actually exceed what is required and have been a model for other organizations to look at that sort of thing.

DR. WALKER: David Walker. I have -- the Department of Defense is doing some more about this. I'm on a Department of Defense-sponsored National Research Council standing committee on biodefense, which specifically is trying to assist

in identifying the steps to accelerate the TMTI bringing things to FDA approval. So they really are trying to figure out to do it, and it's not

easy.
DR. POLAND: No. No.
DR. WILENSKY: Any other comments? Yes?
DR. MILLER: Mark Miller. Historically, vaccines are made by state labs and public sector facilities. Massachusetts and Michigan come to mind. Are you suggesting, then, that the DOD establish a public sector vaccine-like company, effectively? And how well would that compete with other type of mechanisms, cooperative agreements, and could the DOD effectively compete on salary structure, career support, long-term issues that would be important?
DR. POLAND: Heady, heady questions, and we really didn't get into that. And there are a lot of creative, you know, ways to do that, and DOD has actually done that in terms of bringing a product to a certain level and then transferring it over to industry. That may take some

incentives to do but can work. But we really didn't examine that part, and it's not a part of our recommendation.
DR. WILENSKY: Any other comments or questions from people around the room? Trip?
DR. CASSCELLS: Dr. Wilensky, I might just say we appreciate the Committee's work and don't take exception to any of it. I think it should be forwarded to the Secretary. If it's done in the next few weeks under my tenure, I certainly will and I'm sure Ms. Embrey will, too. I do want to make sure that, just for the record, I want to say that I don't think we've squandered the opportunity: that we're learning. There certainly are examples of redundancy, inefficiency, and there have been one very famous and deplorable incident where a laboratory scientist seems to have gone rogue and developed mental illness -- due to a mental illness -- and probably was a disseminator of the anthrax episode seven years ago.
Obviously, you know, the Army has taken great

pains to make sure this never happens again, and just to clarify the accountability term, I do want to make sure we all understand that no where has

-- no organization in the country has held health care workers to higher accountability than the U.S. Army. And this is an organization where if patients are unhappy, the boss gets fired. And the boss's boss gets fired. So please understand that the accountability issue is one that we don't just pay lip service to.

Quite a few people lost their jobs 20 months ago on a health care accountability issue, so we do take it seriously, and we will take these results very seriously. That's why this is a public hearing. I had not seen them before, and I'm answering you publicly.

So thank you, Dr. Poland.

DR. POLAND: Thank you.

DR. CASSCELLS: I agree with everything except I think you said "sustained accountability." That means we sustain the accountability we already have, and I would agree

with it 100 percent.

DR. POLAND: Under a single ear. Thank you.

DR. WILENSKY: Thank you very much. We are going to break until 1 o'clock. There will be, the board member service liaison officers, guests, and speakers, lunch will be provided next door. For others of you, there are several restaurants within this complex for you to use for your lunch option. We'll reconvene at 1 o'clock. Thank you.

(Whereupon, at 12:15 p.m., a luncheon recess was taken.)

A F T E R N O O N S E S S I O N

(1:05 p.m.)

DR. WILENSKY: Can we have people take

their seats so we can resume our afternoon session, please.
Okay, the sixth speaker today is Dr. William Halperin. He is currently serving as the Chair of the Department of Preventive Medicine and Community Health in New Jersey Medical School; as Chair of the Military Occupational and Environmental Health and Medical Surveillance Subcommittee. He'll provide the Subcommittee's external review of the risk assessment conducted by the United States Army Center for Health Promotion and Preventive Medicine.
In response to possible exavalin chromian exposures at a water treatment facility in Iraq, on December 12, 2008, the Secretary of the Army received a briefing from the United States Army Center for Health Promotion and Preventive Medicine, USA CHPPM, the Defense Health Board draft report was discussed during the

presentation, and Dr. Halperin was in attendance to answer questions.
Dr. Halperin?
DR. HALPERIN: Thank you very much.
DR. WILENSKY: The slides are under -- the slides are under Tab 6, excuse me.
DR. HALPERIN: Thank you very much. All the members of the Subcommittee are here this morning. There are their names. They'll be available to you to answer questions at the end of the presentation.
My doing that I thought we should have a little motto for our Subcommittee, and I'm trying this one out: Services Provided in Real Time, Evaluation is Retrospected.
So our goal is not a kind of should-have-would-have-could- have blame approach, but rather if there are problems to be found, we view them as learning lessons for continuous improvement. And I think that's the spirit in which we should be approaching this.
The goal for the next 30 minutes is first a very

brief orientation for the DHB to the problem, a discussion by all of you of the report that is both in your list leaf as well as you're going to

hear about, hear modifications, if any, from you and hopefully approval by the Core Defense Health Board of the report.
The charge for the Committee came on October 6 from General Schoomaker, which is to review occupational environmental health assessments at Qarmat Ali water treatment plant of an investigation that was done by CHPPM in 2003. Was the standard of practice adequate, and are the report's conclusions valid? And we will take you to this evaluation, the answers to this, at the end of our report.
As far as background, I'd like to start in Yorkshire, England, where Malcolm Harrington, who is a former Epidemic Intelligence Service with CDC, now professor of Occupational Medicine, did a lung cancer mortality study of all chrome platers in the Yorkshire area. And they have about a twofold mortality for lung cancer. This is

adjusted for smoking. So this is a highly exposed group, exposed for working lifetime and Chrome VI is a respiratory carcinogen.
I'd then like to take you to my hometown, of all places, Jersey City, New Jersey, that while I was growing up little did I know that the gritty town that it was the primary place where chrome ore was milled and chrome was extracted for the United States. The tailings of that chrome that came in, I suppose by ship into New York Harbor, were used for filling in low spots and building houses upon. So Jersey City in Hudson County ended up as the most contaminated Chrome VI area in the United States with some 40 sites that have now been remediated through the efforts of the EPA, et cetera.
Blue is water -- that's the Hudson River. Yellow is areas of low exposure. Medium is green, and orange are areas of very high chrome exposure.
CDC as of September 30th, the AFTSDR, the Agency For Toxic Substances and Disease Registries, did a mortality study of people who lived in Jersey City

from 1976 through 2003, the 25-year period, and looked at mortality by proximity to the sites. So this is not a high sustained exposure like people

who are chrome platers; this is residential exposure, and for males they've come up with anywhere from about a 7 to 17 percent excess of lung cancer in the high exposed areas, and as I recall it's about a 7 to 10 percent excess in lung cancer for females.

Now, the first study controlled smoking; the Jersey City study didn't control smoking. This is by residence. You don't know whether some of these people worked in the plants as well as resided in the area. There are lots of "ifs," but I want to put this in the context of why it is that people reasonably could be concerned about occupational and/or environmental exposure. What both of these examples, though, have in common is very, very long potential exposure, decades of exposure rather than what you're going to see in this circumstance.

So this is Qarmat Ali -- whoops, it goes by very

fast. This is Qarmat Ali and contrary to, you know, thinking of Iraq as a nonurban area, this is the University of Basrah, so this is an urban industrial site. It's much like Jersey City, if you will.

The site was the industrial production site for water, for water, salt water, that was going to be pumped into old wells, which is part of the process for producing oil. So this is part of a program called a RIO, a Restore Iraqi Oil. The site before our military got there was ransacked, the steel roofs came off of the buildings. The ground was visibly contaminated with a yellow dusty material which is sodium dichromate which was used in this as an inhibitor of corrosions, put in the water so that the plumbing wouldn't clog up.

There was a continue contractor presence, and there were successive military units there guarding the site and protecting the contracts for several months.

Now, this is the chronology. In the Spring of

2003, the military started providing security for KBR, which was the contractor. In the summer of 2003, the contractor identified hazards which is

the chromate, remediated the site, meaning they paved it over with asphalt and gravel. And in September or thereabouts of 2003, one of our soldiers remarked that why the contractor was equipped with a moon suit -- basically, it came to the surprise of the soldiers that weren't wearing personal protective equipment -- that very rapidly got to the health provider for our soldiers, who was in Kuwait, who very rapidly went to the site, identified the potential hazard, restricted access, required personal protective equipment, and basically took immediate control of the situation in very rapid form.
September 29th and not very much after -- 10 days after the problem was identified -- CHPPM was in the field doing a site investigation, which again, you know, when we're talking about the realities of getting an industrial hygiene epidemiology group within the field with the appropriate

knowledge and methods for collecting samples, et cetera, is also really quite active rapid deployment. They, CHPPM, completed its work by October 30th -- the field investigation was completed; it took a little bit longer to get results back on some of the laboratory specimen, but at that time the site had already been remediated.
Five years later there was a charge to the Defense Health Board from us to evaluate the effectiveness and adequacy of the CHPPM investigation. On the 17th of October, 11 days later, we had our first conference call. It took awhile until November 12th and 13th to arrange a review of the report because it was classified, so we could only take with us to the classified meeting those of us on DHB who had a security clearance. So there was an impediment caused by the classification.
The report -- we did review the report on November 12th and 13th and produced a report that has been going through review. The Army has -- the Secretary of the Army had a draft of the report,

and I briefed the Secretary of the Army on December 11th on the draft, not on the final because it's still a draft, not a final. We

expect the final to be resolved today, once we get your comments and inclusions, and there's an expectation there would be briefs from for various senators in the next days, weeks, or so.
Now, what did CHPPM do and what happened at the site? Well, first of all, KBR identified the hazard and the elevated concentrations of dichromate. They encapsulated with asphalt and gravel, as I said. They then tested and founded minimal exposure to Chrome VI. The British Forces also did environmental testing, also came up with the assessment that there was minimal exposure, and CHPPM did the same after the encapsulation, although they tried to mimic what it would have been like preencapsulation and found essentially very little Chrome VI except for the offsite, that is, beyond the perimeter fence.
The area in breathing zone samples showed no Chrome VI, so the good news in comparison, if you

will, to Yorkshire or even to Jersey City is essentially testing that went on showed very little potential for exposure. The caveat, of course, is that some of the testing was done after the fact of encapsulation.
Now, as far as medical assessment, histories and physical were done by our Forces there looking for disease that's associated with chronic exposure which, a pathognomonic are chrome ulcers usually around the second knuckle and perforations of nasal septum, which comes with high chrome exposures.
They also did monitoring for Chrome VI, which has to be done really within a month or so of exposure because you can't find it in the urine, you can't find it in the serum if you wait too long. So they did the appropriate testing, which was to look for Chrome VI in whole blood, and the results were basically that the levels were low, inconsistent with the occupational data in the literature and basically that there wasn't evidence of excessive exposure amongst the

soldiers that were tested, which is only one Guard unit at the point when they tested.
The epidemiologic assessment is, as I've just

described, consistent -- not consistent with occupational exposure, and there was no association with length of exposure, as you might think if the longer soldiers were there the more they would have accumulated, and so forth. So it looked like the levels of exposure were fairly low in the soldiers who were at the site.

There were plenty of health risk communications directed to the troops who were there and the Guard units that had returned home. There were seven in total. The results of the laboratory medical evaluations were, quote, "incorporated" into the medical charts, and that's now been confirmed that actually this information hasn't really gotten into the medical charts, so it wasn't one of those things that you get and never put in your medical chart; it finally did get in the historical medical chart for the units.

Now, what were the limitations of this

investigation? Well, one is that there were at least three National Guard units and only one of them that is the latest one was tested. That, to the Committee, was thought to be a reasonable assumption that the other contingents were similarly exposed and would have had similarly unremarkable results, plus the reality of, by the time that the last Guard unit was tested, such time had gone by, such depth of results of biological monitoring of the first Guard units would have been falsely negative, even had there been exposure.

The next limitation is the assessment postremediation. As I've explained, the contractor was expeditious in paving over the area at least inside the fence, so the assessment of environmental exposure after is not an unbiased estimate of what it might have been before.

And the third is the issue of what I call "stove silos," what the military seems to call "stovepipes." It's the delay, the limitations of communicating between different groups that have

responsibilities, overlapping responsibilities in the same area. So what's an example of silos here? Well, one of them is that it would appear

that KRB had information on a potential for exposure at the point where they encapsulated and remediated, and it was a surprise to the soldiers who were on the site. So the information didn't seem to migrate from one group there to another group.

Another area of silos that should be of some concern when you consider that this is an urban area is that while our troops are in there and out of there in short order and levels of exposure inside the fence, now, are well controlled and no evidence of substantial biologic absorption, you have civilians on the outside of the fence, not civilian contractors but civilians on the outside of the fence who are working in the area, walking in the area, who may be there for a long period of time who you can't extrapolate from the results inside to the results outside, and it's not clear that this has been transmission of information

from the inside to the outside.

Our conclusions were that given the war environment that this happened in, given the how expeditious the site evaluation was and the testing was, and so forth, that our Committee felt that CHPPM really did meet the standards of practice for field investigations and occupational medicine. It is very timely, although we will point out, though, that this problem of silos is problematic, and, finally, that the conclusion of CHPPM related to the units that they studied were again reasonable, again one can extrapolate, beyond the fence line, if you will, and there's some chance in extrapolating to the first units, but it was not unreasonable to extrapolate to the first units as well.

We have recommendations that are both specific and general to this kind of field investigation that I'll share with you. The first one is that there ought to be an insurance that the communication of the results of this episode has been communicated to the soldiers, to their health care providers,

and to their medical records, and that this information really has been -- is in their files and will be in their files for the next 10 or 20

or 30 years, as the population ages and as the population develops as we all do, all sorts of naturally-occurring illnesses and injuries. But the information has to be in the charts so somebody years from now has some idea of what we're talking about.

The second recommendation is that all parties really need to see the report of what CHPPM was able to do in the field, so expeditiously one needs to declassify and disseminate the report. The results -- really the only result that apparently caused the classification was the geographic coordinants of the plant -- and I was able to go directly from Google to Qarmat Ali, so that doesn't really sustain, you know, classification at this point. So it's one of those things that needs to get done.

The third issue is the development of the case study for training. A lot of things were done

very well in this investigation. A lot of challenges came up that I think were handled very well, and the question is whether those people who handled this investigation were exceptional or whether this would essentially be the standard of care if you repeated this, or repeated it in other circumstances. Well, there's no way of telling that, so one of the ways to do this is to develop a case study and have those people who would be in a position of responsibility work through the problem artificially, if you will.

The next recommendation, specifically, is that all the silos here, including the National Guard units, the contractor, and local public health, that is, local Iraqi public health, needs to be debriefed on what the situation was and is and could be, et cetera, so there's common knowledge there amongst all parties about what the situation is and what was done, needs to be done, et cetera.

The fifth recommendation is that there ought to be a simple registry established which has the names of the people who were at the site, any

information about how long that they personally were at the site, et cetera. The medical information. This is valuable years from now if

there should be, per chance, some assessment that it may be more of a hazard than it is projected to be, or if there's an individual who has an illness. Lung cancer is not that unusual a phenomenon.
One needs have a registry to know who was there and who wasn't there. A registry doesn't mean that one should launch off into some detailed cohort morbidity study or mortality study at this point, but it is the basis for that kind of follow-up, and if you don't do it now, it may be impossible to establish a registry later.
We have general recommendations. The foot soldier needs to be trained at some level how to recognize and avoid industrial hazards. Walking through yellow cake, essentially, is something to be avoided; it should be part of one's training. It refers, though, not just to yellow cake but all sorts of industrial hazards that a soldier might

come upon in the field.
The other reason to train the foot soldier and their leadership is because there's a more, sometimes even higher risk, which is avoid the de minimum chemical exposure and incur the much more substantial military exposure; that is, the projectile lead rather than the environmental, and always to avoid the chemical and accept that hazard of the military bullets, basically. It's not an assumption. This needs to be weighed in the theater.
The third recommendation that's general is that we need to ensure in-theater capacity for initial investigations. This one went well because there was an occupational physician, I believe -- or I note that there was an occupational physician, but I believe it went well because that person was in the field and were able to understand what to do quite immediately, and essentially pull the trigger on requesting the CHPPM investigation. So it all went very rapidly. So it has to be people in the field, there have to be enough people in

the military in these environments to do this.
It looks like we have two "3's" so it's actually No. 4, at home base, that is, there have to be

enough toxicologists and industrial hygienists, epidemiologists, and they have to have enough access to industrial experts in the country with, you know, thousands and thousands of processes that go on in industry so that given whatever is found in the field, there's some line of defense at home who can be called for backup expertise, and they in turn have people in industry and in academia and wherever to ask pertinent questions on this well.

That takes care of the third and the fourth recommendation.

The fifth recommendation is that there are times at which both in real time during such an investigation, CHPPM may want advice on how to proceed with an investigation or affirmation that they're doing the right thing or whatever, and, in retrospect, there's also a time when such advice and evaluation is valuable. So we ought to set up

or suggest that there be set up the access to an advisory board, if you will, or to DHB such that this kind of advice can be given in real time, and that we prepare for it such that we have more than three or four of us with security clearance at any point in time so that those giving advice can know what they're giving advice about.

The next recommendation, which is general, is -- this is throughout life, throughout academia, but also in the military -- we need to learn how to bridge these silos and stovepipes because they incur, they cause us to incur delays that's a delaying of information, a delay in accurate and full information, and they get in the way. So we need to figure out how information can be transmitted across silos.

And, finally, the system for classification and review of classification, this is really probably the most Don Quixote recommendation of all, there needs to be a review of how to get things declassified or not classified, perhaps in the first place, so that when they are the subject of

the review, it doesn't stymie that review. So there's a whole issue of declassification.

Now, what I'd like to do is ask for other

subcommittee members, if they have additional comments that they'd like to make to make them now, open the floor up to questions for the Subcommittee from you all. If there are any proposed modifications to or report, we can discuss that, and then move on to approval by DHB of the report.

Wayne?

DR. LEDNAR: Wayne Lednar. One of the very practical examples of silo-busting is where DOD might turn to its sourcing, its logistics, expertise. Whose who were writing the contracts with contractors who were doing this work in theater to the extent that it is the expectation of the Department that should this kind of unexpected event occur, that it will be an expectation in the contract with contract language included that they talk to the Command in the area, or whoever the right people are. And I

think in the absence of some of that -- call it legal language -- it either didn't occur to those on the ground or there might even have been advice provided from a distance to suggest we better understand this before we have a communication officially. So anything that can be done, structurally, to support those on the ground forward, I do think would be very helpful.

DR. HALPERIN: Yes, Ed?

DR. KAPLAN: First I'd like to compliment you on an excellent report to the point, facts available and done very well. My question's a little bit off to the side, and that is my understanding is that in Basrah that was mostly the home of British troops. Is there a difference between what you found and what was found by the British, because that could have implications for your final report?

DR. HALPERIN: Yeah, the results of the Brit for environmental assessment and the CHPPM environmental assessment inside the perimeter fence was basically de minimum exposure that was

totally consistent. It would appear, though, that the CHPPM did sampling outside the perimeter fence as well, so there's an absence, if you will --

there's not an inconsistency, there's just this, as I remember, there's no data from, like -- that information, though, is valuable information for the local population. So it's not an inconsistency, it's just a realm of the sampling that was done.

DR. KAPLAN: Kaplan. Is that in your report about what the British also found?

DR. HALPERIN: Yes. Yes, in the summary fop the environmental sampling. Yes, Ellie?

MS. EMBREY: Did your subcommittee have an opportunity to review the deployment health instruction that DOD published no this subject matter?

DR. HALPERIN: The report that actually went into the medical chart, is that what you're asking?

MS. EMBREY: No. There's a deployment

health instruction out to the surgeons, the Department on the scope and responsibility of different parts of the Department as it relates to eschewing health in a deployed environment. An environmental sampling and identifying and notifying and all of that information is covered. I was just wondering whether or not you were aware of it, and is there a way I could provide you with that so that you could comment on how that instruction might be complimented by gaps, because this obviously -- I mean there are some things here that are very important, and I would like to build on that. But I also don't know how much of the details of your subcommittee's work, and you might be able to help us with that.

DR. HALPERIN: I'm sure we'd be happy to review it. We didn't review -- these aren't like generic advice on how to handle the situation. We didn't review it, but certainly in the next phase of what we do, which is the kind of the overall view of this risk assessment process, it sounds very relevant.

DR. MATTOX: My question relates to your fifth specific recommendation on the third from the last slide relating to the registry. Do you

have recommendations on the ownership and where that registry should be housed? I have familiarity with the injury registry that is often housed and owned by three or four different agencies making it basically unusable. So that if we have a registry, it must have an owner, and that owner must prudently disseminate those people who have need to know.

DR. HALPERIN: Absolutely. There are registries for other exposures with DOD, and the best advice would be whoever has a management responsibility for those registries. This ought to be an add-on. You don't want an orphan registry floating out there because 10 years from now you'll never be able to find the registry. Now, as far as who has it, I don't think I can comment on that at this point, who has responsibility for registries. I know that there's some whole millennium cohort, but somebody

else is probably better --

DR. WILENSKY: Ellen indicated she was able to respond.

MS. EMBREY: On the advice of the AFEB and the Defense Health Board, the Department did create an Armed Forces Health Surveillance Health Center, and the trauma registry, all of the major registries for the enterprise are to be managed out of that Armed Forces Health Surveillance Center. It is the enterprise authority for these kinds of things. So if we accept this recommendation, then what we would have to do is to identify a business process for setting up a, quote, "small cohort of registry," and making sure that it's available to those who need to know. But we did create a enterprise authority, a single point of accountability for registries in the Department.

DR. WILENSKY: Adil?

DR. SHAMOO: Adil Shamoo. I may have missed it, but did you say anything about the exposure of the local population and whether we

are going to give them any advice or not?

DR. HALPERIN: Well, I said something about the exposure of the local population, which

is the environmental exposure outside the fence line was found to be -- there was found to be exposure out there, and that there were -- there was a comment in the report that there were civilians walking out there.
I did also point out that I think the silo problem has gotten in the way of transferring that information to the local public health.
There are lots of ways to do it. It's in Basrah, so there is going to be some local health -- but I also, it just happened to be on the -- in the blog-o-sphere, and I was looking at Ward Casscells' blog the other day, and I saw that he had met recently with public health school leadership in the United States talking about building public health infrastructure maybe even at school in Iraq. So there are ways to transmit that information and encourage transfer of that information.

DR. WILENSKY: John, did you have questions?
DR. CLEMENTS: I did. John Clements. I had been repeatedly struck by the observation that it was the troops who noticed that the KBR folks were wearing protective equipment and brought that to the attention of Command rather than vice versa. And I think it's one thing when you're moving through an area on your way to engage an enemy, and that's where the troop ability to recognize and avoid industrial hazards would be particularly important. But once you get into a situation like that, I think Command has the responsibility to ask if there are any hazards in the area that should be reflected back to the troops.
So somewhere in here I hope we can reinforce that, because I think that was a major failing here.
DR. HALPERIN: Well, that it's again the silos issues. Wayne has addressed this issue as far as contract language. There's a communication-sharing ethos. It is an issue that

needs to be addressed, and, quite honestly, should be one of the elements if one develop a case study out of this is, you know, you can't have people

treating the same patient in different arms.
DR. WALKER: Walker. Does full mention of a registry involve any HIPAA issues?
DR. HALPERIN: Within the military? I'm not familiar with HIPAA restrictions within the military. For public health, you know, HIPAA does not pertain to surveillance issues as much as it does in clinical medicine, but within the military it's not. I don't know.
DR. WILENSKY: (Inaudible).
DR. RUBENSTEIN: I'm David Rubenstein. Before I get to my point, the answer to that question is no.
We have a number of registries, and HIPAA does allow for a certain military waiver, if you will, to ensure that the health of the Force is protected.
On to my point, our briefings to Congress start on Monday a week, the 22nd. The work of this

Subcommittee, Madam Chairman, is important to informing those briefings. We certainly appreciate the work and just speaks once again to the value and importance of this Board and its members to care for the health and welfare of America's sons and daughters, and we want to say thank you.
DR. WILENSKY: You're very welcome on behalf of the whole Board and individuals on the Subcommittee who have worked so hard.
Are there other questions or comments?
CMJ. HOLLAND: Ma'am?
DR. WILENSKY: Yes?
CMJ. HOLLAND: Command Center Major, retire, Larry Holland. Great reports, and the last time we talked about the idea that we really want to make sure that this gets in every serviceman and woman's record because, you know, for the Guard and Reserve, especially -- these are Guard and Reserve units -- we've crossed level folks from a lot of states, so we're only mentioning three states, but I bet you there's

multiple states involved, plus looking at the time frame when these units returned, I bet you a lot of their individuals have now retired so they're

out of the system, and individual augmentees. So we have some challenges.
The last point is, let's not forget our multinational brothers and sisters out there, because they do a great job, and I think we owe it to them to provide the report when it's approved.
DR. WILENSKY: So noted. Members of the Core Defense Health Board, this is, as you know, a sensitive issue. Is there anyone who dissents from accepting this report as you've heard it? I've not heard anything, but I wanted to make sure people had an opportunity to register it if you did.
(No response) Regard that, then, as approval by the Core Board,
And go ahead and, General Rubenstein, good luck.
DR. RUBENSTEIN: Thank you.
DR. WILENSKY: Our seventh speaker today is Brigadier General Roy Sutton. General Sutton

serves as the Director of the Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury, and is the Special Assistant to the Assistant Secretary of Defense for Health Affairs. General Sutton's presentation slides may be found under Tab 7 of the binders. General Sutton, welcome.
BG. SUTTON: Thank you so much, Dr. Wilensky, Ms. Embrey, distinguished guests. Thanks so much for providing me the chance to be with you this afternoon. Please refer to your slides as reference, but I won't be using them today. I just really, in the few minutes that we have, I'd like to give you a brief overview of where we are with the Defense Centers of Excellence, where we're going, and to get your ideas, to get your thoughts, to get your questions, get your input.
First of all where we are: We just passed our one-year anniversary. That is to say that on 30 November last year we opened our doors -- and I just thank Ms. Embrey, Dr. Casscells, Dr. Kelly,

the entire Health Affairs TRICARE management activity, as well as the Department of Defense at all levels. The leadership and support has been

phenomenal. What that meant was that on the 1st of December we had a phone number, a receptionist, a part-time chief of staff, and myself -- and a huge mission in front of us but great support. The foundations that LOA2 and the entire Senior Oversight Council had put together served as a ever foundation for us, but, of course, that was informed by the incredible work of all of the various task forces and commissions, and I'd like to particularly recognize Dr. Shellie McDermid -- I saw your name here, Shellie. Great, with the work of (off mike), with the Mental Health Task Force, and that now we are in the position of really being able to implement and make things better because that's what it's all about. We have pulled together over this past year -- it's been a time of building the team and growing the capabilities, so we've established directorates headed by key leaders from each of

the Services, phenomenal support from the Surgeons General and from the Senior-most leaders. In fact, I just came from this morning a meeting with the four Vice Chiefs and staff, and I will tell you what a tour de force. I just can't even being to tell you what it means to have that kind of support behind our efforts. It is that important. Well, what we've done is we've put together several directorates, anything from resilience, to education and training, to standards of care, to research program evaluation, to PELA health and technology because, after all, it's so important for us to be able to reach out to those remote locations, particularly to be able to connect with our guardsmen, our reservists, our family members, our troops, our leaders are all over the world,as well as the clearing house, a clearing house where we can become the Department of Defenses open front door for all concerns related to psychological health and traumatic brain injury. We have also looked around the Department. We

realized early on that this challenge was far bigger than any of us within the Department of Defense, of any of us including the VA. As far as

we have worked together, it's phenomenal. We've got a VA deputy Sonia Backman, the VA's best and brightest who is assigned to the Defense Center of Excellence.
But we realize that this would be well beyond the efforts of the Federal Government, would go well beyond our TRICARE network; it would go into the nation as a whole and around the world. After all, there are things we need to be learning from other countries and things that we are learning.
And so we thought, well, let's take a page out of Gurney's Play Book, let's become that change we want to see first.
And so we looked around the Department of Defense, and we found centers of excellence that were already in place doing incredible work that had never really been, oh, palmed or budgeted on a regular basis, hadn't really been able to synergize or fully take their results up to the

next level, and we thought this is our opportunity. So we did, we brought in four existing centers. The Defense Veterans Brain Injury Center led by Air Force Colonel Mike Jaffee, incredible reputation of this organization and what they've done over the last 13 years.
Second center, Center for Deployment Psychology. Dr. David Riggs came to us from the National Center for PTSD, incredible job, just three years in operation now, but just work and it takes a psychological health training, not look just to our psychological health providers but well beyond, primary care. In fact, Mike Jaffee is back there right now. We know that whether it be traumatic brain injury or psychological health concerns, it is an integrated team approach. There is no one specialty that has it all.
The third center, we pulled together the Deployment Health Clinical Center made by Chuck Engel. This has been in existence about the last 14 years, came out of the early "Go For" Illness Studies and has really built a phenomenal ability

to both do cutting edge research, and the latest research published just this last fall had to do with acupuncture with PTSD.

Chuck and his team, they run a three-week regimen throughout the year for both PTSD as well as medically unexplained physical symptoms. Folks around at the (off mike) just aren't getting better, as you might have hoped that they might. Come together for three weeks regimen: Best of Eastern medicine, best of Western medicine, truly an integrated team approach that gives them the tools, gives them the structure, brings in their families -- we know how essential their families are -- and gives them hope.

In fact, there was an officer earlier this Spring at Congress who testified as to how this program had saved his life. At our Real Warriors Conference just last month at the AMSUS meeting, we had a family member there with her husband. They both said, "This program has saved our lives, saved our marriage."

The fourth program, Center for the Study of

Traumatic Stress, 20 years in existence led by my former boss, Bob Ursano, retired, Air Force psychiatrist, did a lot of the seminal work -- how are you doing, sir, speaking of Air Force? -- a lot of the seminal work likened to pilots coming out of Vietnam, POWs, his Center for the Study of Traumatic Stress has been involved in every major disaster in this country's history over the last 20 years. So phenomenal expertise, bringing them together.

The fifth center, we established a brand new center because we knew for telehealth and technology, it was really going to require our concerted effort to be able to reach out and tap into these emerging pathologies, bring tomorrow's solutions into today's. I would recommend to you, take a look: afterdeployment.org is one of our recent tools just rolled out this summer. It is our first sort of down payment working towards a "Sim Coach," and the ability to harness the best of artificial intelligence, expert learning, neuroscience, voice recognition in simulated

conversation, headquartered in Fort Lewis run by retired Colonel Greg Gum.

The sixth center -- I'm so pleased to have Jim

Kelly with us today, Chairman of the TBI Subadvisory Committee for the Defense Health Board, as you know a renowned behavioral neurologist, and we are so thrilled to be able to welcome him on board as of the first of January as our new Director of the National Intrepid Center of Excellence, which that modern-day founding father, Mr. Arnold Fisher, has dedicated his life, fortune, and sacred honor to rallying his fellow Americans to contribute money towards building a center that will be the home of our national and global network, and will serve the needs of our troops and their family members with psychological health and traumatic brain injury concerns, just as the Center for Intrepid that he and his intrepid and fallen heroes have already built in San Antonio.

So that's the line in terms of structure, but where are we headed? You'll see in your notebook

that there are a number of things that we've done already, but I will tell you, moving out from this year of building the team, the concept, and growing the capabilities, we are now launching into a year of delivery and improving as we go. We cannot wait for the perfect solution set; we have to deliver what we have now and improve as we go.

I had a chance to talk with some troop out at Fort Hood last Friday. They had just come through the Warrior Reset Center, which is a two-week program that brings in GILGA. REIKI, acupuncture, biofeedback. (off mike)... to sit down with these troops ranging in range from a sergeant major down to a specialist. He closed the door, let the staff in the other door, and I asked him, "What do you all think?"

He said, "Well, ma'am, we thought it was a bunch of hocus pocus to begin with, but we knew it was our only chance." One soldier said that he had come to the Center because he had woken up one morning to find his wife cowering in the corner. He was underneath the high-boy dresser. She was

crying, scared to death. He said, "Why am I sleeping under the dresser?"

She said, "You work up last night and were

screaming at me. Surely you remember."
"Incoming mortar, ordering me down." Well, he didn't remember. And we know that for repetitive exposure to life-threatening trauma, whether it be from the experiences that Sophocles wrote about with the Trojan wars, or whether it be for more recent experiences, World War I, World War II, Vietnam, and this conflict, we have got to bring every tool, every resource to bear.
We know that for unknown (off mike) conditions, yes, we already have clinical practice guidelines, we're all aware of that. We know about the longed exposure and cognitive behavioral therapy, and we're also aware that, like the civilian world, we've got a tremendous gap to close to make sure that folks are using the guidelines that we have.
This year for the first time we're so pleased that we finally had a single clinical practice guideline for the management and treatment of

concussion, mild traumatic brain injury. In a deployed setting, that's now up on the joint patient tracking system, and as of January we'll have the revision for the mild traumatic brain injury concussion, CPG in the nondeployed setting.
We're also very reassured by the recent Institute of Medicine report that came out, and, of course, the VA had commissioned them to really look at the best practices in terms of screening and surveillance and TBI research, and they came forward with a number of recommendations. It was very heartening as we reviewed that report and that recommendation. Yes, of course, we can always do better and we're continuing to make our best today better and better and better; but every one of those recommendations, which are already either we've implemented them or we are already in the process of implementing them.
So we're on a journey. Where are we in this journey? I look at it like this: I feel a little bit like Churchill at the Battle of Britain when he said, "This is not the end. This is not the

beginning or the end, but it is perhaps the end of the beginning." And so this is a time as we move forward with the help of great folks like Marty

Seligman -- I saw your name where you'd -- someplace, Dr. Seligman, the granddaddy of positive psychology -- he's working with us and others. But we can develop a common lexicon so that we can communicate what we're doing.

I think of the plebes at West Point earlier this fall. I went up to one of the psychologists there, Dr. Mike Matthews and said, "Dr. Matthews, we know you're a psychologist, we've got a question for you: When we waved our hands, we knew that we were entering the Army at a time of war. We expect to be deployed. But this whole PTSD thing, I guess we just kind of have to expect that we're going to get that, too, right?"

That's the challenge that's before us. The reality of our challenge is tough enough, but what makes it even tougher is when we're not even communicating reality, which is, of course, that while many of our troops coming back from these

repeated deployments will have posttraumatic stress, many of them will have issues with depression and anxiety. We know that PTSD is not the only thing, that's why we didn't name the Center the Center for TBI/PTSD. If we resolved all of the issues related to posttraumatic stress today, it would be less than half of the psychological health issues that concern our troops, to include pain management, to include substance misuse.

And so we are on a journey. We are launching forward with a consortium this next year. Congress has been very generous, we've got research projects that are underway, $300 million from the first year that have gone out. Those research projects are in progress. We've got a research consortium that the Center is leading and integrating.

We've got the research, the clinical consortium, and we've got another consortium for promising practices that we are rapidly moving forward with this coming month, because when it all comes down

to it, we're all in this together, and it's not just about the health care sector. This is way to important -- health is way too important to be

left to the docs; it's about the faith communities; it's about the employers; it's about the teachers; it's about the families; it's about the policy makers; it's about keeping face with our warriors and our families and our nation. And so I look forward as we go down this journey and as we work to keep faith with our nation to set the example, to show that the medical model of illness, as important as it is, it has not served the larger cause of health very well. And so we see the work that we're doing in conjunction with the rest of the Department's efforts as really being part of that tipping point that can lead to a model of wellness and health for the nation. Let me just close with words that I review just about daily, words that came from a young soldier several months ago. We were at the Army-Navy Club, and he was down from Walter Reed as a wounded warrior, and he was there with several

leaders, folks who were very active in supporting the cause of wounded warriors. As he reminded us, he said, "I didn't lose my leg, I gave my leg for my country." And so we started talking about the way ahead, and, you know, as you talk with warriors and their loved ones, you realize just how enormous this challenge is because although this particular soldier was still in the DODO system, many of them are wounded warriors who have been wounded, ill, or injured only in this conflict. They've already gone through the DOD system of care, and the VA system of rehabilitation. And when it comes to (off mike) that reintegrate in their communities of choice, they fall off a cliff, which is why we're going to be hosting a Megacommunities Forum this next year so that we can imagine the future, the next 20 years of what it is to care for warriors and their loved ones and how we, as a nation, can support that. So back to this young soldier. Someone in the group said, "You know, I'm kind of worried. The

election's coming up, and they looked at me and said, you know, like you, you had a reasonably promising career before all of this. Don't you

know that the Department just looked at this as an election year ploy? Don't you know that you're just here, and you're going to be plucked away, and it'll be like everything else with DOD that, you know, great leaders, great energy, but then, you know, no continuity of leadership, and we're left holding the bag?"

This young soldier was listening to that. There was a Vietnam vet who was there. He talked a little bit about what happened after Vietnam. Finally, the soldier looked at me, and I looked back at him, and he said, "No." He says, "I don't believe it. I don't believe that my nation is going to turn its back on me and my buddies." And I looked at him and said, "Roger that, soldier. You're my boss. You're the reason we exist. Let's go on this journey together."

Thank you so much. God bless. Any questions now? Sir?

DR. WILENSKY: Any questions from the members of the Defense Health Board?

DR. SILVA: Yeah, I have one.

BG. SUTTON: Yes, sir.

DR. SILVA: Silva. Thank you for that very moving rendition of what's occurring. We have the handouts here. Are we going to review them at some point? Or --

BG. SUTTON: I'd be happy to address any questions regarding the handouts, sir.

DR. SILVA: Well, I only have two.

BG. SUTTON: Sure.

DR. SILVA: One is, it's mentioned Manhattan Project. That's a very bold name, and, in fact, you have two types of Manhattans.

BG. SUTTON: Sir, can I come over there and see (off mike)?

DR. SILVA: I couldn't answer that. And then the Center of Centers, it's midway through your handout, it's -- I really can't read it, but it looks like a lot of operative descriptions, what occurs in each center. So to save time, if

we can get that blown up, that would be helpful for us to see --

BG. SUTTON: Yes, sir.

DR. SILVA: -- the overarching program.
BG. SUTTON: We will absolutely do that, and we can go into as much detail as anyone would like. We've got a concept of operations that goes into "nitnoy" Detail, but we certainly wouldn't have given you a single slide that you can read, sir [sic], no question.
Let me just get back to your original point on the Manhattan Project. When I briefed the Vice Chiefs this morning, I started out by saying, "Gentlemen, thanks so much for allowing me to be here, let me start out by saying each of us wishes it could be five years ago. No question about that, but it's not. It's now, it's here, let's go eyes forward, roll up our sleeves.
"What we need is we need an MWRAP, focused urgency mindset that is imbedded upon a Skunkworks innovation platform that is enveloped with a Manhattan Project level of energy urgency and

effort." And they completely agreed. That's that reference, sir. Thank you.
DR. WILENSKY: Any other questions?
BG. SUTTON: Yes.
DR. MATTOX: In the handout material, you talk about prospective randomized trials. Are those among active-duty military personnel and, if so, in order to get world-class -- where's Ken Kizer -- prospective randomized trials are important. There is a perception among many people that prospective randomized trials cannot be done in active duty military. How did you do that, and how can we extrapolate that to other areas of subcommittee work?
BG. SUTTON: Great question, sir, thank you. We have not yet done it; we are doing it, and that's another reason that the fire power from the Chief is going to be so important, because, as we talked to them this morning, we set out, and, you know, one of the things that we did this last -- earlier this month is we held the first- ever hyperbaric oxygen treatment consensus conference.

There's been a lot of debate about this issue going back and back and forth for years, but there just wasn't research to tell us what role, if

any, hyperbaric oxygen has for traumatic brain injury.
So we brought together 60 folks, scientists brought together their pilot data, we had the group -- this is not just from the Services but from around the country, round the government -- and the consensus was, hey, we can move forward with an RCT within this next calendar year. So what we've done is we've put together a time line. It's an ambitious time line, to be sure. We will have the proposal for this study, it'll be a 15 to 25 site study, and it will have one arm that will look at concussion or mild traumatic brain injury, six months of symptoms in duration as a minimum for inclusion criteria; it will have one arm that will deal with moderate to severe TBI, again with symptoms great than six months in duration, and I've asked for an arm with PTSD alone, again with symptoms greater than six months in duration,

which, of course, the sham element built in as well.
Here's the kicker. As you well know, the thought of getting together a multisite study of this type and to launch it in April when we're submitting in March is absurd.
That's why I get back to the Manhattan Project. One of the things that we're going to be identifying over these next few days is to figure out, how can we come up with a common IRB? Why don't we take the toughest, knarliest, most stringent IRB that currently exists from the services and say, listen, let's have it pass this IRB, and if it can pass this IRB, surely we can migrate it to the other sites.
We're not there yet, sir, but that's exactly, you know, if we don't put a high mark on the wall that sounds absurd, we'll certainly never get it, but that's what we're aiming for the first arm of the study of the first base of the study, will be approximately 200 to 250 subjects brought from all over the military to the various civilian and

military sites, the second phase of the study likewise, a second arm with 200 to 250 subjects.
Jim, anything you want to add to that? I know

that you've certainly been part of that discussion.
Michael? I've got Mike back in the corner. Mike Jaffee.
COL. JAFFEE: The question about randomized controlled trials, when we talk about randomized controlled trials in the world of rehab medicine, it's been very difficult.
BG. SUTTON: Yes.
COL. JAFFEE: Take out the military, not even counting a DOD, even in civilian medicine there's been very few randomized controlled trials in rehabilitation medicine.
Using this network in collaboration we have between the VA and the DOD, we've actually been able to complete some, so in the year 2000 we published the first ever randomized controlled trial of a rehabilitation modality, this cognitive rehabilitation. We were able to take the results

of that and actually complete another randomized controlled trial focusing in on the population which may benefit more.
Those results are actually being released tomorrow. There's going to be a press release from the Department of Veterans Affairs. It's already posted on the Archives of Physical Medicine and Rehabilitation. But again, it takes time, it takes planning, and it takes coordination. And it was only through this collaborative network that we were able to complete this type of endeavor that's been challenged, not just in the DOD but in the civilian world.
Another effort which has been launched that we're doing with DECO is looking at a randomized controlled trial of the use of Ritalin for the management of severe traumatic brain injury and attention. It's a common medicine which is being used by clinicians, but there's never been a Class 1 randomized controlled trial looking at it.
Because we have this network of these VA hospitals

in this population, we are able to do that, but it requires coordination, it requires partnerships, and a lot of what we've been working on over the

past few years is reaching out and developing more of these relationships and partnerships so that we can increase our network for randomized controlled trials.
An exciting example of that is just what General Sutton was talking about, was being able to do that for the modality of hyperbaric oxygen therapy.
BG. SUTTON: And the problem with what Mike mentioned that's just unacceptable to us at this point is the first RCT that he mentioned was published in 2000. The second is in 2008. We don't have eight years to really put this together, which folks have told us, you know, you can't possible do it in that time period.
I don't know if we can or we can't, but we know that we'll have the proposal completed. We know that we've brought the country's leading experts together, and we know that they've reached

consensus, and so now we've just got to figure out, how do we accelerate using a common IRB so that we can perhaps serve as a model?
I know that National Cancel Institute's already led the way on this. We're very interested in learning from their experience, but we also know that we've got troops that their family members are suffering right here, right now today, and so whatever we can do to accelerate it, we'll share with you our progress on that. But that is our plan and more to follow.
Thank you.
DR. WILENSKY: Mike?
DR. PARKINSON: Yes, General -- Mike Parkinson -- thank you.
It would be very useful, I think, going forward in order for the DHB and the immediate groups that you deal with -- and again I think it was a good editorial the other day in one of the newspaper saying we create a czar when the infrastructure that we currently had doesn't work. And czars that were created, none of them appear to work at

the governmental level. So I always get worried when I see center of centers.
And actually, I even get worried when we create a

center because it says that, left to its own DNA that the structure as it currently is doesn't give enough emphasis, so we create a center.
Having said that, the balance of your portfolio in terms of randomized controlled trials, research, Ritalin, the rehab world, what we can do with RCT -- which is clearly important -- but I'm going to start with a no hypothesis and say that if we don't understand the natural history of most of these disorders, because they have not been researched in the past, we have not funded them -- I just saw The Best Years of Our Lives movie.
BG. SUTTON: Yes,.
DR. PARKINSON: It was about World War II that's came back, and I guess didn't assimilate very well. It's a social, environmental, family, cultural, community thing as much. So can you state a little bit about the relative balance of what we're doing in social and behavioral

descriptions of the natural course of the disease and successful reintegration. So do we have 150 people who have met some criteria of the three disorders that we now call "disorders," who actually are doing pretty well, in words that we can describe that?
And then, secondarily, it would be very useful to me at any rate -- I don't know about the Committee -- to have a portfolio approach to your activities in the relative areas that we consider to be traditional medical R&D, functional PET scanning of people who've got it, people who don't, and what was the Ritalin effect on the PET scans, those types of things. If you've got the money, I'd do those studies.
But the other end, where is the balance of your funds going to community reintegration of 25 people who have these diagnoses in Topeka, Kansas, where there is no military facility, and there might not even be a VA? What's going no with those people?
So because, as is, it's a, you know, a splatter

against the wall, but there needs to be a construct that I think, if this could be useful, in buckets that helps us measure outcomes.

Because this will be rife in Congressional Oversight money thrown at it, is rife about creating studies and money to research centers. We've seen it in Persian Gulf I; we saw it in Persian Gulf II, and this has all the feelings of that unless we get our arms around it in a very stable construct that we can all buy into here to show we're making progress.

I think it's in there somewhere, but I'm asking for more clarity.

BG. SUTTON: Certainly. Thank you. First of all, we are reviewing the results, the date of the Millennium Cohort Study, and I think that will be able to inform us somewhat. We also know that whether it be traumatic brain injury or posttraumatic stress and other psychological health concerns, we need a longitudinal -- and we're starting both on the psychological health and on the TBI front -- a 15-year longitudinal

study that will help to get at some of those natural history and course of development questions.

Because this part of the problem is we don't have a reference baseline population for comparison right now, meaning to say that we don't have a population of, you know, 22-year-olds from 20 years ago who had this kind of repetitive exposure of blasts, of trauma, of repeated grief and loss.

But we do have -- we do have what we've learned from the Vietnam head study, we will have what we're learning what we're going to learn from the 15-year longitudinal study.

But more than that, in the very year term, right here right now, we are launching what we're calling the Warrior Wellness Innovation Network, working with the Samuel Institute, Dr. Wayne Jonas and his team, so that what we can do is, we can -- we can really encompass the full spectrum ranging from resilience from Day No. 1 building resilience with tough training, helping our troops and our family members understand what are the normal

human responses to trauma. To educate them, to give them a framework, and then leading forward from that into, what are the recovery tools and

treatments? And have it integrated so that the things they hear about in basic training are then woven into their operational training cycle. So that when a tanker, for example, goes to his UCOP simulation trainer, he sees similar tools and perhaps we can integrate some of the biofeedback and arousal tools there to help give that troop a sense of control and mastery in the training environment that then perhaps if he or she gets wounded, ill, or injured, they'll recognize the same principles geared towards resilience, wellness, performance within the medical environment. And then, of course, moving from the medical environment back to reintegration, because you're right, it's a community, it's a leader-led, it's a social phenomenon. If you've been a good troop before, it's the leader's job to plant that expectation for the buddies, for the families, for

the community to embrace that troop coming back, if they're able to go to their unit. As importantly, if they're not able to go back to the unit and they're going to their community of choice, to prepare that community for knowing how to relate to the troop and to their family and to recognize what an incredible strength they bring. So this Warrior Wellness Innovation Network is going to be a 12 to 15-site study over this next year, but it's really -- it's a living innovation platform for bringing together evaluation tools to evaluate current programs, because after all, that's part of our challenge right now. A lot of the money that came out for ONM programs last year, those programs are just getting underway now. So if they'd had a year under their belt, we'd really be able to evaluate them, but in the meantime there are always programs in place that need to be evaluated like the Warrior Reset Program at Fort Hood, or the Fort Bliss R&R Center, or the C-5 Center down in San Diego, or the H-5 trial that's just about underway at

Wilford Hall. So in tandem with this effort which will bring in the complimentary alternative forms of therapy

that then can be integrated into the bedrock, what we know of our existing clinical practice guidelines, is the Real Warriors Campaign. We just started this just last month on Veterans Day. It started with an AP article on Ms. Pauline Jelinek interviewed Major General David Blackledge. We know the importance of senior leaders stepping forward and talking about their story. General Blackledge was injured twice by an IED. He talked about his struggle with traumatic brain injury as well as PTSD and how he got help and held help. Do you know from that one story alone, General Blackledge has received hundreds of e-mails, phone calls, getting stopped in the hallway, folks who were thanking him because they were unable or unwilling to brook that signal, whether it be personal, whether it be societal, whether it be institutional and that's another

piece of this that we're, you know, joining our policy colleagues so that we can really look at what our current policies are, and are there any policies of institutionalized stigmas. Secretary Gates took the lead earlier this year in terms of Question 21 on the security clearance evaluation. That's a great start, and we want to continue the momentum in that area. So there are a number of different areas, but there is no one solution to this. But we also know, for example, that it's not just the military population that's currently still in uniform; we know of the wounded, ill, and injured population. There's a whole spectrum, and to, for example, sit down and spend some time with the families of those who are minimally conscious, or who in vegetate states. The work that we're dong with the VA and with DVBIC now in terms of the pilot study for that population, it just absolutely is dripping in terms of what the needs of these families are right here, right now, and what they will continue to be.

And, Mike, you're in a position to provide some more detail.

MS. EMBREY: Ellen. Before you start,

Mike, if I could just -- I think one of the important things that Loree isn't saying is that when she was asked to open the door a year ago at the end of November, beginning of December, she was given some specific strategic objectives to address. We had seven different independent reports characterizing the gaps and capability, the lapses in access to care, the inconsistency between providers across the system, the lack of evidence to be able to understand, diagnose early, intervene, treat, and recover from particularly mild traumatic brain injury, and a systematic way to handle the management of an individual from the point of entry into and especially the transition from a point of care in the Department to the VA or private sector for reintegrating into their next stage of life.
These are important gaps that were repeated over and over again within the Department, intensively

managed and shaped over a year period of time.
And Loree's had the unfortunate misfortune and opportunity to receive the guidance and adapt that, an infrastructure of support to address those very specific gaps in capability.
She's had to manage the, you know, specifically the $300 million that were provided to the Department for research in those two broad areas, and manage their proposals with the help of the Army, MRMC. She's had to set up an infrastructure to ensure that in remote areas where we didn't have resources that a telehealth capability was in place to support that.
She's had to revamp and revise and update and understand and identify those practices, and she's had to garner and bring together a common framework and vision for the team that she's assembled in this Center of Excellence, and -- oh, by the way, deal with Arnold Fisher as he attempted to assist us in creating a facility that would be the best in the world, not necessarily world-class but the best in the world.

And I have to applaud Loree for her ability to adapt and be agile in her receiving of direction.
And I know that for you sitting around the table,

particularly you folks who are used to specifics, the specifics on the stretch of this program is so large that it would take a week for us to get into the details on this. And I think Loree probably wanted to give you a flavor of where we were headed rather than give you the details, although I know you're hungry for those details. Trust me, there are a lot of details. And if you have some specifics that you're interested in, we can get them to you.

BG. SUTTON: Thank you so much, ma'am. In minutes I really didn't quite know how to hit the mark. But what I will tell you as well is that this summer we are holding a State of the Knowledge Summit where we will be able to bring in all of the findings to date and be able to organize them. In fact, I've love to follow up in terms of really how we might be best able to organize and

communicate it, because communication -- we know that if we can do everything else right, but if we fail along the way to transform the culture to one that is based upon transparency, trust, and communication -- yes, sir?

DR. WILENSKY: Please keep the question short and the answer short --

BG. SUTTON: Yes.

DR. WILENSKY: -- so we can get onto our next session.

DR. COLENDA: Dr. Sutton, so you have large-scale operational issues.

BG. SUTTON: That's correct.

DR. COLENDA: You have outreach from -- that reaches from in theater all the way back home to Central Kansas. What are the key health services questions that you're looking for in terms of how to say the Psychological Health Committee could help you with in terms of specific operational or health services research questions?

BG. SUTTON: They include a great, great question. One of the things that we are very

interested in doing is evaluating how we can best integrate psychological health aspects into the primary care setting so that we can again do what

we can to erode those barriers of stigma as well as to prepare our primary care and other specialties, to be able to recognize and meet these needs.

We know at this point that it's a complex set of problems that we know that health quality care, research -- and Chuck Engel was our point of contact on that -- I'd love to bink Linda. I'll be glad to get Chuck in contact with you because that's an important aspect that we'd like to be sure to cover.

Thanks so much. ma'am.

DR. WILENSKY: There are two more follow-on. Mike, did you want to respond?

COL. JAFFEE: I just wanted to remind the Defense Health Board with some of these questions that were the hunger for specifics and the oversight that Ms. Embrey mentioned, that the TBI Subcommittee was set up with parallel duties

and missions, one of which was, like other Defense Health Board committees, provide guidance and advice and recommendations with regards to TBI policies to the Department of Defense.

The other mission was to serve as an advisory panel to the Defense Centers of Excellence and to the Defense and Veterans Brain Injury Center. So in that regard, every time they had met they had gotten in-depth briefings on the overall DOD research portfolio making sure that there's appropriate resources both for the epidemiology characterization diagnosis and treatment; looking at what's going on with clinical issues in theater; following the entire spectrum of care from the battlefield through air evacuation to a medical treatment facility to the VA; looking at the educational efforts going on to all the stakeholders.

So throughout all this, a lot of this information has been feds and coordinated through the TBI Subcommittee, who has been providing a very good oversight making sure that some of these issues

and gaps are being addressed, and they are being considered.

The conduit to the overall Defense Health Board,

most of those briefings, I think, are available on the Web, but if members of the general Defense Health Board would like those sent separately, we'll be happy to facilitate that. I have the pleasure and honor of serving as a DOD liaison to the TBI Subcommittee and have been making sure that all the information needed by that panel is available to them.

And getting at the question of psychological health, one of the things that we have been discussing and working on with Colonel Gibson and the other leadership is trying to particular a joint session of the TBI Subcommittee and the Psychological Health Subcommittee just to explore those types of synergies and support.

DR. WILENSKY: Adil?

DR. SHAMOO: Adil Shamoo. I like the thinking beyond the box. I think it's wonderful, but at the same time I think we are very

science-based.

BG. SUTTON: Sure.

DR. SHAMOO: And under resource slide you have there, the very first bullet is complimentary and alternative medicine. And my two-part question is why you highlighted that; and second is you call them therapies, and my question to you is if something is called "therapy," has there been randomized clinical trial for something else, and you're calling them therapies and are going to use them for new modes? And I don't recall that there is that many complimentary and alternative medicine who have gone through randomized clinical trials and have not failed to show efficacy.

BG. SUTTON: Sir, I stand corrected. When we will get the terminology correct, I will tell you that in terms of our research strategy, it is a very diverse portfolio that does not focus exclusively or primarily on complimentary or alternative forms of medicine, but it does to a wide variety of both preventive, protective

treatment as well as, certainly, animal (off mike) at the models.

DR. WILENSKY: Ellen, did you have a

further comment?
MS. EMBREY: Well, Loree's team actually went out with a broad area announcement and actually awarded $5 million in prospective alternative therapies for PTSD and mental health issues.
BG. SUTTON: And that was really out of looking at the first round of research that was funded and seeing that we hadn't emphasized that as an area, and we wanted to get some folks in that area, but you raise a great point, sir, and we'll make that correction.
But we put out the $5 million RFP this Spring. We got some 82 proposals that came in of which we selected 11 in a wide variety of areas. So we're looking forward to getting some hopefully promising results, in fact, that will lead to a stronger level of evidence. So more to follow.
DR. WILENSKY: Thank you very much,

General Sutton.
DR. CARLTON: : Loree, if I could have one question; Gail, one question?
The follow-up we had two clues last year that we discussed in January about treatment and prevention. One was the helmet issue, the other was progesterone. Can you give the Board an update on those?
BG. SUTTON: Yes, sir, thanks so much.
The helmet issue working with the folks from the Riddell Football Helmet Company as well as with our own internal scientists, both the material developers, the combat requirements folks, as well as our medical team brought together, convened that group and looked at three sets of data on helmet specifications.
The point at that time had been to issue a request for information based upon the collaborative forum that we brought together. The decision was made instead to move towards a request for proposals. And my understanding is that that process is underway right now to make sure that we both have

a set of helmet specifications that provides both concussive protection as well as ballistic protection.

And so I appreciate, General Carlson. Thank you so much for your help in that area and convening that meeting, actually, early last January that really made that collaboration come together. In terms of progesterone, we're -- the folks at Emory, of course, have done a lot of the leading work in progesterone, and we've got some work right now that we're very interested in seeing what the results come out, you know, to see where we can go move forward with this. I'll have to get back to you in terms of any further details, but certainly, whether it be progesterone, or prazelton, or Norend, or a number of different -- or Anasetyl cystine for hearing mitigation loss -- I mean there are a number of different agents that we have funded clinical studies to really follow up and see what efficacy we can identify. I don't know, Mike, is there anything you want to add to that in terms of the progesterone trial?

COL. JAFFEE: NIH is involved with the multicenter trial --

DR. WILENSKY: Can you go to the microphone?

COL. JAFFEE: I mean that's a promising therapy. NIH is involved in a multicenter trial, and it's been a key topic of some of the collaborations and meetings that the DOD has had with the NIH, too, to make sure that we're working together on that initiative.

DR. WILENSKY: Thank you very much. We are going to move on to Dr. James Kelly, who is currently serving on the Traumatic Brain Injury External Advisory Subcommittee. He's also Professor in the Departments of Neurosurgery and Physical Medicine and Rehabilitation at the University of Colorado School of Medicine in Denver.

In addition, he is the attending neurologist at the University of Colorado Hospital of Denver and Aurora, Colorado. Recently, selected Subcommittee members traveled to Fort Carson for a site visit

to learn about the postdeployment testing administered to Service members returning from Iraq and Afghanistan. Insights gained from this

will be shared in the brief.
Dr. Kelly's presentation slides may be found under Tab 8 of your binders.
DR. KELLY: Dr. Wilensky, Dr. Poland, Ms. Embrey will be back, I suppose.
DR. WILENSKY: She'll be right back.
DR. KELLY: I hope so because it was her question that we were addressing, and I would really like for her to hear the answer at some point. If not, I'll have a private conversation.
Thank you, all, Board members. This is my second meeting, and perhaps as you've just heard about the announcement as I come inside, I can no longer be an External Advisory Committee member, and so I'm assuming that I won't be doing this again at least from the TBI External Advisory Committee perspective. But it's an honor to provide this information and entertain your questions.
These are the 13 members of our Committee, our

Subcommittee. With us today are Drs. Lockey and Parisi. I don't think anyone else is here, but what we had was a site visit just last week, and part of the reason that you have such an incomplete handout at this point in your binders is because we just finished and wrapped this up on Friday and did the work on Saturday, and I flew here on Sunday, and so it's a little bit light.
And I will be adding slides that you'll see on the screen that do not appear in your binder.
The last visit -- my last visit with you -- was followed by a meeting of our Subcommittee at the National Naval Medical Center in Bethesda, and that included a presentation on PTSD research by Colonel Charles Hoge, who I know has addressed this group as well. And then TBI screening was addressed by Colonel Jaffee, actually, along with Kathy Helmick from Defense and Brain Injury Center and David Chandler from the VA.
Our Subcommittee then met as a work group only with Drs. Langlois, Iverson, and myself at Fort Carson just last week. Our guests were

psychiatrists Dr. and Colonel David Orman and Dr. Lisa Brenner, a neuropsychologist at the Denver VA, who has been engaged in research in this

regard, and Commander Ed Feeks.
Just so that we're on the same page with some of these things and perhaps the people in the room all know this, but I suppose some won't, what the glossary will need for this brief discussion is what a PDHA is, which is the Post Deployment Health Assessment, which was done within 30 days of redeployment. So when someone is leaving Iraq or Afghanistan, it can be done 30 days before or 30 days after.
It is typically done right before leaving and returning home.
Post Deployment Health Reassessment is done around 90 days later, and you actually have those, or should, as paper copies that were just handed out, in case you're not familiar with the content.
They have some of my own handwritten notes on there, so we'll be guided by that as well.
The WARCAT, which is specific, I believe, just to

Fort Carson at the present time is the Warrior Administrative Retrospective Casualty Assessment Tool that was created by Colonel Heidi Terrio and her colleagues. And then there's an annual periodic health assessment, the PHA, and I'll just mention that briefly.
The question we were asked to address by Ms. Embrey was, are the PDHA and the PDHRA responsive to the postdeployment needs of Service members?
That was the basic question we were asked to address, and she went into more detail with the question, but that's basically it. Questions inherent within that question are, what is the optimal way to screen for traumatic brain injury? When should it be done? How does this process guide management?
Could this screening be used to inform policy regarding TBI and related disorders? And to bring up Colonel Hoge's concern, are the word "dazed" and "confused" the right words to talk a bout the threshold injury, the mildest form of mild TBI?
And then again, how do we accurately attribute

symptoms either to psychological distress or to traumatic brain injury? Colonel Hoge has been very articulate in talking about misattribution,

the assignment of symptoms to the wrong problem, to the wrong disorder. Also, how do we avoid iatrogenic TBI, if you will, which is when we actually tell somebody they have a problem that they don't; not iatrogenic in the sense of treating and causing a problem, but this is truly assigning a diagnosis when we get it wrong. And then can we influence outcome by introducing the expectation of recovery? Can we actually arrange for people to get better partly because they expect to get better?

Traumatic brain injury, the diagnosis is made based on what actually happened to the person at the time of the injury. This goes back to our experience, my experience in the sports medicine world watching the injury happen right before our eyes, or having athletic trainers on the field. And as you may know, many of us who have been doing this research for our academic careers have

been brought in by the DOD to help inform the thinking as to what happens, how does it work, what is the natural course of recovery -- Dr. Parkinson?

And so we've been watching those sorts of things in some detail in the civilian world, and now we're applying it here, and I am telling you that what's going to happen is quite the reverse. The civilian population is going to benefit from this, somewhat unfortunate, of course, in its origins, but this military experience will then inform us about brain function, dysfunction, psychological overlay and so forth in ways we've never understood before.

Under wartime conditions, self preservation often requires that that Service member continue to fight and dismiss the symptoms. Physical injury frequently occurs coincident with that intense emotional response, so now if we're looking at screening, since mild TBI could easily be dismissed under those circumstances as unimportant, given the circumstances of its

occurrence, retrospective screening is our next best option, which is really what this is all about, the PDA -- PDH -- I'm sorry, PDHRA. This

is the injury event we're talking about largely. In the Fort Carson experience, 88 percent of those reporting a concussive experience received that in a blast exposure, and you can imagine not only the force involved in such destruction but the impact, psychologically, that has on someone anywhere in that vicinity.

So what are the obstacles to figuring this all out? Well, this problem is poorly understood, and the individuals who are experiencing it themselves are worried about the possible stigmatizing effects of the invisible injury. People don't seem to understand them because they look fine. They're worried about being perceived as damaged. They won't get where they want to go in life if they're perceived as dysfunctional in some invisible way.

They often want to avoid being singled out amongst their herd mentality, as the term was used, the

idea that were all uniform, we're doing the same thing, we're members of a team, "I'm not going to say I've got a problem," and then, of course, the career implications down the road.

There are other concerns that many of you in this room will understand better than I do as epidemiologists about injury surveillance issues. You have to use the right instruments to be able to produce meaningful information about injury surveillance. And I'm not sure we got that right. Identifying residual symptoms and problems so you have to not only look at what happened right now when you're filling this out, but what is that long-term effect? What about comorbidity in terms of posttraumatic stress disorder. Depression, life stress, all of the things that had been mentioned already with family impact and so forth, huge issues for these individuals. And then the overlapping of mild traumatic brain injury and a multitude of behavioral health issues: people who have not only cognitive defects from a concussive injury but the psychological overlay as well that

influences life in so many ways.

Then there's also the identification of treatment and rehabilitation needs which is really, how do

we help these individuals?
Now, I'm sorry this didn't project right, but I'll tell you what the bottom line of this is. Somehow when I transferred this, it changed colors. We got into this business of screening for these injuries late in the game. The Afghanistan invasion occurred in 2001; the Iraq invasion began in 2003; the mandated VA screening began last year in '07, and it was May of this year, 2008, that the Department of Defense mandated the wording you have before you be done on every Service member returning from theater. So you can imagine how many individuals had exposures who are already out there, injuries of various kinds, psychological concerns and so forth that we had not adequate surveillance on.
Then we found as we delved into this there was an evolution of the screening tool itself. There really has been only one validation study

involving a screening tool, and that was an original three-item tool. You actually have a four-questioned one.
I should point this out, in the page that at the top there it says, "Sample," if you go back to what would be the third page and No. 9, there are four parts to Question No. 9 which really constitute the screening for traumatic brain injury, primarily mild traumatic brain injury, and that's really what we are working off of. But that was not the instrument that was used in the validation study.
It was also not the instrument used in the Rand Corporation study, so now we've got two different wordings, two different numbers of questions and answers, two different manners of being administered as well. Then we find out that this is not the tool that the DOD studies previously reported had used; this was fairly new, and it's not the tool that's used in the VA screening system. It has different working at the VA level, and actually, also, has the application in a

computer sense that if you say no on Question 9-A, let's say, the you skip 9-B,C,D.
So if you're really looking for information that

could be gleaned by the full complement of questions, the VA system doesn't gather that. The DOD system is different.
So the other issue we discovered is that the DOD and VA screening tools are specific to deployment-related mild traumatic brain injury only, not in any other context when they're on duty on off duty in any way. It says, specifically, "during this deployment" in the DOD version, you have.
The VA version says "during this or any past deployment." So you could skip over all kinds of injuries that have occurred in the meantime or in different settings.
The other issue here in terms of consideration is our VA system really is caring for about 40 percent of those eligible in the current wartime returnees age groups. So there are 60 percent of those individuals who have served in OIF and OEF

back in the United States now eligible for veterans' care and are not receiving it. So they're in the civilian population. We have no way of getting to them in the current scheme.
And as I mentioned, the VA screening requires ongoing symptoms. You aren't considered to have a TBI in their system unless you have ongoing symptoms from the injury. It makes perfect sense if you're a VA, because your concern is taking care of the person with symptoms, but if you need a surveillance instrument, it's deficient immediately because those people have dropped off: You're no longer symptomatic. As far as that system knows, you never had TBI.
All of you know that screening has its pitfalls with false positives and false negatives. Both can be problematic in either direction. The issue here for us is that we don't want to fail to identify service members who have been injured. We have to increase the sensitivity as best we can to not miss those people. But we also don't want to misidentify soldiers as injured if they have

not, and give them a problem, send them down a pathway in the health care system that is inappropriate for the nature of their problems.

One of the problems that we have is terminology with the actual threshold of injury. It's widely accepted in the medical literature that the hallmarks of concussion are confusion, a confusional state, neurologically-based confusional state and/or amnesia. So much of the sports world functions on that basis. The guidelines that I helped write say that a transient confusional state because of a blow to the head on the football field, even if the individual remembers what happened, still is a concussion. It's the mildest form of concussion, but you can understand the problem by using the words "confused" or "dazed," or something like that, because that could easily have happened to somebody startled by that blast who was not actually impacted in any other way.
So semantically and conceptually, these can be mistaken for psychological problems, including the

dissociative experience, and it adds considerably to the complexity of simply trying to do surveillance of these injuries.
The other part of this, of course, is we have to keep in mind that the brain is the organ of the mind, and so when someone has a psychological problem such as PTSD and they have the residual effects of a mild TBI, there is over an overlap. And there's a growing body of evidence in the civilian literature to say that mild TBI increases the likelihood of posttraumatic -- well, stress disorder and various other psychological disorders. And Colonel Hoge's work has helped us with that in the military as well.
So since there are several variations on the screening tool, most studies have used slightly different versions. These different versions yield a different results under the circumstances, including different symptoms that are on the checklists, and then we get to what is the annual physical assessment checkbox assessment called "the periodic health assessment," which lacks

uniformity across Services. No two Services use the exact same form, and it has nothing specific to TBI or TPSD in it except for areas you can fill

in if those are problems. So it doesn't cue you, so to speak.
Some of the mild TBIs under the circumstances, whether they are in deployed settings or not, may be missed altogether under those circumstances.
Sc the recommendations that we're able to come up with at the present time is that the DOD should emphasize strategies for improving early identification of mild TBI concussions in theater.
The best measure we have of brain injury is what happened to that person's neurological function at the time of the injury.
As is typically done now, the PDHA should continue to be done in theater. This is done oftentimes as people are gathering within days or weeks before departing, coming back home, sometimes even on the airplane ride home. We have no particular problem with that if it's done seriously; however, people sometimes get through this system without having

had that filled out, so you're not kept in theater simply because you haven't filled out a form. And so we need to have some other way to review whether it's been done and perhaps do it for the first time back stateside, if it hasn't been done.
The other part of this is, since right now it's not part of a uniform data set, we wold suggest looking into having this part of the AHLTA system, which is the record- keeping computerized database for DOD. The DOD, we would hope consider implementing the automated behavioral health clinic for all Service members. I'm not sure that that's being done, and it's a little bit out of the TBI world and more into the psychological health world. But Dr. Orman was very helpful in talking to us about how that could be used.
And then the model that is used at Fort Carson where there's a face-to-face clinician verification of what happened to that individual should be done using somewhat more detailed questions, as you see in the handout that I've provided.

Toward the back -- I guess it's the last two physical pages that you have -- are the form that is called the WARCAT that is used at Fort Carson

that, as you see if you were to go through it in some detail, would actually be much more specific for mild traumatic brain injury experiences. You see where I scribbled in "witnessed," the problem being here, of course, being it's foolish to ask an individual, "Were you rendered unconscious?" I mean if you were, how are you supposed to know? And so we need a witnessed loss of consciousness; otherwise the question is, "Is there a gap in your memory? Is there time you can't account for?" That's the amnesia part of it. We need both of those.

So something equivalent to this -- and we're not saying that this is perfect, but certainly an improvement over simply screening by using a piece of paper for an individual.

Service members should be instructed by their commanding officers on the importance of doing this honestly. The recommendation was made that

somebody who is in their chain of command has the individual before they go into their small group rooms to fill these things out and have their individual sessions; that they're told not by the medical personnel but by their chain of command: You do this right. You take it seriously. This has impact on the rest of your life. Do it right.

Then the results of this whole process we would hope that PDHA, the WATCAT, and the behavioral health process could be integrated and shared with the VA as well as the private sector where so many of these individuals ultimately go to. I don't pretend to understand how to make that happen. I don't know how we would even make it available for people like me in my academic career at the hospital where I see patients, but those are the kinds of things we would need to explore because so many of our returning military are returning to those civilian settings.

Future issues we will discuss have to do with prioritizing traumatic brain injury research, looking into the fiscal liability for the

diagnosis of traumatic brain injury. This is a concern that has come up in the civilian world in particular. Open discussions regarding the acute

distress disorder and PTSD, and again as Colonel Jaffee pointed out, our Subcommittee will be engaging with the Psychological Health Subcommittee in that regard.
And then inquiring as to the use of electronic medical records and getting more in detail as to what it is that's done in theater, including use of the cognitive assessment called the MACE, Military Acute Concussion Evaluation, which has been used quite a lot already in theater. We will take on the question, and I know Ms. Embrey has a question about the computerized neuropsychological testing. That will be another agenda item.
We will look into the joint theater trauma system and engage as best we an with the individuals who are expert in that. We will talk about additional psychological health and merge traumatic brain research. We will look at organizational structure of related military TIB programs. There

are almost every month something that I hear about that's happening at a specific military treatment facility or somewhere that I didn't know about.
And here, as a member of this Subcommittee, we need that information coming in.
And then I would hope that as I move off to become the Director of the National Intrepid Center of Excellence that t he TBI Subcommittee would have at least some role in oversight of our organization as we move forward.
I'll stop there and take questions. Thank you very much.
DR. WILENSKY: Thank you very much. Are there any questions that people would like to pose? Yes?
DR. DETRE: Not questions, just a couple of minor comments. As Dr. Kelly pointed out, it is becoming clearer and clearer and clearer that any prior brain injury, even minimal brain injury, may predispose to posttraumatic stress disorders; however, the current psychiatric literature which was still in the tradition at the time when we

didn't have an organ system, we just talked about the psyche or, by itself, content that's primarily on comorbidity such as alcoholism and anxiety

disorder for TPSD.
What I'm trying to say is that when people joined the Armed Forces, then the do not know who has had any traumatic brain injury. In other words, we have no idea with what vulnerabilities they are enrolling people into the Armed Services and whether or not they will be more vulnerable therefore to PTSD. That's one comment I wanted to make.
The other comment is that I believe the promise of imaging studies in my TIB at the moment are interesting in an experimental stage but not terribly validated. On the other hand, it's crystal clear that blast injuries do affect the vestibular system, and there are relatively inexpensive, reliable, and valid ways of assessing them, and I was wondering whether that shouldn't be part of the protocol.
DR. KELLY: Colonel Jaffee might want to

speak to that as well, but that is part of the testing and assessment that we're already doing in the civilian sector.
As perhaps you know, blast injury has not only the concussive mechanism but also the barotrauma on the ear itself, and perhaps a much more complex and a multitude of causes for internal injury. And, yes, in fact that is being investigated at present time, and there are research protocols that have been begun in that regard.
DR. WILENSKY: General Sutton?
BG. SUTTON: Dr. Detre, thank you so much for those comments. Regarding your initial point, yes, we are working with the training doctor in personnel communities so that we can identify what would be that brain-based assessment; from the time of accession and early career development, to be able to obtain, for example, what have been the prior exposures or concussion incidents that an individual may bring to the Service as well as, what is their preferred cognitive learning style?

Let's figure out, you know, how can we tailor a decision-making strategy and a leader development strategy that really pertains to their diurnal

rhythm, you know, a variety of factors now that are coming forward with the recent research that we really do want to take advantage of so that it moves beyond what has been more of an industrial era and olfactory approach to really customizing our care, whether it be in health care or in leader developments.

So we would look forward in consulting with you as we do down that road. Thank you.

DR. WILENSKY: Yes?

DR. BREIDENBACH: Dr. Kelly?

DR. KELLY: Yes, sir.

DR. BREIDENBACH: Is "dazed" and "confused" the gold standard against which the instruments are tested, or is there something more concrete?

DR. KELLY: What actually happens in the clinician verification is talking with the individual Service member about, what actually

happened to you?

And so if there's a span of time that under the circumstances that individual could not act on the information that they were processing, if they felt as if there was something that they couldn't make sense of for even if it's seconds, which is not uncommon under the circumstances, then that is what is used as the standard for determining that a concussive event had occurred.

Better, more certain, would be an amnesia, a gap in memory after the event, certainly at the time of the event, including the event and sometime thereafter, so that a person not uncommonly in a civilian accident, for instance, would not remember the parts of the car crash as it was happening and thereafter. And the next thing they know, they're standing outside the car. They don't know how they got out there.

Something equivalent to that would then be also the standard, if you will, that there was as gap in memory.

That is well established in the medical literature

from animal work all the way through human experience as to the gap in the memory.

Witnessed unconsciousness is the one that there's

absolutely no quibbling about. That's the one thing that people all say obviously, a brain injury has occurred, but it's those milder two, without and with amnesia, that we struggle with even now.

DR. BREIDENBACH: So is it so clear-cut that it's not necessary to do the following, or has this been done? Have you taken case histories and asked different clinicians to make or not make the diagnosis? Or it just not necessary?

DR. KELLY: That has not been done in this setting, to my knowledge. That's a good point.

MS. EMBREY: Dr. Kelly?

DR. KELLY: Yes, Ms. Embrey.

MS. EMBREY: Thank you so much for what you've come up with to this point. I just want to give you a little bit of deep history on what these forms were originally intended to do, and

they're not a substitute for a clinical practice guidelines once you have an assessment of risk that is sufficient to refer for care. And we do need -- we are legislated by law to accomplish the postdeployment health assessment and the predeployment self assessment. The postdeployment reassessment was done based on research findings that indicated that some of the symptomology associated with deployment wasn't appearing or wasn't manifesting until, you know, six to nine months after deployment.

The evolution of these forms was to identify people at risk for further evaluation, not to be the evaluation tool itself. And the forms have gone from a four-page form to now a nine-page form, and the time it takes to implement this in a responsible way is becoming increasingly difficult.

So the issue really is, do we need to have this level of specific kinds of things in this form, or should it be amended to the provider's clinical practice guidelines for more specific follow-up.

In other words, is there a better set of questions that we could be asking that would be sensitive and specific without coming up with a 10-page

form, with the same questions being asked inside a period of six months at least three different times, because sometimes I get feedback that we aren't answering the questions right, so we keep asking it until they answer it right.

DR. KELLY: Well, I think that last point you make could very well be the case on some occasions, but the other part of it is some people don't recognize they have a problem until later, which is exactly why you say that the PDHRA, the reassessment, is done much later. And, in fact, if you look at that, you'll see that it's more heavily loaded to pick up on psychological behavioral issues, stress-related problems and so forth, and the mechanisms of blow to the head and concussive effects are not so apparent in the reassessment as they had been in the earlier questionnaire.

And I don't know that we've actually got the

questions right, but I think they're pretty darn close the way they are right now. One of the things we need to avoid is having them be so different that we're comparing apples to oranges, which has happened every step of what we're trying to figure out, what does this assessment show us? And every study used a different approach. So we couldn't really make fair comparisons.

But I think the most recent version that you have in your hands now is pretty darn close to what we need. The increased specificity that is added by a clinician interview and making sure that the discussion is had, even if it's very brief, around those questions, that increases the targeting then, ultimately, of care needs for people, the identification of the person with problems, much more so than the form could by itself. And I don't know that we have any other way of doing it except that kind of interview format.

DR. WILENSKY: Dr. Casscells?

DR. CASSCELLS: Dr. Kelly, thank you so much for you and your committee's hard work on

this and independent work. And I want to agree with most of what you've said, and maybe you can persuade me of the rest of it.

The issue of a face-to-face encounter I think is very important, and I think it's terrific if you've come up with that. The Chairman of the Joint Chiefs of Staff has made the same recommendation, and he's not a doctor, you know; he's a Navy Admiral, and I think he's right. The pushback is that this is expensive. My feeling -- and I better finish the thought now -- I just realized this is a public meeting -- but the point is we don't really have a secret on this. The point is if we are going to do this, it is expensive; but face-to-face eyes-on, you know, is obviously going to have a better specificity and a better sensitivity because a person can fill out that form, you know, no, no, no, I'm fine, I'm fine, because they want to get home, you know, I'll come back to that problem of, you know, to hiding the symptoms even from yourself when you fill out the form.

But if you -- the face-to face I think validates some -- if you see just a practicing doctor, internist and cardiologist, if I'm talking to someone, I'll get a better sense than on the questionnaire. My patients fill out a 16- page questionnaire for t he first visit, so I'm not going to apologize to anybody for a mere nine pages after they've had a head injury. But they all fill it out, even the ones with the 6th grade education will fill it out and, you know, with broken spelling. But they'll fill it out. Now, the face-to-face, if somebody has a downcast gaze, avoid your eyes, they may tear up if you ask them about their family or about their pets, or about their, you know, boyfriend or girlfriend, and this is particularly true after you've done a physical examination. So an ordinary internist with no specific psychological training can uncover a lot.

So can a chaplain, and Reverend Certain mentioned that earlier, and so can the nurse practitioner or social worker. They all bring different ways of

bonding with that person and eliciting the PTSD symptoms. And it's critical, I think, to distinguish them from the TBI to the best you can

because so many of the people have had a head injury, they have ongoing symptoms. When you really get down to it, what's bothering them is PTSD, some feeling that they, you know, for some reason the jokes aren't funny, the food doesn't taste good, they feel like they haven't done what they might have done, or perhaps they've done something that they shouldn't have done -- it may not even be true. But this sticks to people like glue. It's hard to strip it away. So I think a face-to-face is very important.

Now, to pay for it, we don't have the people, so we're relying on instruments like this: The better they are, the better we can identify people at risk and then use the face-to-face on a subset, the ones who have a high, of a worrisome score, the confinement, I think.

I hope this is what you're talking about.

DR. KELLY: It actually is a little bit

different than that. And we learned a lot about that in the Fort Cason setting where the face-to-face is done typically by a clinical social worker or some other educated person who's a clinician, but not a psychologist, psychiatrist, even internist who's doing other parts of the exam. This is somebody who knows what to look for, has experience doing that part of the questionnaire, and this is a part of a day's processing in which they're getting their hearing tested, they're going back to their pharmacist if they're on medications to see what they're supposed to be taking, they go through their physical examination on postdeployment all in that same span of time. So they're really not adding much in the way of time or high-level professional expertise, but they're still getting at the information with sensitivity that's much improved over what would otherwise be simply gotten on a -- on a --

DR. CASSCELLS: No, I don't doubt that, and I'm not sure how many layers to build into

this. To me, the chaplain, the trained nurse or social worker, or nutritionist, physical therapist, if they have a psychological

orientation and they've had some training, they can do a darned good job.

DR. KELLY: Right.

DR. CASSCELLS: There are still some people who for some reason won't quite say what's on their mind until after there has been some examination. On the other hand, there are people who would tell -- will speak to anybody but the doctor. We have to admit that, we doctors, so it takes a group of people, and we don't catch everybody.

But let me turn to this other issue real quick of the filling out the form in theater. That's where I disagree with you, and I've talked to too many soldiers, and I was one over there filling out the form on a little hand- held, sat there in the clinic in Baghdad and did it. And the -- everybody, we just were all laughing and saying, heck, no, the answer is no, no, no, no, no, let's

get on the plane, don't take a risk of being kept back in the sand here. And that was October -- excuse me, November of 2006, and Iraq was a very different place then.

But my concern is your recommendation, please put your spoken words on the slide because you said they could fill it out in the theater or on the plane. There's a huge difference. When you're on the plane, you know you're going home, and if you're a Reservist, you want to get home. You don't want to be stuck in theater, detained because you answered yes to a question.

Let me ask you a quick bit of advice, though. One issue: What is the pathology of these lesions? You're a neurosurgeon, and you and Dr. Parisi ought to be able to advise me a little bit. On the boxers and the football players, we see micropunctate hemorrhages, we see leikuns, we see neuron dropped out, we see gliosis, right? We don't know much about these soldiers and marines, but I'm concerned, very concerned about the fact that some of these kids may have hemorrhage, and

we haven't made clear to get them to quit taking aspirin. I'm not sure any war fighter ought to be taking aspirin. We're looking very seriously

about that, and as a neurosurgeon and as a pathologist, I'd like your thoughts on it, because we're short on data in this area.

DR. KELLY: I'd be happy to speak to it. For my entire career and all the writing I have done and in a sports world, aspirin and platelet aggregation inhibitors are all avoided. It's very clear that the acetaminophen products for pain and so forth that can be used safely are offered and recommended, and that anything, especially aspirin, is to be avoided for the first 48 hours. And if I'm not mistaken, Colonel Jaffee, that's what the treatment protocol said as we came up with a variety of different what to use/what not to use medications.

DR. CASSCELLS: You're talking like a doctor. I'm talking about what the patient -- what the soldiers take themselves. I'm talking like a soldier, and you're telling me like a

doctor.

DR. KELLY: Again, I don't know --

DR. CASSCELLS: What the doctors prescribe is a fraction of the -- it's what the soldiers themselves are taking.

DR. KELLY: You make a good point, And actually, in the sports world, those individuals just go into the trainer's office and grab Motrin out of a big jar and take it on their own. They don't even account for it.

DR. CASSCELLS: So you don't tell the NFL coaches to stick with Tylenol instead of aspirin?

DR. KELLY: Absolutely. Absolutely.

DR. CASSCELLS: I do.

DR. KELLY: We sure do.

DR. CASSCELLS: I stick my nose in it, and all the coaches that my kids are involved with on that basis, am I telling them the right thing to keep the aspirin out of the locker room?

DR. KELLY: Absolutely. And one of the things we know, and you're speaking to the issue

of neuroimaging is a standard CT scan which is typically done if somebody has a headache, and you have to worry about a subdural or something, will

not pick up on the particular hemorrhages that we see commonly on gradient echo MRI scanning in a conventional MRI scanner of 1.5 Tesla strength, widely available here in the United States. And we see petechial hemorrhages not uncommonly now. Those were areas of bleeding and could very well cause a problem, as you're alluding to. And so that preventive strategy is absolutely part of what we do recommend.

COL. JAFFEE: I'd like to make a comment, getting back to one of the things that Ms. Embrey said, is are we asking the right questions? And we just heard a presentation from Dr. Kelly, and General Sutton earlier in her presentation said the IOM gave us a set of recommendations. One of those specific recommendations made by the IOM last week was for the DOD to use what they called the brief TBI screening. It's a specific instrument, and what

that is, that's that three-question screen that Dr. Kelly was talking about that had been validated.

So the fact that we have the IOM, who's making that recommendation to use those as the questions, and the fact that we have the Defense Health Board making these recommendations which pretty much incorporates those three questions, tweaking the language and adding that fourth question, tells us that we're on the right track with only four questions using the recommendations. So it's really, I think, reassuring to us to have both bodies making the very similar recommendations, getting back to your question, ma'am, of are we asking the right questions.

DR. WILENSKY: Dr. Parisi, do you want to make a comment?

DR. PARISI: Would you go back to the question about the pathology? I don't think we really know what the underlying pathology of these lesions are. We assume that it's a white matter axonal injury similar to what other traumatic

injuries are, but we really -- it hasn't been studied, and that's something we desperately need to do to try to get a handle on this.

And after I go to Dr. Kelly's comment about MR -- MR's a very important part of the picture that could provide (off mike) imaging of white matter and potentially identify lesions.

MS. EMBREY: Yes.

DR. WILENSKY: Let us make it short, please, because we need to take a break so we can get on to Dr. Parisi as soon as the break.

DR. MATTOX: One quick question to you and Dr. Parisi, the next speaker on a recommendation.

I think we're five years away from a marker of the injury that is either a mediator base, metabolic based, or even genetic based. Therefore strong consideration of developing a tissue, blood plasma bank for later analysis. We have lost all of that that has not been corrected to this point, another major reason why a joint pathology center needs to be maintained.

DR. KELLY: Very good. Great idea.

DR. WILENSKY: We are going to take a 15 --

MS. EMBREY:

DR. WILENSKY: Yes?

CAPT. McKENNA: Could I ask one question? Dr. Kelly, in terms of these screening tests that you have, the goal is to make them 100 percent sensitive, and I realize sometimes a Service member may come back and not be truthful on it perhaps because they can't get on the airplane, as we discussed here. But I was wondering if there is any evidence or studies out there to look at, what percentage of Service members perhaps do not answer truthfully on these, not because they are not going to get home, but because they are afraid of the -- what the ramifications of that might be in terms of their career?

DR. KELLY: There isn't much data, but I can tell you what we do know. In a couple of studies is that in about one in four change their

response when they're in the clinician-verified setting. And it's not clear why. We don't necessarily know the motivation, we just know that

the change was, "Oh, yeah, that really did happen to me," and, "Oh, yeah. Is that what that means?" And so we don't know for sure were they withholding information in order to expedite their exit, or if, in fact, they're just now concluding more honestly something really did happen that they need to address.

But that's as close as we've come.

DR. WILENSKY: Thank you very much, Dr. Kelly. We're going to take a 15-minute break. Dr. Parisi has generously allowed us to have that break, and then have his report. Please reconvene at 3:30.

(Off the record at 3:14 p.m.)

(On the record at 3:34 p.m.)

DR. WILENSKY: We are ready to start. Please take your seat. Can we have your attention, please? We're ready to reconvene. Our 2:30 speaker -- now at 3:30 -- is Dr. Parisi,

Professor of Laboratory Medicine and Pathology at the Mayo Clinic. As Chair of the Scientific Advisory Board for Pathology and Laboratory Services and the Chair of the Review Panel for the Department of Defense Draft Plan for the establishment of the Joint Pathology Center, he will discuss the draft report of the Review of the Department of Defense Concept of Operations document for the establishment of the Joint Pathology Center.

Similar to the presentations on the Task Force on the Review of DOD Biological Defense Research Program Review Panel update, due to technical difficulties at the last virtual Board meeting, a few Core Board members on the phone were unable to hear questions answered. Please feel free to use this opportunity to ask the questions you were unable to do so in the November briefing.

Dr. Parisi.

DR. PARISI: Thank you very much, Dr. Wilensky. First of all, let me point out that the people that were on the Review Panel that

remembers all the members of the Scientific Advisory Board for Pathology and Laboratory Services of whom Dr. Reddick, and Dr. Patricia

Thomas, and Dr. Florabel Mullick are here today as well as selected Defense Health Board Core members and other Subcommittee members were on this Review Panel.

If we look at the review process, I just want to point out the highlights of the review process, on June 16th Dr. Kelly presented a question to the Defense Health Board, and the details I'll show you momentarily, and then this was followed by a briefing at the September 4th and 5th Defense Health Board meeting at which Dr. Kelly and Colonel Baker presented the CON OPs, you know, the concept of operation for this JPC. And that was really our first involvement in this process.

On October 2nd, we had a teleconference with the Review Panel members that was followed by a document that was drafted, and then the document was sent around for review. We presented the preliminary review, as Dr. Wilensky told you, on

November 20th, and the plan is to send a revised report, submit a revised report to Dr. Casscells in the near future.

Historically, the National Defense Authorization Act for 2008 which became public law, the statute recognized the following: The President should establish and maintain a Joint Pathology Center that should function as the reference center in pathology for the Federal Government.

There was also a clause that if the Department of Defense felt that this could not be established in DOD, then it could go to some other federal agency. But the determination was made that the JPC could function within DOD.

In addition, GO OP specified that the JPC should provide at a minimum diagnostic pathology consultant services in medicine, dentistry, an veterinary sciences. It should provide pathology education to include graduate medical education, including residency and fellowship programs and CME programs; it should provide diagnostic pathology research. And then the fourth item was

the maintenance and continued modernization of the tissue repository of which we'll say more in a moment.

So, Dr. Kelly, if we go back to his original question, he asked the Defense Health Board to review the implementation plan for the establishment of the JPC within DOD and to comment specifically on the plan's appropriateness and feasibility for DOD within the context of the BRAC law.

So the Joint Group, this was a labor of many, many man-hours, lots of discussion, lots of going back and forth, and the review, then, is based on the concept of operation that was provided in September both as a power point and as a written document. A Joint Pathology Working Group was formed that organized -- I'm sorry, that developed this CON OPs. and Dr. Kelly, I believe, was the chair of that. And they provided a vision and mission.

The vision was to be the Federal Government's premier Pathology Reference Center, a supporting

military health system, DOD and other federal agencies, an otherwise federal-wide reference center for pathology, and the mission would be to provide world-class -- again getting back to our world-class - diagnostic subspecialty consultation, education, training, research, and maintenance and modernization of the tissue repository.

So the Review Panel -- I'm sorry, here we go, one slide behind -- the Review Panel again spent many man-hours reviewing the documents with lots of discussion, and the conclusions of the Review Board I am going to present now. So the panel members concurred with the vision and mission that we just read, and we believe that the DOD needs to consider a number of other findings and recommendations as the more extensive strategic plan for the JBC is developed.

We believe that the DOD has a unique opportunity to develop a Center of Excellence. The panel recognize the enormous contributions of the Department of Defense to medicine and the

importance of continuing this legacy by providing world-class, if you will, or excellence in pathology consultation, research, and education.

And the AFIP might serve as a model for the JPC, has been a leader in the world of pathology as is well known to everyone in the room. I think the spirit of the current law is actually very similar to what was expressed by then President Dwight Eisenhower in his dedication of the AFIP Building in 1953 when he said, "And now I dedicate this building to the conquest of disease so that mankind, more safe and secure in body, may more surely advance to a shared prosperity and an enduring and just peace."

So again, I think the vision of this excellent center, or the Center of Excellence for Pathology, was really for the good of mankind and the good of medicine.

If we look at the specifics of the plan that was presented, there were several areas that were addressed. One of the clinical scope of service, and the CON OPs said that there would be

subspecialty service represent ed in this JPC, but the subspecialties were not specified.

In-theater support was mentioned, but we suggest that the development of other supporting diagnostic technologies could also be applied to in-theater support by the JPC to the in-theater soldier. The process of handling individual cases, including the accession, triage, disposition flow and so on reporting, and quality assurance wasn't really detailed, but I think that needs to be -- we believe that that also needs to be better detailed.

The QA, the quality assurance, is a very important piece of this since good treatment, adequate medical treatment, good medical treatment requires and accurate tissue diagnosis so that if a tissue is inappropriately diagnosed or the subsequent treatment may be in appropriate, and actually this has not only implications to the patient's well being but also it has medical/legal implications as well.

We stress that there needs to be interactions with

other federal agencies. For example, the VA, NCI, NIH, Indian Health Service, CDC -- all these are potential collaborators or partners that could

utilize the expertise that the JPC could provide. Also the Armed Forces Medical Examiner has needs, other pathology needs that the JPC again potentially could provide. So the scope of the activities that the JPC could do are considerably broader, I think, than what was expressed in the original plan.

The positioning of the JPC was in the Command structure generated probably the most amount of discussion.

I think we finally agreed, the Panel finally agreed that the DOD was a logical choice for the location of the JPC; however, there is a unanimous agreement that the JPC should be at a higher level. Ideally, it should be an independent entity with high visibility and not buried in the Department of Pathology, a hospital Department of Pathology where the priorities, the vision, and the mission are completely different.

So I think we all -- there was unanimous agreement about that point that the JPC really needs to be at a higher level, somewhere higher in the Command structure. If that is to occur, then it also requires a governing board, and we suggested a Board of Governors could be named to provide governance. These could oversee the activities of the JPC, but also provide advocacy, for example, for funding issues, have connections to civilian medicine, to perhaps industry, and actually make -- again expand the scope of the JPC to include many more activities.

I would suggest that the Board of Governors would be a dynamic group of people, hopefully recognized leaders in pathology again that would provide active input into the oversight of the JPC.

Organizationally-wise, we suggest that the workloads need to be clarified and periodically assessed and utilization of business principles, obviously, the LEAN and 6-Sigma, the well-known business principles should be used.

As far as staffing, the key to the success of the

JPC is providing appropriate administrative and laboratory support staffing for the pathologists. I know at Mayo our motto is each pathologist has

one secretary, and on some busy times -- for example, I was on service last week -- and I had two secretaries doing all the typing and all the work.

So it's very important to maintain work flow, that adequate administrative support be available.

Similarly, the laboratory has to be very responsive and be able to perform stains, use special techniques, and they need to do those promptly and do them well so that you have to have a well-staffed and experienced laboratory to provide good material for tissue interpretation.

We also suggest that the working group identify the subspecialties, as I mentioned earlier. The staffing issues are significant. There's really no mention of this JPC will be staffed by a senior pathologist, senior seasoned pathologist or a more junior-level pathologist. Considerations have to be given to staff -- I'm sorry, to salary -- and

probably even more important than salary are the research and educational opportunities that would bring high-quality pathologists and attract high-quality pathologists to work at the JPC.

The work load figures that were provided included cases only from the Military Health Service and the VA and didn't include any outside other cases from other federal agencies. And so we suggest that actually a survey of other federal agencies be done to determine, realistically determine, a work load.

Also a very important piece of this is the case complexity. The model that was proposed had so many cases being done by X-number of pathologists. I believe that that was probably inappropriate. I think that the -- I suspect that the staffing was based on a general pathology service, not a reference center pathology service. Reference center pathology service gets, typically, very difficult cases, so, for example, if I have 10 hernia sacs and gallbladders, I can do those relatively promptly. If I have one dementia case

that's very complicated or a tumor that's very complicated, that may take three or four hours.

So a case complexity is a very important part of

this, and again if it's a reference center, the chances are it's going to be getting more difficult, more complex cases that cannot be handled at the primary hospital.

The crown jewel on all of this is the tissue repository, and the tissue repository for those of you who may not know this is comprised of millions of cases. Actually 7,8 million cases, well-studied documented cases, are contained in the tissue repository. Within that case material includes 31 million paraffin blocks and 55 million slides as well as 500,000-plus wet tissue specimens. This is an invaluable resource, an invaluable national resource, invaluable international resource.

I mean where else in the world could you go and find 500 cases of glioblastoma? So the potential use of this material is unparalleled. It's an incredible resource and something that has to be

preserved and maintained, and again, it gives rise to all sorts of collaborations that could be done both within the Federal Government, with other civilian agencies. Collaborations could be done with civilian organizations, academic and industry, and this is very important in the development of new probes of diseases and therapeutic developments.

And this again is especially important as we move to a model of molecular medicine and personalized medicine.

As these areas evolve, having tissue samples is going to be invaluable again, and into finding probes to identify these diseases but, more importantly, therapies that could potentially treat them.

The research activities as provided, as detailed involved DOD health -- I'm sorry, involved primarily people within the JPC. We suggested that be expanded to include all DOD health agencies and that a research management process be instituted to formally make the research possible

so that you have a process in place for rationalizing and improving protocols.

Collaboration with other federal agencies and

again civilian centers and industry are all key and can strongly enhance the research activities, and it's a win/win situation for everyone. Regarding education and training, there is a mention of some of the educational activities would be taken over by the Uniformed Services School -- Uniformed Services University of the Health Sciences. These were not really detailed but there really was no mention about subspecialty training and pathology. There was no mention about subspecialty pathology courses or the fate of the radiology pathology course which annually attracts over a thousand trainees in radiology across the country. So all these kind of things, although they may not be important on a day-to-day basis, five years down the road, if they disappear, they're going to have a significant impact on particularly the training, on the educational experience of new

trainees in medicine. Other areas of interest could be expanded to include aviation and accident forensics and investigations in a crisis have to be consistent with treatment priorities and challenges as they evolve. And this was probably going to be a moving target. It's going to differ from year to year. Regarding the equipment and special design requirements, there has to be in place policies -- there has to be in place the potential for making the state of the art laboratories and maintaining them, and providing the adequate support for them. Work flow considerations we thought were very important to consider. The plan, as presented, included the separation of the different components of the JPC, some located at the Forest Glen complex and some at the Bethesda complex. And even though there is a 15 or 20-minute shuttle service that potentially could run between the two, this was really not an ideal situation, and we'd strongly recommend that all these activities

be consolidated on one campus. Again, I already mentioned the establishment of state of the art laboratories. There is a mention

of the molecular laboratory being formed. Again, that needs to be detailed and is again an especially important area, as we find molecular probes for identifying some of these different diseases.
So these are our recommendations. Then we believe that the DOD has an exceptional opportunity to build a Center of Excellence. It has to obviously be within the constraints of the law and meet the federal -- meet the needs of all the federal agencies. We really would want to emphasize that this be an adaptable and flexible structure that can evolve as different problems and different issues arise. And this would also meet the further future requirements of the DOD.
We also would want to ensure that all federal agencies could take advantage of the expertise that the JPC could provide. Subspecialty areas, again need to be identified. The organizational

structure should be sufficiently flexible and ought to be adequate to allow for the JPC to thrive. The education and training components again, we certainly would like to see those expanded and continued.
Governing structure and bodies should be involved to ensure that all stakeholders are represented.
Performance metrics should be developed and periodically reported, and we would be happy in the Defense Health Board to review these on a periodic basis.
Again, I want to emphasize to ensure that the JPC thrive and do well, I think there has to be sufficient funding, space, staff, equipment and facilities be available to allow this center to develop, and again, the key is flexibility in allowing it to be potentially expandable. And these would ensure that premier service is provided.
The budget that was presented we thought was probably inadequate for all the activities that were projected, and these again, you have to

include the maintenance and modernization of the tissue repository. There's also a potential for other funding streams. This could be done through

collaborative agreements with other federal agencies, so, for example, the VA could provide a VA piece, NIH could provide an NIH piece and so on to fund different work that the JPC does.
So I think by some creative thinking partnerships could be made with other federal agencies and with civilian and industry that would fund a lot of the JPC activities.
The Board strongly believes that the tissue repository is a national if not international treasure. There's really nothing else like it in the world, and every effort must be made pursued to guarantee that it's preserved and utilized appropriately.
The strategic plan needs to be developed. The scope and functions I think need to be more clearly defined, and this will allow, then, the realistic determination of work load and space requirements. But I think it might be best to

step back a bit and think about the big picture here.
We would be pleased to be involved. Hopefully, we would like to be ideally involved early in the process of the development of this strategic plan.
And I'll leave the rest of the time for questions or discussion.
DR. WILENSKY: Let me remind people that this is the second time we've discussed the report. It's really for questions that have not been raised previously to raised, and also to remind people we are not here to discuss whether or not this Joint Pathology Center is the appropriate successor to AFIP.
If there are comments within that -- Ed?
DR. KAPLAN: Kaplan. Would you repeat what you said about the leadership? I wasn't clear about the issue about there being senior pathologists versus junior pathologists.
DR. PARISI: Well, you can staff a pathology center with mainly junior people, or you an staff them with mainly senior people. Ideally,

you'd probably want a mix of both. But to attract senior people, you need to provide them with first of all salary; you need to provide them with other

opportunities.
It's very unlikely you're going to find a high-level senior pathologist be attracted to someplace where he's only doing case work. He wants to be able to do research; he wants to have some educational activities; he wants to be able to teach, probably. So the makeup of the staff is very important to the success of this. I would see it as being headed by some senior high-level pathologist and certainly each section being headed by a senior-level person. That would be the ideal world.

DR. KAPLAN: Thank you.

DR. WILENSKY: Dr. Casscells?

DR. CASSCELLS: Dr. Parisi, thank you and your Task Force members for this thoughtful report, and, you know, it was at the previous meeting that you and I spoke, and we realized that we hadn't gotten you the brief that was coming to

you, and we got a late start on this. Thank you for your patience.
This has been a difficult issue for us, and we've got plenty of insight and plenty of advice from Congress and all kinds of interested parties on this and, you know, we've been caught a little bit between BRAC and the National Defense Authorization Act, so thank you for working to bring in new ideas and to give us the flexibility to retain the best, strengthen the rest and so forth.
And I want to particularly comment Dr. Gullick for sustaining the performance and morale of a BRAC -- it's a terrible term. It sounds like violence has been done to you or something illegal. We've been BRAC'd. And the fact that that term is used give you some insight into how people feel. So she has kept the team moving forward, and I want to thank her publicly for that, and say there are recommendations that I don't take exception to, and we'll have an ongoing discussions, Dr. Kelly, Dr. Embrey, and I, on how to implement these

recommendations, and as soon as the discussions get too hot, I'm going to resign. I think that's going to be about January 20th.

But thank you, Dr. Parisi. I'd like to hear some frank comments from other stakeholders, please.

DR. REDDICK: My name is Bob Reddick, and I'm a member of the 10th Pathology Advisory Board, and I just want to say that I totally agree with Dr Parisi in terms of his presentation and the information provided to you.

However -- and I guess we're not supposed to talk about this -- but sometimes I get the feeling that Rome is burning while we're fiddling, and I think that we need to hopefully get on a much more active way of looking into this because we actually will lose a treasure. We will lose an opportunity or opportunities for us in the future.

The question was raised earlier as to whether or not there is tissue available for the traumatic brain injury cases and, as a matter of fact there is tissue available. The Medical Examiner for the Service is here, and he can discuss those kinds of

issues. So there are proactive things that are going on, but I think, basically, we need to make sure that we can continue to do those kinds of things and have the Joint Pathology Center, if that's what it's going to (off mike) an AFIP-like Center of Excellence could do these kinds of things that we've all talked about earlier today.

Pathology is not an isolated discipline; it's intimately connected with each of the things that we basically have looked at and hear about this morning from initial patient care to final patient care; to biopsies that come out of the theater to biopsies that, or unfortunately in some cases, deaths that occur on the battlefield. These are all within the domains of the pathologist.

And, obviously, our goal is to make sure that we take care of the best; that we do the best for these individuals who are involved in illnesses and other injuries, if you will. And so my recommendation, hopefully, is that you all would take this as very good information, very helpful information, and as the person at the head said,

this is a way of allowing us to continue to have a Joint Pathology Center that has an excellence and world- class association with it.

So I'm just pushing for that. Thank you.
DR. PARISI: Thanks.
DR. WILENSKY: Are there any other comments or questions that we have not had addressed? Ellen?
MS. EMBREY: One of the things that I did not notice in the previous iteration was the reference to forensic, and now the recent comment associated with the Armed Forces Medical Examiner's Office. Is it the recommendation of the Defense Health Board to incorporate the Armed Forces Medical Examiner in the JPC?
DR. PARISI: We didn't discuss that as part of the subgroup, as part of our group, because actually those functions were separated out by BRAC, by the BRAC law.
On the other hand, the JPC could provide input to the pathology, the further work-up of tissues that are obtained from forensic cases, for example the

TBI cases. So a detailed neuropath exam could be done on those cases if that was submitted to JPC. The forensic people wouldn't have the expertise or time or probably the interest to really do it as well as the JPC could.
MS. EMBREY: So the JPC would consult to the Armed Forces Medical Examiner.
DR. PARISI: Both ways, right.
MS. EMBREY: Okay.
DR. PARISI: And that could be also applied to other diseased organs, too. There could be further work-up of heart, the pathologic heart specimens, livers -- I mean it could be all sorts of things.
MS. EMBREY: Also, Dr. Parisi, I know the issue of -- I mean, to summarize in laymen's terms, because I'm a little slow -- but what I see you saying is the CON OP is good, but you can do more. We need to make sure certain other things get addressed as part of this.
And I'm particularly concerned about the reference to staffing and the senior versus junior levels.

Is there any kind of industry standard out there for what a senior pathologist makes and whether or not that's even possible within the Federal

Government structure?
DR. PARISI: Those data are probably available. I think you could probably find some numbers, and you could augment salaries, for example, with grants perhaps from industry, or from other funding sources.
MS. EMBREY: (Inaudible).
DR. PARISI: There was a -- this problem was recognized, actually, many years ago and resulted in the ARP being formed, the American Registry of Pathology, which provided a civilian input into the AFIP. So that is still on, and if that could be adapted or involved, that's another way to bring senior-level people into something that's more military.
DR. REDDICK: The VA has instituted a new pay plan, and that new pay plan offers salaries that are much higher rate than what we have in academics. So there are those situations

where VA and military individuals are paid at a higher rate.
DR. PARISI: I think the one thing the Subcommittee was adamant about was the pasture, the placing of the JPC within a hospital Department of Pathology were -- we really don't think that allows it to grow and to serve a function as a reference center. Just philosophically, it doesn't make a lot of sense to me. It's not intuitive, so I think it really needs to be at a higher level.
DR. WILENSKY: Please be sure before you speak their comments or questions to indicate your name.
DR. RUSSELL: I understand that GE announced last year a $50 million initiative to develop an automated pathology device and series of devices that I think they intend to bring to the market as soon as next year or the year after. Have you considered partnering with either they or any other private sector --
DR. PARISI: Well, I think that's -- I

think that's an excellent suggestion. That hasn't been explored to my knowledge, but I think all these industry partnerships are potential funding

streams, and it's a win/win for everyone. GE is trying to go to the slideless kind of platform where you can eliminate some of the steps, and typical is dialogy processing, from my understanding.

DR. MULLICK: Florabel Mullick, Director of the AFIP. I am speaking for myself right now as a professional with many years of experience, and I would like to thank Dr. Parisi that I commend him for his report, because without my input, he just described something that I and the rest of the staff of the AFIP -- this is not about the AFIP. As you heard the Professor, the AFIP is BRAC, and we are already aware of that, however, in designing a Joint Pathology Center for the Federal Government, there needs to be a comprehensive plan like Dr. Parisi described. There are still a few things that need to be expanded, even in this plan; however, a Joint

Pathology Center has to be an entity; it cannot be a minute part of the Department. It has to have staff that can provide the final diagnosis on a problem. It's not just a consultation -- anybody can consult -- a final professorial diagnosis, and also that the education will absolutely solidify what we all have done for many, many years because it's not just a basic course based on training; it is that the professionals at whatever level, they need to solidify what they are all about. If you are a surgeon, so you take a graduate course like it has been offered -- it should be offered by a reference center -- that would solidify that specialty, not just basic course. The research, also, should be state of the art, and it should have latest equipment, latest techniques. So in summary, the concept of a true reference enter for pathology for the Federal Government I believe is what we just heard Dr. Parisi describe, and that has been said for many, many months in other forums. I have one question, and that is, what is the

process now for this report? Dr. Casscells mentioned that himself and Ms. Embrey, Ms. Wilensky, I think, are going to discuss it and

then it goes to the Secretary of the Army, or what is the process for this report now to go forward, if I may ask?

MS. EMBREY: Once the Board -- again, this is an independent set of recommendations to Dr. Kelly, who asked the question for advice. Dr. Kelly will, in his role as the Deputy Assistant Secretary for Clinical Programs and Policies, may take on your recommendation, discuss what we're going to do with that, and the report to Congress on our decision on the way ahead. Is that correct?

DR. KELLY: We will go ahead and take the report. It will be referred back to the group that has developed the original CON OPs to revise it, taking into consideration, and then with that we will discuss it at the Joint Pathology Center Working Group where we have representatives of the involved parties, and then it will fully be vetted

with that, and then go up the chain for decision process. It's not just that the decision is these recommendations; it fits into how will they be applied in the setting of the CON OPs and what the plan is as we go forward.

DR. WILENSKY: Thank you, Dr. Kelly. Any further questions? Mike?

DR. PARKINSON: Are the risk of being somebody in a dark room with gauzy cobwebs trying to feel my way through this, if we just -- it just kind of dawned on me, and I've heard this issue several times before -- if we take Congress at its word, this is to be a reference center in pathology for the Federal Government. It does not appear to me, and having heard this on several times although not being directly involved, that we have truly engaged in a meaningful way the stakeholders or the customers of the Federal Government.

I mean my own organization, the College of Preventive Medicine, the AMA, John Herbold's organization, the Veterinary Medical Association

has tried to get over the concept that there was one health: animal disease becomes human disease; animal prions become human prions. And it seems

like the table, if there truly is the Federal Government is a customer of this entity that we need to somewhere have in the process before we sign off on this and send it along, the USDA, what are they doing in terms of veterinary pathology, and global emerging threats? What are we doing in such things as food safety in FDA, and the types of things that we see now -- rapid diagnostics? What are we doing in terms of Department of Energy, the new concern about nanotechnology that nobody is monitoring in terms of the way we detect these in tissue samples? It seems as if it might have been a well-meaning but a relatively cursory look because it comes out of the AFIP legacy in sitting at Walter Reed that perhaps the world has changed in the last 24 months even around an urgency and need for this.
Similarly, the claim that the tissue repository is a, quotes,"invaluable resource," or "invaluable

national resource," it's kind of like an art collection, you know, who's willing to bring it out in the light of day and pay for it? So if there is indeed and invaluable resource to seven million specimens at a time where we, discovering diseases that are reemerging, what is the true commercial potential of a business plan to take that to pharma? To the new emerging technologies companies? To the new -- I'm not sure that we've done enough real homework here in a way to make this credible to the citizens and the Congress about whether or not we've done it.
A lot of good work, but I just, as I'm listening to this again and thinking about the things that we talk about -- John and others -- maybe there's a lot more here, and I would hate to see us give short shrift of this as it works its way up to get it out, you know. We may not have done all our homework. Just a hypothesis.
DR. WILENSKY: Dr. Kelly, why don't you respond, since you're --
DR. KELLY: I will say that we did not

do the Department of Agriculture; however, at the working group the Health and Human Services was invited, the VA has been invited and been a full

participant in there. So the people who are currently using, saw the light and were involved, I think that that is something to be developed in the future.
I don't think that the formation is likely the conclusion, and that there is more to come as you look at a Joint Pathology Center and where the future goes for some of these things that you're talking about.
DR. PARKINSON: I think that we'd like to encourage collaborations. I mean I think if you start thinking about potential collaborations, there a whole world that opens up that you haven't even thought about, and I mean that could utilize this material that's in the repository.
DR. CARLTON: : I was part of the discussions that went on 15 years ago. Everybody wanted this and no one would pay for it. And what I don't see -- I agree with Mike Parkinson, I

don't see that anything has changed. We're just going through the whole discussion again.
We went to pharma, we went to all the educational opportunities. We went to emergency review committees, we went to every university and said, "Boy, you're sending your kids for weeks or six weeks, or whatever, for the formal coordination of pathology and clinical science, and no body would pay for it."
And so I haven't heard the answer to Mike Parkinson's question that we fought with 125 years ago that led to the ultimate position that we don't have an effect 100 percent (inaudible) pathology.
DR. WILENSKY: Yes?
DR. HERBOLD: John Herbold. Can I make one positive statement and reinforcement of what Dr. Parkinson alluded to that it's popular right now to talk about one medicine, one health, one ecology, and I'm one of the disciples of that.
But I also remind people that it's the Armed Forces and the Department of Defense and the

Military Medical Departments that actually do invoke and practice one medicine, one health across the social/cultural and work setting.

And so this is an opportunity to look at a Center of Excellence to demonstrate across all the functions of the Department of Defense how a Joint Pathology Center would function. And then, of course, I think the unanswered question is, do we bring in partners and move to a setting like the Canadians have with a joint food safety and emerging infectious diseases, and Department of Agriculture and HHS together?

So there is an opportunity here to take on the one medicine mantra, and I thought we had a Center of Excellence called the Armed Forces Institute of Pathology, so I think we need to raise that to the next level as we morph. We morphed from the Armed Forces Epidemiology Board to the Defense Health Board. I think we can morph from the Armed Forces Institute of Pathology to a DOD Joint Pathology Center that offers services to other federal agencies.

DR. WILENSKY: Dr. Carlton, when the issue was raised previously, was there serious thought given to not allowing students to come in unless somebody was paying their freight?

DR. CARLTON: : Oh, absolutely. Those discussions went on, and it wasn't a matter of anybody said we want to get rid of the AFIP; it was a matter of the Congress said: Here's your X-number of dollars to the Military Medical Services, and you went from most year to least year, and what happened was then the AFIP didn't get staff, it didn't get funded, and eventually we stopped sending our kids there because we didn't have a quality product. We didn't have the staff that could handle them.

DR. WALKER: David Walker. I have reviewed the Department of Veterinary Pathology at the AFIP, and it's one of the premier departments. I mean it's an outstanding residency program, and one of the most difficult theory is in veterinary medicine.

And I really strongly endorse the establishment of

a nationally risk factor leading quality reference Center of Pathology that's not only diagnostic pathology, looking, like, through the microscope

which Joe Silva here is always joking to me that that's what I spend my time doing. But also, really, using the contemporary technology that Mike Parkinson brought up, moving on up to that next level.

And I think that's going to require money to recruit highly-esteemed pathologists, not only in diagnostic pathology to do the reference work but also to do peer reviews, competitive research, and to have the visionary leadership is going to see what these things are to be able to look and see what's going to be there down the road in the next megatrend that we need to be ahead of instead of behind.

DR. WILENSKY: Dr. Kelly?

DR. KELLY: Yes. Let me just make two comments on some of the things that happened. On the veterinary pathology, we won't go through the whole history of the AFIP and the BRAC process,

and the JPC, but there was a process in between there where the AFIP was looked at and all of the functions that weren't continued in the BRAC law were reviewed for whether or not they should be retained. And the veterinary pathology program is one of those functions that the Army determined that they should retain it as part of the Walter Reed infectious disease -- I think it's the -- we're -- the Army's going to retain it. We could bet where that's going.

So that is further under discussion now of whether it should stay separate because that decision was made before there was a JPC. So that's under discussion, not resolved.

The second thing is on the tissue repository, is that we contracted out independent source to evaluate the tissue repository and to give us recommendations on the best way that that it could be used, utilized, and brought into the future, and modernized. We don't have that report out yet, and so it's all part of the process, but it's not there. We need to press on as we're going.

DR. WILENSKY: Adil.

DR. SHAMOO: A lot of things that are in the repository are the historical things. They go

way, way, way back. I got my hands on from their tissues from soldiers that died in the Pacific, a scrub typhus which affected 18,000 soldiers during World War II, and no one knew until that point what is the target of the disease. Where are these organisms growing until we cold go back and find those tissues in their repository and do the (inaudible) chemistry on them. The actual disease itself, you couldn't understand what it was until at least that part was answered.

DR. WALKER: You know, I think a lot of our functions if government. The function of government is maintaining things that are good for mankind. Maybe they don't general money or maybe, you know, they're costly. But they're good for mankind, they're good for medicine. They push the envelope forward, and I see the repository in the JPC in this kind of role.

DR. WILENSKY: I think we have had

adequate discussion on this, and I want to make sure our last presenter has fair time.

Our last speaker today is Mrs. Anne Moessner, who is currently serving on the Traumatic Brain Injury Family Caregiver's Panel. She was an Assistant Professor of Nursing at the Mayo Clinic College of Medicine, a traumatic brain injury clinical nurse specialist in the Department of Nursing and a Project Coordinator in Traumatic Brain Injury Model System of Research, Department of Psychiatry and Psychology, all of which are at the Mayo Clinic in Rochester, Minnesota.

Ms. Moessner will provide an update on this congressionally mandated subcommittee's activities. Her presentation slides are under Tab 10 in your binders.

Thank you for your patience.

MS. MOESSNER: Oh, absolutely. And thank you for the invitation to come today. I am very pleased to be speaking on behalf of the TBI Family and Caregiver Panel, as the final speaker today, and objectives of my talk this afternoon

include the following: Just reviewing the purpose of the Family Caregiver Panel, review where we are in the curriculum development process, describe

the module approach that we have developed and where we are in that particular process, review the time line that we're under and that we're hoping for in terms of completion of the project and a final report to the DHB, and then outlining the agenda of our next meeting which is coming up soon in a few weeks.

So this panel was convened as a result of the National Defense Authorization Act, and this mandated the establishment of a 15-member panel to develop coordinated, uniform, and consistent training curricula to be used in training family members in the provision of care and assistance to members and former members of the Armed Forces with traumatic brain injury.

So the law stipulated that the panel be comprised of several different types of individuals, so those of us who are medical professionals such as myself, who have a history of providing traumatic

brain injury, care and particularly support to caregivers, but also including those involved in the care of individuals with combat-related traumatic brain injury, including psychologist with both TBI and psychological health experience.

We also have representatives who are themselves family caregivers or represent agencies or associations that advocate for families. We have representatives from the Department of Defense and the Department of Veterans Affairs, and they both have health and medical expertise in traumatic brain injury. We have a couple of members on the panel who have very specific expertise in the development of training curricula, and then we also have family members of Service members and veterans who have traumatic brain injury.

We have presented Colonel Jaffee, who's been up to speak a couple of times today. We have presented some of the basic work that we've been up to, to the Defense Health Board a couple of times in the past. Today again we want to review what we're here for, and let you know what we've been up to,

so I will look to Colonel Jaffee to help answer questions at the conclusion.

So, basically, we convened for the first time in

January, and, you know, the role of the DVBIC, which is the lead agency that's working with our panel is to provide programmatic and logistical support to the panel. So basically, they're helping us develop the curricula, according to the congressional mandate. They reviewing the content for accuracy because of their obvious expertise in that domain, and then also looking to help the panel towards implementation of the curricula evaluation and the ongoing effort for the family caregiver education.

The tasks of the panel itself are to -- were to do a literature review, The goal is that this be an evidence- base curriculum and that we develop consistent curricula so that all family members have access to similar information, and that we recommend mechanisms and a plan for dissemination and again evaluation of the curricula.

So we've had meetings so far. Again, the first

one was held in January of 2008. The appointments were not through at that point in time, so that meeting really centered around the panel coming together for the first time and getting to know each other, sharing ideas, discussing things like what currently exists out there in the literature.

We did have a presentation by Dr. Mary Carlisle, who had done a literature search on basically the caregiving experience, and there's a lot of information in the literature on traumatic brain injury, common effects, helpful interventions and so forth, but not very much on the caregiving experience per se. So Dr. Carlisle reinforced to us that there's not a lot of evidence out in the literature exactly how do you support families, but just that families seem to do better, caregivers, if they're educated and supported in some manner.

We talked a little bit about multimedia efforts, and that we agreed as a group at that point in time that the needs of family caregivers are complex and that they do change over time.

The second panel meeting, the appointments were through at that point in time, so the chair position was finalized at our second meeting in

June. We also spent more time on trying to pin down what will this curricula look like? What sorts of modules or must-have information should be part of the curricula? So much of that two-day meeting was spent on that.
We did in the middle of the second meeting have a town hall meeting, and I'll talk about that in just a minute. Today I will also report a little bit more information on what happened at our meeting, a very recent meeting in November, and then in a bit I'll be talking about our January meeting.
So the town hall meeting, the curriculum, the panel is very interested in this curricula being based on needs and on input from family caregivers, people with traumatic brain injury themselves. So along with having members on our panel who represent people, you know, that are affected by traumatic brain injury in their

family, we did hold a town hall meeting.
Invitation to this meeting was widely disseminated, and the meeting was attended in person here in Washington, D.C., but was also Web cast around the country. There's a list on your slide, handout as well as here about organizations that were represented at the town hall meeting.
Some of the input, just to summarize briefly, that we heard from potential end users of this curricula were that family caregivers from past conflicts want to mentor today's family caregivers. We also heard that -- and again based on my years of clinical experience, I feel like this is also an essential component, families want not only education but they want some reassurance that they can get through this experience, and they want a flavor of hope to be present throughout the curricula.
They also specifically asked us to insert vignettes or stories of hope and recovery or from experiences learned from past caregivers. The individuals with traumatic brain injury very

specifically spoke to us during the town hall meeting about community -- issues around return to community reintegration, per se, specifically work

that people with traumatic brain injury do hope to, intend to, plan to return to a productive and meaningful life, and that this curricula should be set up to educate family caregivers in such a manner as to promote that thought. Families want strategies t prevent burnout and also, loud and clear from the people in attending the meeting, not everyone has a family caregiver. So we met again in November, and our recent meeting was actually very successful, I feel. We are a 15- person panel, but we do have some expert resources assigned to the panel. We have some ex officio members, and we have some contingency members. So out of a total group of 22 individuals who have been working on the panel, 18 attended our December meeting, as did a large contingency of folks from DVBIC who have been increasingly involved and available to us as a panel.

And we have contracted out to two expert writers, both Ph.D. level health writers, to work for the panel, essentially. And so we've been giving them information about content, and they've been producing documents for us to review as a panel. To start off our November meeting, we actually also had a presentation by the Center of Excellence for Medical Multimedia. The Web site is listed here. If you're not familiar with that, I would encourage you to go ahead and access their Web site. Lt. Colonel Randy Mauffrey is working for the Center of Excellence for Medical Multimedia, and he and his group at the Air Force base in Colorado had already begun to develop some multimedia content around traumatic brain injury. And he gave us an updated presentation on, for example, a model of the brain that was interactive whereby you could click on lobes of the brain and have a quick neuroanatomy lesson. And then he has other capacity within his Center as well. Following that presentation, we basically decided to spend the two days getting down to business and

meeting and breaking up into modules and forming work groups to really, really start hammering out content. Now that we had writers that were very

available and invested in the project, we split ourselves into groups that I feel were very diverse and representative and began to process finalizing the module content.
So here today let me review, briefly for you, what the various modules look like for this curricula, and we would invite during the discussion period any input in terms, have we missed something here? Does it look like we're going in the right direction?
So the first module is basically an introduction to traumatic brain injury starting with what types of injuries are there? How do you discern between a blast mechanism of injury versus a more traditional direct blunt- force injury to the head and skull? Learning about the brain, basic neuroanatomy lessons: What are the lobes? What functions do they perform? Acute care issues. What does a typical Service member with a moderate

to severe traumatic brain injury endure during those first few weeks to months of acute care? Complications. What are the possible complications? We do hear from family members that those first several weeks when someone experiences a severe traumatic brain injury, they don't know what the tubes are, they don't know who the people are caring for them; they don't know about the possible complications,but this is information that they certain do wish to know. What's normal? Normal, what's an expected course of recovery following traumatic brain injury? There's been discussion today about natural course of recovery. What are the stages that we typically see in individuals as they progress through recovery from traumatic brain injury? What's an expected pace of recovery from this particular injury?
And then Module I, and you'll see this throughout the modules, we feel very committed to this being a useful, accessible curriculum whereby the information presented is practical, and it builds

not only a knowledge, but it offers practical advice and skills and information that families, we feel like they could, you know, access the

curriculum and figure out what to do and how to help. Because most family members will tell you, "We want to help. We want to do the right thing, we do not want to do the wrong thing." So at the conclusion of Module I are some helpful suggestion lists many of which were provided to us by family caregivers. What did they wish they knew during those first several weeks to months of recovery? Module II, then, which is actually the largest module, if I remember correctly, really looks at what are the commonly-known effects of traumatic brain injury across the domains? So physically, in terms of ability to communicate with people again, emotional capabilities, cognitive functioning, and behavioral sequelae. So Module II is really broken down into here are some possible areas. These are areas people with traumatic brain injury commonly struggle with for some amount of time. We do try to preface all of

the information we're giving at the beginning of each module with this may apply to your loved one, your Service mentor, but to try to have people not be overwhelmed by the amount of information. So we are working out the language here that these may apply; it doesn't mean your Service member is going to have everything on the possible lists of issues to go ahead and deal with.
And again, under the list of each particular potential issue are related strategies that are intended to be practical, useful. We've spent a lot of time trying to hone the language down so that it's simple, meaningful, and it's not just words to fill up space, but we're trying to get rid of all extraneous information and get it down to words again that are usable and the tips that are practical.
Module III talks about the caregiving experience, becoming a family caregiver for a Service member or veteran with traumatic brain injury. And it starts out by reviewing starting the journey. caring for your Service member, caring for

yourself, caring for your children, every-day issues that many families encounter that they may not necessarily think about until they get home.

Planning for the future, and then how might they find meaning in the experience of caregiving? The final module is very complex and is and will continue to be a challenge to try to explain to family caregivers recovery care, eligibility for compensation and benefits, rehabilitation of medical support, entitlements, benefits. We do have a very dedicated and experienced number of individuals that are working on Module IV trying to explain to overwhelmed stressed-out family caregivers, how do you work with the system? How do you communicate with your health care providers, your case managers in order to get what you need and what are you entitled to? So again, the majority of our November meeting was really focused on specific work in the modules. We did finally go ahead and designate a module worker member to work directly with the writers, with the staff at DVBIC, and with myself because

communication was becoming complex. And so that approach seems to have cleaned up the process a little bit, and I feel like we've moving along more quickly due to the designation of some lead content experts in each of the modules. Again, messages from the November meeting, aside from the module work, some general messages, we heard from panel members were again a tone of hope, make this curriculum accessible, make the language supportive, pay attention to reading level, those sorts of ideas. Mild traumatic brain injury, three was some work done during the November meeting on the issue of mild traumatic brain injury. Because this is a caregiver curriculum, most people are looking at it as a caregiver being an individual who is assisting somebody with a more moderate to severe traumatic brain injury. Or if they had a milder injury, certainly there was jewels are more in the moderate to severe domain. But there continues to be a nagging sense among panel members of the need to focus on mild traumatic

brain injury as well. As you all well know I'm sure, most people with mild traumatic brain injury, you know, recover

relatively well in a short amount of time, but those who don't have big needs, needs that can be as large as somebody with a more significant injury.

So the plan at this point in time, there's a little work to develop a Module V perhaps, around mild traumatic brain injury. But that will be a point of discussion at the January meeting to take a formal vote on what to do about that particular issue.

Because of our time line, the panel is thinking at this point in time that it is more likely that a print product will be ready and rolled out before a multimedia product. The idea right now is a print product with perhaps a companion DVD taking into account that people learn in different styles. But we are continuing conversations with Colonel Mauffrey about how to perhaps continue to work with he and his group.

So the time line at this point in time is since our November meeting, we took advantage of the momentum that had been created by breaking out into specific work groups, the content from that meeting and the interim time between that meeting and December 5th has been forwarded to the health writers. They are working on the next round of revisions. The hope is that the entire curricula will be back out to the panel members by December 22nd whereby we meet again January 8th and 9th, and we're hoping again at that point in time that the curricula is near final form because we have a number of other issues to attack at the January meeting, and I'll mention those in just a moment.

Following the January meeting, there is a plan to pilot the curriculum, and what that looks like is yet to be decided. There have been lots of ideas about how to actually go about doing that, but that's the activity finalized. Again, based on the pilot, the curriculum will, we assume, need some revision, but that by summer the hope is that a print produce will be out for use with a report

to the DHB prepared by July.

So the other issues that are on the table -- and these are big issues that we really need to spend

time tweakng -- is again reviewing the final content, determining who will write the preface for the entire curriculum. Should that be somebody from the panel? Should that be a so-called VIP? Should that be a family member? So that will be a point of discussion in January. We do have four family members, caregivers who have volunteered to be videotaped, interviewed, and be part of the curriculum in terns of sharing their stories. We are working on finalizing graphics. We have placeholders in some of the modules at this point in time. We need to do a little more on graphics. We do need to make some more decisions about the multimedia, multimodality approach to the curriculum. The Pilot and Evaluation plan needs to be finalized, the communication and distribution plans for both the pilot and for the end product need to be finalized. There has been discussion in all of

these areas, but not final discussion at this point in time.
We also are looking into V and Department of Defense clearance requirements, what those are, does they exist, and who does this curriculum need to be approved by?
And then a big question that has come up in the panel in the last two meetings is, who, ultimately, is responsible for maintaining the curriculum, updating it, and so forth?
We feel the benefits of the curriculum are, again giving it consistent message to family caregivers, providing practical tools for coping and for communicating, again with their health care team on how to gain assistance, also giving hope while navigating life posttraumatic brain injury. We're hoping the curriculum is accurate, up to day, it reflects current practice, it's evidence-based, and again that it provides self-management skills, that it's user- friendly, culturally appropriate, and really that it's based on real life needs and experience. And the input again on future users.

And at this point in time, there are three, I believe, other -- three or four other panel members, subcommittee members here today, and as

it worked out, there is one from each of the modules, so if you have specific questions about the modules, if it looks like we've overlooked content, please let us know. Again, Colonel Jaffee is here as well to field any questions you might have about where we are with our curricula development. So, please, any questions? Does anyone want to raise an issue?

Yes?

DR. MATTOX: As an academician, sometimes businessman, I have an economic question. I guess it's to the greater Board. Who owns this work product? Where is the intellectual property? Other similar Curriculum, the advanced trauma life support, the ACLS, the Advanced Cardiac Life Support, and on and on, have made millions and millions of dollars for the owners of a course.

Sometimes the courses go to families. Soon this

war is going to be over, and the major people with traumatic brain injury are going to be civilians, and therefore there is a market. And maybe this isn't the right place to talk about the issue of market, ownership, who sells it, to whom do you sell it to, but the time to protect intellectual property -- there's lawyers in the room, I shouldn't even be talking -- but the time to protect intellectual property is before it's out in the public sector.

So I raise this issue.

DR. WILENSKY: Okay, I don't know whether -- well, we can see whether we can get a response to that, so if you want to --

DR. CARLTON: : Gail, I've got a response to that.

DR. WILENSKY: Okay, Dr. Carlton.

DR. CARLTON: : What Ken is referring to is when you look at traumatic brain injury in the United States of America, we're dealing with 1.4 to 1.5 million per year, so the military's less than four or five percent. And what we've

just heard Anne describe so beautifully is a total change in thinking in less than a year. A year ago we talked about we've got to provide a better

helmet, provide ballistic protection against a 762 round. Now we're recognizing that the fast majority, 95 percent or more, are coming from the concussive effects, and now you've seen we've got a curriculum for it.

So it's not an idle question. I think it's absolutely critical and if we get Loree Sutton and Mike Chappy and the group involved, and we make this available as a national product, then all we have to do through the SAMMR, or whoever is going to do that, is establish the teaching modules for the more than a million that you see in the civilian side every year. I think it's a critical question.

I think it's a critical question.

DR. WILENSKY: Ed.

DR. KAPLAN: Kaplan. May I ask a related question? When these modules and educational materials are printed, does it say

"Defense Health Board" or approved by, or blessed by the Defense Health Board in any way, and if that's the case, does the Board have an obligation to review the material before it comes out in their name.

DR. WILENSKY: Roger?

COL. GIBSON: Colonel Gibson -- is this on?

DR. WILENSKY: Um-hmm.

COL. GIBSON: Okay, Colonel Gibson here. What Anne neglected to mention is the thing that drove this was the 2007 National Defense Authorization Act. Congress says, you will, DOD, you will form a Task Force, you will develop a curriculum for family caregivers -- and, oh, by the way, you'll do it in a year -- and that was the 2007 NDAA. So it's ben a little while that we've been working on this.

When they finish their curricula, this wonderful group who's worked so hard give it to the DOD. So who owns the intellectual capital? DOD. DOD then looks at that, accepts it, rejects it, modifies

it, keeps it up, changes it over time because it is a curricula, and every one of you academics know that curricula change over time, so somebody

-- probably the TBI External Advisory Committee -- will ask for updates occasionally on what's the Department doing with that product. The question of intellectual capital, absolutely. It becomes a government product that can be distributed as the government and Congress allows us to do so. To that's how the -- and, yes, Dr. Kaplan, the Board has -- the Core Board as a group is responsible for reviewing that product between signing off of it as a Defense Health Board Subcommittee product, concurring, not concurring, et cetera, not good enough for prime time go back, or, yes, this was the greatest thing since sliced bread, an go on. So that's the process involved, and that's why we are where we are. This isn't something we just dreamed up and decided we just give away. And it will be, in fact, the government product in the end.

MS. MOESSNER: Thank you, Colonel Gibson.

DR. WILENSKY: Bill?

DR. HALPERIN: Men who were working for CDC, there's no government copyright, so I've certainly had the experience of writing a major thing and then having somebody else copyright it, and have the proceeds go to the other private group. So it's a real dilemma how you copyright government work. And one way, in my experience, is to incorporate a coauthor and a foundationer someplace so that they have the copyright such that the proceeds of the endeavor can go towards the benefit of whatever you were trying to do, if you will. So it's a little kind of shell game, if you will, since you have no copyright. Get it to somebody will, who's going to use it for whatever you wanted to use it for. So that's just one comment. The other comment is (inaudible) a theme that's gone through a couple of the past presentations, and I'm thinking, gee, there's a lot of DOD money

going into research grants and whatever, whatever. And I don't think I understand what the system is for that competition, for the review, for the

announcement, for the use of all of those funds. And I'm wondering if at some future meeting we could maybe have a little presentation on, what's that system? How do you get the most bang for the buck if you're interested in TBI or whatever it is, by getting, you know, by competing it in an arena where you're going to get really good products out of the grant money. So it's just a request.

DR. WILENSKY: Dr. Carlton?

DR. CARLTON: Yes, Jim James just left, I'm sorry to say, but a federal grant paid for something called Disaster Life Support and the Family, of course, is that it has spun off. That federal grant then gave that to the AMA, and the AMA has commercialized it. That's what's Ken's talking about, who should take it and commercialize it, because this is an infinitely salable program?

And that, I would suggest, is something that DHB should engage for and find out, okay, who is a good group to take it and run with it? And, Ken, we'd appreciate your input on that because the American College of Surgeons or the Committee on Trauma might well be the right group. That's who sees those patients.

DR. MATTOX: I have some ideas. We can talk off line. This could fund the JPC.

DR. WILENSKY: Adil?

DR. SHAMOO: I am not an intellectual property attorney, neither am I an attorney. But you guys need really -- I have actually a chapter in my textbook on intellectual property, and you guys are really treading on territories you don't know, and I, personally, do not want to encourage taxpayers' money to be used for purely private sector. What they are talking about, you take those government fund products, and you make a new product out of it, and that's the one you really are commercializing. But you cannot -- and moreover the entire Federal Government all the

time has what's called shopping right to reproduce, to distribute free of charge from anyone as long as federal money was involved in

it.
So you need a lawyer.
MS. EMBREY: I'm not a lawyer, and I will tell you that my understanding is that the home of these curriculum outputs and the continued renewal of that is in the DCoE, the Center of Excellence that Loree heads up. It's a core competency of her organization.
And so she will be the recipient of these products, and it will be up to her to maintain them and to update them, working with the proper communities. And if that means working on ways to copyright them for the benefit of the federal sector, then she'll work on it.
DR. WILENSKY: Bill, go ahead.
DR. HALPERIN: I'm just wondering, because I think the question was if there was any feedback about them, about the presentation. And just one little comment. It looked very, very

good, but there was like one flay word "caring for yourself," the caregiver. And undoubtedly this is like a communicable disease. I mean the first is the patient, the next is the family becomes the patient, if you will.
So I wonder whether that, you know, whether that issue -- I mean it's obviously have got to come up, but is there more attention to how to prevent stress-related injuries, if you will, in the caregivers, and family disruption, and you could just go on from there.
DR. WILENSKY: Barbara?
MS. MOESSNER: Actually, yes, there has been discussion, an I'm actually going to ask Rose Mary Pries, who's sitting to my right as few people, just because she's intimately involved in Module III, which is a large focus of that particular module.
Would you mind, Rose Mary?
MS. PRIES: Not at all. Thanks, Anne. Yes, we're devoting quite a lot of content in that section to several things that family members can

do related to their own self care, because we recognize that without the caregiver or with caregiver burn-out, it's ultimately the Service or

the veteran who suffers.
So we're dealing with substance abuse, we're dealing with smoking, we're dealing with health promotion, stress management, all the thing that a family caregiver needs to think about and do to maintain his or his or her own sanity, mental health, physical health, and the ability to cope on a long-term basis.

DR. WILENSKY: Barbara?

COL. JEFTS: Dr. Maddox, I want to thank you for bringing up the fiance piece, because that has been a discussion of ours through the panel as far as who that was all going to work out, so thank you as far as bringing that up.
The other thing that Anne didn't bring up was that the definition of "caregiver," one of the things we realized is that EDOD and VA both had different definitions of "caregiver." So we have to then, initially during our first meeting and then

finalized during the second, as far as formalizing a definition of "caregiver." So we could incorporate a larger group rather than what was set up through DOD.

DR. WILENSKY: Further comments or questions? Yes?

DR. KELLY: Jim Kelly. The U.S. Army is also working on mostly health professional modules, and there have been expert panels brought together for many months to do this. And this was under a grant, and my understanding is that the model there would be that the Army would use it and make it available through DCoE again to all Services. But once again, there is an expectation that this be essentially public domain thereafter.
And one model of that is already in place with the VA modules on TBI and psychological health, which have been made available to the public sector through HRSA here in Washington, and then passed onto the AHECs, the Area Health Education Centers in the United States so that the modules can then go out to health professionals ad families

everywhere in the U.S. Through the rural, largely rural health education centers in this country where so many of our Service members are

returning.
And so that's already in place with an MOU between HRSA and the VA, and I suspect that there will be lots of opportunities to do it that way, and we know the mechanism for doing that, if somebody wants our committee to be involved.

MS. MOESSNER: Great. Thank you.

DR. COLENDA: Yeah, Chris Colenda. I noticed in the discussion, having treated folks with mild to moderate TBI that human sexuality is a major issue for families and caregivers, so is that part of the curriculum?

MS. MOESSNER: It is, actually, and it's under the caregiver section as well as the individual with brain injury section. And it's addressed both the physically, you know, physical functioning as well as through just changes in roles and relationships posttraumatic brain injury.

DR. MATTOX: I am a little out of order, maybe. I've watched, during my lifetime, the U.S. Military develop gadgets and stuff and modules that industry has watched and then picked up. One doesn't need to go any further than the military anti-shock trousers, so the Vietnamian misery that made millions and millions and millions of dollars for the companies that picked it up.
So this is very ecumenical, and it's very nice to put all of this stuff in public domain. But we're in a few market America where money is -- money drives that machinery. And as you were presenting, I saw a textbook, I saw a course, I saw postgraduate courses, I saw family gatherings, I saw an Internet site.

MS. MOESSNER: Um-hmm.

DR. MATTOX: I saw close to $10 million a year industry that could be developed almost immediately.
And I'm not even on your Subcommittee. There's a number of things we've talked about today that this Board and its subcommittees have developed

that could easily be put into the public sector post-Gulf Wars, and somebody at some level -- I agree with my colleague -- needs a lawyer.

The U.S. government is giving away a lot of intellectual property, and so I apologize for being out of order.

DR. WILENSKY: Now you've made your point. This is an issue that we will make sure is raised appropriately within the Department. It is rare that I think we need more layers, but this is clearly a legal issue, and we can discuss if and how the Department wishes to pursue it.

So point made. It is an issue. The issue has come up in some of the research that the NIH does either singly or jointly with private drug companies, so it is not one that is without precedence elsewhere in the governmental -- we will make sure it is at least raised to the appropriate authorities that that authority is clearly not us.

Yes?

DR. BREIDENBACH: Warren Breidenbach.

I'd like to point out that when you have intellectual property which you then give to society, you create in economics what's called a positive externality, because you're giving something that you don't charge for. It looks like it's for free, and it is for free.

I would suggest that if you maintain the intellectual property and put it out in front of the public and then maintain the profit motive, that you would do more good for society, eventually, because I believe it would then pay for that product to be regenerated. And that's really what you're saying.

I don't know how you do that legally, but I think it has to be looked at very, very carefully. You want to do the best for public, whether that's giving it as a positive externality or that it's being given as a profit motive. That's the question that has to be answered.

DR. WILENSKY: Again, the point's been raised. We will pass it along to people who are in an appropriate position to decide if or how to

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proceed on this issue.

Mike?

DR. PARKINSON: Michael Parkinson. Two

comments as we go forward, if the DHB can be useful. One is I'm concerned, I guess because it's constraint of funds more than anything else that you're talking about, primary paper distribution when we have an entire generation of soldiers who's already been connected on line to their loved ones, in Iraq for six years. They're used to this, thy expect it, they want it. So any way that we can this into Web -- not CD Rom but through the TRICARE portals -- to other types of things, I think would be really getting to the end user.

The second thing is, is to connect, and I'm not sure if three is already in extant this notion of, you know, the entire movement now in self-care and consumer engagement is communities of mutual interest: social networking, community support, on line.

So to the degree that that can be linked to

communities of interest on line with virtual content, ASAP, I think will have the broadest assimilation.

And then finally, to go through our TRICARE partners who don't necessarily see themselves as just the TBI community but in reading about this, people will self- identify. The point was made earlier that half of the people who need this or more don't know they need it. So it's not going through the usual channels but going through the broadest lay social engagement networking ways that we can, to see this thing in a viable marketing is probably the way to go. And let's not be restrictive, and that's not your intent, I know, but the paper comment just concerned e a little bit.

MS. MOESSNER: Right. Now, excellent comments and issues that we have discussed in depth, and again, it's figuring out our relationship with Colonel Mauffrey, or Lt. Mauffreys group, and/or putting it out if need be to another group to work with us, and just the

timing of that. And so the group is very committed into this being a Web base curriculum as well. The idea was to get something out quickly.

It would probably start as a paper product, and then Web soon to follow, absolutely. But thank you for the suggestions.

MS. RANKIN: Hi, I'm Theresa Rankin. I'm a national community educator with an organization called Brain Injury Services. It's a national model of community- based services and supports for individuals not just with traumatic brain injury but all of the areas of acquired brain injury.

We're based he in the Commonwealth of Virginia. My other job is as the National Outreach consultant for a national multimedia project that's funded by Colonel Jaffee's office, the Defense and Veterans Brain Injury Center; brainline.org was launched on November the 11th, Veterans Day. It includes an extraordinary Web management design and content-building team that we actually -- I think I can say it -- stole from

the Pentagon. They created army.mil. They created a site at the Pentagon that went from having 6,000 unique visitors a month to something like six million.

I'm hearing a discussion that I know the importance of from first-hand experience. I survived a severe traumatic brain injury as a military dependent at the age of 21. My father was the base communications officer at Camp Pendleton. When I was transferred from an acute trauma center in Northern California where the car crash happened, to the Balboan Naval Hospital, there was no map. There was no guidance, and it would take my family more than 10 years to bring me from California to Washington, D.C., to have the first access to comprehensive rehabilitation.

I know Anne, I know the Mayo Clinic. Over the past at least 15 years I've been directly involved not only with the Center for Disease Control but the NIH TBI consensus conference, and I think some of the knowledge that isn't on your able right now is there has been over 20 years of extensive

investment by every single state in our nation to develop the kind of education, training and outreach. And yet the barrier that exists is

you're looking at a primary population between the ages of 16 and 24, who sustained a severe injury that immediately puts them below the poverty level. So to try to create something that is, one, marketable, and, two, reaches your target audience is so complex. You're looking at families that, one, might even have language barrier; two, a literacy barrier; three, preexisting learning disabilities.
I'm here, I think, primarily to encourage yo to take three things under consideration that in the public domain, and as I think Dr. Parkinson and several other individuals have identified, you have this new generation that is socially connected through the Web. Brainline.org is this project that has been launched by DVBIC to tap into that social connectivity. I mean I'm the old woman on the team, and I'm only 52.
What we're looking at is a phenomenon, not only in

terms of a learning ability but in terms of transferring knowledge that you experience into direct application.
One of the resources that Anne might need to add to her list is from the U.S. Department of Treasury. They're launching an education program called Relational Finances. You're looking at military families who are barely above the poverty level in that mainstream of enlisted. How can they even cope with the fact that they are being processed through a system that doesn't acknowledge the fact they don't own a home, they barely own a car, and now you're telling them. You are not going to be responsible for an individual that might need up to $2 million worth of caregiving in a lifetime.
I think the most important thing I can encourage the Defense Health Board and Dr. Jim Kelly, who knows me well, continue to engage the stakeholders who weren't here today, who can tell you the hard core reality. I've lived at poverty level through the majority of my life, chronically unemployed,

isolated from my family, and periodically homeless because we have a system that repeatedly paralyzes an individual for every step that you make toward

independence.
So the extraordinary resources that General Sutton and Colonel Jaffee are developing, and soon Dr. Kelly, will not be able to break through those barriers until Health and Human Services, the Department of Labor, the Department of Education, the Department of Justice and amazingly enough, the United States Department of Agriculture are all on the same page. Therefore, when we walk in a door, and we have the courage to ask for help, that it's not the wrong door; that we're invited to sit down and tell our story and not be told to pull out your checkbook, it will cost you $15 to get map.
I am the daughter of two United States Marines, and I fight the word for all those who have come before me and are lost and know all those who stand next to me wondering what has happened to their life.

Thank you.
(Applause)
DR. WILENSKY: Thank you for your willingness to share your story with us. Is there any further comment?
(No response) We have clearly gone way beyond 4 o'clock time to Finish the regular portion of our meeting, but I thought it was important with all of the presentations we were doing today to allow the appropriate time for discussion.
We will have an opportunity tomorrow morning to do the administrative session we were going to start today. We will start tomorrow morning again at 8 o'clock. I've been asked by Commander Feeks to remind people that if you have RSVP'd for the dinner this evening, that a bus will be leaving the Marriot at 6:40 for the Army-Navy Club, and you need to meet in the lobby at 6:30, for those of you from out of town who are staying at the Marriot.
DR. POLAND: Coat and tie.

DR. WILENSKY: Dr. Poland was asking quietly behind my back what the dress was for Army-Navy Club, and it's coat and tie for you

gentlemen who were wondering.
This evening, as we have already indicated, we are going to be having the dinner to honor Dr. Poland's contribution as President, but not in any way suggesting any lack of continued involvement with the Defense Health Board.
We're delighted that he will be continuing on, on this Executive Committee position.
Ms. Embrey, will you adjourn the business portion of the meeting, pleas?
MS. EMBREY: I would if I could mind my script. Yes, I would like to conclude this afternoon's meeting, and so I will read it as follows: This meeting of the Defense Health Board is adjourned. Thank you for all attending, and I want to thank you for your tremendous support to the DHB and especially the speakers today for their outstanding presentations.
(Whereupon, at 5:18 p.m., the

PROCEEDINGS were adjourned.)
* * * * *

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transmitted was reduced to text at my direction; that said transcript is a true record of the proceedings therein referenced; that I am neither counsel for, related to, nor employed by any of the parties to the action in which these proceedings were taken; and, furthermore, that I am neither a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

/s/Carleton J. Anderson, III

Notary Public in and for the Commonwealth of Virginia
Commission No. 351998
Expires: November 30, 2012

ANDERSON COURT REPORTING
706 Duke Street, Suite 100
Alexandria, VA 22314
Phone (703) 519-7180 Fax (703) 519-7190