UNITED STATES DEPARTMENT OF DEFENSE

DEFENSE HEALTH BOARD

CORE BOARD MEETING

West Point, New York

Wednesday, August 18, 2010

PARTICIPANTS:

Board Members:

WAYNE M. LEDNAR, MD, PhD

GREGORY A. POLAND, MD

RUSSELL V. LUEPKER, MD, MS

DENNIS O'LEARY, MD

THOMAS J. MASON, PhD

NANCY DICKEY, MD

DAVID WALKER, MD

JOSEPH SILVA, MD

GENERAL (Ret.) RICHARD MYERS

COLONEL (Ret.) ROBERT CERTAIN

WILLIAM E. HALPERIN, MD, MPH, DRPH

JAMES LOCKEY, MD, MS

MICHAEL N. OXMAN, MD

MICHAEL D. PARKINSON, MD, MPH

ADIL SHAMOO, PhD

EDWARD L. KAPLAN, MD

Additional Attendees:

CHRISTINE BADER

COLONEL BEVERLY LAND

COLONEL JOANNE McPHERSON

COLONEL MICHAEL KRUKAR

COMMANDER ERICA SCHWARTZ

LIEUTENANT COLONEL PHILIP GOULD, USAF, MC

LIEUTENANT GENERAL DAVID HUNTOON

PARTICIPANTS (CONT'D):

Additional Attendees:

CAPTAIN ROGER LEE

COLONEL WAYNE HACHEY

CDR WILLIAM PADGETT

CDR PATRICK LARABY

CHARLES FOGELMAN, PhD

DR. GEORGE LUDWIG

LITA BERRY

DR. JILL CARTY

CHRISTINA CAIN

MAJOR SCOTT O'NEAL

LISA JARRETT

KAREN TRIPLETT

MARIANNE COATES

DR. STEVEN KAMINSKI

RADM DAVID SMITH

LTC GREG BURBELO

CADET MORGHAN MCALENEY

DR. JONATHAN METZLER

DR. CRAIG POSTLEWAITE

LIEUTENANT COLONEL CHRISTOPHER ROBINSON

DR. DONNA WIENER-LEVY

CAPTAIN MARTHA GIRZ

DAVID SHUEMAKER

OLIVERA JOVANOVIC

JEN KLEVENOW

ELIZABETH GRAHAM

P R O C E E D I N G S

(9:30 a.m.)

MS. BADER: Can I please have everyone be seated? Thank you.

DR. LEDNAR: Thank you, everyone. What we'd like to do is to open this meeting of the Defense Health Board.

On behalf of Dr. Poland, Ms. Bader, and the DHB staff, we would like to welcome everyone here to this meeting and thank you for your participation.

We have several important topics on our agenda today. It will be important that we try to stay on time because at least one of our presenters had his flight canceled and is unable to be with us here in person, and this is Dr. Frank Butler, and he's going to be calling in at the agendaed time, so we want to be respectful to him for that.

We'd ask now, Ms. Bader, could you please call the meeting to order?

MS. BADER: Good morning again. As the

Designated Federal Officer for the Defense Health Board, a Federal Advisory Committee and a continuing scientific advisory body to the Secretary of Defense via the Assistant Secretary of Defense for Health Affairs and Surgeons General of the Military Departments, I hereby call this meeting of the Defense Health Board to order.

DR. LEDNAR: Thank you, Ms. Bader. And, now, carrying on in the tradition of the Defense Health Board, I'd ask that we all stand for a moment of silence to honor those who we are privileged to serve, the men and women who serve our country.

(Moment of silence)

DR. LEDNAR: Thank you. Please be seated.

This is an open session of the Defense Health Board and we'd like everyone to know who's here and an opportunity for people to connect names and faces. I've encouraged on the breaks to please welcome someone you haven't met before and please make them feel welcome and introduce

yourself.

So, with that, if we can go around first the table and then the remainder of the room, if you mention your name and where you are affiliated, that would be great.

So, if we can start with Dr. Poland and we'll go around the room.

DR. POLAND: Dr. Gregory Poland. I'm one of the DHB Co-Vice Presidents. I'm with the Mayo Vaccine Research Group in Rochester, Minnesota.

GEN (ret) MYERS: Richard Myers, Joint Chief of Staffs, retired. I do a variety of things now and am proud to be a member of the Board.

RADM SMITH: I'm David Smith. I'm the Joint Staff Surgeon and Medical Advisor to the Chairman.

DR. SILVA: I'm Joseph Silva, Professor of Medicine at the University of California, Professor and Dean Emeritus, and, also, a member of the Board.

DR. WALKER: David Walker, Professor and

Chair of the Department of Pathology, University of Texas, Medical Branch.

DR. DICKEY: Nancy Dickey, President of Texas A&M University Health Sciences Center and member of the Board.

DR. MASON: Thomas J. Mason, Environment and Occupational, Department of Epidemiology & Biostatistics, USF College of Public Health, and member of the Board.

DR. O'LEARY: Dennis O'Leary, President Emeritus of the Joint Commission and member of the Board.

DR. LUEPKER: Russell Luepker. I'm Professor of Medicine and Epidemiology at the University of Minnesota and a member of the Board.

DR. FOGELMAN: Charles Fogelman. I'm Chair of the Psychological Health Subcommittee of the Board and an Independent Consultant.

CDR LARABY: I'm CDR Patrick Laraby. I'm here representing the United States Navy Bureau of Medicine and Surgery.

DR. PADGETT: William Padgett, Headquarters, US Marine Corps.

COL HACHEY: Wayne Hachey, Director of Preventive Medicine & Surveillance.

CAPT LEE: I'm Captain Roger Lee, I'm a representative from the Joint Staff J-4, Health Services Support Division.

DR. LEDNAR: Wayne Lednar, Co-Vice President of the Defense Health Board and the Global Chief Medical Office of the Dupont Company.

MS. BADER: Good morning. Christine Bader, Director of Defense Health Board.

Col McPherson: Joanne McPherson, Executive Secretary of the DoD Task Force on the Prevention of Suicide by Members of the Armed Forces.

DR. CERTAIN: Robert Certain, Doctor of Ministry -- a weird one here. I'm an Episcopal priest in Marietta, Georgia. My military career was a B-52 Combat Aviator and Air Force Chaplain, retired as a Chaplain a long time ago.

DR. HALPERIN: Dr. William Halperin, Chair in the Department of Preventive Medicine at the New Jersey Medical School and Chair of the

Department of Quantitative Methods for the School of Public Health at the University of Medicine and Dentistry of New Jersey. I'm on the Board of Environmental Science and Toxicology at the National Research Council and Chair the Subcommittee of Occupational and Environmental Health of the DHB, retired from Public Health Service.

DR. LOCKEY: James Lockey, University of Cincinnati and Board member.

DR. OXMAN: Michael Oxman, Professor of Medicine and Pathology, University of California, San Diego and Board member.

DR. PARKINSON: Michael Parkinson, past President, American College of Preventive Medicine, currently work with employers and health care organizations on performance and productivity improvement, and a member of the Core Board.

DR. SHAMOO: Adil Shamoo, University of Maryland School of Medicine, member of the Core Board.

DR. KAPLAN: Edward Kaplan, Department

of Pediatrics, University of Minnesota Medical School and member of the Core Board.

COL KRUKAR: Michael Krukar, Director, Military Vaccine Agent, representing the OTSG this morning.

CDR SCHWARTZ: Erica Schwartz, Preventive Medicine/Epidemiology, U.S. Coast Guard Headquarters Commandant, U.S. Coast Guard.

Lt Col GOULD: Philip Gould, Chief, Preventive Medicine, Air Force Medical Operations Agency, Office of the Surgeon General.

DR. POSTLEWAITE: Good afternoon. Craig Postlewaite, Force Health Protection and Readiness.

DR. LUDWIG: George Ludwig, Deputy Assistant for Research and Technology, Army Medical Research and Material Command.

DR. KAMINSKY: Steven Kaminsky, the Vice President of Research at the Uniformed Services University.

MS. BERRY: Lita Berry, Executive Assistant for Psychological Health Strategic

Operations.

DR. CARTY: Jill Carty, Force Health Protection and Readiness, Psychological Health Strategic Operations.

MS. CAIN: Christina Cain, Support Staff.

MAJ O'NEAL: Major Scott O'Neal, representing Joint Staff Operations.

MS. COATES: Marianne Coates. I'm the Communications Advisor to the Defense Health Board, contracted consultant.

MS. JARRETT: Lisa Jarrett, Defense Health Board Staff.

MS. TRIPLETT: Karen Triplett, Defense Health Board Staff.

DR. LEDNAR: Thank you. And again, welcome to everyone here at the meeting with the Defense Health Board.

Ms. Bader now has some administrative remarks before we begin this morning session.

Ms. Bader.

MS. BADER: Thank you, Dr. Lednar. I'd

like to welcome everyone to this meeting of the Defense Health Board and to thank the staff of the Thayer Hotel for helping with the arrangements for this meeting, as well as all the speakers who have worked so hard to prepare briefings for the Board.

In addition, I'd like to thank my staff, Jen Klevenow, Lisa Jarrett, Elizabeth Graham, Olivera Jovanovic, Christina Cain, and Jean Ward and Karen Triplett for arranging this meeting of the Defense Health Board.

I'd like to remind everyone to please sign the general attendance roster on the table outside if you have not already done so.

For those who are not seated at the tables, handouts are provided in the back of the room for your use.

Restrooms are located in the lobby. For telephone/fax/copies/or messages, please see Jen Klevenow or Lisa Jarrett. Lisa Jarrett is the brown in the back of the room, and they can assist you.

Because the open session is being

transcribed, please make sure that you state your name before you speak and use the microphones so that our transcriber can accurately report your questions and your responses.

Refreshments will be available for the morning session. We have a catered working lunch in the meeting room next door where we had breakfast for the Board Members, Ex-Officio Members, Service Liaisons, and DHB staff. Lunch will also be provided for speakers and distinguished guests.

For those looking for lunch options, the hotel restaurant is open for lunch, and there are a handful of restaurants located just outside of the first security gates.

The group dinner tonight will be held at the Painter's Inn and Restaurant located in Cornwall-on-the-Hudson. A shuttle service will be provided; please meet in the hotel lobby no later than 6 p.m. Return transportation from the restaurant to the hotel will also be provided at approximately 8:30 p.m. If you have not RSVP'd

for the dinner, see Jen Klevenow. The cost of the dinner is $26 per person, and in order to facilitate payment, you are kindly requested to provide the exact amount in cash to Jen Klevenow either during the day today or before entering the restaurant this evening tonight, as our ability to provide change is very limited. You will then be provided a dinner ticket for tonight.

The next meeting of the Defense Health Board will be held on November 1 and 2, 1st and 2nd, at the Key Bridge Marriott Hotel in Arlington, Virginia.

Finally, I ask that you please place all electronic devices inside in silent mode.

At this time I'd like to welcome Colonel Beverly Land to introduce herself. She is now the new Commander for Keller Army Hospital.

COL LAND: Thank you. I appreciate it.

I'm Colonel Beverly Land. Welcome to West Point. You'll find that this is a fantastic place and the cadets are just supreme. So, again,

welcome.

We did experience a power outage, so we've been busy trying to reschedule patients and those types of things. Thank you very much for the invitation.

MS. BADER: We're pleased to have you.

With that, I'll turn it back over to Dr. Lednar.

DR. LEDNAR: Thank you, Ms. Bader. We are honored and privileged now to have Lieutenant General David Huntoon, Jr. joining us at our meeting this morning.

Lieutenant General Huntoon serves as the Superintendent of the United States Military Academy. Prior to this assignment, he served as the Director of the Army Staff at the Pentagon; 46th Commandant at the U.S. Army War College, Carlisle Barracks, Pennsylvania; Director of Strategy, Plans and Policy for Army G-3 at the Pentagon; and Deputy Commandant of the U.S. Army Command and General Staff College. He has a Masters of Arts in International Relations from

Georgetown University and a Masters in Military Arts and Sciences from the Command and General Staff College Advanced Military Studies Program. Lieutenant General Huntoon's numerous military awards include the Distinguished Service Medal with oak leaf cluster, Legion of Merit with five oak leaf clusters, Bronze Star, Expert Infantryman's Badge, Parachute Qualification Badge and the Ranger Tab.

Without further delay, we are privileged to welcome Lieutenant General Huntoon. Sir.

LTG HUNTOON: I'll go around and welcome each Board member to West Point. Ms. Christine Bader is, obviously, the mother of one of our great cadets. I understand her spouse was just promoted to the rank of Brigadier General of the United States Air Force this week. Congratulations.

MS. BADER: Thank you very much.

*The following is a summary of LTG Huntoon's comments to the Board:

LTG David Huntoon, Jr., Superintendent of the United States Military Academy at West Point, welcomed the DHB members and stated that the U.S. military force is facing unique stressors and challenges while in its ninth year of conflict in Iraq and Afghanistan. He provided a brief history of the United States Military Academy (USMA), indicating that USMA leadership has the responsibility of ensuring the physical, emotional, and spiritual health of the cadets. LTG Huntoon described the USMA physical program and state-of-the art facilities available to the cadets. He discussed the cadet housing environment and stated that during an H1N1 outbreak, two hundred cadets were isolated to protect the health of those who were not infected.

LTG Huntoon described USMA cadets, stating that approximately 1,200 candidates are accepted each year. He stated that during their time at USMA, leadership is very focused upon providing the cadets with the physical, emotional, and spiritual strength and capabilities they will need in order to have a successful military career. The USMA faculty consists of both alumni and non-alumni and serves as role models for the cadets. LTG Huntoon stated that while at USMA, the DHB should take the opportunity to visit the Kimsey Athletic Center.

Dr. Halperin inquired if the core approach to teaching cadets at USMA could be applied to the civilian environment. LTG Huntoon described the downsizing currently occurring at the USMA due to a decrease in the defense budget and stated that institutions such as the USMA will experience pressure to become more effective and efficient as a result. He stated that the USMA leadership benefits from visiting other academic institutions, both military and civilian universities. Dr. Lednar

inquired if cadets provide feedback regarding their education after they have graduated and are serving in the military. LTG Huntoon stated that the USMA receives feedback from graduates, particularly Captains, Majors, and Lieutenants.

LTG Huntoon described the cultural immersion programs in which USMA cadets participate, including full semesters spent abroad to expose students to the culture and language of foreign countries. He stated that cultural awareness is critical to the cadets' success as leaders. LTG Huntoon described some of the challenges experienced by the U.S. Army, including post traumatic stress disorder (PTSD), traumatic brain injury (TBI), and suicide, and stated that the goal of the USMA leadership is to provide the cadets with the necessary training and capabilities to overcome such challenges.

LTG Huntoon concluded by presenting a brief video regarding the history of USMA.

DR. LEDNAR: Thank you, Lieutenant General Huntoon.

For all of you those attending this meeting, we have an opportunity to learn about this great institution and what they're doing, and I think there will learning so we can take away to our work settings about their academia, whether they're from some of the success that has been happening here.

So, this is really a great opportunity for us as Board members. We will have an

opportunity to meet and interact with some other cadets tomorrow. Our activities planned for you are to be able to see some of the programs that go on here at West Point.

But in order to give us a little bit of a context and introduction, we're now going to watch a brief film to acquaint us with the history of the United States Military Academy at West Point, and it will give us a glimpse of some of the tours and activities that we'll learn more about tomorrow.

So, with that we'll watch the brief film.

(Video played.)

DR. LEDNAR: Thank you. That combination of General Huntoon's comments and sharing his thoughts and this video I think is really going to be an important setup for our activities tomorrow.

What I'd like to do is go now into our agenda for the Core Board Meeting, and our first speaker is Major Scott O'Neal.

Major O'Neal is currently assigned to the Joint Staff, Joint Operations Directorate, Europe and NATO division. A career Army officer, Major O'Neal has served in a variety of operational armor and calvary assignments, from platoon through regiment, in numerous locations including Ft. Polk, Ft. Knox, Ft. Hood and Germany. His operational deployments include tours in Bosnia and Iraq. Major O'Neal's education includes a Bachelor of Science from the United States Military Academy in International and Strategic History and a Masters of Military Operational Art and Science from the Air University at Maxwell Air Force Base, Alabama. We welcome him back to his alma mater here at West Point to give us this brief today.

Major O'Neal. Thank you.

MAJ O'NEAL: Thank you, sir. I appreciate that.

It's good to be back, especially as I said last time, and I think as everybody who has served in the Pentagon agrees it's good to be out

of that building especially, but if I could just ask the next time if we could go some place else. I spent four years getting out of here. I'd appreciate it greatly. (Laughter.)

So, it's good to be back, and it's always nice to come back to a place you could call home. It sort of recharges the batteries, so it's good to be back.

Our agenda today -- I know we're running a little bit behind time. We have a conference call. But if you have questions either about West Point in general, I'm fourteen or so years past my graduation, so I can give you a different perspective than perhaps General Huntoon, the Superintendent, or "Supe" as we call him here, can give you. So, if there's questions with West Point or professionalism in the Army, I'd be more than happy to answer them.

My charge is to talk about global operations. There's really three things I'd like to talk about, a brief update on global operations. I think it's a well-educated

different current events as well as is other (inaudible) I won't dive into, but I'd like to touch upon at least the key issues ongoing and then transition to a thought about counterinsurgency. I talked about that a little bit. I'd like to extend that discussion and give you a different perspective on that, and I have a closing thought on Iraq.

In general, as we sort of use to key with respect to that (inaudible). We've shown this slide several times and I think everybody who's given this gets the brief coming out of the Joint Staff, J-33 will show you a slide similar, and it really does show you a world that's still filled with specific challenges, strategies down to a tactical level, but most specifically it shows relationships and it shows a relationship along geographic regions and now both the challenges, geographic and combatant commands, specifically, challenges they face are interrelated and how now just not one particular solution can be applied to one particular area

without undergoing the ripple effect across the world as it would be.

We'll talk about Iraq and Afghanistan a little bit later on in the brief, but I'd like to talk a little bit, at least while we're on this slide, about Pakistan. And although it's been in the news, perhaps in some essence we've seen (inaudible) and the earthquake in Haiti, combined with the size of the flooding currently going on in Pakistan. There's a tremendous Department of Defense, Pakistani government in that that was, uh, though (inaudible). You might see that in the newspaper. It's worth noting as we get toward wintertime in Pakistan, we understand the health-related consequences of a flood and famine, the associated diseases that come from them is worth noting that the strategic relevance of Pakistan, clear armed country, strategic positions with Afghanistan, India and the other associated issues we've had dealing with that country, it's important to note that perhaps as we go forward collectively as a body. The first thing I, the

importance of (inaudible) to continue at least know that Pakistani and the importance on that.

And just as a side note, obviously, working the EUCOM and Pacific actions, just a reminder, Kosovo. We're still conducting operations in Kosovo. You may or may not have known that there's fifteen or so people there and it's drawn down here to about five hundred. The operation began some years ago. It's finally starting to have at least the end of the tunnel, if you will, with respect to Kosovo.

Just as a side note. The last time I talked on the 8th of June, several things I talked about, the most interesting I think slide was the charge in the center of this, and some of the slides are shown to you, as well. But what was mentioned, I showed the diameters of the counterinsurgency and the interrelationships. We talked about the operational scale that you might see here in Afghanistan, and as an attempt to display that confusing, and albeit somewhat irrelevant at times

to us in this level, and down to the soldier and tactical level, the soldier, Marine, or airman, but there are obviously, when we talk to this audience, particularly the global operations, it's specifics, well-educated and informed audience. We don't have to go into what will be current events of global operations. Commander Theis, who is currently in Afghanistan, charged me when I first took on this position to brief, bring a different perspective, and I went to his office and talked to him, and he asked me to bring a perspective that may or may not be known to this general group, and it was a perspective that might give you a “who and what is going on” on a tactical and operational level for a sense of emotional connection, a sense of the rest of the story. And they now, as you read, sort of came up with those of called up listening to Paul Harvey, and he always had a cache, short of (inaudible).

That's sort of what we're going for in this brief. I'd like to talk about any, to the level of my knowledge, of course, and I'll get you

an answer if I don't have it for you. But if I can, what I'd like to talk to you about today is the rest of the story.

The last time I talked you were briefed on the soldier, the sailor, the airman, what do they do on a day-to-day basis. It was espoused to me to one of those individuals, and in particular a snapshot in time, be it a young Captain going to pick up a casualty on the night flight on a C-130 and a young (inaudible) doing a visit to the cancer ward. Chairman to go on health-related visits trying to enforce one of the things we talked about on a then medical-related activity in Africa and how we would help, at least tie the government of certain traveling African nations to the people using medical care. So, that's what we talked about last time.

This time I'd like to take it up on a small level and talk about, I think, a broader topic, and we talked about it at least in a terms of the general sense, how do you win a war. Particularly, how do you win a common insurgency.

It's a leader among a large and diverse group here with respect to institution and educational universe or environment or industry to some degree. Everybody here is charged with, to a degree, with focusing on the organization, trying to get to a degree, an organization to accomplish some sort of objective.

Well, if you're the leader of a counterinsurgency in Afghanistan tying some forty-five countries together for a common purpose, how do you do that? How is it done? More importantly, how can a Major on the Joint Staff and a collective body such as this help that Commander on the ground accomplish his objectives?

It's really trying to have a strategic dialogue to a level filter to tactical level exclusion. We talk about all of that. How do you really do that? (inaudible). General Petraeus has come up with twenty-four guidelines on counter-insurgency. I'll let you take a moment to read them. Although we're not going to go through all twenty-four, I think it's important how General

Petraeus, how he is educating his audience about it, those members on the ground. How does he take a strategic (inaudible), the soldiers, Marines on the ground trying to conduct a counterinsurgency.

Here are some of these points. Some of them may be obvious, some of them may not be obvious. I'll let you read those through for a second. The ones in blue I think are particularly pertinent to this, and I'd like to take a minute or two and go through those, as well.

The first one, and it was the first on his list, as well, "Secure and serve the population." It goes without saying it could be "Protect and Serve" as on the side of the local police car in the United States. But picture this. You are walking in your local hometown, walking through your hometown. You see gun fire, explosions, foreign people coming towards you. Your natural sense here in the United States is that you have a protective force, be it local, state, regional police forces, of some sort or military.

Not the case in a lot of third world countries. Specifically, not the case now, or it's at least a less significant case in Afghanistan.

What you see here is a young man with a brother or a son being protected by the Marines. Secure the population. Demonstrates both personal courage. This Marine doesn't probably know much of this young man or his brother or son, but he's securing the population.

Now what you have is a loyalty. You have a loyalty to a common purpose, an organization and a world and a culture. That loyalty is vastly dependent on personal courage. The only thing that could be better from our standpoint from this picture is as opposed to a Marine, is an Afghan do it.

But here you see a great example of secure and serve the population. For those of you who might have a hard time reading it with the font, I'll read it. "The decisive terrain is the human terrain. The people are the center of

gravity. Only by providing them security and earning their trust and confidence can the Afghan government, being the key word there, and ISAF prevail."

A similar dynamic, if we had a problem via water related, be it some sort of community issue, we have a natural sort of way to go about solving those issues providing a representative, a Congressman going to a local county board to get that result.

That's not how it happens. So, you take someone from our culture -- and a question earlier about cultural confidence is really spot on with respect to how do we, from our culture, translate our own understanding of that to a country that doesn't have that. And it has to begin with an education and understanding it because culturally (inaudible). It's taken us several steps back through Iraq and Afghanistan.

What you see here on the ground is governance. We talked about it in Iraq last time. For those of you who might remember, a small

building, a class of chairs and people sitting around talking. The first picture, I mean, of General Petraeus drinking tea. The same dynamic. That's how you have governance in a lot of places.

What we are trying to do is we are trying to tie a cultural divide, a tribal organization, a tribal, sort of lawless at times, area based on family, based on a tribal dynamic, to a government that is structured not always necessarily relates. It's almost as if you're trying get the (inaudible) to come to Congress and talk. Not necessarily the same. But that's what the reality is on the ground. And for the cadets that are here, a lot of them will be facing this exact same dynamic in a couple of years.

Afghanistan has a long history of representative self-government at all levels, from the village shura to the government in Kabul. Help the government and the people revive those traditions and develop checks and balances to prevent abuse.

Who you vote for, who you spend time

with is almost as important as how much time you spend with them.

Foster lasting solutions. I know. I recently came back from (inaudible) when I was having a discussion with a representative from NATO, and we were talking, talking about the medical component to what we were trying to facilitate; transition teams, advisors, and medical dynamics as we move forward in our relationship with the Afghan Security Forces and the Afghan government at large. How does the medical and logistics that were there, often the longevity lead times in terms of the education, who are involved with the people conducting to get those institutions established.

He gave me a great case in point. He talked about an ultrasound sitting in a hospital in Afghanistan going unused. The United States spent a lot of time and money, time and effort to get the ultrasound to Afghanistan and it's not being used. It's not necessarily on training. They were training on how to use it. Not

necessarily because of will, because they were afraid if they used it and broke it that they would upset the Americans who spent so much. They were also concerned they were going to run out of petroleum gel to run the ultrasound.

If you look at this quote from General Petraeus, and the sort of guidance, is a hundred thousand dollar ultrasound machine as important as perhaps ten thousand dollar renovations of local clinics, because when center (inaudible) of people, is that ultrasound as important as a local hospital in the Taliban controlled area.

Tying the government and the services provided by the government from a national level to a local level is what we're trying to do. Because you see here a young child being stitched up by a local civilian doctor and in a local clinic that was renovated using funds donated through the International Security Force in Afghanistan. Is that more powerful than an ultrasound and a collective body? Maybe it's an area of interest. It's of interest as we continue

to develop third world countries, because I think we're going to be in this business for a long time in an era of persistent conflict.

The medical relationship, the medical dynamic, is essential to get by fostering lasting solutions.

Help Afghans create good governance and enduring security. Avoid compromises with maligned factors that achieve short-term gains at the expense of long-term stability. Think hard before pursuing initiatives that may not be sustainable in the long run. When it comes to projects, small is often beautiful.

I'll give you a guess. You drive down a road here -- New York is probably an exception -- in D.C., without question, is an exception as far as the temperament of drivers, especially at about 4:30, 5:00 in the morning. The Beltway, without question, it could be considered a war zone at times.

The idea of being a good guest at how you drive in a community is a visible symbol to

how we represent ourselves. It is an extremely important dynamic.

When I first arrived in Iraq in 2003 I had a tank. That was my means of conveyance around the battlefield. A seventy-ton tank sends a particular message to the population, which at times is good and necessary and at times it is not good and necessary. How I drive down the road in a tank versus how I try to get the (inaudible) at times or vehicle to the road is extremely important, and being a good guest is not at how you drive, but on how you interact with the population.

If you consider via a community home, somebody comes in, or an environment per se and how they would treat you has a lot to do with how you are a representative in what you take away. Sort of it goes without saying.

This last one is walking. May or may not be self-evident when it comes to it, but when you think about it in a culture that is diverse of internet, Facebook, Twitter, there are no Twitter

fields in the Taliban or local civilians in, A, how do you interact with population? Is it by driving through a twenty-ton vehicle, a seventy-ton vehicle in some cases, or is it by standing there, walking through their local villages and talking to somebody developing a personal relationship?

Know what their kids' names are. Looking at the food stores and seeing how they're doing, if there's anything else you can do with that. Small rewards of cash that you can give them, all legal, but you say, hey, use this to go buy more stock to move the market. Macroeconomics and microeconomics are almost as important as the village ability to shoot a tank at times and understanding those dynamics? Always necessary, but to a degree when you're trying to establish a sense of community and at least establish a community (inaudible).

So, here he says, "Walk. Stop and don't drive by. Patrol on foot whenever possible and engage the population. Take off your sunglasses.

Situational awareness can only be gained by interacting face to face, not separated by ballistic glass or Oakleys."

It's time, really just spending time. Promoting local reintegration. Actually, I had a privilege when I was at battalion and to sit down with General Petraeus. He was the Commander of portions in Iraq, and we had a conversation on reconciliation and -- it might be not be understood, but if you have a group, an organized group that is an insurgent group, how do you stop?

At some point the balance as who were to come where there are actively recognized and integrated into the society (inaudible). As individuals, as regions of particular problem areas as you're going out there, but it's an important decision to have, and it's an important dynamic to consider as you move forward, and you cannot allow that to go without understanding.

So, together with our Afghan partners you have to identify and separate the "reconcilables" from the "irreconcilables." And

there's a definite degree we have to bring them to understand. There is a lot of a cultural understanding of how you can link your part or wash your hands and there's a level within each culture that they will allow this to go. And it might sound crass to say, but at times if they had killed Americans or international soldiers, that's one thing. If they kill Afghans, that's another thing. It might be forgiven that they killed Americans. Had they killed Afghans, it might not. Something to understand. Hard pill for us to swallow at times, but it's something to understand as a cultural dynamic. It goes without saying it's an important one to understand.

I'll leave with this spot. Really what you see here is a picture from Iraq. I arrived in 2003. Really, we had three basic objectives, and these are generalized to a degree for Iraq as a country.

In Iraq, with our help, has to field terrorists and insurgents, and Iraq is peaceful, democratic, and secure. Iraqis have institutions

and they need to govern themselves justly and provide security to their own core. Iraq is a global war and taker to the proliferations of weapons of mass destruction.

March 2003, Baghdad Airport. When I first arrived there is nothing that didn't have a U.S. flag, with exception of the green Army helicopters, which were a nice sight from time to time. In August of 2010, here you see an Iraqi Airways plane landing at Baghdad International Airport with full ground support.

We are at a strategic point of support in Iraq. Although it was on the nightly news the other night might be how you see (inaudible). It is not a victory parade necessarily. It is not a capital that has been received. An Army has been depleted in the field, but it is a slow, gradual decrease in forces over time to where you might see more discussion on the nightly news on whether or not Lindsay Lohan will be on probation or Tiger Woods' golf swing might be misaligned than you see about news in Iraq.

That has happened over the course of time. Maybe that is a signal of at least an acceptance as if it were on the right track towards victory.

This 31st of August we will have 50,000 soldiers on the ground in Iraq and no more combat operations. That's half as much in 2003. Iraqi Security Forces that were nonexistent in March of 2003, now will number 400,000, zero to 400 plus thousand in a little over seven years. That's a pretty significant contribution both on the Iraqis' and the Coalition's efforts.

By December 31st of next year, the United States will be out of Iraq. We're still in Germany, we're still in Japan, we're still in Kosovo, but we'll be out of Iraq.

So, for the goodness that has been going on and all the things that may or may not be caught in the nightly news cycles, it's worth saying, the time and effort to maybe understand what has gone on in Iraq is perhaps what needs to go on in Afghanistan, has continued to go on in

Afghanistan. Although you won't see a victory parade, but you will definitely see a gradual close, and, hopefully, a homecoming here of sorts. I think it deserves it to be said cautiously, job well done.

So, with that, I know we're running short on time, so I open myself up for questions and I appreciate your time.

DR. LEDNAR: Thank you, Major O'Neal. Any questions for Major O'Neal? Dr. Walker.

DR. WALKER: I think I should have asked General Huntoon this question, but you've been in theater, and I recently was reading the book "War." Maybe others have read that, somebody embedded with a forward unit in Afghanistan on the Pakistan border.

And you know we're hearing about the cadets here and how they're trained, and you were talking about how we might best work with the population. How do you train people to do that? You know, you've got soldiers out there who are

taking fire and we're asking them to walk down the street. You've got new soldiers out there who are taking fire and we're asking them to walk down the street. You've got new Lieutenants who are not always favorably reviewed by the enlisted people and suddenly they're commanding. How do you make that transition?

MAJ O'NEAL: I can tell you from my personal experience -- and I have not read "War." It's been recommended to me. It's on my "To Do List," as well. But with respect to that particular thing, I can't tell you.

Now, if we got ready for several deployments, one thing we would do is we would engage a, someone that is called a cultural advisor. It was an Iraqi who has lived mostly his entire life in Iraq, and we brought him in early and we started -- this is a year plus out before we were deployed. What he did was cultural awareness, language classes, and then he went on to serve as our sort of political advisor of sorts, a cultural advisor as we were deployed.

So, what we had in our training associated with that was an understanding from a true Iraqi, not an educated American who understood Iraqi dynamics, an Iraqi who could say, this is how you need to handle this situation, or this is how the situation should be pursued.

This is specifically how you introduce yourself, "Hi, y'all" or "How you doing?" or -- it's a colloquialism. Something that simplistic as to how you would treat the dynamics and, in turn, how you treat women, how you treat local tribes versus government officials.

He could also give us unfiltered advice, not Shiite, not Sunni, not any sort of tribal affiliations, sort of what he was seeing and hearing was in our best interests.

It's a constant adaptation of learning. You don't simply start and stop learning. When you get to the ground because you simply have to understand what the environment you're in and actually have to learn to participate. You have to learn. You learn about trusting the right

people, be it the local tribe or be it a local elected politician. It could be security forces you're aligned with. You have to find somebody to trust. It's a consistent education. It's not once I'm done or a slide show that you're now Iraqi culturally aware. It's something you have to constantly work on as you would any perishable skill, military or not.

DR. LEDNAR: Any other questions for Major O'Neal?

Major O'Neal, thank you for coming back to us at West Point and giving us this brief and the work you're doing. We look forward to an update at the next meeting.

MAJ O'NEAL: Yes, sir. Thank you. It's a remarkable institution. I hope you enjoy your time. Thank you.

DR. LEDNAR: What we'll do now is, we will take a break, and we will take a break for twenty minutes and then we'll resume with a brief by Dr. Frank Butler, who will be joining us by telephone. So, if we can be back in our seats in

twenty minutes from now. Thanks.

MS. BADER: If you can be back like by 11:10. Thank you very much.

(Recess)

MS. BADER: Can I please have everyone be seated? Thank you.

DR. LEDNAR: If everyone would please take your seat. Okay. If we can, we'll reconvene.

Our next speaker is joining us by telephone, Dr. Frank Butler.

Dr. Butler, as we all know, is the Chair of the Tactical Combat Casualty Care Work Group of the DHB Trauma and Injury Subcommittee, as well as a member of that Subcommittee.

Dr. Butler is a retired Captain and a former Navy SEAL. Some of us on the Defense Health Board actually have had a chance to see what it takes to be a SEAL. Dr. Butler has served as the Task Force Surgeon for a Joint Special Operations Counterterrorist Task Force in Afghanistan.

He is an ophthalmologist by professional training and is a regular and significant contributor to the work of the Defense Health Board. Dr. Butler's materials that he will be talking from today are in our binders and can be found in TAB 3.

So, we'll see if we've got the technology supporting us. And, Frank, are you connected with us? Dr. Butler?

(No response.)

MS. BADER: Jen called him. We have him on another line. Hi, Frank? Frank?

MS. KLEVENOW: He's dialing in right now.

MS. BADER: Okay. So, we'll hear him through here?

MS. KLEVENOW: Yes.

MS. BADER: Hi, Frank. We've got you. Welcome to the meeting.

DR. BUTLER: Thank you. I guess we had to swap access lines.

MS. BADER: We've got two mikes up

against you so we can hear you loud and clear.

DR. BUTLER: Good. Thanks, Christine.

Before I start off, my apologies and those at Delta Airlines for my not being there with you folks. I do apologize for that.

If we could shoot to the second slide here. What we're going to do this morning is talk about two proposed changes to the TCCC Guidelines that came out of the 3-4 August meeting of the Committee that was held in Denver recently, and the first is on hypothermia prevention. The second is on fluid resuscitation mostly on tactical evacuation care.

So, if you go to the next slide and just jump right into the hypothermia issue. This text, as you see, is from the new addition of "The PhD" that is currently at press and will be out in November, and I will say in the interest of full disclosure this is my text. I just would draw your attention to the line that is highlighted in red. When we talk about hypothermia on the battlefield, generally, we're not talking about

dying of exposure to hypothermia, we're talking about how you bleed to death hypothermia.

Next slide, please. And this is one of the slides from our teaching curriculum. The point we make to the student is, even a small decrease in body temperature can interfere with blood clotting and increase the risk of bleeding to death, which is the most common reason people die in the battlefield.

To die of exposure you have to drop your core temperature four or five degrees centigrade to knock out your coagulation systems to get -- you only have to drop your core temperature about one degree centigrade.

Also, casualties who are in shock are unable to generate body heat effectively because the tissues are hyperfused, so that complicates the problem. In addition, helicopter evacuations increase body heat loss. So, we emphasize that it's much easier to prevent hypothermia than to treat it.

MS. BADER: Excuse me, Frank --

DR. BUTLER: The next slide is a pretty compelling slide of why hypothermia is -- why a risk is greater in helicopter evacuations. If you add the --

DR. LEDNAR: Frank --

MS. BADER: Excuse me, Frank. I'd just like to make an announcement that the -- Frank updated his slides, so these are not the slides that you have in your binder. So, these are updated slides within the past day or two.

Thank you. I'm sorry, Frank. Go ahead.

DR. BUTLER: Yes. It's my fault. I should have mentioned that I didn't take any out but I added a couple that I thought would provide some additional illustration, and I think this is the first of those.

But for those of you who have flown in weather relating aircraft, it's cold up there and you have a pretty significant wind chill as the wind rushes past the open door. If you notice, this casualty is largely exposed. This is a good illustration of how not to keep a person from

getting hypothermic during evac.

So, the next slide. This is the text pending the current change on hypothermia from prevention -- I'm sorry. This is a list of the reasons that we thought that we needed to change the Guidelines.

First off, combat medics have noted that the previously recommended hypothermia prevention blanket, the Blizzard Survival Blanket, it did wrap up the casualty well, but it prevented you from gaining access to the casualty to care for him or her.

In addition, the previously recommended Hypothermia Prevention Cap had a bad habit of blowing off when you came into a rotor wash from a helicopter.

And, so, a new hypothermia prevention blanket has been developed that allows easier access to the casualty and incorporates a hood into the blanket, eliminating the need for a cap.

If you look at the next slide, I put the old system in here. If you look at the bottom

left you'll see the little cap that was part of the system and on the right you see the Blizzard Survival Blanket.

If you go to the next slide, this illustrates the new heat reflective shell that is proposed to replace the Blizzard Blanket when it's available, and there has been incorporated a hood in the ensemble. It's hard to see from this picture, but you also have a Velcro zipper arrangement that allows you to open it up and have access to the casualty.

So, the next slide, the current Guidelines say, as you see here -- this is slide 9 -- the first step in prevention of hypothermia is to minimize the exposure to the elements. Don't take off the casualty's clothes.

The second step is to replace wet clothing with dry, if possible.

The third step is an apply the Ready-Heat Blanket to the torso.

This is the little blue blanket that you saw in the previous slides that actually generates

some active heat through a chemical reaction, and that goes underneath the Blizzard Survival Blanket.

So, after the Ready-Heat Blanket is in place, you put on the Blizzard Survival Blanket and then you put the Thermo-Lite Hypothermia Prevention System Cap on the casualty's head.

Items F and G just say that if there are other ways that can be used to help conserve the casualty's heat, especially in the absence of the recommended equipment, use what you have.

Looking into the Tactical Evacuation phase of care, it is the same for this phase with the exception of Item D, where we mention using an IV fluid warmer. At the time this Guideline was written, the preferred fluid warmer was the Thermal Angel.

And then it notes that there is wind chill in these helicopters, so it's a good idea to protect the casualty from wind chill, if at all possible.

So, looking to the next slide you'll see

in red the proposed change. So, in Item B, we still say replace the wet clothing with dry, if possible. But we add a provision that says, "Get the casualty off the ground onto an insulated surface as soon as possible."

The ground is a huge heat sink, and if you leave the person on the ground, that will cause them to lose conductive heat. So, if you put them on a sleeping bag or something that reduces the heat loss to the ground.

Item C says continue to use the Ready-Heat Blanket from the Hypothermia Prevention and Management Kit (HPMK) to the casualty's torso and then cover the casualty with a new Heat-Reflective Shell (HRS) that was just displayed. The next slide, Item E, because of the -- take a step back. These systems have been tested to the ISR, the Institute of Surgical Research, to show if their efficacy of preventing loss of heat (inaudible) and the Heat-Reflective Shell was found to be essentially equivalent to the Blizzard Survival Blanket.

So, if you don't have a new device, the Blizzard Survival Blanket is still usable and better than using a wool blanket or something else that would be handy.

And then item E, if you don't have the above items, use dry blankets, poncho liners, sleeping bags, or whatever else you have to do the best that you can to keep that casualty from becoming hypothermic. If you are able to warm fluid in tactical field care, that is a good idea, especially if you're giving relatively large volumes.

Moving to the Tactical Evacuation Care phase, the first two items are the same, B and C, or identical to what we just covered.

Moving to the next slide, the D and E are identical to what we just covered, but there are now multiple fluid warmers out there, and there is not a definitive study that says one fluid warmer is better than the other. So, there's just a generic provision that says use a fluid warmer, if possible, to warm the IV fluids that are being

administered to the casualty.

So, I will stop at this point and see if there are any questions that I could answer on this topic before we move on.

DR. LEDNAR: Thanks, Frank. This is Wayne Lednar. If I can start with a question.

If this new system that you're describing for us is introduced, are there data to show that, in fact, it does a better job of what we'd like it to do than the former system, the combination of HRS and Blizzard Survival Blanket?

Clearly, there's the logistics of rotor wash, you know, blowing the protective blankets away, but are there data to show that it really supports the therapy of preventing hypothermia?

DR. BUTLER: I've included some back-up slides that have a very interesting series of studies that was done at the Institute of Surgical Research where they used a model that was based on 70 kilograms of dialysis fluid that was warmed to room temperature and then allowed to cool.

There was a study group where there was

no intervention used, and there was a comparison of different active and passive interventions that were tested, and they found that the original HPMK or Hypothermia Prevention and Management Kit was better than most of the other alternatives or all of the other alternatives, and that the Heat-Reflective Shell essentially is the same as the original HPMK. It wasn't quite as good, but there was no significant statistical difference, and those slides we can show if we have to.

DR. LEDNAR: Frank, Dr. Kaplan has a question.

DR. KAPLAN: This is Ed Kaplan. As you go along, would you mind commenting on how these Guidelines may differ either being ahead of or behind what is commonly used in civilian situations in this country, just for perspective?

DR. BUTLER: You know, that's such a great question. I will say that the material that you're going to see here or that you are seeing here is included in the book that's used to train the civilian emergency medicine people in the

country. It is much less of a problem for most urban areas because of the extremely short transport time, but there has been several papers in the civilian literature that are referenced in the new chapter in the "PhD" handout that focus on rural areas and wilderness areas and the need to prevent hypothermia in those occasions.

So, I think this is very much in tune with what the civilian literature is saying, often in austere environments in the civilian sector.

DR. KAPLAN: Thank you.

DR. LEDNAR: Dr. Lednar again. And Dr. Luepker.

DR. LUEPKER: You know, you've mentioned this as an old kit. You've also talked about a few degrees altering clotting properties.

Do either of these today do enough to protect people in clotting or is this area a further technological advance? I mean, if these are used properly, is the problem solved?

DR. BUTLER: Sir, I was not able to hear that very well. Is it possible to repeat that

question?

DR. LUEPKER: Yes. Do either of these devices, the old or the new, retain body heat adequately for the goal of preserving clotting function or is some other technological advance needed?

DR. BUTLER: There are no other technologies that I'm aware of that have been fielded for pre-hospital use that compete effectively with the kit that's currently fielded by the Army.

There's a study that's about to come out that is going to describe the most commonly used device in the Armed Forces at present, and that is the old world cavalry blankets, and the ISR data definitively shows that those old world blankets are minimally effective than nothing at all.

So, I think that we are still, even though if the Guidelines have been in place for a while, for whatever logistics ran, there has been very much an incomplete fielding of this hypothermia prevention technology, uh, to date

despite -- I mention even a, uh -- this is one of the few areas of TCCC that was specifically broken out by Dr. Winkenwerder when he was Affairs and recommended to the Services. That was still incompletely (inaudible).

DR. LEDNAR: This is Wayne Lednar. This is a follow-up to Dr. Luepker's question.

What I didn't hear was an answer if any of the fielded systems prevent body heat loss sufficiently so that blood clotting is sustained or do we need something that we don't have yet, further development?

DR. BUTLER: There is data that shows that AFDMB has access to the Joint Theater System Trauma Systems Director's monthly report, but they track the number of hypothermal prevention or hypothermic patients, and although there has been a distinct increase or -- I'm sorry -- a decrease in the number of hypothermic patients presenting since the Health Affairs memo came out, the data that I've seen is incomplete to effectively document that if it's due to any one system.

So, the short answer to that is no. You know, we know that the laws of physics say that if you are providing active heat and you are preventing additional heat loss, then you are conserving heat, but exactly the amount that that system provides to a combat casualty in the battlefield environment is not well described just because of the difficulty of recording that from the battlefield environment.

RADM SMITH: Frank, this is David Smith.

I just wanted to add we tracked this very closely, as Frank had mentioned, and I think it's more application of all the technologies. My sense is when there is a keen awareness of this and we actually use the various technologies, that we have less of an issue because it shows up in the data. We have a much higher incidence of hypothermia with our local, national, and coalition partners than we do with the U.S. Forces when you go look at that data.

Correct me if I'm wrong, Frank, but this

is a physics issue. So, clearly, if we can do better that would be great, and one degree is all you need to effectively shut down the clotting system. We would never have guessed in the desert that this was going to be an issue.

DR. LEDNAR: Okay. Dr. Lockey and Dr. Kaplan.

DR. LOCKEY: Jim Lockey. I just have a couple minor comments.

When I looked at your slides before I got here, and again today, you say that replace whenever possible with dry clothing.

I've always been impressed with some of the things I've been involved with in emergency medicine, that if you sweat and then you're exposed to sixty or seventy degree temperatures you get hypothermic very quickly, and I was wondering whether that "replace wet clothing" could be a little more forceful, "remove wet clothing and replace with dry clothing or dry blankets when possible," rather than -- Think about it. I'd just like your comments on that.

DR. BUTLER: That was a little difficult to hear, as well.

DR. LOCKEY: I was wondering whether the "replace wet clothing" should be more forceful and you "should remove wet clothing and replace with dry clothing and blankets when possible," rather than "replace wet clothing."

I'm always been impressed by if you're wet and you get in fifty, seventy degree temperatures, you get hypothermic very quickly. You can't preserve yourself.

So, the question is should you just say "remove wet clothing and replace with dry clothing" as a more forceful statement?

DR. LEDNAR: Could you hear Dr. Lockey's repeat of the question?

DR. BUTLER: Yeah, I think that I earlier -- there was a question about replacing the clothing, but I wasn't able to hear all of it.

DR. LEDNAR: Can I try perhaps rephrasing on this microphone Jim's question? And, Jim, keep me honest.

Jim is asking, Frank, for your opinion about the wording of the recommendations having to do with wet clothing in terms of perhaps strengthening that statement to suggest, if possible, to remove the wet clothing and then cover with something that's dry, either clothing or a blanket, for the reason that if there's moisture to the skin and the person then gets into a situation where that evaporates, the rapid cooling even to 70 degrees Fahrenheit, 60 degrees Fahrenheit -- this is without elevation in a helicopter and rotor wash -- you become hypothermic so quickly, that would it be, in fact, a better recommendation of, if possible, to remove wet clothing.

So, he's just asking now for your comments on that.

DR. BUTLER: Yes, thanks for the brief clarification on that.

You know, in practice, a unit that is actively assaulting a target is unlikely to be keeping significant changes of clothing. So, it

is perhaps the exception rather than the rule that they will have a change of clothes available on the battlefield.

But, you know, if there is wet clothing in the tactical field care and none of these things happen again under fire, when you're in a gun fight, you're in a gun fight and you're not focused on hypothermia prevention. However, when the gun fight is over, especially if you have vehicles nearby, as we do constantly -- One of the unique things about this conflict is that most of the forces in contact are getting there by vehicle, if not universally true, but it's more true now than it has been in the past. So, if they are available, then that is a good option.

The question is if they're not available, would they be better served to have their wet clothing removed and just be wrapped in the Blizzard Rescue Blanket or the new HRS, which is the Ready-Heat. That is a question I think that has not been addressed from a research standpoint, but there would be a concern about,

you know, what is the effect of having somebody who doesn't have anything on under the Blizzard Rescue Blanket or the HRS and having the, uh, you know, then exposed to the elements with only that protection. I think that the answer to that has not been addressed by any kind of study that I know of.

DR. LEDNAR: Frank, this is Ed Kaplan.

DR. KAPLAN: Ed Kaplan again. A short question.

Are these recommendations going to be or have they been adopted across Services? And, if so, that's fine. If not, could you comment on why not?

DR. BUTLER: That's definitely a great point. As we look at these Guidelines, sometimes we are reading the Services, sometimes one of the Services will get out in front of a particular issue and the TCCC Committee will work at what a particular Service has done and make a change that reflects our thinking that the Service is on the right track. And this is a good example.

The Army has already incorporated the new Hypothermia Prevention and Management Kit in their vehicle kits preempting input from the TCCC Committee just based on their Service's expert opinion that this is an equivalent or better bit of technology for the situation where you can put your equipment on a helicopter and vehicle.

The new equipment is heavier and it has not been incorporated -- the new blanket has not been incorporated into the medical kits that are now carried by combat life savers or medics.

So, that is just an indication that sometimes we're ahead of the Services, sometimes we're behind, one or two of the Services and the Guidelines.

There is also, in the back-up slides, a review that was just finalized at the last meeting that lists all of the equipment recommended by TCCC and which Services have it and which Services don't, and we have just in the last week sent that to the Services for them to review.

So, I will give you the Reader's Digest

version of what it says. Basically, the Army and Special Operations have almost completely incorporated the equipment recommended by the TCCC Guidelines. The Air Force and the Marines are a bit behind in that category, but they were at the meeting a week ago and they are acutely aware that, you know, they are behind and have represented to the Committee that they are in the process of revising their medical sets to incorporate all of the equipment.

DR. KAPLAN: Thank you.

DR. LEDNAR: Dr. Oxman.

DR. OXMAN: Frank, Mike Oxman. First of all, I have to commend you again for your leadership here. I think it's very impressive.

In terms of getting the people in the field educated in the proper use of this new equipment, how successful are we so far and what are plans?

DR. BUTLER: So, what will happen is once the Core Board has made a decision, we will post the updated Guidelines onto the Military

Health System website and send out an announcement that a change has been incorporated, and we will have our training materials updated within, typically, two weeks after the Board makes its decision.

We are working closely with the Defense Medical Material Program Office to try to fast track the new changes into the Services. But I will just, once again, say that what the Services feel is up to the Services, and absent, you know, some very strong wording out of Health Affairs, the Army and the Navy and the Marines and the Air Force make their decisions independently, and although they have a very good track record of following what TCCC is doing now, it is still a Service decision.

DR. LEDNAR: Are there other questions for Dr. Butler about the hypothermia prevention question? Dr. Dickey.

DR. DICKEY: Nancy Dickey, Frank. The question is, what kind of progress are we making? We've talked here on the Board a couple times

about tracking the interventions that occur on the field. It would seem that that would be the ideal way for us to at least begin to answer the question of whether we're having a significant impact with any particular intervention. And, so, I wondered if this sort of information has a check mark on the field combat data collection and whether we're improving that data collection.

DR. BUTLER: Yes, ma'am. Thank you for reducing that point.

Les Cogwell and the Ranger Pre-Hospital Trauma Registry paper that he has written based on their experience with the Ranger Pre-Hospital Trauma Registry is in a semi-smooth draft form and will be the first large paper to come out of this war that documents really with any detail at all what is being done at the first responder level.

As the Board knows the Joint Theater Trauma Registry is a terrific set of data, but the really accurate data maintained by the Joint Theater Trauma Registry doesn't start often times until their casualty reaches Level 3 and the

trauma nurse coordinators are there to understand and tell the data.

So, it is the Rangers who have led the way. And, uh, the TCCC Committee and the Board have urged the Department to formalize the use of very simple TCCC casualty cards that the Rangers pioneered. I would say that that is still incompletely done. It is certainly gaining traction in the Army thanks to the efforts of Lieutenant Colonel France and the Army Vice Chief of Staff. I would not say that that effort has been matched by the Marines and the Air Force to date.

DR. LEDNAR: Any other questions or comments for Dr. Butler on the hypothermia prevention?

What I might suggest, Dr. Butler is bringing two questions to the Board. This, the first, and while it's fresh in our minds I would propose that we understand the recommendation that Dr. Butler is bringing to the Board and if there's any further discussion and then we vote before we

go to the second question. Is that okay?

So, Frank, I'll suggest and see if you agree that really what you are proposing to the Board is the rewording that you've shown us on the slides here in the room today in terms of preventing hypothermia. Is that a fair statement of what you are asking the Board to comment on?

DR. BUTLER: Sir, that's exactly correct.

DR. LEDNAR: Okay. So, Frank has taken us through this material and we've seen the proposed changes in red.

Do I have a motion for a vote? Dr. Kaplan. Okay. Dr. O'Leary. Any further discussion about the proposed change that we're being asked to vote on? Any questions or clarifications?

Dr. Dickey.

DR. DICKEY: Nancy Dickey. I'd like to hear a little more discussion about whether the issue on Recommendation 7 should be separated, "removing wet clothing," period, "Replacing with

dry clothing, if possible."

The way it's currently worded ties those two in only together, and I would think that at least on the field it may well be interpreted as I don't have dry clothing, therefore, I don't take off the wet clothing. I'm not sure I know where I would weigh in on that, but I think it's an extraordinarily valuable question that Dr. Lockey has.

DR. LEDNAR: Frank, did you hear Dr. Dickey's question about how the one recommendation is currently set up sentence structure wise and how it might be, in fact, strengthened with a change?

DR. BUTLER: Right. Uh, yeah. I think that as you look at the wording in these proposed changes, one of the real challenges is to not only capture the key concepts. I think there's been agreement from both the Board and the TCCC Committee on what the concepts are. How best to express those in specific words to transmit them to, you know, a twenty-year-old corpsman or medic

in the field is the challenge, and I think that the wording that you see currently reflects the fact that tactically, sometimes it's just not able to be done.

And, so, if you don't have replacement clothing, I'm going to say that it's probably a bad idea to be dragging a, you know, a new casualty around the battlefield with just his Blizzard Rescue Blanket for protection, despite the fact that you know it may have a negative impact on heat loss, you know, there is protection from, you know, lots -- all of the other hazards that are on the battlefield.

So, I don't have any better wording to put in there at the moment. If the Board wishes me to take this back to the Committee and revisit that, but I think that what's there now reasonably reflects what is feasible and what's not on the battlefield.

DR. LEDNAR: What we have here, Frank, in the room is we put back up on the screen the wording that we're talking to, which is

Recommendation 7B --

DR. BUTLER: Right.

DR. LEDNAR: -- and it's worded, I think the inclusion of the word, "if possible," is a pretty important optional bit of guidance and in a tactical situation in a time and protection of not only the casualty, but the responders is really paramount. So, adding extra steps to do this may, in fact, not be such a good idea for everyone's welfare.

Yes, Dr. Kaplan.

DR. KAPLAN: Ed Kaplan. Is it appropriate that in the accompanying letter that goes with a recommendation such as this that there be some statement if the Board wishes about the fact that there be an attempt made for uniform application or implementation of these across the Services?

I'm concerned, and if I understood Frank correctly, there are some -- I think he uses the word "lagging" in several Services. If this is as good as we think it is -- if it's optimal, let me

put it that way, if it's the best, is it appropriate for the Board to make any comments about that or is that a given?

DR. LEDNAR: Frank, were you able to hear Ed's question?

DR. BUTLER: I did. Let me just take this opportunity to get off of the slide that I was on previously, and if we could get that or whoever is running the slides to go to Slide 81, which is in the back-up slides.

DR. LEDNAR: There's a collective sigh around the table. We didn't look through eighty-one slides.

DR. BUTLER: Right. It is in the -- I did not include the back-up slides. Uh, actually, let's go to Slide 82. We should be able to put that up on the board for you even though it's not in your handouts.

MS. BADER: Thanks, Frank. It's up.

DR. BUTLER: Right. So, this is, uh -- this was done with the -- you see the logo of PMPO up there, a tremendous help from them in finding

out who's got what on the battle-field.

On the left-hand side you see a list of what we consider the relatively critical items and TCCC recommendations. Across the top of the chart, the first column is the Army 68 Whiskey. That is the basic Army medic. The second column is the Marine Corps Combat Assault Pack. That is what we give Marine corpsmen or Navy corpsmen supporting the Marines going into combat. The third column is the Air Force Para Rescuemen or PJ's who are really the all-around combat medics in the Air Force. And then last you have the Special Operations Advanced Technical Practitioner.

So, if you look at what's red -- the green represents, yes, they have this. The red represents, no, they don't.

So, if you go over to the far right, basically, the Special Operations guys have everything except the Hypothermia Cap, that they said, hey, yeah, it blows off, it's not helpful. So, they have, if you will, sort of preceded the

TCCC Committee and the Board on the decision to get rid of the cap.

The same with the Army. Although you see the Army coming up red on the TCCC caps, that really represents the slowness of the system to reflect changes in their sets. The Army folks just about sent me a thousand of these TCCC cards, so that block will soon turn to green. So, essentially, the Army and Special Ops are there.

If you look at the Marines and the Air Force, I mean they don't have some basic things like chest seals, they don't have any of the hypothermia prevention material that we're talking about.

So, as we talk about the small battles, I think Dr. Kaplan's point is exactly right; it doesn't matter for us to describe it in great detail that to use that if they don't have them to start with, and they don't.

DR. LEDNAR: Frank, this is Wayne Lednar.

I assume that in a column that's

indicated by Special Operations that that's a tri-Service column, Special Operations in any of the Services would be reflective in what they carry? Is that a fair statement?

DR. BUTLER: It's a fair statement. It's a complicated question, and having come from sometime in my previous life it is different Service to Service, and I will just give you the two most polar examples.

In the Navy, the Navy Surgeon General buys zero equipment for SEAL deployment. Everything that they have in their kits is purchased with Crew or Special Operations money. Not true of the 68 Whiskey where the arrangement is a little bit different. The Army Surgeon General buys most of their equipment and the U.S. Special Operations Command has a program where they look at what each Service deals with and make up the difference.

So, if, for example, the Army Surgeon General did not buy intraosseous devices for the 68 Whiskey, the Special Operations Command through

that program would buy those devices and give those to Army medics.

So, the Special Ops folks define what their standard will be. They look at what the Services have and they make up the difference.

Does that help?

DR. LEDNAR: That is helpful. Frank, thank you. I think there's kind of a what and how in this, obviously, in the how the Services would find the channels to pay for, supply, equip a Service specific solution, uh, but what the Board is being asked to comment on is from our independent scientific advisory position, does this recommendation from our view, which is a medical view, really make sense?

It then becomes the Department's input to how they implement this, and if they chose to keep the variability as shown on the slide, let's hope that there is a good reason for that, that it is attending to the medical needs of these casualties.

Yes, Dr. Oxman.

DR. OXMAN: Mike Oxman. If we're going to endorse Frank's revision as the best we can do now for our troops, it would seem to me that it would be appropriate to add the suggestion, if you will, would this be adopted universally. I would recommend that. I would so move.

DR. LEDNAR: I heard another aspect to Dr. Dickey's question about data and understanding the experience to reinforce the need to continue to evaluate this as a document as well as, you know, are there new technologies which should be considered in this application.

DR. PARKINSON: Mike Parkinson. Frank, thank you. Again, I always try to draw us back to the ten thousand foot or whatever altitude you feel most comfortable at without being hypoxic.

The goal here of the transformed DHB, and I think it goes back to the administrative dialogue we had earlier about what is the new mission of the DHB and how is it of service, is that we don't have one office, we have got to knit ourselves to a standardized approach to tackling

health, performance, readiness, medical issues, and the model that appears expressly, rather than (inaudible), is that the DHB, based on its -- I'm not an expert in combat casualty care, but I bring something to the dialogue as other members of the Board -- just as I'm probably not an expert on vaccine development, but there are members of the Board who are, there are other experts on various aspects.

But, but I don't think that we need say after something is endorsed by the DHB that we essentially are saying this represents a military relevant clinical practice guideline for the care of casualties in the field who need to be transported at the risk of hypothermia, for risk of coagulopathy, period.

We have had with civilian input come up with a clinical practice guideline. We, therefore, endorse this clinical practice guideline. And I don't think we need to say, and by the way, I think it should be universally implemented, just like we don't have to say after

we endorse the flu policy that we think, oh, by the way, that the Navy shouldn't have a different new vaccine than what the Air Force administers.

So, I do think the personal guidance became, and if we codify this so the STTASP (inaudible). This has been scrutinized, this is has been evidence-based, this has been dialogued at multiple levels, then we essentially say, and, yeah, we want to hear back from the various Services why the transport parading in, you know, out of Florida for Air Force Special Ops, PJ's, if that's where they train, why don't they have hypothermia equipment. Is the nature of their transport brief more than like a transport such as we might not need it for several areas? It would interesting to see.

But absent that, res ipsa loquitur, it should speak for itself. I'm certain we should see an update on what is the equipment and the training and the execution with the data to Dr. Dickey's point of, are we seeing better hypothermia management and prevention of same as it relates to

it.

So, again, not going off, this is our combat casualty care arm of the DHB process that hasn't been voted on, essentially institutionalized as a military relevant (inaudible).

DR. SHAMOO: I think previously we agreed on this point on the same subject and during the -- I mention that I would really love to see some civilian trauma surgeons, what they do. I really think that we don't have the expertise and we don't -- we have not collected the information. Here is what less than what my case (inaudible). Not only endorse it and not make it universal. You want to take -- I would take away that we are endorsing -- this is a method, because throughout the DoD health care there's a lot of things, basically, and my attitude is this should continue and what we will recommend is that more evidence-based data are presented to us in the years to come on this issue since it's not black and white anymore. And it's

not.

It's a very difficult issue. It's very difficult to obtain evidence. I'm with you. But medicine on one-on-one, they do a lot of things that are not endorsed by higher-ups, and that's how I would do it. It's a method. Seems reasonable. Seems logical. And, uh, professionals in the field if they want to do it, they go ahead and do it, but we recommend the continued collection of evidence and data on this topic to bring back to us in years to come.

DR. LEDNAR: Any other comments at this point? Dr. Lockey and Dr. Oxman?

DR. LOCKEY: Just a point of reference.

Are we voting on the Tactical Field Care or are there two proposals we're going to be voting on in regards to hypothermia prevention or are we voting -- because there are two different slides. One is Evacuation, Proposed Changes, and then the other one is Tactical Field Care. I agree with the Tactical Field Care proposal, but I do have problems with the, say, helicopter

evacuation.

DR. LEDNAR: Our vote should be what we're voting on, so if there is an advantage of separating the two, we can do them as separate steps.

Dr. Oxman?

DR. OXMAN: Mike Oxman. While I appreciate Dr. Shamoo's point, I think that a lot of work has gone into this to make it the best we can do at the moment, and casualties are occurring and being evacuated at the moment, and I feel an obligation to reinforce the relatively extensive work that has been done in order to formulate the best practical solutions for the moment. And, so, while I appreciate Dr. Shamoo's reservations, I don't agree with it.

And then I might as well be a difficult cuss for Mike Parkinson. As someone with no military experience except in the allegories, I'm impressed as a civilian before having anything to do with Defense Health Board and doubly impressed by my six years or so with AFEB and Defense Board

that there still is a problem with the independence, if it were excessive independence of the individual Services.

And, so, I think one of the responsibilities, I feel, as a member of this Board is to add ammunition to those people who are trying to bridge that and to encourage all of the Services to adopt the best practices that we have now as quickly as possible.

So, thank you.

DR. LEDNAR: Dr. Shamoo.

DR. SHAMOO: A quick response. I think across Services, I agree with you in principle, but not on this issue where it's not black and white. It's not as clarified. It's not evidence-based. That is, uh, I will say a poor choice of issue to say all Services has to do it. I could see the argument on that, because, let's face it, when we have an argument it's not something we do, we do it because we are something. We are intellectuals. You can cause medical harm also, and that's why it's still in

the field. That's really the issue.

DR. LEDNAR: One last comment, first from Dr. Kaplan.

DR. KAPLAN: One last comment. I would ask, Frank, if there is not some feeling in this Task Force which offered these recommendations, this Task Force which is made up of, in general, more expertise than we do have as a collective body here, then why did the Task Force, Frank, make the slide that's in front of us now to show us a difference? There must be a reason for that, and perhaps he can answer.

I think if it's clearly better, then there's nothing wrong -- then we're not demanding they do it. We're saying it needs to be looked at. If it's better, fine. If it's not better, then we're wasting our time discussing the whole issue.

DR. LEDNAR: Frank?

DR. BUTLER: Sir, I'm not sure I caught all of that.

Wayne, if you could summarize that

before I go to respond?

DR. KAPLAN: He was in the middle of another discussion.

What I said was your group thinks and has recommended that one way of doing this is better, if I read it correctly, and your group has made a slide that shows that there are -- that there's not uniform implementation. If you think one is better and there's not uniform implementation, for us to say that it shouldn't be considered we can't demand it anyway. It seems to me to make common sense.

DR. BUTLER: Right. Uh, this is -- Well, we will get into evidence in battlefield medicine a lot more because if, uh, if you think this was a little tricky, especially when you start to look at hard evidence, the fluid resuscitation question is much more so.

But I will say that prior to the current conflicts, the DoD had no standing battlefield trauma care body that was making trauma care recommendations customized for use on the

battlefield.

And you might say, well, gee, what were they doing? What they were doing was taking the ATLS Guidelines and applying or teaching those to combat positions, teach those to combat medics and sending people off to war with only those Guidelines as a basis.

To use the most dramatic example, the ATLS Guidelines then, and now, recommended against tourniquet use. What is the level of evidence that the ATLS folks have to say that tourniquets are bad? There is no study out there that does that. They were making that recommendation with essentially zero evidence that I know of to back that up.

When the TCCC Committee started to look at this, you know, we reviewed the evidence. It's probably level C evidence, which is expert opinion and case reports, but all of the evidence that we can find said, hey, we think that it is unlikely that a short tourniquet application is going to cause a loss of limb, and even if that were to

occur, sometimes it's going to save a lot of lives.

This was a leading cause of preventable death at the start of this war, and, certainly, the Vietnam conflict. So, I think the real issue is nobody has been asking the right questions and looking at the available literature of combat medicine.

DR. LEDNAR: Okay. I think this has been a very helpful dialogue and exchange and I'm going to make -- as a result of our huddle up here, I'm going to make a suggestion.

Frank has started this discussion with the aspiration of bringing two questions to vote. The second of the two questions we are not going to discuss today. We're going to take -- and that has to deal with the fluid resuscitation. I think it's important that we have adequate time to both understand and discuss, and we don't want to shortchange that, but we will do that at the first Core meeting in November.

So, I hope you or someone from the

Committee is working with us between now and then and also have a discussion at the November Core Board Meeting.

For the first question that Frank has brought, Jim Lockey has suggested that it might be, in fact, better to think of it as not one, but two questions for vote.

So, what I would propose, Jim, if you would, is will you propose a vote to the first part and then, if necessary, we will have further discussion on the second part.

But if we can move any part of this forward, I think this is going to be of great assistance to our combat community.

So, Jim, would you propose a recommendation? And then, Frank, if you could be listening to this and see if this is consistent with what you had in mind. Jim?

DR. LOCKEY: Frank, can you hear me?

DR. BUTLER: I can.

DR. LOCKEY: Well, I propose that we accept your proposed changes for hypothermia

prevention listed under battlefield care. I agree with this. I think it's well done and I propose that our Board accepts this.

DR. LEDNAR: Second? Second by Dr. Walker. Any further discussion? In that case, all those in favor of the recommendation to endorse the Tactical Field Care, Proposed Changes, all in favor raise their hands.

Thank you. Any nays? Frank, it's been unanimously endorsed by the Board, the Proposed Changes in the Tactical Field Care.

Now, Jim, if you could help us with the second part.

DR. LOCKEY: Frank, the second part now is, as I understand, is this is evacuation, say, by helicopter, and under the circumstances I still think that maybe some effort can be given to look at the wording part in regard to Part B and then Part E, because when I read this before I came here in my own mind with questions as to what procedures I should follow.

As somebody who's been involved in

emergency medicine and people who are seriously injured, I know how rapidly a person can become hypothermic if they have wet body fluid hanging on and there's any type of air flow past them. It doesn't take -- it takes minutes.

And, so, I guess I would like you to consider looking at the language in B and the language in E and how you can perhaps reconcile that.

DR. LEDNAR: Dr. Oxman looks like he's got a suggestion or a comment. Dr. Oxman?

DR. OXMAN: I don't know whether this is legitimate or palatable, but I think the interest is to move forward on this and not delay it until November, and perhaps Dr. Lockey would be willing to work with Frank to reconcile that wording, and I would be glad to delegate my vote to Dr. Lockey so that we can approve it ending or assuming that that can be reconciled. Maybe that would put too much pressure on Dr. Lockey.

DR. WALKER: Is the issue on the helicopter or on an ambulance, they should have

this material to be able to put dry clothing on? Is it different from moving somebody across the battlefield?

DR. LOCKEY: The research is not out there, I would agree with that. But if you're a medic and you know somebody who is wet and there's an open helicopter door and air flow across that person, they're going to get hypothermic quickly. That's just the bottom line. That's just what happens.

DR. LEDNAR: Lisa, can we back up one slide so we can show the evacuation, because I think that's really what we're talking about right now. Isn't it, Jim?

DR. BUTLER: Well, I'd like to make a comment on the comments here. It's not just a question of can we bring a change of clothes. I think we need to consider that a great many of the casualties in the current environment are on spine boards having suffered an IED blast with potential spinal fracture.

So, I think we have to weigh the

mechanics of moving the casualty, taking off all of its clothes, trying to get dry clothes on and, you know, the lack of spinal precaution that can be maintained during that procedure, you know, with whatever manages to be gained by from getting them out of the wet clothes.

So, I really think spinal precautions need to be considered as we discuss this. It may be relatively easy if there's an isolated gunshot wound to the leg and there's no spinal precautions, but if spinal precautions are involved we can do as much harm as good by manipulating the casualty more.

DR. LEDNAR: Admiral Smith.

RADM SMITH: Frank, the other concern I had is whether they had already been packaged. So, clearly I don't want to be taking off the Ready-Heat Blanket and all of these features and exposing them when you have the cold and all of this associated with the helo transport. So, even if this is to be considered, it has to be, if none of this has been done previously.

DR. LEDNAR: Dr. Silva.

DR. SILVA: Frank, Joe Silva here. I'm getting concerned that we're really micromanaging the field work. We have well-trained people out there. They need to have the discretion on what the hell to do. I mean, you cut one sock, two socks. It just gets ridiculous. We're getting out of hand with this to start with.

DR. LEDNAR: Dr. O'Leary.

DR. O'LEARY: I don't believe we're going to resolve this today, and I would like to move that we send this back to the Committee.

SPEAKER: I second.

DR. LEDNAR: We have a motion that this is a discussion that could go on for a while. It won't be adequately resolved to the Board's satisfaction, and that this portion of the recommendation go back to the Committee, with some input from the Board about what the concerns are and then to have this brought back to us, hopefully, at the November, Core Board meeting.

Is that the motion? A second to that?

A second to Shamoo. Okay. Dr. Dickey.

DR. DICKEY: I guess I'd like to hear from Frank whether the delay is problematic, because to approve the recommendations as they are in front of us today does no harm with asking the Committee to continue to evaluate a little stronger language about clothing removal, replacement, et cetera.

And, so, I believe we could actually vote positively on the language he's brought us today, while still sending back to the Committee our concerns that perhaps it's not quite strong enough in terms of when and how people get clothing. I really hate to have this Board delay the implementation on something that is impacting our soldiers every day.

DR. LEDNAR: To Dr. Silva's point, clearly, those on the ground need to do the best they can in the realities that they've got. Also, we've mentioned in this discussion earlier today that we need more data-based experience to know what's working and what's not (inaudible) Core

Board meeting, but that can be clearly a signal back to the combat casualty care community.

Dr. Lockey.

DR. LOCKEY: I agree. My purpose here was not to delay this. My purpose was, when I read this I had some problems understanding what procedures I needed to follow if I was in the field. So, I would just ask that the Committee consider some clarification of that with that point in mind, but I think we should go ahead and vote on this.

DR. LEDNAR: Can I ask Dr. Dickey for all of us, can you make a recommendation about this that we can then act on?

DR. DICKEY: I would recommend we approve the language brought by the Combat Care Committee and move it forward in terms of changing the language and simultaneously ask Dr. Butler to continue to look at modification in the language in terms of tightening up the recommendations in issue.

DR. LEDNAR: Second to that

recommendation?

Dr. Lockey, second?

DR. LOCKEY: Yes.

DR. LEDNAR: Call for a vote. Again, the vote that has just been -- the recommendation that's just been proposed by Dr. Dickey --

And first, let me ask Dr. Butler, were you able to hear Dr. Dickey's recommendation?

DR. BUTLER: Yes, I was. I appreciate that approach in that the Committee is not going to meet until after the next Core Board meeting, if I have my timeline correctly, so there will be no chance for the Committee to revisit the language until after the Core Board has met in November, which would push us through into the next winter cycle.

So, I think there's real merit in doing what Dr. Dickey has proposed and capturing the gains that we have here and then continuing to work on it.

DR. LEDNAR: So, with Dr. Dickey's recommendation and the second, I'm going to ask

all those in favor of the recommendations as Dr. Dickey proposed it?

All those against or nays? None. So, Frank, it's been a unanimous vote of the Board --

DR. SHAMOO: It is not unanimous because you did not take the abstentions.

DR. LEDNAR: All right. Let me ask. Are there any abstentions? We asked for yea's and nays. The record reflects one abstention.

Okay. Dr. Oxman?

DR. OXMAN: I'd like to revisit Dr. Dickey's recommendation. If we're going to have data, I would think that we should recommend the deployment and implementation of the TCCC card as quickly as possible.

DR. LEDNAR: Frank, I would guess that with the order of the TCCC card and the scheduled plan for implementation that the Department has underway, that the TCCC cards will become widely used in theater. Is that a fair assessment?

DR. BUTLER: I think we're moving in that direction. Whatever assistance we could get from

the Board to maintain that momentum that we currently have would be greatly appreciated. It is absolutely right that many of the decisions that we are making are based on data that could be better if we were getting those cards filled out.

DR. LEDNAR: Okay. Dr. Halperin.

DR. HALPERIN: You know, the next reference, the fluid resuscitation issue that was to come up next, you know, is really more problematic than this one. If people would read the recommendations about the San Diego company who are the study over lunch, I think we could get that done in five or ten minutes and not put this aside. So, I wouldn't feel badly if we put the Millennium Cohort issue in front of it under fluid replacements.

DR. LEDNAR: To the Millennium Cohort report? Well, we can accommodate the agenda so that we give that the time after lunch. So, don't feel like we have to get that in before lunch.

DR. HALPERIN: It's not the before. It's not looking at Dr. Butler's second

recommendation. I could say I can cut down the time we spend on the Millennium Cohort and still get to the --

DR. LEDNAR: Let us take that suggestion and consider it. We'll just leave it at that.

I'm going to ask, with the good graces of Dr. Dickey and Dr. Lockey, that given the discussion we've had here and some of the messages we would like to pass along as we have endorsed the recommendation, some of the additional considerations about data and continuing to evaluate any aspects, and supporting that data on the use of the TCCC cards. As an example, I think we can convey that message in a supportive way as we've endorsed.

So, if we can from the Board's point of view get both your help, Dr. Dickey and Dr. Lockey, in that wording that can be included in our endorsement letter, I think we'll deal with it that way.

Okay. Frank, my sense is that on the first of your two questions we, the Board, has

voted to endorse and is in favor.

Well, we will figure out how to perhaps, underline perhaps, have some Board time discussion in this meeting to perhaps introduce and better understand the questions about the fluid resuscitation. I get a sense we're not going to be able to bring that to vote at this discussion, but perhaps we can use some Board time to better inform us for a vote at a future time.

So, even though, frankly, the Committee will not meet until after the November Board discussion, we might be able to begin to get ourselves prepared to better understand and then in a more informed manner at the November meeting to bring this to vote with your help, Frank.

Dr. Walker?

DR. WALKER: Might I just suggest that I formally move that we endorse the implementation of the TCCC cards universally and the gathering of the data so we'll have data to use to make some of these decisions?

DR. LEDNAR: Okay. So, there's a motion

on the floor to endorse the use of the TCCC cards so that there are data to inform both the Department and the Board.

A second? Dr. Mason. Any discussion? Dr. Parkinson.

DR. PARKINSON: You know, I'm all about goodness and light and all these good things, but there's a piling on phenomenon that I emotionally have to express here, and I just want to make sure that in the broad scope again of what the DHB is supposed to be doing, at the top of my head is, okay, let's get a little refresher on the TCCC cards and how does that interface with EMR in field operations of what follows the patient where (inaudible) and into the overall surveillance aspects of what we're doing at DoD (inaudible).

So, I mean, yeah, but... So, I endorse the concept? Absolutely. We need data on trauma in the field. Absolutely, we need it. But we've just got to be cautious that we're not the (inaudible). Does it fit with what it was doing in the MHS IT strategy and where it is going to go.

I'm just a little, you know, uncomfortable to tell everybody go get the TCCC cards at a level of understanding, at least this member has at this juncture in time.

DR. LEDNAR: Any other comments? So, we have a motion. Uh, process-wise we sort have to deal with the motion. What I heard is a consensus, at least we want to try to make the most informed decision based on data-based experience. The mechanism by which that data are collected and presented is a little less than having accurate credible data, uh, whatever the tool, and that we can convey that interest, uh, in a general way as part of our endorsement without necessarily having the specific recommendation or use this tool in the field across so that making our combat casualty care experts as they gain experience they find a different, better way that also reconciles with the remainder of the Military Health System's data movement in collection in the future (inaudible). Dr. O'Leary.

DR. O'LEARY: O'Leary here. You know,

it seems to me that the recommendation was not that this be used as an exclusion of all methodologies. And, quite frankly, if this is a way to enhance the collection of data then we should be recommending it. I don't see any problem with that.

DR. LEDNAR: Which leaves open any further enhancements that may make sense.

Dr. Mason.

DR. MASON: Procedurally, it's just a friendly amendment to the motion. That's all it is. All you have to do is accept it as a friendly amendment to the motion and then we can vote.

DR. LEDNAR: Would someone care to word the friendly amendment to the motion?

DR. SILVA: It's not clear to me that the TCCC card is a methodology for collection of data. Isn't it more of an infield clinical tool (inaudible)?

DR. LEDNAR: We may be thinking it has to be greater than what it's intended.

DR. BUTLER: I thought of that. You're

absolutely correct in saying that TCCC card is the first step towards getting the information that we need. There is no way without the Pre-Hospital Trauma Registry Database that has been developed by the Rangers to take what's, or a laminated card and put it into a database where it can be used by researchers and process improvement people.

So, I really think that the pre-hospital piece you have to have both the card and the Ranger Pre-Hospital Trauma Registry as adapted and modified by the Services.

The second bit of the data collection piece is the JTTR. We need to be able to track the casualties once they get to the Level 3, launched back to CONUS, and the JTTR does that (inaudible).

The third item that we haven't talked about, but as long as we are addressing the input that we need, is the input from Armed Forces Medical Examiner's Office.

Now, it's interesting, can anybody here, you know, think of a study where they have looked

at every preventable death that came out of, whether or not they looked at every death that came out of theater and made a judgment as to whether or not this was a preventable or non-preventable death? That's been done twice in two studies, but with very limited cohorts.

It would seem to me that we would want the AFME look at every single fatality, make a determination of preventable or non-preventable and speak to the mechanism of that and how that death might have been prevented.

And I will just use three examples. We've got a casualty picture from early in the war where an individual was shot in the leg and bled to death because there was no effective tourniquet. This was 2002.

There was a more recent photograph where we had a casualty who died with a tension pneumothorax and the CT scan showed that the smaller catheter used to attempt the neo thoracotomy was too short to get through his muscular chest wall.

And then an even more recent photograph from AFME that shows a ferreous device designed for the tibia improperly being used in the sternum going through both the layer and the outer layer of the sternum into the mediastinum and the fluid that was then infused went into the mediastinum instead of the marrow space.

So, I really think that the input that comes into AFME is another critical part of the picture, because if somebody dies pre-hospital, they never get into the Joint Theater Trauma Registry. That is only for admissions to a Level 3.

DR. LEDNAR: Dr. Shamoo.

DR. SHAMOO: I just want to caution that if we're going to use a card to collect data and make a generalized knowledge, now you're doing research protocol without the proper design and you're collecting data without going through informed consent and without human subject, and this was the second general, if I remember, this was the second most important issue in the Medical

Subcommittee deliberation, and we said we should be deliberating and discussing and see how we do research in the combat zone.

I think, I don't know if it was Frank was the one who brought it up, but I think Frank was the one who brought it up in the Medical Subcommittee.

So, that's what you are proposing, pushing them to do research without proper protocol, without informed consent or how we do informed consent and you will be in greater problems than simply using it.

DR. LEDNAR: What I heard Frank say about the TCCC card, the Services are already moving forward with having looked at it, seeing the value to them of that clinical documentation as part of a record, uh, and that's within a hit.

What we heard Frank also remind us is that the data support the in theater care, the transport evacuation chain is supported by several systems. There are gaps that occur. If you do not arrive alive at a Level 3 center, there's an

experience that it won't be in that data set. It's important to understand, which brings the Armed Forces Medical Examiner into play.

So, what I think what we have is a field of parts that haven't necessarily in our mind been understood and pieced together and need for good patient care and understanding the experience and hopefully improving the outcome.

DR. BUTLER: If I could answer Dr. Shamoo's very well made point.

The bulk of the papers that were written based on AFME data were done under protocols developed under protocols for approval. These are papers and there can't (inaudible). So, these were done exactly as you say and is exactly as they should have been done.

The data and the JTTR is also used for process improvement. We review every casualty every week and that is truly process improvement. It's not research. We look at what happened in every casualty every week and we do that. In fact, we're doing that tomorrow morning. That is

not done under a research protocol and it is not, in fact, research, it is process improvement.

So that there are two very different uses that the available data is being put to.

DR. DICKEY: Can I try to -- I'm very interested in the TCCC card, but what I recognize is something we talked about sometime ago. Can I ask that we table this discussion so that at the November Board meeting, at which point Dr. Butler or others can give us an update about where it is and the other competing data development?

DR. LEDNAR: So, what I hear is a suggestion to table the friendly amendment portion specifically to the TCCC card, that we continue to endorse the recommendations that was brought to us and that as an agenda item for an upcoming, probably the November Core Board meeting, we have a more complete discussion of the various tools and approaches that can support the data to understand the experience.

Any comments to that? Dr. Walker?

DR. WALKER: I'm going to vote against

it just because (inaudible).

DR. LEDNAR: Okay. So that we will bring -- we have a motion then. We will bring it to a vote.

DR. SHAMOO: I'm sorry to be a bureaucrat, but tabling a motion takes precedent.

DR. DICKEY: You need a second and then --

DR. SHAMOO: That is correct. It will die from lack of second, not because we have a --

SPEAKER: I second.

DR. SHAMOO: He just did.

DR. LEDNAR: So, what we have is a motion. It's just been seconded to table the friendly amendment about the TCCC card.

DR. OXMAN: One item of discussion before we vote to table it or not table it.

It is my understanding that this was not --

DR. SHAMOO: The only thing you can discuss is whether you want to table it or not.

DR. OXMAN: This reflects what we're

tabling. The TCCC card is collecting data for -- essentially, quality assurance data, and in the absence of it, no data is being collected from that interval; is that correct?

DR. LEDNAR: What is on the table as a motion for table is an endorsement of the TCCC card. What the Services elect to do today, what they order or what they feel is their choice and their doing, and from what my understanding of what that Frank has said, the TCCC card is in use, is being extended no matter what this Board's decision or vote to do or not to do is.

What I hear about the motion to table is a request to better understand the various aspects of how to improve the data collection and support of the experience. Is that a fair --

DR. DICKEY: Yes.

DR. LEDNAR: So, that is what's being voted on, to table for further discussion and presentation and understanding by the Board at the November 1st or 2nd, 2010 Core Board Meeting.

So that is the motion, the motion to

table. Have I stated that correctly?

So, any further discussion around the motion and then we vote on the motion to table.

All those in favor of tabling the motion until the November Core Board Meeting please say or raise your hand and say "aye." By hands, all right.

And all those who are voting "nay," that they do not wish to table -- 1, 2, 3 4 -- four votes to not table.

Any abstentions? Zero. Okay. If my calculation is right, we have voted to table this issue. I will try to not be a bureaucrat because -- but I thank you, Dr. Shamoo, for the process adherence at this point.

But I think what we have had in the last hour or so is a very engaging discussion on a very, very important topic, so this was really very, very important.

And, Frank, I hope you can convey back to the Subcommittee the energy and the interest that the Board has to the work of the Subcommittee

in really trying to do the best possible support to this important casualty care. Some in the Subcommittee might be disappointed that the Board didn't endorse to vote for the questions Frank brought to us. I think there was a very important level of discussion, and there will be more at the November Core Board Meeting.

So, Frank, any closing comments you'd like to make at this point?

DR. BUTLER: Yes. I appreciate the time and the effort of the Core Board in considering that the hypothermia question was the easier of the two. I think it's probably good that we're deferring the discussion and making sure that it gets the full attention and discussion that the fluid resuscitation issue deserves. It's much more complex and much more divisive.

The second point is my understanding is that we should go ahead with implementation into the curriculum of the hypothermia prevention change and table the fluid resuscitation change pending the November meeting of the Core Board.

DR. LEDNAR: That understanding, Frank, is correct.

DR. BUTLER: Okay. And then, lastly, the good thing about the deferring the discussion is it gives the Board members a chance to respond either to me directly or through Ms. Bader's staff whatever issues that they would like to see clarified in the fluid resuscitation discussion.

It also gives me the chance to forward the Board some additional material to read on this topic that will help them out in further discussion, and I will actually forward the references that I had mentioned in that one slide for the Board to review so that they will have had a chance to look at these before the November meeting.

DR. LEDNAR: Thank you. That would be really very helpful, at least, as you know, a process reminder for us. As we are in a public open meeting of the Defense Health Board, as we continue to deliberate virtually between now and November of the next Core Board Meeting that still

remains an open discussion.

So, procedurally, if you have questions that the Board members would like to refer back through Frank to the Subcommittee, would you please send them to Ms. Bader, and Ms. Bader will then forward them on to the Subcommittee. That keeps it all in open traffic from a transparency point of view.

MS. BADER: You can send it directly to Frank. If you just courtesy copy me, that would be great just so I have it.

Additionally, we may want to consider having some of your Subcommittee members at the November meeting, both at CoTCCC and Trauma Injury. So, we can talk more about that off line, but I think that would be a great idea as well to have them in discussion, as well.

DR. BUTLER: I think that would be a great thing considering the complexity of the fluid resuscitation issue. It is probably the most difficult thing that we deal with and the one where the legislature is most in conflict. So, I

think that would be a great idea.

DR. SHAMOO: I would like to see a couple civilians, a resuscitation expert, at least a dozen of them there to give us an opinion or have them come here and make a presentation or make commentary after the presentation. I think we need the input somewhere on this. This is a big, hot issue and a very, very important issue.

MS. BADER: And, Frank, I'm assuming you can help us with some of the civilian experts that you've been working with?

DR. BUTLER: Absolutely. We will have to check their availability. We can certainly look in on a list of people who would be the right people to invite and see how many you would like and who can make it. I'll also work with you on that.

MS. BADER: We'll work with the Board as well for their recommendations. Thanks.

DR. LEDNAR: Dr. Halperin?

DR. HALPERIN: When that is presented, could the date it be presented on which the

conclusion is based currently, all of the data was referenced in this second paper. It wasn't going to be presented. I think we really should see on what (inaudible) data the basis for (inaudible) under resuscitation preferable is (inaudible).

DR. LEDNAR: Frank, what the Board will do is work with you to really frame the time at the November Core Board Meeting in terms of the data to assemble, suggestions on how to present it. We can talk about some potential subject matter experts, perhaps from the civilian world considering resuscitation could join us, how they might participate so it would really make this a really focused, but as much as possible, data supported discussion.

Dr. Poland?

DR. POLAND: I appreciate what you're saying, although there's a bit of a danger of getting too deep into the data. But I wonder if an appropriate compromise might be for the recommendations to carry with them an epidemiologic grading. So, this is a Grade 1A

recommendation, you know, is this a recommendation supported by Grade 1A evidence or Grade 2 or 3 evidence, and then we can selectively go into this data.

DR. BUTLER: Yes, Dr. Poland, we do have the figures, the papers that go into great detail on that. There's actually for the first time in one of our recommendations went through and looked at the level of evidence for each of the different (interruption) for the recommendations that are made at, most of it is Level C. If you use the American Heart Association's classification, the rest of the data used is that the recommendations, the level of evidence for the civilian pre-hospital standard of care are probably worse.

DR. POLAND: It's okay. It often reflects reality. But I think if we had those data available, a summary of the data and next to each recommendation an evidence-based ranking of it, that would go a long way toward, I think, the Board's desire.

DR. BUTLER: Yes, that is done, and we

will forward you, uh, physician paper that spells out the level of evidence for the various portions of the recommendations as part of the package.

DR. POLAND: Great.

DR. LEDNAR: Frank, from all of us here at West Point, we're sorry you weren't able to join us in person. We really appreciate you being so effective participating by telephone. And, hopefully, this will work out okay for you, but we really appreciate how, and the extent of time that you participated with us today.

So, thanks, Frank.

DR. BUTLER: I appreciate the opportunity and look forward to seeing everyone in November.

DR. LEDNAR: Thanks, Frank.

DR. BUTLER: Take care.

DR. LEDNAR: What we'll do now is Ms. Bader will give us instructions as we break for lunch and what the plan is for coming back in. Ms. Bader.

MS. BADER: Well, thanks everybody for the great discussion this morning. Let's break now for lunch. We'll have lunch again right next door. As opposed to the normal hour we have for lunch, let's make it forty-five minutes so we can try to get back on schedule. So, we will reconvene at 1:45.

Thank you.

(Whereupon, at 1:00 p.m., a luncheon recess was taken.)

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

(1:45 p.m.)

MS. BADER: Can we ask everybody be seated so we can reconvene? Thank you.

Welcome back, everybody. We're going to start the afternoon session with the briefing from Dr. Halperin on the Military Occupational/ Environmental and Medical Surveillance Subcommittee.

Dr. Halperin is going to brief from his seat. And for the folks that can, please advance the slides when he just says "advance slides" or "please, next slide." Thank you.

DR. LEDNAR: Just a little bit of an additional introduction, of course.

Dr. Halperin is known to all of us both for his current academic appointments, his selection by the management of this academic institutions is one of the most important. We have a Recruitment Committee. It's an important position, and he's been asked to lead that search and from our selfish point of view.

He leads our Military Occupational/ Environmental Health and Medical Surveillance Subcommittee. For the very important activity of the Subcommittee has been with the Deployment Health Centers, and what Dr. Halperin is going to bring to us for vote is, in fact, a Subcommittee review of the Deployment Health Research Center in San Diego, California, and the Subcommittee's findings as a result of that visit and will bring that to a motion before the Board.

Anything else I should say by way of introduction?

DR. HALPERIN: No.

DR. LEDNAR: So, Dr. Halperin.

DR. HALPERIN: So, it's been a fruitful luncheon discussion, came up with a new epidemiologic pathology called the standardized discussion ratio, which is the amount of time that it actually took for the discussion divided by the amount of time it should have taken for the discussion, and since I frivolously said this would take about ten minutes, we'll see what the

ratio is.

So, next slide, please. Next slide. All right. The names of the members of the Committee are all up there, and you'll see a couple of people with stars to the right of their names. These are people who are sort of on the Committee and were recruited into be part of Team San Diego, and we appreciate it. They've been very helpful.

Next slide, please. The Committee charged to review the Deployment Research Center in San Diego goes back all the way to 2002. You all know that there are three Deployment Research Centers. The one we looked at was the one that does the cohort studies in San Diego is located in the San Diego Naval base. We're going to be looking at the other two Deployment Research Centers in the future, so we're only looking at one now.

And our charge pretty much was from Dr. Winkenwerder was to review the Centers, was also to play a role as an advisor to the centers.

Next slide, please. The Subcommittee visited, once it was just by staff and then we went back as a full Committee. We had a thorough review, and after that we produced a report that has been now circulated amongst all Committee members, and I think we're pretty close to a finalized report and that's what we're going to go over today.

Next slide, please. You can skip this.

So, I'm going to assume that we've all had a chance to at least peruse the report that goes with forty or so observations and we can really get to the heart of the matter.

The research group in California has gone through an evolution in the ten or so years that it's been there. That evolution has left the group with a fairly reasonable sized group of epidemiologists and statisticians who shepherd the Millennium Cohort, the study which is 200,000 plus and growing. The researchers though who are there are fairly new to their careers. Basically, they're in their thirties, so you have to call

them on the junior side. They're very competent people.

It was the impression of the group though that the combination of the researchers being more or less local to San Diego with an Advisory Committee that consisted of people who had either been previous researchers on the Millennium Cohort or people who are connected to the researchers through academics through San Diego left this group with a little unusual experience.

The Millennium Cohort essentially does not have senior epidemiologic researchers or biomedical researchers that are involved. It has very much a local input. It doesn't have a real peer review system for either sorting through the priorities that the group -- that ought to be looked at in their research or for actually evaluating the specific protocol score for research.

So, there's some recommendations that we want to make, which goes back to the original Dr.

Winkenwerder suggestion or guidance, which is that the Defense Health Board play a role in an Advisory Committee for the Deployment Center, and that as an Advisory Board, what it consists of is members or assignees from the Defense Health Board, along with other people who are recognized for their expertise along with representatives of the military, the VA, and so forth, and then this group play a very active role in reviewing the priorities, reviewing the protocols, reviewing the progress, and at some point the funding, the mandate, et cetera, for the Millennium Cohort.

So, that's our first recommendation is really a major redo of the Advisory Committee System for the Center.

Now, I think it's in the next recommendation -- yeah -- the next recommendation is that the Center, while it doesn't have the kind of review process that we wish it have that I just described, it does have multiple reviews.

So, for example, part of the U.S. Army Medical Research and Material Command mandates

that the AIBS, the American Institute of Biological Sciences, review the Millennium Cohort Group, the Deployment Health Research Group periodically.

Our recommendation is that if at all possible, these disparate kinds of reviews all be combined into the one review group and they not have to have multiple parallel reviews, but only the Defense Health Board Review Team, and, yet, the Defense Health Board Review Team be more involved in actual substantive review of priorities and progress.

Next slide, please. The other recommendations are that the three Centers have periodic meetings so that they can -- mandatory periodic meetings so that they can discuss between the three Centers and coordinate what they're working on.

Another recommendation is that when there is opportunity to recruit research personnel into the Center, that this be done with a thought of this being a national gem and that national

scientific leadership ought to be recruited into the group.

The final recommendation of the slide, that there ought to be a process by which research priorities generated and vetted after substantial discussion and that ought to absolutely involve the researchers themselves, and, also, the Advisory Committee.

Next slide, please. The first comment up there is that while there's institutional review of the studies, there really isn't substantive scientific review of the study protocols outside of the researchers, and that ought to be discussed.

The impression of our Review Committee was that the seeming isolation of the group out there could be remedied also by making opportunities available for researchers from other parts of the country who might be available for short- or long-term sabbaticals to be involved in the group.

It is also our impression that there's

some real problems career-wise for, let's say epidemiologists, preventive medicine officers in any one of the branches of the Services going to this group and spending more than just a couple of years, and more than a couple years is really probably necessary in order for somebody to make a real research contribution.

But career-wise, it's problematic because it's not the way one seeks promotion in the military, and it was our impression that what is really lacking on a more fundamental profound level is a career track for epidemiologists.

So, this is not so much for the Deployment Research Center but a comment, if you will, more to the DoD about looking at the possibility of developing a career track for epidemiologists.

Next slide, please. All right. Now, in the future, hopefully, September, October, we're going to repeat this process like the other two, and the way we'll do it is probably with Christine Bader, and then develop an assessment of what we

think is going on and then we'll follow up with the full Committee.

So, I think that at this point those are the recommendations having to do with the Deployment Health Center. I've saved some comments on other things for later.

So, if you will, we can open it up to discussion now and perhaps the other people on the Committee who were there might want to raise their hands so that... All right. Good. So, any questions at this time, now would be a good time.

DR. LEDNAR: Dr. Parkinson.

DR. PARKINSON: Yeah. Mike Parkinson.

I guess I want to ask you about while there was -- it sounds like there was kind of a local flavor to the advisory function and the oversight function. Was there evidence that you could pinpoint to that there were impacts of that localness that were opportunities that perhaps had not been raised or where awareness that the local oversight was missing on the national and international perspective?

What was the impact of that, if any, or was it just a feeling that should be formulated as much by local oversight (inaudible).

DR. HALPERIN: I think it's reasonable to say that between the first meeting that I had when some of these observations were made, and the second meeting which was many months later, perhaps six months later, where the Committee was there, that some of the observations made in the first one about lack of priority setting a certain, you know, clarity about how they were getting ideas and then turning that into research guidance and so forth, had already been lending -- and I took that as real evidence of the isolation that we thought we observed in that first meeting, but it's not that -- they're really quick learners. This is a very good group of people. But I think, uh -- I think it's pretty clear that on the major issues if you only relate to the prior researchers who have been involved, that you don't open yourself to the needs, if you will, of all the constituents, which includes -- it's a

very broad group that lists things that they would like to be seen to be done.

There isn't even a possibility, a process now by which external researchers consider obtaining the data for external review, that is sanitized data for external review. So, I don't think it's, uh -- it's my impression though that this local flavor, it really has led to isolation.

Others may want to comment.

DR. LEDNAR: This is Wayne Lednar. Thinking about having had the opportunity to join Bill at the site visit, two things occurred to me at this point. One is that the Millennium Cohort is a national treasure, but as the Cohort is followed over time, to the extent that there is lost a follow-up and there are fewer people who have longitudinal data available in this Cohort, the values starts deteriorating rapidly (inaudible), and it isn't real clear that whatever good work to sustain this level of participation to keep the informativeness is happening. There is a substantial amount to follow up and these are

challenging studies to do, but that's part of the oversight, I believe, that is somewhat needed.

The second visit. As Bill said, this is a young, industrious, hard charging group of junior researchers and they've been quite active in writing papers and giving posters, meetings, and presentations on epidemiologic methods. When you look at the portfolio of what has been produced and then you ask the question how is this helping DoD, how is this translating into operational improvement or what's the input they've been given to have DoD's priorities with capabilities of the Millennium Cohort, how is this being discussed and factored into their work, and at least it wasn't clear to this visitor that group has had the opportunity to hear from DoD.

Now, part of that might be their geographic separation, which is not all bad, but I think it's an opportunity missed for DoD of that kind of coordinated communication between DoD priorities and this resource.

DR. MASON: This is Tom Mason. From a

review -- I couldn't go to San Diego, but I did have the opportunity to review a number of their manuscripts. And picking up on your point (inaudible), if you look at how the publications are actually being used and the potential for the misuse, the misuse of findings from a study which arguably is no longer representative of the original cohort that was recruited, is ample scientific argument for this has to be done better.

Very simply, there are strategies. Those of us who have cohorts for long periods of time are painfully familiar with follow up. But we try in every possible way, you know, to come up with ways to bring them back in. You know, you've got -- you've got them at the front end. You may have lost them a little bit. I don't care if you go back to the repatriated POW's. We can look at the Air Force, what did and didn't work. We can still work with them.

Now, the fact that we lost the Air Force Cohort for a while was then dealt with in a very

straight forward "Hello, y'all. Come on down to Pensacola," as we said.

Now, so then the question for me then is if you look at the articles and apropos our charge, our Subcommittee's charge and the toxic questions we're being asked to address, the persons that are thinking along the lines of deferring to publications coming from the Millennium Cohort, they're going in the wrong direction.

DR. HALPERIN: A comment. When we discuss the issue of -- it was actually a response to a questionnaire survey that our Review Committee was fairly impressed by the low level response. It didn't seem like within the local milieu that that concern had been shared, but I think we have to come back to giving credit to the people who have been cumulative about the sensitive learners that are the with different perceptions was (inaudible). They were on board with comments being made.

DR. MASON: I'm with you, and that's

exactly the point. But the point with regards to published articles is lost, because those who read the published articles have no appreciation or understanding or awareness of these discussions.

The team is good. The team is well-configured and they are quick studies, but I think if you basically suggest very supportive and very positive, if you will, advice and counsel coming from the Board on the Subcommittee that in order for these publications and subsequent publications to address these emerging questions, I think this has to be, and having to pick up on those recommendations (inaudible). I think another observation, that that relates to staffing.

DR. LEDNAR: Though it has been present in the staffing structure in the past has been an inclusion of at least one or more than one uniformed researchers, and I think the very large benefit to the operation of the Millennium Cohort has been military insight that comes from the uniformed researcher.

When it comes to going to military posts and interacting with units, there's an ease of a uniformed person during that contracted civilian as to work through (inaudible), and yet, these are (inaudible) that have pressures among the Services and having the commitment that this is an important activity of the DoD, and there's a way to get the right uniformed person there and to keep that flow going is an aspect of sustainability that is important for us, I think as (inaudible).

DR. HALPERIN: For us to recognize and make the recommendation that it's really got to be DoD to see how it's going to be the researchers themselves that (inaudible).

DR. LEDNAR: Dr. Kaplan and Dr. Parkinson.

DR. KAPLAN: Ed Kaplan. I was a member of the group. I wonder if you'd like to expand in the written report that you gave, that you talked about Number 20 under specific issues, where it says administratively the Center for Deployment

Health Research is in the management chain of the Department of the Navy, Bureau of Medicine. Uh, however, in practice, authority for the Center stems from DoD Health Affairs, potential ambiguities that may result, and so forth.

Do you want to comment a little bit more about that, because I remember we had quite a discussion about that.

DR. HALPERIN: The issue being this is the mandate for these activities is a very high level mandate. The supervision for the group, if you will, the administrative supervision finds itself all the way down, if you will, down the chain and at a local labor base with Naval commander, uh, but the question is does that day-to-day kind of management issue really matter as long as the needs at the very highest level are taken care of, that is, the needs, priorities, for what kinds of research and so forth.

The sense was, I think, of the Committee was that if particularly -- I mean it's odd. It's a little surprising, but it's not necessarily

broken.

DR. KAPLAN: Wasn't there an example given before, it did become problematic?

DR. HALPERIN: The Commander, if that's the appropriate term, was involved in some, in part, but they were able to maneuver themselves out of that fix. So, we didn't make a recommendation essentially for plucking the Deployment Research Center out of the Naval base and out of the structure where it was but place it somewhere else, although that was considered.

There was the issue this would be better off at Walter Reed, et cetera, et cetera, rather than at the Naval base at San Diego.

DR. KAPLAN: My reason for raising the point was that it does present some potential administrative stumbling blocks that I think, as I recall, we spent a good deal of time discussing at that time. And I think while there's no firm recommendation, I think that ideas need to be kept in mind as the whole gist of this discussion today is carried forward. It's a potential issue.

DR. HALPERIN: It's definitely a potential issue, but I think you're going to find lots of issues in the report where the sense is the next increment to improve the situation is to have a serious Advisory Committee that has some supervisory role, and some of these other things will reveal themselves in time. But my sense is of the Committee that we weren't ready for (inaudible). We had present (inaudible) of moving this research group, which, quite honestly, would probably be in half, this team who (inaudible).

DR. LEDNAR: Dr. Parkinson, Dr. Luepker, Dr. Lockey. Dr. Parkinson.

DR. PARKINSON: Mike Parkinson. Dr. Lednar will understand this, but particularly wearing his Dupont hat and in my work at large employers.

The rolling awareness that it's not about health and wellness, it's not about deployment health. Putting it in military terms, it's about human capital management, kind of a comprehensive analysis and optimization of what

the work force brings to a physical organization and the lessons that are learned about successful companies that do as well versus companies that don't, is that you've got to have senior level line management involved. It is not the HR Department.

So, if anything, we should be thinking beyond just uniform presence in the Deployment Center. There needs to be line presence in the Deployment Center so there is -- there should be in (inaudible) centers for one who's been in artillery, because it is the engine that essentially drives human capital management in the military to bring the force to do a mission that they're asked to do (inaudible).

So, the integration of the database, the initial database, which is all about private sectors saying that we need to have not only the typical things we have in deployment database, but we need to have the types of things, like Disability, Worker's Comp., EAA and absenteeism, attitudinal services, surveying. This is really

where companies are going, and this is how we do it.

I think when the team goes to the other two sites, they'll find pretty much the same types of findings, local researchers that stayed local in or out of uniform with local and command structures was kind of we're already there and you put the deployment health thing on top of that, whether it was the force line or Walter Reed. It's clear. The function with (inaudible), it's the same thing if we want to perform at a higher level to avoid what are predictable loss of follow-up to even expand to what is expanded human capabilities or human capital management function. You've got to have with the right flavor uniform people to make the statement to the line, because this is a line assets, it's not those medics back-of-the-hand type of stuff (inaudible)

DR. LEDNAR: All right. Dr. Luepker.

DR. LUEPKER: Russell Luepker. I was on this visit a couple months ago, but I also chaired the AIBS panel in '05 and '09 and some of the

recommendations were the same. I certainly agree that the reviews need to be folded.

A couple things I want to emphasize. I think Bill has done an excellent job in assisting our discussion. I'm going to be a little harder on things. They have a serious participation problem. It undermines data and it is unclear they know exactly what to do about it. So, that's one.

The second, you know, the lack of the military presence there means questions being addressed, while academic, and some may not be serving the funding agency, the DoD. And the third is they're talking about expansion.

The new cohorts, you know, this is an ever-expanding universe and I would say that good people, very junior and very naive, and, you know, they're supervising, I don't know, a $4 to $6 million a year study, and we need -- I mean the bottom line is they need somehow to have some oversight.

Ideally, it would be to bring a senior

person in and say he or she can run it, but if we're going to do this, this is not a one time a year "How are you guys doing?" stuff. I don't think they're going to get it really. I mean, you saw that. I mean local people, some of whom you respect greatly are very detached of this.

DR. LEDNAR: Dr. Oxman.

DR. OXMAN: I think those criticisms are all valid and I think one approach that we took on that was the recommendation of a hands-on Senior Advisory Committee, the composition of which would meet under representation of the military, but it would have to be an Operational Advisory Committee with responsibilities in that regard.

DR. LEDNAR: Sir.

CDR LARABY: In restating exactly what your concerns were or your issues with the Navy being an executive agent on the Deployment Health Center?

DR. HALPERIN: Certainly. If this were CDC or NIH this would be a, as they say, a genuine crown of the institution. It's a very serious

mandate that they have. It should get very high level attention. They seem to be fairly independent, located at the Naval base, talking to some local academics and previous people who've been investigators there, fairly up the river by themselves.

The management of it, the budgetary to a certain extent has been described by Ed. To a certain extent, intellectual involvement comes from the commanding officer of the base, the commanding officer and executive officer of the base.

Now, that's a fairly localized responsibility for a very high level group. The question is should the group be moved to a higher level, but where, where that would be within DoD.

In other words, pluck the entire research unit and put it somewhere where it's in a better view for doing this kind of research or, as Russell has reiterated, if it's going to be listening through a very active advisory group. We're talking about a trip every two months or three months with an active group of people

engaging with them on what research they're conducting, how they're conducting it, and what value they are to their sponsors.

It's very different than this being, essentially, on the periphery by itself. It's a very good group of people trying, but they're not -- they're not within an institution of, uh, of experienced epidemiologists that are closely supervising what a junior group is trying to conduct. I don't know how else or more politely to say it.

DR. LEDNAR: Dr. Mason.

DR. MASON: Have you been on the receiving end of ROR with regards to my Center for Disaster Management?

If I could say it in the following way. Very simply, the Achilles heel from our collective experiences to date is that although it's very important to have IRB approval, the review of the protocols, the review of concepts, the review of the scientific approach to studies is poorly documented in no specific evidence in terms of the

setting of respective priorities.

Now, with respect to the Committee dealing with ROR, dealing with two very, very different entities, which you know, I could say to ROR they say you have a proposal that was, that you're interested in funding. We all do. So, you take it up. It gets subjected to my review, it gets subjected to their review for scientific merit, and then if we get a green light then we can start moving it forward.

And what we're seeing is that that particular step, if it's there, it's very poorly described. The setting of priorities and the setting of real review of protocols, I spent most of my career at NIH, yes, I had to go before the Division Director and all the senior staff to say this is my idea, this is my concept. If I won, then I had to go through three more hoops with regards to the development of my proposal, the protocol, getting it reviewed and everything else. So, by the time I was good to go, I was really good to go.

And that's what we didn't see, and that's the missing piece and it's not -- it has nothing to do with a few minutes oversight, a few minutes of interaction with regards to funding screens with regards to all of that. It really has to do with do you have -- not you personally, and not, specifically, do they have access to and are they going to be amenable to that type of scientific oversight, because one of the issues, quite frankly, was one of their advisory boards, prior to our giving the membership, was in perpetuity. There's not a group that I know of that basically assigns anybody to serve on a scientific advisory board for the rest of their own natural life. There's something wrong with that.

And those are some of the issues and some of the questions. They're imminently addressable. They really are. And there's -- it's not any comment, but it's, here are some of the issues we've seen and here are the ways forward as we perceive them, how can we actually

make this, take it back to the original mandate. The original mandate is very, very broad and very, very specific, and given the set of circumstances over the ensuing years, they can't honor the mandate. That's the problem.

DR. LEDNAR: I guess one of the things I want to come back to vote, this is a DoD activity. It's a DoD center and we're all used to working in highly matrixed organizations. In fact, when we serve as an executive agent it’s fine. Much of the funding for the work that goes on by this group comes from Army R&D plant. So, clearly, there are working across the Services of various types, and the landlord is the Navy. They've got a commander, a Navy commander.

So, it's one of the pieces that needs to work are in place, but it really is an operation that is trying its best in kind of a separated floating out in its own ocean kind of way without the interaction with others into bringing more value. That's how I'm summarizing the operation.

So, in interest of time, I'd like to

come back to the request for a vote. So, Bill, can you basically frame up what it is you would like the Board to vote?

DR. HALPERIN: Sure. We've made eight or ten recommendations. They're listed here. I'm asking for a vote to move these recommendations forward.

What that would mean in practice is that DHB would then have to establish this Senior Advisory Group, a Senior Review Committee for this operation. You have to work with researchers, identify the advisors, put it in place and start meeting with them as an advisory group.

The others are, uh -- that is the most practical and strategic recommendation. There are other recommendations about, you know, it would be good if the data would be made available to outside researchers and it would be good if there were sabbaticals for doing work with this research team, et cetera.

Those are, I think, valuable recommendations, but the idea that there should be

essentially one advisory group under the auspices of the DHB, it takes more responsibility for this is the major recommendation. So long-winded, but what we're asking for is support for these recommendations in that we would get into action and establish the advisory group.

DR. LEDNAR: First, in my thinking we have a motion --

DR. MASON: I have a second.

DR. LEDNAR: So, now some discussion about the motion. Dr. Shamoo?

DR. SHAMOO: I'm asking the officials of the DHB Committee, this is sort of an executive function. We're going to be coming, basically, in charge of the portfolio of how this blood type and how this research should move forward.

I don't recall -- this is my seventh year, sixth year or seventh year we've done that -- I don't know if this is within our, you know, Charter or Bylaws, and my thinking was that our recommendations go to the DoD since the Secretary of Defense, and he forms whatever he wants in

collaboration with the Services, and try to determine that they come back in a year or two or three saying this is what you guys recommended, this is what we did, this is the evaluation process, this worked, this did not work, and if we still didn't say, heck with you, no, it didn't work and we send another recommendation and maybe clean up house. You know what I'm saying. I don't know if we should be in charge. It's a seemingly executive function. I don't know.

MS. BADER: Actually, Dr. Shamoo, you are correct. The recommendations, you know, are broad recommendations. They require more oversight and the Advisory Committee can go to the ASD(HA). ASD(HA) will decide whether or not that's something he would like to do and then he will come forward with his plan, but it's his decision. You are correct, yeah.

DR. LEDNAR: I think that the Committee's observations have merit on whoever and however it is operated to improve the value of it.

Dr. Winkenwerder's charge is going on

eight years ago. It probably would be reasonable for the current ASD Health Affairs to look at that in light of today and see whether or not they support the continuation of that charge or (inaudible), but if there is are a consolidation of activity and they are closely interacting with the deployment health sector in their operations, whoever does that, and it doesn't necessarily have to be us, the DHB, that would be a recommendation that the Board would take under consideration.

So, I think if it were to turn out that the DHB would be asked to perform this function, the executive evaluation would have to be what kind of resources would it take to do that. Well, are those currently available; and, if not, what would be the resource gap, and have that discussion with DoD at that point.

Dr. Shamoo.

DR. SHAMOO: I support all the recommendations, except delegating the executive function to DHB. I'm very impressed with the work.

DR. LEDNAR: Yeah. Lisa, Dr. Halperin is going to ask if you can bring a certain slide up.

DR. HALPERIN: The Board recommends the revision. If we can just go back to that. Before that. Before. Before. Before that. There. No, before that.

MS. JARRETT: One more?

DR. LEDNAR: One more.

DR. WALKER: Maybe members. And the other is they have advised to be selective, you know. Those are the two things that mentioned in the DHB (inaudible).

DR. HALPERIN: So, we clearly can read what the recommendation is. This is the recommendation. If you will, you might as well just read through the whole thing.

The Board recommends the revision and restructuring the Scientific Steering Advisory Committee (SSAC) -- that's what they have now -- into a Scientific Advisory Committee (SAC) that is responsible for overseeing all activities of the

Center for Deployment Health Research. The Board recommends that the SAC include senior leaders of the Active Duty and retired, officer and enlisted, military, regional, and national subject matter experts, and DHB representatives. The Commanding Officer (CO), along with at least one senior leader from the Department of Veterans Affairs (VA) should serve as Ex-Officio Members on the SAC due to the implications for veterans. Furthermore, appointments should be recommended by the DHB to ASDHA); the ASD(HA) should appoint the Committee and assign its responsibilities, as well as determine the appointment duration.

So, there really is a key role for the DHB, but as the thought about the role of the Assistant Secretary is represented there, as well.

DR. POLAND: Can I just clarify something? Research, you mean in San Diego?

DR. HALPERIN: Yes.

DR. POLAND: Though we're likely to find various -- we haven't looked yet, but we're likely to find very similar issues. I'm just sort of --

DR. HALPERIN: I wouldn't prejudge it. I don't know what we'll find at the other place. From what I understand, at the other two places it's not a civilian group that is taking responsibility, but it's actually active military that's directly those groups.

DR. POLAND: We sort of have information about one of the three parts and we're making broader recommendations.

DR. HALPERIN: This is just for --

DR. POLAND: We're making a recommendation that would, in a sense, single out one of the Centers without understanding what help or assistance or oversight the other two -- and I'm just wondering do we need to tie the idea that you have and sort of step it back a little bit to say that, you know, in essence, since this is eight years ago from -- since you received the charge from the ASD, do we need to have the ASD reissue something that says that all three Centers ought to be examined in a cohesive set of recommendations made in terms of what further

oversight, et cetera, the same type that are recognized -- I was on the very first one there for eight years farther along of follow-ups, et cetera, et cetera. But I'm just interested in how it's always better to look at the whole than just one part.

DR. HALPERIN: We operated under the recommendation start small, start down. That's the motto. Those who are on the DHB visited perhaps three years ago now, we had a big dog and pony show and it wasn't clear what our mandate was. It was really off. It was only after that.

So, we're going back about a year and a half, two years that the mandate was very active, very real and very clear.

So, my sense is we had the mandate, we did the review, we have the recommendations for this Center, which may be different from the other Centers, and then unless we want to run the risk of wasting more time and getting it back on track, which runs the risk of taking what can be a jewel -- there aren't many cohorts with two hundred

thousand plus people around. We run the risk of losing it, if you will.

And I don't think -- my personal advice is, don't run the risk of losing it. There's some real questions this group can answer, but we have to get on top of the answer. The only way to do that is to get the group together and move on.

DR. POLAND: Maybe it's just to incorporate something that says formally or informally we've only evaluated one of the three parts and, you know, an immediate evaluation need to be performed on the other two so more overarching recommendations can be made. I mean, it would seem that there's a certain economy of scale by having three Centers that could mean --

DR. HALPERIN: The three Centers do have different things, so this is the only Center that does the cohort follow-up.

DR. LEDNAR: Dr. Lockey, Kaplan and Oxman.

DR. HALPERIN: I don't think we're recommending the scientific oversight of the

Centers. We're not doing that. We're just saying that the Scientific Advisory Committee should be formulated to be more broad-based, more representative and a representative of the Board be on that, but I don't think we want to be responsible for scientific oversight. We want feedback of the Board.

DR. LEDNAR: Dr. Kaplan.

DR. KAPLAN: I just would point out where I agree with what you've said, there is another recommendation in there that the three groups get together on a regular basis, which is, as I recall from the discussion -- and correct me, Bill, if I'm wrong -- they didn't do.

And, so, they don't even know what the other two are doing. Nobody. Nobody knows what they're all doing. And as a way of sort of getting this together I think this was at least, in my mind, a way to get started, to have them start talking to each other. But it takes more than that, and I think that's what you point out.

DR. LEDNAR: Dr. Oxman.

DR. OXMAN: And I believe that we dealt -- I certainly felt that with respect to this cohort study to the oversight capabilities and responsibilities that the NHRC has for oversight of the program, being as they are founders of the program. I'm just wondering if you have actually captured all of the oversight activities that go on for this particular program, because their program does get NHRC command level review that includes a broad spectrum of expertise to oversee that program, again, from a programmatic perspective, and I just ask the question because I'm curious as to whether you've actually seen everything that's involved with the oversight of that particular program.

DR. HALPERIN: I don't know really there's a way to answer that. We only learned about what the Committee was told about as far as the various review groups, but if there is -- I'm sorry to put this to you -- if there is extensive review, it's not evident in the activity in the group, and that's been manifested by the lack of

priorities, the poor response rates and the concern about the response rates and so forth.

So, I don't know. The truth may fit somewhere in between. The group may be doing review but we weren't told about it, and at least we didn't report it. If it's there, it's not evident in the practice.

Just to follow up. I think that's a very good point. It sounds to me like there may be a communication misstep. I just attended -- uh, what, it's been about two or three months ago now -- an IPR for the Millennium Cohort Studies Program where they went through an in-depth description and discussion of the Cohort loss and how they are addressing that issue. So, it was a significant enough concern at that IPR meeting that we asked specifically to review that and got a good indication of what their remediation plan is.

So, maybe the problem is somewhere -- we've got some lack of communication that the full story is only getting to part of the review

groups. So, maybe that's where the real issue comes, is making sure that we've actually got visibility of all the correct information.

DR. SHAMOO: Again, I would be cautious in terms of DHB representative, because once they're in executive function or part of an executive function oversight, we lose our independence.

DR. LEDNAR: Dr. Poland and Dr. Parkinson.

DR. POLAND: We were just having a little bit of a huddle, and let me make just one point here that still accomplishes what I think the Subcommittee wants to do, but also makes it palatable at ASD.

I think we ought to use language maybe like you started before to recommend, and now I'll change it a little bit. Consideration that the SAC includes senior leaders, blah-blah-blah. I think after that we get very prescriptive here, probably inappropriately so, for the ASD is saying who should serve on this Committee, and maybe just

modify the language about we recommend considering representatives such as, and then list people, and that we'd be pleased to make recommendations to the ASD rather than prescribing it should be this person and this person and this person.

DR. LEDNAR: I think in the very last phrase of the recommendation as currently worded, the ASD should appoint the Committee. I think it's up to the ASD to decide based upon the presentation of the issues what they think is the kind of response, but I'm not sure that we should really be telling the ASD do that. Raise the issue and make it clear, and then that comes into the ASD's consideration.

Dr. Parkinson?

DR. PARKINSON: Mike Parkinson. I agree with the sentiments currently expressed. I do think that the term line representation is important, uniform line representation, again, like my earlier comments, without specifying who it is. However, to balance again saying what is the best practice that the DHB should look to

standardize.

Here we have a commission of the Department being the deployment readiness, deployment health, something that we talked about going back to when I was still in uniform as a representative of the Board having standardized to cross all surfaces at health and readiness issues (inaudible). We should have an annual portfolio review of this program at the DHB level for the full DHB.

There were tens of millions of dollars going into this program that is of central importance to answer the questions that were all the time (inaudible) to do. It is our resource on behalf of the American people to get at. We ought to make sure it's working right.

So, when I look through the notes there's twenty-five ongoing studies really doesn't fit with what -- So, it might be in a sense of that as another part of a recommendation (inaudible).

DR. LEDNAR: Dr. Walker.

DR. WALKER: (off mic)

DR. HALPERIN: They don't fit together as part of the problem.

I want to respond to the comment a few minutes ago though. The participation problem didn't just occur six months or a year ago, it has been a continual hemorrhage for years now and they may have a plan now, but they've got seventy percent of their participants already. This is should have been a problem solved in 2003 and when it first began.

So, you know, I think that it is not a new situation we're dealing with. They may have a new solution, but, boy, once you've lost that many people for that long, it's a serious problem.

DR. LEDNAR: Dr. Walker and Dr. Oxman.

DR. WALKER: I think what it boils down to is they need a good scientific advisory board to give them advice. There's a lot of words here and we've suggested changing a few words, but I think that that sounds real. I think that's something that the DHB ought to address.

DR. LEDNAR: Dr. Oxman.

DR. OXMAN: And I think the recent reports to the Navy reflect that, the local group's wisdom in taking the input from our visit as what should be the ongoing input of an advisory committee.

DR. LEDNAR: So, we have a Subcommittee report. We have a text up on the screen, a portion of which I think there are some concerns about whether or not that's going to perhaps be overstepping our mark, a suggestion of perhaps getting the points across in a different way as Craig has suggested.

I'd like to propose that with those considerations that the Subcommittee's report be accepted and that with the help of Ms. Bader and others we capture the sentiment of this and the wording of this so it could be appropriately communicated.

SPEAKER: I so move.

DR. LEDNAR: Second? Any further discussion about that?

Dr. Oxman or Dr. Kaplan?

DR. OXMAN: Can we presume that that draft will be circulated back to the members of the Committee?

DR. LEDNAR: Yes, electronically, with a fairly short circle element of response.

Dr. Kaplan?

DR. KAPLAN: Yes. Could you tell me where else it would be -- where is this going to be ending up, ASD?

DR. LEDNAR: I'd say the entry point from the DHB would be a communication to the ASD Health Affairs for the individual performing the duties of ASD Health Affairs.

Obviously, where it goes after that for consideration and deliberation is in the discretion of the ASD.

DR. KAPLAN: Are we potentially out of line to somehow or other make some suggestions? I mean, they're all kinds of players in this story. It goes directly to ASD, no question about that. Do we think that that other people get this for

comment or is that the ASD's job?

DR. LEDNAR: I believe that's the ASD's job, and I think as a Subcommittee that shares its observations after identifying some issues, does the ASD Health Affairs looks at it at that will say, well, who and how will it be best to understand this to consider what other action, if necessary, is taken. That would be coordinated with one of the departments of the ASD Health Affairs office.

Dr. Parkinson.

DR. PARKINSON: Thank you, Wayne, for indulging my fine comment on this, but a number of lost follow-up is seventy percent, and that number is real? I think this report underestimates the gravity of the situation.

I mean, unless it's in here, I haven't quite read it, but the Millennium Cohort Study is meant to be the go-to cohort for the answers that we struggled with for decades on this Board, and I think the level of that attitude and some benchmarking perhaps from members of the Committee

visited to say, well, did you know launching the Cohort Study will have less sway than military, over military members, you know, current and future or (inaudible) here's a benchmark number, you should be here with potential serious detail.

We may be doing a disservice, but that's the message. Clearly, you know, when it's beyond smoke but there's fire in the building, you got to respond with a response. I don't really know what the other two Centers are doing, but if there's researchers there, they're going so they can do it fast. So, that the Department funded this study (inaudible) I think that would be important too, we should see a graphic cycling plan in action that is (inaudible).

DR. LEDNAR: Dr. Mason and Dr. Silva.

DR. MASON: If I might, that was my whole reason for sharing with you my serious concerns. The publications that are coming out are based on really woefully inadequate response rates and potentially, potentially to be misinformed on any one of a number of very

important health issues which have an impact on our Forces. It's that simple. And with respect, there may well be remedial deficiencies. At least these recommendations taken in the right sense suggest that if that scientific oversight, then you can say why can be done and how realistic are some of those perspective comments.

DR. LEDNAR: Dr. Silva.

DR. SILVA: I'm sorry, I missed the beginning of your report, but this loss of seventy percent, obviously, is incredible. Do we know why? Is there a generic reason?

DR. HALPERIN: No, we don't know why, but what we do know from the first visit and with some of the interviews that we did on the second visit that there was a lack of the same level of concern. That was remedied by, I think, the attention that the researchers there made to the reviewers from the DHB, and I'm sensing that there's already a changed sense of concern.

As far as what the problem is, my sense is that it's going to take this Advisory Group

going back there every two or three months for a couple of years, looking project-by-project at how they're organized, what problems they're running into and so forth. That's work to be done, and I think we really need representatives on that work.

DR. LEDNAR: So, as we have a motion on the floor, again, there's a recommendation of the Subcommittee with some rewording, some care about what we would propose to do and that is the assigning of ASD Health Affairs. That recommendation of rewording is needed.

I'd like to call for a vote. So, a show of hands. All those in favor of the recommendation as considerations?

Any opposed? Are there any abstentions? Zero. Thanks to the Subcommittee for its work. Very important issue, obviously, and we will work to recirculate to the Board a recommendation given the discussions we've had here. It will be forwarded by e-mail and it will be a short cycle time for a response, so if we can get this communicated ASAP so we can get it.

Dr. Kaplan?

DR. KAPLAN: A little bit off the point, but how many people here think that with a seventy percent loss at this time that the patient is resuscitable withheld or not?

(Laughter)

DR. MASON: Last comment. That's why I brought up the Air Force for those of you who remember the POW's from Vietnam with the repatriated POW's. The Navy did a spectacular job. They really did a spectacular job. The Air Force started out doing it right and then they dropped the ball big time for years with regards to the Air Force POW's. They were lost. The Navy said there's got to be -- there's got to be a way, and they brought them back. We brought back all the Air Force POW's to Pensacola and we put them in exactly the same program that the Navy had maintained over years. We lost some, but we got it back up to reasonable levels and were able to actually pursue those. The only way you'll ever know is by looking seriously at those one million

because that was the target population, that's what they told Congress.

DR. LEDNAR: This is a discussion that, while relevant, we understand the issue and we have to go forth.

I am gratefully passing the gavel to Dr. Poland to facilitate the remainder of the meeting.

MS. BADER: Just one quick announcement. We're actually going to move the break from the agenda. Please feel free to get up at your leisure, get a cup of coffee, take a physiological break as Dr. Mason says, as required, but in the interests of time I think we need to continue to move on.

Dr. Certain will be briefing on the Task Force on the Prevention of Suicide by the Members of the Armed Forces in place of Colonel McPherson, and I will turn it now over to Dr. Poland for a formal introduction.

DR. POLAND: I'm going to introduce the very reverent, but never irreverent Dr. Certain. He's currently a Rector at Saint Peter's, Saint

Paul Episcopal Church in Marietta, Georgia. He's held a variety of different and interesting positions at a variety of churches through Texas and Tennessee and Mississippi. He got his BA at Emery University in 1969 at the School of Theology, subsequently got his Master of Divinity and Doctorate of Ministry in 1990 from the University of the South. He was ordained a Deacon in '75, a Priest in '76. He's been published in numerous publications. His most recent published article is "Wartime Sacrifice" for Chaplain Magazine in the spring of 2010 issue, and you all have seen his two books.

Reverend Certain's military career began in 1969, graduating from eighth grade as a U.S. Air Force navigator. In 1972, during his 100th mission over Vietnam, his aircraft was hit by surface-to-air missile and then Captain Certain spent from 1972 to 1973 as a Prisoner of War in North Vietnam.

His military awards and decorations include the Bronze Star for Valor, Meritorious

Service Medal, Prisoner of War Medal, Vietnam Service Medal, the Distinguished Cross For Heroism, a Purple Heart, an Air Medal, the Air Force Commendation Medal, and the Representative of Vietnam Cross of Gallantry.

Dr. Certain left active duty in 1977 as I was graduating from college, retired as a Chaplain in the United States Air Force Reserves at the United States Air Force Academy on July 8th, 1999.

So, Reverend Certain.

REVEREND CERTAIN: Thank you. Now that we've all had a time for fifteen minutes discussion on the last one, I can hardly wait for this one. But at least you don't have to vote on anything. We did this already. So, this is not very where we've been, as you know, the very helpful meeting that we had with the full Board back in July or June, whenever it was.

The Task Force on Suicide Prevention by Members of the Armed Forces was mandated in the National Defense Authorization Act for Fiscal Year

2009, directing the Secretary of Defense to set it up. It also named the specific expertise of the fourteen members, seven DoD active duty, seven non DoD civilians, and to report back to Congress through the Secretary of Defense. It is different from the others in that regard.

To answer the earlier question today about the RAND study that was sponsored by the Secretary of Defense, the Joint Staff and DoD Intelligence Community and then the Army study was an Army study, and those things are found in Appendix I of the report that you have. There about twenty of them that cost us approximately $65 million over the course of three years to accomplish. Each of them have a slightly different perspective.

For those of you who are scientific and would like evidence-based anything, uh, that's not here. We don't have that in suicide prevention. We have an awful lot of expertise, however, that worked in it and did our best to find the best studies, the best evidence, the best practices to

recommend to the Secretary of Defense. The deliverables were required by Congress, and those are all in the report. The reports you have in front of you now is a vastly cleaned up, better organized report than what you saw electronically a couple months ago.

A number of general observations that we made throughout the time that we were making the studies and the principal one, that going assumption is, that while not every suicide may be preventable, suicide in general is preventable.

We do believe we can reduce this rate and get it back down towards zero. It's sort of a never-ending challenge to get it down all the way, but we do believe that there are some things that the Department of Defense and various Services can do and do better to get it done right. We don't know of any other single employer in the world who is spending as much time and effort to grapple with the issue of suicide among its employees. So, we really are pleased with what the Services are doing in general.

There's some foundational recommendations that we are making to the Secretary on Friday.

First of all, to create an OSD level Suicide Prevention Division under Personnel and Readiness and to keep suicide prevention in the leader's lane, that is, not to relegate it into the medical realm. The medical answer is the last safety net in suicide prevention. Leadership is the first. Keeping people aware, working with people, training people, enhancing resilience, answering problems as they arise rather than allowing them to get overwhelming is the key, is the first key, and -- but some people, poke through all webbing, and even those who do come to medical care, psychological care, forty percent of those still seem to fall through that safety net. This is not an easily solved problem.

So, here are some general Foundational Recommendations. We believe that they have to be answered before anything else will be successful. And, so, though there are more important

recommendations than others, these we believe are the ones.

And that is just that one slide, and you have all of this in your folder.

Since we last saw the whole Board, these are the events that have occurred as we have polished this report. Lots of long nights and all-night sessions, particularly with Colonel McPherson, our Executive Secretary, who, as the rest of us went back to our daytime jobs, she really took charge of all the data, all the writing and tried to get it into a more coherent form working with some of the staff.

Now, I'm trying to skip over these because you have the sheet in front of you that we passed out as you came in today with all of these things that we heard from you last time and our responses, and so we encourage you to look through there and it will reference you back to the full report so you can see how your concern was addressed. You can read that a lot better than I can read it to you, because I know you'll glaze

over if I read it to you. So, please do take some time and become familiar, because what you did with the Task Force two weeks ago was vital and the full product that you see in front of you now.

Here's what's happening next. Friday we're scheduled to brief -- or the Chairs are scheduled to brief the Secretary of Defense, and then next Tuesday at the National Press Club will be a two hour press conference scheduled to make it public. And, so, we do ask, as we said at the beginning of the day, that you not distribute this product or show it outside the Board until after 3:00 next Tuesday. After that it's public information. And we really do appreciate what you've done.

The Task Force, because of the way it was set up by Congress through the Secretary was necessarily set up as a Subcommittee of this, of the Defense Health Board simply because we didn't have yet Congress to pass a whole bunch of laws in order to do what they said we had to do.

So, some of it is opinion of all of us

fourteen experts was that the Defense Health Board was there as a (inaudible), and I think we really didn't take into consideration what, that we needed and final polished product for you first, and you were very tolerant and very kind and very generous to us last time, and because you were, because you asked a lot of good questions and made some very fine observations, we were able to really get down to polish it in a much better way than would otherwise have been possible.

And, so, I personally want to thank all of you as my colleagues for doing that for us a couple months ago so that we are where we are today.

The copy you have today still has a few typos in it that we discovered since Monday and they've been fixed. So, if you find anymore, you can send me an e-mail and I'll see if we can fix them.

But the other thing that is going on in the background is that we've asked -- HA has been asked to extend our appointments for six months,

but that's a "what if" situation; what if the Secretary of Defense asked us to give him more information, provide a little more work, or do some of the response to our own report. If that happens, we need to be in place. We're not looking to prolong this work any further than necessary, but, yet, to work in the Department of Defense.

So, I'm pleased with it. I hope you're pleased with it, and if you have any questions Colonel McPherson and I will be glad to try to respond to it.

Yes, sir?

DR. LEDNAR: Can you just share with the Board after Secretary Gates is presented with the report, uh, there are at least two ninety day cycle events which begin to assure the Board what's ahead following Secretary Gates being delivered the report?

REVEREND CERTAIN: First of all, the Secretary has ninety days to have a response written to attach to this and then go to Congress.

First or second. I'm not sure what the other ninety is.

Col McPHERSON: Although at the time we delivered the report to Secretary Gates we also provide copies to the Congressional Committees, Secretary Gates has ninety days formally with which to forward the report to Congress with his comments in a cover letter or however he chooses, and then there's an initial ninety days built into the language for DoD to have an implementation in the plan. Obviously, they'll probably just start as soon as they see HA has been briefed.

So, they do have a hard copy, even a rougher version than this and the work starting, but that's the two ninety day pieces.

REVEREND CERTAIN: One of the onerous recommendations is increase in the size of the Force in order to widen out or reduce the obligation.

That's one of those stuck in all the areas you can for that one, because we know that that -- that there are all kinds of issues

surrounding that (inaudible). But Congress asked our opinion, so we gave it to them.

DR. POLAND: All right. Thank you very much.

Because of travel arrangements we're going to make a switch and Lieutenant Colonel Robinson will go ahead of myself.

Our next speaker will be Lieutenant Colonel Robinson. He is the Executive Director for Psychological Health and Traumatic Brain Injury. Prior to this role, he was Director for the Strategies, Plans, and Programs Directorate at DCoE and recently served as the Combat Stress Detachment Commander for RC-East during a deployment to Afghanistan. He also previously served as the 78th Medical Operations Squadron Commander at Robins Air Force Base, leading all health care operations and directing seven outpatient family clinics, and as the Program Manager of the Air Force Alcohol Drug Abuse Prevention and Treatment Program and the Air Force Drug Demand Reduction Program.

He'll be presenting a potential question for consideration and examination by the Board regarding the prescribing and use of psychiatric medications and the use of complementary and alternative medical treatments within the DoD.

His slides are under TAB 8 of our notebooks.

MS. BADER: If I can just interject. We also have Captain Simmer on the line.

Captain Simmer, can you please quickly introduce yourself?

CAPT SIMMER: Sure. Captain Ed Simmer, Navy psychiatrist, who formerly was the Senior Exec. Director for DCoE, which will be Chris Robinson. Now I am a Naval Officer at Beaufort.

MS. BADER: Thank you very much, Ed, and welcome.

CAPT SIMMER: Thank you.

Lt Col ROBINSON: Is this on? Thank you.

Thank you for that introduction and thank you for giving me this opportunity to come

forward and seek your guidance on these two areas. These two areas are certainly related, but separate, and if I could just give you a little bit of background on this.

Last spring Dr. Rice, in his role as the ASD Health Affairs, asked these questions about how much and what is the, in terms of how to prescribe psychiatric medication and the proper use of psychiatric medications in deployed environments, as well as in garrison. And, so, that was turned over again to Captain Simmer, who is on the line, and he developed a whole series of questions, specific questions about having a handout not on these slides.

To address this, and what we're hoping to get from the Board is guidance on the uses of psychiatric medications, and then as well as the use of complementary and alternative medicine.

Next slide, please. The reason this is important is, as you know, this area of taking care of our greatest resources, our men and women in uniform, is a hot topic in the media and,

certainly, in Congress' eyes these days, so there's been a lot of attention, a lot of newspaper articles, a lot of Congressional testimonies about this.

There are separate reports on the use of medications in our deployed forces. Actually, one-sixth -- a report that says one-sixth of our deployed men and women are on, essentially, a psychiatric medication; and, also, seeing lower numbers, between two percent and eight percent of our total Forces on some sort of psychiatric medication.

Psychiatric medication, as we know, they vary widely in their safety and addictive properties, and some are okay to use in some settings and some aren't. So, the rules of those need to be spelled out.

When I was deployed, I saw a couple of things. One, the use of certain medications and other medications widely used. We had a young private that I'll never forget who was having sleep problems and went to the Aid Station --

hadn't seen me yet or my mental health technician -- and was prescribed Ambien for sleep problems, and then walked out mumbling and took the whole bottle. He had only been given ten, so, fortunately, it wasn't a lethal dose, but then he was walking around very much impaired in a fog, basically, drunk, with loaded weapons as you can imagine.

So, after that one of the things we did in that area was everybody who was coming forward, no matter what your rank or job was, if you were requesting medications you had to be at least evaluated by us.

And, so, that worked out actually, because some of the folks it made sense that they were doing some of the medication. Some of the folks we found had all sorts of other issues, as well. So, what we're seeking is just some definitive guidance from this body on how to best do this.

And then the next set of questions on the use of complementary and alternative medicine

I think is also an important area for a variety of reasons, but also the evidence for these types of interventions is there.

So, one of the things that, you know, for many of the examples being exercise, yoga, relaxation, Tai Chi, uh, meditation. Those kinds of things are what I'm talking about. The evidence is there. Some as good, some not so good. A lot of it is anecdotal. They're largely not covered as a TRICARE benefit, which makes it then more difficult for us to advocate the need. So, we're looking forward to some help with that area, as well.

Now, we'll go to the next slide. These are just examples of some of the questions that Captain Simmer put together. These questions that I have again are electronically that can be sent, but these questions were vetted to the Services Directors of Psychological Health and a lot of people put ideas on these questions.

The one category to help us out with medications or PTSD, help us out with medication

for Acute Stress Disorder. The category, a broader category of the psychotropic medication questions, in general, about safety, about off-label use versus an indicated use, questions about are there any special concerns we should have while using some of these medications in a deployed environment. And you need all of your faculties as much as possible.

And, so, these are some of those questions that I'm mentioning. So, what medications are commonly recommended for PTSD and Acute Stress Disorder? What psychotropic medications may be safe for a deployed combat environment? What medications carry an increased risk for suicidal or violent behavior?

Hence, that's a key over there, because as opposed to a civilian environment everybody has, you know, certainly easy access to (inaudible).

And then there's questions about counseling, how do we incorporate counseling with the use of medication. These are people that take

medication without giving or having counseling per se.

Next slide. What medications might have potentials for abuse? I already mentioned the off label question. What policy should be in place to make sure that we're not promoting drug seeking or addictive behaviors through our prescribing, and in terms of just quality and oversight of the psychiatric medications.

Next slide. Certainly, one of the things that we see is many folks taking a variety of medications, so it certainly is always a concern to making sure that they're being prescribed correctly so that we're not causing drug interactions that might interact with both the medications that they're taking, as well as other over-the-counter or dietary supplements (inaudible). Finally, the last category is recommendations. What are the best practices that we're interested in.

The next slide. One more slide. And then these are the four questions about

complementary and alternative medicine.

What are the Board's thoughts or recommendations on the use of these sorts of medicines? What level of evidence does exist to support CAM? Does a threshold for standard of care exist for CAM? And then, certainly, how it would advise on if/how the Department might extent the TRICARE program to cover these other benefits.

Next slide, please. So, the question might be, you know, why do we need to come to this Board to get this kind of information, and our providers are well trained and we know how to do literature reviews, but I think that the primary reason is this is an external body and external to the military and to the government.

I think these, if you were to take these questions, I mean, your conclusions would carry a lot more weight.

Make no mistake, my role when I was deployed was to keep the Service members there in the fight. We didn't turn a blind eye to serious problems, but, generally, were providing treatment

in the field keeping them there. So, we would definitely use this type of information to train and educate our deployed combat stress team to make sure that they had the best information possible.

Finally, on an additional point, I think that might be helpful and useful to speak with these who have been recently re-deployed, recently returned from combat to get their perceptions on this experience, as well as perhaps looking at similar professions in that they're working to keep their members alert in a difficult environment, such as police, firemen, et cetera.

So that concludes my comments, and I'm open for questions at this point.

DR. POLAND: Thank you. I'm not sure that CAPT Simmer -- CAPT Simmer, would you like to add any comments?

CAPT SIMMER: I think Christopher summarized it very well.

I think the only comment I would add is that, you know, obviously, there are areas where

there has been a good bit of controversy, especially looking at things like polypharmacy. And another issue that we have a lot of difficulty with is when soldiers or sailors, Marines use prescribed medications with over-the-counter herbal supplements, those sorts of things.

Those are areas where I think we really don't have a lot of good information of what we can do to provide the best possible care for the people who we are caring for.

DR. POLAND: Let me ask a clarifying question. I assume your questions in regard to CAM are in the domain of psychological health?

CAPT SIMMER: That's correct. Yes, sir.

DR. POLAND: Well, let me just make a comment and then we'll have some discussion.

These are very broad questions, and I think to sort of summarize this, you're asking for help in devising a guidance document on the use of psychiatric drugs in CAM for the psychological well-being in a combat environment.

CAPT SIMMER: Yes, sir. That is correct.

What I could add is one thing. I would say in a combat environment and a post-combat environment when people come back.

DR. POLAND: So that's very broad, and I think that we have one obvious Subcommittee that can help us. But this is really, I think, broader than one Subcommittee. I think the way for us to think about this is to get some discussion about that point and for us to probably, as an Executive Committee, sort of decide how best to constitute a work group that would deal with something quite this large.

DR. WALKER: I think almost certainly particularly in the CAM area (inaudible)

DR. POLAND: First, on a lighter note, it always strikes me as entertaining of how pharmaceuticalized we've all become when we characterize exercise and physical activity as complementary and alternative medicine. Striking. You know, I did a whole talk on this on behalf of the physicians in general articles, the first thing paper change, rather than your prescription

pad (inaudible).

DR. PARKINSON: Off the observation, go with hundreds of copies over the last decade. The first drugs for all companies we looked at the better part of seven years are one version of stress anxiety depressant medications, number one. Purple pills of some sort, which are all related to stress anxiety. Herb related things. And the third is some version of statin. It doesn't matter what company you're in. It's all the same three.

And that with a volunteer Force where we know we have people coming in in many cases from an economic and socio-cultural background where there's a history of family trauma, perhaps a lack of resiliency, coping skills and they look for quick and fast solutions, and I think that six month timeline is probably -- is probably unrealistic is my first reaction.

I think that serious benchmarking, looking at the DoD bases versus similar occupational equivalents in the civilian sector is

first to determine where we may be against the prescription patterns that we see. I think that's very doable, but I don't think we can go at this point with anecdotes and with stories and with fast clips, although my sense is that this is a big issue and I'm glad it's here, but I don't think the timeline, my first reaction is realistic, and I think to do it right we have to take the high level now and look at other issues going forward.

DR. LEDNAR: Wayne Lednar. In addition to what Mike Parkinson just mentioned, as we think about the group we are keeping in mind as we think about this are those in theater or, at least, in return from theater, but part of that group are the Reserve or National Guard.

Several things about them. One is they may be older than the rest of the Active Duty force. They're going to bring to their service and bring to the combat environment the prescribing patterns of their doctors at home. And, so, we're going to see plenty of SSRI

utilization mostly on statins, particularly as the recommendations of intervening have gotten into lower, lower numbers and lower, lower ages, particularly to the point where it's going to be like fluoride maybe even put in the water.

So, I guess the last point, these are questions where the expertise, especially, are currently. And, secondly, does it align with the existing Subcommittee structure?

So, I think it's going to require assembling the right expertise and individuals from outside to assemble the right expertise.

DR. SHAMOO: I just want to add we're dealing with a vulnerable group and it's important to realize that.

DR. POLAND: Charlie.

DR. FOGELMAN: My first thought about this -- actually, I got a heads-up about this person I've spoken about a little bit. My first feeling is that going into this, among the things he would ask about is the interaction of all of this with alcohol and other substances, which is

not anything I've heard anybody say, but I just know that it's a big piece of it, in terms of where it fits and how it should be approached. Indeed, we talked about a number of these issues along the way in our Committee. It's unquestionably the case that our Committee cannot by itself do all of this in six months. We would certainly want to have outside experts.

My only suggestion includes the Executive Committee think about it. That way -- our next meeting is in November, so we should have time for a proper review or just, I guess (inaudible) how to approach it. We should probably use that meeting as a point for a larger discussion or else we'll have all the psychologists and other folks on board present.

DR. POLAND: Thank you. Russ.

DR. LUEPKER: Let me go back to something Mike said, that, you know, I think to approach this problem you got to know frontwards who's saying what. You paint a broad stroke here of things, and, you know, I have no idea how many

are on Ambien or Prozac or whatever. That would be very helpful to know.

RADM SMITH: This is getting a little tactical, but the good news is that we know pretty much what everybody is on because when they get it from CVS, as long as we pay for it we're well aware of what it is. Within theater, however, we do not have that familiarity at all. It's in paper records maybe. It might be in electronic records, but probably we won't have that information.

Another point is to try to make sure that we've got it honed right, is this is specifically looking for guidance relative to mental health related conditions presumably, because another overlay -- and that's primarily in the media -- is, obviously, the explosive use of pain medications as opposed to the civilian community.

A CDC study just showed over the last fifteen years ten times the increase in the use of pain medications, and we are certainly seeing

within the military a commensurate increase in that use. And then our concerns about abuse of that.

But that is a separate, presumably, area that we don't want to -- there's clearly -- this has been diagrammed. There's clearly an overlap, but I would think we would want the questions you're asking. I'm just asking this to clarify, to make sure we don't want to get into that in terms of the issues, and it looked like some questions, that they were staying away from that particular part of the whole idea of prescription medications.

SPEAKER: I know. I guess I am worried if we don't have any data in the theater, but local. It looks like (inaudible).

DR. POLAND: I think the point is almost absent, that information. We can provide the information that could begin to form a guidance document for the use of these medications in the theater, whether fifteen percent or twenty-two percent are using them is, for the purposes of the

questions we're asked here, irrelevant.

RADM SMITH: One other point is we do have guidance presently for the use of psychotropics in theater. So, this is a much more extensive look at it and trying to get more, uh -- you know, it's presently a Level 3 evidence that guided that guidance.

DR. POLAND: Dr. O'Leary.

DR. O'LEARY: Yeah. I mean, the current preference level, that is really not the issue. The question is, what are the pharmacologic physiological effects on people who are in the theater. That seems to me to be the creation of something like best practices or medical practice guidelines, which may be a stretch for this group, but I don't know who else is going to do it because it is about the theater and the post-theater activities.

DR. POLAND: Mr. Fogelman.

DR. FOGELMAN: Well, yes, but there is also going to be a question about control. We will have guidelines and recommendations, because

one of the things that goes on in the theater, many, many people will -- people trade medicines all the time, and that just because they're prescribed in a certain way or dispensed in a certain way doesn't mean they're used in a certain way. That's what happens in the Continental United States, as well.

DR. POLAND: Dr. Walker.

DR. WALKER: What is the right use, if any, of hearing (inaudible) for therapeutic and drug use (inaudible)

DR. POLAND: Which environment are you talking about?

DR. WALKER: What percentage of people covered (inaudible).

RADM SMITH: We just kind of looked at this and the, uh, it's -- the guidelines we have, a hundred percent coverage over the course of a year, and all the Services do that. The compliance of that and all is what we're now looking at to see, and it's clearly some questions about how well that is being done. There's just

questioning some of these things that are comparison-based, et cetera.

But the numbers coming out of theater proportionately are a little bit less than the numbers from the garrison, but we felt that they're pretty reasonable considering the work environment.

DR. WALKER: So, you have a lot of data.

RADM SMITH: We have data of what we're watching -- I may have misunderstood your question, but I'm talking about drug urinalysis, and we have very good data as to what we're catching on that those.

Now, there's another issue that we don't test for full spectrum of drugs for. In other words, there's a lot of discussion about expanding that. For example, Hydrocodone is not part of the routine tests, Oxycodone is.

So, we have some, a fair amount of data that will help with your discussions.

DR. POLAND: General Myers.

GENERAL (ret) MYERS: You have talked about

the questions around the PTSD. What about traumatic brain injury?

Lt Col ROBINSON: Well, certainly, that's a related set of problems just because we know people with traumatic brain injury that have PSTD, as well. What we don't know if one happens first and the other one follows.

But, certainly, what we would hope is that when people have a traumatic brain injury that our providers then would use a regular evaluation, they make the right decision, types of medication that can be prescribed in the presence of that type of injury.

Does that answer your question?

DR. POLAND: I think so, for now. Okay, Tom. One last question or comment and we'll leave you alone.

DR. MASON: Just a quick comment. Is it possible that within those sources, there's not a way in which it would assist the concern about the Guard and Reserves (inaudible). For example, try to gather some information, because I don't know

whether --

DR. POLAND: Those are interesting questions, but not relevant to the questions that we were asked.

We're going to move on. We've got some jerry-rigging of the schedule here.

The next presentation will be delivered by Dr. Wiener-Levy. She has been at the United States Military Academy at West Point since 2004 and has served as Clinical Director since 2006. She previously held appointments at South Beach Psychiatric Center, Staten Island Hospital, Westchester Jewish Community Services and Westchester Medical Center/New York Medical College, where she also had a faculty appointment.

Accompanying her will be Cadet Morghan McAleney. Cadet McAleney is an honors-psychology major who served as a Cadet-in-Charge of the Cadet Counseling Unit during Basic Training in 2010. Currently, she serves as Company Commander for H-3 and is interested in pursuing a career in counseling. She has received recognition for

highest average in courses taken in Civil Engineering, Information Technology, and Psychology Research and Methods.

Both Dr. Levy and Cadet McAleney will provide an overview of the Center for Personal Development and the Cadet Counseling Unit. Established in 1967, the CPD provides counseling for cadets on various topics, including personal development, interpersonal development, decision making, trauma-related stress, and crisis situations. The Center also conducts outreach programs, victim advocacy, suicide prevention, and referrals for psychiatric consultations, as well as consultative and training services for cadets and faculty.

Her slides will be found under TAB 9.

DR. WIENER-LEVY: Thank you. I'm real happy to be here today at CPD, which is the Cadet Counseling Center. We really welcome the opportunity to talk to people about who we are and what we do.

I can tell you that the tactical

officers swear to me that the Counseling Center was not around when they attended West Point, and since tactical officers pretty much graduated in the late '90's, uh, and thereafter I think CPD was around. So, hopefully, we've come along way.

The CPD mission. The primary mission of CPD is to provide counseling services for cadets. We see cadets. There are other organizations that provide services for active duty folks and their families, but we see cadets only. We see cadets for -- some cadets that we see, we see throughout their tenure at West Point. We drop in a couple of times a year every year, and we're happy to do that.

Our secondary mission is to provide consultation. We get calls lots of times from staff, faculty, tactical officers concerned about somebody not eating, somebody whose behavior seems to have changed, somebody whose appearance seems to have changed. They're asking us what to do, and what we try to do is get the tactical officers, especially, to have the cadets come over

voluntarily, because those are the kinds of referrals that really work out a lot better where the people come to us voluntarily other than being referred by their commander.

Last year we took on a project of trying to meet with each of the members of the Class of 2013. It was our hope that by providing these routine meetings, it would help decrease the stigma around our organization, since pretty much everybody would have walked through our doors. We did see about half the class. Again, hopefully, at least that half that we saw, that was through one semester, we saw about five hundred cadets for outreach, and then we're hoping that the short interaction, which was totally not clinical, was enough to tell them something about who we are and if they run into some kind of snag along the way during their four years here they'll come back to us.

So, our priorities are, of course, cadets. We try to reinforce the notion that we are a Force multiplier. We're not looking to send

anybody home. We're not looking to get anybody separated. We're not looking to get anybody a leave of absence. We're looking to help people struggling through a crisis, a personal crisis that may occur and help keep them here.

We know that this is a stressful place, and it's not a surprise that from time to time we have young men and women, eighteen, nineteen, twenty, who have all sorts of other developmental issues that they're struggling with, so now that they have the West Point stressors, which are unique on top of that.

Finally, we respond to crisis situations that I'll talk about a little bit later. We are on call twenty-four hours a day, seven days a week. We are on call. We have a call person even when the cadets are on leave, and we reinforce the number. We tell them the number. We publish the number, so that even if they're nowhere near West Point they can call us and we'll be right there to the emergency room. And sometimes it's actually not about themselves, sometimes they're truly

calling about a friend.

This is our organization. Ten colonels and Director of CPD. I am the Clinical Director. I've been at West Point since the spring of 2004, and we have two other psychiatrists who are relatively new to the field.

So, we have been accredited by IACS since 1978. That is the organization that accredits counseling centers around the country. Any college, any college university, any self-respecting college university has a counseling center, because it's well recognized that there are developmental challenges that occur without the existence of psychopathology in the ages that we're talking about.

So, we're in many ways, you know, different than any college counseling center you'll find anywhere else in the country.

Standard Operating Procedures are in accordance with IACS, HIPAA standards, AMEDD standards and APA's Ethical Principles and Code of Conduct.

We are confidential, but we do have limitations to confidentiality. We're very up front with cadets about those limitations. The most significant one here is at West Point is if somebody is an imminent danger to themselves or someone else, we will not keep that secret, and they're pretty aware that we are going to be talking with someone, either hospitalizing them or just talking and letting their tactical officers know that they are struggling and that maybe somebody needs to just check in on the person over the weekend so that a weekend or a long weekend doesn't go by without somebody, you know, knowing what this person is up to.

Most of our referrals are self-referrals. Occasionally, we get what we call Command referrals, and we'll see somebody doing an evaluation, and usually that will -- that occurs when somebody is worried about someone, for the reasons I talked about earlier, and they just want to get a sense of where this person is at now.

We do not do fitness for duty

evaluations. As you can well imagine, if you have a counseling center that was doing fitness for duty, we would just about kill our business. So, we're very clear, we do Command referrals but never fitness for duty evaluations.

We get referrals from medical clinics. Just today we got a referral about a cadet. A doctor was concerned about some of the behaviors that have been going on that she's been reporting to the doctor, called us, and we were able to see the cadet immediately.

The instructors do not maintain a waiting list. Very often we get a call -- especially, if we get a call in the morning we get somebody in. We try to set aside what we call a walk-in time. If somebody calls at 7:30 in the morning and says I got somebody that really needs to be seen, we have an open hour where we can tell them to come in and do an evaluation.

It doesn't have to be a life or death situation all the time. Whenever possible, we'll accommodate somebody who experiences what they're

going through. We consider them to be a crisis.

There are a multitude of reasons people come in to see us. Probably the most reason people come to see us is, I would say, mood. They're experiencing increasing irritability, difficulty with anger management, depression. They're not sleeping or they're taking an awful lot of time to fall asleep. And you know very quickly sleep is really at a premium, and nobody here can afford to toss and turn for an hour or two hours until they fall asleep. Loss of appetite.

So, we do see quite a number of cadets who experience depression, interpersonal issues. You have young men and women here who are sort of wrenched at the age of eighteen out of their home environment in many cases, and this is all really very new to them and they really haven't had to share with other people before.

A lot of boyfriend and girlfriend difficulties, of course.

Anxiety. DCoE have some folks who see

active duty, so we do see some PTSD, not just for post-deployment, but PTSD related to other issues, as well. Certainly, a number of them come in here with a history of sexual assault prior to the Army. That would be included in that group.

We work with folks around eating issues. Sometimes it's about simple overeating or wanting to lead a healthier lifestyle, but often it's much more serious eating problems.

So, the good news is that the visits have actually doubled. We have the same number of staff members since I got here in the spring of 2004, and last year we saw about twice as many people as we saw in the academic year of 2003-2004.

The interesting is that the same (inaudible). So that October is peak month for us. February, early March is a peak month, as well. And, again, we saw an elevation in all months, but the patterns remain the same, which is sort of interesting.

Our continuing concern is, of course,

the stigma. You know, no matter how many times we brief cadets and we tell them that this is confidential, that they can't get booted the out of the Army, the first question they ask when they come in is, “is this confidential? What is this going to do to my career? My mother told me never to come here, never to talk to the psychologist because it would ruin my Army career.”

It's a problem, and it continues to be a problem. Again, the fact that we've doubled the number of visits I think reflects the fact that some of the stigma are falling by the wayside, but it's still something we hear a lot of. Cadets are very angry when their friends insist that they walk over and see us, and we do get quite a number of cadets who come to us because their friends, they are very concerned about them and their friend says either you go see them voluntarily or I'm going to tell your tactical officer and they'll force you to go. And, uh, that number has been increasing, as well. And cadets are frightened, and they don't want to keep secrets,

and that's a good thing.

Confidentiality remains always an issue. I think that sometimes it's the tactical officers and the Commanders feel that they should have information which, again, would be compromising.

One of the things we promised them all the time, and I say it very clearly to tactical officers, if I'm worried about a cadet and I'm not going to sleep tonight, I'm going to share that with you because I don't want to -- and I'll never send you back somebody that I think is an imminent danger to themselves or somebody else.

Some of our other activities. As I said, we tried to do as much outreach as possible. We had gotten involved with teaching. We have taught in the basic psychology course, uh, BS&L 100, which every plebe takes, and they usually invite us in. I think it's around Lesson 37 or 38, which addresses psychopathology and treatment. There's another lecture on PTSD. So, very often we guest lecture in those courses. There's a BL387 course, which is the Foundations of

Counseling, and instructors have designed a course so that one way of satisfying course requirements is by coming to three, what we call non-clinical visits, so that people who are taking a counseling course get a taste of what counseling means, what it's like to sit across the table from somebody who asks you these very personal questions, how difficult it can be to, you know.

Sometimes we assume that people who don't talk to us are being intentionally resistant, and, really, it's about having difficulty sharing. It's not something that's intentional in other ways.

We have a newsletter that we do. We try to do it every other month. It's meant to be a really informal chatty newspaper on topics that interest them.

So, for example, one of the things that we do very often is around, uh -- in February we have Valentine's Day. We put out a newsletter that focuses on relationships. Or in May we might put out a newsletter that focuses on transitions,

because we have a whole class of folks that are going out into the Army, we have people who are going out into all sorts of different experiences, so we talk about transitions. And, again, it's our hope to talk about some of the growth that takes place and some of the things that they can work on in a non-pathology kind of way so they will feel free to talk.

We have served as advocates. So, it's another piece of what we do. We will accompany cadets to the investigating office. We will accompany cadets to the hospital, if they need to have a rare exam done. We meet with them and explain to them what the different options are for prescriptive or non-prescriptive.

They've heard it before, but what cadets will always say to me is so now I heard it, but it didn't have anything to do with me so I didn't really listen so I didn't know what I was supposed to do. And what we try to do is push them in the direction of counseling.

One of the things the lawyers cautioned

us against about the adherence to this program, the person who serves as the advocate should not always be the person who serves as a counselor. So, hopefully, we can be effective in getting people into counseling because that's certainly part of recovery from a trauma.

As I mentioned before, suicide prevention is, of course, important for us. We are on call. Increasingly, we have been called to the hospital during our on-duty hours to evaluate people who need psychiatric hospitalization.

Frequently, we find it necessary to make referrals for medication. We do have cadets who are on antidepressant medication for the most part, so we work very closely with one of the psychiatrists that we meet twice a month with. We talk about the people that he is medicating, talk about how they're doing, and we think that that's a really important piece of what we do.

Sometimes we get these young men and women who are on medication for maybe a year and they come in and look for medication and they’re

able to function very well. So, that's an important piece of that, that it's available to them now.

I will say that when I first got to West Point the person who hired me said, okay, they get one trial, an antidepressant medication for six months. And I kind of looked at them, six months? The conventional wisdom is you take nine months to a year and then get tapered off. So, that's kind of like sending a boy to do a man's jobs. What's the point of putting somebody on medication? And if you do the arithmetic, if you don't get the right medication the first time, which is entirely possible, you have to go to a second medication. A person can be on medication for about eight weeks until they're on the right dosage and you've already eaten away eight weeks out of the six months. Fortunately, that's changed, and I think that eventually it's a major stride in the emotional care of cadets.

The difference between a Command referral and a referral, a self-referral, which we

ask the cadet to sign a release so we can speak with their -- it changes the customer so that the cadet's record -- if it's a Command Directive Referral, the tack has access to the entire record, which is why from the cadet's point of view it's always better to do a self-referral with a release, and that usually happens, but about half a dozen to two dozen times a year we have cadets who are dead-set on coming to see us and they are Command Referred.

We meet bi-monthly for our multi-disciplinary team for the treatment of eating disorders, which is really, probably the preferred way of treating individuals with eating problems. We do get cadets who are purging, cadets who are binging and purging, cadets who are binging, cadets who are on the Army Weight Control Program. We work with a dietician and one of the doctors to help them get to where they need to be and to establish healthy eating patterns.

Of our cadets who are purging and binging they are using those as coping mechanisms,

and so what we try to do is help them in applying healthier ways in whatever they're trying to cope with so that they're not engaging in that kind of self-injurious behavior. You can get frequently sick if you purge. And, of course, anorexia is also very dangerous.

This is what cadets see. This kind of information is what will pop up through their Homepage, and so they can access us very easily. They can call, they can e-mail, they can walk over. We try to make ourselves as available as possible.

Again, we're very happy when we increase our business because it means -- it doesn't mean that people are necessarily having more problems, it's people are much more willing to talk to us about those issues and, hopefully, get stronger and feel stronger and feel more resilient as a result of talking to somebody.

Now, Cadet McAleney is going to speak to you about the Cadet Counseling Unit, and I'll take any questions after that.

CDT McALENEY: Good afternoon, ladies and gentlemen. My name is Cadet Morghan McAleney, and this past summer I fulfilled my leadership detail as a Regimental Counselor. This is also known as a Cadet-in-Charge of a counseling unit.

Today I am going to talk to you about the organization of our counseling unit and present an outline of the counseling training and highlight our responsibilities.

This past summer there was eight counselors, one per cadet per company. The counselors had -- oh, excuse me -- each counselor had a sister company. Alpha and Bravo were both under the supervision of Captain Ruscio, who is a graduate student, and Dr. Wiener-Levy. Charlie and Delta were under Captain Hsiao. Echo and F were under Captain Agnor. G and H were under Colonel Supplee. I'm in charge of all the counselors, and I reported to Counselor Hsiao, who reported to the current Colonel.

Our basic mission was the successful execution of the CBT mission by preventing

psychiatric casualties, providing counseling services to new cadets, providing crisis management 24/7, and serving as a mental health consultant to Tack Officers, Tack NCO's and the chain of command, because the counselors were imbedded to the companies themselves. They were able to be available to the cadets 24/7 who were having serious issues in the middle of the night. They knew where their counselor was and was able to go to the counselor in the middle of the night and receive the help they needed.

Before we actually began counseling we had to have training and then we became certified in counseling. We learned listening skills, crisis intervention and suicide prevention, intake assessment, diversity in counseling.

Our favorite was relaxation and breathing techniques. A lot of times cadets don't know how to take a step back and breathe, so we use this ourselves. We use it ourselves when helping new cadets and we also are using it in helping our chain of command and our classmates.

The typical day, we wake up at 0500 when the cadets attended morning PT. After PT we had breakfast, and then after breakfast at 0845 we would attend Supervision. The sister companies, we'd first go to Small Group Supervision with their supervisors, and at 0945 we would come together as a day group.

The point of Supervision was to go over the counseling of the previous night and make sure that we had addressed everything and looked back on the new cadets that we had seen. At sometimes we needed further guidance from our supervisors. They would suggest what to go back and talk at that time with the new cadets about, and then in Big Group we were able to discuss cases that were a little bit different or we could discuss as a group and see what we would have done differently, and, hopefully, apply it to the next new cadet.

After Supervision it was then that the counselors had to return to their companies. In some cases, a lot of cases actually, the counselors had to go out into the field. So, we

were issued a Humvee, which I had control of, and after Supervision I would take the Humvee and drive the counselor back out into the field to look for land navigation, repelling, and various training.

At the bottom it says, "On call for psychological emergencies." Our counselors were allowed to take two passes, one per day. When the counselor was on pass another was to cover, so the new cadets are never without a counselor. If in some cases the new cadets did not want to see their sister co-counselor, I was also available to cover them.

We fell under the same licenses as our supervisor, and because of this we follow the same ethical code. Before every counseling session we discuss confidentiality with the new cadet and they were asked to sign an Informed Consent, as well as the Privacy Act Statement. We maintain confidentiality between a new cadet and ourselves. We do encourage new cadets to fill out a Disclosure of Information, but we could not

promise chain of command members if they do this. We used tactical in talking to the chain of command members to let them know what the situation was and so they could stay involved.

There are limits to our confidentiality if a new cadet expresses to us that they were harming themselves or harming somebody else.

We encourage squad leaders to be the first line in counseling a new cadet. When the squad leader needed advice, expertise was available if the squad leader felt they couldn't deal with it or they would like somebody else to handle them, we would counsel the new cadet.

We also referred the new cadet (inaudible). We would never take a new cadet without letting the chain of command know where they were.

And we're a big part of the resignations. When a new cadet came to us and was discussing possibly resigning, we stayed neutral and helped them see both sides of the situation so they can make an informed decision. However, we

were not the resignation process. If a new cadet decided they definitely wanted to resign and told their counselor, we would send them to their squad leader, who would counsel them, and their Chair Command would counsel them, and we would meet them again for regular resignation counseling.

This past summer we conducted over four hundred official counseling sessions. An official counseling session usually lasted about an hour, and we saw almost two hundred new cadets. Our counseling sessions happens any time during the day because of the change of detail, whenever that was, had a side source available we would counsel, because we didn't want to take new cadets out of training or away from their squads.

We engaged in over one hundred curbside counseling sessions. A curbside counseling usually would happen when the counselors and cadets were out in the field. Because we didn't have the proper environment to sit down and have a full counseling session, we'd take about fifteen minutes, check in on the new cadet and see how

they were doing. My counselor attended EPR, means to see cadets with physical ailments, and my counselor neutralized two potentially new life-threatening physical ideations. They were quickly and efficiently brought to the ER where the licensed psychologist met the new cadet and they were transported to Four Wings in a timely manner (inaudible).

We help new cadets who are in need of psychiatric help get the help they need.

At the end of the summer we looked at all our cases and we decided if the case needed to be transferred to CPD or closed. If it needed to be transferred, CPD would take the new cadet's name and send them an e-mail. Transferred doesn't mean that they had to go to CPD, it just means that they would receive e-mails from CPD and invite them to come in.

Are there any questions?

DR. POLAND: Let me start with one. What kind of both positive and negative feedback have you gotten about the Cadet Counseling Unit?

CDT McALENEY: The new cadets very much enjoy the Counseling Unit. They like that they were there. Many new cadets, even if they didn't come to see us, appreciated the fact that they could turn around and see their counselor and get back in formation every morning or at meals.

We were also there for the entirety, whereas, most -- there's two details of these. We are there full time. So, the new cadets, for them it's very beneficial. I think for the chain of command it was a harder time because the chain of command, it had a little bit of confidentiality. They constantly wanted to know who was going to see you, why they're coming to see you. They wanted to know anybody who was possibly thinking about resigning. And that's information we couldn't give out, and we had to tactfully tell them the new cadet is safe, we cannot give you this information. I think that the chain of command members had the most push back, but for the new cadets that was very beneficial.

DR. WIENER-LEVY: One of the things we

hear over the course of the academic year when cadets come in to see us, they said I never would have seen it if not for my counselor. They felt like everybody was screaming at them, everybody was criticizing them, everybody was telling them they were doing everything wrong, and then there was this person who was just sitting there listening.

The other feedback is we get calls from parents. We very often during CPD and even during the academic year we get calls from parents who are concerned about their eighteen-year-old. We very often funnel that information to the cadet counselor for that company, and we're very frank. I mean, we tell the parents we're going to let your son or daughter know you called us, but we'll make sure that somebody gets to speak with them, and the parents are assured by the fact there's somebody even better there in the company and there's somebody that they're speaking to, let's say if they're resigning, never mind any other kinds of issues.

DR. POLAND: It's an interesting idea to have the cadet peer counselors. I may be wrong, but I don't think the other academies have that. Do you know? Has there been any attempt to sort of structure lessons back and forth between the academies?

DR. WIENER-LEVY: I don't believe they have it during the summer. I believe it's the Navy that have peer counselors that operate in a different capacity during the academic year that we don't have them.

DR. POLAND: It might be an opportunity to, you know, develop some sort of forum where the four academies could meet and talk.

DR. WIENER-LEVY: I actually attended in June a meeting on sexual assault with three academies. And, absolutely, it was incredibly beneficial to hear about what people are doing, what the three academies were doing. We did not get anybody from the Coast Guard, although, interestingly, one of our former psychologists is now working as a civilian at the Coast Guard. So,

hopefully, they can be brought into the loop.

DR. POLAND: Any further comments?

DR. SHAMOO: As a psychologist with experience with the cadet, do you see the treatment during the four years appropriate and helpful for the growth and development in the performance of their job afterwards, as a psychologist, and have they sought your views on how one can improve their treatment in order to reduce the unnecessary stress, if there is any unnecessary stress?

DR. WIENER-LEVY: I think for some cadets coming to see us is very beneficial and gets them through some very rough patches. I think they also, of course, at the time they're going from eighteen to twenty-two, they're transitioning from late adolescence, and you'll see them blossom into young adults. And, again, there are the normal challenges that you see a tremendous amount of growth, and, hopefully, they already -- or those that are struggling, especially are ready to take that leap when they

graduate.

DR. SHAMOO: My question is about the way the training and their treatment by the school masters.

DR. WIENER-LEVY: Oh.

DR. SHAMOO: Is that the most appropriate way for the eventual performance as to whom, officers with a big mission and whether they have ever attained information from you to contribute to a better way (inaudible).

DR. WIENER-LEVY: As a civilian I think it's hard for me to talk about what appropriate training is for Army officers. Sure, you know, I'm not -- probably the same way an Army officer is going to see them.

And I can give you an example. Somebody we were just talking about today. One of the problems is that when cadets come to basic training they have no phone, no iPod. If they want to go out for a run because they're feeling stressed, they can't do that because they're a hundred percent accountable. That's just three

examples to start.

Those are the coping mechanisms that you see nineteen and twenty-year-olds use today. I didn't have a cell phone at eighteen. I didn't have an iPod at eighteen, but that's what kids have today.

So, whether you tell somebody during CPD, for example, you can't have your iPhone, you can't go for a run, you can't have your iPod, that does make you more stressful.

DR. PARKINSON: First of all, I want to commend you because language is extremely important, as you know. Icons are very important for visual or cognitive.

So, when you call your entity the Center for Personal Development and then back it up with programs and activities and say it's not just putting lipstick on a traditional package, but this is the struggle employers are having. They take this thing, it was basically stigmatizing the drug abusing, non-performer and try to get into such areas as human personal development,

resiliency training, because they don't put the resources into making the old model or the new model.

So, I think you're to be commended for the name, for the approach to give people awareness from the first days that they're here through the peer mentor counselor who is (inaudible). I'm senior to you and I'm going to be looking at first to the peers a little bit higher, because there's a lot higher ones. That's wonderful.

The question I've got for you though, which is the next level that I know we, the employer, are looking at, is if we take the label Center for Personal Development seriously and we say that wellness is not fitness and absence of disease is not performance, are there actual programs that you could think to develop that really say become your best self at the Center for Personal Development? You don't have to have an issue for development to be here. Would you like to bounce back quicker from anything in your life?

Would you like to perform emotionally, spiritually, mentally? Just the way the Superintendent said this morning, everybody is in a sport. Everything is possible. I'd like your thinking along those lines. And if you ever did do that, you would be a national gem.

Employers, I can name five or three -- I can name five of that treatment, know it, are trying to define for executive rank and file employees what is resilience training, look like that's not stigmatizing (inaudible), and you talked a lot about it here.

Any thoughts on that? And again, please get your story out because you've got good things to say.

DR. WIENER-LEVY: A couple years ago we issued a program called "My Style of Eating For Active People." It was really for people who want to eat healthier, wanted to be more fit. There didn't have to be any psychopathology.

Again, the demand petered out. But in my experience, some six years that I've been here,

is that there are just certain things that evidence, depending on who's here, whether it's the things people are struggling with. When I first got here, I saw a lot more eating issues than I've seen in the last couple of years. But we've seen more depression.

So, I think there's an ebb and flow. If there's demand for the Relief Program, we would certainly be very happy to reinitiate it.

West Point initiated a Tobacco Cessation Program, not just tobacco cessation last year. We actually tried two years ago, but it didn't catch on because one of the components was Group, and one of the things is we were about cadets. Cadets don't like Groups, because Groups mean that somebody knows you're coming to see CPD.

So, we revamped the program which enabled people to come and get medications because, you know, you also have the counselor, and with that we will continue to do.

DR. POLAND: Thank you very much. Appreciate what you do.

DR. LEDNAR: Our next speaker is Dr. Gregory Poland, Co-Vice President of the Board and Chair of the Infectious Disease Control Subcommittee, as well as its Vaccine Safety and Effectiveness Working Group.

On behalf of the Infectious Disease Control Subcommittee, Dr. Poland will be presenting two recommendations memoranda for vote. So, let's listen attentively because there are items coming for vote by the Core Board on the topics of the DoD smallpox and anthrax immunization policies and the inclusion of measles/mump/rubella vaccine under the Navy Accessions Screening and Immunization Program.

Those are the two areas we're voting on. Dr. Poland's materials can be found in the binder under TAB 6.

DR. POLAND: A lot of background to what I'm going to present. Most of all you heard at the meeting at the NDU, there's some of it the whole Board didn't hear because it was more an Infectious Disease Subcommittee function, but

you'll go over that.

Members of our Subcommittee are as listed there. Some of them couldn't be with us today, but I invite those members that are here at the conclusion of my presentation to add anything they think that I've left out or misstated.

We had an early June meeting in terms of recent activities of the IDC Subcommittee. Colonel Hachey reviewed for us how DoD did, sort of lessons learned with the H1N1 pandemic. We received a question about MMR immunization in the Navy Accessions Screening and Immunization Program (ASIP) and then talked about with Colonel Krukar in the MILVAX the DoD Immunization Programs for Smallpox and Anthrax.

We also had a 14 July meeting. We looked at the, or talked about the Blood Look Back Program. There will be more coming at a later time in regards to that.

Looked at results of some vaccine safety and effectiveness studies for both the ACAM2000 smallpox vaccine and AVA. We'll talk about the

MMR vaccine question in a minute, in addition to the Special Immunization Program headquartered at USAMRIID.

In terms of the 2009 H1N1 summary, our feeling as a Committee was that the DoD outbreak response elements, including surveillance, detection, communication, and prevention efforts were really handled in an exemplary manner.

A lot of thought, a lot of effort, and a lot of resources went into this, but it was just handled, I think, beautifully all the way up and down the line there.

This was evidenced I think by DoD's involvement and state allocation programs, vaccine distribution and immunization rates, safety monitoring activities.

Ninety percent of the Active Duty Force was vaccinated for H1N1. Ninety percent of Active Duty Force vaccinated against seasonal influenza. And, also we talked about the success of some of the DoD communication initiatives, particularly the DoD Pandemic Influenza Watchboard.

A number of us got regular, sometimes daily updates by e-mail on this and the MILVAX Flash Info System.

So, really, you know, I was thinking about this, and I hope that there's some way to preserve this institutional memory the next time a pandemic comes or the next time we have to gear up for something quite as big as this was.

Some of the lessons learned were that risk communication is a top priority. More accurate definition of Service Member is necessary for prioritization. Greater emphasis should be placed on preventive medicine and preparedness exercises. Not that those weren't done, but especially as you get away out from the larger commands it was harder to assess those, and the need which we talked about before for a universal, standardized immunization tracking system that truly cuts across all the Services.

In terms of smallpox and anthrax immunizations policies, we did a pretty deep dive into this, had a couple of meetings on it, had

outside experts come in and brief us, et cetera.

We looked at issues pertaining to adverse events related to those vaccines, the capacity for early detection should an infection occur, the current prophylaxis policies, the availability of alternative countermeasures other than vaccines, threat evaluation, and the continued need for the policies that we currently have.

So, let me get right to our proposed recommendation. I should say that we had the opportunity to talk to people from Admiral Smith's office and others around DoD as well as some of the intelligence communities. Our recommendation is to suspend the current DoD smallpox routine immunization program absent a new need or credible threat.

There's a substantial burden associated with vaccination. This would avert unnecessary costs in administering unwarranted vaccines. That is to say, we would not prevent a single case of terrorist-induced smallpox, but we have side

effects which are inevitable with the use of the current vaccines.

Minimizes the need for multiple vaccines administered on a routine basis. As I say, it's hard to enumerate a benefit, at least a quantifiable measurable benefit because no cases have actually been prevented, and, yet, many AE's induced.

There are alternative treatments available. There's vaccinia immune globulin (VIG) available, and at least two antivirals, one licensed and one an investigational drug.

However, we also recognize that there may be some special circumstances that exist where smallpox vaccine would be appropriate and necessary and should continue, and we leave that to DoD to decide who that would be, but it might be, for example, certain Special Operations troops and others.

We recommended configuration of antiviral and vaccine stock piles to a "ready level."

For those of you that might not be aware of this, should there be a case of smallpox, as long as we got VIG or smallpox vaccine to them within three days, we can prevent the mortality associated with smallpox and reduce the morbidity. So, it would be important if we suspend this routine immunization to have these countermeasures available so that within that seventy-two hour time frame we can move these materials, and we've been assured that that's possible.

We also thought it would be appropriate to extend the safety surveillance window beyond the current FDA requirement of five years for follow-up of ACAM2000 recipients who had specific vaccine-related adverse events. The particular one that we focused on is there is a small incidence of myocarditis associated with this vaccine.

By the way, actually defined by and published by DoD in JAMA when this program was spun back up in 2001 or 2002, and there is concern about the rare individual who doesn't

spontaneously recover from this side effect and who could go on to experience more chronic cardiac symptoms.

Let me ask first if there are any questions about smallpox before we go onto anthrax?

DR. FOGELMAN: Two questions. So, what is the longevity of this vaccine, the shelf life on it is one. And the second, what is the incidence of myocarditis or the known cases?

DR. POLAND: Yeah. It's a little hard to answer that question because we have moved pretty rapidly from Dryvax to ACAM to advanced ACAM vaccines. So, you know, the study sort of start -- they're rare enough that they're hard to find. I can tell you there have been some two hundred and fifty cases identified. That doesn't mean they were symptomatic, but identified out of several million doses administered. So, it's an uncommon event.

The shelf life. Up until mid 2000's we -- like DoD, like everybody else is using Dryvax,

which was last manufactured in late '76, the late '70's, and I think maybe up until early '80's, but the shelf life is very long because it's a dry live vaccine and reconstituted at the time needed.

Okay. Let me go onto anthrax then. We felt that the current anthrax immunization policy at the current time should not be changed. There was evidence that anthrax is a continuing and credible threat. The agent is not difficult to acquire or engineer for biowarfare capability depending on scale. CDC has not reported any linkage of AVA to increased risk of life-threatening or permanently disabling adverse events in the short- or long-term.

I mention this because they just, CDC just finished -- our item happened to be one of the sites, the largest study of the safety immunogenicity of ADA that has been done, so people were followed over an almost five-year time period. AVA is known to be effective against anthrax. We did recommend continuing the current safety monitoring and reporting of AVA associated

adverse events through MILVAX, et cetera.

Any questions about anthrax? Okay. We also looked at a review of MMR vaccine inclusion under the Navy ASIP Immunization Program. The particular issue revolved around mumps.

For those of you that may not be aware, there are large scale outbreaks of mumps that are occurring actually in New York state and a few other places. This seems to have occurred despite receipt of two doses of MMR and in about half or more of the cases.

So, we looked at the incidence of mumps among Active Duty members and looked back to 2000. We had serological data indicating levels of immunity to measles and rubella among Armed Forces recruits. The percent of Navy accessions that were getting MMR vaccines.

So, they are tested now, and if they are not immunized, which saves a lot of vaccine and a lot of money because the serology is relatively inexpensive to do compared to the vaccine.

We looked at projected cost-savings if

only MMR screening were to be conducted and the cost per dose and then side effects and adverse effects.

We looked at three potential courses of action. One was to continue the current Navy Program. The second was to drop MMR vaccine from that program and resume mandatory universal MMR vaccination at the time of accession, and the third was to continue the Navy ASIP at recruit training centers with monitoring of mumps case incidence within the Services and broader communities within which they're imbedded, and then reinstitute mandatory universal MMR vaccination for recruits if mumps outbreaks occur either in the recruit training sites or mumps incidence increases.

So, our recommendation was that the Navy should continue their current practice followed under their current program, which is administering MMR vaccine to eligible recruits if they are seriously negative on serologic screening.

Vaccine recipients are recruits who are non-immune to measles and rubella; present immunization rates, that is those who are not immune, is about 15 to 20 percent of an estimated 40,000 Navy accessions per year.

Unwarranted vaccinations would be averted.

There would be significant resource and cost-savings to doing that. The cost of screening is, by the way, about $5. The cost of the vaccine is as much as $60. So, you know, if you can go from 100 percent immunization rates to 15 or 20 percent immunization rates and not the 80 percent that don't need it and aren't going to benefit from it, it's a very large cost savings.

Nonetheless, we felt close surveillance should continue to be maintained, given that we don't really understand why mumps outbreaks are occurring in this age group in civilian settings, and that any increase in mumps case incidence or changes in the epidemiology should be reported and might cause us to review these recommendations.

Any questions about that?

DR. OXMAN: The total cost, including blood drawing, et cetera, the serology, even though it seems low and the cost of the vaccination to me at least seems high. I wonder if those are the original figures.

DR. POLAND: We confirmed the cost of the vaccine, so those are accurate numbers and the -- you're right in that the cost to do the mumps assay is five bucks. There are costs associated with gathering the blood to do that assay, but all those costs are incurred anyway because blood is drawn for a variety of other reasons. So, we, in essence, don't count those costs for this particular question.

DR. LUDWIG: Are the recipients of the vaccine after screening, are those retested again to look for perpetual nonresponders?

DR. POLAND: They are not.

DR. LUDWIG: They're not?

DR. POLAND: If you have a question about that we can talk. My laboratory does work

on that very question.

The SIP was established to confer added protection to laboratory personnel who are engaged in research on countermeasures for select agents.

Those compose somewhat over 600 volunteers. About 60 percent are from USAMRIID working directly there. About 40 percent from other DoD, federal, and non-government entities that are doing this work.

Licensed vaccines, that is, FDA-approved are required under SIP but investigational new drug (IND) vaccines are used for both research and immunizing laboratory personnel.

Many of these are legacy vaccines developed by the Salk Institute from the '60's up until about the '90's. So, we have a similar issue with regards to shelf life and the ongoing provision of some of these vaccines.

Major issues that affect the sustainability of the SIP include policy, availability, and ethical use considerations.

We were asked in the terms of reference

are as follows:

To determine whether the SIP still serves an important role in the context of USAMRIID's overall Biosafety and Occupational Health Program, particularly given the more modern advent of personal protective equipment (PPE) and other engineering controls that weren't present in the '60's and '70's when these programs were first started.

We were asked to define the appropriate role of vaccination in protecting against laboratory-acquired infections.

Determination regarding who should be vaccinated, if vaccinations still played an important role.

Determine the ethical issues associated with the SIP, if any, and how to address them.

Assess the value of the legacy IND vaccines for DoD and determine whether they should be maintained, particularly in regard to assuring future availability of any legacy vaccine that was found to be valuable for preventing

laboratory-acquired exposures and/or Force health protection.

So, we looked at a list of the licensed IND vaccines that are administered.

We looked at the benefits and risks of those IND vaccines, and to whom they're administered.

Looked at program funding source and costs for sustainment.

Looked at the appropriateness of and compliance with existing biosafety precautions and practices, particularly for personnel who refuse (required) licensed vaccines or (voluntary) IND vaccines.

And then, of course, the fact that there are Personal Protective Equipment (PPE) and availability of alternative safety measures, such as different engineering control measures.

We also looked at vaccine immunological potency evaluations, manufacture and lot release dates and remaining supply, and sort of tried to project that at the current rate of use vaccine

storage, vial labeling and integrity of vials and vial stoppers, which is an issue which some of these were filled thirty or so years ago.

Safety and immunogenicity data and data on vaccine local and systemic side effects. How often are there actual laboratory accidents or exposures that occur?

Continuation and need of the SIP in the context of the USAMRIID's overall Biosafety and Occupational Safety Health Program.

During this course of events, and as we were evaluating this one of the things that became apparent to us is that the National Academy of Science had initiated a study of these very issues pertaining to the USAMRIID and SIP program, which is the, I guess, it was initiated in March of 2010.

You can see -- I won't read all of that, but you can see what they were expecting to do that. That report is expected within nine to twelve months of that March start date.

And, so, our recommendation was that we

delay comment at the current time on the SIP program until we see the NAS report and then we will comment on and/or address any residual highly focused questions relating to the specific areas where we have some expertise.

So, comments or questions? Mike?

DR. PARKINSON: That last discussion of the National Academy of Science, my knowledge is they don't just say let's talk, take a look at USAMRIID.

Who requested the study or the funding through the NAS that they would go looking at this? What's the background of the NAS study that you were able to ascertain?

DR. POLAND: Let me see if I can remember that. Does anybody know off the top of their head?

DR. LUDWIG: I think it was DoD initiated -- no, actually it's NAS initiated out of HAS, and there's some history to this.

In fact, after 2001 there was a working group. The White House called it a working group,

called a medical, uh, working group -- I can't remember exactly what it was. But one component of that working group was the Special Immunization Program. That particular organization came up with a series of recommendations at that time that involved the expansion of the SIP Program to be more widely distributed to make access to the other centers that were being stood up that were doing biodefense research as a result of expanded expenditures in the civilian sector.

The problem was that NAS said they didn't want to spend the money to make that happen, and so nothing actually became of that.

So, this is actually a follow-up to that work that happened probably in 2002-2003 time frame to reassess whether or not such expansion was important.

And I just wanted to follow on. I think the differences between the NAS study and the study that USAMRIID had requested are pretty significantly different. The concerns of the NAS study really revolve not only around whether or

not we need to really maintain a program, but whether or not we should expand it and how that should be done.

DR. POLAND: Our intent is to use that work to then, as a basis to inform our own, so that's why I say it's a delayed comment.

DR. LUDWIG: Okay. I think and if the best way to move, that's up to us. I think one of the things we had hoped for was an independent assessment based on a wide variety of information that the National Academy Study was not looking at, and I'm a little concerned about the outputs of the National Academy Study prejudicing in some way the response for the Defense Health Board.

So, I mean, the best way you decide to go, that's the way you decide to go.

DR. POLAND: I'm not sure why that concern, but I don't think that should be a big issue.

DR. LUDWIG: Okay.

DR. PARKINSON: It's very helpful, just like a line that there's a rationale behind the

request. Typically, it's generated by concerns. I'm sure that your Subcommittee will take those all into account. It's interesting. Thank you.

DR. POLAND: Mike Oxman.

DR. OXMAN: Just for people who were ruminating in the interval between our considerations and when that study comes out, I'd just like to make two comments.

One, is the physical containment issues, that the usual equipment is vastly overrated and can often give a false sense of security. Eighty-eight feet is three miles an hour and the biosafety cabinets are tested under totally unrealistic conditions with no destruction of the air flow, and even then it's a reduction of about a thousand in spore counts, which makes, you know, some difference, but not much.

But more importantly is the next line, the "Appropriateness of and compliance with existing biosafety precautions and practices, particularly for personnel who refuse (required) licensed vaccines or (voluntary)".

I think anyone who refuses a licensed vaccine should simply not be allowed to work with that agent. And again, I think we need to think about that in the interval between now and when the report comes out.

DR. POLAND: Let me take you through it so we can vote on each of those.

So, here is your Subcommittee's recommendation on the smallpox immunization policy.

We have a motion to --

DR. SHAMOO: You don't need a first and second. It's a Committee report.

DR. POLAND: All those in favor of the Committee's smallpox immunization policy?

Thank you. Any opposed? Any abstentions? All right. It is uniformly accepted. The second one is that we recommend the current anthrax immunization policy should not be changed and that we continue safety monitoring and reporting of any associated vaccine.

DR. LEDNAR: All those in favor of the

Subcommittee's recommendation, raise your hand.

Thank you. Any opposed? Any abstentions? Thank you. It's accepted.

DR. POLAND: The third one was in regards to MMR vaccine and the Navy Accession Program.

We recommended that they continue their current practice following serologic screening and call for close surveillance given what's happened in the civilian side.

DR. LEDNAR: Those in favor of the Subcommittee's recommendation?

Thank you. Any opposed? Any abstentions? It is accepted.

DR. POLAND: And then the last one was not so much a vote, but our recommendation that the Infectious Disease Subcommittee sort of pause pending the NAS report and then we'll learn from that.

DR. LEDNAR: So, the Subcommittee is not bringing forward a request to the Board to vote. I see this as an informed --

DR. POLAND: To let you know what we're doing.

DR. LEDNAR: Okay. Any other comments for the Subcommittee?

I think for all of us on the Board, Greg, thanks to you and the Subcommittee. It's been a very busy time in the era of infectious disease.

DR. POLAND: We're very glad to have passed H1N1.

Okay. The next speaker is Dr. Craig Postlewaite. Dr. Postlewaite is the Director for Force Readiness and Health Assurance in the Office of the Deputy Assistant Secretary of Defense for Force Health Protection and Readiness.

In his role, he writes deployment health policies, develops programs, provides oversight, and advocates for medical research supporting deployed occupational and environmental health. Specific programs under his purview include Individual Medical Readiness, Human Performance Optimization, Global Medical Surveillance, and Deployment

Occupational and Environmental Health Surveillance, which all focus on sustaining the health and improving the performance of Service members and DoD civilians.

Dr. Postlewaite is a retired Air Force colonel and served as a professor in the Department of Biology at USAFA.

He's presenting two potential questions for consideration and examination by the Board on the topics of theater air monitoring plan and the Armed Forces Health Surveillance Center Burn Pit Assessment Report.

His presentation slides may be found at TAB 7, I believe.

DR. POSTLEWAITE: Thank you very much. Members of the Board, it's my pleasure to be here this afternoon.

My slides that I'm going to show you this afternoon are slightly different from what you will find in your notebooks. I apologize for the late substitution, but Ms. Bader will get those out to you.

I'd like to first thank the DHB, in particular the Occupational Environmental Subcommittee, Dr. Halperin and his team for the work they've done for us in the past relating to the burn pit risk assessment and currently a review. We certainly appreciate your interest and your offer to remain engaged. That's why I'm back here to speak with you.

We'll be presenting questions involving two different documents for your consideration. One is the recent epidemiologic assessment report on burn pits, smoke exposure in theater, and we'll also be presenting a draft document for additional air sampling in theater to help answer some concerns.

As some of you well know we've had a lot of media attention, a lot of Congressional attention, a lot of attention by veterans related to this issue. It's very much a Force sustainment issue.

The DoD acknowledges that smoke from burn pits causes acute effects. There's no

question there at all. They tend to be mild. They tend not to interfere with mission accomplishment, but they do present a quality of life issue and they aren't pleasant, to say the least.

In the engineering community within the Department of Defense in particular, the U.S. Central Command, it is doing much to communicate in the theater. Essentially, all burn pits in Iraq have been closed by December 31st. A lot of the incinerators have been installed and are operational there now, and there's also an incinerator plan for Afghanistan in place.

In addition, there have been policies implemented to control what is burned in those burn pits to a much greater extent than occurred earlier in the conflict. A lot of the hazardous material we now know are no longer included in what might have been burnt back in 2003. 2004 is certainly in question, but there are no records kept on waste strains at that point in time.

We've tried to fill very diligently a

number of gaps related to occupational and environmental health surveillance since the '91 Gulf War. We feel like we've made great strides.

For example, over 17,000 air, water, and soil samples have been taken in the theater of operations. As part of our Risk Management Program to identify hazardous exposures and to mitigate them we have, in addition, implemented a system of a one state location tracking for people that were deployed during the '91 Gulf War. As some of you recall, we don't know who was located where.

Now we have a database. It's not a hundred percent, but we can certainly create cohorts and study them, which we did not have the capability to do after the '91 Gulf War.

We also had health assessments where we can evaluate self-reported exposures as well as health outcome data.

We have the Millennium Cohort Study, which was identified earlier today, that has provided a very valuable component for us in terms of looking at the longitudinal health of our

personnel.

The problem is that even though we've done all of these things, we still can't answer all of the questions, and a lot of it boils down to the fact that we don't have good individual exposure assessment data. Very, very difficult to get in the deployed setting, as you can well imagine, with the logistics and constraints going under extreme temperatures, dusty conditions, power related issues, not to mention just the difficulty getting additional preventive medicine people.

We're going to ask you some very pointed questions on whether it would be valued for us to continue to sample the air related to the burn pit locations.

After that introduction I'm going to briefly cover the background and timeline and then I'll talk about the two documents and we'll go into the individual questions.

These are the two documents that are referred to, the Armed Forces Health Surveillance

Report was issued May 25th of 2010. It's a series of epidemiologic studies.

Dr. Smith from the NHRC in San Diego contributed heavily to this. And, again, he collaborated and in a very fine fashion with the Armed Forces Health Surveillance Center.

I'm going to go through this pretty rapidly. It's more of a benefit for the Occupational Enviromental Health Subcommittee as they put all these pieces together in terms of the timelines and the issues surrounding what we've done in theater to date.

Most of our efforts in theater to date have involved one burn pit, Joint Base Balad (JBB). It was the largest burn pit in Iraq. It was located just north of Baghdad. I went over and looked at it firsthand myself two summers ago. At that point in time it was winding down, but it was easy to get people at that location because of the size of the base because there were no Force protection concerns. Specifically, power issues were not a problem.

Very much a problem in forward operating bases throughout the theater, which was mentioned earlier today, military unique issues and contingencies really have to be taken into account to a very great degree when making recommendations on what might be feasible or not.

But the sampling first began at Joint Base Balad back in 2005-2006. An environmental health site assessment was accomplished and the burn pit was identified as a problem back then.

There was air samples taken in the January to April time period which formed the basis for the screening Health Risk Assessment (HRA) that you all previously reviewed, and there you can see that more air samples were taken which resulted in another report in the interim. Incinerators were being put into place.

In June of 2008 the Defense Health Board provided a report on the results of their review of the Screening Risk Assessments, which basically did not identify long-term health risks, and as of right now the burn pit in Balad has been closed.

There's actually four incinerators in place.

There's been some addendums issued related to the Health Risk Assessment. The first addendum basically responds back to the Health Board's recommendations. Those additional hundred seventy air samples that I mentioned a second ago formed another addendum, and we've continued to take more samples at that location even though at this point in time the burn pit is closed. There are now four incinerators operating and provides us a perspective on how the air may have changed from the time where we had a full blown burn pit in operation to the time that we no longer do.

In 2009 the GAO began an investigation of burn pit smoke exposures. And, also, since that time we've had numerous media reports involving veterans that allege health effects as a result of burn pits. It's gotten a lot of Congressional interest, as you can imagine.

Let me do the next one here. Some Service members have actually been diagnosed with various kind of respiratory conditions that

providers feel are due to an inhalational cause while in theater. Unable to link them specifically with any burn pit.

Now, we acknowledge and have acknowledged since about April 2009 that it's medically plausible that some individuals have been adversely affected by the smoke, and that's been our message for quite sometime, but this continues to fester, continues to draw attention.

There's now an additional investigation by the House Oversight and Governmental Review Committee that's looking at this issue. And, also, as you may well know the Institute of Medicine under contract with the VA was also engaged in a study of burn pit smoke exposure.

So, that's a little bit of background in terms of all the pieces that are going on, and we have this report that was issued, and also, the Burn Pit Air Surveillance Plan that I think will be very useful for you to comment on.

First, let's talk a little bit about the Air Surveillance Plan. I know that an earlier

draft was sent to the Subcommittee for their review. We've got some initial comments back. Those have been incorporated into the plan.

In addition, the Surveillance Plan takes into account recommendations that were made by the Committee on Toxicology. We are interacting with the COT. In fact, I'm due to go down and provide a presentation to them on environmental health challenges. So, we are engaged with the COT and there are opportunities to do more of that, Dr. Halperin, as you pointed out.

But what we've essentially got here is a tailorable site-specific plan with a phased approach to acquire additional data for burn pit emissions.

The reason that this particular surveillance plan was drafted was because of concerns that were raised that air sampling we did at Joint Base Balad may not be representative for other locations in theater. And in all aspects it probably isn't, but it was the largest burn pit. We felt like, one, we get people in there without

too much trouble. Central Command allowed those people to go in there, so that's where we focused.

The sampling done at Joint Base Balad was basically for all hazards. We took air samples. If there happened to be pollutants in the air either from vehicle emissions or whatever or from a local industry, those were included in those results.

So, if we go to different sites, those additional pollutants are likely to be different. The other thing to remember is, as I've said earlier on, because policies have now been put into place over the last two years on what can be burned in a burn pit and what can't, by going to additional locations it raises a question about whether that would be useful or not. But the Phase 1 would be to conduct the ambient monitoring at probably up to three additional sites, probably in Afghanistan, because all the Iraqi burn pits are going to be closed by the end of December as I mentioned, and it would include continuous, twenty-four hour composite air samples for all

known major emissions that are listed there.

And then the thought is, the way the plan has been drafted is after a review of that ambient monitoring, if it's determined looking at the ambient data that we feel like our personnel at that location are at an elevated health risk, then we could follow it with Phase 2, which would be an attempt to refine the health risk provisions.

As you well know, ambient monitoring data does not equal individual exposure. Lots of misclassification goes on in terms of levels of exposure. Based on that kind of data we know that our locations specific data for our troops is not one hundred percent. Some of these people come onto a base camp with maybe eight or twelve hours a day they're outside the wire, so they're not actually on the base camp. We know that personnel clerks are not as diligent as we'd like them to be in terms of recording time on site, as well. So, what we end up with, and we try to combine ambient exposures with individuals who are assigned to that camp, we know that there's going to be a

spectrum of exposure. Some will be more highly exposed, some probably will be virtually non-exposed.

When you lump those together it can mask an effect, and we think maybe that's why we are not finding anything based on a population approach with our epidemiologic assessment.

That's what I want to talk about now. I'll go ahead and introduce that and I'll talk about specific questions related to both of those documents.

For nearly all health outcomes measured the incidence for those health outcomes studies among personnel assigned to locations with documented burn pits and who had returned from deployment, was either lower than, or about the same as those who had never deployed.

And there were a number of conditions that were studied. Respiratory diseases, acute respiratory conditions, COPD, asthma, circulatory disease, signs, symptoms and ill-defined conditions for cardiovascular disease, signs,

symptoms and ill-defined conditions for respiratory, sleep apnea, chronic multi-symptom illness, rheumatoid arthritis, lupus and burn outcomes.

So, as we say, there are a very large number of health outcomes that were studied between the Armed Forces Health Surveillance Center's contribution to the report and the Research Center's contribution to the report. There were about 18,000 personnel studied in two locations where burn pits were located by the Armed Forces Health Surveillance Center and about 3,000 individuals that were assigned to burn pit locations by the Department of Health Research Center.

Similar findings occurred in comparison between those methods deployed near a burn pit and those methods deployed outside the area of a burn pit, with one exception. We found an adjusted odds ratio barely above 1.07 for signs, symptoms and ill-defined conditions for personnel located at Camp Arifjan in Kuwait, which is a location

without a burn pit. So, even when we looked at all of this we couldn't see anything at those specific locations.

For comparison populations we looked at personnel who were deployed to locations in theater without burn pits. We compared them to a company or of individuals who were deployed to Korea, no burn pits, but high particulate matter that blows over in the Gobi Desert, and we compared them to never deployed service members in CONUS. So, a very large group of controlled or controls, as I should say, that were used in these studies.

For health outcomes measured in theater, this would be for acute effects, they looked at that, as well. Air Force members at Joint Base Balad had a higher proportion of respiratory encounters, although Army Service members at other burn pit sites studied didn't see any consistent trend here at all.

Burn pit exposures at various times before and during pregnancy, and for differing

durations, were not associated with an increase in birth defects or preterm birth in infants of active duty military members.

But very interestingly, we think it's probably just a spurious finding, we did see an increase in defects in infants of male Service members who were deployed to a burn pit region for more than 280 days prior to the conception of their infant. There were no other dose response relationships identified. Again, the adjusted odds ratio was not high, 1.31. So, it was significant.

Among deployers, self-reported, newly diagnosed lupus and rheumatoid arthritis was part of the Millennium Cohort Study here where people were assessed for baseline conditions in 2003-2004 with that survey instrument. And then again in 2006 and '07, I believe, it was for the policy line and, of course, any conditions that they had at baseline, those people, you know, those people were not followed for that outcome.

We found that for newly diagnosed lupus

and rheumatoid arthritis they were not significantly associated with either a three- and five-mile proximity to a burn pit or to cumulative days exposed compared to those not within proximity of the three burn pits in the study.

However, a very interesting finding. A statistically significant elevated risk of newly reported lupus adjusted the odds ratio of 3.52 was seen for those deploys within proximity of a burn pit at Joint Base Balad but not at other locations.

And when the Deployment Health Clinical or Research Center followed up to confirm those cases of lupus, the adjusted odds ratio for confirmed cases became non-significant. So, the numbers were small. But, you know, what does this mean? We're not really sure.

As many of you know from an epidemiological standpoint the more analyses you conduct, the greater the chances that you're going to find spurious findings. All of the conditions that we studied were chosen either because the

literature linked those with issues related to combustion exposures or there were issues during the '91 Gulf War or they were issues related to Congressional interests or media interest and that's how we arrived at that list of various conditions that we would look at.

So, in terms of the questions, we'd very much like the Defense Health Board to review our epidemiologic study. It has not yet been released to the public.

We had anticipated having a press event to release it. Some of our senior leaders are a little nervous about that. They are very interested in getting the review from this esteemed body, but it looks like we're not going to be able to wait until mid-November for when you all told us the result would probably come back. This report needs to get to the Institute of Medicine for consideration in their study. The GAO wants it and should have it, as well as the House Oversight and Governmental Review Committee. So, it may be released to those committees, to

those agencies in the near future as preliminary findings, with the knowledge that a peer review will be forthcoming.

So, Question Number 1, based on the data available for the conduct of the individual epidemiologic studies, were the methods used, the analyses conducted and the interpretation of the results appropriate?

Question 2, are there additional studies or modifications to the completed studies that the Board recommends to further determine whether there may be long-term health effects associated with inhalation/exposure of/to burn pit smoke?

In addition, two other questions that I would I ask that the Board consider. How often should we repeat these studies?

We know that results show what I've described to you at this time. What are they going to show four years from now, eight years from now or whatever. Is there a chance that we would pick up additional chronic cases in a longitudinal fashion?

So, we'd like to know your recommendation on how often these studies should be repeated, and we'd also like the Board's recommendation on which of the findings that I've described to you ought to be followed up.

We'd also request that the Defense Health Board review the Air Surveillance Plan that I described to you to support the collection of additional air samples at up to three additional burn pit locations.

The data will be used to conduct site-specific health risk assessment, very much like we acknowledged to do at Balad.

Again, please keep in mind that it's not easy to perform these studies in these -- particularly, that Phase 2, which would involve individual monitoring to refine risks.

So, the questions are: is there a value in conducting the additional ambient air sampling? Would it tell us any more than what we can already glean from our samples from Balad?

Is there value in conducting indoor air

and/or personal monitoring in conjunction with ambient air monitoring?

Are the proposed analyses appropriate and reasonable?

Is a combination of continuous and time-integrated monitoring appropriate?

Will this approach and the resulting data set provide a useful foundation to characterize for efforts to characterize health risks?

How can the data best be used to support long-term health risks assessment?

That concludes my presentation. I'd be glad to answer any questions.

Yes, sir.

DR. KAPLAN: I have a couple questions for you.

First, as you think about the fact that various things were burned on various days and so forth and so on, it seems to me that it's going to be tough to try to get any kind of corrected data. You said before you don't know how long on the

base which way the wind was blowing, et cetera, et cetera. So, it would raise a question, and I wonder how you thought about it in terms of these long-term follow-ups.

The other question that I would raise just for the record is something that you're, I think, aware of, and that is there was a piece in the Washington Post on August 7th, and to quote from it, uh, it says, "The military personnel and civilian workers say they inhaled a toxic haze from the pits that cause severe illnesses. Six with leukemia have died and five others are being treated for the disease."

Can you tell us a little bit about what you know about that and what you don't know?

DR. POSTLEWAITE: Yes, Dr. Kaplan, I'd be glad to.

First of all, in your first question under the Air Surveillance Plan there we're asking you to review, there are requirements in there, pieces of that which essentially would involve the deployment of up to ten people to a particular

site that would be there to characterize the direction of the wind meteorological conditions. They would be actually monitoring what is being burnt in the burn pit. We'd keep the equipment running. We'd be able to, if we went to a Phase 2, we'd be able to follow the people in terms of what their occupations are and, essentially, get much more data with an eye on target approach than we were able to achieve in Balad.

So, I think there can be some refinement there.

DR. KAPLAN: It would seem though everybody being aware of it and everybody being nervous about it, that burn pits being seemingly modified in terms of what actually is thrown in there, you'd be comparing apples and oranges. What have you thought about that?

DR. POSTLEWAITE: Yes, sir. That is a concern of ours and that's why we really would like your opinion on whether you think it would be valued to do this or not. We have some concerns about that, as well.

Let me answer your second question first, and then I can move onto the gentleman on your right.

You asked about the leukemia cases.

DR. KAPLAN: Yes.

DR. POSTLEWAITE: We had the Armed Forces Health Surveillance Center do an analysis, and I've got the actual numbers over there on the chair. But, essentially, they compared all of the deployers to non-deployers for leukemia cases and they found that the incidence was seven times higher than those who did not deploy versus those that did deploy.

In addition, there were no cases found of any of the deployers at the sites that were studied.

So, that's what's in the database in terms of our leukemia cases.

DR. KAPLAN: So, much ado about nothing.

DR. POSTLEWAITE: It's hard to say. I'm sure -- I think there were sixty-four cases of leukemia that were identified among all deployers.

It's a fairly young person's disease, as you know, in many cases, but the number of cases among those who did not deploy at all, as I said, was seven times higher. So, we looked for those scientific data points to be able to answer those questions.

DR. POLAND: Dr. Shamoo.

DR. SHAMOO: Thank you for your presentation.

DR. POSTLEWAITE: Yes, sir.

DR. SHAMOO: We have here at this Board really prominent immunologists and toxicologists, and I am not one of them. So, maybe my questions are going to be very primitive.

I assume all your opinions from data are based on symptoms; you did not take blood, urine, hair, skin, or bone samples?

DR. POSTLEWAITE: That's correct. We didn't do any bio-monitoring, except for one.

DR. SHAMOO: You didn't do any tests to indigenous people who lived there longer?

DR. POSTLEWAITE: No, sir, we did not.

DR. SHAMOO: If that is true, then do we

have any moral obligations to these people -- I've asked the question over the last four years -- towards the indigenous people whom we may have harmed, because there are now reports by independent investigators indicating there is damage in communication, et cetera, in children. I don't know the veracity of them, how good they are. I would rather see us do some definitive research rather than leave it to the future, you know, freelancers maybe.

DR. POSTLEWAITE: Yes, sir. We follow all those reports and we look at them as we can. The data available in our -- in the Iraqi health system is extremely suspect. We've looked at depleted uranium for years. We know that in the Basra region or the Fallujah region where some of these allegations are coming from, that there's a high probability of contaminated water, chemical warfare agents, and what's not known very widely, but the rate of consanguinity within the Iraqi population, particularly in rural areas, can be as high as sixty or eighty percent.

DR. SHAMOO: What? I don't understand.

DR. POSTLEWAITE: Marriage among cousins, close relatives, et cetera.

DR. SHAMOO: Sure.

DR. POSTLEWAITE: So, there are some other reasons there. Definitively, you can't point to any one thing, but we know that their medical surveillance systems -- and I talked with Iraqi doctors. They say that people come into the clinic and they said you can't believe it what they do, they take the presenting complaint, they write it down, and that becomes what they use for medical surveillance.

So, there's some real problems. But we realize it. We'd love to see maybe the DHO or somebody go in there and do some very good studies.

DR. POLAND: Let's keep moving. Dr. Oxman.

DR. OXMAN: Just a quick question. How well matched were the non-deployed controls of the leukemias?

DR. POSTLEWAITE: That's a good question. I cannot answer that question, but I do want to offer the Committee the opportunity to meet one-on-one with the investigators so that you can really dig down into the data and get your questions answered. I'm sorry I can't answer that.

DR. POLAND: That might be appropriate for the Subcommittee that eventually takes this on.

Dr. O'Leary.

DR. O'LEARY: This may be a silly question, but particularly with this problem known, is anyone wearing masks; and if so, what kind of masks; and if so, is that variable factored into the study?

DR. POSTLEWAITE: Nobody is wearing masks that I'm aware of. There may be some contractors who operate the burn pits who may, but, you know, by and large if you go over to that area of the world in the summertime when the temperature is 110, uh, you know, in the shade and

the dust is blowing everywhere, it becomes a very, very difficult problem.

The issue of respiratory protection was considered very early on in the war, and about the only thing that was able to be implemented, was a recommendation that that wore hats. It doesn't do a whole lot. But, again, we have not been able to demonstrate a long-term health risk and so is it indicated.

DR. POLAND: Dr. Walker.

DR. WALKER: Yeah, a couple questions. A couple questions on this study.

You said something a second ago about contractors. Are you looking at the right population? Are contractors doing this or are Service people doing this?

DR. POSTLEWAITE: It varies. There are a number of the burn pits that are under long contract. That means they are contractor operated. But some of the smaller facilities -- let me just preface this by saying that you know many, many camps either have some sort of burn

operation. The smaller camps might be a barrel. They might be a single trench, and then at the larger places they may be acres in size. So, you get this whole gamut of possibilities, and in some cases they're not a problem because they're located in a place where the wind tends to blow away from the camp. In other places they are a big problem. There's just a huge amount of variability involving burn operations.

And in terms of the contractors, as many of you know who come from the military background, basically, contractors -- the employer or the contractor is responsible for a contractor's health and well-being. That's not to say that there isn't information exchanged in theater or even on our installations where one individual or one group will find a problem and share it with other. But, generally, military has no responsibility for contractors.

DR. WALKER: The second question is in your air sampling what are you actually looking for? Did I miss that?

DR. POSTLEWAITE: I didn't list the analyses in detail. I think I talked about them in general, but, you know, PAH's, VOC's, particulates, acid, gases, uh, those types of things are normally associated with burn operations.

DR. WALKER: Finally, just a general comment. Listening to you, having read the report, you know, as an epidemiologist you're -- I mean this is a conundrum. You're talking about difficulty measuring exposures, difficulty measuring where the burn pits are and what's being burned.

I mean, I'd like to know a scientific answer to this, but, you know, what you present -- I'm not sure how you'd do it. Maybe some of my colleagues have an idea how to do this in a systematic way.

DR. POSTLEWAITE: It's a very difficult issue. Yeah, you're exactly right. Sure.

DR. WALKER: We listened a couple years ago --

DR. POSTLEWAITE: Right.

DR. WALKER: -- you have more data than they did, but the issues are the same.

DR. POLAND: Dr. Halperin or Dr. Lockey.

DR. HALPERIN: In relationship to your question again to susceptible populations, I would suspect that perhaps children in this environment undergo differential growth are a susceptible group that would look at in relationship, and because it's a varied mechanism and it can be impact by (inaudible).

DR. POSTLEWAITE: You're exactly right. And just a reminder here, I mean, in third world countries for how many thousands of years the only way to dispose of trash has been by burning, so this is nothing new in terms of from that standpoint, in terms of some of these countries.

DR. LOCKEY: Could you tell us what the IOM project is and who's funding it?

DR. POSTLEWAITE: It's funded by the DoD. It's an eighteen-month study. We expect the

results to be completed late next summer. They've been charged in a very broad fashion to take a look at health risks associated with burn pit emissions and they've also be charged with, if appropriate, present an epidemiologic design to help get to the issues.

You can go on the IOM web site and put in "Burn Pit Study IOM" and it will come up and give you a little more perspective then.

DR. HALPERIN: As far as surveillance studies, are you only using the Millennium Cohort? Are you using other cohorts? How are you identifying incidences, either morbidity or mortality?

DR. POSTLEWAITE: Right. We're using electronic medical information, ICD9's, that are recorded while people are in theater. We identify the cohort by going to DMDC, the Defense Manpower Data Center, telling them to identify people that have been deployed between certain dates at various base camps, and they can give us that data, and then those social security numbers are

then bounced against the electronic health information database. These are ICD9 codes that were used to accomplish those successes.

DR. HALPERIN: So, you only pick up cases if they're active duty?

DR. POSTLEWAITE: Well, two parts for that portion of it. Yes, that's correct. For the Millennium Cohort Study that involved Reservists, Guardsmen, et cetera.

DR. HALPERIN: Incidence or mortality?

DR. POSTLEWAITE: Incidence.

DR. HALPERIN: For the Millennium Cohort -- for the questionnaires?

DR. POSTLEWAITE: Yes, sir.

DR. HALPERIN: All right. So, we have potential ascertainment problems in both of those.

DR. POSTLEWAITE: Yes, sir.

DR. LEDNAR: Okay. As far as outcome, where there's some evidence I, you know, some evidence there's birth defects, there's leukemia, and then there's this report that some of us have read out of Denver, what can you tell us about

that?

DR. POSTLEWAITE: That's a very perplexing problem. Constrictive bronchiolitis, I believe, is the primary diagnosis. There have been in the neighborhood of several dozen individuals, primarily, that I believe were, uh, uh -- what's the base, uh, the post? I can't remember right now. But most of them were deployed -- Ft. Campbell. Is that the 101st Airborne; right? Being a blue suiter I don't know that side of the military, as well.

But, yes, back in 2003 there was a sulfur fire that burned for over a month near Mosul, generated plumes that went up to 40, 50,000 feet and spread over a large portion of Iraq.

Back in 2003 we didn't have very many environmental health people in the ground to track what was on the ground level. We were very concerned about it and did what sampling we could, and then trying to characterize it we identified some acute health effects in the surrounding region, but really didn't expect any long-term

health effects.

After the 101st came back there were some individuals that were experiencing dyspnea on exercise, fairly normal PFT's. We really couldn't figure out what was going on. They referred them to Vanderbilt. Dr. Miller did a number of open lung biopsies on these individuals trying to characterize what they had and came up with these, I think about twenty of them at that point in time, I'm not sure how much the numbers are standing, identified with this constrictive bronchiolitis.

U.S. Army Public Health Command did an investigation on it and what they found were about two-thirds of the individuals were in the Mosul region, potentially exposed to the sulfur fire smoke, the sulfur dioxide, and other agents and about a third were not. They were located elsewhere through the theater.

So, we really couldn't pin it down to the sulfur fire smoke, but maybe it's a beginning. Maybe it's particulate matter, plus tobacco smoke,

plus whatever. There will need to be some follow-up on that, and we expect that the Institute of Medicine will be looking at that as well and providing some recommendation. What it really means, we're not sure we have all of the pathology specimens sent to AFIP. They looked at it and really weren't too impressed with what they saw, said there was a spectrum of disease and they weren't sure what it meant.

DR. LEDNAR: That is at the behest of your office?

DR. POSTLEWAITE: Yes. We're actually interacting with IOM and have briefed them on our concerns and studies, et cetera.

DR. HALPERIN: So, just in general, it sounds like we can't -- I mean, November was the reasonable -- I'm sorry. Not reasonable -- was a practical date, and it sounds like that's not going to work for you as far as a review before the release.

DR. POSTLEWAITE: We can't wait that long because pressure is being put on us, exactly.

DR. HALPERIN: Then just to put it on the table for discussion, we have the constraint of the exposure assessment part of your study, of your question. The real issue is expertise on DHB of people who are exposed -- and, actually, I can't identify with anyone at the present. It doesn't mean we couldn't add or identify somebody, but exposure assessment expertise on its own.

DR. POSTLEWAITE: An individual from NIOSH weren't able to help you all.

DR. POLAND: We're really getting into the operational, how would we work this question, which we could figure out off line with your help and with others' help, but we've heard the question. We've received the questions. We'll take on those questions. We'll figure it out. And, obviously, we're going to need your help to figure out how to figure it out, how to work those questions, Bill, how to work those questions.

Jim, did you have a question about that?

DR. LOCKEY: I just want to ask one question. Is there full function tests that are

done? Is that routine?

DR. POSTLEWAITE: It's not routine. There have been some pilot studies on pre-deployment/post-deployment PTF's. I think the U.S. Army Public Health Command has some visibility on that.

In addition, there are some research projects being proposed. Potentially, it could end up being a policy, but currently it is not.

DR. POLAND: Okay.

DR. POSTLEWAITE: Thank you very much.

DR. POLAND: Thank you. We have still have another brief to do here, and let me just say that when we're introduced to a question, I know the Board wants to dig right into the data, et cetera, but this is not really an appropriate time to do it. It's to hear the question and then decide whether we're going to take the question on and then a Subcommittee or group would actually review those data and bring a recommendation back here. It's just not possible or feasible for a whole Board to try to do the science attendant to

each question.

So, if you see me hurrying us along, that's why.

All right. Our final speaker this afternoon is Lieutenant Colonel Greg Burbelo.

Lieutenant Colonel Burbelo is the Director of the Army Center for Enhanced Performance, or you guys say it ACEP or -- Okay, ACEP.

LTC BURBELO: That's correct.

DR. POLAND: -- which has 9 CONUS locations at approximately ninety employees. He's co-author of "Military Application of Performance Enhancement Psychology," published in the September-October 2004 issue of Military Review and co-authored the article "Total Fitness Concept," featured in the August 2010 edition of Military Medicine. He's an active member of the Association for Applied Sports Psychology. Lieutenant Colonel Burbelo has extensive experience applying sport and performance

psychology with athletes and teams at United States Military Academy and Army Olympic shooters, as well as numerous operational units and Army organizations.

Founded at the United States Military Academy at West Point in 1993, ACEPs are now operating in other installations across the country. ACEP trainers teach individuals to acquire, practice, and master the mental and emotional skills that are the foundation of human performance by using state-of-the-art technologies, best practices in education and applied sports psychology techniques. Tomorrow you'll actually have the opportunity to tour the ACEP.

Dr. Burbelo's slides are under TAB 10.

LTC BURBELO: Thank you.

Good afternoon, everyone. And thanks, Ms. Bader, for inviting me here today. That was a great intro, and I'd just like to tag onto the great presentation by the cadet on the CPD, as well.

The Center that you're going to visit tomorrow is kind of another sister center organization at the Academy that supports the corps of cadets. The program that I'm the Director of came out of the Academy Center For Enhanced Performance, which was built for the cadet's academic, physical, and military development.

In 2004, General Stu Baker, the then Chief of Staff in the Army, directed for me to get this program up to the Army. So, over the last several years we have stood up these nine centers, and as recently as this past month stood up a tenth center at Redstone Arsenal where the Army's Explosive Ordnance and Detachment School is located.

We had a lot of talk about psychology, and I know there's a few psychologists in here. When we look at it from a performance standpoint, not a clinical or medical approach, when you look at Army doctrine of kind of why we exist -- I'm well-read on Army leadership. It goes into great

details on what a leader must be known to do, what a warrior must be known to do. It describes it in detail.

One of those attributes is confidence. It's actually cited over about sixty times in the Army Leadership Manual. It tells you that leaders must be confident. That doesn't give any kind of instruction on the leader development process to get there. It tells you, you must be composed. It cites that at least great leaders are composed at least a dozen or fifteen times, but there's no instruction on leader development process or warrior development process to build that composure, and so on and so forth.

So, what we have tried to do with this program, and we surely don't have all the answers, is try to operationalize a lot of these almost seemingly intangible leader attributes, leader soldier attributes that are really the cornerstones of what it means to be a warrior and a soldier.

So, again, Army doctrine tells us what

we must be. The ACEP Program is geared towards educating and training soldiers to actually acquire those skills that underlie those attributes.

We know the Army does a great job. My Army does a great job of putting soldiers in stressful, realistic training environments to prepare them for war and the combat so they can handle those environments. So, we see it blends in very nicely.

Our current mission, and I think one of the gentlemen over here during the CPD asked a question about the full potential. I can't rephrase the question. But our mission is to develop the full potential, and our whole program is focused on performance, personal strength, professional excellence, and the Warrior Ethos, which is really again a cornerstone of what we're trying to build in the Army.

The four mission essential tasks that we're providing is, one, performance enhancement education and training, which grew out of the

multiple fields. Initially, from sports psychologist, but we drew from many different disciplines the best practices, but also some of the people-building activities.

Resiliency training. We're currently collaborating and partially funded from the Soldier Fitness Program and we're providing a lot of the expertise. I've got instructors right now that are down at the Master Trainer Course providing some training.

And then, lastly, the Learning Enhancement Program, which we'll get into.

Our current location is as stated. Current mission support. To kind of give you a quick overview of where we're at in the TRADOC, on this graphic right here, TRADOC, which is Training and Doctrine Command, where all the Army does all its education and training, we're in the U.S., incorporating the U.S. Drill Sergeant's School, spells the explosive disposal attachment for soldiers as a looking uniform.

They recently made a movie, "The Hurt

Locker," but those two specific schools that train drill sergeants and EOD and use ISOC where our site was located, was a Special Operations command at Ft. Bragg working with their training, as well as their Operational SP Team. So, they have definitely gravitated toward what we have to offer.

In MEDCOM we're working down at Ft. Sam Houston with a lot of the medical professionals, and I'll get into detail as to exactly why, but there are multiple reasons anywhere from we're looking at, you know, my performing medical professional and the need to be as a medical professional. One of the (inaudible), the 68 Whiskey, might for six months a nurse case manager for fifty-two weeks long and requires a national licensing exam (inaudible). Most of them do not have a college degree.

So, it's a very rigorous school. It's very demanding, high attrition rates, and we're helping to support that as well as mitigating effects like combat fatigue, supporting that

endeavor.

The other audiences, we're working with families, the Department of the Army, civilians, and the Forces Command, we're working with many operational units, 82nd Airborne, 101st Striker Brigades, and you name it.

And then lastly, which is about twenty-five percent of our mission, the warriors in transition. And, again, when you look at it from a performance perspective, since we're not a clinical or a medical organization, what we're working with a command and with their mission is to really get, uh, to have the warriors in transition take ownership for their rehabilitation, get inspired about their future. So, it's very rewarding work. We touched a lot of folks over the last year.

One of our mission essential tasks is this Performance Enhancement Education Model, and what you see here is a model that has been in design approximately fifteen years or so and modified, because it's really a series of best

practices, though we know some evidence-based practices that are effective and kind of put them into a package model where we're able to educate the student, acquire and apply a lot of these mental skills. And really, our goal is to get the transfer of a lot of these mental skills across the broad spectrum of performance, whether it's professional and/or personal.

The team building. We do some great, great teams exercise. We do them with unit chain of commands, smaller units and whatnot. But again, another one of these attributes is cohesion. And we know about social, the importance of social support. We actually do a lot of activities to help facilitate, help commanders create that vision for an organization.

The resiliency training. We've collaborated again with Comprehensive Soldier Fitness -- soldier fitness questions with the University of Pennsylvania with some of their resiliency training. All of my instructors are getting trained up on it so we are providing

resiliency specific training across many locations, and the Army's newer school that's been recently established.

The Learning Enhancement Program. Again, you'll get a little snapshot of this tomorrow morning, but it grew out of the Academy, so the Academy has this Academic Enhancement Program within the Army Center for Enhanced Performance that really talked about mastering these academic skills to a high performance student.

What we find to be extremely applicable is in some of the Army schools -- for instance, at Ft. Bragg, the language course. We have these high speed Warrior, Airborne, Ranger, Special Forces, Scuba, Halo guys that have to go learn to speak Arabic for six months. They have to pass the test, and it's pretty tough business. And you know their careers are on the line, so we are helping them to master some of these underlying study skills to help them be a good performer in it so they can get their language requirement.

At Ft. Sam Houston and 68 Whiskey, it's an extremely tough attrition rates. And most recently the Explosive Ordinance Disposal course, and I see there's several folks here from the Navy and the Army who have been having some challenges, we do Phase 1 of this DoD course for the Army and then we send them to Eglin Air Force Base up to the DoD School and seventy percent of the soldiers training from the DoD school that are not making it are due to academic reasons. Not physical, but academic. So, we're incorporating our capabilities to help soldiers develop these underlying skills in a multitude of activities to be successful.

We've had that great program evaluation. We've got a research team, and you're going to get a snapshot of the research we've been doing, but from a quality of problematic standpoint satisfaction surveys, we've got a really good feedback from the Force where we've been able to really militarize a lot of what we've been able to do really resonates with the soldiers, with the

commanders, and we've got Brigade Commanders asking us when we're going to come on their unit. So, we built a great reputation that we're very proud of.

Lastly, I'd just like to comment on our strategic network. We think it is absolutely critical, but because we don't have all the answers, but I think we're definitely onto something and we're collaborating with multiple agencies, like Walter Reed Army Institute of Research, many, many first rate institutions of higher learning, and most recently with the Office of the Secretary of Defense for Psychological Health Affairs, and I think Dr. Jill Carty, I think is a good transition where this is one collaborating effort that we're doing, and I'm going to turn it over to her to introduce one of my research teams and we'll close it down.

Thank you very much. Again, I know your time is precious. You're more than happy to see me off line or we can -- we have plenty of time tomorrow morning as you do the tour. We're going

to have a nice round robin and you can ask us all the questions and all the deep thinking questions for the research team, et cetera. So, we're looking forward to that conversation.

Thank you.

DR. CARTY: Can you hear me? Thank you, Ms. Bader, for inviting us today and Lieutenant Burbelo for the brief on ACEP.

I'm taking the opportunity here, as Lieutenant Burbelo said, to introduce to you Dr. Jon Metzler, who is holding up a TMA psychological health project. Actually, it's a preventive psychological health demonstration project for active duty personnel, which is being conducted at Ft. Hood, and it's actually a resiliency training project.

While we know that resiliency has become an everyday household word, it's still acknowledged that there's no standard definition for this term, although most definitions include exposure to adversity and an adaptive response to this exposure. As such, we think we have a very

unique experimental study with outcome measures that we're conducting that I hope will inform us whether mental health strengthening assay -- ACEP, as on the ACEP Education Program is this Mental Health Strengthening Program that we're investigating, whether that will actually have an impact on enhanced performance, on a report of resiliency and hardiness and whether, in fact, will be a prevention of negative mental health outcome.

Without further ado, I present to you Dr. Metzler.

DR. METZLER: Thank you, Jill, and thank you for having us here. I'm going to give you a brief overview of one study that we had designed to execute at Ft. Hood.

We can go in more detail and answer your questions, and then again tomorrow when you meet the research team, or at least myself and Dr. Herotta, who is also part of the research team.

But as you can see from this slide this gives us an overview of the study design that we

have our ACEP model on the left here and that contains the feature components that we try to teach, mental skills, and based on the proper psychology literature we try to enhance confidence, enhance goal-setting skills, focus people's attention, help them maintain composure and manage their energy under stressful situations, and then use imagery to rehearse tasks that they will be performing so they're fully prepared to engage in those tasks under stressful situations so they can thrive under pressure.

Those principles map onto some of the things that we talked about when we look at resiliency factors which could prevent mental health risk.

Now, this is somewhat of a stretch, and to really emphasize the point that ACEP was designed to enhance performance, so when we look at this study design, I just want to highlight that our primary outcomes here are enhancing performance, and that's what we're interested in from an ACEP perspective, but we also think that

due to the overlap conceptually that we might enhance resiliency and, therefore, lead to reduced mental health risk post-deployment. So, that's the overview of the model.

The methods that we're going to use, we are collecting data from 1800 deploying soldiers at Ft. Hood who are enrolled in the CLS or Combat Life Saver Training Program, and I'll relate to that a little bit in a minute. This is not a true experimental design, it's quasi-experimental, which is nice because, obviously, the training environment pre-deployment, we don't need to disrupt that by any means.

So, at Ft. Hood we want to just in the training environment and the Ft. Hood commanders send soldiers to CLS as needed. So, they come in relatively randomly into the CLS course and that provides a nice atmosphere for us to get a range of distribution of our population.

We have natural scheduling that occurs. Obviously, the soldiers come in as the Command delegates and, therefore, we will have random

soldiers and random units in a natural setting. We will be using alternate weeks for experimental controls, so a week on for an experimental piece of study and then the alternating weeks we'll have a controlled group come through, and I'll talk exactly about the intervention here in a second.

We have multi-methods for our procedures. We are going to collect data via self-report. We do have observations, but we will have performance rating based on the CLS instructors and how they do Combat Life Saver Skills, and then we have to augment training intervention, and I'll just take a minute to speak about that.

Combat life Saver Training is designed to enhance specific skills. Specifically, can you attend to the pressure points, you can attend to tourniqueting, clear airways, seal up sucking chest wounds and so forth.

These are essential skills that CLS is trying to train. What we're going to do is use that as a control condition and then layer ACEP on

the top to see if ACEP training can augment the CLS training to performance outcomes, as well as post-deployment mental health outcomes.

Here's an overview of the methods categories of methods that we're going to be looking at. Of course we want to highlight in red here the central outcomes. Hardiness. We're looking at using Maddy's Personal Views Survey, which is the most acceptable hardiness measure out there, and Maddy has looked at in terms of setting up hardiness interventions to see changes in hardiness over time.

The resilience scale, we're using the Connor-Davidson Resilience Scale. You see the risk, and then we'll be obtaining data from the Defense Medical Surveillance System, the PDHRA data, PDH data, which I believe most of you are familiar with. So, we will be obtaining -- there's ten items there that relate to mental health, and we'll be obtaining a composite score off of that operationalize the mental health risk.

Lastly, the performance which will be

assessed via the rating of the Ft. Hood, Medical Simulation Training Center, MSTC, as they're known, and then rate performance on CLS skills.

Why are we using Combat Life Saver? We have here on the left a classroom and on the right a simulated battlefield. One of the nice things about the Ft. Hood MSTC, the Simulation Center, is there they take their CLS classroom training and they actually subject the soldiers to a simulation of going through a Middle Eastern city, a hundred degree temperature, prayer calls, enemies shooting paint balls at them, simulated combat, and have them perform the CLS skills that they learned over the week in that environment.

This is precisely what we're looking at in terms of performance psychology in thriving under pressure. And this is, from what I understand unique, that Ft. Hood engages in that. We have anecdotal evidence that soldiers in a classroom can actually engage these skills successfully about ninety percent of the time, but when they're in a simulated environment that drops

to about forty or fifty percent. I can't imagine what it would drop to in theater when the pressure is even greater.

So, obviously, this is a nice environment for us to test the performance outcome. Plus, if we can have the effects that we desire that ACEP is meant to do, then, hopefully, we can actually engage this in theater and reduce the amount of casualties on the battlefield.

The expected outcomes of our study, obviously, this will give us a nice analysis of ACEP training with a very tangible performance outcome and then we can make some assessment of how the training works, what tweaks we need to make to the training to enhance performance, and, of course, ultimately, we hope we see reduced post-deployment mental health risks as the function, but this is a relatively exploratory setting.

So, with that said, that's a generic overview for you, and we will take any questions regarding the design.

DR. POLAND: Thank you for that presentation.

DR. WALKER: I have a question about performance.

Performance can be observed at the individual soldier level when we receive less skills. So much of what that needs to be done, especially in theater, is not so much individual effort but the squads and teams working effectively together. So, at some point we'll be looking at the performance of natural unit work teams or groups. It's not just at the individual level. But how does a team perform under the discussed situations?

DR. METZLER: Well, thank you for that question.

The beauty of the design of this simulation is that at Ft. Hood, soldiers are placed into squads of ten and they actually engage in a squad performance, if you will, outside of the building that they're going into where the casualties will be located.

So, we will actually be operationalizing a squad performance within the study as well as an individual level performance.

So, we will have been able to get that data and look at the effects of what we do on performance at both levels.

DR. WALKER: How do you get your data from post-deployment?

DR. METZLER: That will be via the PDHA and PDHRA that comes in. That's a uniform assessment that health care providers use and then is sorted in a database.

DR. POLAND: Okay. No other questions? I guess, as I said, you'll get to see ACEP tomorrow. So, thank you. We look forward to that.

DR. METZLER: Thank you.

DR. LEDNAR: Ms. Bader, would you like to dismiss us?

MS. BADER: First, thank you all so much very much for your patience today. Obviously, the Board has a lot of work in front of them, and I

appreciate all of the great questions from the Board members, and, of course, the fantastic presentations from all of our presenters today.

This concludes today's session of the Defense Health Board. Again, we look forward to our continued role in serving the Secretary of Defense.

Bear with me for thirty more seconds. I have some administrative remarks regarding this evening and tomorrow.

First, there's a manila envelope on the left side of your binders. Please put your materials in there if you'd like to take your materials home with you.

We encourage you to check out at the appropriate time from your hotel room first thing in the morning because there is, in fact, a $50 per hour hotel fee beyond the time of original checkout if you check out late, and the hotel will hold your luggage. So, please, we're encouraging a timely checkout.

Breakfast will be available tomorrow

morning next door at 7 a.m. and bus transportation will depart from the hotel at 7:45. We will have a guided tour of the Academy. We will have an opportunity to walk through Thayer Hall which houses the majority of the cadet classrooms. We will not be able to walk into any occupied classrooms, but you'll still need to see the cadets in action, especially recognizing how small the classes are.

From 10:45 to 11:50 we'll tour ACEP. We will walk from the ACEP over to lunch and we will all have an opportunity to lunch with the cadets.

Lunch will end at approximately 12:45. Lunch has been prepaid. If you have not RSVP'd, please see Jen Klevenow so she can provide a head count to the personnel that are assisting in coordinating our day tomorrow.

Shuttle service is available back to The Thayer at approximately 9:45 a.m., 10:45, 11:45 and 12:45 if you're not able to participate in the full day's events.

We are encouraging you to wear

comfortable clothing and shoes as we will be getting out of the bus, especially during the tour to walk a bit around the Academy grounds.

For those of you who are coming to dinner at Painter's Inn and Restaurant, we will ask you to convene in the lobby at about 6:15. It gives us about twenty minutes to get up to our rooms and change clothes as appropriate. We will return to the hotel probably a little bit later than was originally anticipated, maybe closer to 9:00 tonight.

Again, please pay Jen Klevenow for your evening meal if you have not already done so.

Thank you all very much for attending. This meeting of the Defense Health Board is adjourned.

(Whereupon, at 6:00 p.m., the PROCEEDINGS were adjourned.)

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CERTIFICATE OF NOTARY PUBLIC

I, Carleton J. Anderson, III do hereby certify that the witness whose testimony appears in the foregoing hearing was duly sworn by me; that the testimony of said witness was taken by me and thereafter reduced to print under my direction; that said deposition is a true record of the testimony given by said witness; 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

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