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MEETING OF
ARMED FORCES EPIDEMIOLOGICAL BOARD
THE ISLAND CLUB
NORTH ISLAND NAVAL AIR STATION
3629 Tulagi Road, Building 4
San Diego, California 92155

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TRANSCRIPT OF PROCEEDINGS
November 30, 2004

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1 SAN DIEGO, CALIFORNIA, NOVEMBER 30, 2004

2 7:44 a.m.

3

4 ARMED FORCES EPIDEMIOLOGICAL BOARD MEETING

5

6 COL. GIBSON: (Remarks about lunch and dinner
7 plans.)

8 DR. OSTROFF: I would like to thank everyone
9 for their willingness to come out here to San Diego. We
10 just finished the long Thanksgiving holiday, and I think
11 clearly we have a lot to be thankful for. It's been --
12 you know, just watching the news over the last month or
13 two, since the board last met, it's been a very
14 difficult time and a very challenging time for the men
15 and women in uniform. And I think all of us are very
16 proud and have a lot to give thanks to for the
17 tremendous effort and for the work that they do for all
18 of us here back in the U.S.

19 And I must confess, every time I see a story
20 about a casualty -- whether it's a fatal or nonfatal
21 casualty -- it just brings home to me the importance of
22 all the work that we do for the fine men and women of
23 the armed forces. So I think that the willingness of
24 all of the board members to make the effort to be here
25 and to help, not only the men and women of the armed

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1 forces but also the department, in setting the best
2 policies so that we can keep these fine men and women as
3 healthy as possible. We thank all of you for what you
4 do for all of us.

5 There are a couple of new board members here.
6 If we could, I'd like to first have them introduce
7 themselves, and then we'll go around the table and
8 introduce each of ourselves so you can see who your
9 colleagues are and who is here for this particular
10 meeting.

11 (Board members introduce themselves.)

12 DR. OSTROFF: If I could -- just so we know
13 who else is sitting around the table, if you wouldn't
14 mind very briefly introducing yourselves.

15 (Everyone else present at meeting introduced
16 themselves.)

17 DR. OSTROFF: Thanks very much. It's really a
18 very impressive turnout. I thank you all for being
19 here. Before we begin the program, let me ask
20 Commander Dukovich to make a few opening comments.

21 CDR. DUKOVICH: We're done with all the
22 pleasantries. So it's time to get down to business.

23 We already took care of Air Force earlier.
24 We'll move on to the next pressing issue.

25 Thank you for your opening remarks and the

1 administrative issues for this meeting. It's my great
2 pleasure to have the opportunity to welcome you to this
3 meeting of the Armed Forces Epidemiological Board and to
4 have the Naval Health Research Center serve as your
5 host. I have a lot of thank yous this morning, probably
6 deservingly. I'm told that they were having this
7 meeting, and we'd like you to come down and -- the hard
8 work, of course, was done by Dr. Ryan's group.

9 Kevin, thank you for your help. Lisa Henry,
10 from our organization, and Senior Chief Santa Maria, I
11 want to thank you.

12 I want to note the presence of Ms. Embrey.
13 Your presence here recognizes the important role of the
14 AFEB in providing the best possible advice and guidance
15 for establishing the health policy. It also indicates
16 the commitment to an ever-changing challenge of
17 protecting our troops from health threats. Looking over
18 the agenda yesterday and this morning, it indicates how
19 this group adapts and takes on the difficult and
20 emerging issues of the day.

21 In this case the topics emerging from
22 Operation Iraqi Freedom and Operation Enduring Freedom
23 -- traumatic brain injuries and psychological injuries
24 and also the more persistent problems such as STDs --
25 show your willingness to engage in these difficult

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1 issues.

2 This meeting, as so many other board meetings
3 over the 50 years, which is a surprise to me -- I didn't
4 realize the long history of this group -- but the AFEB
5 has held the policy recommendations. The Board's
6 emphasis on the use of epidemiological principles to
7 guide policies have proven particularly effective. As
8 times have changed and health issues have changed, the
9 Board has redefined itself. HRC's committed to help
10 provide the research expertise needed to assist with
11 services -- all the most pressing health issues of the
12 day. With that, I will let you get on with your
13 excellent work. Thank you very much.

14 DR OSTROFF: We have a plaque for you. These
15 are in appreciation for key support during the December
16 2004 meeting. We'd like to present these to you along
17 with one of our AFEB coins. Thanks so much.

18 We're actually making some modifications to
19 the agenda to the usual way the meeting is held. Part
20 of this is because one of the major topics for this
21 meeting is to discuss mental health issues. As per
22 prior discussions amongst the board members, we try to
23 have themes for the various meetings that we hold
24 throughout the year so that they're not always focused
25 on many of the issues that have come before us in the

1 last year or two, which are more related to infectious
2 disease, disease control. And we wanted to make the
3 theme of this particular meeting issues related to
4 mental health, which is a very important topic that we
5 haven't really had an opportunity, over the last couple
6 of years, to have discussions of. And so we have made
7 that a major focus for this particular meeting.

8 Unfortunately, our primary mental health
9 liaison on the Board isn't able to be here until late in
10 the day. So we decided to go back to the way the Board
11 was run many years ago, which is the updates from the
12 preventative medicine liaison occurs first. So what we
13 decided to do is to break those into a couple of
14 different sessions and actually start with several of
15 the preventive medicine updates. And Colonel Ruscio is
16 first up in the que who will give us the update. So
17 without further delay, I'll hand the podium over to
18 Colonel Ruscio.

19 COL. RUSCIO: Good morning. I'm Bruce Ruscio.
20 What I will be providing this morning is health affairs
21 update on two subjects. The first is the influenza
22 protection program. We are all aware of the national
23 shortage of vaccines that occurred -- is occurring in
24 the '04/'05 season. And DoD is affected by that
25 shortage also. 70 percent of our vaccines were ordered

1 from Chiron, which resulted in a significant shortfall
2 for DoD. What occurred when we're notified is that
3 LT. Steve Philips and the preventive medicine
4 representatives on the JPMPG started putting in a lot of
5 hours and work in adjusting the DoD program to that
6 shortfall.

7 Essentially, what has occurred is an
8 adjustment of priorities in DoD from a total force of
9 vaccination programs to prioritization of the high-risk
10 groups in the DoD deployed members in the priority
11 members in uniform. Also, the optimization of the use
12 of FluMist in healthy soldiers and healthcare workers
13 worked hand-in-hand with DHHS during this process and
14 continue to do so. Use of FluMist among our healthy
15 members allowed DoD to use 200,000 less injectables in
16 freeing those up for other use within the U.S. At times
17 we have sufficient vaccine requirements to meet our
18 adjusted priorities, and we're working in risk
19 communication and preventive medicine communication to
20 the members.

21 This is a quick overview of the policy and
22 guidance that has gone out in health affairs in the
23 services. I want you to take a look at those real
24 quick. The first one announces there was a shortage,
25 and DoD would focus on critical operations of forces in

1 our medical high-risk groups in accordance with CDC
2 guidelines. We further defined the priority groups
3 focusing on military readiness and providing guidance in
4 the use of FluMist. As the season goes on, we'll
5 certainly be providing more guidance as needed to the
6 field.

7 This is an overview of the critical operations
8 of forces. And our approach has been that we vaccinate
9 medically high-risk groups in critical operation forces
10 in parallel, again, using the medical high-risk
11 beneficiaries guidelines. Just a quick overview of --
12 itemized list of critical operational forces. Also, it
13 includes healthcare workers with direct patient care and
14 our trainee population and the cadre of working those
15 training populations.

16 Just some quick numbers. The slide shows the
17 1.6 million dose shortage that DoD is facing. The
18 original estimation for this year was about 3.7 million
19 doses needed to -- for total vaccination for DoD.

20 I apologize. This is somewhat hard to see,
21 but there's two snapshots in the -- of vaccination of
22 active-duty members. As we go through the process, we
23 continue to monitor and determine the vaccinations
24 provided to the service members.

25 As far as we see, the road ahead is a

1 continuous assessment and monitoring of the program down
2 to the MTF level. I'll distribute and administer the
3 FluMist to appropriate populations and continue to
4 maximize the use of FluMist in the appropriate
5 populations also looking or waiting for possible changes
6 to the package insert of FluMists, and that's in
7 relation to the concurrent administration of
8 immunization. It's important for the trainee
9 population.

10 We've continued to have medical surveillance
11 of influenza-like illness. We're maintaining 25,000
12 injectable zone reserves to respond to potential
13 emergencies that may occur within the DoD population.
14 Dr. Angler is working on the half-dose study out of
15 Walter Reed, looking -- and waiting for the completion
16 of that. And we've already started to approach the
17 '05/'06 strategy for vaccine acquisition.

18 That's all I have, sir.

19 DR. OSTROFF: Thanks very much.

20 Let me open it up and ask if there are any
21 questions from members of the Board.

22 Let me point out, for the transcriber it's
23 important, because the group is so large, if you could
24 identify yourself, please.

25 MR. POLAND: One quick question on your slide.

1 Did you mean to say the Navy and Marine Corps have not
2 administered any doses?

3 DR. RUSCIO: No, I did not. The number for
4 the Marine and the Navy, I think, are at 22,500. I
5 apologize.

6 MR. GARDNER: I am impressed that the numbers
7 of immunizing are rather low. On November 16th, on your
8 slide, I guess the total immunized is still less than a
9 couple hundred thousand for a target that's looking at
10 something more than ten times that. I should ask you to
11 think about that.

12 And the other question -- I'm not sure
13 it's -- in this population, which is mostly between 15
14 and 60, you're giving your two vaccines in sizable
15 numbers. Is there going to be a possible -- research
16 question is as to are we going to be able to look at the
17 efficacy of the injectable versus the naval vaccine?
18 That would be a question that the rules are asking
19 itself, and the opportunity might present a challenge to
20 look at that.

21 DR. OSTROFF: Could you possibly give us a
22 little bit more information about how the FluMist is
23 actually being deployed and utilized?

24 DR. RUSCIO: I have the service
25 representatives here, and I'm going to talk to -- or ask

1 some of those -- they are being used in our recruit
2 trainee populations. But I'll see if one of the service
3 preventive medicine representatives would like to
4 discuss the specifics on the service.

5 MR. MEYER: First of all, the question is:
6 How many people we have vaccinated? We are seeing only
7 the active duty. There are probably about -- the
8 Air Force has about 210. The Army has about 230,000,
9 and the Navy is somewhere around 200,000, also high-risk
10 patients that are not included in these numbers, which
11 are the numbers that have to be used for the injectable
12 vaccines. The FluMist that the Air Force is using is
13 for the trainee population. Once the second dosing of
14 the FluMist is available, it will be going to our
15 deploying forces. So we have about 60,000 doses that
16 the Air Force will be using.

17 MS. EMBREY: When the shortage became known to
18 us -- initially, when we learned we were going to be
19 short by probably a half of our requirement, we
20 determined that we needed to prevent the flu in those
21 who are in high-risk areas and deployed already. We
22 then set about to finding the requirements, the lowest
23 possible injectable for our high-risk. We also made
24 this decision over a period of three weeks in October,
25 so not much time has passed since the time we made this

1 decision. So it's a combination of logistics, timing,
2 and where we are.

3 MS. LUDWIG: I also want to add that the -- of
4 the vaccines that are not given yet, a number of those
5 are in new recruits who have not come in. We give the
6 vaccine to recruits through the end of June, if at all
7 possible. We'd like to give it all year, but this is a
8 separate issue. That's another reason for the large
9 disparity.

10 The other thing you mentioned is the
11 possibility of research into the efficacy. Because
12 we're giving FluMist to a completely different
13 population than we are the injectable, it would be
14 pretty hard to set up epidemiologic studies.

15 MR. BROWN: It's unclear to me that maybe you
16 could comment, Bruce, about whether or not these efforts
17 that show efficacy or this half-dose approach could have
18 any impact on the current flu season. Is this to pan
19 out to change policy in this season?

20 COL. RUSCIO: I don't think this year.

21 DR. OSTROFF: Let me ask one question. One of
22 the -- or a couple of the recommended priorities with
23 DoD caused some consternation in the settings. One of
24 them was individuals that were transiting through
25 multiple high-risk areas, and the second was critical

1 nondeploying operation of forces and how those
2 individuals were defined. The reason this became an
3 issue is there are lots and lots of first responders who
4 felt they were fairly critical also -- and they ought to
5 be vaccinated. So I'm wondering how that was defined
6 among the services.

7 COL. RUSCIO: One of the service reps who
8 would like to talk?

9 MS. EMBREY: The joint staff identified the
10 critical operations --

11 MAJ. KILIAN: What we had hoped to do was to
12 vaccinate those folks who were a continuation of
13 government-type individuals. I don't think this Board
14 has ever had the opportunity to visit Raven Rock. It's
15 an alternative command post. There's multiples of
16 these, but this is the one that most folks -- you know,
17 you go to Google search. You can pull it up with all
18 the imagery from commercial sources at an unclassified
19 level. It boils down to there is an extremely small
20 number of people that would be the operational military
21 continuation of the government. We had submitted that
22 those folks should be immunized. Folks above this Board
23 made a byline veto to not include those.

24 There was a staffing throughout the entire
25 Department of Defense to the combatant commanders seeing

1 -- the biggest player that joint staff is able to
2 incorporate are those folks that were the folks who
3 carried the nuclear weapons. There is a very specific
4 nuclear weapons package that was written into the plan
5 to ensure that everything bad would happen -- those guys
6 would not be, if their ability to think and do what it
7 is they need to do.

8 DR. OSTROFF: Any other questions?

9 Thank you very much.

10 COL. RUSCIO: Thank you, sir.

11 DR. OSTROFF: Our next presenter is the
12 preventive medicine update.

13 COL. GIBSON: This is Colonel Gibson.

14 We actually had two briefings from health
15 affairs. One was on this influenza. Colonel Ruscio was
16 going to update us on the wrap. There's been some
17 movement on this project within the Department of
18 Defense that the Board has been interested in for some
19 time.

20 COL. RUSCIO: Dr. Ostroff, what I'd like to
21 do is give a quick overview of some of the moving pieces
22 that are occurring. I know there were some questions,
23 as Colonel Gibson mentioned, from the Board members. If
24 you would be interested -- if the Board members would be
25 interested in a more thorough overview at the next

1 meeting.

2 Just a quick background on the history of the
3 recruit assessment program. This is doing an assessment
4 on all new recruit members. I'll let you read the
5 little bit of background up there. The most recent
6 change or addition to the guidance is from outside of
7 DoD, actually. NDAA was signed November -- early
8 November. It requires DoD to perform a baseline health
9 data collection program on all new military assessments.

10 More specifically, this Board addressed the
11 recruit assessment program in 2002, provided a valuable
12 guidance to the DoD in moving forward on that. The NDAA
13 -- the act again was just signed -- requires DoD to
14 collect baseline data on all new recruits entering the
15 service at the time they enter to provide computerized
16 automation for that process.

17 (Unintelligible.)

18 Little bit about where we're at now. The
19 Board recommended a Tri-Service group be established and
20 the purpose of developing the instrument and the
21 Con Ops. That group was established. It did develop a
22 concept of operations and provided an instrument for
23 that process. The instrument -- we have subject matter
24 concurrence throughout the services. Most recently in
25 November provided -- requested external purview on that

1 instrument looking at its compatibility with other
2 self-reporting instruments within DoD and outside of
3 that. We have -- need to go through legal review or GC
4 review yet. All Tri-Service, self-reporting surveys
5 from DoD, required defense manpower data center review.
6 That's both a technical review, process review, legal
7 review. And that's a requirement within the DoD.

8 DR. OSTROFF: Thank you very much.

9 Let me open it up to the Board. This is a
10 topic that has occupied a lot of time of the Board over
11 the years. In fact, for those members who have been on
12 the Board for a long enough time period, you may recall
13 that our last meeting right here in this room was
14 heavily occupied with presentations on this particular
15 subject. And I must confess that I was a little
16 surprised when I heard that this was still a major
17 issue. Because my presumption was that, based on the
18 discussions that we had previously, things had
19 progressed a bit further than they currently are.

20 And I had some confusion, to say the least,
21 about the difference between the RAP and the RAS and
22 whether or not the information gathering was actually
23 written in stone at this point, whether it was still
24 being piloted, what the status was among the various
25 services. And it is of some concern, at least to me. I

1 don't know if other members share the same concerns,
2 that we don't seem to be able to get this finalized and
3 get this moving. Can you give us a sense of what the
4 future holds right now?

5 COL. RUSCIO: Sir, again, tell you that the
6 NDAA does require DoD to have this program operational
7 within two years, and that there's not -- it's not in
8 stone yet. You are correct in your assessment. But I
9 think the significant hurdles of a Tri-Service agreement
10 on the instrument is a significant hurdle that has been
11 overcome.

12 We will be having a meeting at the end of this
13 week, in fact, with the MEPCOM center individuals and
14 others to expedite the process to ensure that -- one of
15 the hurdles is ensuring that we have a
16 continuum throughout the services -- service members'
17 career so that there's not individual instruments --
18 collecting instruments that's not connectable or mapable
19 to ensure that we can assess those individuals health
20 and look at intervention procedures.

21 MR. PARKINSON: I apologize for my
22 Tony Bennett voice today. (Unintelligible.)

23 If you look at the original charter, it was to
24 do this -- that's now 11 years ago -- as a result of
25 PGY-1, after we had done the study on the first 10,000

1 Persian Gulf War vets. I understand the difficulties in
2 doing this. But if I go back and say why have we now 11
3 years later not had implemented a standardized
4 collection process, it's probably because of an organic
5 inability in large organizations to execute good
6 solutions rather than perfect solutions smartly.

7 I would just urge the department and the
8 services to look, yet again, at 11 years history, as
9 best I can tell, of trying to have something that's good
10 enough that is not subject to interservice variations.

11 We just came from -- the first visit I went
12 down to Locklin, after many years of being out, and the
13 real issue is can we get it down by the commanders who
14 wear the funny looking hats? Have we backed them into
15 the process at the beginning of this process so they
16 expect this and it's not a surprise, even now it's in
17 statute in NDAA? So I would ask that part of what we do
18 collectively is to say how can we do this better, faster
19 is to analyze almost in a case study in the past 10
20 years where this has been and map it out. Because I
21 agree with Dr. Ostroff that this is a case study of what
22 DoD does not do very well. It happens kind of again and
23 again in a way that I think we should all learn about
24 the process and hopefully establish some simple
25 accountability.

1 One of my old bosses, General Rodin, used to
2 say, who has the monkey? Who's responsible? It's not a
3 committee. It's not an integrated product team. It's
4 not a Tri-Service working group. It's got to be an
5 accountable individual to make sure this happens over
6 time.

7 So in order to be critical, it's just
8 reflective, based on my experience, and feeling
9 passionately that standardization is something good
10 enough to move forward, is something most of us are
11 looking for.

12 DR. OSTROFF: I would fully agree with you.
13 As I said, we literally spent virtually the entire
14 meeting here in San Diego a couple of years ago,
15 including going over to the Marine recruit depo, watch
16 it be administered. The Marines seemed to have no
17 problem getting this thing administered in their very
18 difficult training schedule. The problem was precisely
19 as you identified, which is that each of the services
20 wanted to try to implement this in slightly different
21 ways. Those ways had to do with the questions that were
22 being administered and the way it was being
23 administered.

24 Some of them wanted to do it on pieces of
25 paper. Some of them wanted to use PDAs. Everybody was

1 doing it differently. We were adamant that in order for
2 this to be functional and feasible it needed to be
3 standardized, and it needed to be done the same way.
4 And there were lots of pilots that showed that it was
5 absolutely feasible.

6 So the issue at that time was getting it
7 finalized and using it. And, again, it's a little
8 disappointing that now, several years later, we haven't
9 made more progress than we've made.

10 MR. RUBERTONE: I think, Mike, it's not that
11 our bureaucracy doesn't know how to accept a good
12 solution as opposed to a great solution, it's that we
13 continue to think that a group of individuals, like the
14 JPMPG, who meet once a month, are flooding our e-mail
15 accounts with information is going to solve this
16 problem. It's not. Someone is going to have to appoint
17 an agency or a group -- an organization to say, You're
18 in charge.

19 Last I heard there is still no one in charge
20 of the RAP program. It's also clouded by the fact it
21 started out in a research modality and didn't really
22 make a good transition to an operational capability. I
23 think these issues need to be addressed if they're going
24 to have any success. I think someone needs to be held
25 accountable by saying, number one, you are accountable,

1 and then hold them accountable.

2 MR. GAMBLE: I kind of agree, but I think one
3 of the key things in doing this is we need to take it
4 out of medical context and put it into the commanders'
5 realm. They make it a commanders program. The
6 commander's responsible for getting this done, much like
7 when doing a lot of things, like predeployment surveys,
8 and so on and so forth. When they first started coming
9 out, it was visioned as a medical issue, not a
10 commanders' deployment readiness issue. And if we do
11 that, I think we'll get a better response on a great
12 project like this.

13 COL. GIBSON: I just wanted to give a little
14 bit of that history in the last little bit that
15 Dr. Parkinson was talking about. The champion and --
16 Mark, I don't know whether you call that the person
17 accountable -- but the champion for this project has
18 been the folks at clinical and program policy at health
19 affairs. Those of who you were here at that meeting --
20 and this echoes Dr. Ostroff's comments. What we had
21 across the services was a general disagreement on how to
22 move forward. And it took a considerable amount of
23 effort to bring those folks within each of the services
24 together just to develop that concept of operations.

25 When we started looking at the instrument

1 itself, which I thought was the next big step, what we
2 found was the instrument that we were using in our
3 pilots did not map well to the other instruments, which
4 was one of the recommendations from the Board. And a
5 lot of those questions had never been validated nor were
6 they from validated surveys or validated instruments.
7 So what we did was, as a group, went back and took it
8 apart and tried to make it so each of those questions
9 and areas, domains, were mapable. And that's taken a
10 considerable amount of time.

11 I can tell you, at least my experience, if you
12 bring that work group together and allow them to look at
13 this tool, they will never get done. So I do agree that
14 we reach a point where it's good enough, let's go, and
15 move to the next step, which is to finish the policy
16 part of this issue and to make it a commanders' issue as
17 well to get it deployed.

18 DR. OSTROFF: Now you've got Congress telling
19 you to get it done. I personally thank them for that.
20 But I would argue that surely this can be
21 operationalized in a shorter time frame than two years.
22 And so whose responsibility is it to make sure that
23 there's a specified time frame and that it actually
24 happens? It shouldn't take another two years to pilot
25 this and pilot it, as Mike Parkinson said, for 11 years

1 now.

2 MS. EMBREY: I want to thank you for the
3 constructive criticism. We will take this information
4 back and do something important with it. I think you
5 need to look at the RAP in the context of changes that
6 are going on in how we're addressing force health
7 protection in general. We have just issued a force
8 health directive which identifies and specifies through
9 policy requirements for annual health assessments. So
10 it's every year throughout their career, in addition to
11 the pre- and post-deployment requirements, in addition
12 to the ongoing visits that individuals do for
13 occupational certifications and other things. So the
14 RAP is the first piece and a very important piece, but
15 it's a continuum of care and assessments.

16 The issue that was to the Board on this topic
17 was about what is a health assessment and what is a
18 physical examination, which is what's required in law,
19 and is sufficient to be able to get good epidemiologic
20 data for a long-term career analysis on the effect of
21 service on health. There is still -- is no good
22 definition of what a health assessment is and what it
23 should be and how that differs from a physical
24 examination. And we got beat up several times in
25 Congress for not doing physical exams on everybody.

1 What we really needed was a group of outside
2 experts to advise Congress and us on what constitutes an
3 appropriate screening and assessment. That's what we
4 were seeking. Our doctors are pretty good at doing
5 assessments. But the question is: What should we
6 routinely be doing in a uniformed way?

7 The issue of collecting data has to do with
8 the information technology that supports our system. We
9 have not enough dollars to implement that system as
10 quickly as we like. We have CHCS. And we're moving to
11 CHCS-2. And CHCS-2 provides a mechanism for us to
12 collect a central data repository on a person's medical
13 record throughout their career in electronic fashion.
14 The current deployment date for CHCS-2 is 2007. So as
15 much as we'd like to implement an electronic capability,
16 we don't have the mechanism or the funds or the
17 resources to make sure that will happen system wide
18 until that whole system is implemented.

19 So what's important now is that we have the
20 discipline and the business practice to collect that
21 data in whatever form that we can and then move towards
22 the electronic, which is probably 2007, which is,
23 coincidentally, what Congress directed us to do. So it
24 will work out just fine.

25 MR. PATRICK: I'd like to follow up on that,

1 and I'm wondering if we can make this an actionable
2 step. I see the two being integrally related. And
3 we've had periodic updates on the CHCS system -- I might
4 be getting the acronym wrong -- but the computerized
5 medical information system. And I'm wondering if we
6 can't, as a Board, get a regular update on that coupled
7 with, perhaps, how the RAP is being factored into that
8 and, in part, used as a sentinel mechanism that really
9 is the proof of concept of how well that works. I think
10 as a Board, perhaps having the person -- the individual
11 who is responsible for the integration of those two
12 things present to us on a regular basis so -- part of
13 what this meeting is about -- can really move it to the
14 more -- pulling it out of the mist that Mike is saying:
15 What's really happening? Can we do a retrospective case
16 study here and really put it into the present moment?

17 I was partly responsible for developing the
18 RAP recommendation. To my mind, they were very closely
19 aligned. The RAP will not work unless it feeds into a
20 very functional data system. 2007 seems like it's a
21 long way away. It's really not that far away. I think
22 it would be real, real nice to get an update -- and
23 maybe this is the issue of who is responsible? Who can
24 we ask to come to the Board to present who is
25 responsible for integrating making that happen well

1 together?

2 DR. OSTROFF: One last comment.

3 MS. PUFAL: CHS has choosed not -- employed by
4 the reserve components -- how is the reserve component
5 going to play into that record?

6 COL. GIBSON: With respect to the RAP?

7 MS. PUFAL: Once the reserve member goes on
8 active duty, their medical record is captured
9 electronically. They come off of active duty back into
10 the reserve, their record is no longer kept
11 electronically. So anything happening in this time
12 frame of reserve component is not fully captured. They
13 come back on active duty, you only have the active duty
14 records, not anything that has happened on their reserve
15 time.

16 COL. GIBSON: I can answer part of that. I
17 think that Colonel Cox can answer the other part. With
18 respect to the recruit assessment, the baseline product,
19 all of the reserve components will go through some sort
20 of assessments-type training, so we would have an
21 opportunity to collect those data on them at that time.

22 And I'll turn that over to Colonel Cox. I
23 believe he has the stick for the other part.

24 COL. COX: It's a small stick. But to answer
25 the question in a general fashion, I think the goal of

1 what we're doing with all of these various assessments
2 that have been discussed -- whether it be the RAP; the
3 annual assessment, which was previously referred to as
4 the here, and now it's proposed to be the there -- and
5 then the -- all of these in-depth -- going back to the
6 issue of we need to apply them equally to active duty as
7 well reserve component personnel and as no CHCS/CHCS-2
8 or any DHP, the defense health program of funded
9 resources are available to the reserves. That's always
10 a challenge.

11 And so our goal and our solution for these
12 surveys is to install them on a web-enabled system such
13 as Tri-Care online, and that is already established for
14 the annual survey tool. Although we need to finalize
15 the exact set of questions that will best support the
16 reserve components.

17 And, similarly, the RAP can be administered
18 through that, and we already have electronic versions of
19 the pre- and post-deployment.

20 The resourcing issue is what it comes back to.
21 So our challenge has been, in Ms. Embrey's office, to
22 encourage the services to recognize the importance of
23 the reserve components. And that, in general, all we're
24 talking about is electronic data storage, which is
25 relatively cheap. So we're hoping that the services

1 will continue to offer that. So all that information,
2 whenever it is collected on reserve components, will be
3 in the central data repository and central data
4 warehouse and available to create an ever-extending
5 medical record for those individuals as well as to the
6 -- the participated studies and investigations.

7 DR. OSTROFF: Thanks very much. Some of these
8 issues I would consider to be speed bumps, and some of
9 them are probably significant obstacles that -- I would
10 argue that none of them are insurmountable.

11 Since it's getting closer to 2007 as we sit
12 here, I'm going to take the moderators prerogative and
13 move on to the next presentation. We have
14 Colonel Stanek giving us the update on the Army.

15 COL. STANEK: Good morning. Thank you, sir.

16 My update will be probably shorter than
17 Colonel Ruscio's.

18 I want to give an update briefly on the
19 Leishmaniasis cases. When I briefed this last time, we
20 showed the chart which showed the increase of cases that
21 happened toward the end of '03 and then it tapered off
22 into '04. And we were saying we hope it stays down that
23 way, and it doesn't climb back up. And we thought what
24 we were seeing was actually due to the life-support
25 conditions in theatre. I think I redid that chart.

1 If I could have the next slide. This was the
2 chart that I showed last time. And you can see on the
3 right-hand side that -- the tapering off of the numbers.
4 And what I can report is that in the last three months,
5 since our last meeting, the number of cases, I believe,
6 for September was seven, and then for October it was 12.
7 So we aren't seeing the spike that you saw in
8 November/ December of '03. That hasn't occurred. And
9 we do, in fact, believe that is because of the living
10 conditions that the soldiers are in now.

11 They're in the more mature living conditions
12 -- in these built-up areas, living in structures, and
13 not so much out in tents or in the field settings. So
14 we're hopeful we will continue to have a relatively
15 stable number, and maybe this number will taper off.
16 That's being reported.

17 The other thing I wanted to comment on is the
18 influenza control program. Colonel Ruscio gave a good
19 briefing on the status of the program. All the services
20 are working together to make sure that we are working in
21 sync in terms of how we're using our vaccines. The Army
22 is immunizing in accordance with the policies and the
23 guidance.

24 But a couple other things I wanted to talk
25 about with respect to the influenza control program and

1 other outbreaks -- we went out to the different
2 installations and specifically asked for them to review
3 their local response plans. Earlier in '04 there was a
4 significant amount of activity and request for
5 information to the installations on what's your SARS
6 plan? How are you going to deal with SARS? And it was
7 very SARS specific. We went back out to the
8 installations and said, We need something to do deal
9 with pandemic flu. And through some of the discussions
10 we were saying how you're going to respond -- whether
11 it's SARS or some other flu or some other infectious
12 disease outbreak -- a lot of those things are going to
13 be similar. So you need to develop your plan and then
14 be ready to respond accordingly.

15 One of the following things we did was that
16 the installations, the military muscle, the Army
17 facilities were told to send those plans back to the
18 regional medical command and to Army medical command for
19 review by the operations. So they could see --
20 actually, they do have a plan in place. And those plans
21 are going to be reviewed not only by the operators but
22 also by some of the preventive medicine individuals, not
23 so much to approve the plan as to say, Well, have you
24 guys thought about this because the other installation
25 is dealing with this situation? You might want to

1 consider that. Obviously, all the installations are
2 going to have different things to deal with depending on
3 the size of their support structures and things like
4 that. So we're getting those plans into the operations
5 -- we'll be looking at those over the next couple of
6 months.

7 Another thing that we went forward is an
8 identification of a public health emergency officer.
9 And every installation or every NTF was asked to
10 identify a public health emergency officer. And this
11 was an individual -- or is an individual who is supposed
12 to be able to give public health advice or be the
13 primary point of contact for public health issues on
14 that installation. There was some variability in who
15 was appointed. And by appointing we were saying this
16 individual needs to be named and put on order so they
17 know they are the individual who holds this title.
18 Obviously, one of the things you don't want is the phone
19 to ring and someone says, By the way, you're the public
20 health emergency officer, and we have a public health
21 emergency. We need the person to know ahead of time.
22 There was some variability. Sometimes on some of the
23 installations it's been identified as the senior medical
24 officer, which in many cases is the hospital commander.
25 In other cases it may be the installation preventive

1 medicine officer.

2 One of the things that we're looking at is to
3 make sure there is commonality in terms of definitions
4 of who's the medical public health emergency officer
5 because some of the installation side of the house,
6 individuals who run the installation, use the same term
7 to apply to people who take care of installation
8 situations, and they aren't necessarily a medical
9 person. So we've had different names showing up from
10 the same installations, and we're working to deconflict
11 that a little bit.

12 There has also been a question in terms of who
13 can actually serve in this capacity. There are some
14 smaller installations which have a contractor run --
15 contractor operated medical support facilities. And the
16 question comes: Can a contractor serve as a public
17 health emergency officer? And we're working through
18 that. Most often was -- actually what happened is the
19 individual being identified to serve in that capacity is
20 the nearby military medical person who provides
21 oversight or support to that installation.

22 It's an important concept. But also the
23 person at the higher level of installation who has
24 oversight needs to know, by the way, he's not just the
25 THEO for the installation where he resides, but he also

1 needs to be familiar with the -- what the situation is
2 at that local -- or at that smaller installation where
3 he'll provide support and guidance.

4 Being a public health emergency officer goes a
5 little further than simply providing answers to
6 questions. The individual should really understand or
7 be aware of what the local community and the local
8 support structure can be in -- if an emergency --
9 public health emergency, happens at the installation,
10 how they would need to interact with the local people,
11 the local medical resources. So it's not simply being
12 able to answer the phone.

13 One of the things we're having with all of the
14 names being given to us is that when we start to
15 disseminate information, specifically in the public
16 health emergency topic, we will know exactly who to send
17 this information to in terms of things to review, things
18 to be aware of because it's going to be different from
19 every installation. We need to make sure we share a lot
20 of information and guidance to make this easier.
21 There's no sense in reinventing the wheel.

22 Now, like I said, I didn't have a lot. Those
23 are the two subjects that I wanted to talk about.
24 That's all I have

25 DR. OSTROFF: Let me open it up to the Board

1 for questions or comments.

2 DR. HERBOLD: Let me get down to a particular.
3 Who do I call in San Antonio, Texas at Fort Sam
4 Houston?

5 COL. STANEK: I don't have that list with me,
6 sir.

7 DR. HERBOLD: So let me back up. Would it be
8 the office of the installation commander -- post
9 commander, or would it be Brook Army Medical Center, or
10 would it be the community health nurse that I sit on the
11 emergency response group with, or would it be the
12 commanding general? That's just one instance.

13 COL. STANEK: This is -- actually reinforces
14 the point of identifying our saying, You need to have
15 individuals who are identified at each installation.
16 And it goes beyond knowing that they have that title.
17 They need to know who sits in local capacity -- the
18 county health officer, the county health commissioner,
19 or whatever the title is. They need to know each other
20 and have each other's phone numbers so whoever's in that
21 area would know who to call. So we don't get into that
22 exact situation.

23 DR. HERBOLD: So just to ask you rhetorically,
24 in all fairness to you, who would I call at Fort Sam
25 Houston?

1 COL. STANEK: What's the question, sir?

2 DR. HERBOLD: Who is the monkey for being the
3 local public health emergency officer at Fort Sam
4 Houston?

5 COL. STANEK: I would -- at this point, not
6 having seen or remembering whose name is on that list, I
7 would say probably calling the bantee of the commanders'
8 office.

9 DR. HERBOLD: So you think it might be the
10 Army medical center versus someone who has authority
11 over the actual geography of the installation, which is
12 part of the issue that we're wrestling with on the
13 defense science board for quarantine?

14 COL. STANEK: That's exactly the point. The
15 individual who is identified as the public health
16 emergency officer is often the senior medical person on
17 the installation. Certain installations -- you know,
18 Fort Sam, having several senior medical people that make
19 it kind of cloudy -- but specifically, you know, I would
20 say call on his office or the command suite, and they
21 may say the person that has that title is the chief of
22 preventive medicine or someone else. I know there are
23 some posts that do have a hospital commander, flag
24 officer who has been identified as public health
25 emergency officer. I can tell you also you can be

1 working very closely with installation preventive
2 medicine officers.

3 DR. HERBOLD: Just one follow-up, if I may.
4 On the civilian side I have one-stop shopping. I can
5 probably go across the United States, and I can go to
6 the county emergency operations center and find out who
7 has that monkey. But my point is that I can't for the
8 Department of Defense.

9 MS. EMBREY: You should be able to. There is
10 a directive that has been issued out of my office two
11 years ago, specifically, to do that. And each
12 installation commander is responsible for designating a
13 bellybutton for that purpose.

14 DR. HERBOLD: So, Ma'am, who do I call?

15 MS. EMBREY: You have to call the installation
16 to find out. Now, technically that individual should
17 have contacted you. So maybe you're not the
18 bellybutton.

19 DR. OSTROFF: I won't go there. Let me just
20 -- I don't want to gloss over the Leishmaniasis because
21 I think it's very, very impressive. Whether it's -- I
22 think it's probably more than just changing the housing
23 structure. I think there was a very concerted effort
24 here to address this problem. And my hat's off to a lot
25 of people who did a lot of hard work to take care of

1 this because it looks like it's a major success. So
2 congratulations to you and your colleagues for
3 addressing that problem.

4 One question I do have about the public health
5 emergency officers: Is that -- other than getting a
6 designation, are they actually doing exercises to assure
7 that they can adequately fulfill their role?

8 COL. STANEK: Part of the issue of identifying
9 the individual who's the public health emergency officer
10 is also making sure that they know what they need to do
11 in various events or circumstances. The question has
12 come up: Do the individuals need specific training to
13 do their job? Is there some sort of certification that
14 says this is the individual and this is what they know
15 how to do? We're in the early stages of discussing what
16 those people need to do or how someone would be
17 considered trained as a public health emergency officer.
18 It may be not much more than these are the checklists,
19 that these are the things they have to accomplish so
20 they know if something happens they can go to this
21 resource.

22 I think it does need to be exercised. It is a
23 little bit difficult to do top down considering the
24 number of installations that we have, and each one is
25 different. There is, I believe, a comment in the

1 DoDD that talks about PHEOs -- that specifically states
2 they should be incorporated into the installation
3 emergency drills and exercises. But that's not
4 something, I believe, that is being driven from our
5 level down towards the installations. They need to
6 incorporate that at the installation level.

7 MAJOR DENNISON: I'm actually an Army officer.
8 I can tell you in specific, absolutely that they were
9 working the State and County of Honolulu getting the
10 Aloha Bowl, the major football stadium in Honolulu as --
11 they work their emergency preparedness plan.
12 (Unintelligible.) This person was identified. In that
13 case it was Colonel Wasserman.

14 In the State of Virginia recently there was a
15 drill for a coup. And several of the respective
16 installations were involved in that exercise, various
17 degrees, again, exercising their emergency preparedness
18 plans. The doctrinal Army answer for this would be in
19 -- for Fort Sam Houston because you have Air Force and
20 Army interest -- but for the Army issue this is a
21 Garrison commander function. He receives all of the
22 medical-type support like this from the regional medical
23 command. So whoever the chief of preventive medicine is
24 under EPP would be the default unless there's specified
25 to be someone other than that. So that would be the

1 doctrinal answer. And they should already be working
2 with the city on EPP-type issues.

3 COL. STANEK: If I can comment a little
4 further. One of the issues we found out is when we got
5 names of individuals who were identified for different
6 areas, we had one individual who was identified -- who
7 covered a large geographic area. He was the individual
8 for multiple installations, which overarching that may
9 be helpful for him to be identified as knowing that's
10 going to come up his way. But there still needs to be
11 an individual on the ground at the local installation
12 who knows -- who's familiar with the local public health
13 department and who can serve in that capacity locally.
14 Because if something is happening at one installation,
15 it's probably not just happening at that installation.
16 So there needs to be someone at each of the ones. And
17 we pointed that out, and then they came back with some
18 other names.

19 COL. GIBSON: Just to add a little information
20 that Dr. Herbold brought up, on the Defense Science
21 Board Task Force for Quarantine, one of their
22 recommendations was to exercise with the local
23 community. And exercising on base within ourselves and
24 these types of problems is not going to solve it. It
25 has to be exercised with the local community, which by

1 -- in itself gives you those names of who you need to
2 contact on the base, et cetera.

3 COL. STANEK: We've had some people ask us
4 about that. And we've said the same thing. When you
5 work those details out locally, you're going to have to
6 sit down with the local public health department and
7 figure out how you're going to do that. That's
8 something -- the specific details of that can't be
9 driven from the level of OTSG. That needs to be --
10 that's why you need to have that guy in your Rolodex --
11 so you know exactly who he is, and you know what his
12 basic plan is, and you could work those issues
13 quickly.

14 DR. OSTROFF: Or she.

15 COL. STANEK: Or she. Thank you, sir. I
16 stand corrected.

17 DR. OSTROFF: Last comment.

18 MR. LEDNAR: I guess -- just listening to this
19 discussion and thinking back to what happens in global
20 corporations, just the fact that talking about it is
21 actually a very helpful first step. So I applaud you
22 for that.

23 The whole culture of clarity of who is the
24 person responsible is very important. But next week it
25 may be a different person. So again, part of the

1 sustainability of this plan is it's not dependent upon
2 today the person knowing, but next week they're in a
3 different assignment and different location. So the
4 whole process of being able to support this plan,
5 despite the fact people are moving, is really important.

6 I guess one other concept we've encountered is
7 a term called "siloed globalization." That is -- in
8 this context it may be that the Army is talking with
9 itself throughout the world, but in San Antonio, Texas,
10 the Air Force is talking with itself up its chain and
11 it's not horizontally connecting. So that silo is, in
12 fact, an obstacle. Some of these responses will clearly
13 be one that have to be global in the silo. These issues
14 can also be a local community issue which then has to be
15 horizontally connected.

16 MS. EMBREY: Just so you know, for your
17 information preparedness to deal with, especially
18 bio-medical issue threats here in the U.S., we have
19 initiated an initiative to evaluate what we call
20 "community based preparedness," which involves all
21 components of the federal government working with all
22 components of state and local entities that have a
23 responsibility with respect to this. This would involve
24 V.A. It would involve CDC, any federal component that
25 has a capability that would touch on public health.

1 This is a model that we're evaluating right now. We're
2 going to be piloting it in the next several months.

3 Community bases planning is, I think, the best
4 way. It brings a new definition to media response.
5 Federal government doesn't need permission from everyone
6 to respond to a local incident. And this is the idea
7 that we're testing out. It's very important. I think
8 it will be very timely. It will probably generate a
9 series of gaps in capability that we have not been aware
10 of. And it will be the first step, in a very long set
11 of steps, necessary to build a public health
12 infrastructure and private infrastructure that will help
13 us deal with medical challenges as we move forward.

14 So we are in our baby stages of this model,
15 and we are working very hard to come up with a couple of
16 sites. But it is something that we believe strongly is
17 the proper way to go.

18 DR. CATTANI: I hope that when you do this
19 you'll look carefully at the experience of the
20 metropolitan medical response system, which was funded
21 by the Department of Justice. Because in some
22 communities this has been excellent, and in other
23 communities it's failed totally. But in the Tampa Bay
24 area, it's been very effective and has addressed many --
25 we have don't have an Army base there, but we have an

1 Air Force Base. It's worked very well at bringing the
2 -- in fact, we have a public health commander at McGill,
3 and she attends every one of the meetings.

4 So before implementing a new model, it would
5 be important to look at some of the successes of this.
6 And just because it was funded by DOJ, it was kind of
7 out of the mainstream of the DoD and HRSA and all of the
8 other agencies. So keep that in mind, because there
9 were some successes in that.

10 MS. EMBREY: All we're trying to do is take
11 what is already there and make sure all the pieces in a
12 community are talking to each other, inventorying,
13 planning, identifying what their population at-risk is,
14 how they intend to approach it together in a logical,
15 local way rather than waiting for the President to
16 declare an emergency and watch money and things flow
17 into an area that is little prepared to handle it.

18 DR. OSTROFF: Sounds like a very positive
19 step. And I think as Dr. Cattani has pointed out, it
20 will be very successful in some locations and will be
21 not so successful in other locations, as is generally
22 the case.

23 Thanks so much for the presentation. Took a
24 little longer than you thought, but we're pleased by the
25 information.

1 Let's move on to the next presentation, which
2 is Commander McMillan, and this is the update for the
3 Marines.

4 CMDR. McMILLAN: Good morning everyone. What
5 I want to do today is just talk to you about kind of the
6 current status of the sports medicine injury prevention
7 program that Smith -- that was begun a little over a
8 year ago. This was -- has been funded. It was
9 presented for additional funds. This is a line-owned
10 program. This has nothing to do with the Navy medical
11 side. This is strictly one we sold to the line. They
12 own it. They control it. And sometimes that makes it
13 interesting for us trying to look at it and work over
14 their shoulder.

15 The second area of prevention -- as a quick
16 reminder or update for people that weren't familiar with
17 it, in an effort to try to reduce injuries at the
18 recruit training level, we incorporated athletic
19 trainers into the different training battalions. Their
20 primary idea of what they do is to provide physical
21 therapy-type training to go out where the recruits are
22 performing the training, to intervene when a recruit is
23 doing something with maybe poor technique that might
24 lead to an injury, to look at the type of training
25 that's being done, to be able to predict types of

1 activities that might lead to overuse injuries, and to
2 try to work with their line units because they belong to
3 those line commanders, to try to look at changing some
4 things in the way they do their training to avoid such
5 injury. So we're trying to change some of the training
6 protocols, which is not a small thing for the Marine
7 Corps.

8 This is just a quick graph. It's a snapshot
9 of some numbers. The female recruits are probably where
10 we can make our biggest headway. That's only one group,
11 one battalion, at Parris Island -- that's where all the
12 female recruits for the Marine Corps are trained, put
13 through about 1,000 at any one time as they rotate
14 through. As you see, they're down to about a 72 percent
15 -- was the low for the early period. During the summer
16 of '03 is when the Smith program was slowly -- stood at
17 the different ones. There was a trainer at each
18 location. They had to develop -- to create a training
19 space for them to work in and had to get equipment.
20 There's a lot of issues, that I won't go into here, that
21 slowed this process down.

22 Now, to look at the male side, for the next
23 slide, they had a higher overall completion rate
24 compared to -- remember about a 72 percent for the
25 females. They're all averaging over 90 percent. Still

1 showed a little bit of improvement.

2 One of the areas that was of real concern was
3 what they'd call for the recycle. Once a recruit has a
4 severe enough injury that they actually have to take
5 them out of their training group and put them aside for
6 some physical rehab, some healing, you might say, the
7 return rate had been pretty low for that. So that's one
8 of the big areas that we've actually seen. In fact,
9 another interesting anecdote, you might say, is we've
10 seen a similar curve as this for those who have been
11 separated or are stopped training and sent home due to
12 physical injuries versus administrative requests to
13 leave. We've seen a complete flip-flop in that. It
14 used to be about 80 percent would go home because of
15 --they had a physical problem. Now it's about 80
16 percent are going home because they say, I don't want to
17 do it anymore.

18 Basically, these athletic trainers are able to
19 say, Hey, I can keep sticking your butt in that ice
20 water, and we'll get that ankle feeling better. And the
21 guy says, I've had enough. I don't want to do this
22 anymore. That, in itself, has been an interesting
23 evidence to this. For the males the trend was pretty
24 flat and has stayed pretty flat.

25 One correction on this, this is '03, '04 as

1 the time period here, but this is at the follow-on
2 command. So they have four months of training at the
3 recruit depot. Some of the theory was, Well, they get
4 these kind of minor injuries that -- they're so focused
5 to get through this process that they don't really want
6 to go in and report something because they get kicked
7 out to this recycle group. So a lot them were
8 essentially continuing on despite chronic-use type of
9 minor injuries. But when they get to the secondary
10 training, later on is when these would become evident,
11 and we would start losing people there. There's about a
12 4- to 6-month lag here. There are some problems with
13 this data that when we compared year to year we're
14 really not even comparing similar groups because some of
15 the requirements change throughout.

16 And as I mentioned, as they look and go, you
17 know -- one example is that the Marines started the
18 martial-arts training. And, you know, after a while of
19 where you have a guy standing and you kick his legs out
20 from under him, they started noticing that a lot of guys
21 started complaining that that was hurting their knees.
22 So they kind of quit that. So that changes. And so, of
23 course, that will put some spike in it and -- because it
24 doesn't change universally and globally everywhere all
25 at once, so we can put a spike there so we can say this

1 is where we stop doing that one. But there has been an
2 overall trend downward in training. So this may be a
3 reflection of some underlying changes and efforts in the
4 primary prevention that we're seeing as an overlay on
5 the rest of this. I still think it's a good deal
6 overall.

7 The next slide -- of course, for the Marines
8 they really want to know -- we don't want to be too easy
9 on them. And that's been the real thing that's been
10 going on all along. At one of our officer candidate
11 schools, the injury rates were coming down. The
12 physical fitness scores were staying steady. And we
13 thought, Hey, boy, that's great evidence. Well, the
14 drill sergeants got together and said, We're not being
15 tough enough on them; so they fixed that. But,
16 basically, we're maintaining physical rating. It's
17 physical training. And so, at least along those lines
18 with reducing injury, we're kind of maintaining that.

19 Just as a quick look at -- category of injury
20 -- of course, what we would expect. A lot of these are
21 just -- we have to categorize as overuse injuries. The
22 one fell off the log and hurt his knee or his arm where
23 you have a very point-related time reference to relate
24 that injury to, still pretty good over a quarter of
25 those. But then we're -- just the recurrence stuff is,

1 by what we expected, the largest number we see in the
2 next slide. Of course, a lot of them are the milder
3 injuries, and this is right in the bailiwick for these
4 athletic trainers. These athletic trainers work very
5 closely with the sports medicine clinics. But these are
6 Navy medicine clinics. There's a lot of work with them.
7 So the moderate and severe injuries are pretty much then
8 referred over for them.

9 I think I'll end it here for the sake of time.

10 Any questions anybody has?

11 DR. OSTROFF: Thanks very much. This is just
12 terrific news to see data supporting the success of this
13 endeavor, and so congratulations.

14 Again, for those of you who were here the last
15 time in San Diego, one of the things that we did while
16 we were over at the Marine recruit training depo was to
17 go by and see the facility that was being set up at that
18 time. So it's nice to see that it's being successful.

19 Assumedly, if I was to go over there this
20 afternoon, I would see fewer people marching around on
21 crutches?

22 CMDR. McMILLAN: Depends on what their
23 training schedule is at that particular time.

24 DR. BAKER: I'd be interested to know whether
25 when a recruit is injured, is there a specific place to

1 record on the -- at the -- by the medic or whomever as
2 to exactly where they were and what they were doing when
3 they were injured?

4 It was several years ago when I was at the
5 group at Paris Island. I remember noticing there were
6 some places where if a recruit fell and landed in water,
7 which was fine, and there were other places if he fell
8 he'd land on a wooden log or something. I wonder
9 whether there is an opportunity to analyze data which
10 show exactly what part of an obstacle course might be
11 creating problems.

12 CMDR. McMILLAN: They have an excruciatingly
13 complex list of all the activities broken down, as you
14 mentioned. You know, whether it's the rope swing or the
15 log climb -- and for the traumatic injuries that works
16 very well where they go, Yeah, I slipped, I fell, and
17 bang, and that was the injury. But so many of them come
18 in and they go, Wow, I ran the obstacle course
19 yesterday, and now my shoulder's killing me. Well, what
20 was it that did it? And that's where, at least from my
21 perspective of -- the exercise physiology comes in of
22 looking at some of these things and saying, You know, I
23 would expect that to be tough on a rotator cuff. And
24 then when you see a lot of injuries that aren't really
25 specific, you may have an idea of where you can work

1 that out.

2 But going back -- and like I said, the
3 traumatic stuff is often accidental. So it's tough to
4 try and say, Well, yeah, when it gets wet, it gets
5 slippery. We don't want it to be wet. But those are
6 difficult.

7 But, yes, to answer your question, they are
8 tracking it for the ones that are trackable.

9 DR. BAKER: And doing something about it?

10 MR. McMILLAN: Yes, ma'am.

11 COL. WHITE: This may seem like a dumb
12 question: But what is the difference between these
13 physical trainers and the people that normally oversee
14 physical training in the Marine Corps? I maybe just
15 don't understand the system. Who normally would do it?

16 MR. McMILLAN: Nobody.

17 COL. WHITE: You mean a drill sergeant
18 would --

19 MR. McMILLAN: He's the guy overseeing it.
20 But he has a different perspective as far as what's he's
21 trying to accomplish. So what these guys are are --
22 they're the experts at this side of the -- like I said,
23 the mechanics, ergonomics, and physiology to try to look
24 at it, predict it, and give him some feedback. And
25 because that -- even though it's a civilian athletic

1 trainer in the contract to that unit, the integration
2 has been really remarkable.

3 And, in fact, one of the big success stores is
4 because -- maybe I shouldn't say this with the reporter
5 going -- but the drill instructors are superman. They
6 are not seen by the recruits doing anything other than
7 being completely squared away and right there all the
8 time. You know, they don't sleep. They don't eat. And
9 they certainly don't go to seek medical care where
10 recruits could see that. And so these athletic trainers
11 have been able to work some little sidelines to take
12 care of these instructors -- off to the side and keep
13 them going because they're not superman like they want
14 to be. And so that camaraderie and that association has
15 really been great at getting that two-way communication
16 going and getting them as critical resources for these
17 guys.

18 COL. WHITE: The reason I'm confused is --
19 certainly in the Army in the U.K. we have a specific
20 corps of -- Army -- physical training corps, and we have
21 physical trainers attached to every single unit. And if
22 we're doing -- overseeing major physical training
23 programs, but even for doing minor things like do basic
24 fitness runs, they have to be supervised by someone
25 who's been trained in an Army physical training corps

1 approved course. So a drill pig, as we call them, could
2 never go out and supervisor physical training ever.

3 MR. McMILLAN: We always had oversight for the
4 guy who dropped dead. But for the guy that maybe
5 strained his knee, no.

6 DR. LAUDER: First and foremost, I'd like to
7 congratulate you on this because this is hard to
8 implement in a civilian sector in a variety of places
9 that I've worked. Secondly, I want to follow up a
10 little bit with what Sue said and a comment that you
11 made.

12 It's, you know, always easy to look at the
13 traumatic injuries and say where it happened and where
14 it occurred, but you brought up a good point when you
15 said the real issue is the physiology. Now that you've
16 gone this far, hopefully you'll be able to look at the
17 types of injuries occurring and look at the training
18 regimen to try to match up what types of injuries could
19 happen, somewhat specific training modalities, and carry
20 your data a bit further. I think that's the next step.

21 I suspect you probably haven't had time to go
22 that next step yet, but that would be the next step that
23 would be very important to make important changes.

24 MR. McMILLAN: Absolutely. That's really my
25 pet project, you might say. Because I believe that's

1 where we can go next. It's a matter of we have to get
2 their feet firmly planted where they're at now, and then
3 we can start moving in that direction better.

4 DR. PATRICK: I too think it's a terrific
5 program. It's a great example of how to sort of put
6 prevention into practice.

7 What I'm wondering is what happens -- these
8 are recruits. Is this sort of thinking being put into
9 how medics and others are actually dealing with deployed
10 active duty individuals? This is just a very narrow
11 time window, if I understand correctly, to get people up
12 and out. But it seems there is a real persistence issue
13 with respect to this with all the forces out there. So
14 how is this being maintained and sustained?

15 MR. McMILLAN: This is kind of a
16 proof-of-concept operation. It makes sense to everybody
17 who knows about this stuff. But to prove it to the
18 Marine Corps that it's a value to spend money on this
19 rather than developing a piece of protective gear or a
20 better weapon, it's tough. It competes with those kinds
21 of dollars. And they see that as a real threat and a
22 very real benefit. So the force is -- from the
23 different Marine expeditionary forces, they want this.
24 But right now there's not funding set aside as of yet
25 for a long-term continuation even at the recruit level.

1 I believe we're going to be able to make that happen.

2 In fact, one of the things that we are looking
3 at is trying to basically take the sports medicine
4 clinics that have belonged to the Navy medical command
5 supporting Marine forces and actually create those
6 within the medical assets that the Marines own. So no
7 matter where they go in large numbers, they'll take a
8 sports medical clinic and similar kinds of stuff with
9 them wherever they go.

10 DR. PATRICK: I think there have been reports
11 in the past where there have been a vast number of
12 injuries that have occurred -- have not been battlefield
13 injuries. There've been other injuries at other times
14 which may well be preventable, associated with
15 appropriate training. So I think that's -- the Board
16 should strongly encourage the uptake of this.

17 DR. OSTROFF: Have you been able to do any
18 analysis that shows that this is cost beneficial?

19 MR. McMILLAN: Enough so they bought off on
20 continuing funding through fiscal year '05 and
21 tentatively for '06. So it was not funded through '05
22 until several months ago when they made the cut, so
23 yes.

24 DR. OSTROFF: Thanks very much.

25 Any comments? If not, we'll move on to --

1 MR. LEDNAR: This training cadre are probably
2 some of the most highly-performance oriented leaders.
3 I'm wondering how their annual efficiency ratings
4 incorporate the safety experience of producing high
5 graduation rates. In other words, is there any kind of
6 measure for the drill sergeants, for example, that the
7 training they accomplish not only produces high
8 graduation rates but is done safely?

9 MR. McMILLAN: And that's a cultural trend
10 that we're working on. It's recognized.

11 MR. LEDNAR: That's difficult work and it
12 takes time. Absolutely.

13 DR. OSTROFF: Our last presentation of this
14 session is from Commander Ludwig.

15 CMDR. LUDWIG: Good morning. Apparently
16 airport security scrambled my overhead presentation, but
17 I believe everybody has the handout, so I will just
18 proceed from that.

19 I'm going to talk about three different topics
20 -- influenza vaccination policy, methicillin resistant
21 staphylococcus aureus on another cutter, and STDs in
22 the Coast Guard recruits. As far as influenza
23 vaccination policy -- I'm on the last slide on the first
24 page. We pretty much have really been over this
25 already. I just want to skip to the last bullet which

1 is our use of LAIV or FluMist.

2 We had our first supply of vaccine -- of
3 course, was the injectable, and we sent it to our pack
4 area because we had some deploying, not troops, but --
5 well, they'd be troops once they get over there, but all
6 of our pack area was initially vaccinated with
7 injectable. But because our second group to be
8 vaccinated turned out to our land area, we were able to
9 implement a different system for them so that many of
10 our people in land area are receiving FluMist instead of
11 the injectable, which we're saving for our high-risk
12 groups. And depending on how things materialize or
13 evolve over time, we may be giving those to our recruits
14 a little bit later on.

15 We initially thought we would use it in the
16 recruits because we had the complication of not being
17 able to give other vaccines at the same time. Now that
18 that's more or less being solved, we may adjust our
19 policy. One of the things that's been hard with this
20 program -- and I don't know if it's really been brought
21 up too much -- is that it really has evolved and, of
22 course, it's evolved rapidly as we learn more about
23 different things. At first we thought we could use lots
24 of FluMist, then we found out there was this problem
25 with administering other vaccines at the same time or

1 immunizations, and then we discovered some other things.
2 And so our policy has sort of evolved and changed, and
3 that has made it kind of more complicated than we would
4 like it to be out in the field.

5 We frequently have had questions from groups
6 who think they ought to be vaccinated, and we have to go
7 through repeatedly the explanation. And then when the
8 policy shifted slightly, we had a bunch more questions.

9 In Coast Guard -- our mission is so varied and
10 so wide -- so different in so many individual isolated
11 areas that we have to take each one almost on a
12 case-by-case basis and explain to them why they aren't
13 getting vaccinated this year. Okay. That's influenza.

14 Let's go to MRSA. At the last meeting I
15 described a, quote, outbreak of MRSA on Coast Guard
16 Cutter POLAR STAR. I did make a site visit there.
17 Basically, not really to investigate any further than
18 what was already done, but to inspect, if you will, not
19 a formal inspection, but to look at the environment in
20 which this MRSA was being spread and to give the crew
21 and the command especially some information on MRSA that
22 would kind of bring them to a level of -- beneath
23 hysteria. Because the response tends to be still that
24 MRSA is a flesh-eating bacteria. And if somebody has
25 it, we're all going to get it, and some of us will die.

1 And as we all know, in this group, MRSA, when it first
2 appeared, did cause even healthcare providers to get
3 very, very worried because it was in hospital ICUs. And
4 the patients who had it were very ill, and the organisms
5 were resistant to multiple antibiotics.

6 But what we're talking about here is community
7 acquired MRSA, not that it isn't worth attention,
8 because it is. As we know, it can be fatal also. But
9 with the proper sort of approach to skin and soft
10 tissue infections, we can approach it with a little bit
11 of calmness and realize and recognize and educate our
12 people that they're going to see it and see it again and
13 again and that we can deal with it.

14 So in my handout I talk about -- on the Coast
15 Guard Cutter MOHAWK, the first report I got was 11 cases
16 out of a crew of approximately 100. This was over six
17 months and two deployments. One of the cases had to be
18 medivaced, or was determined to need medivac, to a
19 hospital facility and then, subsequently, had something
20 like 26 days lost duty time. Now, this person that lost
21 duty time was not completely due to the infection
22 itself. But because of that, a report -- a mishap
23 report was sent that hit our message board and was
24 noticed immediately by our chief of staff and then the
25 commandant of the Coast Guard. And so there was Coast

1 Guard wide attention paid to MRSA.

2 Without going into more detail on the
3 outbreak, except there was only one laboratory confirmed
4 case of MRSA, there were several nasal swabs positive
5 but no skin infections. I did draft -- and it's
6 basically ready to send out -- that gives a little more
7 education on MRSA. So hopefully it will -- the word
8 will get out to the broader group, not just the medical
9 people, that this is something we can deal with.

10 My last subject is STDs in new recruits. Last
11 meeting I promised you a slide that showed the trends.
12 Just as a review, at Cape May we do test all female
13 recruits for HPV, for gonococcus, and for chlamydia. It
14 happens at their pelvic exam for Pap smear. In 2004 at
15 the beginning of this year, we started reporting the
16 monthly frequencies, and I do have some numbers on the
17 last slide. The issues really that still need to be
18 dealt with is that the count does include nonrecruit
19 clinical cases. So anybody at Cape May who has tested
20 for any of those three organisms for clinical reasons is
21 included in the count, but we're talking about a very
22 small number there.

23 Also, male testing is not done except if
24 there are clinical indications. So there are very few
25 numbers of males in these numbers as well. These are

1 things we can sort out and change, but I was just -- it
2 felt to me like such a step to be able to finally have
3 some numbers to show you.

4 And on that slide I think you can see -- the
5 last slide -- that gonococcus is virtually close to --
6 hovers around zero, and that chlamydia is possibly a
7 little lower than -- I did start out by putting trend
8 lines on there, and then I took them off because this is
9 really unadjusted, just sort of gross frequency. But
10 chlamydia hovers around a little lower than the national
11 average or the average that has been reported in the
12 other services.

13 So that's my last slide. If there are any
14 questions, I'd be happy to answer them, I think.

15 DR. OSTROFF: Thanks very much.

16 Comments or questions?

17 DR. ATKINS: I wasn't at the last several
18 Board meetings, so you might have discussed the HPV
19 issue before.

20 When was the testing started for HPV?

21 CMDR. LUDWIG: We've been doing that for
22 several years. I can't say exactly when they started.
23 It was not reported to me until very relatively
24 recently, in terms of numbers. But it's been many
25 years.

1 DR. ATKINS: Is it, as is generally done in
2 other clinical settings, in the context of a Pap smear?
3 So is it reflex testing on women with abnormal Pap
4 tests, or is it actual screening regardless of their Pap
5 result?

6 CMDR. LUDWIG: It's screening regardless of
7 their Pap results.

8 DR. ATKINS: And the -- what is the -- what
9 are women who are HPV positive told? And is there a
10 policy to inform them about the significance? And
11 actually related to that, are they tested only for
12 strains that are associated with increased risk of
13 cervical cancer or they -- what's the test --

14 CMDR. LUDWIG: It's a gross test from a Pap
15 smear, the smear itself, and the cells that come from
16 that. And in terms of what they're told with any of the
17 positive tests, is that they're counseled and treated
18 appropriately per, you know, national protocols.

19 DR. ATKINS: I'm not aware of any
20 recommendations for HPV testing other than in the
21 context of specific strains that are associated with
22 cervical cancer, and that's the commercial test, and
23 then it's primarily in the context of women with
24 cervical abnormalities. Because I think the
25 significance of being HPV positive with normal cervical

1 cytology is -- we're still learning what that means.
2 I'm wondering if we shouldn't think about this issue in
3 terms of making sure the information women are getting
4 is accurate. I think there's potential to really alarm
5 a lot of women about a positive test.

6 CMDR. LUDWIG: Yes, I agree. Good point. I
7 will review that with the folks up there, up at Cape
8 May.

9 DR. OSTROFF: Let me ask Joel or Charlotte if
10 they have any comments about that issue.

11 CMDR. LUDWIG: Charlotte and I have talked in
12 the past about doing some urine screening.

13 MS. GAYDOS: I would be interested in knowing
14 what kind of test is being done. Are they cervical?
15 Are they PACE II Gen probe for chlamydia and gonorrhea?
16 That's a test that has about a sensitivity of almost 60
17 percent. So you're missing almost half of your infected
18 women. Your HPV test, is that the Digene test?

19 CMDR. LUDWIG: I don't know. I believe it is.

20 MS. GAYDOS: Because the first dye gene test
21 just picks up high risk of types, unless you're doing
22 the second generation one. So it would be interesting
23 to know.

24 CMDR. LUDWIG: We need to do some work on that
25 STD program, as we have talked about. And there are

1 several things that I've already talked about with
2 Charlotte and seen from my reviews up at Cape May in
3 terms of the education they give and several
4 improvements that could be made. And I am more than
5 interested in pursuing these.

6 MS. GAYDOS: Rather than spending money on HPV
7 testing, it might be more cost-effective to spend it on
8 doing something you can treat. Because in the absence
9 of a cervical abnormality, HPV testing in a young
10 sexually active woman is not thought to be recommended
11 according to Haycock (phonetic) because many of them
12 will be positive.

13 CMDR. LUDWIG: Thank you.

14 MR. PATRICK: This chlamydia rate, back in my
15 college health a few years ago, strikes me as higher
16 than what we were seeing. Our background rate was about
17 2 percent in the population here in San Diego. So I
18 guess I'd ask Dr. Gaydos whether this really reflects a
19 an area of reasonable concern to make sure you've got a
20 very good treatment and follow-up program for this.
21 This just strikes me as high.

22 CMDR. LUDWIG: I would like to hear
23 Dr. Gaydos's comment. I will say, as she's walking to
24 the mic, this is a different population than we have in
25 colleges, for one thing. As I remember from the

1 military studies, this is actually a little on the low
2 side.

3 MS. GAYDOS: Your rate is low maybe for two
4 reasons. Maybe it is lower, or perhaps it is because
5 you're using a less sensitive test. The new tests on
6 the market now, which are amplified nucleic acid tests,
7 are much more sensitive, much more higher sensitivity
8 like in the '90s. In the military studies that we've
9 done in new recruits at Fort Jackson, our prevalence
10 rate, which you'll hear tomorrow, runs very close to 10
11 percent. In family planning clinics across the United
12 States, it runs about 5 percent. So most of the
13 military recruits that are coming in our studies have
14 been much higher using the best tests that's available.

15 DR. BROWN: I was interested to hear about
16 your program to -- to actually implement your influenza
17 vaccine policy amongst active duty Coast Guard members.
18 At VA we've had a similar problem, and we've tried to
19 develop a program to address it. When we go and tell
20 veterans -- when we go to vaccinate, we would normally
21 provide flu vaccine to an awful lot of veterans across
22 the country. And when we tried to implement, we made a
23 policy, a decision, that we're going to implement CDC
24 guidelines for how to ration it. And it's been widely
25 unpopular, and it's been very difficult to explain to

1 them why we're not giving them the vaccine. They don't
2 understand that. They think that we're not being fair
3 or reasonable.

4 Any comment about what kinds of procedures or
5 what kinds of ideas you've come up with to try and
6 implement what is essentially a rationing program?

7 CMDR. LUDWIG: It is. And it's interesting
8 that in years that there doesn't appear to be a
9 shortage, we have people not wanting the vaccine. I
10 think that's a nationally -- or international -- it's a
11 psychological phenomenon that has to do with a sense of
12 control, I guess. But we had our initial all coast
13 (sic) that came out very early stating basically the
14 units that were -- the type of work that people do that
15 was going to be -- those folks were going to be
16 vaccinated.

17 The second message we sent out several weeks
18 later actually clarified those units a little more
19 carefully and give the rationale behind how our decision
20 was made on who would be vaccinated. We continued to
21 get calls saying things like, Well, I board vessels from
22 all over the world. I'm -- you know, my unit's going to
23 be exposed to influenza before anybody else, et cetera,
24 et cetera. Our answer to that was that our decision and
25 DoD's decision on who to vaccinate did not have to do

1 with their risk of exposure. It had to do with how
2 critical they were to maintaining the mission and
3 whether the mission of their unit could be done if they
4 had done several people, some percentage of people,
5 whether that mission could go forward. And that calmed
6 some of them. They were, of course, still worried about
7 getting influenza.

8 But the other part of it was to say, Now, we
9 don't necessarily have reason to suspect that this year
10 is going to be worse than other years and that if you
11 don't get the vaccination doesn't mean that you are
12 going to get influenza and you are going to die from it.
13 You know, it could be worse. We don't know, but we
14 don't have any particular reason to suspect that it will
15 be worse. And, therefore, if you get influenza you will
16 be sick for a week, two weeks. You know, you may have
17 aftereffects that last for even longer. I mean,
18 influenza vaccine is still important. Of course we have
19 to balance between, in the past, trying to convince them
20 they all need it and currently saying, Well, you're
21 going to survive without it. It's been rough.

22 We spent a lot of time on the telephone trying
23 to convince different commanders or individuals even
24 that they will be okay -- probably be okay.

25 DR. OSTROFF: This is a great example. And

1 since we do have a lot of psychiatrists and
2 psychologists in this the room, it's the psychology of
3 wanting what you can't have and not wanting what you can
4 have. But I will point out -- I mean, this is the issue
5 that I was raising before with people defining
6 themselves as being mission critical. And so they
7 absolutely have to get flu vaccine when it's very, very
8 difficult to be able to convey to these people that
9 there's -- the target groups are those that were at high
10 risk of getting complications from the flu.

11 I will point out though it's really the
12 perfect setting that if you do have operational units
13 that are so concerned about their risk of influenza and
14 their ability to operate, it is an opportunity to use
15 other modes of prophylaxis, particularly antiviral
16 drugs, and to save that flu vaccine for those precious
17 few who are really at high risk of complications.

18 I'm wondering to what degree the Coast Guard
19 or the other services have thought about the use of
20 prophylactic antivirals because it really is the ideal
21 setting if you don't want these people to get the flu
22 during that period when it's circulating.

23 CMDR. LUDWIG: You reminded me of a couple of
24 different important points. One is that nobody likes to
25 be told that they're not critical. You know, they do a

1 job, and they are all critical in some sense. So it's
2 been difficult to say -- that's why we sent out the
3 criteria. It's not just that they're mission critical,
4 but these jobs have been determined as the ones that
5 absolutely cannot be done without basically the whole
6 crew available. There are many jobs where the unit
7 itself is critical, but they don't have to respond
8 within a certain amount of time or within a certain
9 geographical area. We can bring people in. We can
10 shift around. We have time to work with it. So that's
11 been part of it.

12 The other part of it is each of our -- all of
13 our messages have gone out with a section on nonvaccine
14 prevention modalities. We did talk to the healthcare --
15 the providers, and the pharmacists, especially, to be
16 aware of what their antiviral stocks were and consider
17 if they wanted to order any extra. We didn't send out
18 word that they should order extra. We just wanted them
19 to be sort of aware of what they had and consider the
20 alternatives. So we have -- we've touched on that
21 repeatedly, and I sent out the CDC websites with the
22 fliers they could print out and many of that, many
23 things that sort of address the nonvaccine prevention
24 issues.

25 Was there another part of your question?

1 DR. OSTROFF: No, that was it.

2 DR. ENNIS: I have a point that deals more
3 kind of with long-term policy of the Board and the fact
4 that historically this Board was absolutely instrumental
5 in developing evidence of influenza vaccine efficacy by
6 classical studies done in recruits. I know from the
7 information Colonel Gibson sent that the Board's
8 authority has changed over the years. Its ability to
9 pay for research that's important to the military has
10 changed over the years. But it seems to me this morning
11 there are a couple of examples where studies could be
12 done in the military. Dr. Gardner put -- mentioned it
13 in one of his questions. It's very important, and it's
14 an opportunity that could be taken advantage of this
15 year -- a comparison of the live versus the dead-flu
16 vaccine. In the same population I can understand the
17 recommendations separate out the populations, but an
18 ethical scientific study could be done in healthy people
19 in the military comparing inactivated and live-flu
20 vaccine.

21 Another -- probably even more important to the
22 military than to other populations is the concern about
23 using a live influenza -- a live virus and the effect of
24 that virus on the recipient who is then receiving
25 multiple other vaccines around the same point in time.

1 It's a very important military need, and there are real
2 scientific questions about the impact of that live virus
3 on those other vaccinations. And I think the military
4 should be at the forefront of trying to get that type of
5 data for their own reasons and needs.

6 DR. OSTROFF: Thank you.

7 COL. WHITE: I wanted to tell you what the
8 U.K.'s position is, if you're interested. People ask
9 me, so I might as well say it once. The military
10 defense bases its position on the national strategy,
11 which is to immunize people at risk from mortality or
12 complications and not to immunize against morbidity. So
13 we do not have an influenza vaccination policy in the
14 U.K. MOD.

15 DR. GARDNER: Just to follow up a little bit.
16 At this stage we're not going to set up the
17 controlled -- anything. We're trying to get vaccine out
18 there. But we are going to give roughly 2 million doses
19 of vaccines. A little more than 20 percent will be
20 FluMist.

21 You brought up the issue of possibly a policy
22 of early treatment with antiviral drugs. This is a
23 large and interesting experiment. And I think we have
24 some opportunities. For instance, as Frank brought up,
25 one of the serious issues about FluMist is its ability

1 to transmit from one person to another. The data of
2 last year was very small. I think it dealt with family
3 contacts -- 178 contacts, or something like that. It
4 was a very small cohort on which to make an important
5 decision. If we're giving FluMist to recruits who are
6 going to be in close contact with each other over the
7 next bunch of time, it seems to me there is an
8 opportunity to learn an important fact that would help
9 the Army and help the military and help the rest of the
10 world understand this issue.

11 I think -- although it can't do careful
12 prospective studies, we can certainly try to do
13 observational stuff that tries to look back at --
14 afterwards. We have a reasonably good surveillance. We
15 have viral cultures going on for flu and other things.
16 We can look back at that if we know who showed up at
17 sick bay with -- if you know their vaccine status. We
18 can tie those things together. We'll know their age.
19 We can probably, if there are gross differences, get
20 some interesting retrospective data out of that.

21 One of the other interesting biologic
22 questions being asked about the two vaccines are in
23 years where the match of the vaccine and the circulating
24 virus are not exactly the same, are there differences in
25 the efficacy of the vaccine? So these are still within

1 the realm of things we can learn about even if we
2 haven't set it up in a way we would do -- with rough and
3 dirty observational data, I think we could still get
4 important information. And I would urge us to try to
5 organize it that way. Thanks.

6 DR. OSTROFF: Thanks. And thank you,
7 Commander Ludwig.

8 We are a few minutes early, which is unusual
9 for the Board, but I don't think that will hold over the
10 course of the day, given how full the schedule is. So
11 let's go ahead and break early. We were initially
12 scheduled to take a 15-minute break, so why don't we go
13 ahead and do that and plan to reconvene at five after
14 10:00. Thank you very much.

15 (Recess taken.)

16 DR. OSTROFF: For those of you who attended
17 our last meeting, you may recall that because of the
18 nuances of the agenda we were not able to accommodate
19 Colonel White and his presentation, and so we indicated
20 that -- given that this meeting would focus on mental
21 health concerns, that it was a very appropriate topic to
22 be presented at this meeting. And so we, once again,
23 apologize for our problems at the last meeting, but are
24 very pleased you are able to hold the information and
25 give us this presentation. And the information is in

1 Tab 3 of your books, and I'll turn the podium over to
2 Colonel White.

3 COL. WHITE: Thank you very much for inviting
4 me to take up where I left off last time, as you said.
5 And as usual, these things are being -- plagiarizing or
6 publicizing some nuances of work.

7 Before I begin, I thought I would share
8 something with you that I saw in this week's Washington
9 Post. They have a regular feature called "The Style
10 Invitational." I thought that was relevant to our theme
11 and quite amusing.

12 So in particular, I'll be talking about two
13 reports which are recently published by the MOD on
14 suicide rates and methods of suicides, and I'll also be
15 briefly touching on the MOD's current suicide prevention
16 strategy.

17 These studies were carried out by the Defense
18 Analytical Agency, which last year formed a health
19 surveillance activity headed up by Nick Blachey, who
20 might be known to some of you here.

21 The headlines on this slide concerning deaths
22 at our recruit training depot are somewhat dated, but
23 the issue is still very active and has come to typify
24 the public interest in military suicides in the U.K.
25 Perhaps in contrast, the U.S., where interests, as far

1 as I can see, has been focused on deployed or
2 redeploying service members. And the public interest
3 deaths at Deep Cut was one of the reasons for MOD to
4 make a renewed effort to study military suicides. In
5 fact, they did notice that this depot -- that's what we
6 call it by the way -- was back in the news over the
7 weekend with allegations of bullying and harassment.

8 So the definition of suicide that we
9 used -- that was used nationally in the U.K and includes
10 open verdicts, these are deaths -- are likely to be
11 deaths involving deliberate self-harm but lacking in
12 evidence of suicidal intent. And in the U.K, coroners
13 are responsible for investigation of all suspicious
14 suicide deaths. It's really the job and the problem of
15 the military departments to extract the findings of
16 these causes from the coroners. There's no automatic
17 method, unfortunately, at the moment of these -- of the
18 results being passed to the military. So it's --
19 actually collecting the data is a little bit of a
20 challenge. The data centers analysis includes almost
21 all trained and untrained regular male personnel.
22 Accurate data concerning reservists could not be
23 obtained, and I understand that's a pretty similar
24 situation in the U.S. And women were excluded to the
25 very low numbers involved.

1 To provide meaningful comparisons across the
2 services, age standardized rates were calculated using
3 the 2003 compilation as a standard. Let's say the rates
4 -- estimate the rates of suicides reach services as if
5 each service had the same age distribution as the total
6 population.

7 Standardized mortality rates were defined as
8 the ratio of number of deaths observed in the study
9 population to the number of deaths expected as a study
10 population had had the same age groups and the year
11 specific rates as the general population.

12 By convention, SMR of 100 implies an
13 equivalent ratio. Another relevant fact that we
14 analyzed were service, gender, age, location of the
15 suicide, rank, and whether the person was a recruit or a
16 trained service member.

17 So now I'll run through briefly the results,
18 which in the report are grouped into two areas. These
19 areas being the descriptive statistics including
20 patterns related to age, rank, et cetera. Age
21 standardized rates and age standardized -- standardized
22 mortality rates. This slide shows numbers which are
23 perhaps not very meaningful to you. So if you look at
24 the next slide, it's got the rates. The total number
25 we're talking about -- I gave this presentation a few

1 weeks ago, and unfortunately I didn't have the rates for
2 comparison. So that's the size of the U.K. military --
3 is about 200,000. As you can see, the Army had a higher
4 rate than the Navy, and particularly in those under 25
5 years old. Whereas an untrained Army male is actually
6 at a lower rate. You can look at the actual numbers in
7 a subsequent slide.

8 This shows the detailed results. And the
9 significance here is that the 3 percent of suicides
10 occurred in the under 25 age group. So the Army had the
11 higher rates than the other services. And the younger
12 Army males were more at risk.

13 This graph clearly shows the higher rates
14 amongst the under 25 in the Army; it also implies a
15 higher rate in over 40s. But it turned out this wasn't
16 statistically significant when the age standardized
17 rates were compared.

18 In the light of concerns over deaths among
19 recruits, rates and trainees and untrained personnel
20 were compared. And as you can see, there was a
21 statistically significant difference in rates in the
22 Army. So -- actually, this is quite serendipitous
23 because the -- one of the reasons for doing this study
24 was an assumption there was high suicide rates in
25 recruits and, in fact, there weren't.

1 So we're looking at trends over time. The
2 good news is rates seems to be falling and seem to have
3 peaked in all three services. The open boxes in the
4 graph at the end -- I don't know if you can see them --
5 these represent deaths which are awaiting verdicts, so
6 that can clearly alter the final result. The fall was
7 most noticeable in the Army where the rate fell by
8 52 percent between the -- across the period from 19.8
9 per 100,000 to 9.5.

10 Using those standardized mortality rates to
11 compare the rates with the U.K. population as a whole,
12 in comparison the Armed Forces had a lower rate of
13 suicide with the exception of young Army males.

14 That shows there's a standardized mortality
15 rate -- in fact, in this case 172 in that particular age
16 group. Just for your information, the U.K. general
17 population suicide rate in recent years has been around
18 10 per 100,000. The rates have generally fallen since
19 the mid '80s, and exception is, again, for younger males
20 for whom rates have increased by around 60 percent over
21 the last 20 years. Suicide is the most common cause of
22 death for men under 35 and the rates for males -- three
23 times that for females. That's in the U.K. general
24 population.

25 The reason you got a blank space in your

1 handout is I was trying to extract this graph from last
2 year's report. This isn't included in this year's
3 report, the comparison with the DoD. So as you can see,
4 in comparison to the DoD, the U.K. personnel had a lower
5 rate of suicide for the period studied. These figures
6 for the DoD were obtained from the Washington
7 Headquarter Service. When I gave this presentation at
8 the DoD Prevention Conference a few weeks ago -- is that
9 the -- there is some variance in the figures for the
10 DoD, depending on which organization is doing the
11 counting. But I'm fairly sure that that wouldn't
12 account for all of that difference. That's just the
13 actual numbers concerned. There's, again, an issue,
14 both in the U.K. and the U.S., about some numbers that
15 are awaiting verdicts, which is really why the last row
16 is blank.

17 So just looking at some of the factors that
18 could affect these rates and where we go next, as far as
19 any further research. Again, at the Prevention
20 Conference I was at a few weeks ago, we were told about
21 a number of U.S. research initiatives. One of them was
22 a statistical method for analyzing events with a
23 relatively low occurrence. And that's something we
24 certainly might do to follow-up in collaboration with
25 the U.S. I think the other issue from their slide that

1 I would like to point out at the moment is we don't
2 follow up suicides in personnel who have left the
3 military. But this is certainly something we need to
4 consider in the future.

5 So the defining of a higher standardized
6 mortality rate in young Army males appears to run
7 contrary to the trend, especially if you assume that
8 factors such as bonding and unit cohesion -- you might
9 think in the Army would tend to bring these things down.
10 So these are some of the factors we need to look at to
11 try and find out why the Army has a particular problem.
12 At the moment we know from the evidence that people with
13 higher physical or psychological morbidity do -- are
14 more likely to commit suicide. Unfortunately, our
15 analytical agency does not have the medical records
16 available to them at the moment to analyze that
17 further. We know the different services have different
18 recruitment criteria which are really related to the
19 mission, but at the moment we don't know if that has an
20 effect or not.

21 One of the particular things we'd like to look
22 at are the effects of deployments. But, again, we don't
23 have the data coordinated, I suppose, to do that. In
24 theory, we ought to -- we need to look at these verdicts
25 which are awaiting a final outcome before we can

1 conclude there is a declining trend.

2 Moving on to the methods -- this is an area
3 which has received limited academic attention in the
4 U.K. Again, nationally agreed definitions were used,
5 and three major methods were studied which are hanging,
6 poisoning by gases, and firearms. Other methods such as
7 jumping, solid or liquid poisons, and cutting were all
8 grouped together under the other category. So looking
9 at the trends associated with each method. Hanging
10 appears to be becoming more popular, if that's the word
11 one uses. Firearms, overall, less popular, but not
12 surprisingly more popular in the Army. Although there
13 seems to be a peak there. Poisoning by gases is
14 declining in popularity. So compared with the
15 U.K. population, military personnel were less likely to
16 use hanging or poisoning by gases. But, again, the Army
17 is sort of a leading proponent of the use of firearms.

18 So what can we take away from this? Well,
19 there is evidence from other studies which shows a
20 strong association between the method of suicide and the
21 availability of means. This is certainly something we
22 want to follow up. Perhaps using comparisons with other
23 occupational groups, you have access to firearms, such
24 as farm workers, maybe even veterinarians. In the
25 U.K. we like to use guns a lot more than you do here.

1 There's also evidence of when one method of suicide
2 becomes less available the use of other methods
3 increases. This has been seen in Europe with the
4 introduction of catalytic converters in cars and
5 legislation, believe it or not, to make the bore of car
6 exhausts less compatible with gun post pipes. And
7 perhaps I should have explained -- earlier on when I
8 said poisoning by gases, I meant gassing yourself in a
9 vehicle.

10 So as I said, I would describe briefly our
11 prevention strategy. I can't go into too much detail on
12 it because it's still currently being approved by the
13 chain of command. The issue that you can infer from
14 this slide is that suicide prevention is seen primarily
15 as a personnel issue rather than a medical issue. It's
16 overseen by the group of the Armed Forces Mental
17 Well-Being Steering Group. And I separate working
18 groups within each service looking at suicide there, it
19 does include deliberate self-harm and does not cover
20 stress or operational stress in general. And deliberate
21 self-harm -- just in case you wonder what that's all
22 about -- we adopted a definition developed by the World
23 Health Organization, a European multi-center study,
24 which is defined as the following: An act with nonfatal
25 outcome in which an individual deliberately initiates a

1 nonhabitual behavior that without intervention from
2 others will cause self-harm or deliberately ingest a
3 substance in excess of the prescribed or generally
4 recognized therapeutic dosage in which is aimed at
5 realizing changes which the subject desired by the
6 actual or respected physical consequences. Whatever
7 that means. So that includes acts of self-poisoning or
8 self-injury but excludes acts of self-cutting, which are
9 part of a repetitive pattern of self-mutilation.

10 These are not different from the strategies
11 used in the different services here. Under the heading
12 "Better Understanding" -- and some of the particular
13 things we want to do is monitor what is going on at a
14 national level. There is such a thing as a National
15 Suicide Prevention Strategy. I'm beginning to
16 understand more of the factors which contribute to the
17 current suicide rates. Education and training is
18 self-explanatory.

19 But as far as detection in management is
20 concerned, there have been some people who have
21 advocated, as they always do, screening that we've
22 concluded that recruit screening for factors that may
23 contribute to suicide should not be introduced at the
24 present since this would risk screening of many
25 applicants most of whom would not go on to exhibit

1 mental health problems while serving. There's a whole
2 lot of preventive measures that we've looked at. What I
3 mean is one of the particular ones is access to means,
4 and particularly firearms. And it could be that the
5 reduction in the rate of the use of firearms in the
6 Army, particularly, has come about through more strict
7 controls about who can carry weapons and ammunition.

8 There was a question at the conference a few
9 weeks ago, which I don't think I quite understood it at
10 first -- but it was really someone asking me: Do people
11 not go around carrying guns in the U.K.? I had to
12 explain that we didn't have a -- our constitution didn't
13 allow people to carry guns around, generally. We
14 certainly will be looking at contributing factors such
15 as alcohol and substance abuse and bullying and
16 harassment and addressing subsequent issues such as
17 workplace stress, as you like, and developing a
18 risk-assessment methodology by use of the chain of
19 command when they have concerns about a particular
20 individual. I think we can learn from some of the tools
21 that already exist for this in the U.S.

22 So what are we going to do? As I said, we
23 need to validate this data. We want to particularly
24 look at social background because there are some
25 socioeconomic class issues and geographical location

1 issues which I think are related to recruitment.
2 Because we recruit, certainly in the Army, under the
3 regimental system, we tend to recruit from specific
4 geographical locations depending on which regimen you
5 are going to join. So there may be some issues there.
6 This idea of psychological autopsy, which is, I think, a
7 term that's used in the U.S. as well, is something we're
8 going to pursue. And we ought to look at this issue of
9 deliberate self-harm which is -- really we have no data
10 at the moment at all.

11 And stigma reduction, I think, is an important
12 thing. I was intrigued to learn a few weeks ago there
13 was some evidence in the U.S. that, in fact, although
14 it's perceived that people go and seek help for the
15 perceived mental health problems, do not actually suffer
16 unduly as far as their career is concerned. That was
17 the outcome, wasn't it, I think, from one of the
18 studies?

19 That's just for reference, the work that has
20 been published prior to 2003. All these four studies
21 showed similarities to the general population in terms
22 of suicide rates after taking into account age and
23 gender.

24 That's all I have to say. Thank you. If
25 there's any questions, I'll be happy to try and answer

1 them.

2 DR. OSTROFF: Thank you, Colonel White.
3 Fantastic presentation. Before opening it up to the
4 Board, let me just ask a couple of questions.

5 One of them is: Do you have any information
6 on seasonality of these events? I know that in the
7 U.K., particularly in winter, it gets to be pretty rainy
8 and dark. And I'm wondering if there's any role for
9 seasonal affect disorder.

10 And the other question I have is: What is the
11 policy in the U.K. Armed Forces as far as therapeutics
12 for individuals that seem to be suffering from
13 depression?

14 COL. WHITE: Well, the first one the answer is
15 no, it hasn't been taken into account. That is
16 certainly something I will suggest to them.

17 On your second question -- so can you just --

18 DR. OSTROFF: Yeah. What is the policy
19 regarding use of antidepressants as an intervention for
20 people who might be identified as being depressed?

21 COL. WHITE: I don't know of an MODwide
22 policy. I imagine that's just a clinical policy for
23 each provider to decide. I don't know that.

24 DR. BAKER: Very nice presentation. I'm
25 especially impressed with the tremendous decrease in

1 firearm suicide over the past half dozen years. That's
2 really one of the most remarkable things I've seen. So
3 I'd be interested to know about the policy, which you've
4 mentioned, with regard to stricter control of people
5 having both guns and ammunition at the same time. I
6 wonder whether there has been any change in policies as
7 to whether people can take their guns home, or do they
8 have to be checked in someplace on the base so they're
9 not in their possession when they go home?

10 COL. WHITE: The first thing, I don't think --
11 there isn't actually the evidence to think -- I think
12 there is an assumption -- there used to be a policy for
13 possibly -- for a number of reasons the policy was
14 introduced. It appears to have coincided with the
15 dramatic reduction in suicides. I don't think that is
16 specifically why the policy was introduced. There would
17 be a bit more evidence provided to show there was
18 actually a causal link there.

19 But on the second issue, no. No one takes
20 their weapons home in the U.K. at all, legally.

21 DR. FINE: The suicide method, do you have
22 that broken down by the under 20 to see what the trends
23 are there?

24 COL. WHITE: We do, yes. I'll show that to
25 you later on. I have the full report there.

1 DR. FINE: Is there anything that stands out
2 there in terms of --

3 COL. WHITE: I don't think they have a
4 particular different methodology.

5 DR. BROWN: One of the things that struck me
6 about the data that you presented -- and I want to make
7 sure I understood it -- but it looked like the overall
8 suicide rates in the U.K. military, with possible
9 exception of males under 20 in the Army, if you excluded
10 them, but -- that there was some significant reductions
11 starting in the mid '90s. And you had some data showing
12 that that paralleled U.S. suicide rates in the Armed
13 Forces.

14 Did anyone who prepared that data, who
15 prepared those reports -- or do you have any speculation
16 as to what happened that caused those overall trends?

17 COL. WHITE: I mean -- because this is
18 actually the -- only the second year that we've actually
19 done this study. So to start looking at as to why that
20 happened, that hasn't been done yet. That is something
21 that we'll be doing. What I should have said is we
22 certainly would like to collaborate, where at all
23 possible, with the U.S. on any future studies. I think
24 it will be more methodology in how we analyze this data.
25 I think the country specifics -- there are a number of

1 factors that could alter the suicide rates in the
2 U.K. and in the U.S. It's probably not worth trying to
3 come up with some common strategy. But as far as the --
4 how we look at the data, I think we can probably
5 collaborate -- the statistical methods of these events
6 which have rather small numbers and how you draw
7 conclusions from that.

8 DR. LEDNAR: I have a question about how the
9 -- sort of the U.K. -- why leadership approaches this
10 issue when they've seen the data? As I understand it,
11 in the U.S. Air Force, the Air Force command, the line,
12 has in review of the U.S. Air Force its suicide
13 experience, and this is our issue. What I mean by that
14 is this is not a medical issue. This is an issue of
15 running our business, the Air Force. I'm wondering in
16 the U.K. why leadership of the MOD looks at these data
17 on their organization. Do they see this as their issue
18 of running the MOD, or does this seem to be a -- still
19 be in a -- positioned in a more traditional way, let the
20 doctors deal with it?

21 COL. WHITE: I think -- to answer your
22 question, this -- because it's still being sort of --
23 the MOD wide strategy is still being developed and
24 because its only been two years worth of data -- or two
25 studies, it really hasn't been looked at in great detail

1 by individual services. I think when this strategy is
2 approved, they will be told that that is how it's to be
3 done, the way you suggested, through the line and not
4 through the medical. I think they're having a choice
5 about that.

6 DR. PARKINSON: Great presentation. Thank
7 you. To follow on Wayne Lednar's comment, I had the
8 opportunity to be there at the beginning when
9 General Fogelman turned to the then surgeon general and
10 said, That is unacceptable. This was the
11 entire -- well-chronicled in articles and about what the
12 Air Force did. This started with one chief of staff who
13 said, I really don't understand SMRS, but one suicide is
14 one too many, and that is where we began. I want to see
15 it at zero. I think sometimes as epidemiologists and
16 medical people we sometimes take comfort in looking at
17 things like healthy worker effects. But for him this
18 was a passion.

19 Second point, just in terms of historical
20 reference of this issue, is that as we did a
21 psychological autopsy, which is the term that I really
22 don't like, because once again it medicalizes us in a
23 way that says these people are somehow aberrant or it's
24 unusual or it's nuts, whatever it is, the line on what a
25 person does -- as we went back and investigated all the

1 suicides, we found -- and I apologize for some of you
2 who know this -- it wasn't medical at all. It was a
3 community problem. And these people tried to access
4 help in many ways and through many different sources
5 and, by and large, couldn't find it. Or if they did,
6 the people at the other end -- in the JAG Corps, in the
7 chaplain's office, at the local family support services,
8 not the clinic -- because even then they have trouble
9 getting in for appointments -- and it only became a
10 medical problem when there was no pulse. So
11 essentially, the process is important that we learned
12 was to convene all of these helping agencies, including
13 the NCO who was in charge of the unit and the commanding
14 officers, to say these are warning signals because there
15 are two things that predicted suicide. It was personal
16 loss -- a romantic relationship, a marital relationship
17 -- gone sour, which is happening in spades these days.

18 And the second thing was a legal or financial
19 problem. And the person who did an Article 15 on Friday
20 afternoon and we treated them somewhat as lepers and we
21 isolated them, that's exactly the opposite of what we
22 need to do. So the policy changed to say these people
23 will not be left alone on the weekends. And it's the
24 NCO's responsibility to invite them to their house.
25 They have to make sure they're there to support them

1 during these very difficult times when they're
2 ostracized in the culture.

3 The access to weapons is absolutely key.
4 That's the best argument I've seen to gun control
5 relative to what we saw in the Air Force in terms of
6 reasons for suicide. But people who are determined to
7 kill themselves probably will, and they'll find a way.
8 That's the lesson I'm taking.

9 So what I would urge us all to think about is
10 how do you get the stakeholders in the process of the
11 front end? Because if it just comes down from a
12 directive from the chief of staff and the chief of the
13 JAG Corps did not get involved in the months of meetings
14 showing how they could be part of the problem, it's
15 probably going to land on deaf ears as well. So the
16 process tells a lot about the outcome. That's the kind
17 of lesson we learn. And it's very important. The model
18 we used was the prevention model of ICDC. It was then
19 widely publicized saying, How do you find the risk
20 factor? How do you get stakeholders to the table? It's
21 community activation. That's kind of the lesson, I
22 think, we all have to relearn as we try to move from the
23 medical to the population health.

24 So pardon the lengthy -- but this triggered so
25 many memories, and there's so many good things we could

1 do jointly to build on good models. I think it's great.

2 COL. WHITE: I know that wasn't a question,
3 but I do have two comments on what you said. And the
4 first thing is what's the target, if you like? Our
5 draft strategy does say our objective is to minimize the
6 instance of suicide and deliberate -- and self-harm, and
7 total eradication is unrealistic.

8 But the other thing, on a personal basis, is
9 leadership seems -- to me, is one of the most important
10 elements in this whole issue -- whether really right at
11 the bottom or at the top. I think one of the useful
12 ways of motivating people to improve -- but I'm
13 not -- this was something that was mentioned earlier on
14 in relation to visible training -- is to use performance
15 appraisal as a way of ensuring that people take the
16 steps that they're meant to, rather than leaving it as a
17 directive. If you want to follow it up when you give
18 the annual appraisal, include some objective which
19 covers that.

20 DR. OSTROFF: I realize that the -- not all
21 the data are in for the last couple of years. And a lot
22 of these are still waiting to be classified. But I
23 think it's very impressive that -- particularly given
24 all of the stressors that had gone on in the U.S. and
25 U.K. Armed Forces over the past couple of years, I don't

1 get the suggestion that the declining trend is actually
2 reversing itself. And so rather than saying that the
3 cup is half full or half empty, I'd rather look at this
4 situation as being half full because it looks like there
5 are a lot of very positive things going on in terms of
6 these trends.

7 Let me turn to Dr. Halperin and then
8 Ms. Embrey.

9 DR. HALPERIN: Your period of observation
10 stops when somebody leaves the military, and that's
11 problematic. If we looked at any occupational cohort
12 exposed to asbestos or benzene or whatever we know that
13 really causes problems and we stopped observation when
14 we leave, essentially there would be no excess. And if
15 you combine that with the issue of stigmatization -- I
16 begin to worry stigmatization could be translated a
17 different way, which is that the methods for
18 identification, people at-risk, has poor predictive
19 value when you're looking at the general population as
20 recruits coming in the door. But when somebody comes in
21 and says, I'm blue and I've been thinking about suicide,
22 et cetera, then the predictive value goes way up. And
23 the possibility here is that folks who are suicide
24 prone, depressed, in fact, are terminated from the
25 forces, in which case you wouldn't see them in the study

1 because they would be committing suicide afterwards.
2 And unless we can demonstrate that stigmatization
3 really means that people are not separated, your study
4 is open to survivor bias, if you will.

5 And I think that the way to get around that
6 would be perhaps the continued period of observation
7 after they've left to make sure you don't see an
8 increase in suicide after people essentially had left.
9 Otherwise, you know, if I step back, then it sounds like
10 a lot of industries have dealt with which is if you cut
11 off the cohort mortality study soon after employment,
12 that is before people really start to get sick, then all
13 you have is a healthy worker effect, and they really
14 look great.

15 DR. WHITE: I think the only way we can
16 address that is to try and coordinate our efforts with
17 sort of national efforts. The MOD does not have any
18 business to follow people up. There's no way we can do
19 it.

20 MS. EMBREY: One of the reasons why I wasn't
21 here for the last several meetings was because I was
22 engaged in a department-wide analysis of sexual assault.
23 And one of the things I learned is that recruit
24 populations come in with a considerable amount of
25 baggage to begin with. And we don't screen for that

1 baggage for privacy reasons. But that baggage has an
2 effect over a career and influences these issues. So I
3 think it's important -- I mean, if we truthfully are
4 going to be epidemiological about this -- is to
5 understand what we're getting, what we do with what
6 we're getting, and following up after they leave under
7 those kinds of circumstances. But that's a dream world.
8 We don't have all of the resources to do all of that all
9 of the time. So I think it's very important for us to
10 recognize how and who we recruit and the baggage they
11 have and changing the culture of how we deal with
12 individuals who have challenges in their life. Even
13 though they're in the military, those challenges are
14 normal challenges -- finances, relationship coping --
15 and I think we have a very over whelmingly young
16 population. And that too brings its own set of bias.

17 DR. WHITE: I wasn't trying to suggest that we
18 would not screen people out.

19 DR. OSTROFF: Thanks very much.

20 Now we're a little bit behind schedule. So in
21 an attempt to balance things out, we'll go on to our
22 next presentation and our last speaker of the morning,
23 who is Dr. Deborah Warden, who's the national director
24 of the defense and Veteran Brain Injury Center at Walter
25 Reed, and she'll be discussing traumatic brain injury

1 among military personnel deployed to OIF.

2 Thanks for being here.

3 DR. WARDEN: Thank you. Thank you for the
4 opportunity to be here.

5 I'm here today to share some of our experience
6 in military and V.A. traumatic brain injury as it
7 relates to issues of mental health and operational
8 readiness. Because of the focus of this meeting, I took
9 out our organizational history slides. But I want to
10 take a moment to say that we are a
11 Congressionally-funded program, came into being with the
12 Defense Appropriations Bill of 1991. So we have a lot
13 of years of experience of working with Tri-Service
14 medical resources defense and veterans' programs.

15 We already had a single randomized trial going
16 at Walter Reed at that point when congress gave us
17 additional funding to ensure standard of care throughout
18 the system for traumatic brain injury, and our approach
19 was learn as you treat in that we had that randomized
20 trial of rehabilitation already begun.

21 What that has permitted and perhaps has an
22 advantage when you bring additional dollars -- so we've
23 been able to work with the different cultures of
24 military V.A. and the services where we have these
25 congressional dollars to work with ensuring clinical

1 care, doing clinical research that helps to define what
2 is the evidence that leads to the clinical care
3 standards, and then also focused educational
4 interventions for the active duty and veteran.

5 So what I would like to talk about today is to
6 give an overview pathophysiology of traumatic brain
7 injury; some of the mental health aspects; talk about
8 epidemiology; talk -- add something about blast injury,
9 since we're seeing many injuries resulting from blasts;
10 and then areas of research.

11 So we're not going to talk as much of
12 penetrating brain injury except to say that our
13 soldiers, sailors, airmen, marines are injured often by
14 multiple ways so that someone may have shrapnel but also
15 may have a closed brain injury, and what we think about
16 our forces that are moving in the AP axis as well as
17 rotational injuries. This is the classic coup,
18 contracoup, and this is to relate to diffuse axonal that
19 we'll talk about in a moment.

20 If you think about the brain -- kind of an
21 orange sitting on top the brain stem and spinal cord --
22 as a pencil, you can appreciate how vulnerable it is to
23 rotational forces. And this was -- we're better
24 defended for AP diameter than for blows in the temporal
25 area. The next slide -- that was a slide from

1 Dave Hugda (phonetic) at UCLA.

2 And this is a slide from more moderate to
3 severe brain injuries that received C.T. imaging. And
4 I'll talk about the whole continuum of mild to moderate,
5 severe brain injury, at times focusing on concussive
6 injury or mild traumatic brain injury in particular and
7 of the imaging.

8 In this study by Harvey Leven's group, CTs
9 were superimposed on each other where there were
10 lesions. And you can see the vulnerability of the
11 temporal tips, the underside of the frontal lobes, of
12 course, where the olfactory tubercles are coming out,
13 anterior, frontal, and temporal poles, also areas of the
14 brain that we talk about a lot in neuropsychiatric
15 conditions as well.

16 TBI is a measured severity in terms of period
17 of loss of consciousness. Keep in mind, we're not able
18 to interview to find out how long he or she has been
19 unconscious. We can find out the period of time they
20 don't remember, which would be a combination of period
21 of unconsciousness as well as posttraumatic amnesia. So
22 posttraumatic amnesia begins at the time of the event
23 and proceeds until continuous memory is established or
24 largely established. So there may be islands of memory
25 before posttraumatic amnesia has resolved, and they may

1 contribute to stress symptoms, memories of part of the
2 event. But yet they're not really -- during
3 posttraumatic amnesia the brain is not really encoding
4 new memories. So there are ways to operationally define
5 the end of posttraumatic amnesia. It's pretty much if
6 someone can tell you what has happened in the last
7 couple of days. There's a Galvenston Orientation
8 Amnesia Test that also allows us to do that. And then
9 the Glasgow Coma Scale as well.

10 In terms of neuropathological changes, there
11 are immediate events that happen in traumatic brain
12 injury. So we think about the contusions and
13 hemorrhages as well as the diffuse axonal injury.
14 Immediately secondary events intracranially include
15 blood flow, metabolic changes, traumatic hematomas, more
16 chronic hematomas, issues with cerebral edema, issues
17 with hydrocephalus, and increased intracranial pressure.
18 Also, systemically we know from studies that a single
19 event of hypotension is deleterious in closed traumatic
20 brain injury. There are also issues of hypoxia,
21 hyponatremia, and infection.

22 Diffuse axonal injury, this has been shown in
23 pathological studies even of people who have had mild
24 traumatic brain injury and then died of other causes.
25 So that -- though it's not necessarily visualized on any

1 of our -- during life imaging modalities, it is
2 something that is felt to be contributing to the brain
3 function changes that occur. And one of the major
4 advances of the last, I'd say, decade or so has been the
5 realization this is not a single moment in time with a
6 structural damage. So we used to think about this in
7 the cell bodies are in the gray matter and then the long
8 axons coursing through the white matter of the brain and
9 thought that there were stretch injuries and that right
10 there the axon was discontinuous at the time of the
11 accident.

12 However, it turns out there are a number of
13 mechanisms set into place over about 24 to 36 hours.
14 Changes in axoplasmic transport occur. And, in fact,
15 there is a disintegration of that axon with then the
16 retraction balls showing up. So this has led to a lot
17 of interest to a window of opportunity in treating the
18 individual before those axons are discontinuous, and
19 that's very important as well.

20 I'd like to go ahead and talk about what are
21 some of the cognitive, somatic, and neuropsychiatric
22 sequelae of traumatic brain injury. And in this slide
23 from David Arsinagas (phonetic) in Colorado, he's linked
24 some of these areas of the brain with some types of
25 symptoms that can be seen. And as you remember, these

1 were areas that showed on the CT study, temporal tips,
2 anterior, frontal, and orbital frontal cortex. So
3 important in issues about memory, judgment, appropriate
4 behavior, and, of course, in terms of talking about some
5 mental health issues -- anterior brain stem, where we're
6 talking about ascending noradrenergic (phonetic),
7 serotonergic tracks as well.

8 There are a number of different instruments
9 that can be used to rate postconcussive symptoms. In
10 general, we tend to think about them grouped into
11 somatic such as headache, dizziness, cognitive problems
12 difficulty with memory, concentration and also mood and
13 behavioral, so depression, irritability issues such as
14 that. One of the kinds of complaints we hear from our
15 patients is that they do feel more irritability, they
16 feel tense, they are surprised they're not able to shake
17 this off. They're used to being high achievers, go out
18 and do what they want to do or what they're told to do,
19 and they find themselves going to the mess hall late, as
20 it's getting ready to close. They don't like being
21 around a lot of people, difficulty with divided
22 attention, concern that something may irritate them and
23 they may lash out. So there are a lot of ways that this
24 can have itself be seen.

25 I want to take a moment to emphasize that a

1 single concussion in a healthy individual has the
2 expected natural history of full recovery. And there
3 are some studies, including one by Harvey Leven in the
4 late '80s, that showed that this is generally the case.
5 With -- as more recent studies will show, recovery of
6 cognitive abilities over about four to seven days. So
7 we're really looking at issues of resiliency and
8 recovery as well as in some people persistent symptoms.
9 And the very next review was by Nick Alexander talking
10 postconcussive symptoms.

11 The next study actually is 2002. There's an
12 error in the slide. But the Pittsburgh group, working
13 with high school athletes, showed that the point about
14 concussions being cumulative in their effect. So in
15 this study high school athletes with three or more prior
16 concussions were up to nine times more likely to develop
17 symptoms than their colleagues who had not had previous
18 concussions. So in an operational -- in an occupational
19 situation where people may have a lot of concussions,
20 that certainly comes to be important for a group. Also,
21 by several groups, including our San Diego group, a
22 difference between people who've had mild traumatic
23 brain injury and more moderate to severe.

24 In terms of people who have had mild traumatic
25 brain injury, are often very sensitive to those

1 difficulties, the problems with attention, problems
2 concentrating and not really being their full
3 100 percent. Generally, families and colleagues feel
4 they're doing fine and are surprised at these
5 complaints. So, for example, we say people walk and
6 talk and pass for normal whereas someone who has had a
7 more moderate severe traumatic brain injury may have
8 what we call anafignosha (phonetic) or unawareness
9 deficit. In these situations we see families come in
10 and saying, you know, he just doesn't get it, or we
11 don't understand, you know, why he doesn't understand
12 what the problems are. And yet that person may tell us
13 he's really doing fine, he's recovering well. So one
14 question we're always careful to ask someone who's had
15 more moderate to severe injury is: How would your
16 spouse say you're doing? And almost invariably we hear
17 things such as, Well, I'm a little more frustrated. I'm
18 more easily frustrated, things like that. So it's
19 really important to look at the situation in terms of
20 how we find out about the problems that people are
21 having.

22 We've had for some years -- one of our troop
23 sites is at Fort Bragg. We've been involved in working
24 with the commanders there to do screening. We do a
25 cognitive assessment, a computerized cognitive battery,

1 as well as a detailed history of previous brain injury.
2 And then if someone has a concussion afterwards, we're
3 able to repeat the testing, cognitive testing, and
4 interface with medical resources in terms of returning
5 the person to duty. In this study -- this is by
6 Karen Schwab in our group -- has reported on the
7 increased risk of paratroopers to mild traumatic brain
8 injury.

9 And in the same look, the question was made:
10 What about individuals who are not reporting for
11 problems but individuals who are going to work every day
12 and when they were told to, came over to the defense and
13 veterans head injury program or brain injury center to
14 do their baseline assessment? We just asked them in the
15 last couple of weeks how many of these symptoms have you
16 experienced? And then we asked them what their past
17 history was of head injuries. And as you can see here
18 in this group, the average number of symptoms that
19 people report goes up with severity and existence of
20 previous brain injury. Again, this is just a nonmedical
21 care-seeking population. Those are all the symptoms.

22 Now, when we break them down -- I mentioned
23 that there are also cognitive symptoms. Typically,
24 attention, concentration, speed of mental processing,
25 learning, information retrieval, and executive functions

1 are effected. So all things that are very important to
2 full functioning.

3 This is slide from a study by Tom McAllister
4 in the Dartmouth group. It's worth taking a look at
5 because it speaks to what functional imaging is starting
6 to provide for us. It will give us insights to where
7 we're not able to get a grasp on it otherwise. As I
8 mentioned, people who have mild traumatic brain injury
9 are often very sensitive to problems that they're
10 having, and yet it's hard to document.

11 This is a group of people who a month
12 previously had been at Dartmouth Emergency Room for some
13 kind of mild traumatic brain injury. They received care
14 and were discharged. And a month later they called up
15 and asked to participate in a research study. So these
16 also were people who were not looking to seek care.
17 When they came, in they were asked if they were having
18 more memory problems, concentration problems, and
19 compared with a group of age and education matched
20 controls. And, in fact, people who did have mild
21 traumatic brain injury did have more complaints about
22 their memory. Yet typical of these studies when you sit
23 down and give them a paper and pencil test of their
24 memory, in fact, they perform well. So they perform as
25 well as controls. But when you have them do the test

1 while they're having an FF MRI done and you increase the
2 complexity of the task, the controls and the mild
3 traumatic brain injury patients are seen here looking at
4 a one back subtracted out the zero back. And as the
5 test gets harder, two back now subtracted from the one
6 back from the two back, the controls have already
7 activated cortex, and they don't further activate any
8 new areas.

9 The MTBI patients, however, have shown this
10 activation pattern similar to the controls in the one
11 back greater than zero back. And yet when the test gets
12 harder, they are now activating new cortex to complete
13 that. So different ways to interpret. Very interesting
14 in terms of a possible hypothesis. This may relate to
15 why people say they have memory problems but they also
16 complain of a lot of fatigue. So they're needing to
17 activate more cortex, work harder, as it were, to
18 perform at the same level. This finding has been
19 replicated by the Montreal Neurologic Institute using a
20 different type of a working memory test and also showing
21 different activation.

22 We had an opportunity to work with the
23 United States Military Academy at West Point, and we've
24 been able to go in and do baseline cognitive assessment
25 when the first year cadets come through barracks. We

1 can sit 70 down at a time at the computer labs, get
2 baseline information. And then if one of them has an
3 injury -- typically during boxing we have -- work
4 closely with the athletic trainers. And then patients
5 -- sorry -- cadets are evaluated within an hour of
6 concussion and then on out days later. And in a study
7 we published in neurology a few years ago, simple
8 reaction time, if you look at their baseline, 250
9 milliseconds one hour postconcussion in 14 Grade I
10 concussions -- Grade I and Grade II, which means no loss
11 of consciousness, alteration of mentation but no loss of
12 consciousness. And at four days postinjury when all of
13 those symptoms of headache, dizziness, all that have
14 subsided. Their simple reaction time is still about a
15 tenth of a second longer than their baseline.

16 In a subsequent years group, we showed that
17 doing a math test -- after three to seven days, the
18 recently concussed are with controls who have shown an
19 immediate practice effect, they get better; and it takes
20 the concussed a few days until their math is at that
21 same level.

22 To focus now on some of the mental health
23 issues, personality. We talked about irritability;
24 episodic discontrol; talked about increase and decrease
25 activation; sometimes in the very acute periods,

1 lethargy; and aspects of activation. There are mood
2 disturbances with traumatic brain injury, psychosis --
3 not commonly, but can be seen after traumatic brain
4 injury. And aspects of work and relationships can be
5 affected.

6 Robert Robinson's group and others have done a
7 lot of work in depression following stroke and also
8 following traumatic brain injury.

9 Many of you may be familiar with their work.
10 In a recent publication they showed that approximately a
11 third of hospitalized TBI patients develop major
12 depression in the first year. This is a semistructured
13 interview, been mapped onto criteria for major
14 depressive disorder. A larger number even will develop
15 depression within the first eight years of injury in a
16 number of studies. Some of them suggest that linkage
17 with brain injury and also left frontal areas is more
18 relevant in earlier postinjury period and then further
19 out from issues of psychosocial support and other
20 aspects. Depression is highly comorbid with anxiety in
21 about three-quarters of people, aggressive behavior, and
22 also poor social and functional outcome. As I
23 mentioned, also left brain injury. And that's been
24 replicated by other groups as well.

25 An area of postconcussive symptoms, we see

1 they're not specific. They're sensitive, not specific,
2 and there is overlap with acute stress and post
3 traumatic stress symptoms. There's interesting
4 literature that's battle fatigue. Shell shock may have
5 had to do with repeat concussions as a factor. There is
6 an interesting aspect in the literature about whether or
7 not people who have loss of consciousness and are not
8 able to remember on a neurogenic basis will still be
9 afflicted with PTSD. They found that actually none of
10 our first 47 had full PTSD by full criteria. However,
11 they were only missing a full diagnosis by not having
12 the re-experiencing phenomenon, what you would have to
13 expect from having declarative memory. Sort of
14 working -- being able to articulate the experience. But
15 there was a lot of comorbid depression and anxiety.
16 And, subsequently, we have seen people who have full
17 criteria for PTSD. This has been in the literature back
18 and forth. And, in fact, people who have neurogenic
19 amnesia for the event can develop posttraumatic stress
20 disorder. But there are possibly some differences in
21 how it's shown.

22 Larry Labate (phonetic), our prior military,
23 and I have a chapter coming out soon in the American
24 Psychiatric Association Neuropsychiatry of TBI textbook.
25 And it's possible -- it looks like from some of the

1 studies there may be less re-experiencing phenomenon, so
2 fewer flashbacks, nightmares.

3 There is a group in Australia that has used a
4 specific -- a particular methodology at looking at
5 increased reactivity to fulfill that criteria. And they
6 show a relatively high amount of PTSD also that people
7 do develop PTSD for some of those experiences. It may
8 be waking up in an emergency room or in an ICU. So
9 there are many difficult parts that go along with the
10 brain injury as well. It does look as though the more
11 severe, the longer the period of unconsciousness has
12 been, perhaps the less classic PTSD that happens. But
13 there are other morbidities with that. And many studies
14 suggest that the rate of PTSD may increase over time,
15 though really longitudinal follow up has not been
16 optimal to date.

17 A word about the interventions. We do have
18 effective treatments, as you can see. Largely what we
19 work with pharmacologically are medications to use in
20 indications were the person not to be brain injured. In
21 fact, there's not a lot of Class 1 evidence right now in
22 TBI groups as a whole. We just finished an
23 evidence-based review of that. And some of the death
24 studies are from the '80s, although there are now some
25 randomized control trials being done. And we're

1 actually doing two of them looking at SSRIs for
2 different neuropsychiatric conditions. But some of the
3 best evidence actually exists for stimulants for that
4 slowed mental processing we talked about and memory and
5 tension and also for beta blockers in aggression.
6 Certainly most people are inclined to use SSRIs because
7 of lack of side effects, although there are other side
8 effects that come with them, and that's why we were
9 funded to do some of those studies. Also,
10 anticonvulsants are used as mood stabilizers.

11 In terms of looking at people with milder
12 injury concussion, there's evidence that suggests that
13 if you give people a psychoeducational intervention,
14 really tell people they're likely to develop symptoms,
15 the symptoms are part of the brain injury -- so as one
16 patient said, So it's in my head. It's in my brain.
17 It's not in my mind. Maybe you heard some of this
18 stigma. They're not just, you know, being nonmilitary
19 to have headaches and problems. This is part of their
20 brain's recovery. And if you teach that and teach that
21 the expected recovery pattern is continued recovery, you
22 decrease the frequency and the severity of the symptoms.
23 This has been done in this country by Wally Mitinburg
24 (phonetic) and also in Australia by Jenny Ponsford
25 (phonetic.)

1 We got into this business by being funded by a
2 V.A. study which had some money for joint V.A. DoD work
3 and looked at a rehabilitation study in which patients
4 who had the potential for going back to duties -- they
5 didn't have severe orthopedic injuries or other types of
6 injuries that required a medical board -- were
7 randomized to either staying in the hospital and having
8 a cognitive behavioral program or randommized to going
9 home and having this same amount of time of the
10 home-based program where a masters level psychiatric
11 nurse called weekly, checked on them, made sure they
12 were safe and the family was safe, and also they were
13 doing a half hour a day of some cognitive activity, even
14 reading the newspaper, and a half hour a day of physical
15 activity working up to their own abilities.

16 What we found out from a study published in
17 2000 in JAMA is if you look at all of those moderate to
18 severe injured active duty -- the analysis was done at
19 the first 120 at one year follow up -- the whole group
20 there was no difference in the ability to still remain
21 at active duty between those two groups. But when we
22 did a plan subset analysis for severity, if one had been
23 injured with a loss of consciousness greater than an
24 hour, then those folks did do significantly better if
25 they were treated in the hospital program. So again,

1 trying to get evidence about how we spend our scarce
2 resources to get the right treatment for the right
3 person. And certainly some of the people wanted to be
4 at home.

5 All right. I have some incidence slides, and
6 I will go through them pretty quickly. On the next
7 slide this is -- the point here being is that this is an
8 incidence peak for young males and also in the elderly.
9 Using standard inpatient data records, the incidence has
10 about 88 to 100 per 100,000 per year. This study by
11 Therman and Garmo (phonetic) shows that whereas in the
12 '80s the incidences were reported as more about 200 per
13 100,000 thousand. It's come down. And that's primarily
14 because of not hospitalizing mild TBI patients. This,
15 of course, has been managed care era. This is a study
16 showing the economic impact. There are three slides on
17 that. And it's not only in terms of healthcare dollars
18 to treat people, but also in terms of lost wages and
19 impact on family.

20 Again, using this database, Brian Ivans in our
21 group has worked out for the same years looking at a
22 peacetime incidence 69 per 100,000 and looking at the
23 postdeployment forms -- we'll hear more later -- and
24 looking at the hospitalization of people who have four
25 symptoms consistent with postconcussive symptoms.

1 That's the incident rate that comes out.

2 In Dr. Holcomb's Joint Theatre Trauma
3 Registry, you see for head and face it's over 20
4 percent. This is at a Level 3 of the combat support
5 hospital before they go on to launch dual. This is a
6 bit higher than what we've seen in prior conflicts.
7 And, of course, some of the issues that come in are the
8 effectiveness of the body armor is allowing more people
9 to live. The helmets are effective, but there's a lot
10 of face and neck that is exposed. And people who are
11 coming in for traumatic amputations are often having
12 concussions as well.

13 Just for your knowledge, these are the codes.

14 In a CBC recent report, they point out the
15 pyramid factor of death hospitalization, E.D. visits,
16 and then people who are treated by family care docs,
17 sports people, or maybe no medical care.

18 A point here is that male to female ratio. We
19 know that it's about two to one in general. Of note is
20 that military females have about the same risk of
21 traumatic brain injury as civilian males. So it sort of
22 shows the increase with the military lifestyle and work.

23 Two slides showing that they can be
24 underobserved. This was a survey -- estimated about
25 25 percent are unidentified and a British study showing

1 that about half of the people who are admitted to
2 hospitals didn't have brain injury coded but often had
3 other injuries.

4 A few words on blast injury -- and I'll go
5 through these quickly -- but there are a couple of main
6 points that have bearing on our active duty.
7 Grahm Cooper wrote in Britain about blast, and we know
8 that the physiologic dose as relates to the amount of
9 time and the degree of the overpressure wave. People
10 can be subjected to the overpressure wave, also
11 sustained what's considered a secondary injury where
12 debris or something is hitting them or a tertiary injury
13 where they become the moving object and can hit
14 something.

15 There are good reports showing that brain
16 injury can -- will result in death from blast. There's
17 less good information about morbidity in survivors. We
18 know that air-filled organs are very vulnerable as well.
19 Chernack (phonetic), who was in Eastern Europe as a
20 physician for a period of time is also a preclinical
21 researcher and is now at Georgetown, did some
22 experiments. I would like to point out for a second you
23 can give a blast to a laboratory animal while protecting
24 the brain. Yet when that animal is sacrificed, see
25 neuropathological changes in the temporal lobe. So a

1 concern again that blast overpressure can lead to
2 changes.

3 Our point, as we were at Walter Reed seeing
4 patients coming through initially having consults, that
5 there are many life-saving maneuvers that have occurred,
6 typically enroute to Walter Reed, and brain injury may
7 have gone unnoticed.

8 We've looked at the way the data were coming
9 in. And, in fact, as you can see, the categories of
10 injuries -- a head injury, a brain injury -- could be in
11 virtually any one of those causes of injury.

12 The kind of patient we had no problem being
13 referred was this first sergeant. This is an inverted
14 helmet. The bullet went in there. Luckily it slowed
15 down so much it didn't kill him, but it did push some of
16 the skull, some of the bone fragments, into his
17 occipital lobes, and a lot of swelling here. And he was
18 left with visual field deficits. He's actually back on
19 active duty. He has so much education and experience to
20 share. He has difficulties with irritability, low
21 frustration tolerance, but is being able to still work.

22 So when we looked at the different services,
23 he would then be one of the 4 percent who come to
24 neurosurgery. We realize it's here in the 77 percent
25 who are appropriately on general surgery in the

1 orthopedics. So we went ahead and began to screen all
2 patients coming into Walter Reed who had been in a
3 blast, fall, or a motor vehicle accident.

4 As of August we've seen 355 patients who were
5 assessed who had a traumatic brain injury from OIF/OEF.
6 Those more recent numbers coming out show that over half
7 of all the wounded are from blast. And when we evaluate
8 people from blast, over half of them have had traumatic
9 brain injury, and that's diagnosed by some period of
10 amnesia.

11 So someone brought up at the break there is
12 even a consideration there might be other types of
13 exposure with deleterious effects. But we were focused
14 on, at least, identifying those who had amnesia. And
15 working with one of the combat support hospitals for the
16 82nd Airborne showing that as many persons are treated
17 in-theatre and kept there, treated appropriately, have
18 come back. So we're not talking just about people who
19 have been evacuated. We're talking about people who may
20 have a concussion and be returned to the front.

21 From our first 305 just to show that close to
22 90 percent are closed and about 40 percent are mild, but
23 over half are moderate to severe.

24 A few slides about the postdeployment form.
25 We've looked at some of the postdeployment surveys.

1 We've done some of the soldier readiness center at Fort
2 Bragg trying to get data. Because, as of yet, with the
3 current form, we don't have a question about either
4 exposure to blast or mild traumatic brain injury, any
5 head injury. And, in fact, we're below -- we're looking
6 at different groups to try to get this for the -- this
7 group. But 2 1/2 percent of the sample of 487 said
8 they'd like to talk further to a healthcare provider.

9 In a group who came to our site at Fort Bragg,
10 our own defense and veterans brain injury center site,
11 just looking at war fighters -- 236 combat troops, 15
12 percent reported they have had TBI; and two-thirds still
13 had symptoms. Only 6 percent were moderate to severe.
14 And looking at this postdeployment form of 189,000
15 troops completing it, about 5,000 reported four symptoms
16 that are consistent with postconcussive syndrome. So
17 these are the symptoms that are currently surveyed.
18 18 percent of them had been hospitalized, so 72 had not
19 been. So this gets to sort of documenting this.

20 Implications of mild traumatic brain injury or
21 concussion, we talked about the data from West Point.
22 100 milliseconds is a large amount of time. Some of
23 that may be sleep deprivation as well. Some of it is
24 clearly the concussion. The aspect of soldiers being
25 unable to will away their symptoms and behavioral issues

1 may ensue. This is not just a military issue. The
2 CDC is very interested in the issue of blast and stress
3 and concussion as well.

4 Some of things that we're looking to do is,
5 first of all, really work with some of the different
6 sites in terms of working out really appropriate
7 guidelines for the military in terms of returning to
8 duty. We have one place now in Baghdad where we're
9 being able to use one of these computerized assessments
10 and working with a symptom and evaluation and trying to
11 work that out as well. We're looking at many of the
12 in-theatre records. It's a Q.I. project from our
13 department of neurosurgery and neurology. We have an
14 archive, really, of -- many of the physicians are
15 archiving some of the treatment records with us, and
16 we're trying to determine the size of the problem in
17 returning units. And within some of our existing
18 research protocol, such as the one at Fort Bragg, we're
19 able to gather a lot of this data. We'd like to be able
20 to screen for injury and symptoms, so we've done
21 postdeployment questions at Walter Reed, at Fort Bragg,
22 and at Camp Pendelton as well, and working with a couple
23 of protocols for telemedicine capabilities. We'd also
24 like to do a randomized controlled trial of an enhanced
25 telephonic follow-up to see if that is a more

1 cost-effective way of treating as well.

2 As we talk to different groups, some of the
3 take homes is that these people are coming back to our
4 communities. We do need to screen people who are at
5 risk of concussion. That's our deployed forces and
6 certainly our paratroopers. A good history is really
7 very helpful in terms of what's happened to them, a
8 period of posttraumatic amnesia. We do have different
9 cognitive screens that are involved. And we want to
10 reassure people there is access to care and follow-up by
11 DoD and V.A. This is our website. We're at Walter
12 Reed.

13 We do conclude that TBI in the current combat
14 environment is not uncommon. It's often associated with
15 severe multitrauma PTSD or concussion. I just say a
16 word that when we started interviewing a lot of people
17 who have amputations -- for example, one of the persons
18 who had a double -- both legs amputated, said, Yes, he
19 remembered the whole thing. He didn't have a head
20 injury. He really appreciated that we came in and
21 talked to him anyway. He started telling his story, and
22 it was punctuated with, And then I blacked out for that
23 period, and then I picked up. So really, again, a good
24 history in finding out exactly what happened. Then it
25 turned out he was keeping notes for himself because of

1 memory problems. And just an intervention there as well
2 about postconcussive symptoms.

3 These are people at our Walter Reed
4 Headquarters. I want to thank Karen Schwab and
5 Lori Ryan who helped with this presentation.

6 Last slide. And also all of our centers --
7 San Diego right here is our Navy center. Wolford Hall
8 is our Air Force site. We have four V.A.s identified by
9 the V.A. And we have one community re-entry program in
10 Trellisville, Virginia.

11 That's all. Thank you very much.

12 DR. OSTROFF: Thanks for that very
13 comprehensive presentation. You can catch your breath
14 for a second. Let me open it up to members of the
15 Board. I'll point out that we're running a bit over
16 time, and we do have to get to lunch. So I'll probably
17 allow maybe five to ten minutes of discussion, and then
18 we'll have to break it off. So I see a lot of hands
19 raised. I'll start over here with Dr. Gray.

20 DR. GRAY: Outstanding presentation. You
21 certainly opened my eyes to a new possible thinking with
22 respect to postdeployment illnesses. I'm wondering if
23 you care to speculate if the brain image scanning
24 findings that have been highlighted, I think by the MIN
25 report, could be explained, not so much by the alleged

1 neurotoxins, but by undetected traumatic injuries to
2 some of these individuals.

3 DR. WARDEN: I've already become specialized
4 enough in TBI. I apologize. I don't know well that MIN
5 report.

6 DR. GRAY: I think -- and I haven't read the
7 report. I just learned it's been released, but I know
8 from some of the literature there have been a number of
9 neuroimaging studies, cutting-edge studies, for which we
10 don't have a good baseline in asymptomatic people that
11 have suggested some pathology among some of the Gulf War
12 veterans. And my question is: Could some of that
13 imaging pathology be explained, not by the neurotoxins
14 which have been so highlighted by this committee
15 of -- I'll say a number of which are advocates for
16 various different causation theories -- could it be
17 explained by trauma? I have done a number of studies
18 among the Gulf War veterans. We did not consider
19 including screening questions for this sort of an event
20 in Gulf War veterans. I suspect we would have missed
21 trauma --

22 DR. WARDEN: Yes. Certainly if we're talking
23 about MRI scanning. But even with CT scanning there can
24 be evidence of prior trauma. And especially in those
25 areas we talked about -- frontal, temporal areas -- but

1 sometimes more deep injuries as well. We always have
2 the problem of incidental injuries. So it's always
3 important to have good control populations. It's more
4 of a problem with EEG studies, but can happen with
5 imaging. But assuming these are all important findings
6 on the imaging, I think, yes, a screening for trauma --
7 for traumatic brain injury would be very important and
8 could potentially be involved in some of those findings.

9 DR. BAKER: I think the opportunity here to
10 look at both the etiology and prevention of traumatic
11 brain injury from blast injury is outstanding. To the
12 best of my knowledge, helmets are typically evaluated
13 and tested and so on for impact injury. And I'm
14 wondering what information we have as far as the
15 effectiveness of helmets, various helmets, in preventing
16 blast injury; whether there are differences among
17 helmets; whether any information is collected in terms
18 of the -- for example, the direction from which the
19 blast came, whether in our postdeployment debriefing
20 there's any interest in looking at people who may have
21 been exposed to blast but have not shown symptoms of
22 TBI. I think there's a whole host of things that could
23 be learned, as I say, with regard to etiology and
24 prevention and, in particular, as far as helmets are
25 concerned.

1 DR. WARDEN: Helmets is a whole very
2 interesting area. I think that the civilian helmets are
3 developed for impact. The military helmets are
4 developed for ballistic pretext. And, in fact, we had a
5 study planned at Fort Bragg to look at enhancing the
6 impact prevention, the safety of that. In terms of the
7 opportunity -- and there's a whole part of -- about this
8 in terms of the trade-off between what you're covering
9 more and making people less operationally able to move
10 and be able to do what they need to do. I don't know
11 that the studies have -- there's, as you can appreciate,
12 a lot of chaos at the moment of impact of an IED or
13 something. I think to the extent possible, people are
14 taking down and trying to record exactly what happened.

15 We're often having people -- not just the
16 injured, but people, other buddies at the hospital as
17 well -- perhaps from the same accident and trying to
18 mark out where that explosion was. It's very difficult
19 to do it. But there's also an interest of -- in people
20 in the laboratory right now of doing some of that in the
21 military, studying that further. Clearly the helmet is
22 helping the most from things that are coming from
23 falling down or impact for themselves. There's at least
24 a concern that it could help to contain -- if the blast
25 is coming up, it could help to contain that pressure

1 wave. But I think there's no question that you need
2 some protection. So people are trying to focus on that
3 now.

4 DR. LEDNAR: Really sort of a thought-opening
5 presentation. I have a question of sort of down the
6 road after the initial event with the initial injury.
7 That's really a fitness-for-duty question. Either that
8 in-theatre or when they return home, so much high
9 technology is used in their day-to-day work; therefore,
10 the neurocognitive demands for their work are much more
11 intense than we realize. I wonder if you have any
12 thoughts on how long do you follow up, and what is the
13 return-to-work evaluation to address the cognitive
14 demands of work and the interpersonal demands of work.
15 Because typically we do the familiar, which is the
16 physical demands of work in terms of capability and job
17 demand. I think we have a lot farther to go in terms of
18 the cognitive demands of the work and the interpersonal
19 demands of work and taking this kind of a very injured
20 person. Do you have any suggestions for the kind of
21 follow up that we should be doing to make sure we have a
22 good --

23 DR. WARDEN: Sure. Again, we're talking about
24 the whole continuum. So we'll have many people who
25 recover and successfully return to full work. And we

1 have really many of those remarkable and not so
2 remarkable, more typical success stories. I think the
3 military uses cognitive assessments in its evaluation
4 for medical retirement from brain injury. So one of the
5 things we're working on is try to have that be more
6 focused so it doesn't need to be a full eight-hour
7 battery of neuropsychological testing, for example. But
8 I think that we know about -- if it's evaluation -- when
9 we know people are having difficulties, then we need to
10 give it a full evaluation of cognitive psychosocial and
11 physical. And then I think what we're trying to do is
12 have access. If they're doing well, that's great. And
13 if they start having difficulties, to be able to access
14 the care. We have implemented a routine eight week,
15 just phone calling people after they go home to make
16 sure that transition is working. I can't give an exact
17 period of time or way. I think it is important to do
18 follow up, as you're saying. And some people have their
19 military work changed to now fit better, although that
20 is somewhat difficult to do.

21 DR. LEDNAR: And some of these will be
22 returning reservists and guard. So some of the
23 follow-up care will be out in the civilian setting.
24 Again, that is a care setting that will need special
25 help to advise them.

1 DR. WARDEN: Absolutely. Thank you.

2 DR. BROWN: I was interested in the connection
3 in your discussion that you were making between
4 traumatic brain injury and blast injury, particularly
5 mild traumatic brain injury/blast injury. Because I
6 think -- you know, we know there are -- unfortunately,
7 too many soldiers were injured from blast who suffered
8 like traumatic amputation and so forth. But there must
9 be -- I assume for every individual who had an
10 experience like that, there must be many, many more who
11 experience a lower level of blast, not enough to
12 physically, immediately cause apparent injury, but could
13 have -- lead to some long-term health issues -- along
14 the lines that you've talked about. You come up to a
15 mild -- I had the same reaction that Greg had in kind of
16 the way you described. The signs and symptoms of mild
17 traumatic brain injury sounded like what people call
18 the Gulf War syndrome -- the cognitive effects and memory
19 problems.

20 But my question is from an impact on
21 long-term healthcare. What type of long-term health
22 issues are we likely to see from the individuals from
23 presumably large number of individuals who could have
24 suffered at least mild traumatic brain injury from being
25 near a blast where an injury took place and maybe didn't

1 suffer any outward injuries but nevertheless will be
2 coming for healthcare in the long run? What kind
3 of -- do you have some recommendations to think about
4 planning for long-term healthcare for these individuals?

5 DR. WARDEN: I think it gets back to some of
6 those executive and social issues. So the idea -- you
7 know, really the difficult interacting, just even on a
8 shorter basis. I can say people are so excited about
9 going home, the families are excited about having them
10 home, then you find out a month later things aren't
11 going so well. The idea of difficulty with the
12 relationship, to some extent, lower frustration
13 tolerance, cognitive, somatic, and work areas -- I think
14 the recommendations would be to be able to track the
15 people. There is a group in New York City who made an
16 advertisement and asked for people who were still having
17 difficulty from traumatic brain injury. So it's a real
18 particular sample there. But that may give us some
19 idea. And there were a lot of mental health issues and
20 cognitive issues among that group. In terms of the mild
21 traumatic brain injury, I really hope that a single
22 blast, something like that, people are going to do well,
23 and they're going to do very well. In fact, that same
24 study -- if you gave the blast to the head, they didn't
25 have those neuropathological changes. And there's some

1 question about whether or not these forces going -- the
2 fact they're coming up from the brain vessel, the
3 thorax, isn't reassuring. But I think that it's kind of
4 the same concussion literature. What we worry about at
5 some level maybe we worry about -- they're repeated over
6 and over. We know that that can kind of resemble
7 Parkinsonism.

8 DR. BROWN: But from a single blast
9 experience, do you think that the long-term effects
10 might be self-limiting?

11 DR. WARDEN: Boy, I hope so. We don't have
12 those -- we don't know. And that's certainly a concern.

13 DR. LAUDER: I want to congratulate you. I
14 would ask one thing. I didn't hear in the presentation
15 -- perhaps I just missed it. We're talking about
16 recognition. Now we're talking about going home and
17 long-term outcomes. But what about the rehabilitation
18 stage? I mean, what sort of rehabilitation programs are
19 set in place at Walter Reed and in the V.A. systems, and
20 where are these folks going for that in-between stage,
21 which is kind of when it's then determined whether
22 they're fit for duty?

23 DR. WARDEN: Our network within the V.A.s have
24 rehabilitation there. It's done both in the military
25 sites but also sometimes through Tri-Care. It's a very,

1 very important aspect. I just didn't go into it.

2 DR. LAUDER: My concern though -- I'm sure
3 there is some sort of system in place now given this
4 presentation. But way back when, you know, the only
5 inpatient on active duty was at Walter Reed, and there
6 was V.A. But there was a whole host of other
7 individuals that it was thought they would do better
8 closer to home and by family, so they would go to a lot
9 of different civilian institutions. So a lot of
10 follow-up just never happened, I think.

11 DR. WARDEN: There's still issues. There's no
12 question about it. I think we work very hard to make it
13 the most seamless system as possible, and things are
14 advancing every day. But there are still issues.

15 DR. OSTROFF: Thanks very much. I'm going to
16 bring this session to a close. Thank you for that
17 presentation. I think that it gives us a lot of things
18 to think about, particularly as we go through the
19 afternoon sessions and hear some of the presentations
20 about some of the mental-health-related issues and how
21 this particular aspect of mental health problems fits in
22 with some of the things we'll hear this afternoon
23 because I suspect some of them are interrelated. So
24 with that, let's break for lunch.

25 (Lunch recess taken.)

1 DR. OSTROFF: Before we begin this afternoon's
2 session, we have a few issues to deal with.

3 COL. GIBSON: For those of you who want
4 CME credits, there's a form out there called the
5 "Attestation Statement." Put your address and phone on
6 that as well, and fill it out, and leave it with us, and
7 we'll get your CME credits.

8 For the Mercy tour tomorrow, we have two more
9 slots available, so see Abby. She has the list. There
10 are two -- the speakers, the liaison officers are
11 already taken care of. Your names are already on that.

12 DR. OSTROFF: I went out to make a phone call
13 during the break and I noticed there were a bunch of
14 guys out there setting up a large number of chairs out
15 on the patio out there. And for a minute I talked to
16 myself, Wouldn't it be nice if we could sit out there
17 and have the afternoon sessions out there because it's
18 beautiful out there. But, alas, we have a very
19 interesting and important number of presentations to
20 cover this afternoon, and hopefully we'll be able to
21 stay on schedule.

22 And this is a very important and, I think,
23 timely issue that the Board has been interested in.
24 There is a formal question before the Board related to
25 these issues. And so with that, why don't we get the

1 afternoon program started. Our first presenter is
2 Colonel Tom Burke.

3 COL. BURKE: I am Colonel Tom Burke. I am the
4 program director for mental health policy in the office
5 of the assistant secretary of defense for health
6 affairs. And on behalf of Dr. David Tornberg, the
7 deputy assistant secretary of defense for clinical and
8 programs policy, I would like to thank you for this
9 opportunity to present these questions to the Board.

10 By way of background, there has been a
11 remarkable level of interest in mental health, in the
12 mental health of the soldiers, sailors, airmen, and
13 Marines who have been deployed in support of Operation
14 Enduring Freedom and Operation Iraqi Freedom. There has
15 been interest on the part of the press, on the part of
16 various special interest groups, particularly veterans'
17 groups, and interest from congress. They have had
18 questions about the experience and our DoD policies
19 towards those veterans and those service members across
20 the timeline of deployment.

21 The first question -- predeployment usually
22 relates to screening. How do we screen soldiers? I'll
23 talk -- whenever I talk about soldiers, I'm talking
24 about all sorts of service members. Because I'm Army I
25 just naturally -- how do we screen the soldiers? Are we

1 sending vulnerable populations to combat to have them
2 exposed for -- be exposed to situations that will cause
3 them to develop PTSD in the future? Compounding that
4 problem we also have the issue -- the recurrent issue of
5 the stigma associated with mental illness and with
6 seeking mental healthcare. So on one hand you have
7 pressure to not expose a vulnerable population to
8 excessive risk. But on the other hand if you eliminate
9 soldiers from certain jobs, from deployment, from
10 promotion opportunities, or from being in the service at
11 all, based just on risk, you will worsen the problem of
12 stigma -- of the stigma associated with seeking mental
13 healthcare, and you may drive people who need mental
14 healthcare out of the system so that they wind up later
15 -- years later perhaps with PTSD. The other questions
16 are usually postdeployment. They relate to how do we
17 screen soldiers as they're coming back looking for risk
18 factors for PTSD, looking for mental health issues; and
19 are we doing anything in terms of intervention and
20 follow-up for the soldiers who have already been exposed
21 to combat situations?

22 For those reasons -- with that as background,
23 we would like to propose the following questions: What
24 studies would the Board recommend to help identify
25 subpopulations who may be at differential risk for

1 deployment related near or long-term adverse mental
2 health outcomes? Should we be looking for people with
3 preexisting mental health conditions, for people with
4 adverse childhood experiences who may be at an increased
5 risk and that could be identified and protected either
6 by not -- by not qualifying for deployment or by some
7 sort of intervention before they are deployed?

8 Second question is: Does current evidence
9 warrant conducting further research to determine if
10 there are protective factors that could be addressed for
11 soldiers before or after exposure to combat to reduce
12 the risk of adverse mental health outcomes?

13 At the risk of sounding flippant, this is sort
14 of the idea of is there a vaccine for PTSD or after
15 you're exposed to the traumatic situation, which is the
16 risk factor for PTSD, is there some sort of
17 PTSD antiviral drug that can be taken in a prophylactic
18 fashion to prevent the PTSD from becoming symptomatic
19 later on? Should the DoD pursue research into
20 preexisting vulnerabilities to deployment related
21 adverse mental health outcomes that could disqualify
22 individuals for military service? This looks at not
23 just soldiers who have already been in the service and
24 are anticipating deployment but for recruits before they
25 are accessed into the service. And finally, what can be

1 done to better understand and reduce the barriers to
2 care that are covered under the general heading of the
3 stigma associated with mental healthcare and contribute
4 to the choice the soldiers make when deciding to seek
5 care?

6 That's all that I have for the presentation of
7 the questions.

8 Are there any questions from the Board for me?

9 DR. OSTROFF: Thanks very much, Colonel Burke.
10 Any comments or questions before we move to the
11 presentations?

12 There are none. Thank you very much.

13 Our first presenter is Colonel Charles Hoge,
14 who is the chairman of the department of psychiatry and
15 behavioral sciences at Walter Reed Institute of Research
16 and the author of the recent paper that was in the New
17 England Journal of Medicine that prompted a great deal
18 of this discussion and also an old friend since Charles
19 was an EIS officer in the respiratory diseases branch
20 when I was a staff member there many years ago. It's
21 good to see you, and we'll look forward to your
22 presentation.

23 COL. HOGE: Thank you very much. It's a great
24 honor to be here. I have a rather lengthy presentation
25 on the land combat study that we published in the New

1 England Journal of Medicine. But I think I can flip
2 through a lot of this stuff to give you a sense of how
3 we conducted the study, what the elements are of the
4 questionnaires that we're using, and go relatively
5 quickly. I don't mind receiving questions. I don't
6 know how Dr. Ostroff wants me to do that -- if you want
7 me to go through the whole thing, but I don't mind
8 receiving questions if there are points that people
9 don't understand in the course of the presentation.

10 I was also asked -- why there's an hour and
11 15 minutes allotted for my session -- I don't know if I
12 can stand up here that long -- but there was. I was
13 also asked to comment on research initiatives that
14 should be considered. And so at the end -- after the
15 presentation of the study itself and the findings and
16 recommendations that pertain to the study, I have a set
17 of slides pertaining to what I think research priorities
18 are and also just some considerations for the Board from
19 my perspective as one of the few psychiatric
20 epidemiologists in the Army and maybe in the services
21 regarding those four questions that Dr. Tornberg asked.

22 So I want to thank my coinvestigators,
23 particularly Bob Koffman from the Navy, who helped us to
24 make this a Tri-Service or at least a Bi-Service study
25 with the Navy and Marine Corps, and a number of other

1 investigators that work with me at Walter Army Research.

2 Just have a couple of background slides. I
3 think probably a lot of this stuff is fairly apparent to
4 everyone. There are numerous studies in the literature
5 that have shown strong correlations between combat
6 experiences, combat deployments, and a variety of
7 health, social, and occupational outcomes. Particularly
8 PTSD, but not just PTSD, unemployment, U.S. spouse
9 abuse, divorce. Those are some of the sequelae that are
10 associated with combat experiences. And the studies are
11 based on retrospective data from the National
12 Comorbidity study and other surveys that have been done
13 typically performed years after combat experience,
14 literally, you know, sometimes decades after combat
15 experience. So that's an important background.

16 The other thing is mental disorder. We have
17 clearly defined the importance of mental disorders in
18 peace time with some of our earlier work that
19 demonstrated about 10 percent of all service members
20 receive care for a mental or behavioral health problem
21 each year. And that was -- that's before the war
22 started. So that's sort of a little bit of the
23 background.

24 Obviously, the current war in Iraq and
25 Afghanistan is a very unique challenge. And this is the

1 first sustained ground combat since Vietnam. It's a
2 conflict, obviously, that does not have clear borders of
3 what the front line is, what the rear area is. I can
4 tell you it's not just Fallujah and Najda that's getting
5 hit. It's every single forward operating base in the
6 country, you know, almost without exception. It's an
7 experience which -- every unit that we surveyed over
8 there, every unit had sustained casualties of one kind
9 or another. It's very immediate. It's very sustained.
10 And there's a lot of anticipation that soldiers feel.
11 It doesn't matter whether you're an inside-the-wire
12 soldier or an outside-the-wire soldier. Those guys who
13 are doing patrols sometimes twice a day outside the wire
14 -- the guys who are inside the wire are also getting
15 mortared and rocketed on a relatively routine basis.
16 And maybe the casualties are not anywhere near as high
17 on the base, it's the random nature of those casualties
18 that cause -- that elevate the stress levels of
19 soldiers. You just don't know. Is it going to be your
20 tent that gets hit, or your trailer that gets hit? Last
21 week it was the trailer 200 yards away. So just to give
22 you a little bit of sense of some of the unique
23 challenges. And I think maybe one of the tributes of
24 our study is the fact that it's not 50 percent soldiers
25 who are having significant PTSD symptoms. It's around

1 15 percent. I think that speaks to the resiliency of
2 our personnel over there. There are a number of
3 questions regarding, you know, what is the full impact
4 of combat. And there really hasn't been a study which
5 has used modern psychiatric nosology to look at
6 psychiatric disorders in the realtime context in
7 warfare.

8 And I think there's a very proactive approach
9 on the part of our leadership now at the very high
10 levels to address mental health issues. That's really
11 very unique to this war. The leadership has taken a
12 proactive approach to understand, support our studies,
13 support other studies being conducted, proactive in
14 terms of the policy initiatives, and proactive in terms
15 of trying to assess whether those policies are effective
16 or not.

17 These were the key research questions we
18 defined at the beginning of the studies. There's
19 probably multiple spin-off questions that have continued
20 to be generated. But the key one that we wanted to
21 answer was: What are the prevalence rates of
22 depression, posttraumatic stress disorder, alcohol
23 abuse, anxiety, as well as some of the other potential
24 social and occupational effects of combat based on other
25 studies, marital and relationship disfunction alcohol

1 abuse, et cetera? I wanted to emphasize that this study
2 is not designed to provide an estimate of the percent of
3 soldiers that -- if you did a screening, for instance,
4 in a primary care setting, the percent of soldiers who
5 may screen positive. We were trying to determine what
6 the population level prevalence estimates in the
7 population were at large. And since this is a healthy
8 population with a relatively low prevalent rate of
9 whatever the disorder is we're looking at, say PTSD --
10 if we use Vietnam figures of current PTSD, maybe 15
11 percent. That's still a relatively low prevalence rate
12 in a population at large when we're talking about a
13 healthy population. And any screening instrument is
14 going to have a large number -- is going to have
15 problems with -- specificity problems with predictive
16 value. So we set our specificity cutoff of our test
17 very high to try and get as best an estimate in the
18 population -- I can talk more about, you know, why we
19 picked the cutoffs that we did, but it is a cutoff that
20 is very standard in the literature for -- that's been
21 repeatedly used in other studies. So we have nice
22 comparative measures with other studies that are out
23 there.

24 We want to know, obviously, what the impact is
25 on occupational functioning and readiness, what the risk

1 factors for key outcomes like PTSD are, what factors
2 decrease the risk. And this gets to one of the
3 questions Dr. Tornberg asked in terms of resilience:
4 Are there factors that predict enhanced resiliency among
5 soldiers, good leadership unit cohesion, social support,
6 morale within the unit, and those types of things? So
7 we have a human dimensions team -- we have a multiple
8 disciplinary team that we're also using standardized
9 measures of unit variables as well as our medical
10 variables on our surveys.

11 And most importantly, what proportion of
12 soldiers and -- we're also studying family members to
13 some extent who are in need of services, have received
14 services, and what are the barriers to care. Our
15 methods are primarily survey based and primarily
16 repeated cross-sectional design. We do this anonymously
17 because we have very sensitive questions on the
18 survey -- questions about family violence, questions
19 about alcohol and drug abuse, things that have legal
20 implications. And because of that we wanted to have as
21 high a compliance as possible. We designed the study to
22 assure anonymity. And so we have limited ability to
23 link with another database -- no ability to link with
24 other databases. And we have limited ability to do
25 longitudinal analysis of individuals within our cohort,

1 although we have a code system we've created to allow us
2 to identify our cohorts within our repeated
3 cross-sectional measurements. So we will be able to say
4 something about the longitudinal nature of the data, how
5 many individuals who tested positive for PTSD had
6 resolution of their symptoms, and how many developed
7 symptoms subsequently delayed onset PTSD. Those are
8 some things we'll be able to answer.

9 The bulk of our data are repeated
10 cross-sections within the same units done at different
11 time points, predeployment in some cases. But in
12 postdeployment we're looking at three months, six
13 months, and one year out. We augment our work with
14 focus groups and spouse survey data as well, has been
15 very helpful because we get a somewhat different
16 perspective, but actually remarkable correlations of
17 what we're seeing in spouses and their responses about
18 their perceptions of what's happening among the soldiers
19 and the soldier data themselves, particularly, for
20 instance, family violence data. We have very similar
21 correlation between spouse and soldiers, and that was
22 very reassuring to me. As an epidemiologist, we're
23 always thinking, how valid are these measures? Are the
24 soldiers being honest when they answer our surveys? We
25 give informed consent. It is voluntary. Typically what

1 we do is we approach the units of interest. And we
2 focus primarily on land combat units, Army infantry
3 predominately, although we've had at least around 1,000
4 Marines that we've included in a study as well after
5 OIF-1. We approach the combat unit, and we
6 conduct -- we identify the times that are going to be
7 convenient for the unit, and we go to their location --
8 to their work location and conduct the survey and
9 whatever way makes it feasible for the unit to do it.
10 So if they want us there at 6:00 in the morning or 11:00
11 at night, we'll be there. Overall, we've had an
12 excellent participation rate.

13 Among the units that we have targeted, we've
14 been able to get roughly 60 percent of the soldiers
15 within those units -- that was at least from the New
16 England Journal paper. The determination of who is
17 available to hear our spiel about the study is really
18 purely an operational thing for the most part. It's who
19 is available that day on duty. If they've had night
20 training or exercises going on somewhere else, then
21 obviously that group won't be available, but another
22 group who just finished the training may be. Among
23 those that are briefed, probably -- I assume because of
24 the anonymity and the reassurances we give that their
25 answers really will remain anonymous, they almost all

1 fill out the survey.

2 Just some limitations up front. This is
3 cross-sectional data, primarily. It's not
4 representative of all soldiers who deployed to Iraqi
5 Freedom or Afghanistan. We're primarily focused on the
6 combat units. We have now -- we are in the process and
7 have done some work with the support elements
8 postdeployment, and we're also -- we've also done two
9 theatre-wide assessments in Iraq that have included
10 substantial numbers of infantry as well as support
11 personnel. But there are some limitations. This is not
12 a random sample of all the forces that are deploying.
13 This is a study focused on combat units. Because we're
14 going to the unit and surveying healthy soldiers in the
15 unit, we have -- we're obviously going to be missing
16 those who may be clinic appointments that day or who are
17 AWOL or injured and still recovering from traumatic
18 injuries in Iraq. So I think that if our bias in that
19 case would be toward a healthier result, we might see
20 somewhat higher rates if we included the other folks
21 that aren't there for our survey.

22 This is just a snapshot of some of the
23 variables in the survey. It's, again, primarily survey
24 based.

25 This is, again, a snapshot of some of the

1 units that we've surveyed. We have almost all of the
2 entire 18th Airborne Corps, which is just an enormous
3 sample at Bragg, Stewart, and Fort Campbell. We
4 surveyed special op units. We've surveyed two Marine
5 battalions -- one from Pendelton and one from the East
6 Coast. We have about 1,000 spouses who filled out
7 surveys. And then we have two theatre-wide assessments.
8 We -- we don't have complete pre and postdeployment data
9 on all these. But we do have a nice predeployment
10 sample that we've obtained just prior to the start of
11 OIF in one of our 82nd Airborne infantry units that
12 provided our basis for comparison. That was 2500
13 soldiers. We've since followed those specific -- that
14 specific unit up.

15 Just a couple comments on demographics. The
16 demographics from our theatre-wide assessments in Iraq
17 look very different than this. But our postdeployment
18 infantry samples are almost all male, almost -- over
19 half -- about 60 percent less than the age of 25, high
20 school diploma typically. About half are married. So
21 despite this young age, a large proportion are married,
22 and a large proportion have children.

23 I think in our theatre-wide assessment we're
24 seeing --

25 DR. OSTROFF: Can I ask one quick question?

1 This is exclusively active duty personnel. It does not
2 include reservists who are National Guard units or --
3 COL. HOGE: The data I'm going to show today
4 are all active duty. And the data in the New England
5 Journal is all active duty. We have just now added
6 National Guard brigade that's preparing to deploy to
7 Iraq, and we'll be following them postdeployment. And
8 we have a substantial reserve National Guard and active
9 comparison from our in-theatre Iraq sample that we just
10 collected. I just got back last month from Iraq where
11 we completed 2,000 surveys, and almost half of them were
12 from reserve and National Guard. We have had a very
13 nice sample of females as well, 14 percent. They look
14 good. The rates in mental health problems are no higher
15 in the reserve National Guard than they are in the
16 active component. Generally -- actually, a little bit
17 lower because they're -- probably because they're older,
18 and they're -- they have more life experience and
19 married and social support than the younger folks. But
20 I don't have the data.

21 Just a brief comment on the survey instruments
22 that we're using. For major depression and generalized
23 anxiety, we use the patient health questionnaire. This
24 is the same thing that's being used in the Millennium
25 Cohort Study, the recruit assessment program, and other

1 -- here -- I think now has a PHQ module on it. It's the
2 most widely used depression measure in a primary care
3 setting. It's been very well validated in the primary
4 care setting, and it's based on DSM nosology.

5 We have for our -- we used two definitions.
6 I'll show you two data. The first cutoff criteria that
7 we use is the cutoff criteria that is recommended by the
8 PHQ for use in the primary care clinic or in a mental
9 health clinic where you want to do screening and you
10 want to cast the net as wide as possible because
11 everybody's going to see a provider, and you want to try
12 to identify those people who might be at risk so that
13 you can probe deeper and see whether they have
14 depression. You'll catch a lot of folks who don't have
15 the disease when you do that. But that's the screening
16 definition or the screening cutoff.

17 Now, we have a strict definition, which is
18 our population -- our best guess of what the population
19 estimate is. That's why -- where we require them to
20 have -- meet the same definition, but also to have
21 evidence of serious functional impairment based on a
22 survey item. PTSD -- similarly, we use the National
23 Center for PTSD checklist, which is also the standard
24 now in the field. And we have a standard definition
25 that's widely accepted, used as a screening criteria,

1 and a strict definition that requires the person also to
2 have a score of 50 with this range of 17 to 85. And
3 that's a score that's been used in other studies and is
4 a well-established cutoff score. But it's a fairly
5 strict cutoff score. You have to have a lot of symptoms
6 to meet that score.

7 The time period for all the questions are
8 standardized for the past month. So we're not asking
9 about symptoms in the past year. We're asking just --
10 you know, have you had these symptoms in the past month?

11 This is -- soldiers love to name their
12 vehicles. I don't know what this is. I think it's some
13 sort of chemical decontamination vehicle. We were going
14 to try to adopt it when we were over there, but we
15 weren't successful.

16 A snapshot on our combat experiences. We have
17 a long combat experience question. Some of these are
18 some of the questions, and these were the experiences
19 that soldiers reported -- the percent of soldiers that
20 reported having had these experiences at least once
21 during their combat deployment to Iraq -- receiving
22 small arms fire, 93 percent; being attacked or ambushed,
23 almost 90 percent; receiving incoming artillery mortar,
24 86 percent -- that's now up to around 95 percent;
25 shooting or directed fire at the enemy, 77; being

1 wounded or injured, 14 percent -- not uncommon, and we
2 found significantly associated PTSD. I thought this was
3 remarkable -- shot or hit with the protective gear that
4 saved you, 8 percent endorsed that item.

5 These rates are -- we're seeing very similar
6 rates persisting right up until now. The -- some of the
7 things like being responsible for the death of an enemy
8 combatant, that's down. Among soldiers now over there,
9 it's maybe around 20 percent instead of nearly 50
10 percent of soldiers endorsing that item after the OIF-1.
11 But handling or uncovering human remains, about 50
12 percent. A lot of soldiers reporting having team
13 members become casualties, even engaging in hand-to-hand
14 combat, saving the life of a soldier or civilian.
15 Soldiers are experiencing very, very significant combat
16 events. This says nothing about frequency or intensity.
17 We do have frequency measures on the survey, but this
18 is -- and they're significant. They're high.

19 Perception of being in serious danger, over
20 half the soldiers reported that this occurred many times
21 during deployment.

22 This is the distribution of soldiers reporting
23 number of fire fights during their deployment both --
24 again, over half reported three or more -- you know,
25 almost a third -- ten or more during the deployments.

1 Now, when we get into the mental health
2 portion, we have a broad screening question that asks:
3 Are you currently experiencing any stress, emotional,
4 alcohol, or family problem? If the answer is yes, just
5 rate it subjectively -- mild, moderate, or severe. And
6 these are from four different cross-sectional data
7 collections -- predeployment sample from the 18th Air
8 Borne Corps infantry unit, theatre-wide assessment from
9 OIF-1 conducted last summer, and then postdeployment
10 three months and postdeployment six months in the same
11 unit from infantry unit -- from the 18th Air Borne Corps
12 that had experienced -- actually, the third infantry
13 division that went into Baghdad, you know, led the
14 invasion.

15 So 12 to 16 percent during deployment or
16 postdeployment reported experiencing a moderate problem,
17 and about 5 to 7 percent reported experiencing a severe
18 problem. Then when we asked the question: Are you
19 currently interested in receiving help, you know, not a
20 high number. 15 to 17 percent of soldiers during
21 deployment or postdeployment reported interest in
22 receiving help. Most of these folks don't get help.
23 They don't necessarily -- this doesn't translate into
24 help seeking, but they are willing to report on an
25 anonymous survey they are interested in receiving help.

1 Now, when we asked the question: What portion
2 of soldiers screened positive for depression,
3 generalized anxiety, posttraumatic stress disorder, or
4 any of those three using the screening criteria that
5 would be used in a primary care setting, casting the net
6 as wide as possible, to identify anyone who might have
7 symptoms, even though those symptoms are not diagnostic
8 of a disorder or disease, this is -- these are
9 prevalence rates. So predeployment for depression, 11
10 percent; 14 percent after coming back from Afghanistan
11 at the three-month time point; about 18 percent
12 in-theatre last summer -- summer before last; and
13 anywhere from 1 to 15 percent in our postdeployment
14 samples. This is Marines, and this is third infantry
15 division, again three months and six months. And going
16 over to anxiety, very similar picture. PTSD is where
17 you see the big difference between predeployment and
18 postdeployment. Predeployment is about 9 percent of
19 soldiers meeting the screening criteria; 11 percent
20 after coming back from Afghanistan; and outwards of 18
21 to 20 percent in-theatre or postdeployment -- either
22 Marine sample, Army sample. This was also very
23 reassuring to me to see these -- that high correlation
24 between Marines and Army in terms of prevalence rates.
25 These are different types of units, yet we're

1 seeing very similar things, all of whom have experienced
2 significant combat in the initial ground war. And then
3 any mental health problem, upwards of 30 percent
4 postdeployment meet the screening criteria. This --
5 kind of a seed to be planted is the notion that if you
6 did screening in the primary care setting at the
7 three- to four-month time point, you might see huge
8 numbers of soldiers -- if they're willing to endorse
9 questions in that setting. You might see a large
10 portion of soldiers. Then you have to think about are
11 there the resources to do the follow-up interview
12 successfully and figure out what portion actually had
13 the disorder. What proportion do I think actually had
14 clinically significant illness using these screening
15 criteria?

16 DR. BLAZER: In a typical primary care clinic
17 using the PHQ, what's the frequency of these screens?

18 COL. HOGE: I think it's around 10 to 15
19 percent, but I'm not 100 percent sure about that. I
20 think it varies.

21 MS. EMBREY: I think there's a policy within
22 the department right now that anybody who's returned
23 from combat theatre and goes to a clinic for any reason
24 is supposed to be asked along the protocol for the
25 postdeployment health -- clinical health -- clinical

1 practice guidelines. And some of the questions are
2 leading into this further -- more discrete screening
3 process. It's anytime anybody shows up at a clinic the
4 provider is supposed to go through the postdeployment
5 clinical practice guidelines. You know, ask the
6 question: Do you believe this is related to your
7 deployment? Yes or no. If yes, then you go through a
8 whole series of other questions. I don't know to what
9 extent that's actually being practiced, but that is the
10 policy.

11 COL. HOGE: Generally, current prevalence
12 rates of current depression in a primary care population
13 is around 10 to 15 percent. That's generally the range
14 that I remember.

15 Now, these are the -- using the strict cutoff
16 criteria -- the cutoff criteria that I think most
17 closely parallels what I think the true prevalence rates
18 are in the population -- again, we have to realize these
19 are a healthy population. These are screening
20 instruments. These aren't clinical interviews -- but
21 here we're seeing rates more around 6 to 7 percent for
22 depression and anxiety. But for posttraumatic stress,
23 you see this big difference. 5 percent is right on par
24 with what you see in the general population for PTSD.
25 The prevalence rate in the general population for PTSD

1 is around 3 to 4 percent. We're finding it to be around
2 5 percent in our predeployment sample. That was a
3 sample that had not previously deployed yet. And so
4 that was very reassuring to see this was pretty much on
5 par with what we expected. Postdeployment -- during
6 deployment and postdeployment we're seeing rates upwards
7 of 15 percent. And that's actually also remarkably on
8 par with other studies for Vietnam, even though the
9 Vietnam studies had been conducted years later. I
10 generally don't say that when I talk to reporters when
11 they say, Well, you know, how does this compare to
12 Vietnam? I say, Well, this is very difficult to compare
13 because these are -- our research is being conducted
14 right at three months postdeployment, whereas the
15 Vietnam experience is conducted 15, 10, 20 years
16 postdeployment. But the bottom line is we're getting
17 quite similar numbers. And then overall, 15 to 20
18 percent screening positive for any of the three.

19 Any questions about this? This is probably
20 one of the more important findings.

21 Just some quick, you know, risk factor
22 epidemiology. We found a roughly linear correlation
23 with that question of being -- perception that you were
24 in serious danger of being injured or killed during
25 deployment. And you see the prevalence rates of

1 PTSD based on how they answered that question.

2 And, similarly, prevalence of PTSD by number
3 of fire fights, also a nice linear correlation. The
4 lower rates of PTSD from our Afghanistan sample looked
5 to be directly due to lower frequency and intensity
6 experiences rather than, you know, something unique
7 about Afghanistan.

8 Also very high comorbidity with alcohol. Not
9 surprising. Very well documented in the literature and
10 it's here too. It's a nice thing that you can use to
11 hook commanders with this, that this is -- you know, if
12 you -- you should pay attention to this because you're
13 going to have -- because if you don't, you'll have
14 higher number of alcohol incidents in your units, and
15 they'll say, Oh, okay. I didn't know that. Also,
16 soldiers recognize the fact that they treat their own
17 symptoms with alcohol, and that's sometimes very
18 helpful. Soldiers understand, Oh, gee, maybe that's why
19 I'm drinking more.

20 Now, the basic -- one of the basic questions
21 was: What proportion have received care -- what
22 porportion of those who screened positive have received
23 care? So this is among those who screen positive using
24 our strict case definition, so relatively serious
25 symptoms. What percent have reported receiving any

1 professional services -- and that includes seeing a
2 chaplain. 17 to 32 percent, depending on the units
3 we've surveyed in the last month, and only slightly
4 higher than that if you ask about the past year. And
5 then this is the rough percent of soldiers who saw
6 mental health professionals with the other percent being
7 seen by primary care providers, chaplains, et cetera.
8 So not over 40 percent. About a third of the 17 percent
9 receive some sort of professional services. It says
10 nothing about the adequacy of those services.

11 Why is that? Well, this is where we get into
12 the stigma and barriers to care. I think this has a
13 significant role in why soldiers don't receive care.
14 Now, interestingly, when you compare soldiers that
15 screened positive with soldiers that did not, the
16 questions were worded in such a way they were sort of
17 generic. If you had a mental health problem, you know,
18 what would be the factors that would be of concern to
19 you in receiving care? They were worded that way so we
20 could get a general sense of -- what the general sense
21 of what the perception stigma is in the population at
22 large. I actually thought maybe that if -- it would be
23 more of a societal, you know, belief system that would
24 be fairly uniform. But, in fact, it's those folks who
25 have mental health problems who are much more -- it

1 makes sense. It's logical. Those folks who have mental
2 health problems are much more clued into their problem.
3 So they're thinking, Gee, maybe I have a problem. I
4 wonder if I should go get help. What will that do to my
5 career? Maybe not surprisingly after all, we found huge
6 differences between those who screened positive and
7 those who didn't in regard to how they endorsed the
8 stigma questions.

9 Now, the policy implication here is that the
10 hardest people to reach are the people that you want to
11 reach, you know, those who have the mental health
12 problems. Things like I would be seen as weak, my unit
13 leadership might treat me differently, members of my
14 unit might have less confidence in me or blame me for
15 the problem, or it would harm my career -- these are
16 questions that are on a scale from strongly disagreed to
17 strongly agree. And with these types of questions, you
18 always get a large porportion of folks answering in the
19 neutral category. So to see rates of 50 to 60 percent
20 on these kinds of questions, is usually pretty
21 striking.

22 Just two general categories of barriers. One
23 is the stigma, the perception that one will be
24 stigmatized. It doesn't mean they are stigmatized, but
25 they perceive they will be, the individual themselves.

1 The second category of barriers are more the physical
2 barriers of not having adequate transportation;
3 difficulty getting time off work; difficulty navigating
4 the healthcare systems, which is complicated, at times
5 not knowing where to go for help. So these are some of
6 the questions we asked in regard to stigma and barriers.

7 Interestingly we found in the spouses of
8 soldiers who were deployed, very similar rates of
9 depression and anxiety, 8 percent of spouses. And very
10 similar rates of endorsing wanting to get help, 15 to 20
11 percent. But instead of 25 to 40 percent getting help,
12 two-thirds of spouses get help. And they're a lot less
13 concerned about stigma. They were more concerned about
14 these sorts of physical barriers -- am I going to have
15 child care? Will I be able to get off work? Can I get
16 an appointment? And places like Fort Bragg where
17 there's really, I think personally -- maybe I shouldn't
18 say this -- it's abysmal Tri-Care support for spouses,
19 and it's difficult for them to get off post and navigate
20 the Tri-Care system for themselves and their children,
21 especially for children. I'm not showing the child
22 data. But this is an issue because we're not, at most
23 posts, able to provide care to spouses. I think I have
24 some of this data later. Let me hold it until then.

25 Just some basic questions about alcohol and

1 drug misuse. We found higher rates of endorsing use of
2 alcohol more than you meant to or needing to cut down on
3 drinking. Postdeployment compared to predeployment.
4 This is just a slide I snatched off another brief. It's
5 three different infantry brigades. We see very
6 comparable data between all our survey data collection.
7 It's been very remarkable in that sense. Things like
8 drinking after -- having several drinks, pretty high
9 endorsement rate. About 5 percent admitting to using
10 illegal drugs, and about 2 to 3 percent needing referral
11 or having been referred.

12 Aggression also appears to be different
13 postdeployment than it is predeployment. And I think
14 the most specific question is this one: Got in a fight
15 with someone, hit the person -- basically a fist fight
16 -- almost 20 percent endorsing that in our
17 postdeployment sample.

18 Among spouses -- this is what I was eluding
19 to. I forgot I had this slide in here. But, you know,
20 very similar -- about 17 percent moderate or severe
21 problem; 19 percent interested in receiving help; 8
22 percent screened positive. And then here, instead of --
23 over 60 percent are seeking care versus 25, or 30, 40
24 percent. But most of the care that they're receiving is
25 from their primary care doctor at the military facility

1 because Tri-Care is difficult to navigate. Even though
2 there's providers on the books, a lot of times they only
3 have a certain -- small appointment slots because they
4 don't get paid very well, and it's difficult to get
5 reimbursed. So they -- you know, it's hard sometimes
6 for spouses to get the care, and they're not being given
7 the care necessarily by the military professionals on
8 post because they are stretched as it is treating the
9 active duty soldiers. So you see this. So this really,
10 I think, speaks to an important policy issue and
11 research issue in terms of how we're delivering mental
12 health services to the spouses in this setting, and if
13 they are getting -- and it seems to suggest -- the bulk
14 of mental health services in that primary care setting,
15 and are there things that we can do to beef up the
16 delivery of services within the primary care setting to
17 support them and to assure that they're receiving
18 quality services. Because, you know, they're -- they
19 may not be receiving necessarily the same quality of
20 care that they would from a mental health professional.

21 We ask about marital satisfaction. Again,
22 kind of giving you a snapshot here. Pretty high,
23 actually, marital satisfaction among married soldiers.
24 But maybe a slight dip here. I'm not sure this would be
25 significant. But, you know, it's -- you start to see

1 something here at the 12-month point. And then the next
2 slide though speaks to it, maybe a little more directly,
3 and is a little concerning and very preliminary. This
4 is from the same infantry brigade surveyed
5 cross-sectionally at three time points, including only
6 those soldiers who deployed and who are married. But
7 you're starting to see what looks like a linear
8 relationship here and moderate and severe abuse.

9 We looked at another brigade that was not
10 surveyed at any of the earlier time points, only
11 surveyed at 12 months. We found identical rates. So
12 this is something that needs to be looked at very
13 carefully over the next few months as we complete our
14 data collection of the other brigades that we've
15 surveyed.

16 But severe spouse abuse in this case -- now,
17 the background rate among married couples in the
18 civilian population and in the military is very
19 comparable. It's around 3 to 4 percent. When surveyed
20 anonymously, report severe incident of abuse in the past
21 year. And "severe" being defined as choking, beat up,
22 or threatening with a weapon, or use of a weapon.
23 That's the definition of severe abuse. That's used a
24 lot in literature. That's not necessarily the best
25 definition. We use this just as a standard measure so

1 we can compare it with other things. You generally find
2 severe abuse in the range of 3 to 4 percent. And here
3 we're seeing a slightly higher rate at the 12-month time
4 point, which suggests there may be a delayed effect.

5 We're also seeing the slide I showed of PTSD.
6 We're also seeing -- I didn't show the 12-month time
7 point on that. But we're seeing a similar higher rate
8 of PTSD there, suggesting that there are, in fact, as
9 has been described in the literature, some cases of
10 delayed onset of some of these problems.

11 How am I doing? Guess I'm doing all right.

12 In summary, these are just the key findings
13 here. I think I've hammered them. Sizable porportion
14 -- you know, when surveyed, screened positive for mental
15 health problems. PTSD is the most important one that
16 you see a big difference between pre and postdeployment.
17 Low percentage of soldiers are receiving help, and they
18 perceive they'll be stigmatized. It may take up to a
19 year for marital issues to emerge. There may also be
20 delayed onset of PTSD. These are things that are
21 research questions that we'll continue to be looking at.
22 Then I talked about -- a lot about the spouses in terms
23 of their likelihood in their accessing care -- is really
24 through the primary care or defacto mental health
25 system.

1 Just a couple other things I think that has
2 policy implications. There is good data out there that
3 earlier treatment of PTSD -- and there is -- there's
4 lots of good proven treatments of that. The earlier the
5 treatment the better. Again, there may be delays in
6 onset of symptoms. Again, I think this speaks to how do
7 we deliver the information to the operational line
8 leaders in the most effective way to get them to
9 encourage their service members, the soldiers in their
10 unit, to receive care early and that it is, you know,
11 acceptable to do that?

12 Now, I think one of Dr. Tornberg's questions
13 has to do with barriers with the stigma question. So I
14 put this as a list of what I think are some of the key
15 considerations that are in some ways already being
16 implemented. There are already initiatives in a good
17 number of areas, particularly the emphasis in expanding
18 mental health services and primary care clinics and
19 stuff like that. So these are some of the
20 considerations to reduce barriers of care.

21 The flip side of this is that any of these
22 considerations, I think, need to be evaluated from a
23 program evaluation standpoint. We can -- they all look
24 good. But are they effective? That's a question which
25 we need to continuously ask. I think that's the most

1 important research question. I don't think those four
2 questions that Dr. Tornberg outlined really hit the nail
3 on the head. I think the nail on the head is: Are the
4 policies being implemented successfully? Do we have
5 success in terms of reducing the impact of combat on our
6 forces? Considerations include incorporating routine
7 PTSD and depression screening in primary care. That's
8 already being done with depression. I think now the
9 PTSD guideline -- I think that will start to be done
10 much more routinely in the primary care setting.
11 There's a very nice four-item PTSD screen that mirrors
12 the longer version, and it now has validation data. It
13 didn't when it was proposed for inclusion on the 2796,
14 but it has validation now, and it looks pretty good.

15 So I think that that's -- there's also
16 potentially some other areas where other locations --
17 where we could do screening, for instance, in family
18 advocacy settings, social work settings, and in alcohol
19 treatment settings. And I think that the biggest
20 resistance to this probably comes from my own community
21 of mental health professionals. I think that virtually
22 all care -- mental health care should be delivered in
23 primary care setting. I think that -- or a huge bulk of
24 it. I think having separate clinics, and separate
25 entrance, separate charts is stigmatizing in and of

1 itself.

2 If a soldier walks through the front door at
3 Robinson Clinic -- this is a wonderful primary care
4 clinic in -- it is the troop -- huge troop medical
5 clinic that provides all the primary care to the entire
6 82nd Airborne division. Soldiers, spouses, and their
7 children -- it's got pharmacy services, you know, basic
8 lab services, OBGYN, family practice, primary care.
9 It's a wonderful clinic. They also have mental health
10 collocated. And it's around the side, and it's separate
11 from the rest of the clinic by a key punch, and they're
12 always arguing over space issues. This is just -- and
13 they have different sick calls. So a soldier has to
14 specify which sick call he's going to. Is he going to
15 go around the side door for sick call or the front door
16 sick call? So these are things I think that we really
17 need to look at -- how we're delivering services in ways
18 that destigmatizes.

19 I think that we also need to do more in terms
20 of training leaders that PTSD symptoms are common
21 expected reactions after combat, that it's nothing to be
22 ashamed of, that everyone is affected. There is no one
23 that isn't affected that goes to Iraq, and that it's
24 okay to get help, and that the earlier you get help the
25 better, and just provide this education. And it is

1 having an affect. Leaders now are starting to implement
2 policies to this effect at the line level. It's very
3 interesting. But I think that we can do a better job in
4 terms of providing training modules and then trying to
5 assess whether they're efficacious or not.

6 I think for the spouses, I think there needs
7 to be consideration in terms of social work support at
8 the brigade battalion level and that sort of thing.
9 These are things that in many cases are already being
10 implemented. There are changes underway and -- but are
11 some of the ways which I think stigma may be able to be
12 reduced in the future.

13 Am I doing all right on time?

14 Just a few quick -- what I think are kind of
15 key research priorities. I think No. 1 is establishing
16 program evaluation, part of policy initiatives. I think
17 that's already going on. But we need to kind of keep in
18 mind how well are we doing, how well do we do, and does
19 it -- and who does it? Is it a research -- is it a
20 research mission, or is it a, you know, healthcare
21 delivery mission, et cetera? I think the big area that
22 we need to move into is that we've now done it and in
23 the process of doing a very nice job with understanding
24 prevalence rates, risk factors. So now we need to go
25 the next step in terms of, you know, are there truly

1 efficacious interventions that can be done at the
2 primary and secondary prevention level? And this is
3 where psychiatric epidemiology falls way behind other
4 epidemiology fields.

5 Evaluate new strategy for delivering
6 behavioral services, I talked about that already. And
7 then looking at whether those strategies work. And then
8 another question that Dr. Tornberg asked was about
9 screening, and I think that we're already doing
10 screening. We have a postdeployment health assessment,
11 which it has a very short but very nice collection of
12 mental health items to include the two stem questions
13 for depression and that four-item PTSD module on it. So
14 very, very nice baseline measure. But there are
15 questions that need to be considered -- like, Is doing
16 that immediately postdeployment really the best time to
17 do that? What about three to four months to six months
18 postdeployment? And how valid -- what is the optimal
19 cutoff criteria? There is still a lot that needs to be
20 done in regard to that. And how well do those measures
21 correlate with more standard psychiatric measure,
22 particularly clinical interview? So some of -- the
23 other thing is where to do the screening. Do you do it
24 at the unit level, or do you keep it at the primary care
25 level? Do you do it anonymously or not? Is there a

1 role for anonymous unit needs assessment programs?
2 Because screening itself may be stigmatizing. If you
3 have to wait in a line and get identified based on the
4 answers you put on the survey and go to another line to
5 wait and see a health provider, well, you can imagine
6 you're going to get cat calls, and that's what happens.
7 So that may be stigmatizing in and of itself. There is
8 an inherent risk benefit ratio to doing any screening
9 program.

10 In fact, if there's more time, I've got a
11 slide -- actually, it's in your packet -- of the
12 potential benefits and potential risks of screening.
13 And that risk benefit ratio needs to be seriously looked
14 at with any screening initiative. But despite the fact
15 that you might conclude that there's limited evidence of
16 the efficacy and the benefits might not completely
17 outweigh, if not the risks, maybe the costs, still we
18 may want to do screening because soldiers and commanders
19 feel like they're being taken care of when we do it. It
20 may provide a way for soldiers to get into the medical
21 system and mental health care system. And, therefore,
22 screening may have a role in destigmatizing mental
23 health services. So there's a lot to consider in terms
24 of screening measures.

25 Then I think that we need a real PTSD research

1 initiative to include determining what the best
2 treatments are for soldiers and where they should be
3 delivered, how they should be delivered. And that's
4 really sort of, in a nutshell, what I think the research
5 priorities are.

6 Do I have time to go through the four
7 questions, or should we stop? It's totally up to you.

8 DR. OSTROFF: Yeah. If you could do it
9 quickly.

10 COL. HOGE: I think I've hit on this. This is
11 the first question that Dr. Tornburg asked. What
12 studies are recommended to help identify subpopulation?
13 And the considerations are -- that I think are important
14 are the risk benefits of screening and the fact there is
15 no psychiatric instrument out there that has high
16 sensitivity and specificity. When we get 80 percent of
17 each of those, we're pretty happy. So what does that do
18 in terms of predictive value?

19 Then the next two slides you have in your
20 packet are potential benefits or potential risks.
21 I've already talked a bit about the screening -- what I
22 think are important research questions pertaining to
23 screening. Let's skip over that.

24 So the second question that he asked: Does
25 evidence warrant conducting further research to

1 protective factors to reduce the risk? I think it does.
2 I think there needs to be more -- I agree. There's an
3 important role for trying to identify those factors that
4 are important for mitigating or attenuating the effects
5 of combat. Things we're looking at are things like
6 leadership or cohesion as one potential mode.

7 Next question: Should DoD pursue research at
8 a preexisting vulnerabilities with the purpose of
9 disqualifying individuals? And this is a very, very
10 different question than should we have a screening
11 program to identify those soldiers who have had
12 developed problems postdeployment so we can provide them
13 the best care. Completely different question. There's
14 literature out there that's very poor. We have all the
15 problems inherent in sensitivity and specificity with
16 regards to this, except it's even worse because how do
17 you disqualify if somebody -- what if they have an
18 abnormal development childhood? That doesn't
19 necessarily mean they won't be successful in the
20 military. Can you use that as an exclusion criteria,
21 for instance?

22 This is a much more complicated question, and
23 I chose in my research program to completely ignore this
24 question. It's too difficult, as far as I'm concerned.
25 I have enough work to do trying to just keep up with the

1 whole question about deployment related screening much
2 less even start to think about how to grapple with this
3 one.

4 Next question: And what can be done to, you
5 know, better understand stigma? And I belabored that.

6 Thank you very much. I really appreciate it.

7 DR. OSTROFF: Thanks very much. Let me open
8 it up. I'm sure that there are questions and comments
9 from Board members.

10 DR. CATTANI: I was just curious on your
11 perceived barriers to mental health whether the 38
12 percent of the screen that didn't trust mental health
13 professionals -- whether you correlated whether or not
14 they actually have seen a mental health professional
15 versus whether they just had a bias or a prejudice
16 against them without ever having experienced care.

17 COL. HOGE: Not yet. That's a whole -- I've
18 got a couple people working on that really trying to
19 tease out what's the relationship between all of these
20 variables with regard to stigma. Excellent question.

21 DR. CATTANI: And my second question is also
22 one of curiosity. I wondered if you did -- or why you
23 didn't ask about having seen dead civilians, children,
24 women, noncombatants basically, in terms of the
25 hypothetical risk factors. Because of the interviews

1 that you see with returning troops is that they've been
2 very disturbed by the number of civilians that -- and it
3 seems to me to be complete in looking at what the risk
4 factors are that that should be one of the questions.

5 COL. HOGE: Yeah. I'd have to look at the
6 surveys. We did have a question on there about being
7 responsible for the death of an enemy combatant and also
8 being responsible for the civilian. And the endorsement
9 rate was 20, 25 percent in our OIF-1 sample. It's lower
10 now because the situation is different. And then there
11 are some questions on there about being -- seeing women
12 and children who are suffering and being unable to help
13 them, or something like that. So there are questions on
14 there about that.

15 DR. PARKINSON: Dr. Hoge, thank you very much.
16 That was great, including your comments about let's get
17 over the fight about the instruments and standardized
18 case definitions.

19 I was going through a list of items here, and
20 I'll pop some questions in. The first thing is the
21 prevalence. These are things we have to establish.
22 First, what is the true problem? Your study is
23 absolutely essential in helping us understand that, not
24 only the prevalence, but the time of onset. Hopefully
25 the Board gets the MSMR. And if not, we should make

1 sure everybody gets it. When I look at the data from
2 the postdeployment questionnaires for active duty
3 troops, Army, mental health concerns using a subset of
4 those completed questionnaires for depression and
5 PTSD run about 5 percent. So realizing that the cohorts
6 are not exactly the same but the people filling out the
7 postdeployment surveys and seeing people who are
8 in-theatre coming here, we go from a 5 percent to a 15
9 to 20 percent three months out. Do I reed that right?

10 COL. HOGE: Are you talking about the
11 postdeployment health assessment?

12 DR. PARKINSON: Right. If I was to assume
13 that the methodology -- there is some degree of mapping
14 that the title "mental health concerns" -- so we're
15 seeing a three-fold increase in the three months
16 following departure from theatre.

17 COL. HOGE: I don't know if this answers your
18 question. These are data from the postdeployment health
19 assessment compliments of Dr. Rubertone's group, and
20 here we broke -- we've looked at those specific
21 items -- this is for OIF, Army, soldiers, and Marines,
22 active component, and reservists. And we've looked at
23 whether or not they endorse the question about wanting
24 to go get help. So whereas anonymously a
25 three- four-month time point -- about 15 percent

1 endorsed this. Now, here, about 5 percent on the
2 postdeployment are endorsing that. PTSD out of the four
3 items screened -- if two or more were positive -- about
4 10 percent are screening positive for two or more, which
5 is becoming the accepted cutoff criteria. That's
6 probably not as specific criteria as we use.

7 Depression, this is meeting either of the two
8 stem questions for depression, about 5 percent. And
9 then this is having concerns about getting in conflict
10 or losing control, and any of these -- around 20 percent
11 -- almost 20 percent of the sample from OIF. I didn't
12 show any of this data. But we did this to try, in part,
13 to validate the 2796 data. And we found very nice
14 linear correlations with all these questions when we
15 looked at OIF compared to OEF compared to other
16 deployments and also when we looked at the questions
17 about combat exposures and these items. So we think
18 that there is -- that the 2796 is measuring, you know,
19 something of value. And it's correlating very nicely in
20 terms of the trends with what we're seeing in the survey
21 data. Although the prevalence rate -- you can't use it
22 as a prevalence rate estimate.

23 DR. PARKINSON: I guess what I'm trying to get
24 at is the timing of the instrument -- on the one hand,
25 if I use whatever criteria this is -- the mental health

1 concerns, what I'm seeing are 5 percent, which is a
2 combination of seek mental health and maybe others. I'm
3 trying to determine, yes or no, is there evidence that
4 the problems of these things increases in the first
5 three months, or is it static from zero to three months?

6 COL. HOGE: We have some direct comparison
7 data that we've collected in Europe, the U.S. Army
8 medical research unit in Heidelberg, which is part of my
9 division at RARE. And we've had some direct comparison
10 between immediate and three months, and it's higher at
11 three months. There's a measurable difference. They
12 have a tech report that they've written, and I think it
13 may actually be out and available.

14 DR. PARKINSON: The third issue is of the
15 universe of people that screened positive, assuming
16 there is going to be -- let's not assume -- you got 20
17 percent of people with, you know, a mental health
18 condition. Now we get back to the clinical best
19 practice. What is considered to be the desirable
20 proportion of any population that has this level of
21 morbidity that you would want to seek mental healthcare
22 in terms of are they likely to improve? That's just a
23 data point. You don't need to answer that now. What is
24 the universe we're trying to shoot at? What's the best
25 practice that is documented?

1 Next thing is the access of care issue, which
2 is another issue of -- which is the best way to access
3 it? And I -- contingent with that is whether or not the
4 military needs to pioneer new ways of treating military
5 specific mental health conditions. For example, those
6 of you who are in the Air Force, it's called the hot
7 wash. After every single mission you come back, you sit
8 down with an air crew and go over everything that
9 happened in that mission. Should we have a military
10 equivalent hot wash that's institutionalized in military
11 doctrine, you know, one month, three months, six months
12 by unit to say, You know what? We expected 20 percent
13 of you to have a performance deficit. It's called PTSD.
14 We expected it. Sure enough, here we are with 20
15 percent. What I'm concerned about is if we continue to
16 medicalize this model with access issues around mental
17 health, which has always been a problem and a huge
18 issue, I agree with you. Maybe there's another
19 outside-the-medical-box solution that really is military
20 centric. That might be something to talk about.

21 I guess the other piece -- the training of
22 providers. I'm not convinced sending anybody through
23 the Tri-Care system downtown to a social worker or
24 mental health person who is not from the military
25 background has any idea what to say to these people, and

1 hopefully it's not to get them on an antidepressant.
2 Because you know what? That's where we probably don't
3 need to go either. We're over medicalized as it is
4 right now, as far as I'm concerned. So that's the
5 training piece for providers. I guess what the
6 opportunity is -- thank goodness for this question
7 because I think it gives the Board and all of us trying
8 to help our active duty service members that are
9 veterans a new way to look at this issue. Because I
10 think we've been down a lot of traditional medical
11 models before, and we're not making, to my understanding
12 -- reached a whole lot of progress in helping people in
13 a way that they understand how to get out of it.

14 COL. HOGE: In the question about where to
15 best deliver the intervention, really, whether it is a
16 medical model or if it's a unit level intervention is
17 key. That's critical. And we have data from the mental
18 health advisory team -- we've been over there twice now.
19 We have some data that shows those soldiers who received
20 training in coping with the stresses of deployment and
21 felt that the training was adequate actually did
22 perceive less stigma, felt like -- reported they would
23 be more comfortable handling a buddy with mental health
24 concerns. And so this sort of buddy aid and what's done
25 at the unit level -- and you've mentioned the hot

1 wash -- well, that gets into a critical and stress
2 debriefing which is actually not supposed to be
3 delivered as a medical model intervention. It's
4 supposed to be delivered really outside of that. It's
5 used widely. It's being used routinely in Iraq and
6 Afghanistan now. There is no data to support its
7 efficacy. But the vast majority of studies are flawed
8 because they've really done studies on the victims
9 themselves of trauma rather than on those who have been
10 involved in -- you know, on the -- or the most obvious
11 example, soldiers who may have not been injured
12 themselves but have been in conflicts in which their
13 buddies were. So stress debriefing, I think, needs to
14 be tested systematically. We have a protocol --
15 approved protocol to do that, and we're trying to get
16 permission to conduct the systematic randomized trial of
17 critical and stress debriefing in the operational
18 environment. You can imagine how difficult this is.
19 I've been trying for two years now to get that going.
20 And that's not exactly what you're talking about, but
21 it's along those lines.

22 DR. LAUDER: Actually, a lot of comments I was
23 going to make have kind of been brought up, so I'll
24 limit some of them. But I think it's a little bit of a
25 slippery slope. There's critical things to pay

1 attention to, but I think it's a slippery slope. And I
2 think you have to have all your pieces in place before
3 you entrust -- or you get the trust of a soldier that
4 you're helping them and the next step isn't there for
5 them. So for example, if, you know, you do a screening
6 test and you bring somebody in and say, you know, We
7 want you to see this provider and they get frustrated
8 because they can't get access, et cetera, they're going
9 to retreat and tell their buddy, Hey, don't answer that
10 questionnaire because then you stand in that line,
11 everybody knows that you're recognized, and it doesn't
12 go anywhere. So a lot of the comments that you have
13 already made you really -- I think destigmatizing this
14 is one of the most important things. And perhaps the
15 starting point of that is to assume there is no
16 subpopulation that is at risk. It's the entire
17 population that is at risk. And to, you know, hammer
18 mental health like you hammer hydration -- you know,
19 this is a problem. You don't drink you get dehydrated.
20 You don't take care of the issues -- your job as being
21 in the military, you get sick. And, you know, you take
22 it from that level. It would be interesting to see if
23 you kind of take away the sense that it's mental health
24 -- mental health and an inability to cope is that it's a
25 normal problem that everybody in the Army is aware of,

1 you take away that, Oh, gosh. I'm different than
2 everybody else. It would also be interesting for me to
3 see if you did that and it became kind of a standard
4 thing that everybody is aware of. It would be -- I'd
5 like to see what happens to complaints about Gulf War
6 syndrome symptoms. Because I think a lot of that is
7 anxiety driven -- much of it may be anxiety driven,
8 thinking that nobody is listening to them and there is
9 nowhere to get help.

10 The other thing -- the other thing I would
11 caution against -- and I don't -- I am not going to
12 pretend to think that I understand the whole funding
13 issue, but I'm assuming that everything we do -- or that
14 you do takes funding. And if it's -- driving a mental
15 health prerogative takes a certain amount of funding and
16 then that funding dries up, therefore, you will also
17 lose the trust of the soldier for now and in the future.
18 So I think knowing your pieces are in place and maybe
19 starting broadly and then getting more specific when you
20 know everything can be carried out is going to be pretty
21 key with us.

22 DR. BLAZER: Excellent presentation. I just
23 wanted to congratulate you. I wanted to make three very
24 quick points. First off, the point you made -- and I
25 want to emphasize that this is an area we know very

1 little about. So the foundation of evidence base is
2 pretty thin. So we're sort of taking guesses both in
3 terms of -- I think these are very good initial
4 epidemiologic studies. But I think you're absolutely
5 right. We're just beginning to break the ground in this
6 area. We don't know where we could best intervene in
7 terms of prevention. I think if I had to put my money,
8 I think I'm right with you. I would do it with
9 secondary prevention. I think we really don't have the
10 answers, but I think there are a lot of pitfalls with
11 the idea of prescreening, predeployment that's really
12 going to tell us anything -- actually, help to screen
13 out individuals who might be at greater risk. There
14 maybe some population in there that we could
15 potentially identify, but I think I would be more
16 interested in trying to do something once we begin to
17 see some symptoms emerge.

18 The third thing is there actually is a model
19 in a totally different population of what I think you're
20 talking about. And that is the idea of actually trying
21 to get mental health services integrated into the
22 primary care clinic in a way that it really is seamless.
23 This has worked at Wayne Caden. This is with an elderly
24 population. They put -- not psychiatrists -- but they
25 put mental health facilitators in the clinic itself.

1 They have contact with the psychiatrist. What we do is
2 really try to assure that these individuals who may
3 screen positive -- or in this particular case, they were
4 looking at depression. In fact, they got optimal care
5 for that particular symptom in that setting. This was a
6 true effect of the study because it was done in real
7 life practice. They were actually able to show some
8 very significant improvement both in symptoms and in
9 function. So I think we've got some model out there by
10 sort of getting individuals into primary care that could
11 actually serve as -- is maybe a thrust to some extent
12 that that's where we're going to try to include
13 services. That may be the site where we'll do it.

14 DR. OSTROFF: Thanks very much. I'm going to
15 try to break off the discussion so we can keep to our
16 schedule. Let me just turn to Ms. Embrey, and then I
17 have one or two really quick questions.

18 MS. EMBREY: Thank you very much for the
19 presentation. Very informative. One of the things I
20 think we should capture, if we can -- the department
21 instituted a 1-800 one source -- outsourcing capability
22 for anybody to call for any reason for support. And
23 attached to that is a limited amount of counseling and
24 other kinds of things that might be an indicator of
25 seeking services that they couldn't otherwise get. And

1 it would be good to have some of that information and
2 correlate that to some of this information if we can get
3 to that data.

4 COL. HOGE: We actually did include that on
5 the survey, but it was confusing to the soldiers when
6 they read it. I don't think they could figure out what
7 it was. It was probably too new. I don't know if we
8 continued it.

9 MS. EMBREY: Secondly, one of the major
10 strategic objectives between the Department of Defense
11 and V.A. is to collaborate on V.A.'s vast experience in
12 this area and to come up with training and outreach
13 programs that we cannot only use V.A. as a place to go
14 to send some of our folks outside our clinics that isn't
15 highly visible, that could benefit from some of their
16 expertise while they're still on active duty. That's
17 another initiative that we're working on.

18 And, thirdly, I think we need to -- behavioral
19 health, mental health support -- if integration is going
20 to be achieved, we ought to look at it as an
21 occupational health support service and perhaps call it
22 that. And because we provide how to cope with your
23 broken leg, how to cope with your whatever, we ought to
24 send those same kind of people to all of the support to
25 get -- to deal with the problem that they're dealing

1 with.

2 DR. OSTROFF: Let me just ask one or two
3 really quick questions. One of them is: Is it possible
4 to make available the actual instrument so that the
5 Board members could actually see what the questionnaire
6 looked like and see what the questions looked like?

7 COL. HOGE: Absolutely. The survey has
8 evolved somewhat, but I'll take one of our, you know,
9 standard three-month postdeployment surveys. I'll let
10 you take a look at that.

11 DR. OSTROFF: The epidemiologist in me -- I'm
12 fascinated with a survey or study that has a -- amongst
13 those who were briefed has a 98 or 99 percent
14 participation rate. It strikes me that I've almost
15 never heard that. And so are there some lessons in
16 terms of how you get people to participate? And just in
17 terms of the methodology, is it the same -- are you
18 asking different groups of individuals at different
19 times, or are you asking the same individuals
20 repetitively with this questionnaire? Because that's
21 what was not clear to me.

22 COL. HOGE: We're going to the same unit, but
23 we're not necessarily surveying the same individuals.
24 Some of the individuals do receive our survey on
25 multiple occasions. But because we're -- because the --

1 we have to fit in with the operational requirements of
2 the unit to do this study, we could not hand pick -- you
3 know, tell them, Look, we need these 1500 soldiers, and
4 we're coming back three months later, and we need the
5 same 1500 soldiers. They would have said forget it.
6 We're not doing it. So we go to the unit, and we get
7 1500 soldiers at one time, and then three months later
8 we may get another 1500 soldiers of which there will be
9 overlap. And we have a code system that we've developed
10 to try to identify the porportion of soldiers that
11 overlap with those two samples so we can compare the
12 longitudinal data within that subcategory with the
13 larger cross-sectional data. But everything I showed
14 you today was all cross-sectional and large -- and I
15 think -- we obviously have some concerns about the
16 methodology because it's not the optimal way to do this
17 study. Optimal would have been truly longitudinal
18 design in a random sample. But -- you know, so we had
19 some concerns when we did this. But I think that the
20 thing that's reassured me the most is the consistency of
21 the data.

22 Time and time again with different units that
23 we've looked at and the correlation of the combat
24 experiences, et cetera, that's really been -- reassured
25 me that even though we don't necessarily have the same

1 individuals, we have very reasonable representative
2 samples within those combat units.

3 The other comment you made about the -- about
4 the 98 percent participation rate -- I think that the
5 fact that they've already taken the time to assemble,
6 come into the auditorium and sit down, is 90 percent of
7 the reason we get a 98 percent participation rate. When
8 we've done male surveys, it's been a disaster. If we
9 asked -- if we -- if surveys are distributed throughout
10 the unit and have them return it later, forget it. You
11 just won't get the participation at all. But if
12 you -- but if the commanders buy off on what you're
13 doing, then they will say, Oh, okay. Come at such and
14 such a time, and I'll have 500 soldiers sitting in the
15 auditorium for you to brief. And then we brief them.
16 We stress to them this is entirely voluntary. You don't
17 have to fill out this survey. But they're already
18 sitting there, and they probably -- they figure, Well,
19 maybe I'll be out doing some other detail, so I might as
20 well sit here and fill out the survey. I don't know --
21 really know why. When we've talked to them afterwards,
22 they -- we generally get positive feedback on the
23 survey. We also self-rate the survey. We have a rating
24 scale on the back, and we consistently get very high
25 ratings that the perception that this -- the survey

1 content is appropriate, that it covers the important
2 issues. That's usually in the 70, 80 percent range.

3 Then when we ask about is the survey
4 worthwhile, it goes down to about 50, 60 percent because
5 a lot of soldiers, even though they think it covers
6 important topics, they don't think it will do any good.

7 UNIDENTIFIED SPEAKER: I did a study on eating
8 disorders which was similarly a very sensitive topic for
9 women, and I had a 95 percent response rate and captured
10 the individuals in the exact mode. It was done at the
11 unit level, and they gathered at the auditorium. And
12 they ended up just all deciding to fill it out. I too
13 had an extremely positive response. And the response
14 was that -- thank you for taking the time to recognize
15 that we have stresses that need to be recognized. And I
16 think it may be similar with the male population. They
17 just won't say it.

18 COL. HOGE: The other thing is that we
19 actually scan the data in the field, do Q.C. on the
20 data, and brief it to the operational leadership onsite.
21 We don't leave Fort Bragg until the battalion commanders
22 are -- have actually seen the data from their units.
23 That keeps our foot in the door. They really like us.
24 Some of this is bad news. But, you know, they are
25 very -- they're not afraid of the data. They know

1 they're soldiers. They know what the stresses are. And
2 we're quantitating -- and they perceive that to be
3 helpful to them. But that doesn't explain the 98
4 percent participation rate, but it does allow us to keep
5 getting in the door of that auditorium.

6 DR. OSTROFF: Thanks very much. And thank you
7 for this presentation. It was really very enlightening,
8 to say the least, very sobering. We have several other
9 presentations before we take a break. So I'll ask the
10 Board to bear with us.

11 Our next presenter is Colonel Mark Rubertone,
12 and he's going to present to us an overview of mental
13 health surveillance for OIF and OEF and the
14 postdeployment mental health concerns.

15 COL. RUBERTONE: Good afternoon. I have to
16 admit that when I saw myself on the schedule after
17 Charles speaking for 75 minutes on mental health issues,
18 I was a little concerned because -- not because of his
19 reputation of going longer than he has on the schedule,
20 but because of knowing his reputation of presenting in
21 exquisite detail in particular to -- with regard to
22 recommendations and to future areas that needed
23 research. So I wondered what was I going to be
24 presenting on that was going to be different. I got to
25 thinking the amount of detail he would be presenting

1 would be flying very close to the ground. And the most
2 refreshing thing when you're flying that close to the
3 ground is to pull back on the stick and go up to the
4 altitude and get a different perspective. So that's
5 what this brief is all about. Hopefully, it will be a
6 little more higher altitude.

7 I'm going to briefly go over the defense
8 medical surveillance system for those of you on the
9 Board that may not be familiar with that. I have one
10 slide on it, then I'm also going to briefly discuss
11 surveillance of medical encounters, looking at deployed
12 versus not deployed. Again, just a few slides.

13 I should mention that this briefing has grown
14 out of a series of briefings that I was asked to provide
15 on these topics. And the mental health focus, in
16 particular, was in response to looking at the general
17 surveillance question which showed that the mental
18 health hospitalization rate and ambulatory rate was
19 higher -- in the returning service members wasn't
20 unexpected but -- so he asked us to get more detail on
21 the mental health issues. So we'll look at deployed
22 versus nondeployed service members, look at
23 postdeployment health assessments, and look a little bit
24 at the referrals of the mental healthcare.

25 This is a somewhat busy slide, but it's the

1 one slide I can come up with that describes the defense
2 medical surveillance system. It's a longitudinal data
3 base of all service members that have served in any
4 capacity in the reserve and active forces since 1990,
5 and it starts with personnel data. We have about --
6 close to 8 million, 7.9 million individuals in the data
7 base that are being tracked. We do lose their ability
8 to track them if they don't interact with the military
9 healthcare system after they get out of the service, but
10 a lot of people do retire and -- we also have other
11 information from a personnel perspective. I should say
12 all the numbers on here are counts for either current or
13 former members of the U.S. military. The system has a
14 lot of the -- twice as much data on nonsponsors on the
15 other beneficiaries, but none of those are presented on
16 this slide.

17 In terms of medical data, DMSS has inpatient
18 data since 1990, about 2.3 million records, about
19 92 million ambulatory records since 1996. This is very
20 much collected from the various systems in the military.
21 You heard CHCS which feeds into the standard inpatient
22 and outpatient data records. We collect -- information
23 on immunizations, about 37 million records, mostly since
24 the use of anthrax in the military. But the Air Force,
25 in particular, and now even the Army has started to

1 enter yellow shack card records back to 1980. So we
2 have a fair amount of other immunizations in there.

3 Serologic data, we've got -- the
4 DoD repository has about just over 36 million samples
5 now in its inventory on those 7.9 million individuals.
6 So it's quite an impressive collection of frozen serum
7 at minus 30 degrees celsius.

8 In terms of deployment data, which is going to
9 be a good focus on my talk in terms of mental health
10 surveillance, one of the weakest links, unfortunately,
11 is our ability to do any kind of surveillance on a given
12 population is to define the population. And the
13 deployment rosters are still not exactly as precise as
14 we'd like them to be nor as timely. I'd like to say
15 they're improving, but that's like saying we're getting
16 closer to seeing CHCS II. It's a true statement, but
17 I'm not sure to what degree. So I will say that the
18 study -- the analysis that we -- that I'm going to
19 present today, we just received what looked like a very
20 promising deployment roster from DMDC, and this will
21 reflect the use of that data.

22 The postdeployment health assessments, about
23 2.2 million surveys of which 2 million have been in the
24 last couple of years. I'm glad to say about 70 percent
25 of the surveys are sent to us electronically.

1 In terms of surveillance of medical
2 encounters, what we're asked to do is look at returning
3 active duty service members because the V.A. is doing a
4 similar study on the reserve component individuals. So
5 we're asked to look at active duty service members only
6 and track them up to one year following deployment. And
7 we compared their use of the healthcare -- of the
8 healthcare system -- whether it's mental health
9 utilization or surveillance in medical encounters. We
10 compared them to all nondeployed active duty members in
11 terms of background rate. Again, the data has come from
12 DMSS and to include the DMDC deployment roster. And the
13 analysis period was 1 October 2002 through the end of
14 August this year.

15 This is just a very high level look at the
16 major diagnostic categories of disease and injuries for
17 individuals who were deployed to OEF and OIF in the --
18 shown in the red bars compared to the nondeployed or
19 background rates shown in the yellow bars. You can see,
20 pretty much as you might expect, hospitalizations for
21 injuries is quite high in the group that was deployed.
22 Mental health, we also are seeing increases there. In
23 most categories across the board, other than pregnancy
24 related, hospitalization rates do seem to be higher in
25 the postdeployed group compared to the nondeployed

1 group.

2 This is ambulatory data, so same -- I guess
3 postdeployment rates. But, again, muscle, skeletal,
4 higher. There is so much use of the healthcare system
5 that it's sometimes hard to see differences in different
6 groups. But in terms of ambulatory data -- these are
7 incident -- what we call incident visits, so we try to
8 eliminate repeat and follow-up visits. We allow a
9 30-day lag period before we recount the visit on an
10 individual. You can see again not all the categories --
11 but muscle, skeletal injuries, mental health, again, are
12 higher in the postdeployed group. Most of the other
13 ones are fairly similar.

14 Moving on to mental health surveillance in
15 specifically -- these are hospitalization rates for the
16 different three digit ICD-9 categories of the mental
17 health major diagnostic category. You can see on the
18 bottom, the list of the categories. This is just the
19 top 156, these categories. We see in the postdeployed
20 group -- again, not unexpected based on what we've heard
21 -- higher rates in various categories -- adjustment
22 reaction, effective psychoses, depressive disorder. Of
23 interest -- this is for the DoD. I should have pointed
24 that out. It's all active duty service members. We
25 don't see this exact same trend across all the services.

1 This is the trend for the Army, a little bit for the
2 Marines. The Navy -- it's hard to know what the
3 definition of deployment is for the Navy. Were they in
4 a hazardous duty pay zone? Were they supporting
5 operation? Did they ever leave the ship? So the number
6 kind of fluctuates on the deployment roster. Currently
7 there is about 18,000 active duty Navy seamen that are
8 on the deployment roster, but in the past it's been as
9 high as 80,000. So it does vary over time of who is
10 captured. So the rates look somewhat different. But
11 the one that is consistently high in both services was
12 the abusive drugs and alcohol -- somewhere on here there
13 is alcohol. Those do tend to be higher in the
14 postdeployed group across the board.

15 Next slide is the ambulatory visit rates for
16 mental health disorders saying -- I will -- I won't read
17 through them, but you can see some are higher, and some
18 are a little lower. It looks like the postdeployed
19 group has a slightly higher rate of ambulatory visits
20 for mental health compared to the nondeployed or
21 background rates.

22 I'm now going to turn to some of the responses
23 to the mental health questions in relation to mental
24 health referrals and in relation to prior mental
25 healthcare. The responses being from the DB-2796

1 postdeployment health assessment. This population
2 includes active and reserve component, all individuals
3 -- all active duty and reserve individuals who filled
4 out a four-page postdeployment health assessment. The
5 four-page form came into being -- in use as about May,
6 June of 2003. And that's the form -- the four-page form
7 has the mental health questions. The old two-page
8 postdeployment form only had the one question, which
9 still remains on the back page, regarding your intention
10 to either seek mental healthcare or your use of mental
11 healthcare early in deployment.

12 Specific clinical referral information has
13 been entered -- the paper form going back to October
14 2002. There's a recent report by the GIO that, I guess,
15 slapped our hand a little bit because we weren't
16 capturing the specific clinic referral information from
17 the paper form. We were told specifically not to. But
18 now we're told they want us to. We went back and
19 entered about 70,000 forms that had some referrals from
20 October 2002, and we put -- we now captured the specific
21 clinic referral information, so that's now in the
22 database. So, again, using the DMSS, we looked at the
23 health assessment forms and then both inpatient and
24 outpatient mental health encounters in the prior three
25 years from the time they filled out a form. Analysis

1 period is a little different because we need a four-page
2 form. So that goes from 1 June 2003 through the end of
3 September 2004.

4 This just describes the number of
5 postdeployment forms we have in the DoD broken out by
6 service. You can see where we have a large return of
7 troops in sort of the early summer of 2003. And, again,
8 in February, March '04 there was a large number of
9 postdeployment forms that were collected. The purple
10 line shows the percent of electronically sent forms for
11 postdeployment. It hovers about 60 percent. It's a
12 little higher for the predeployment. It's up to 70, 75
13 percent.

14 These are the questions on -- the mental
15 health questions on the postdeployment health
16 assessment. It's Questions 10, 11, 12, and 13, which
17 are grouped together on page 2, I believe. And then
18 questions on the last page -- and I'll just read them in
19 case you can't see them.

20 No. 10 is: Are you currently interested in
21 receiving help for stress, emotional, alcohol, or family
22 problem?

23 11 is: Over the last two weeks, how often
24 have you been bothered by any of the following -- and
25 it's little interest or pleasure in doing things,

1 feeling down, depressed, or hopeless, would you be
2 better off dead or hurting yourself. Sort of a scale of
3 depression.

4 No. 12 is: Have you ever had any experience
5 that was so horrible or upsetting in the past month?
6 It's kind of hard to say if any -- how we read that
7 question. Let's say it's a PTSD-type of question in the
8 past month. And have you ever had any nightmares about
9 it, or thought about it where you did not want to --
10 tried hard not to think about it or went out of your way
11 to avoid situations that remind you of it? Were you
12 constantly on guard, watchful, or easily startled?

13 13 is: Are you having thoughts or concerns
14 that you might have serious conflict with your spouse,
15 family members, or close friends where you might hurt or
16 lose control with someone?

17 Question 4 is kind of a double-edged question.
18 It says, During deployment have you sought or do you now
19 intend to seek counseling? So you don't know what
20 they're answering there. We use it as an indicator of
21 that they tend to seek counseling. But it could be they
22 sought mental healthcare in the field and they're going
23 on. So that's Question 4.

24 This is just the answers to the questions from
25 those questions broken out by active and reserve.

1 Looking at percent positive responses, again, broken up
2 by service. So you can see overall, Question 10
3 answers -- you know, interested in receiving help for
4 mental health problems, about 3 percent in the DoD.
5 No. 11, bothered by some problems -- where we see signs
6 of depression runs in the 20, 24, 27 percent. It's a
7 little lower in the Air Force, only 10 percent. Have
8 frightening or upsetting experience, pretty high in the
9 Army and Marines, little lower in the Navy and Air
10 Force. Overall, 14 percent with the DoD. And had
11 thoughts or concerns about losing control, between 7, 8
12 percent for the most part. And then Question 4
13 the -- intends to seek mental healthcare. I think
14 that's the percent that was reflected in the report that
15 Dr. Parkinson pointed out. That's 5 percent in the Army
16 and 4 percent in the DoD. You can see the numbers for
17 those questions in the reserves are not too dramatically
18 different than they are in the active duty.

19 MS. EMBREY: On the postdeployment assessment
20 forms, what's the percent of those that are redeploying
21 that are actually resubmitting the forms? About 90
22 percent?

23 COL. RUBERTONE: It has varied over time. Now
24 we think it's very close to 95 percent. But over time,
25 if we look at the entire operation, it's more in the

1 order of 70, 75 percent because early on -- especially
2 that big balance of when we are -- were getting forms,
3 there were a lot more people coming back and we weren't
4 getting forms on. But there's been, as you know, a
5 tremendous emphasis on getting the forms done. And with
6 electronic forms we're seeing, I believe, over 90
7 percent. I'll caveat that not to the -- turn the screws
8 to the Navy and Marines, but they are a bit lower. But,
9 again, who is deployed, what's the definition, and when
10 did they fill it out.

11 This slide looks at the percents that are
12 referred based on the referral question on the
13 postdeployment form in relation to how they answered the
14 question. And for this slide and for the remainder of
15 the slides, we grouped any positive response to any of
16 the Questions 10 through 13. I'm not sure -- we said if
17 they've had any mental health issue, as defined by the
18 Questions 10 to 13, we called it a positive response.
19 We kept 4 separate because it really is quite different.
20 It just says, Do you intend to seek mental healthcare,
21 or have you sought it during this deployment? As you
22 can see, you would expect a higher percentage of
23 individuals who had positive response to be referred for
24 mental healthcare than negative. And that's what we
25 see. Not a tremendous difference, but enough.

1 Of 104,000 individuals who had a positive
2 response, 5 percent were referred. Of the 228,000
3 individuals that did not have a positive response,
4 basically 0 percent, a little bit in the Army. But
5 basically 0 percent were referred for mental healthcare.
6 In terms of the question intends to seek mental
7 healthcare, you would expect -- if they said they had
8 the intent to seek it, you would see higher rates. I
9 recently presented this to Dr. Tornburg. And he said,
10 Why isn't this 100 percent? I think the reason is
11 because not everybody who said it on the form that they
12 intend to seek needs a referral. It may be that in
13 talking with them the provider decided that they could
14 follow up with their primary care physician. Maybe what
15 they really needed was some kind of social counseling or
16 marriage counseling. It wasn't actually a referral to
17 mental health is one of the responses. So that's the
18 best I can give, in terms of an answer, as to why the
19 individual said their intent was to seek mental health
20 isn't 100 percent. But it is still -- out of the 12,000
21 individuals that said they intended to seek, about a
22 third actually were referred to mental healthcare.

23 MS. LUDWIG: Can I just clarify? When you say
24 -- positive response is to any one of the Questions 10
25 to 13, but the negative then would be negative to all of

1 10?

2 COL. RUBERTONE: That's correct. So any
3 positive response to 10 to 13 versus no positive
4 response to any of those questions.

5 COL. PUFAL: Regarding questions -- again, on
6 the reserve and National Guard, the difference when
7 they're coming back and being demobilized, the active
8 duty goes to their home that happens to be right there
9 with their family. And with the reserve, if they do a
10 positive response or intend to seek mental healthcare,
11 they're told they're going to have to stay longer and be
12 away from their family. And so, therefore, the tendency
13 to answer in the positive is going to be lower because
14 of that stigma. And also to the fact that when we're
15 identified in a large group of people, if you answer any
16 of these questions, go to that corner over there, and
17 we'll take care of you. And, therefore, you're delayed.
18 So if there's a better way of addressing that to the
19 reserve National Guard, I think that should be a more
20 true response.

21 COL. RUBERTONE: We have the ability to look
22 at who actually goes on to receive mental
23 healthcare independent of whether they tend to seek or
24 whether they were referred, so that -- access issues
25 aside, as Charles talked about, it seems as though --

1 you know, the numbers are pretty consistent. About 24
2 percent of the 9,000 that said they intend to seek in
3 the reserve and guard actually were referred to mental
4 health. Some that intended to seek it got a surprise, a
5 bonus, and they were referred, nonetheless, but the
6 numbers are low.

7 This is the percent of -- this slide shows the
8 percent of service members that answered either
9 positively or negatively to those groups of questions or
10 question -- how many had a history of mental healthcare
11 use? And really this question -- the driving thing
12 behind this is we tend to think that some people are a
13 little more comfortable interacting with the mental
14 healthcare system than others. So it may just be
15 Question 4 -- if they end up getting referred, it's
16 because they're a little more comfortable seeking that
17 avenue in their life, or it may be
18 that there's underlying mental health pathology that is
19 re-emerging after an emotional exposure such as
20 deployment. So it's hard to pin that down. That's why
21 we sort of framed it that way, is to look at the history
22 of mental healthcare. Again, not surprisingly, those
23 that had positive responses to Questions 10 and 13 did
24 have a higher -- not too much -- 10 percent compared to
25 8 percent higher use of mental healthcare resources

1 prior to deployment. The same thing was seen -- we are
2 limited in terms of knowing the predeployment mental
3 healthcare use true number. There are interactions with
4 the military healthcare system. For Question 4, again,
5 it's twice as many individuals who said they intended to
6 seek mental healthcare actually had used mental
7 healthcare resources in the past and much more than that
8 in the -- for the reserve and National Guard.

9 This is my last slide -- I believe second to
10 last. This is the -- this slide shows the percent of --
11 that had a history of mental healthcare, different
12 referral patterns. In other words, if you were referred
13 for mental healthcare, what percent had a history of use
14 of the mental healthcare system? And, again, for the
15 DoD, 21 percent referred actually interacted with a
16 mental healthcare professional prior to deployment,
17 whereas only 9 percent of those that did not -- not
18 referred for mental health had a prior healthcare
19 episode. And, again, it's seen in the reserve National
20 Guard. These numbers are a little skewed because we
21 can't capture all the events in that group.

22 This just shows -- it's a summary of all
23 referral from the postdeployment health assessment from
24 January 2003 to present. This sort -- this period sort
25 of represents postdeployment time for OIF and OEF, but

1 we tend to go back to January 2003. And we're looking
2 at postdeployment refer referrals only. You can see
3 down here there's 341,000 postdeployment forms filled
4 out, during that time of which 59,000 or 17 percent had
5 at least one referral. These numbers don't add up to
6 59,000 because there are multiple referrals. What this
7 shows is, you know, commonly -- people are referred for
8 dental -- this is their periodic -- their need of a
9 routine dental exam or whether they -- something
10 occurred, then next couple of -- more common ones is
11 orthopedic, mental health, and dermatology. This very
12 large other category often -- the only way we know this
13 is because on the electronic form we get the text of the
14 other sent to us, so we can look at it. We looked at
15 some of those data. Often times it will say follow up
16 with TMC or follow up through battalion aid station.
17 They might have a sprained ankle, and for some
18 reason -- especially on the electronic forms, they're
19 more likely to just not leave it blank. They're more
20 likely to say, Yeah. You need a referral to other.

21 The first time we did this slide it was done
22 for a General Peak (phonetic) in the Army. We looked
23 at mental health, where that service member follows up
24 in mental health, and the numbers were actually low. So
25 someone who has an orthopedic injury could actually find

1 other avenues of getting that taken care of -- could go
2 to family practice or could go -- it's hard to track.
3 So we started saying -- I'll credit General Peak with
4 this idea. He wanted to make sure we weren't losing
5 people to follow-up. And you can see it runs about 93
6 percent on average, 94 percent. They are being seen by
7 the healthcare system. This is within six months of the
8 referral. It's not on this slide. So we thought that
9 was at least encouraging that there is an interaction
10 with the healthcare system, whether you're seen in the
11 orthopedic clinic or -- maybe that's something that
12 needs to be addressed. We can do that. But we want to
13 see whether service members were actually being followed
14 up in some capacity. That's my last slide.

15 DR. OSTROFF: Thanks very much. I think we
16 have time for one or two quick questions before we move
17 on to the next presentations.

18 DR. PARKINSON: Is it working, the program?

19 COL. RUBERTONE: You'd have to define
20 what -- yes. The two-fold reason why it was established
21 is, one, it gets service members in front of the -- a
22 healthcare provider so they can voice their concerns,
23 have them document it if they have any. It's certainly
24 working. We have 2.2 million forms' proof. The other,
25 I think, less clear objective was to collect the data

1 from the forms. We have to analyze it, look at it from
2 a centralized surveillance perspective. I can't say
3 whether it's working. There's some data there. I think
4 some useful data. A lot of people ask us for the data.
5 They're doing studies. Is it worth it to do all of it?
6 I think just to get them in front of the healthcare
7 provider on the way back out of the deployment, I think
8 that is worth it.

9 DR. PARKINSON: The follow-up question -- not
10 to sound like an attorney -- but where we have
11 traditionally -- we collectively, the DoD family --
12 perhaps not followed through well enough is to
13 communicate the success of the practice to key state
14 holders in a timely fashion so that we have a little
15 immunization against future type things. I just leave
16 that as an open question. But publishing in medical
17 journals is great. And I am sure there are numerous
18 vehicles we have to communicate. But this is a great
19 news story and one, for years, the department has been
20 criticized for not doing well. We now have evidence to
21 say that not only are we finding conditions but we're
22 treating them. I hope we communicate it clearly to the
23 state holders in a way that is dispassionate but that's
24 balanced because we can't be reacting to this type of
25 stuff.

1 MR. ENNISS: It's probably a peripheral
2 discussion today, but what is being done with the
3 serology samples, 7 million samples? Is anything being
4 done --

5 DR. OSTROFF: We'll reserve that discussion
6 until later on because that's a different question
7 that's before the Board right now. Thank you very much.

8 We have two presentations -- one from the Army
9 and one from the Navy -- concerning the current support
10 programs. And our first presenter will be Colonel Goby.

11 COL. GOBY: Good afternoon, ladies and
12 gentlemen. I'm the army reserve clinical psychology
13 consultant to the surgeon general. I'm a reserve
14 officer that's been called to active duty, and I've been
15 fortunate enough to serve with Charles in Iraq to gather
16 data on mental health issues. I'll talk today about the
17 support activities that are set up with the Army.

18 I'm going to review the history of the mental
19 health programs for deploying soldiers in the Army.
20 I'll talk about the need for and provisions of
21 prevention and early intervention and treatment
22 services. I'll talk about resources available for
23 assistance, some of which have been alluded to, and I'll
24 talk a little bit about research questions that were
25 asked to be looked at.

1 I'll give you the background -- there's a
2 history to this. It has evolved just in the last year.
3 So I'll start with the '80s in combat stress, and then
4 I'll move into the other areas.

5 The most recent relate to the current
6 legislation and has to do with Tri-Care for reservists.
7 Combat stress control services in the Army really
8 evolved out of identified experiences in the world wars,
9 in the Korean conflicts, in Vietnam, and through -- also
10 from the Arab/Israeli conflicts and in other wars. The
11 U.S. Army combat stress control doctrine developed and
12 has been revised beginning in the '80s to the present --
13 there is a current revision right now in the works that
14 has not been approved, but is out in the draft format.
15 It really -- the entire doctrine really related to the
16 establishment of combat stress control resources of
17 various kinds, really changing the way in which we've
18 offered mental health services evolving from the past to
19 the present, which is really different from what it was
20 historically. There are now organic mental health
21 sections that are part of divisions, in particular, and
22 in some indications other brigades. There are combat
23 stress control units, usually companies or detachments,
24 and those are actually in-theatre. There are three
25 combat stress control units in-theatre right now, Army

1 types.

2 The goal of the combat stress control services
3 are really to prevent battle fatigue and soldier
4 misconduct, and some of that was alluded to by Charles
5 in his presentation on alcohol and other acting-out
6 behavior -- reduce PTSD, assess, and in some cases treat
7 mental health casualties and return soldiers to duty.
8 The real focus is to keep soldiers in the theatre. And
9 we found historically if we evacuate soldiers, we tend
10 to lose them as mental health casualties. So the real
11 focus is to keep them in-theatre.

12 Principles of combat stress treatment include
13 what's called PIES -- proximity, immediacy,
14 expectancies, and simplicity -- in mental health
15 services. And that's getting the services down at the
16 unit level, doing it right away, having an expectation
17 that soldiers will get better and will return to duty,
18 and really keeping it simple, which has been -- which
19 has been very successful for the most part.

20 The other thing is the mental health areas in
21 the theatres of treatment have to do with trying to
22 provide reassurance, a respite for soldiers, a
23 replenishment and restoration of confidence. We do have
24 some of these units in theatre now. And it's our
25 understanding that they're really, really very

1 successful. They pull soldiers away from their unit and
2 keep them in these units and tend to have a pretty good
3 success rate in getting back to duty.

4 One of the programs that followed immediately
5 9/11 -- for those of you who are in the D.C. area, it's
6 called "Operation Solis." It was a quickly put together
7 mental health service for soldiers, D.A. civilians
8 following the 9/11 attack. It began as an acute
9 response to 9/11. I think it was -- my understanding in
10 talking to mental health providers is that it was being
11 unseen and really learning by doing because no one
12 really experienced anything like this previously. And
13 it was a matter of coming up with a solution to a very
14 big problem very quickly. It has continued today as a
15 support system for individuals who are impacted by 9/11
16 in D.C. There are still people in the Pentagon area,
17 psychiatrists and social workers, that are available
18 onsite and continue to provide, in some ways, some
19 really nontraditional mental health services, short-term
20 problems focused, and referral network system for
21 people.

22 Following events that occurred in 2002,
23 particularly the Fort Bragg incidence where there was
24 violence that occurred with soldiers that were returning
25 from deployments, there was a design -- what was called

1 the "Deployment Cycle Support Program," originated in
2 May of 2003. It was for soldiers, D.A. civilians
3 redeploying from combat or operations to meet challenges
4 of returning home, prevention activities, earlier
5 intervention activity focus to reduce the impact of the
6 combat experiences. It begins in the theatre. I will
7 talk more about that. It continues at home or at the
8 demobilization stations. The focus is really on
9 maintaining well-being while preparing to return to
10 family and unit. It's based on individual assessment
11 and follow-up care that might be needed for people that
12 need more extensive care.

13 Predeployment activities include mental,
14 physical, and professional preparation involving
15 training and information gathering and information
16 provisions during deployment when called to duty and
17 away from family. Stress management techniques
18 particularly are emphasized and utilized as part of the
19 deployment process -- as part of the deployment cycle
20 support program. During redeployment there's
21 preparation to return home. It begins when people begin
22 redeploying in-theatre and then you reunite with
23 families. Screening is involved, education is involved,
24 and referral for assistance is involved for people that
25 identify or are identified as needing further mental

1 health-type assistance. Postdeployment really focuses
2 on reintegration training and support and in some cases
3 referral for assistance and then sustain the training.

4 If you turn to the next slide, you'll see a
5 very detailed picture. But the bottom line has to do
6 with this being an ongoing process, really being built
7 into the training cycle, really being something that
8 people expect and experience, and something that is used
9 not only for the individual soldier but for the family
10 member in terms of preparing for being involved in the
11 deployment, returning from that deployment, and
12 reintegrating for preparation for redeployment in the
13 future. The reports we get is that it is very helpful.
14 That is something that people are now looking forward
15 to, and the response at the present is very good. It is
16 a program that is advocated by the personnel folks.

17 I attended a meeting two weeks ago with the
18 personnel folks along with about 70 or 80 folks out in
19 the field. And they have a very serious effort to
20 gather information about people's experiences and really
21 trying to enhance the program and include -- what needs
22 to be included in the program to make it successful. So
23 I personally, as a reservist, was very surprised to find
24 out how much information was really solicited about
25 reserve forces in the interest in those people and their

1 return, not only to their unit, but obviously to the
2 real world.

3 In August of 2003 following a spike in
4 suicides that occurred in-theatre, there was a mental
5 health advisory team that was put together pretty
6 quickly. It was following the ground war in June of
7 2003. There was really a focus on taking a look at the
8 adequacy of mental health services. And a study group
9 of mental health providers actually went to theatre and
10 collected data. The team was in-theatre from August to
11 September of 2003. Charles alluded to some of his data
12 being collected during that time. And recommendations
13 were released in December of 2003 in terms of how to
14 improve the provision of mental health services and the
15 state of mental health in the field at that point in
16 time. Recommendations were aimed at improving access,
17 quality, variety, and continuity of mental health
18 services. Results are available, if you have not seen
19 those, at ArmyMedicine.Army.Mil. The results from the
20 last year study are on the site right now.

21 Army One Source was talked about. That was
22 developed for soldiers and D.A. civilians redeploying
23 from combat, our operations to meet challenges returning
24 home. By the way, there was also a big emphasis at the
25 conference I attended on D.A. civilians. I was

1 surprised on how many DoD civilians weren't in-theatre.
2 But D.A. or DoD civilians are included in several of
3 these programs, including Army One Source. It's a
4 24-hour, seven day a week, toll-free phone information
5 and referral service. It is for A.C. and R.C. soldiers
6 and family members and, as I mentioned, DoD or
7 D.A. civilians. They provide information and referrals
8 for counseling, and they supplement the
9 installation-based services, particularly for reserve
10 component people who are not on installations. Talks
11 about the types of assistance, the types of areas that
12 are the focus of Army One Source. They do provide and
13 pay for six sessions of counseling services for
14 individuals. So they do make the referrals. They have
15 a list of providers, as I understand it, separate and
16 distinct from Tri-Care. And they do reimburse for
17 those counseling services. They do provide services, by
18 the way, for all the kinds of issues that are identified
19 up front here. Social workers and/or master level
20 people are the counselors that are answering phones at
21 this point in time.

22 Care manager program designed and implemented
23 in December of 2003. Also for soldiers, D.A. civilians
24 redeploying. These are made up primarily of social
25 workers and located at the redeployment sites. They

1 begin at the demobilization station through -- with the
2 screening questionnaires that were talked about, the
3 2796. They are part of the team -- the medical team
4 after -- at the redeployment sites, they do talk with
5 each person. Having gone through the process very
6 recently, I did get to speak with one of the care
7 managers. It was her job to, in fact, pick up folks
8 that were being missed or were requesting assistance.
9 After talking with her -- and she was -- it was her job
10 to, in fact, make the referrals and help to facilitate
11 the referrals for follow-up care in addition to primary
12 care providers or in conjunction with primary care
13 providers.

14 Disabled soldiers support system. The DS-3
15 system was developed in April of '04. It's a new
16 resource for really severely disabled soldiers and
17 family members. It's my understanding they typically
18 deal with people with multiple types of difficulties.
19 They are a system of advocacy for personnel support to
20 assist with return to active duty or transition to
21 civilian life. It was talked about earlier today where
22 some soldiers who aren't fit and able -- they become an
23 advocate for those folks and assist those folks.
24 Financial, administrative, medical, vocational, and
25 other needs are addressed by those folks. And it's a

1 partnership of the V.A., as I understand it.

2 The team that Charles and I were part of was a
3 follow on to the mental health advisory team. We call
4 it MM-2. It was tasked by the Army surgeon general to
5 restudy the issues that were identified in OIF. The
6 theatre -- the team was in-theatre from April to October
7 of this year. And findings or recommendations, we're in
8 the process of finalizing. The study is aimed at
9 assessing the impact of improvements to access, quality,
10 variety, and continuity of mental health services. We
11 are actually going to reconvene next week and finish our
12 reports, present those to our chain of command, and they
13 will be on the website after the first of the year.
14 It's an attempt to take a look at the changes in-theatre
15 and to take a look at the services and recommendations
16 that were made last time. And Charles's questionnaire
17 was part of the survey process.

18 This is a new piece of legislation that was
19 approved. It's an additional attempt to take a look at
20 reserve forces and the availability of services for
21 these people. It's my understanding it was signed into
22 law in October, becomes effective in May. It is a new
23 Tri-Care benefit for reserve component service members,
24 provides 90 days of Tri-Care coverage for soldiers and
25 family following mobilization, authorizes 180 days of

1 transitional Tri-Care coverage for reservists or active
2 duty and family after separation, and it allows
3 reservists to earn the eligibility for additional
4 Tri-Care based on the service.

5 This is something that was talked about a lot
6 in-theatre. I was also struck by talking with
7 commanders and their real concern about their soldiers.
8 Several of them had seen Colonel Hoge's work and were
9 concerned about the incidents of mental health problems,
10 PTSD in particular. And I was really taken aback by how
11 much they were interested in the reintegration process
12 -- the nurturing, the replenishing, physical, mental,
13 and spiritual health. I need to really sustain the
14 decompression from the deployment process and
15 integration back into the normal unit command and social
16 structure and in the case of reservists back to the
17 civilian world. Focus on marriage, family, friends, and
18 community really needs to be all part of that
19 reintegration process. We tend to forget these issues
20 and that they all have to be of concern.

21 It's been alluded to numerous times that
22 combat experiences have a tremendous impact on the
23 mental health of the troops, and it has a long-lasting
24 effect. Charles's studies are up here and talked about
25 15, 17 percent of the folks reporting experiences even

1 six months after returning home, increased aggression,
2 alcohol use.

3 We saw the information from the 2796 in how
4 many people were identified as -- self-identified or
5 referred for mental health. So we're talking large
6 numbers of people that are -- that need to be of concern
7 in terms of mental health issues.

8 Many soldiers avoid seeking care. We talked
9 about stigma and perceived impact on career. All
10 soldiers must be knowledgeable about available mental
11 health services and feel comfortable using them, and
12 that's from our high leadership. We're getting better
13 at recognizing symptoms, warning signs, and being
14 proactive for referring soldiers for care. So it really
15 needs to be part of the process, as we talked about, in
16 terms of our deployment and redeployment process.

17 There are many challenges for military members
18 and families to overcome during the stages of
19 redeployment. Establishment and maintaining a support
20 network helps soldiers and families to cope. Most
21 family members overcome these challenges successfully.
22 The Army is making a mental health support program a
23 real priority, and I'm glad to be part of the process.

24 Resources that are available.

25 Next slide -- we'll, just run through these,

1 if you have the handout. Soldiers have a -- have been
2 through a life-changing experience. They redefine life
3 with new normalcy. Soldiers often feel like a visitor
4 to home but will be invited back. Interesting concept.
5 Those most likely to understand soldiers and their
6 experiences are those serving with them. So soldiers
7 must really stay connected, which becomes more of a
8 problem with our reserve component people who are not
9 together necessarily day-to-day when they return from
10 deployment.

11 Any questions?

12 DR. OSTROFF: Thanks very much. Let me open
13 it up to questions from the group.

14 MR. LEDNAR: I'm wondering how does this issue
15 apply if you just look at leaders and officers?
16 Obviously, there are some significant disincentives. To
17 be honest, they're kind of expected to be resilient
18 despite how they feel. Some of the concerns that were
19 raised throughout the day today in terms of stigma and
20 access, I think will apply maybe in different ways. I'm
21 wondering if there is any way of rushing this issue in a
22 protective safe environment for leaders and not as just
23 part of the global approach.

24 COL. GOBY: Actually, in-theatre now there's a
25 pilot program that's going on aimed at leadership, aimed

1 at significant people in units to try to get them to
2 take a look at just what you're talking about -- the
3 stigma connected with asking for help, the need to
4 identify who needs help, and how do they get help. So
5 there is some effort. I think we probably -- at least
6 what's been reported to me by a colleague of mine who is
7 involved in this, he's getting very good responses and
8 trained about 100 people at this point in time. The
9 response has been -- this response from leadership has
10 been good, and response from participants has been good.
11 So maybe that will be an avenue for us to get closer to
12 reducing the stigma and soliciting people to seek help.

13 DR. OSTROFF: I have one question. Do you
14 think this presentation sort of gave us an idea of what
15 the core available resources are? I'm wondering to what
16 degree the Army has promoted creativity and doing things
17 or looking at things differently. And the reason that
18 this comes to mind is that I recall seeing a story -- I
19 think it was on the news hour where -- I believe it was
20 Fort Carson. They were trying some different creative
21 approach of -- all returning soldiers to Fort Carson
22 were going through a systematic series of focus groups,
23 or something like that, where they had an opportunity to
24 sit with each other and talk through their experiences
25 at both -- while deployed as well as in the

1 postdeployment setting. I have no idea whether this is
2 successful or not. But the person who was doing this
3 program seemed to think it was a valuable thing to be
4 doing. And are these types of things being evaluated?
5 Are they being promoted, or do you have any idea --

6 COL. GOBY: I'm personally not aware of
7 anything in terms of evaluation. I have heard of
8 numerous people doing creative kinds of things. I can
9 tell you that some of the reserve commands have taken on
10 a high percentage of reservists, social workers in
11 particular, that they brought on active duty to be
12 involved in all the stages of these programs. I know,
13 as having been a reservist and been to all deploying
14 people, it's a concerted effort to try and address the
15 need of the soldier and the family. I think there is
16 some creativity -- I mean, the programs are out there.
17 But I think there's definitely creativity. As far as
18 evaluation of it, I don't think about -- there's been an
19 organized effort that I'm aware of. I have not heard of
20 such if there is.

21 MS. EMBREY: There has been a campaign coming
22 out of our office with the support of the services, in
23 general, to combine family support program with the
24 medical to address reunion issues, how to deal with
25 them. Each service has a very robust set of websites

1 that address reunion issues and where to go and a whole
2 list of resources where to go for support. It's been
3 emphasized. Risk communication has been very active in
4 all of the services outreachwise to make sure people
5 understand there are resources available to them from
6 the service member themselves as well as the family
7 members.

8 COL. GOBY: I think all of what I presented
9 today is, in fact, presented almost universally during
10 the redeployment process with a strong emphasize on,
11 Here it is. Take advantage of it. Use it. So I think
12 that is true.

13 UNIDENTIFIED SPEAKER: I think this is an
14 extremely important issue because that popped up in my
15 mind. I think you're to be commended for offering
16 these. But, again, one of the real issues if you want
17 to sustain them is to be able to prove at the end of the
18 day are they really effective and which are more
19 effective than others. Part of my question is: What
20 percentage of returnees, in fact, take advantage of
21 these services? Which do they take advantage of more?
22 I think this relates back to this initial question
23 that's posed to the Board, and clearly this would be
24 something that we would talk about in terms of
25 formulating a recommendation. Very impressive.

1 DR. OSTROFF: Thanks very much. I'm going
2 to take the moderator's prerogative and take our break a
3 few minutes early. If Captain Koffman, who is the next
4 presenter, would be so kind, why don't we take a
5 15-minute break, and then we'll start back up with your
6 presentation after the break. Please be back at 20
7 minutes after 3:00.

8 (Recess taken.)

9 CAPT. KOFFMAN: Good afternoon. I've
10 actually been involved in combat stress control since
11 Desert Storm. My background -- I'm a psychiatrist as
12 well as an Air Force medicine clinician. I'm going to
13 present some data -- though I've had such a rich
14 experience deployed overseas with two particular units
15 that really bear witness to a lot of issues that we're
16 talking to this afternoon, and that is stigmata and
17 resistance, that I really want to sort of, if you will,
18 wax somewhat historic about my experience with these two
19 particular units. I do want to talk about the changing
20 war. I think that is absolutely critical in terms of
21 trying to anticipate this next wave of mental health
22 casualties.

23 Truly, my experience has been one of
24 remarkable opportunity, and with opportunity came
25 enormous credibility. And I hope to share with you what

1 credibility can do with the deployed forces as a mental
2 health provider. Earlier we heard about the PIES model.
3 Truly, in this environment we, at least as far as the
4 Navy, Marine Corps, proximity and immediacy, with our
5 paltry or our sparse mental health assets, really is a
6 luxury. And if time permits, maybe that will be a good
7 discussion to have in terms of how you actually change
8 time-honored doctrine when, in fact, there is no --
9 because of the nonpermissive environment, proximity and
10 immediacy are luxuries that combatants don't have.

11 One of the key points I want to make today,
12 and hence my story about these two particular units, is
13 describing what I consider to be organizational
14 casualties. We hear a lot about, obviously, individual
15 combat stress, individual PTSD. But my experience is
16 really unique in that I had two opportunities to observe
17 what mass casualty does to an entire organization, both
18 vertically and horizontally, and how it absolutely
19 paralyzes that unit to function. It's impossible to
20 talk about healing the individual when we have a
21 collective organization of casualty, and I want to
22 address that. I refer to it as the dead elephant. If
23 time permits -- and I hope it does because I really want
24 to talk about a concept that came to pass. I call it
25 facilitated reunion, for no other reason that I really

1 don't know what to call it.

2 Clearly, all of you are aware -- nightly you
3 watch the news, wounded members coming back from Iraq,
4 and all they tell the newscasters is I want to get
5 myself rehabilitated enough so I can go back, my buddies
6 need me. In fact, the same day that the NBA rucus last
7 week with -- the real story that wasn't told was
8 Sergeant Peralta (phonetic) -- I don't know how many of
9 you are aware that he threw himself on a grenade,
10 actually didn't even make front page, but I want to talk
11 about that type of unit bond, unit cohesion, as a
12 function of facilitated reunion. Also, kind of outside
13 the box, I want to talk about method and mode returning
14 home. I was fortunate enough to convince Colonel Hoge
15 to add a question to our survey. And that was an
16 assessment of how effective you think your method of
17 returning home was, either flying home or sailing home.

18 The obvious inference is that it takes a while
19 to depraves (sic.) And, you know, with the 24, 48 trip
20 from the desert back home, that has probably been more
21 maddening than combat itself. Then, lastly, because the
22 Navy is a big organization, we really have two mental
23 health resources. We have our mental health resources
24 embarked with Marines, special forces, seabees, and we
25 have our mental health resources embarked at sea.

1 That's really two separate stories. I probably won't
2 have time to talk about the blue Navy. I just want you
3 to know there is a whole Navy afloat now with
4 challenges.

5 I characterize this as a new lexicon and
6 alluded to earlier -- and I think it's really important
7 that we start rethinking the stressors of this
8 particular war. And I think the best way to understand
9 these stressors is really to kind of listen in on the
10 new lexicon. We hear about this 360-degree battle space
11 in the battlefield. Truly, there is no longer a near,
12 close, and deep battle space. You know, being inside
13 the wire, as some of our speakers alluded to, is
14 actually more stressful than being outside running
15 convoys. Because outside the wire running convoys, you
16 know, if you look mean and bad, you can pretty much ward
17 off some of the attacks. There is an element of control
18 when you're outside the wire. Inside the wire absolute
19 target.

20 I talk about the nonpermissive environment.
21 That's another euphemism that I think is very useful to
22 conceptualize what the enemy has done to us in terms of
23 this insurgency in terms of this inability to be mobile.
24 And, of course, we have the improvised explosive device.
25 We talked briefly about the three-block war. I don't

1 know how many of you are aware of General Kulocks
2 (phonetic) characterization of the three-block war. But
3 this too is also very key to understand the new
4 stressors that our combatants are being exposed to. The
5 three-block war says that the same three block -- a
6 service member of Marines -- the same Marine is going to
7 be engaged in peacekeeping operations. He's going to be
8 at the same time involved in humanitarian efforts and
9 real kinetic slug it out, you know, 0311 infantry
10 operations. And that role will change as the block
11 changes. And that's really what we saw happening in
12 Fallujah. And it's really -- the three-block war is
13 really here to stay. And, again, how do we train to
14 that capability? I talk about the ambiguity of that
15 three-block war and inability to reconcile the different
16 roles for that 20-year-old.

17 I actually -- these are all critical take-home
18 points that I want to get back to. Hopefully, I'll be
19 able to cover credibly. But, principally, as a
20 therapist, there is no substitute for credibility. When
21 you hear about my experiences with this Marine battalion
22 and this seabee battalion, I think you'll appreciate
23 that. Build it and they will come and not stop coming.
24 The corollary being if it is not built or it is not
25 suited as safe, they ever never comment again. Not only

1 is there individual resistance and individual stigmata,
2 but there is organizational resistance and
3 organizational stigmata particularly when that
4 organization has become identified as the victim.

5 After war how you come home and with whom
6 matters. This is really, I think, one of the most
7 exciting things -- one of the most exciting areas of
8 research in terms of how we bring our people home, and
9 this works into that facilitated reunion.

10 23 March -- actually, it's 2002. The same
11 battle that gave the media Jessica Lynch was also
12 perhaps almost the single most devastating day for task
13 force Paraquat, (phonetic) an East Coast based second
14 Marine division who encountered the enemy in Nazaria
15 experiencing -- one particular company lost a third of
16 their men. It's the greatest number of loss since
17 Vietnam. The dynamics that went into this loss were
18 particularly contributory to this organization becoming
19 a collective casualty. This organization was, in fact,
20 so impaired that the commanding general asked for mental
21 health, which is really unprecedented in Marine history,
22 asking for mental health provider. We had 12 mental
23 health providers in country, and none of them were
24 prepared, equipped, or trained to go forward. Yet
25 another story for how we prepare Navy mental health

1 providers, basically taking them from the hospitals as
2 our medical augments.

3 Having been the division psychiatrist, having
4 been deployed, having already been through a couple
5 wars, I actually had the opportunity to spend the next
6 four months with this particular unit that had a third
7 of their men as casualties. You can imagine what it was
8 like for this task force. And this task force actually
9 sailed back, sailed over, and sailed back. You can
10 imagine what it was like for these Marines to return to
11 the ship and every third rack was empty. You know,
12 they're stacked four and five deep. So every day a very
13 visible reminder. I had the unprecedented experience to
14 be able to spend the next four months with this unit,
15 and the commander asked me to sail home with them. He
16 said, Doc, you know, Marines wait until Christmas Eve to
17 do their Christmas shopping. You're going to find that
18 the closer we get to shore the busier you're going to
19 be. I was working 12 hours a day at -- 12 hours a day
20 seeing folks. That was probably one of the most success
21 stories in terms of building it and they will come. And
22 this was after months of them getting to know me and my
23 having to reinvent myself.

24 Story of another topic, how I reinvented
25 myself. It was not through doing debriefs. I did one

1 with this unit. And if this had been Vietnam, I
2 wouldn't brag. I reinvented myself with doing
3 professional military education and offering incredible
4 products in terms of psychoeducation as well as being
5 able to provide the leadership knowledge as to how to
6 restore a lot of trust that had been shattered. I fail
7 to mention the battle for Nazaria was also marred by
8 friendly fire. One of our own controllers called in
9 some apens (phonetic) which took out an additional 12 or
10 so Marines. So very complicated in terms of the
11 dynamics.

12 I'll talk about traumatic grief because I
13 think traumatic grief or complicated grief is actually
14 another area that is unexplored and rich and needs to be
15 tapped. The other mass casualty, which I was beginning
16 to feel like I was a black cloud, happened to my very
17 own seabees on the 2nd of May. And, in fact, following
18 an IED attack on the 30th of April, they were -- you
19 know, the marines were in Ramadi and experienced a
20 series of mortar attacks which killed 7 and injured over
21 30. The problem was this was a reserve battalion. I
22 don't really have the time to talk about the unique
23 dynamics to a reserve battalion in terms of the cohesion
24 and integration. Suffice it to say, there were other
25 dynamics that were very key such as our commander had

1 been present. And to this day, erroneously, seabees
2 believe that we never targeted because our commander was
3 present. Similarly, there were -- the fact that this
4 came on the heels of an attack two days earlier really
5 complicated the grieving process and I mentioned reserve
6 component.

7 I speak to these two examples because I spent
8 four months with the Marines a couple years ago and
9 another several months with the seabees. It afforded a
10 rich opportunity to understand complicated bereavement
11 and organizational casualty -- scapegoating,
12 victimization -- all of the things we see in individuals
13 we saw in the organization.

14 I wanted to just -- this is actually from the
15 National Center for PTSD. I wanted to remind everybody
16 that a lot of the anger and the irritability of the
17 domestic violence and a lot of the problems that we're
18 seeing that we don't understand in returning vets, may,
19 in fact, be a reflection of complicated bereavement.
20 We're so geared to looking for PTSD when, in fact,
21 complicated bereavement has a lot of the same breeding
22 pessimism, the same numbing, the same avoidance that
23 PTSD has.

24 One of the take-home points for the
25 presentation this afternoon is looking at my

1 contribution to East Coast Marines. Keep in mind, the
2 East Coast Marines, unlike the West Coast Marines, did
3 not have their division psychiatrist. That's why I went
4 forward. They had no one. They had zero, zip. 7,000
5 Marines and zero mental health resources. It's really
6 interesting to see what their rates (inaudible). And
7 this is something that Charles and I looked at and did
8 not report because it was a small end. I think you'll
9 agree that it was very suggestive that having an
10 imbedded mental health provider desensitized people and
11 having the system Oscar -- that's the system that the
12 Marines had when they came home for continued care. But
13 you can see that in -- the green is the battalion I was
14 with. Brown is West Coast. Basically, green sailed
15 home. Brown flew home and had an organic division
16 psychiatrist. You can see there's comparable combat
17 experience.

18 You can also see the same indicators that we
19 asked of other combatants were fairly comparable. This
20 is actually the data we didn't report. This is actually
21 suggestive of the effect of having an embedded shrink
22 for four months. The green is the battalions that I was
23 with. You can see -- again, we didn't -- do not report
24 this because of a reduced number of respondents. But
25 it's suggestive, at least -- at least when you look at

1 depression and anxiety in PTSD, of some sort of effect.
2 Is this an effect of having sensitized individuals to
3 the fact that mental health was constantly there?
4 Indeed. I walked patrols with these guys. I mean, it
5 was never easier to get a mental health consult. That's
6 what they came to understand, ultimately took the
7 opportunity for.

8 We start to see -- and, again, this was not
9 reported because we don't know how robust this data is.
10 But we're starting to see the stigma, at least as far as
11 with an embedded mental health and with Oscar, both on
12 the East Coast -- we're starting to see -- I think the
13 next slide shows this a little better. We're starting
14 to see that amongst the Marines on the West Coast that
15 did not have Oscar or did not have the embedded mental
16 health found it much more difficult to get appointments,
17 whereas the Marines that had the Oscar and had mental
18 health capabilities did, in fact, use them.

19 This was the number of post -- Marines at six
20 months -- 186 for West Coast, and 294 for East Coast.

21 Okay. I'm going to hit a couple of other
22 points. I don't have but a couple minutes left. But I
23 do want you to understand that one of the things that
24 constrained, at least OIF-1 General Madus (phonetic),
25 who was the division commander, had Division Order 3,003

1 said no Marine is going to be medivaced to the rear for
2 mental health without commander approval. Can you
3 imagine any other physical, any other surgical, or any
4 other physical illness requiring commanders' approval
5 for medivac? So we needed to -- with the location of
6 our combat stress company platoons -- we actually have
7 three of them, two of them now in OIF-2 -- but we had
8 three of them then. At times they were hundreds of
9 clicks away from the forward edge of battle. And so we
10 actually came up with this concept. "We" being the --
11 then the division surgeon, the medical surgeon, and
12 myself with this regimental recuperation center -- and I
13 want to talk about that. That's kind of an intermediate
14 -- that's sort of a Mobile three hots and a cot. The
15 problem was that, you know, our CSC platoons were fixed.
16 They were fixed at the level of a surgical company, and
17 they were manned by medical augments which are good
18 people. But these medical augments are just yanked out
19 of the hospital -- and, again, what's the most important
20 -- from my perspective, the most important perspective
21 that a provider brings is visibility, accessibility, and
22 credibility in -- you know, when you are in a surgical
23 company to the rear, how can you get, you know, those
24 key predictors of utility and success?

25 I have a slide that I'd like to end with, and

1 basically it's that -- you'll see. This basically is
2 what was the office, and this is probably the most
3 effective of seeing the member right then and there in
4 the environment. This is proximity. This is immediacy.
5 Obviously, nothing that -- this would be ideal to have
6 more mobile mental health providers.

7 Operation Desert Storm mental health lessons
8 learned and relearned. I think it's significant to know
9 that -- all of the mental health providers in here know
10 that every single war we relearn these same lessons.
11 OIF, ODS, OIF-1, 2; and now three is no different.
12 Navy, we are struggling with putting together finally a
13 combat stress doctor, and Dr. Kennedy and headquarters
14 are actually champion in that. Again, the expeditionary
15 nature of warfare limits are fixed capabilities.

16 Let me say that the seabees that got attacked
17 with those three mortars at Ramadi -- the 785th combat
18 stress detachment got fragged in that same attack.
19 Here's a whole battalion of seabees. Over the next
20 several months, after I left, there was only three
21 individuals who used the Army combat stress detachment.
22 That's not to say the Army wasn't offering a credible
23 product. Again, there's this stigma. There's also a
24 Tri-Service or a joint stigma in terms of -- you know,
25 seabees are very xenophobic.

1 Psychomorbidity reporting could not be
2 monitored realtime. I'll have a slide to address mental
3 toughness.

4 One of the three -- this is while I was still
5 able to accumulate data. You could see that preexisting
6 psychiatric diagnosis were probably 25 percent now --
7 you all probably realize that's about one in four, which
8 is what our national epidemiologic catchman is. You
9 would think that would be better after having folks
10 being screened to go to war.

11 And I left this slide in -- actually, in the
12 Navy we didn't even have a psychiatric authorized
13 medical allowance. So I put together -- I did a recall
14 of drugs being dispensed trying to anticipate what type
15 of medications we were going to need. Drug companies
16 had -- have done marvelous in terms of convincing
17 providers that, you know, a patient can't leave without
18 a prescription.

19 Warrior transition -- this is actually a
20 Marine Corps program. This is our effort to repatriate
21 or reunite our combatants. And, basically, it's a
22 chaplain-run program. It's required that everyone that
23 comes back from combat goes through this warrior
24 transition. You can see the elements of it. Is it
25 effective? Yes. Is it good? Yes. Anything that gets

1 people talking and thinking is good. We took warrior
2 transition to the next level, and that's what I want to
3 talk about, the facilitated reunion. And I'll end on
4 that note. And there's slides with regards to the blue
5 water mental health.

6 One of the Marines came up to me when we were
7 sailing back, and he said, You know, this is crazy. As
8 badly as I want to see my wife, my buddy -- I'll call
9 him Corporal Huff -- the last time I saw Corporal Huff,
10 he was in a stack of bodies, and I thought he was dead,
11 and low and behold he's home and he's waiting for me.
12 And how do I -- my wife's going to be there. And who do
13 I hug first? And my wife -- if I don't hug her first
14 and if I don't pay all the attention to her, she's going
15 to say, What am I? Chopped liver? So the idea came up,
16 Well, why don't we try -- and for the individuals who
17 had lost -- you know, WIAs, why don't we try and reunite
18 the WIAs with their unit. And we did this, in fact,
19 with the Marines. We stopped the ship early, and we
20 picked them up, and only the WIAs were allowed on board
21 the ship to make the rest of the trip home. They
22 weren't in very good shape, but it was amazing to see
23 their compatriots just carrying them aboard and nursing
24 them. And the opportunity to reunite and to grieve and
25 to have the opportunity to do this facilitated warrior

1 transition as a group, clearly was a luxury. But I
2 think it's a luxury that has tremendous practicality.

3 Incidentally, we tried doing the same thing
4 with the seabees. We were going to bring 12 of the
5 wounded back to Kuwait to our safe -- to our apod, our
6 staging base in Kuwait. This went to the level of our
7 surgeon general. There's not science that says this is
8 prudent or this is useful. But this is what every
9 single one of the wounded wanted. And this is really
10 what this grieving battalion that -- oh, by the way,
11 five months later still had not healed, was still a very
12 dysfunctional and very grievous unit.

13 Areas of future interest. I attended a
14 presentation of Dr. Fowa (phonetic) and her colleagues
15 on brief recovery program training for trauma. It's
16 actually about an eight session cognitive, behavioral
17 based, and desensitization. Right now there's no
18 psychological first aid. I think there's utility and
19 training on medics and our GMOs and our corps men on how
20 to do some interventions right now. There's virtually
21 no psychological first aid. In Garrison treatment of
22 PTSD, I think the virtual reality -- especially with our
23 population that loves high tech, you know, the interest
24 may be very great in -- we know that V.R. works. I
25 think we can adapt it to our population. I think this

1 is an area that needs to be explored in that partial
2 symptom PTSD. I think that may be the big delta in
3 terms of what we're seeing in terms -- in a lot of
4 alcohol abuse. And this is actually an interesting
5 concept I threw up there just for consideration and
6 obviously a topic of another time.

7 I think I want to run some slides -- just some
8 pictures, and then I'll end there.

9 This was -- you know, one of the Marines I
10 took care of -- actually, he flattered -- but I call it
11 humor, the fifth vital sign. Every day this particular
12 Marine chronicled his struggles and therapy in session.
13 They sent a Navy captain to talk to us and see if we're
14 all nuts. The jury is still out. Yep, you're nuts.

15 Regimental recuperation center respite via
16 temporary removal to a safer area. This is perhaps what
17 we considered to be the new three hots and a cot. In
18 other words, bring the three hots and a cot to the main
19 area of the division where Marines could easily make
20 their way. I think this has now changed. And
21 Captain McDonald could comment on whether or not
22 Division Order 3000 is still in effect. I think the
23 next one is some pictures of the regimental
24 recuperation. This, actually over the several months,
25 morphed into the next slide, an R&R center. So this RTC

1 was for combat stress, acute stress. This was for
2 individuals who were having some sort of symptoms. This
3 R&R -- it morphed into an R&R center, so where entire
4 units just kind of got a chance to take their battle
5 rattle off for a few days.

6 You can see this is actually -- some of you
7 may know where this is -- this is Camp Fallujah. Little
8 pond here. TV room, computers. Truly, the troops --
9 you know what? They all wanted to go back because their
10 buddies were out there. Racks, at least hard racks, and
11 that was a luxury. We even have a nice swimming pool.
12 And I think there's one more slide.

13 And I'm going to stop there and take
14 questions. And there's actually a couple more handouts
15 in your -- couple more slides, but I don't want to
16 shortchange the following speakers.

17 DR. OSTROFF: Captain Koffman, thank you very
18 much for that presentation. Let me open it up to the
19 group for comments or questions.

20 MS. EMBREY: You're the first one to mention
21 expeditionary, and I think that's a very, very important
22 concept. We are moving to that -- across the services.
23 The Navy and the Air Force are always deploying the
24 Armys -- moving to a different organization that would
25 be expeditionary as well and a process of recycling the

1 resources in an appropriate way. Is there -- from your
2 experience and from the various programs that you're
3 proposing that we expand to address the expeditionary
4 nature of our war fight for the future and it's impact
5 on our psychiatric help systems?

6 CAPT. KOFFMAN: Absolutely, ma'am. The
7 problem is -- and I use the term "fixed MTF centric
8 model." And, truly, you know, the model we had for
9 healthcare -- roll through to the slide that's a
10 quotation -- and I think this says it all. Truly, it's
11 an entirely different paradigm. If we have -- in every
12 other arena, fever leukocytosis and right lower quadrant
13 pain is going to buy you a surgical consult and a trip
14 to the operating room, you know, 100 out of 100 times.
15 But, you know, in mental health we have this paradigm
16 similar -- it's referral based. It's MTF centric. It's
17 diagnosis driven. And the whole idea of mental health
18 is expeditionary. And it really is an entirely
19 different paradigm. I mean, you know people ask me how
20 did you do it on these hundreds of hundreds of
21 individuals that you saw? What kind of therapy did you
22 use? My response was: It doesn't matter. It's the
23 quality of the relationship. It's particularly the
24 ability to have that relationship sustained over time.
25 I think that that quality -- it is -- we are able to

1 sustain a relationship, a therapeutic relationship, in
2 an expeditionary environment.

3 MS. EMBREY: So you're saying we need more
4 mental health professionals --

5 CAPT. KOFFMAN: Absolutely, ma'am, absolutely.
6 It's a good segway into the Oscar program.

7 Any other questions?

8 UNIDENTIFIED SPEAKER: Do you think sending a
9 Navy Captain was -- or do you think having some medics
10 and/or junior officers at a company would be better?

11 CAPT. KOFFMAN: Actually, the question was --
12 you know, was it prudent to send -- I was the senior
13 combat stress control consultant. The answer is: There
14 was no one else to send. And virtually everybody else,
15 without having had division of living with grunts and
16 being part of them, would have failed and probably would
17 have been more injurious. In Operation Desert Storm
18 there's actually a quote of -- the Textbook of
19 Psychiatry by Captain Madison, now Admiral Madison --
20 but he actually was quoted -- but half of the mental
21 health providers in Operation Desert Storm were returned
22 home as psychiatric casualties themselves. So I had a
23 great concern of sending people who had not been
24 trained, not comfortable with their 782s, how to live in
25 the field, how to survive. This one was calling for

1 help, and the call was answered.

2 CMDR. LUDWIG: On that point I was just
3 commenting that there aren't that many military
4 psychiatrists, I think that you're short staffed, I
5 think. If you're not -- there should be more. And I
6 don't say this in any way to be flippant, but if the
7 Captains and the high ranking few mental health
8 professional psychiatrists are going out into harm's way
9 -- I mean, what would happen if you were the only one
10 that could have been sent and you could have been
11 killed? You were, you know, in a position -- I mean,
12 the question is: Who would be left behind? My concern
13 is you can't send all your psychiatrists out to the
14 field in harm's way, I guess is what I'm saying.

15 MAJ. KILLIAN: We just went through sourcing,
16 and there's some shortfalls. If you send out the senior
17 guys, what seed corn do you have left? Who's going to
18 train the next generation? We have seen this -- the
19 Army has Colonel Jim Stokes who did the same job for 20
20 years, and that's the reason why the Army is able to get
21 the footprint it has today. But then they had to call
22 him back to active duty because he didn't train anyone
23 else to continue the generation, to continue to pass on
24 the neurons, to continue the good work. How do you make
25 sure that you don't send the only guy that knows how?

1 Should you have had an underling to teach along the way?

2 CAPT. KOFFMAN: And as you'll hear, Oscar is
3 an attempt to bring staff NCOs, senior enlisted -- those
4 underlings who can provide those. At this time, out of
5 the 12 individuals that I personally was with and
6 beseeched and implored and begged -- you know, it was
7 clear that no one else was capable or willing to do that
8 job. And we had a task force commander saying, I want
9 help. In my mind, war's a crazy place anyway. Who's to
10 say, especially with the type of seize mentality now,
11 that myself or anyone else would be safe anywhere else?
12 The randomness and the ambiguity is really horrific. It
13 was the right decision then. I guess the bottom line is
14 I'm still getting calls from people that I took care of
15 who -- even though they are out of the Marine Corps and
16 have PCS -- still don't trust the system. And I have to
17 constantly deflect that call and thank them for calling
18 me and make that call to the provider nearest to them
19 and say, Look, here's the situation.

20 DR. LEDNAR: I guess two impressions strike
21 me. One, Captain, I don't think there are many
22 psychiatrists that I know that would have gone through
23 this experience as effectively as you did. So I think
24 you're part of a select few. And just positioning 60
25 whiskeys, an Army term, with a deploying force is not

1 going to cut. It's the kind of person and the
2 orientation they bring to the unit and how they work
3 which is critical. It's not just a number. It's the
4 kind of person.

5 CAPT. KOFFMAN: One point about that
6 organizational casualty where I think I was very
7 effective is the casualty really -- the amount of guilt,
8 and guilt is an amazing thing because with silence
9 there's inferred guilt. And with guilt there is blame.
10 And there was guilt and blame and shame all the way up
11 to the commander. And it was only because people
12 weren't talking. I didn't talk about the -- how I
13 reinvented myself. But it was almost shuttle diplomacy
14 in terms of getting the one star to talk to the O6 to
15 talk to the O5 to talk to the O4 to talk to the O3
16 because there was that much -- you know, one bad day in
17 a three-hour fire fight, you know, one company loses a
18 third of their men. It's going to be a very --
19 incredibly difficult situation to navigate. As I say,
20 it took months to try and restore some integrity into
21 this unit.

22 UNIDENTIFIED SPEAKER: I had a second
23 impression. We tend to think a lot of the predeployment
24 mobilization readiness, sending units out, and maybe
25 supporting them while they're there. But what I heard

1 in your message is operational readiness is, in part,
2 getting home. And, in fact, some of these units will
3 turn around and go back again. And if we don't have the
4 third phase done well, you're not going to have a ready
5 force to go out again. We see the same dynamic in the
6 corporate world in terms of expatriate assignments,
7 where we see a very high casualty count, loss, and
8 morbidity in the returning of expat families. I think
9 this aspect of the whole experience of mobilization
10 deserves a major plus up in getting people home in a
11 safe and appropriate way.

12 CAPT. KOFFMAN: I was going to say this seabee
13 battalion -- I don't want to name it -- but I took them
14 through Doha. I didn't want to do their PDHAs because I
15 knew almost every single one of these seabees that would
16 come to see me. On the way out of the country, I took
17 them to Doha and had their PDHA screening done. And
18 about a third of the unit were recommended for mental
19 health referral.

20 DR. OSTROFF: Last comment from Dr. Gray.

21 DR. GRAY: It was a very good presentation.
22 Thank you very much. Other than your primary
23 recommendation that we provide more -- have more mental
24 health providers, what would you value most as far as
25 intervention -- sort of more practical? You hint here

1 that virtual reality, desensitization projects, or --
2 can you expound on what you think might work?

3 CAPT. KOFFMAN: We're trying to identify
4 individuals who meet diagnostic criteria for PTSD.
5 We're enrolling them in a -- through San Diego Naval
6 Hospital and some researchers there and HRC. There is a
7 V.R. protocol that is being worked out now. And as soon
8 as we have a population -- right now we're waiting for
9 this battalion to come back from Fallujah. So in the
10 next few months this pilot program should be
11 operational. I don't know what the protocol looks like.
12 I just know it's going to use the latest generation of
13 virtual reality goggles for decentralization.

14 DR. OSTROFF: Thank you very much. We'll have
15 to move on. Our next presentation is from the Marines.
16 We have Commander Kennedy.

17 CMDR. KENNEDY: I have a few photos to the
18 presentation. So what you have in your slides will show
19 a more focus on the Oscar program, but I thought -- also
20 I wanted to talk a little broader as well. So for the
21 most part, what you have in your hands will be similar,
22 but I added a few photographs.

23 To give a little initial background -- first
24 of all, thank you very much for the opportunity to
25 address this group, and I'm really happy to see the

1 attention being paid to this topic. I know Chuck Hoge
2 well and just -- I'm new in my position and look forward
3 to working with him. I think, in a nutshell, one of the
4 things I'm hoping we'll be able to do is to help some of
5 these junior people coming out of training to fall in
6 love with their units the way Bob Koffman fell in love
7 with his Marines and now with his seabees. I think that
8 can be done. And we can find -- through program
9 development find those techniques that can be taught to
10 mental health people and taught to enlisted personnel
11 and to others to try to do these sort of interventions
12 and not put our high value expertise at risk on the
13 battlefield.

14 Most of this has been covered elsewhere. Let
15 me mention that Marine Corps sees a lot of suicide. We
16 see a lot of hospitalizations for mental health
17 problems, and we see a lot of separations for mental
18 health -- for personality disorders. This is pretty
19 significant because one problem is when you have, as Bob
20 mentioned, an MTF centric approach where you have people
21 coming to the MTF to be seen, there is a risk that the
22 context for which they're presenting will not be fully
23 appreciated by the mental health provider. And all too
24 often, mental health providers without the benefit of
25 consultation are taking the point of least resistance.

1 You have a Marine who's unhappy with his unit, his life,
2 unhappy with things at home. The mental health provider
3 is seeing someone who may not want to engage in
4 treatment, and it's all too easy to write up that
5 recommendation and chapter them out. This loss of
6 manpower is particularly going to be acute as we face a
7 sustained war on terrorism. So we're in a situation
8 whereby making an approach more unit centric, there is
9 more of an opportunity to do interventions that obviate
10 an unnecessary separation and medivac from theatre.

11 I want to say a few words about stigma. I
12 would use the term "the light and the darkness." It's
13 somehow appropriate that we have -- we're trying to work
14 more closely with our chaplain brotherin. I like to
15 joke with them that they get to be on the side of the
16 light. We get to be on the side of the darkness. We
17 get to be on the entrance around back and often
18 separated from the rest of medical care. I think that's
19 obviously being addressed in the discussions about
20 moving mental health treatment into the primary care
21 setting and moving mental healthcare into the unit level
22 as well. I have a text of a message that's going to be
23 going out from the Marine Corps. It's really well
24 written. But it talks to leaders to let the Marines
25 know it's never too late to get help, and you'll assist

1 them by all means available. The problem is that these
2 don't get around the underlying stigma of letting others
3 know that you are singling yourself out to go somewhere
4 to seek care by identifying yourself as a patient. As
5 much as I think One Source is a way to begin increasing
6 access, there is a potential undercurrent. And that is
7 -- in many ways it goes the other direction that -- as
8 opposed to bringing mental health into the units and
9 into the primary care setting, what it says is, Here's a
10 way to move it off of campus. So unfortunately, we are
11 stuck with a situation where either we really make it
12 superconfidential and lose the opportunity for follow-up
13 and that unit integration, or we go the other direction
14 and try to make it superintegrated so people don't have
15 to label themselves as being a mental health casualty.

16 Another way -- I'll come back to this. The
17 picture you're looking at -- to the right, there is the
18 hallway in the surgical center at Camp Fallujah. The
19 door -- you can just barely see to the left of the
20 photograph is the entrance to the combat stress platoon
21 office. Those benches are where Marines who are
22 preparing to seek mental health personnel sit. The
23 dental office is across the hall. A little ways down is
24 radiology. On the right is lab, followed by the trauma
25 bay. So the thing about Marine self-identifying and

1 sitting on that bench there and saying, Yep, yep, that's
2 me, and I'm here to get my head shrunk -- as much as we
3 try to move mental health into field environments -- if
4 we have people trained in MTF office practice model,
5 we'll set up situations like this, and we'll have
6 well-qualified people who want to help. But we'll have
7 a hard time getting people into the fuse, if you will.

8 This is the chapel at another base in Iraq,
9 and this is -- there two chapels here. There are two
10 entrances. There's a tiny white sign -- I don't have
11 the laser pointer, but the white signs says, Combat
12 stress platoon clinic around back. So let's go around
13 back. This is the entrance. Other door, is what that
14 sign says, and it really goes nowhere. Really excellent
15 people there. I was paying a visit and interviewing
16 people in country during a five-week visit to Iraq, and
17 so these are well-meaning people. I think it's
18 significant that it didn't occur to them this may not be
19 the best way to help people find them. To their credit,
20 they're starting to move out and get around to different
21 locations. They're probably no more than a quarter mile
22 from a mortuary. We have to prepare them doctrinally so
23 they don't find themselves slipping into this lightness
24 and darkness model.

25 I had the opportunity to be trained in my

1 residency at Walter Reed Army Medical Center and having
2 as a mentor Harry Holloway, who served as a psychiatrist
3 in Vietnam and was at RARE. Taught me a lot about how
4 to use organizational approaches, how to treat an
5 organization like a patient, and, in many ways, echoing
6 what Bob was saying earlier. And I obtained some
7 training how to approach that. I think that has served
8 me well.

9 This is the deck of the Cole about three days
10 after terrorists blew a hole in the side. I served the
11 crew for about 3 1/2 weeks both in Yemen -- and flew
12 back with the crew across the Atlantic. You're seeing
13 300 people who have lost a sixth of their crew mates,
14 dead or injured. You can't do clinic one at a time.
15 And in due course was able to work with a number of them
16 but didn't have the opportunity to do one-on-one.
17 However, it paid off by working with them as a unit,
18 working with the leadership to have them serve their
19 people, and working with department heads, division
20 officers to help them work with their own people.

21 When I did a debriefing, if you will, with the
22 engineering department, I worked with department head,
23 and I heard the engineering officer lead the
24 intervention where she talked with her department about
25 what they did right and all the successes they had and

1 talked about how they're going to pull things together
2 and get through this experience together. My role was
3 to be a catalyst, to be a consultant, to the leadership
4 and provide assistance to those who were fraying around
5 the edges. When we asked crew members what was helpful
6 to them, they put at the top buddy aid, one-on-one
7 support from each other. They put us near the bottom.
8 The message I first came away with was: Why do I
9 bother? The second message that occurred to me
10 afterwards was our work helped catalyze that one-to-one
11 support, and I think that's the winner.

12 One of the problems about debriefing is it's
13 been a bit of a blow back. I think it's been oversold.
14 In fact, the Cole commanding officer apologized to me
15 when I arrived at the ship. Day four, after they were
16 attacked, he apologized because they couldn't do the
17 debriefings as scheduled because they had taken on some
18 additional flooding and had lost power again. This had
19 been presented to him ahead of time, but once -- I
20 talked to him that we were going to serve him, not the
21 other way around. It was a great relief to him. So
22 this is an intervention that's been oversold.

23 What's happened in the other direction is --
24 with the Cochran (phonetic) report is the analysis
25 looked at a number of controlled studies. What they had

1 in experimental design they lacked in intervention
2 description. What they called debriefing was one-to-one
3 interventions with individuals who suffered burn
4 injuries, motor vehicle accidents. They do a one time,
5 go through seven steps of a debriefing, what happened,
6 let's talk about it, and let's talk about how you're
7 going to get past this together. And that was it. And
8 then a month later sent them a questionnaire. Not
9 surprising they did not show positive effects. So that
10 shows you you don't want to do that kind of
11 intervention.

12 This is -- the larger point I want to make is
13 helping an entire unit to work with one another and
14 provide additional support in an ongoing way for
15 identified individuals is quite likely to be having an
16 effect if we can find the right methodologies to get at
17 it. I was happy to hear Dr. Hoge is working on trying
18 to study that in depth, and I will do what I can to
19 support that.

20 You've already -- you may have heard briefly
21 that -- show me the money. Putting psychiatrists on
22 aircraft carriers diminished medivacs by 87 percent. By
23 having access to care, by having a mental health
24 provider on the ship, decreased separations by 93
25 percent. This is an incredible savings in money, in

1 time, in disruption of the mission of carrier
2 operations.

3 Mental health support in the U.S. Marine
4 Corps, to give you an idea of where things have been --
5 stood before of a recent plan we've been putting in
6 place, FMF consists of three active divisions, three
7 service support groups, three wings. The entire Marine
8 Corps, one psychiatrist and one unlisted site tech per
9 division for a total of three psychiatrists, three
10 enlisted psych techs. During war time there are combat
11 stress platoons made up of augmented personnel, drawn
12 from MTFs, standard TO, one psychiatrist, one
13 psychologist, and three psych techs. We have two combat
14 stress control platoons in country. Using a civilian
15 model not well coordinated with services or with the
16 FMF. Not operationally trained so that they're familiar
17 with the daily life of those that are serving. They are
18 nondeployable, insufficiently accountable, and access
19 problems in stigma.

20 This is a program that had its birth at the
21 second Marine division in Camp Lajune in response to a
22 suicide spike in the late '90s. The commanding general
23 said, What do you need to try to improve access to care
24 and begin getting folks in sooner? The division
25 psychiatrist said that I would like to have some staff

1 NCOs and a chaplain as well, and we can begin increasing
2 our outreach. He was brought to Washington to develop a
3 program which I inherited. It's a pilot program being
4 implemented in order to try to bring an additional
5 footprint to the division, so we are putting folks
6 within the division structure. I know the Army does
7 that. I think a lot of these ideas were drawn from the
8 Army with a little dose of the experience the Navy's had
9 with multidisciplinary sprint teams. The idea is
10 predeployment in a preventive -- means emphasizing
11 resiliency, early intervention, individual group
12 support. Our methodology is somewhat variable depending
13 on the training of individuals who are being put under
14 these teams. We are in the process of building a more
15 defined curriculum and defined intervention strategy and
16 continuing care for those identified. And once we have
17 our individuals who have the opportunity to be well
18 accepted by their units, to be able to continue to
19 provide that care.

20 Being here, I can't help thinking about my
21 colleagues who are back from being deployed to Iraq, who
22 are back here in Pendleton, working and doing
23 follow-ups with those same Marines that they served with
24 in Iraq. And having spoken with them, having an
25 excellent opportunity to engage at the active unit level

1 and help ensure no one falls through the cracks now that
2 they're back.

3 Covers what I've already been talking about.
4 Leverage -- the impact on command -- Doug Marlow's
5 (phonetic) work in looking at World War II units showed
6 -- David Marlow -- excuse me -- found there was a high
7 inverse correlation between unit moral and cohesion and
8 combat stress casualties in units in World War II. So
9 the idea is to leverage that impact by working
10 commanders. Gary Haight (phonetic), our psychologist
11 who is deployed with RCT, 7th Regiment in the western
12 part of Iraq, was able to gain the trust of the
13 regimental commander such that he was given the
14 opportunity to -- given command support and working with
15 battalions identifying battalion leadership who had a
16 lot of contact with the enemy and given the opportunity
17 to do interventions with entire battalions, debriefings,
18 do information for the Marines themselves, and be
19 available for follow ups as necessary, of course,
20 expeditionary deployment, as was mentioned earlier. So
21 we have people deploying with the troops and being where
22 they are.

23 This is the composition of Oscar teams.
24 Psychiatrist, psych tech, and additional psychiatrists,
25 psychologists, a chaplain, and four staff NCOs. We

1 have an alternative plan for follow-up from a study by
2 CNA to be tracking the impact we have on the utilization
3 of services. The idea is that hopefully we'll be able
4 to reduce the services at the MTF to justify which may
5 be a transition of mental health personnel from an MTF
6 centric location to working with the units. The pilot
7 project is not requiring that, but this could reflect a
8 change in the center of gravity at mental healthcare
9 away from and MTF closer to where the troops actually
10 are.

11 What we're seeing in terms of the reality of
12 things is we're having a stepwise implementation of
13 personnel. So if you look at four, you'll see we have
14 additional psych providers that came from Omved
15 (phonetic.) We're in the process of getting a chaplain
16 on board in a few months. We'll be collecting data and
17 make a briefing to the Marine counsel.

18 This shows you where people are at now. The
19 folks in yellow are the people deployed now. Green,
20 here, are folks who are back from deployment.

21 This is worth noting. This is from the first
22 half in the way of two when the Marines returned to
23 Iraq. This will show roughly equal population division
24 and the support group and the wing. These two groups
25 have equal numbers. This will show that we're looking

1 at 2 evacuations versus 14.

2 Next step may have to be course correction.
3 This is something that I'm hoping you all can give
4 feedback or ideas. One of the things that -- the
5 challenge here is looking at -- we're not under this
6 current pilot. We're not looking at health status. I
7 hope we find ways of being able to track -- do a case
8 control by comparing RCT-7 which had an Oscar provider
9 versus RCT-1 which did not. Perhaps we'll look at
10 outcomes in clinical status to see if that has had an
11 impact, somewhat analogous to what Bob was showing in
12 terms of the Marines who returned with a shrink on board
13 versus those who did not and the possibility this may be
14 having a diminishment in the symptoms or diagnoses. So
15 we need to get around -- these ideas -- of course, Oscar
16 is being exported to other elements. So we may be
17 diminishing our opportunity to do a good A/B comparison.

18 I'm hoping to find results from PDHA comparing
19 responses from different Marine Corps units and tracking
20 that according to what services we have on the ground
21 with them, increasing liaison with MTF, RARE follow-up
22 study, as well as development of operational stress
23 curricula. What should we be training our mental health
24 providers so they do know -- they may know music, but we
25 want to teach them the military music. So this is a

1 skill we want to make sure we infuse our new people
2 coming out of training to not only know how to do it but
3 to feel so much connected with that unit that they won't
4 be sitting on the sidelines but getting involved in a
5 way it's going to overcome the stigma and the access to
6 care barriers.

7 So we need to test this. I think it's going
8 to be a winner for the Marine Corps if we can get the
9 studies necessary to show the efficacy. My hope is the
10 Marine Corps will choose to buy this program. We're
11 working on trying to broaden prevention across the
12 Marine Corps. And I think this is very significant, and
13 I'll be working with the Marine Corps command who owns
14 the school house for the Marines to increase the role on
15 nonmental health personnel.

16 Another way to get away from that -- one of
17 the challenges of the debriefing, get around the stigma
18 and access problems, is to help them be more effective
19 by taking care of themselves, what I was describing on
20 the Cole with my assistance and that is to help them
21 work with one another. Pretty good evidence that those
22 increased resiliency and their protective factor are
23 against development of symptoms. So Marine to Marine as
24 well as broadening this so that unit corps men who gain
25 the trust of the Marines and are out there in the field

1 with them can gain their trust and use some basic
2 techniques. It's not rocket science. It requires you
3 put your heart into it and have some training ahead of
4 time to be able to leverage that access you might have
5 to them.

6 I'll pause for questions. I'm sorry if I went
7 a little bit long.

8 DR. PATRICK: Again, very impressive
9 presentation. And in several places here you alluded to
10 the complexity in evaluating this. And this is going to
11 be tough to evaluate. And I would just give you a
12 heads up that I think next week NCI is sponsoring a
13 conference on looking at complexity theory as a
14 theoretical model to evaluate complex systems. And
15 while they're not focusing on this, they're focusing on
16 self-organizing symptoms that address clinical
17 preventive services. I would just encourage you to
18 think broadly about evaluative models you would use for
19 this because this will be really tough to evaluate. I
20 applaud your organic approach. This reminds me of
21 something that is sort of putting this in the hands of
22 the people that are really right there grappling with
23 the problem. I suspect this will be quite different in
24 different installations.

25 MR. PARKINSON: Excellent presentation. One

1 thing you said was absolutely key. And I wonder, as a
2 group, in the Board, and all of us, if we can't think
3 about -- if there was a weapon system in the Marines or
4 the Army or the Navy that had a 25 to 50 percent failure
5 rate, somebody didn't do their homework in a battle lab.
6 There are processes through our war colleges and our PME
7 where we actually stress test weapons before we put them
8 into the field. We don't do that for the human
9 performance. I wonder if it isn't time for us to think
10 about a human performance battle lab where bright young
11 physicians, who are all young these days, don't have to
12 think outside the box with new types of study designs
13 because they've done it before for human performance.
14 And I really think what we're doing is seeing these good
15 ideas popping up, and then you have to have an
16 individual champion. Heaven forbid you go somewhere, as
17 your mentors did, along the way so you could pick up and
18 bring back to active duty. This needs to be
19 institutionalized in a way, I would suggest. And as
20 you're building this model, I would think maybe there's
21 a piece to come back and say, What can we learn
22 generically about this human performance enhancement?
23 We got our risk factor specific centers. We got the
24 cold and the hot areas. We got the -- but we don't have
25 a generic way to do -- shouldn't be reinventing this

1 wheel every time. And it starts with a doctrine, and
2 that's the key. If you had a battle lab approach that
3 got it to the doctrine makers and then it comes down to
4 Marine Corps doctrine, it's done. And you don't fight
5 this battle every time you have another war. It's part
6 of the doctrine. It makes so much sense.

7 I want to come back to this doctrine thing and
8 think more broadly about how we can streamline it so we
9 don't have leap times of years when we have something
10 that works. The preliminary data you've got here are 50
11 percent reduction, the previous briefer in folks that
12 have these conditions by just being with them and
13 talking to them, and, likewise, 50 percent and 93
14 percent reduction in people that are -- you know, huge.
15 We just need to find a way to get it into the doctrine
16 quicker. I mean, "we" collectively. It's a wonderful
17 presentation.

18 CMDR. KENNEDY: Unfortunately, it looks like
19 our colleague from Britain is not here, but the Marines
20 have instituted an aggressive peer-to-peer based
21 approach, which I think they got some ideas from us, and
22 I hope to reimport it. I am going to be a member of
23 Joint Harth Force Protection (phonetic), and that's why
24 I'm flying out late tonight, to go to the training
25 force. So I'll do what I can. And if you all can do

1 what you need to do to help move this forward, I'll be
2 rooting you on.

3 DR. OSTROFF: Thanks very much. We have two
4 more presentations. I'll ask the next two presenters --
5 because I note, in particular, that the next
6 presentation has a large number of slides -- we'll need
7 to try to be as efficient as possible.

8 Colonel Favret from the Air Force.

9 COL. FAVRET: Thank you, sir. I could
10 summarize by just saying the Air Force does the same
11 thing as the other services but just better. Any
12 questions? Just kidding, of course. I will try to get
13 through this quickly.

14 We'll skip the overview. But just to give you
15 an overview of how -- most of you know our medical folks
16 work directly for the line leadership. We call our
17 clinic life skill support center. That was an effort to
18 get away from mental health and try to destigmatize it.
19 It's not the greatest name, but it doesn't have that
20 mental in it. And it incorporates the alcohol program,
21 family, and drug demand reduction. So that's how we're
22 sort of set up.

23 We take a life cycle approach to health in
24 general, and there's different opportunities to screen
25 folks annually through our PHA, our preventive health

1 assessment. We have an opportunity to ask questions,
2 including mental health questions, to try and assess how
3 folks are doing. And, of course, folks also take the
4 health assessment prior to deployment. So there's
5 opportunities to screen, make referral for more thorough
6 exam as needed, and, if necessary, to put someone on
7 profile so they're not deployed.

8 We do have two types of mental health teams or
9 packages that can be deployed either independently or
10 with a larger medical package. They're outlined there.
11 And, essentially, they follow the DoD directive on
12 combat stress control. The emphasis is on prevention by
13 a consultation, outreach, and education.

14 As has been discussed, the 2796 is used to
15 screen for mental health issues. There's an opportunity
16 there to identify folks and, again, a referral for as
17 needed. There was also some discussion earlier -- I
18 think Ms. Embrey had mentioned that. I think all the
19 services have been actively engaged in having
20 reintegration redeployment processes. We found that our
21 major commands have some excellent programs. And now
22 we're trying to have one Air Force standard that says at
23 a minimum you need to be doing this. And if wings or
24 major commands want to tailor it more specifically to
25 their units, they can do so. So that's where we're at.

1 I want to talk a little bit about -- we're
2 revising our Air Force instruction that's called
3 "Critical Incident Stress Management." Essentially what
4 we are doing is taking work that was done by the NIMH
5 when they got a number of experts to look at best
6 practices with regard to dealing with mass trauma.
7 We're taking that document as well as the V.A., DoD
8 clinical practice guidelines, which a lot of you are
9 probably familiar with, on the management of
10 post-traumatic stress. So that's what we're using as a
11 basis to revise our instruction. You have the websites.
12 They're excellent if you want to check those out.

13 NIMH -- one thing that they noted was
14 participation should be voluntary. So I think the
15 experts had some concerns about where everyone was
16 mandated to go through certain processes, and they
17 didn't feel like that was a good idea. Here are the key
18 aspects of early intervention following mass trauma that
19 you deal with, the basic needs of the individual who are
20 affected -- provide psychological first aid; you do a
21 needs assessment; monitor the recovering environment; do
22 outreach and information dissemination; foster
23 resilience, coping, and recovery, triage; and then refer
24 to treatment as needed. So those are some of the basic
25 components.

1 The V.A. DoD clinical practice guidelines
2 noted PTSD -- and this is -- again, has been referred to
3 -- is only a part of a spectrum of disorders that folks
4 experience following trauma. And like all clinical
5 practice guidelines, basically what it does is give a
6 number of algorithms that you follow. There's a core
7 module. And based on where that takes you, you may go
8 off to some other algorithms. It's very well laid out.

9 The core module has the use of education
10 training to promote resiliency. After a traumatic
11 incident you screen for PTSD symptoms. And if the
12 symptoms are present, you go into one of the other
13 algorithms. If there are no symptoms, then you provide
14 education and access information. One important shift
15 we're making is that most people exposed to trauma will
16 not have long-term adverse effects. So we probably
17 shouldn't be treating everyone exposed to trauma as if
18 we expect them to do that. We need to be very good
19 about screening and education. We don't think it's wise
20 to give everyone intervention when, for the most part,
21 most people wouldn't need it.

22 This is hard to read, but this is the core
23 module, how the algorithms work. This is the algorithm
24 for combat and operational stress reaction, the
25 symptoms, and what you do going through it.

1 So when we looked at these documents, where
2 was the consensus? When we got our team together to
3 revise our instruction, we agreed that commanders and a
4 team of experts were allowed to provide consultation
5 and services to a community following a traumatic
6 incident. As I mentioned, the vast majority of those
7 exposed to trauma will not experience adverse long-term
8 effects. The goal of trauma intervention should be to
9 foster resiliency in those who have been affected, and
10 the services should include these components --
11 screening, education, psychological first aid, and
12 referral when indicated. Overall, we felt we relied
13 heavily on the clinical practice guidelines to show
14 where we're heading.

15 Down here, the education screening referral
16 should occur before, during, and after deployment, plus
17 an additional screening. I think this is one thing that
18 we've been missing out on is you're -- each one of these
19 -- you know, before, during, after, and then post post
20 -- are all opportunities to educate and to screen. I
21 think that post post is what we're missing. A lot of
22 folks will come back, and either they won't be
23 experiencing symptoms or they'll be reluctant to endorse
24 symptoms for a variety of reasons. So we feel we want
25 to go somewhere where that's a standard thing. We need

1 to think about the guards in the reserves, how we get
2 them 90 to 180 days out to have an opportunity to check
3 in with them again, offer them the education, but also
4 screening to see how they're functioning. I think a lot
5 of times there are silos -- you know, the chaplains are
6 doing something and family support is doing something
7 the medics are doing something. We need to try to
8 organize our efforts so we're not duplicating efforts
9 and working in a consistent manner.

10 I want to talk briefly about Air Force suicide
11 prevention program. I think, as was alluded to earlier
12 -- I think Dr. Parkinson was involved in some of these
13 efforts early on. We had some Air Force senior
14 leadership that became very concerned about suicide back
15 in the early '90s. You could see the rate was over 14
16 per 100,000 during that time period. We had a
17 comprehensive look at what we could do to prevent
18 suicide and initiate our program. We did see, after the
19 implementation around '96, '97, a fairly dramatic
20 decrease in our rate of suicides. In the calendar year
21 2004 we have had a significant increase in the Air Force
22 in suicides. It does not appear to be related to
23 deployment, deployment stress, because we haven't had
24 people commit suicide while deployed. I think only one
25 individual postdeployment. There is some talk about

1 what are the stresses of deployment on folks that are
2 left behind. But right now we have no evidence to
3 suggest that the higher ops temps was a factor. So
4 we're reinitiating or retooling our program and the
5 basic tenets.

6 Here's a slide through 2003. These are rates
7 per 100,000. And as you can see, the Air Force is in
8 black. After we implemented our program is where we saw
9 a fairly significant decrease in our rates.

10 This just goes -- there are 11 initiatives
11 that were implemented as part of our suicide prevention
12 program. The -- getting leaderships involved was key.
13 And identifying this as not a medical issue but as a
14 community issue was a big part of it. I'd also highlight
15 the investigative interview handoff policy. When
16 someone is under investigation for criminal behavior --
17 let's say it's OSI, the office of special investigations
18 has interviewed that person, and when they're done, they
19 need to return that person to their unit and make a
20 handoff. The unit then checks to see how the person is
21 doing. And, if need be, they'll send them over to life
22 skills for an evaluation because we know from our data
23 that these folks are at higher risk.

24 Another one -- No. 9 I would highlight along
25 the same vein of identifying folks at higher risk. When

1 someone is facing UCMJ action and is suspected to be a
2 higher suicide risk, they can invoke this patient
3 psychotherapist confidentiality where they can talk to a
4 mental health provider, and that information is
5 protected. It won't show up in their court marshal and
6 be used against them.

7 These are completed suicides. And we go back
8 and see what were some of the underlying issues, and
9 there could be multiple issues. The one that always
10 comes up are relationship issues.

11 I want to mention we have put together the
12 leaders' guide for managing personnel distress. Got
13 together a number of folks, including commanders and
14 first sergeants, chaplains, mental health providers, to
15 put this together. It's now on a CD, and has been sent
16 out across the Air Force.

17 It's a CD that a commander or supervisor can
18 pop in and look up different issues. There's checklists
19 of what to look for and what to do.

20 So on the CD there are 35 different areas of
21 distress that a leader may be concerned about in one of
22 their troops. And like I said, it goes through -- I'll
23 give you an example. So here the situation -- a member
24 displays behavior suggestive of a risk for -- of
25 suicide. It has the behavioral signs that a leader may

1 see or be aware of and then actions that a leader can
2 take to deal with that. So it's meant to be very
3 practical advice and assistance for leaders out in the
4 field.

5 Now, talking about barriers to seeking mental
6 healthcare. Denial and avoidance. I think sometimes
7 even if you provided free and completely confidential
8 care, still it's hard for people to admit there's a
9 problem. So it's a problem. But as it was shown in
10 Dr. Hoge's study, the fear that seeking help will
11 somehow impact your job or career seems to be a primary
12 barrier.

13 This is a study done in the Air Force a few
14 years back. It looks at folks who are seen by a mental
15 health provider, what -- how many -- what percent of
16 those have some adverse impact on their career. The
17 first are people that self-refer. So they come on their
18 own accord. Only 3 percent of those, when we go back
19 and look at it, had some sort of adverse impact. Then
20 the others are chain of command referrals and command
21 directed evaluations. The message here that we send out
22 to folks is that if you come and come on your own, very
23 few of those cases will end up having any kind of
24 impact. I don't think many people believe that. But
25 that's the case when we looked at it empirically.

1 This is the type of referral, life skills, and
2 whether confidentiality was maintained. For those
3 self-referred, in 90 percent of the cases
4 confidentiality was maintained. Obviously, you have a
5 commander directed referral, the confidentiality --
6 you're obligated to respond back to the commander and
7 give them information.

8 These are the barriers that were already
9 discussed by Dr. Hoge, so I won't go over those again.

10 So as far as research recommendations, I think
11 that -- I think we can do more in terms of examining the
12 barriers to care. I think we have some information, but
13 I think we need to look across all the services, not
14 just during -- folks that are deployed, but all
15 instances and try to better understand what keeps people
16 from seeking care. I think we know a lot, but we can
17 probably learn little a bit more. We think it may be a
18 good idea to consider a pilot study with enhanced
19 confidentiality and privacy. I think One Source does
20 that, but I don't know if that's the answer. I think
21 maybe the answer is having our folks see someone in
22 uniform and provide a lot more confidentiality.

23 Right now that debate is going on within the
24 sexual assault community. The way it's framed is do we
25 lean on the side of the person who needs care and give

1 them more confidentiality at the expense of maybe the
2 commander having vital information? I think we're
3 making an assumption that it's going to be one or the
4 other. And maybe if we were to study, we find if we're
5 to enhance privacy and confidentiality, we get more
6 people in the door. And maybe in the end the commander
7 would have greater visibility because a lot of people
8 that aren't getting help from -- for a variety of
9 problems would end up coming forth. I don't think we
10 know until we're able to study it. And that's it.

11 DR. OSTROFF: Thanks very much. Good job.
12 Let me ask if there are any questions or comments on
13 this presentation.

14 DR. HALPERIN: I think it was probably some of
15 the first data we saw and what happened to careers of
16 people who are referred or self-referred.

17 COL. FAVRET: I think for our Air Force
18 personnel those numbers are a lot lower. They assume
19 their commander will know about -- if they come in to
20 seek mental healthcare. I think the problem is even if
21 I say, If you come to me on your own, I can tell you
22 from a study there's only a 3 percent chance it will
23 adversely impact your career. That might not be low
24 enough for some people. That's enough to keep me out
25 the door. So that's the downside of it.

1 DR. OSTROFF: Other comments or questions? In
2 the interest of time, I'm going to ask that we do the
3 last presentation, and then we can have some additional
4 discussion and break out into the executive session.

5 DR. BROWN: I should have gotten the hint that
6 I should be quick because the copy of the agenda has me
7 down as speaking at 1630 and has a discussion beginning
8 at 1630. I guess there's a hint there that -- I guess
9 that was on purpose.

10 It's a good time to talk about V.A. mental
11 healthcare because at this time a couple of issues have
12 led the Department of Veterans Affairs to really start
13 thinking about some new strategies for providing mental
14 health based on some national healthcare issues that
15 have developed. That really has to do with the
16 healthcare we provide to all veterans.

17 The focus today has been on OIF/OEF veterans
18 and the mental healthcare that they require or may need.
19 V.A. has been planning to provide mental healthcare --
20 to respond to mental healthcare needs of these new
21 veterans. We've been very affected by some recent
22 events -- in particular, it was nice to hear Dr. Hoge's
23 talk -- but the paper that Dr. Hoge produced has had
24 just one tremendous impact on V.A. because we're getting
25 all these calls from congress and veterans, and the news

1 media is calling us up asking is V.A. ready to handle
2 the flood of mental health cases that we'll be getting
3 from OIF? The picture is that there is going to be this
4 flood of veterans coming in that are going to require
5 mental care from Department of Veterans Affairs and that
6 V.A. is going to be overwhelmed by this. V.A. has an
7 enormous healthcare system. We provide -- we are the
8 second largest cabinet level agency in terms of budget
9 and staff. I'll leave it to you to think who the first
10 largest cabinet level agency is. We provide healthcare
11 to 25 million American veterans. We're planning to have
12 more than 5 million veterans coming to V.A. for
13 healthcare. A lot of the healthcare we provide is
14 mental healthcare. My point is: We are a robust
15 healthcare system. And the incremental addition of
16 those veterans -- I mean, it's an important group. We
17 have to get it right and provide the -- all the
18 healthcare that they need. But we're such an enormous
19 system that the incremental increase on our work load is
20 trivial, is tiny. I think we're well prepared to handle
21 the needs of the returning veterans.

22 With that, I want to talk about some new
23 strategic planning that V.A. has done and how we're
24 going to provide healthcare to all veterans.

25 We've been strategizing on mental healthcare,

1 and the reason for that is we recognize that there's is
2 a growing veteran population with unmet mental
3 healthcare needs. We were thinking of things like
4 homeless veterans, veterans with substance abuse
5 problems, geriatric veterans with mental healthcare
6 needs. It's a big population that we have to provide
7 for. And then there's been some national initiatives
8 that have had a big impact on our thinking. There's the
9 President's Freedom Commission on Mental Health, the
10 Secretary of Veterans Affairs, Mental Health Task Force
11 that produced a report, Internal Committee on Care, and
12 the so-called Capital Asset Realignment Strategy.

13 The President's New Freedom Commission on
14 Mental Health sets a number of goals that V.A. tried to
15 incorporate. The goals are Americans should understand
16 that mental health is essential to overall health, that
17 mental healthcare is consumer and family driven, the
18 disparities in mental health services are eliminated,
19 early mental health screening assessment and referrals
20 to service are common practice, excellent healthcare is
21 delivered, and research is accelerated, and technology
22 is used to access mental healthcare.

23 The Secretary's Task Force on Mental Health
24 findings made similar findings that somewhat overlap. I
25 tried to highlight some of the unique findings they came

1 up with. They told us there is variability in gaps in
2 mental healthcare. They also pointed to there is a
3 reduction in substance abuse treatment programs.
4 There's a need for a national mental health plan and
5 finally a need for more improvements in mental health
6 leadership.

7 We put together a task force that came up with
8 some strategic plan recommendations that are listed
9 here. The first one -- this is an important change in
10 the mind set of mental healthcare, and that it is --
11 we're trying now to emphasis recovery as the model. Our
12 philosophy is that mental healthcare should result in
13 recovery, not just maintenance. I think that represents
14 a change in the paradigm. At any rate, we've also taken
15 steps to restore the substance abuse programs that have
16 slipped in the past. We're also concerned about
17 addressing the long-term healthcare needs of those that
18 require it. This would apply to geriatrics. And,
19 finally, we focused on trying to integrate veterans and
20 their families in all aspects of the program. That
21 sounds like a no-brainer, but it's something we haven't
22 done as well, to try to implement programs now that will
23 incorporate family members into mental healthcare
24 approaches. That's really all I'm going to say about
25 V.A. mental healthcare strategic planning.

1 I want to talk about a couple initiatives that
2 we jumped onto following the Operations Iraqi Freedom.
3 We developed a number of immediate responses -- I mean,
4 we were thinking that we're sending soldiers off to --
5 in harm's way -- and we're going to be getting
6 individuals back with, among other things, mental health
7 programs. And we tried to rise to the occasion by
8 developing a number of projects. We developed satellite
9 -- a V.A. term for -- an educational broadcast to send
10 to all our healthcare providers on strategies for
11 dealing with mental health issues. We developed an Iraq
12 War Mental Health Guide which was designed to provide
13 best practices for our providers. We developed weapons
14 of mass destruction mental health curriculums. Finally,
15 we developed a post-traumatic stress disorder --
16 clinical practice guideline.

17 The satellite broadcast we did was a joint
18 DoD/V.A. effort. It talked a lot about conventional
19 injuries we'd be seeing as a result of the kinds of
20 weapons being used in Iraq. But it had a particular
21 focus on mental health issues, including PTSD,
22 deployment-related stress, and also major module on
23 postdeployment readjustment issues. If you want to see
24 what this module looks like, it's available at our
25 website at www.va.gov.

1 We developed a guide specifically from V.A.
2 national center for the study of PTSD at the White River
3 junction in Vermont. It was focusing on Iraq. It had
4 an interesting module. I recommend taking a look at it.

5 The WMD curriculum which focuses on the mental
6 health issues of the WMD attack was -- it was required
7 by Statute 107287. And it had a focus on other types of
8 injuries -- blast injuries, nuclear, biological,
9 chemical. There was a major acknowledgement that mental
10 health issues were going to be an important aspect of
11 treating victims of any -- casualties from this type of
12 instrument.

13 We heard about the PTSD clinical practice
14 guideline which was a V.A./DoD collaboration. I'm not
15 going to talk about that any further.

16 I presented data having to do with the
17 healthcare utilization of Operation Iraqi Freedom and
18 Operation Enduring Freedom. I appreciate the talk that
19 someone gave earlier on the DoD equivalent. This slide
20 gives the number -- when this data was done -- this was
21 data available to us last June. And at that time there
22 were almost 200,000 separated OIF/OEF veterans. Of
23 those, 15.6 percent, about 30,000, had come to V.A. for
24 healthcare at least once. Of those, almost 21 percent
25 or 6,290 had come with one mental health diagnosis.

1 I've listed the various diagnoses there. It seems
2 consistent with what we've heard through some other
3 reports. You have to add to that number we've had about
4 6,000 additional Operation Iraqi Freedom veterans come
5 to one of our vet centers. I just want to emphasis that
6 the vet centers are the V.A.s way developed to deal with
7 this issue of trying to provide healthcare in an
8 anonymous fashion, in a nonmedicalized fashion. All
9 those issues we discussed that affect mental healthcare
10 seeking among active duty service members, they don't go
11 away when a service member separates from military
12 service and comes to V.A. And our vet centers, which
13 operate outside of our hospitals, are the method V.A.
14 has found to be quite effective in providing services to
15 this group. Almost as many have come to our vet centers
16 as have come to our actual hospitals for mental
17 healthcare.

18 Finally, I want to mention our mental health
19 research and clinical centers. We have ten MIREX that
20 specialize in mental healthcare research, providing
21 clinical care education located around the country.
22 Their themes are things you might relate to providing
23 mental healthcare to veterans. But we decided to open
24 up two MIREX this year -- one in Durham, North Carolina
25 that will focus specifically on OIF/OEF veterans mental

1 health; and a second one in Denver, Colorado focusing on
2 suicide prevention. I think that's my final -- that's
3 it.

4 DR. OSTROFF: Thank you. Any comments or
5 questions for Dr. Brown?

6 DR. HERBOLD: One question. When people who
7 are separating who go to V.A. to obtain their disability
8 rating is -- does that count as a clinical encounter or
9 is --

10 DR. BROWN: No. That's a good question. The
11 two major things we do is provide healthcare and second
12 thing is disability compensation for disability. And
13 the evaluation for disability also involves a medical
14 exam. But that's not considered a health encounter for
15 this purpose. This is -- the visits that I've discussed
16 were purely for healthcare.

17 DR. PATRICK: I'm trying to figure out the
18 overall denominator. Do you have some sense how many of
19 the OIF/OEF veterans actually receive care, actually
20 come to the V.A.? Is that 6,000 a rough approximation?

21 DR. BROWN: Well, I went through that very
22 quickly. As of June -- we regularly get this data from
23 the Department of Defense and compare the names and
24 social security numbers of separated OIF/OEF veterans --
25 it's a pretty simple process. When you do that, we have

1 -- let's see. Last time we went through this last June
2 we got about 200,000 names of veterans who had served in
3 Operation Iraqi Freedom or Enduring Freedom but who
4 separated in the military service and were there for --
5 eligible for V.A. healthcare. Of those, about 30,000
6 had sought healthcare from V.A. Of the 200,000 who are
7 eligible for V.A. healthcare, about 30,000 had come at
8 least once. Of those, about 6,000 came for mental
9 healthcare, so about 20 percent.

10 MR. LEDNAR: Is the care that's provided in
11 the V.A. system for the separated veterans? It looks
12 like it would be an important window on service that is
13 connected. Is that data connected to the DMSS? Because
14 if you go to view on the health experience of military
15 service, I think increasingly it sounds like the V.A. is
16 going to get a view of what that experience includes.

17 DR. BROWN: Well, the material that Mark
18 talked about -- I'll let Mark talk for himself. My
19 impression is they were doing a somewhat similar
20 analysis of healthcare utilization. It was of those
21 OIF/OEF veterans that remained in active duty -- so it's
22 the complement to our data analysis. I think in the
23 long run, if you're talking about our ability to track
24 the health status, the morbidity, mortality of these
25 veterans, this is not a substitute for an

1 epidemiological study. We don't even know what the
2 total denominator is. We have no control group -- we
3 have a group that's self-selected to come to the V.A.
4 But some day this -- the way we conceive of this is this
5 information will form the basis to conduct a proper
6 epidemiological study. These are the veterans that have
7 served in Iraq or Afghanistan, come back, separated from
8 military service, and some fraction of those have come
9 to V.A. for healthcare. My impression is that what Mark
10 reported on was the compliment of that.

11 COL. RUBERTONE: That's correct. I would say
12 we don't get any data from the V.A. The paradigm is
13 that DoD would provide most available medical care data
14 to the V.A. (inaudible.)

15 UNIDENTIFIED SPEAKER: If the question comes
16 to Ms. Embrey's office about the health experience
17 associated with military service, part of the answer to
18 that question will reside in the V.A. data experience.
19 So if there's not some way to bring those complemented
20 pieces together in some way --

21 MS. EMBREY: That, in fact, is what we're
22 working on. A lot of the separate veterans of the
23 OIF/OEF are actually reservists. And they're not
24 separated, but they come off active duty, and it counts
25 as a separation. And that medical record is very

1 important to us because they get activated again, and we
2 need to have that information. So part of our strategy
3 of working with the V.A. is to understand and share
4 relevant information to help us understand that medical
5 record across the continuum of service -- whether it's
6 -- the V.A. has, by law, the good fortune of taking care
7 of any reservist who has served in a combat environment
8 for up to two years after they come back -- after they
9 come off active duty. We need to work a way to exchange
10 the information.

11 DR. BROWN: I would just add to that that
12 we're always glad to share our information and talk to
13 Ms. Embrey in her office, of course. But the truth is,
14 we have regular contacts with our DoD. We're dependent
15 on each other. We have to get our data from the
16 Department of Defense, and we have to compare it to our
17 internal data at V.A. So we're in constant
18 communication on these issues.

19 DR. OSTROFF: Thanks very much. Let me just
20 ask, not specifically you -- but let me just ask the
21 group if there are any general questions or comments for
22 all of our presenters on the mental health issues before
23 we take our break. I have a couple that have sort of
24 popped into my mind over the last hour or two. And most
25 of the focus and most of the presentations have probably

1 rightly so concentrated on OIF. And I'm wondering if
2 there are data to suggest that the experience has been
3 different in OEF than it has been in OIF. I'll let
4 Charles answer in a second. Then the other question
5 that I have -- and it sort of occurs to me that every
6 time I go through the Atlanta Airport, which is,
7 unfortunately, far too often, there are large numbers of
8 military personnel in their desert battle fatigues who
9 have come back for their, I guess, mini vacation or R&R
10 or whatever it is that it's referred to. I know this
11 was heavily promoted as a great benefit, particularly to
12 combat some of the stressor issues that have taken place
13 during that deployment. And I'm wondering, has there
14 been evaluation of the benefit of this break?

15 UNIDENTIFIED SPEAKER: With regard to OEF/OIF,
16 we looked at it in the New England Journal paper. And
17 OEF deployment had lower rates of mental health
18 problems, somewhere between the baseline problem and the
19 OIF experience. It was significantly different than
20 OIF. But among those soldiers in OEF who had
21 experienced significant combat experiences or multiple
22 fire fights that -- had the same rates as soldiers who
23 had similar combat experiences in Iraq. So I think it's
24 not an Iraq/Afghanistan phenomenon. It's purely that
25 OEF is not as severe in combat operational environment

1 as OIF.

2 With regard to R&R -- on the MHAT data
3 collection, we asked a question about whether or not
4 soldiers had the opportunity to go on R&R. A large -- I
5 can't remember the exact percent, but a decent
6 percentage of the 2,000 surveys that we did had the
7 opportunity to go on R&R. Probably 80 or 90 percent are
8 able go back to the states for their R&R two weeks.
9 There was no difference in the mental health rates for
10 those who had been on R&R and those who didn't. I don't
11 know that that means anything because those who hadn't
12 gone on R&R were anticipating being able to go on it.
13 So it's not really clear that there is a direct
14 relationship there. So -- but, you know, it was a
15 little sideline investigation that we hoped would pan
16 out, and it didn't.

17 MS. EMBREY: I would also say it's a morale
18 welfare issue too. The personnel community is the one
19 that responded to the commander's desire to provide and
20 improve morale for the force. It was not specifically
21 designed to address mental health issues.

22 UNIDENTIFIED SPEAKER: And the soldiers
23 themselves reported it was the one positive aspect of
24 deployment. You know, the thing they really looked
25 forward to was being able to go home, and it did make a

1 difference.

2 DR. OSTROFF: Are there other questions or
3 comments? If not, I'll turn it over to Colonel Gibson
4 for some administrative issues before we adjourn. I
5 will point out that the Board members will stay, and we
6 will have an executive session. I will give you a
7 couple minutes of a break to stretch your legs.

8 COL. GIBSON: Just a reminder, on the CEUs, as
9 you fill out that form, put your address and phone
10 number on there. The Mercy tour -- we leave here at
11 8:20. There will be coffee and snacks in the morning
12 before that starting at 7:30. For dinner tonight we're
13 carpooling. We leave at from the lobby of the Navy
14 Lodge at 7:00 clock. There are maps out here.

15 DR. OSTROFF: I'd like to just close by
16 thanking all the presenters this afternoon. This is a
17 very challenging and difficult question. We're very
18 pleased that Health Affair has brought this to us for
19 deliberation and discussion. It seems clear to me that
20 there is a lot of tremendous work that has been going on
21 and a lot that needs to be done. And I, for one,
22 greatly admire your dedication and perseverance in this
23 very challenging but very rewarding area. So on behalf
24 of the Board, let me thank all the presenters for giving
25 us a lot of food for thought, and thank you again.

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(Meeting adjourned at 5:30 p.m.)

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