HEARING VI ON THE DEPARTMENT OF VETERANS AFFAIRS INFORMATION TECHNOLOGY PROGRAMS

HEARING

BEFORE THE

SUBCOMMITTEE OVERSIGHT AND INVESTIGATIONS

OF THE

COMMITTEE ON VETERANS' AFFAIRS
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March 17, 2004

HEARING VI ON THE DEPARTMENT OF VETERANS AFFAIRS INFORMATION TECHNOLOGY PROGRAMS

WEDNESDAY, MARCH 17, 2004

U.S. HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS,
COMMITTEE ON VETERANS' AFFAIRS,
Washington, DC

The subcommittee met, pursuant to notice, at 10 a.m., in room 334, Cannon House Office Building, Steve Buyer (chairman of the subcommittee) presiding.

Present: Representatives Buyer, Bilirakis, Boozman, Evans, and Udall.

OPENING STATEMENT OF CHAIRMAN BUYER

Mr. BUYER. The Subcommittee on Oversight and Investigations of the Committee on Veterans' Affairs will come to order. This is our sixth hearing on the VA's information technology programs. The date is March 17, 2004.

By way of opening—this is not necessarily an admonishment, but perhaps the VA can take it as they choose. The subcommittee's original letter of notification of this hearing, originally scheduled February 25, was sent to the VA on February 6. At the VA's request, the subcommittee rescheduled the hearing for today. That letter was sent on February 13. The subcommittee just received a fax copy of the VA's testimony at 9 a.m. this morning. We hear the usual excuse that OMB is holding it up. Would you please tell us how long it has been at OMB? I would think 40 days' advance notice would be more than adequate time for the Department to respond to this committee.

I also understand our pre-hearing questions were sent to the Department on March 11, and we have not received the courtesy of a response. I don't understand that form of lack of responsiveness, Dr. Roswell. And for that reason I have to bring it up here. And this is a hearing on VA/DOD sharing. And the best way I can help prepare for these hearings and we can get on with it is when I have the advance testimony. And I have read everyone else's and was quite confused that I didn't have the VA's, and now I am very disappointed.

Today's hearing will revisit some of the key VA initiatives, including VETSNET, its automated claims processing program. We will also review two new programs, the VA's Core Financial and Logistics System, called CoreFLS, and the Patient Financial Serv-

ices System, PFSS. CoreFLS is currently undergoing an operational testing in VISN 8 at Bay Pines Medical Center in St. Petersburg, Florida. Unfortunately, during this testing phase, it became necessary to repeatedly postpone surgeries because of multiple problems with implementation of the new system. I am at a loss as to why the Department would choose the second-busiest hospital in the nation for a test site. So maybe the VA can explain that.

When I learned about this situation, I asked the VA's Office of Inspector General to conduct a comprehensive review of the ongoing implementation of CoreFLS at Bay Pines facility. This request was made by this subcommittee on February 19. We also requested that the IG's investigation focus on the adequacy and effectiveness of the training provided to the employees of the facility. The cost of the two consecutive 30-day delays prior to full implementation of the total penalties assessed for the delinquent payments of invoices over 30 days old and current delinquent invoice inventory. I understand that the IG has sent 15 personnel down to the Bay Pines facility. Any updates you can give us on that, I would appreciate.

The Patient Financial Services System, PFSS, pilot project is currently under way in VISN 10 at the Cleveland Medical Center. The pilot project is designed to test PFSS in order to demonstrate how integrated commercial patient management and patient financial software will improve VA's third party collections.

The subcommittee's last hearing on November 19, 2003 dealt with the efforts being made by the VA and DOD to develop and deploy electronic medical records that are inter-operable, bi-directional, and standards-based. Currently, we have service members deploying overseas and we have service members transitioning from active duty back to civilian status. How much easier would it be for these men and women if their medical information was in electronic format in a common medical record? I guess what we would like to hear from the VA and DOD is what is the latest and greatest of your endeavors to move this process forward?

The President has identified moving toward electronic medical records as one of the top priorities. In his State of the Union address, the President said, "By computerizing health records, we can avoid dangerous medical mistakes, reduce costs, and improve care." In fact, the Institute of Medicine, commonly referred to as IOM, issued a report entitled, "Patient Safety Achieving a New Standard of Care." The report was the work product of IOM's Committee on Data Standards for Patient Safety and focused on improving quality of care in America and fostering the use of information technology within the health care system. We will hear from Dr. John Clarke, a member of IOM's committee, and get his thoughts about the advantages of moving more aggressively toward paperless medical records.

During our last hearing, it was acknowledged by me and others that more progress had been made in the last 14 months than in the prior 20 years. It has been 4 months since our last hearing, and we would like to know how much closer the two departments are in providing a seamless transition to veteran status.

Another area of interest to the subcommittee is the VA's Smart Card Initiative. The VA testified before this subcommittee back in

September of 2000 about a Smart Card proof of concept demonstration that was conducted August 31, 2000 for the acting secretary and the veteran service organizations. The demo project showed how the Smart Card could support express registration, which would save time for the veteran and VA staff while improving data quality. The demonstration also showed how a veteran using a kiosk could digitally sign forms using keys securely carried on the card. The goal was to implement this program nationally by January 22, 2002. It is my understanding that a new Smart Card initiative has been underway. Hopefully, we will learn what went wrong with the past efforts to implement the Smart Card after conducting the demo project in 2000.

This hearing will also give the new Assistant Secretary for Information and Technology, Mr. Robert N. McFarland, an opportunity to provide to the subcommittee an update on the implementation of the one VA enterprise architecture plan and the state of the Department IT program. I look forward to your testimony.

Right now, I will pause and ask the ranking member, Lane Evans, if he would have any opening comments.

OPENING STATEMENT OF HON. LANE EVANS

Mr. EVANS. Yes, I do, Mr. Chairman. I thank you for your leadership on this issue. This committee has repeatedly addressed DOD and VA's informational exchanges. Transcripts of basic medical information on separating servicemen is very important. The VA has a need to know that this information to do so is its mission. A list of all separated service members is important, especially lists of returning members from Iraq. VA claims that the DOD information is often conflicting and contains discrepancies. DOD claims that there were no errors in any records sent to the VA. Well, both, obviously, cannot be true. Secretary Rumsfeld requested a comprehensive list. Will he get it? If he could not, that is a specific problem that DOD has and it needs to be addressed elsewhere. But if he could get such a list, why could the VA get that same list, what seems to be the problem? If the two departments cannot walk out the interface, what are the options?

Mr. Chairman, I appreciate your leadership, and I yield back at this time.

Mr. BUYER. Mr. Bilirakis.

OPENING STATEMENT OF HON. MICHAEL BILIRAKIS

Mr. BILIRAKIS. Well, thank you, Mr. Chairman. Just very briefly, because you and Mr. Evans have basically covered the material. I commend you for holding this hearing. We know that the VA spends about a billion dollars on its information technology infrastructure each year, and certainly it is our duty to ensure that the American taxpayer is getting a good return on this investment.

Obviously, I am concerned about the problem with Bay Pines. You have brought it up, and I am sure we are going to spend a lot of time on it with the witnesses. Mr. Evans, of course, brought up the interface between the two departments, the Veterans' Affairs and the Department of Defense. I understand it is something like 16 or 17 years that the two departments have been trying to develop a common medical record for military service members and

veterans. Seventeen years on something that seems to make an awful lot of sense. It is a practical thing to do and why in the world it taking so long and they still haven't even gotten to that point is beyond my understanding.

But then again, when it comes to computers and things like that, my understanding is not so very big, anyhow. But hopefully we can learn more about these matters here today. Thank you, sir.

Mr. BUYER. Mr. Bilirakis, we are pleased that you are here today. As you chair the Health Subcommittee on the Commerce Committee, your impact upon our health system is immense. And this will be an important hearing as we learn more about do we digitize, not only its impact in the quasi-private system but obviously, here with the VA. And the VA has always been a leader, but they need to get with it here a little bit.

Dr. Boozman?

Dr. BOOZMAN. I really don't have a statement. I want to thank you, though, for holding the hearing on such an important subject.

Mr. BUYER. Thank you, Doctor.

If our first panel will come forward, please. We now recognize Dr. John R. Halamka, chief information officer, CareGroup Healthcare Systems, and chief information officer at Harvard Medical School. Please take a seat. And next—please come forward—is Dr. John R. Clarke, a member of the Committee on Data Standards for Patient Safety for the Institute of Medicine, professor of surgery at Drexel University, and adjunct professor of computer and information science at the University of Pennsylvania.

Dr. Halamka, you may proceed.

STATEMENTS OF JOHN D. HALAMKA, M.D., CHIEF INFORMATION OFFICER, CAREGROUP HEALTHCARE SYSTEM, AND CHIEF INFORMATION OFFICER, HARVARD MEDICAL SCHOOL; AND JOHN R. CLARKE, M.D., MEMBER, COMMITTEE ON DATA STANDARDS FOR PATIENT SAFETY, THE INSTITUTE OF MEDICINE, PROFESSOR OF SURGERY, DREXEL UNIVERSITY, AND ADJUNCT PROFESSOR OF COMPUTER AND INFORMATION SCIENCE, UNIVERSITY OF PENNSYLVANIA

STATEMENT OF JOHN D. HALAMKA

Dr. HALAMKA. Great.

Mr. BUYER. We will operate under the 5-minute rule.

Dr. HALAMKA. Thank you, Mr. Chairman, and distinguished members of the subcommittee, for allowing me to testify today. I am John Halamka, and I serve as the chief information officer for the CareGroup Healthcare System. That is a collection of six hospitals and 3,000 doctors in eastern Massachusetts, comprising about 9 million patient records.

Mr. BUYER. Sir, do you have a written statement?

Dr. HALAMKA. I do, and that is included.

Mr. BUYER. It will please be submitted for the record, no objection.

Dr. HALAMKA. Okay.

Mr. BUYER. Your oral testimony may be received.

Dr. HALAMKA. Thank you. I also serve as the chief information officer of Harvard Medical School and the chairman of the New

England Health EDI Network, an organization responsible for inter-linking the administrative medical records for the entire New England region.

I would like to make a few remarks about creating interoperable medical records across systems and regions. My experience in doing this clinically in New England is it required a phased approach. First, we needed to identify who are the patients. We have no national patient identifier in this country at this time so our challenge is as patients move from doctor to doctor and region to region to identify who they are and link their records to an identifier. So in our hospital system, the first matter at hand was to create a master index of every patient in our region, the medical record numbers they had been known by in various doctors' offices and hospitals. And once we created that database, that enabled us then to create what I will call a virtual medical record. I can now gather data using Web technologies from various doctors' offices and hospitals because I have a common database of where the data resides and the medical record numbers by which each individual is known.

Another challenge we had was data standards. These are very much evolving in medical informatics today. And in fact in 1998, when we first did this, many of the standards for the exchange of medications, problems, various things such as radiology studies didn't exist. We actually had to invent them at the time.

Well, the good news is as we think about this phased approach, the standards for interoperable medical records today do exist. In fact, Tommy Thompson in 2003 has adjudicated a set of basic information exchange standards that make interoperability today much easier than it ever has been in the past.

The other thing we recognized is that doctors deliver care with a patient in front of them. We think of HIPAA as actually empowering the exchange of medical records because HIPAA specifically provides exceptions for treatment, payment, and operations. If the patient consents to be treated, the data can be gathered from various places the patients received care, delivered to the doctor to ensure good patient treatment quality. So in fact HIPAA has not been a barrier to us in the implementation of shared interoperable medical records.

We also recognize that population health is ultimately very important. To ask questions such as are our diabetics getting proper laboratories or proper physical examinations? But we also recognize creating central repositories of consolidated information across hospitals is extraordinarily hard. So in our phasing we said clinical care for the individual patient seeking care is our first goal. And we have deferred creating unified databases for population health and data analysis as a future goal.

I will say that I have worked with Rob Kolodner and I have spoken to Dr. Winkenworder about IT issues in the past. And as I understand the current interoperability of VA and DOD, they are following a phased approached fairly similar to what we have done in New England, starting with a master index of who are the patients, which went live last year, and now working on pilots to do a very similar virtual medical record approach with a pilot going live in the fall starting with medications and allergies. So this ap-

proach, virtual medical records based on standards and information exchange at the point of care, is a very sound approach that we have used for clinical information exchange.

I will also say that we have done administrative data exchange, such as is the patient eligible for care, claims processing and financial information exchange throughout all the payers and providers in New England. The New England Health EDI Network, described in detail in my testimony, processes today about five million transactions a month, about 90 percent of the administrative transactions in our region, and it uses a very similar model: Web technologies, virtual linkage of multiple heterogeneous and disparate systems that exist in hospitals and payer systems.

And my recommendation after analyzing DOD and VA technologies is that following a standards-based approach for administrative and clinical data, using this notion of a master patient index and distributed data stores does appear to be sound. And I certainly look forward to watching their progress because although, based on the information I have reviewed in this packet, the past has certainly been a checkered experience. I do believe, with the standards available today, that the future does look bright.

I will conclude by saying the way that we were able to achieve this interoperability in New England is through a strong vision and consistent leadership. It absolutely took managing every aspect of this interoperable exchange with a strong project plan, a single project management organization, and milestones that were adhered to. So it was actually much more an organizational problem than a technical problem to achieve interoperability. And in certainly the VA and the DOD's experience, today I believe they do have an architecture and a plan and a vision whereas in the past that may not have been the case.

So, again, I do look forward to a rosy future. And we are certainly happy to share our experiences in New England as it will help our nation exchange medical records.

[The prepared statement of Dr. Halamka appears on p. 59.]

Mr. BUYER. That is great. Thank you very much.

Dr. Clarke, you are now recognized for 5 minutes.

STATEMENT OF JOHN R. CLARKE

Dr. CLARKE. Thank you, Mr. Chairman Buyer. Like you, I am also a veteran, I might add, having served as a physician in the Army and as a surgeon at the VA hospital in Philadelphia. I am speaking today, however, as a member of the Committee on Data Standards for Patient Safety of the Institute of Medicine. The Committee's recommendation——

Mr. BUYER. Could you pull your microphone a little closer to you, please?

Dr. CLARKE. It wasn't on, excuse me. The Committee has made recommendations on health care standards to improve patient safety and in the interest of time, I will summarize the written statements.

I think Dr. Halamka has already illustrated the important need to have an electronic medical record to provide accurate information for the care of patients, and so I will not discuss that any further. However, it is very clear that as these records develop, one

of the inhibitors of developing the electronic record is that for the most part the successful systems today have been homegrown and talk within their own community but do not talk between communities. And the main problem that we addressed was the need for data standards so that all the electronic health records could talk to each other. The Committee made a number of recommendations along those lines.

The National Committee on Vital and Health Statistics, which is a public/private advisory committee established to provide advice to HHS and Congress on national health information policy, has for many years recommended that the Federal Government assume a more active role in establishing national data standards. In 1996, Congress passed HIPAA, which mandated standardization of administrative and financial transactions. In 2001, the Consolidated Health Informatics Initiative, an inter-agency effort, was established as part of OMB E-Government Initiative to streamline and consolidate government programs among like sectors.

The mission of the Consolidated Health Informatics Initiative is to articulate and execute a coherent strategy for the adoption of federal interoperability standards for healthcare information. DHSS was designated the managing partner for this initiative with both the DOD and the VHA as being major partners. The initiative played a pivotal role in the recent decision by the Federal Government that the programs of the DHHS, the VHA, and the DOD would incorporate certain data standards and terminologies. The initiative, although off to a very promising start, lacks a clear mandate to establish standards. In addition, once standards and gaps have been filled, the future of the initiative is unclear.

The IOM Committee recommended that Congress should provide clear direction, enabling authority, and financial support for the establishment of a national, not just a federal, standard for data that support patient safety. Various government agencies will need to assume major new responsibilities and additional support will be required. Specifically, the recommendations concluded that the Department of Health and Human Services should be given a lead role in establishing a public/private partnership for the promulgation of standards for data that support patient safety and other quality of care initiatives. The Consolidated Health Informatics Initiative in collaboration with the National Committee on Vital and Health Statistics should identify data standards that are appropriate for national adoption and identify gaps in the existing standards that need to be addressed.

The Agency for Healthcare Research and Quality in collaboration with the National Library of Medicine and others should provide the administrative and technical support for these efforts; in particular the agency should ensure the development of implementation guidelines, the certification process, and confirmation testing for all the data standards. They should also provide financial support and oversight for the developmental activities to fill the gaps in the data standards.

And the National Library of Medicine should be designated as a responsible entity for distributing all the national clinical terminologies that relate to patient safety and other quality of care issues.

Yes, the DOD and VHA need to be able to talk to each other, but to improve the safety, quality, and efficiency of healthcare, we all need to be able to speak the same electronic language. The incorporation of data standards into government programs is a logical approach to establishing national standards. The major government programs, including those operated or sponsored by the Department of Health and Human Services, the VHA, and the DOD, should incorporate these data standards into their contractual and regulatory requirements.

The IOM Committee detailed an action plan for the deployment of these standards for classifying and coding health data for electronic interchange of data and for representing clinical knowledge electronically. With federal leadership in the establishment of standards for data that support patient safety, information technology systems built up over the coming decades should achieve the success to support the delivery of safe and effective care that we have been waiting for.

Our committee report offered a blueprint to address the standards necessary to make electronic health records universal, not only within the federal sector, but across the country, as well.

I would like to thank the committee for the opportunity to present the IOM findings, and I would be happy to take questions at the appropriate time.

[The prepared statement of Dr. Clarke appears on p. 69.]

Mr. BUYER. Thank you very much. Dr. Halamka, you testified that this was really more an organizational problem than an IT. In order for you to achieve the level of success that you have today, what type of institutional will was necessary?

Dr. HALAMKA. Certainly we needed to have strong visionary leadership from the CEO, from the leaders of the organization that would help us get through some of the barriers because there are always the barriers of privacy and confidentiality versus the doctor's need to know to deliver good care. So if there is a strong central vision that good care is the champion here, certainly that breaks down some of the other barriers.

We also have to have a common agreement on standards, that each organization has to adjudicate, we will adopt interoperable medical records systems that will enable us to consolidate records. So it took leadership at the executive level, leadership at the IT level, and clinical leadership in the field to make sure we deployed electronic medical records that doctors would use to put the data in to begin with.

Mr. BUYER. Dr. Clarke, your testimony was equally as clear, asking Congress to provide such direction and enabling authority. I believe that Congress here over the last two decades has done that. This is our sixth hearing. We have given not only great resources of America's treasury but latitude and authority to DOD and to VA. So what I am most hopeful about here, Dr. Clarke and Dr. Halamka, is that that institutional will can proceed. And I know that patience is a virtue, but I am running out. This committee is running out of that patience.

You used the word "heterogeneous," Dr. Halamka, would you characterize the DOD and the VA health systems as heterogeneous?

Dr. HALAMKA. Well, certainly. In fact, just as an example, if you think of a banking transaction, there are about five data elements in a banking transaction. There are about 65,000 data elements in an average medical record. So to represent those into an electronic system by its very nature creates very heterogeneous to interoperate data systems.

Mr. BUYER. I should have asked this as a follow-up to the previous question. When you took on this cause and you had the institutional will, you laid out the direction, what was the time line in order to achieve success?

Dr. HALAMKA. Sure. We did it in about one year. But the prerequisite was we had already had electronic representations to the data so the systems existed. And therefore that one year was defining the standards for interoperability, ensuring we had a cross index of our multiple patients, and then building a record that was frankly good enough, that perfection was the enemy of the good. That is if a doctor got a list of medications and it said, "Tylenol, Acetaminophen, Panadol," all of which are the same drug, the doctor would be able to figure out that people are taking Tylenol. That was acceptable, a level of clinical data inoperability that didn't necessitate that we solve every vocabulary and every data integrity issue first but got the doctor the information they needed to do clinical care in the safest way possible was really our goal. So one year.

Mr. BUYER. If you feel as though you are not qualified to answer this question, just state so or you can give your personal opinion on how long do you think it could take the VA and DOD to enjoy such success, 17 years? 10 years? 5 years?

Dr. HALAMKA. Well, I will say the following, that in 2004 I consider this the year of the "Perfect Storm." We have standards. We have HIPAA that gives us guidelines for appropriate exchange of information. And I think the leadership of the VA and the DOD, it has that institutional will that I described and the project management is put in place today that wasn't existent in the past such that I do expect the next year to see much more substantial progress from my knowledge of these systems than you have seen in the last 10 years.

Mr. BUYER. All right, before I yield to Mr. Evans, I have to repeat this, and I will repeat it 10,000 times, the vision here is very clear: When a soldier, sailor, Airmen, Marine, they are injured on the battlefield or in the workplace, they are taken to a combat aid station. They take their dogtag, which has an electronic medical record, everything comes down. The first time they begin to provide service to them, it goes into electronic medical record form. When they are taken off the battlefield, whether it is in Iraq, Afghanistan, say they go to Landstuhl, it follows them, they know what care has been given. In transport, when they go from Landstuhl and they end up at Walter Reed or they end up in San Antonio, everybody knows what is happening. And then upon medical discharge, when they go to VA, everybody knows what has been done along the process. We increase the quality of care. That is where we want to go.

Mr. Evans, you are recognized.

Mr. EVANS. Dr. Halamka, your statement contains comments on exchanging administrative records via the Web indicate a significant degree of success in that area, which we can be happy with. But what would you recommend that would assist the VA, the DOD/VA information exchange, what must the two departments do to support a third party remedy?

Dr. HALAMKA. Just so I understand the question, what are my recommendations to VA and the DOD to enjoy the same kind of success?

Mr. EVANS. Yes.

Dr. HALAMKA. So certainly, the adoption of a standard way of exchanging data. It is absolutely the case that medical records are going to be heterogeneous and distributed. You are not going to be able to create a centralized database of everything that happens in the course of an individual's life, civilian and military. So by the adoption of the standards, such as the ones you have suggested, you now have the ability to query those source systems and gather the data the doctor needs to deliver care. So it is leveraging the Web, leveraging modern technologies, which afford such exchange, and adhering to standards rigorously throughout all systems will make them successful. But of course that is technology. There is the organizational aspect I talked about as well, you must have a consistent project plan that is adopted by every single hospital and site that is part of the care delivery system. It is only by herding the cats that you will make this information exchange possible.

Mr. EVANS. Dr. Clarke, your testimony says that the implementation of the national health information infrastructure in which government healthcare systems can interface with the private sector, when you speak of the private sector, you mention suppliers, various insurers, purchasers, and employer groups. Please expand on how you will guarantee the security of this system and the privacy of the veterans' medical records within this national health care infrastructure?

Dr. CLARKE. The security of the individuals' records I think are captured under the umbrella of HIPAA. And all institutions have to adhere to a policy whereby information is released only to authorized individuals, health care providers, and other individuals, under the HIPAA standards. So the requirements for the VA are the same as the requirements in our own institution. And when I want to get information from any other hospital, be it a VA hospital or be it another institution across town, I have to adhere to the same standards.

Mr. EVANS. Thank you. Thank you, Mr. Chairman.

Mr. BUYER. Thank you. Dr. Clarke, do you have a written statement you would like to entered into the record?

Dr. CLARKE. Yes.

Mr. BUYER. It shall be entered.

Mr. Bilirakis, you are now recognized.

Mr. BILIRAKIS. Thank you, Mr. Chairman. Let's see, Dr. Halamka, you work for Harvard Medical School, correct? And you have no private firm on the outside or anything of that nature?

Dr. HALAMKA. Yes, I have no stock holdings nor affiliation with——

Mr. BILIRAKIS. So you are not in here trying to drum up work?

Dr. HALAMKA. There is nothing I have to sell.

Mr. BILIRAKIS. Right. And, Dr. Clarke, the same thing with you, you are with Drexel, right?

Dr. CLARKE. I am a full-time employee of Drexel University.

Mr. BILIRAKIS. Yes. If you had been requested, your recommendation, your help and your aid had been requested by the VA/DOD, would you have been available to help?

Dr. HALAMKA. Yes; in fact, I have met with Rob Kolodner several times over the last several years.

Mr. BILIRAKIS. I see. Well, it is not really comparing apples with apples, obviously. One is government with all sorts of turnover, particularly at the top with elections and whatnot and Harvard and Drexel of course there is a different situation. You are both M.D.s. I think it was in this hearing room that we had somebody testify, Mr. Chairman, a few years ago to the effect something about your chances of dying are enhanced the more time you spend in the hospital, or words to that effect. There are some statistics to that effect. Why is that?

Dr. HALAMKA. Well, certainly if we think about the way that care is delivered in many hospitals, with handwritten orders that can't be read, the potential for medical error is estimated at 7 percent of the inpatient population has a medication error during the course of their hospitalization. So if they use electronic medical records, such as computerized provider order entry, where there is no longer handwriting, there is no longer data re-entry by clerks, eliminates much of that. So as I understand the interoperability pilot of the DOD and the VA, medication data and allergy data is the first element to be exchanged. So in fact I think they are targeting that exact error issue.

Mr. BILIRAKIS. So there is criticality behind getting this done, is there not? We are talking about lives.

Dr. HALAMKA. Correct.

Mr. BILIRAKIS. Why do you gentlemen think that the VA and the DOD have had a such a hard time getting this done?

Dr. HALAMKA. And I will just render an opinion.

Mr. BILIRAKIS. Lack of institutional will or more than that?

Dr. HALAMKA. Render an opinion because of course I haven't worked in either of those sites specifically but on the technical side the standards had not been adjudicated until fairly recently. So that certainly was a barrier. But we have the standards today. There was not a master patient index in the DOD system itself. There wasn't an ability to identify the patients between the VA and the DOD until last year. So that there were some technical barriers.

Mr. BILIRAKIS. Has it been principally DOD that maybe has been the problem?

Dr. HALAMKA. I can't say, because, again, I don't know enough, but I recognize that the master patient index didn't exist until last year.

Mr. BILIRAKIS. With DOD.

Dr. HALAMKA. That is correct.

Mr. BILIRAKIS. But it did exist for some time in the VA system.

Dr. HALAMKA. That is my understanding, yes.

Mr. BILIRAKIS. Okay.

Dr. HALAMKA. And then organizationally I don't think the project, again from what I understand, had quite the priority in the past that it does today. It is highly visible. The people, the vision, and the technology exists. So I think today is very much a new day for this interoperability demonstration.

Mr. BILIRAKIS. Well, Mr. Chairman, I am not really sure how much more we can ask of these two gentlemen. I would sure have loved to have seen the VA at the same table with them and the GAO. I think it would be an interesting play among the three groups. But in any case thanks, gentlemen. You appear to be experts at this. We are talking what, nine million patients and you have been able to get the job done. I would hope that the VA, and the VA is in the room, Dr. Roswell is one of my favorite people forever and ever, and others from the VA here and they are listening to you and hopefully we can get this thing done somehow.

Thank you, Mr. Chairman.

Mr. BUYER. Acting off of your intuition, I know both of you have come down here from Philadelphia and Boston, and I don't know what your return schedules are, but if you could after the first panel retires, if you could wait and if you have anything you want to add after the GAO testimony.

Mr. BILIRAKIS. I thank you, Mr. Chairman. That is good thinking. I meant to bring that up.

Mr. BUYER. And if there is any interaction, we could do it at that time.

Dr. Boozman?

Dr. BOOZMAN. Mr. Halamka, what does the form look like that you use? Do you check boxes?

Dr. HALAMKA. Everything we do is Web-based. And so when one thinks of navigating a Web page, text displays, checks boxes, pull down menus, so for the display of records we are gathering them from all of our various hospitals and doctors' offices and showing them as a consolidated view as a Web page.

Dr. BOOZMAN. When a doctor does an exam though, what do you recommend that he does? Do you have a particular form that you want him to use or are you just into gathering the information?

Dr. HALAMKA. When we gather information as in data being input the system, everything is put through standard formats. We actually have a 35-member clinician committee designing all of the systems such that if you are ordering a medication, if you are doing a documentation of a history or physical, what are those data elements that need to be captured? So a lot of clinician input into designing those Web-based structured standard ways of getting data in.

Dr. BOOZMAN. But when a guy does an exam, when an internist is with a patient, does he check boxes?

Dr. HALAMKA. It is a combination of both free text, dictation or typing, plus checking boxes.

Dr. BOOZMAN. You mentioned earlier that there are 65,000 versus a much smaller amount in the banking, are you trying to standardize a form that the internist would use and that optometry would use? Wouldn't it make sense in the day and age that we live now, there are so many different ways of doing that, wouldn't it

make sense to try and get that 65,000 down to much lower than that?

Dr. HALAMKA. What we found is for procedure-based specialities, you are going in for a colonscopic exam for example or a pathologist has to review a slide, those types of activities actually render themselves very well to forms and structured data input. But when you see an internist and your chief complaint is fever, shortness of breath, it is very hard to put that into a structured form. So we will do both.

Dr. BOOZMAN. But when you do see fever and whatever, because you have fever or whatever, you do certain things, right?

Dr. HALAMKA. Sure.

Dr. BOOZMAN. So it looks like you would have those certain things listed and then whatever the standard of care is for that particular complaint. See what I am saying? I understand what you are saying but the days of just writing on a chart kind of over?

Dr. HALAMKA. Well, one of the challenges is so much in medicine is not black and white, it is gray. When you say fever, what does that mean? How high? Are there night sweats? Unlike again something discrete such as banking, so much of medicine is subjective that, yes, absolutely we can reduce much of medical practice to standard formats and standard vocabularies but there still has to be room for subjective interpretation and that is where we will use voice recognition to get in the doctor's subjective view, which ends up as text in the record.

Dr. BOOZMAN. Okay, I am not arguing with you, whatever you are doing is working so thank you very much.

Dr. HALAMKA. Sure.

Mr. BUYER. I have follow-up off of Mr. Bilirakis' question. If this can be quantified from your analysis in implementation or having now lived through the system, is it possible to now actually calculate your medical errors or deaths through your quality assurance or risk management, what could have been avoided having gone through this electronic record?

Dr. HALAMKA. Sure, well, the numbers that we have experienced are that we have been able to reduce adverse drug events by 50 percent——

Mr. BUYER. Wow.

Dr. HALAMKA (continuing). In our hospitalized patients. The average cost of an adverse drug event is $5,000. And that is because of extra hospital days or extra care that needs to be rendered. And in our case it is about 60,000 patients a year that receive inpatient care. So if you do the multiplication, 60,000 patients times an error rate of 7 percent times $5,000, that reduced it by half. But when you start scaling that to the country, it gets to be a very significant number.

Mr. BUYER. How do you achieve that? Why? Why do you receive 50 percent? That is extraordinary.

Dr. HALAMKA. We go from doctor's brain to patient's vein without a single hand-off. It used to be that a doctor wrote an order, it went through a piece of carbon paper. It was faxed to a pharmacist who then re-keyed into a pharmacy system. If it went to a nurse, well, today a doctor types in a structured form. It goes into the pharmacy system automatically. It then goes to a drug robot that deliv-

ers the medication to the nursing station. The nurse types in a patient name, gets the medication in the right dose and the right format and delivers it to the patient. There are no hand-offs whatsoever.

Dr. CLARKE. Chairman Buyer?

Mr. BUYER. Yes?

Dr. CLARKE. If I could also elaborate from the perspective of the Institute of Medicine Committee. We felt very early in our discussions that it was important to recognize that quality of care was not—and patient safety was not just a matter of detecting and preventing errors. But rather it was involved in the delivery of quality health care. And the seminal discussion really involved an experience at Latter Day Saints Hospital where they looked at new drug allergies, that is people who developed allergies to medications they had never received. And they set up a program,—everyone agreed that those were not errors. But they set up a program whereby you could look at your drug choices and look at the pros and cons of each drug and they found that by presenting intelligent information to the provider at the point of care, they were actually able to reduce their new drug allergies by 50 percent.

So this is not just a matter of detecting errors. This is a matter of providing a provider with accurate information about the patient, making a correct match, and providing top-quality care. It is not just a matter of picking up mistakes. Patient safety is a matter of delivering quality care. And medical records, electronic health records are essential to doing that. And standards are necessary for me to get information from your hospital so that I can take care of the patient who has been there and now is in Philadelphia.

Mr. BUYER. Who are your vendors with regard to your hardware and software?

Dr. HALAMKA. Sure. Starting with the hardware, all of our storage has to be very, very reliable. And we have purchased storage from EMC Corporation for that reliable storage. Our servers are provided by Compaq, Hewlett Packard Corporation. Our networks by Cisco. And our software has been created largely internally but we use a language from Intersystems Corporation called Cache, which is actually the same language and the same infrastructure that is used by the VA.

Mr. BUYER. Thank you. Does anyone have any follow-up questions? Mr. Bilirakis?

Mr. BILIRAKIS. No, Mr. Chairman. Well, I guess when we get the next panel up there, I know you have asked both of the doctors to stay around and that is just terrific that they are willing to do that. If somehow we can intermingle them, I think it might be interesting. Thank you.

Mr. BUYER. Thank you very much for your testimony.

Dr. HALAMKA. Thank you.

Mr. BUYER. We now recognize panel two. We recognize Ms. Linda Koontz, director of information technology management issues, United States General Accounting Office. Also on this panel will be Mr. James C. Reardon, chief information officer for the Military Health System, Office of the Assistant Secretary of Defense for Health Affairs. We also recognize Dr. Robert H. Roswell, Under Secretary for Health, Department of Veterans Affairs. We also rec-

ognize Dr. Robert M. Kolodner, acting deputy chief information officer for health, Veterans Health Administration.

Normally, when we do these congressional hearings and we ask the administration to come forward with their positions, we will have the GAO testify and then we will have the administration present their testimony. We bring in outside experts. We led off today with outside experts. Now we are going to turn to the GAO.

And, to my colleagues, we have asked the administration to come. They don't have prepared remarks, but I think that what we should do is after the GAO provides their testimony, if they would like to give any opening comment that they made based upon what they have heard from the first panel and the testimony from the GAO, that is permissible. You are here so that you can answer many questions that members have with regard to how we get this process moving forward.

So with that as sort of our architecture of the hearing, we will lead off with Ms. Koontz.

STATEMENTS OF LINDA D. KOONTZ, DIRECTOR, INFORMATION MANAGEMENT ISSUES, U.S. GENERAL ACCOUNTING OFFICE; ACCOMPANIED BY VALERIE C. MELVIN, ASSISTANT DIRECTOR, INFORMATION TECHNOLOGY MANAGEMENT ISSUES, U.S. GENERAL ACCOUNTING OFFICE; JAMES C. REARDON, CHIEF INFORMATION OFFICER FOR THE MILITARY HEALTH SYSTEMS, OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE (HEALTH AFFAIRS), DEPARTMENT OF DEFENSE; ROBERT H. ROSWELL, M.D., UNDER SECRETARY FOR HEALTH, DEPARTMENT OF VETERANS AFFAIRS; AND ROBERT M. KOLODNER, M.D., ACTING CHIEF INFORMATION OFFICER FOR HEALTH, VETERANS HEALTH ADMINISTRATION

STATEMENT OF LINDA D. KOONTZ

Ms. KOONTZ. Mr. Chairman, members of the subcommittee, I am pleased to be here today to participate in continuing discussion of the Department of Veterans Affairs Information Technology Program. With me today is Valerie Melvin, assistant director, who is responsible for our work in this area.

My testimony focuses on a critical aspect of this program, VA's work with the Department of Defense to achieve the ability to exchange medical health care data and create an electronic medical record for veterans and active-duty personnel. VA and DOD have been pursuing ways to share data in their health information systems and create electronic records since 1998. Yet accomplishing a two-way health data exchange has been elusive.

When we testified on this initiative last November, VA and DOD had achieved a measure of success in sharing data through the one-way transfer of health information from DOD to VA health care facilities. Yet, VA and DOD faced significant challenges and were far from realizing the longer term objective, providing a virtual medical record based on the two-way exchange of data as part of their HealthePeople Federal strategy. The Departments had not clearly articulated a common health information architecture and lacked the details and specificity essential to determining how they would achieve this capability.

Since November, VA and DOD have made little progress toward defining how they intend to achieve the two-way exchange of patient health data under the Healthy People federal strategy. Although VA officials recognize the importance of having an architecture to describe in detail how they plan to develop an electronic interface between their health information systems, they acknowledge that the Department's actions are continuing to be driven by a high-level strategy that has been in place since September 2002.

VA and DOD officials stated that they intend to rely on an initiative being undertaken this month to satisfy a mandate of the National Defense Authorization Act, which mandated that VA and DOD develop the capability to exchange outpatient pharmacy data by October 2004. The Departments hope to determine from a planned pharmacy prototype what technology can be used to facilitate the exchange of data between the health information systems they are developing. However, this project is in an early stage and the Departments have not yet fully determined the approach for this undertaking. Given these uncertainties, there is little evidence as to whether and how this project will contribute to defining an explicit architecture and technological solution for achieving the two-way exchange of patient health information.

Adding to the challenge and uncertainties of developing the electronic interface is that VA and DOD have not fully established a project management structure to ensure the necessary day to day guidance of and accountability for the Departments' implementation of this capability. Although maintaining they are collaborating on this initiative through a joint working group and receiving oversight from executive level counsels, neither Department has had the authority to make final project decisions binding on the other.

Further, the Departments are operating without a project management plan describing the specific responsibilities of VA and DOD in developing, testing, and deploying the interface.

In discussing these matters last week, we were told that the Departments had designated a program manager for the pharmacy prototype and begun discussions to establish a plan for the overall interface project. However, until essential project management elements are fully established, not only for the prototype but for the entire project to develop an interface, the Departments will lack assurance that they can successfully establish the capability to exchange data within the time frames they have set.

In summary, Mr. Chairman, achieving an electronic interface to enable VA and DOD to exchange patient medical records between their health information systems is an important goal with substantial implications for our nation's military members and veterans. However, at this time, the Departments lack critical components, including a well-defined architecture and a project management structure and thus risk investing in a capability that could fall short of the intended goals. The continued absence of a clear approach and sound planning for the design of this new electronic capability elevates concerns and skepticism about exactly what capabilities VA and DOD will achieve as part of the HealthePeople Federal and in what time frame.

That concludes my statement. I would be happy to answer questions at the appropriate time.

[The prepared statement of Ms. Koontz appears on p. 79.]

Mr. BUYER. I think the testimony of the GAO is very critical. I don't want to be redundant to the last hearing that this committee held last year, so I would just now turn to Mr. Reardon and then to Dr. Roswell for comments that you would like to make with regard to any progress that you have and respond to the testimony of the GAO, whether you agree with it, whether you disagree with it. Now is your opportunity.

Mr. Reardon.

STATEMENT OF JAMES C. REARDON

Mr. REARDON. Good morning, Mr. Chairman and distinguished members of the subcommittee. Thank you for the opportunity to discuss the progress being made by the Department of Defense and the Department of Veterans Affairs in sharing medical information to facilitate the care of veterans. While I have submitted a more detailed written report, I would like to highlight some of our major efforts.

We continue to enhance the Military Health System enterprise architecture to ensure that information technology investments directly support the military medical mission and allign with the Department's high-priority Business Management Modernization Program.

Protecting sensitive patient information is of the utmost importance to the Military Health System, and we have implemented a strong information assurance program which addresses information protection, both from the cyber, physical, and personnel security perspectives. We continue to enhance our secure standards-based infrastructure, which ensures essential patient and population-level health care information is well protected, and is available when needed around the clock.

Another major focus is the Department's electronic medical record called the Composite Health Care System II. CHCS II began worldwide deployment in January 2004 after successful completion of operational testing and evaluation and limited rate production at eight DOD medical facilities. CHCS II is an enterprise-wise medical and dental electronic health record that provides worldwide secure online access, to comprehensive patient records, a single electronic record for each beneficiary. CHCS II is patient-centric, secure, and scalable for use in all DOD medical facilities from our largest garrison based facility to our forward-deployed medical units. CHCS II is a core component of military medical readiness supporting uniform, secure, high-quality health care delivery to active duty service members, their families, and other beneficiaries.

DOD continues to work very closely with the VA, electronically transferring large quantities of medical information via the Federal Health Information Exchange. This model of collaboration between the Departments markedly enhances continuity of care for our nation's veterans. Examples of the electronic information being transferred to the VA include laboratory and radiology results, discharge summaries, allergies, and consults. Since last appearing before the subcommittee in November, we have expanded the information being provided to information on our national mail order pharmacy,

and on our retail pharmacy, as well as our standard ambulatory data records are now moving to the VA at the point of separation.

VA providers nationwide have access to electronic medical information on over 1.9 million separated Service members and the numbers continue to grow on a monthly basis.

The primary focus of DOD/VA IT collaboration is the development of interoperability between DOD's Clinical Data Repository and the VA's Health Data Repository. A DOD/VA integrated product team led by senior clinicians and information technologists from both Departments is managing this initiative. The initial interface will be the pharmacy prototype, which will test our infrastructure and operational architecture to ensure we are exchanging data in a safe and secure manner that supports data integrity and patient safety.

A joint DOD/VA team collaboratively developed the functional requirements for this initiative, the request for proposal and other supporting documentation. A DOD/VA selection board evaluated the proposals, made a selection, and a contract was awarded in late February to Integic Corporation. A joint project kick-off meeting with DOD, VA, and the winning contractor occurred earlier this month and the program management team and the contractor team will continue to meet weekly to ensure this effort stays on schedule. The health CIOs will meet on a bi-weekly basis to receive updates, provide input, and ensure quick issue resolution. The DOD/VA Health Executive Council and Joint Executive Council will also receive updates on a monthly and quarterly basis.

In addition, DOD and VA are working closely as lead partners in the Consolidated Health Informatics Project, one of the 24 E-Government Initiatives supporting the President's Management Agenda and as principals on the new Federal Health Architecture initiative being managed by HHS.

Mr. Chairman, and distinguished members of the committee, the collaborative relationship between DOD and DVA is strong and progress continues to be made. The groundwork has been laid for even greater accomplishment in the future, and the Department is firmly committed to continue success at the highest levels. This cooperative technology sharing serves as a vital tool to assist both Departments in caring for the men and women who serve and have served this country. They are the focus of our efforts.

This concludes my oral statement. Thank you again, Mr. Chairman, for the opportunity to highlight our activities. And I will be pleased to answer any questions.

[The prepared statement of Mr. Reardon appears on p. 97.]

Mr. BUYER. Dr. Roswell.

STATEMENT OF ROBERT H. ROSWELL

Dr. ROSWELL. Thank you, Mr. Chairman. It is a pleasure to be here. I do not have formal prepared testimony, but I appreciate the opportunity to make comments, and I would like to do so.

First let me publicly thank the first panel. I certainly agree with their testimony and the importance of an electronic medical records system. I would comment for the record that, as alluded to, medication errors account for a large number of adverse outcomes associated with hospitalizations. In fact, I have been told that 58 percent

of all medication errors are associated with the ordering process and the computerized physician or provider order entry, what we call CPOE, is a process that virtually eliminates those 58 percent of mistakes. That has been fully implemented in the VA for several years.

However, virtually all of the remainder of medication errors are associated with the administration of the medication, something that cannot be prevented by computerized physician order entry because that checks the validity of the order, checks for allergies, transmits those data to the pharmacy and assures that the medication ordered is the medication sent to the ward to be administered to the patient. The remainder of the errors occur with the actual administration of the medication.

In VA we have implemented and have had in place for several years now bar code medication administration that virtually eliminates all the remainder of medication errors. So you can be very proud of your VA medical system and be assured, and all veterans can be assured, that medication errors are virtually eliminated through the use of information technology in the VA.

With regard to the GAO testimony, I find it very helpful. Certainly I am not an IT expert. I do have the privilege to co-chair the Health Executive Council with Dr. Bill Winkenworder, and I sit as a full member of the Joint Executive Council. I am puzzled though by one comment Ms. Koontz made in her testimony, and that is that there is not a well-defined architecture for how information will be shared between the two Departments. Like you, Mr. Chairman, I feel very strong about the absolute imperative to make sure that there is seamless medical record information. But to me, I think there is a well-defined architecture.

Again, from a non-IT perspective, you need four things to be able to have an integrated medical records system sharing between the two departments. First of all, both Departments have to be using an electronic medical records system. In VA, our Computerized Patient Record System, or CPRS, has been in place for years. In DOD, CHCS is in place at virtually all locations of care. And CHCS II, a graphically user interface updated version of CHCS, is being developed and it is in place in a number of locations. Both Departments have an electronic medical records system.

The second thing you need is a master patient index, a list, a complete, comprehensive list of every patient in either system who has electronic medical record information. Again, VA has had a master patient index in place for years. DOD implemented a master patient index last year. It is fully in place now.

The third thing you need to have full interoperability of medical records system is an architecture that will allow the sharing of that. That is the data repository architecture that both departments have agreed to go to. VA calls it Health Data Repository. DOD calls it Clinical Data Repository but the concept is the same. At every location of care, the electronic medical record system, by virtue of the master patient index, can identify and pull complete information from the data repositories in either system. With the sharing of master patient indices across both departments, then the two systems become one. It is a well-articulated architecture from my perspective.

The final thing you need are the standards that allow us to move the 65,000 components of the medical records system across the data repository to any point of care,—excuse me, Jim—to any point of care in either system. That is a comprehensive undertaking, but let me assure you we are working collaboratively and aggressively on developing those standards. It is a huge product, but it is vitally important to our mutual success and more importantly, to the welfare of the men and women who have and will wear the uniform of our country. We are fully committed to this and anticipate that we will be on track to begin the initial implementation by the latter part of fiscal year 2005.

Mr. Chairman, it is a pleasure to be here, and I would certainly be happy to answer any questions you may have.

Mr. BUYER. I have lost track of how many times over the last 10 years you have been here before this committee and testified on this issue. Do you know how many times?

Ms. KOONTZ. This is the second time I personally have been here.

Mr. BUYER. GAO?

Ms. KOONTZ. GAO, I would have to say—do you know how many? At least five or six in our memory.

Mr. BUYER. Do you recall any of the recommendations that the GAO has given that the Departments have implemented——

Ms. KOONTZ. Yes, I do.

Mr. BUYER (continuing). Over the last decade?

Ms. KOONTZ. Yes, I do.

Mr. BUYER. What are they?

Ms. KOONTZ. For example, I couldn't enumerate them all, but one of the recommendations we made concerned the Federal Health Information Exchange. We had found at one point that there was a lack of an appropriate program management structure in place. They didn't have someone who was really in charge of the effort. I think that the Departments took action on our recommendation, and I think that that is, at least in part, why they have seen some success with that particular effort.

Mr. BUYER. Do the Departments view you as a partner in this endeavor?

Ms. KOONTZ. I don't know what the other thing is.

Mr. BUYER. There is a censorship button up here.

Ms. KOONTZ. I understand. I think we have had a good working relationship with the Departments. I think with every situation, do we agree on all the points? Absolutely not. There is plenty of area of disagreement.

Mr. BUYER. There is a common theme that I have been picking up out of the some of the testimony, those of whom have been critical. The notes here, absence of sound project management, lack of identifiable decision authority, lack of defined strategy, lack of identified requirements, lack of clear goals, lack of consistent leadership. To the GAO, what would you say are some of the most important ignored recommendations that need to be accomplished here?

Ms. KOONTZ. Well, actually, we don't have any outstanding recommendations on this particular project at this point.

Mr. BUYER. Okay.

Ms. KOONTZ. But what I would say, the primary thing that we see missing at this point is the program management structure, that is, to provide a structure for managing the process where you know who is in charge, you have clear lines of authority, you know what VA and DOD roles are in developing interoperability and that you have a project plan that tells you what your objective is, what your tasks are going to be, what your milestones and what your resources are. This is what you need in order to affix accountability for any project and make sure that it gets successfully carried out.

Mr. BUYER. Mr. Reardon, Dr. Roswell, do you concur?

Mr. REARDON. Regarding our relationship with GAO, I find the information and the recommendations that GAO provide to be very helpful and we do try and to work closely with them.

Mr. BUYER. With regard her statement now, do you concur?

Mr. REARDON. On the project management plan?

Mr. BUYER. Yes.

Mr. REARDON. I do agree that we have a draft project management plan, that is not as detailed as it needs to be. We will be finalizing a detailed project management plan this month. We had a generalized project management plan and now that we have the prime integrator on board, they will be working with us to lay out specifically what actions need to occur between now and product delivery.

Mr. BUYER. Dr. Roswell, do you concur?

Dr. ROSWELL. Mr. Chairman, I certainly respect and value the GAO as very important in virtually all aspects of the operation of the Department. My only point was that I do think we have an architecture. If I can understand as a non-IT professional what we have to do and where we are going, I think the architecture is in place, or at least it is defined. I won't say it is in place. With regard to project management, though, I would defer to Rob Kolodner, our CIO in VHA, to make comments.

Dr. KOLODNER. Mr. Chairman, as Mr. Reardon has indicated, we have put in place a project manager and we are in the process of getting that approved through the same procedures that we had previously through FHIE, that is through the HEC and JEC. That approval has not been finalized yet, so GAO is correct that it is not yet in place. However, we are moving the approval through and actually modeling our project management—in terms of the project manager and in terms of the oversight that Mr. Reardon and I will be doing on a bi-monthly basis and that the HEC and JEC will have—to really follow the same successful project management process that we had for FHIE.

Mr. BUYER. Thank you, sir. Mr. Evans, you are now recognized.

Mr. EVANS. Ms. Koontz, you stated on page 9 of your testimony that the VA and DOD are operating without a project management team or plan describing the overall development and implementation of the interface, including the specific roles and responsibilities of each department in development of testing in deploying this interface. You address security requirements.

Secondly—I guess it is a two-part question here—do we have a project manager already in place or are you hiring one? What is the problem with getting the master management plan and somebody to implement it?

Mr. REARDON. Yes, sir, we do have a project manager in place. The individual has been officially appointed. He has a project management team in place working right now. There is a VA lead program manager and we have a DOD deputy program manager.

Mr. EVANS. Okay.

Mr. REARDON. That individual is in place now.

Mr. EVANS. Okay, I guess that is all the questions I have right now. I yield back my time and ask for additional questions to be added for the record.

Mr. BUYER. No objection. Mr. Bilirakis?

Mr. BILIRAKIS. Thank you, Mr. Chairman. Going to Bay Pines and St. Petersburg, Dr. Roswell, would you say—well, GAO is familiar with the problem at St. Petersburg and Bay Pines?

Ms. KOONTZ. We have not been asked to study——

Mr. BILIRAKIS. You have not. So you are not ready, you have not kept up with that. I know that that system was selected to do different work than what we are talking about here. But it is intended to expand nationally, isn't that right, Dr. Roswell?

Dr. ROSWELL. That is correct, Mr. Bilirakis. CoreFLS is a major component of our software. It deals with financial transactions, inventory management, project management, requisitions. So it is a very complex——

Mr. BILIRAKIS. It is complex but we are talking about black and white information, no subjectivity involved as there would be in the interfacing of the medical system that we have been talking about up to now. And yet somehow we blew it at Bay Pines. So there is going to be a long delay insofar as the CoreFLS is concerned from a national standpoint. Is that correct?

Dr. ROSWELL. I believe there will be delays unequivocally. The original project time line called for moving the testing of CoreFLS software at Bay Pines to the Tampa facility.

Mr. BILIRAKIS. Right.

Dr. ROSWELL. That has been suspended and we are now evaluating other possible sites to begin the next phase of the deployment and testing of CoreFLS.

Mr. BILIRAKIS. Would you say that what has happened there, if we weren't able to get something in one facility, and we are talking about non-subjective data, black and white type data, how in the world can we do something from a health standpoint where we are talking about including subjective data on a national scale? I guess my question is would you think that that might be a setback to what we have been talking about here, the interfacing? I think psychologically or logically or whatever it is, you would say, hell, it has got to be setback.

Dr. ROSWELL. Certain psychologically I think it may be a setback. It also points out the absolute complexity of health care, even the black and white, non-clinical component of health care. Part of CoreFLS's problems, I am told have to do with the way it interfaces with our very extensive inventory of virtually every medical supply, every suture, every expendable item in our inventory. And that is a package that exists within our existing suite of applications. It had been deployed but it wasn't being utilized to inventory every single item and therefore the interface didn't work. I think it points out the complex problems. Now I would point out that this data re-

pository architecture that I spoke of, as I understand it, would allow COTS products, which is an acronym for commercial off-the-shelf software, to be interfaced with the data repository. One of the problems in our system as it currently exists is that the same suite of software is installed on servers at virtually every medical center.

Mr. BILIRAKIS. Well, Doctor, forgive me, the bells are ringing and my time is going to be up soon. But is much of the problem at Bay Pines personnel, lack of will insofar as the personnel is concerned?

Dr. ROSWELL. There certainly have been some personnel issues that have influenced——

Mr. BILIRAKIS. People have been directed to do something a certain way and just haven't done it? It is that simple?

Dr. ROSWELL. That is currently under investigation. We are still evaluating that. But, yes, I would suspect——

Mr. BILIRAKIS. You would say that. Well, let me ask in my remaining time, Doctors Halamka and Clarke, any response, any reaction to what you have heard here from Dr. Roswell, Mr. Reardon, from GAO? Feel free. Let us know. I don't mean to belittle DOD or VA. You know how I feel about both Departments and whatnot.

Dr. HALAMKA. Well, certainly from the testimony they have given, they have described architecture based on a central repository at DOD and VA, a common master patient index, and standards to exchange information between the two repositories using this master index, which is the same approach we have used in New England quite successfully. The one challenge they have is I will be very honest, in New England I have 9 million patient records and a million active patients, each of them has about 10 million active patients for round numbers. So the challenge is probably tenfold or twentyfold greater than mine, so I certainly understand the complexity of interfacing those multiple heterogeneous systems.

But it does sound like technologically they are doing the right thing. And if they are putting project management in place to oversee that process, obviously that is the operational side that we all need to be successful.

Mr. BILIRAKIS. So you feel that progress is being made based on what you know about it all?

Dr. HALAMKA. Based on what I have heard, it does sound like they are doing the right thing, yes.

Mr. BILIRAKIS. Dr. Clarke, anything you want to add?

Dr. CLARKE. Dr. Roswell mentioned that the difficulty that they were facing right now is standards. And certainly the IOM Committee identified standards as the area that needed to be overcome and this is at a national level. This could be the DOD and the VHA or this could be Tenant Health Care System and Inter-Mountain Health Care System. The problems remain. They have to be able to talk to each other. And there are many nitty-gritty components to these standards that have to be ironed out by consensus groups.

Mr. BILIRAKIS. Let's go into the minds of the personnel who would be doing all this. It would take a heck of a lot of cooperation, an awful lot of people involved. Have you run into any problems in your experience with maybe a reluctance, basic reluctance on the part of personnel not delivering the way they should and that sort of thing? Should there be a problem in that regard?

Dr. CLARKE. Well, standards require consensus—and if you are talking about having standards for the Internet or standards for the banking industry or standards for nuts and bolts in cars, everyone who is a participant has to be involved. So, for instance, if you want to talk about communicating a picture, you have different vendors that have different ways of generating a picture electronically. They have to decide on a common way of transmitting that picture in order for one institution to see another institution's x rays.

Mr. BILIRAKIS. So when one person is sort of not living up to that standard could mess up the entire——

Dr. CLARKE. If you read the IOM report, standards are developed in a variety of different ways. Groups can come together and agree on a standard. One particular vendor might dominate and therefore establish a defacto standard. There are many ways standards can evolve. Right now we need some leadership to define, to bring together our current system into a unified standards system.

Mr. BILIRAKIS. Thank you, Doctor.

Dr. CLARKE. The banking industry has developed a system where I can get money out of any machine in the civilized world. And the health care, which is a very information-intense industry, is not at that level.

Mr. BILIRAKIS. Thank you. Thank you, Mr. Chairman. I appreciate your indulgence.

Mr. BUYER. Thank you, Mr. Bilirakis. I have to extend my apologies to everyone. Congress and our voting schedule, we are facing a motion to adjourn, which is a 15- minute vote. Then we have 5 to 10 minutes of debate left on the Iraq resolution. Then there is a 15-minute vote on the previous question, 5 minutes on the rule. When you add the give and take in between, you are looking at an hour. So what I am going to do is adjourn the committee for an hour—actually, for 65 minutes. We will return at 12:30.

I apologize. I know some of you have some things, some plans. What we didn't get with this panel and which I have to ask you to come back is the issues with regard to reduction of medical errors. We spoke about pharmaceutical but others to improve the delivery of health care with regard to these seamless record claims processing and collections. So we will have that when we return.

We stand adjourned. We will take the hearing back up at 12:30.

[Recess.]

Mr. BUYER. The subcommittee comes back to order. And I want to thank you.

I noted, Mr. Reardon, from your testimony when you mentioned CHCS One, implemented around 1986 to 1987 and now we are phasing into CHCS II which really sort of started in 1999 but you are pushing back implementation now until June of 2006. Is this a hard date or are you going to constantly keep pushing back farther and farther and farther?

Mr. REARDON. No, sir, I think it is a hard date. What began in 1999 was the actual development of all of the requirements for the electronic medical record. The requirements were approved, I believe, in September of 2002 by the Department. We have gone through the acquisition cycle, have passed operational testing, and limited production. We are into full production right now. We are

looking at a 30 month implementation schedule and CHCS II will go to all of our DOD medical facilities. The completion date is scheduled for June 2006.

Mr. BUYER. To bring this online and to implement, what is the cost? What have you spent to date and then what do you think it is going to cost?

Mr. REARDON. Sir, there is a 20-year life cycle. The life cycle estimate for 20 years is $3.8 billion. That is the Department's number. CHCS II will go to all facilities and will include not only medical but the complete dental record, as well.

Mr. BUYER. Would all of you comment with regard to where we left off? If we move toward this dreamland of seamless integration, along with this digitized record, that we truly will improve the delivery of health care, improve our claims processing and collections? I would like some testimony with regard to that?

Dr. ROSWELL. Mr. Chairman, I don't think there is any question that a fully integrated electronic medical records system would not only enhance transitional issues but it would improve health care benefits, delivery, and cost of recovery.

Mr. BUYER. All right. If the private sector can do this so fast, why can't we do it?

Dr. ROSWELL. Again, Mr. Chairman, I will defer to much more expert IT colleagues, but let me refer to earlier testimony that Dr. Halamka made concerning the size of both Departments, the number of beneficiaries, in addition to the seven million enrolled veterans, the roughly 10, 12 million DOD beneficiaries who may be eligible for health care services. There are significantly different missions of the two departments.

So it is not a small undertaking but I have to say that from a Joint Executive Council perspective, from my vantage point, I have never seen the level of commitment or cooperation that I currently experience between the two Departments. And while I don't hold out false hope that that will lead to a fully deployed seamless electronic medical records system within the next 12 or 24 months, I think we are making substantial progress. And I have to say I am pleased to be a part of that.

Mr. BUYER. Well, gentlemen, define the horizon? When? What is the goal? What is your time line?

Dr. KOLODNER. The time line for the data exchange in an interoperable fashion is the next fall 2005 to begin that roll out and to be completed as the CHCS Two roll out completes in DOD.

I think just to comment briefly on your previous question about the issue of electronic health records, one of the things that would be important for us to note is that both DOD and VA have full CPOEs (computerized provider order entry) at a time when only 30 percent of the private sector has that capability in their inpatient setting and less than 10 percent of the private sector has that in the doctors' offices and small clinics.

So what we have accomplished, in what are two of the largest health care systems in the world, is actually remarkably advanced compared to the vast majority of health care settings. We are now working very diligently to standardize that data, because we had systems that were installed 10 and 20 years ago, when standards did not exist. Our first challenge is to standardize the data within

our systems, so that it is interoperable, and then to make sure that the standard we each implement is actually the same standard, so that we can move data across these two systems. And that is the 2005 deadline.

Mr. BUYER. This committee wants to keep the VA at the forefront. We want you to be the leaders and pull the country toward your direction. That is our position on this committee. I didn't articulate it as well as others but that is what we want to do. And because you serve a population that our society respects and honors, they are willing to use the U.S. Treasury to do that. And we have done that in many fronts.

And so there is a reason obviously we brought the first panel to testify when we can see this happening in the private sector and its implementation and the benefits. And we understand this is a very large health system. And I have been just as challenged and at times frustrated by having two systems not be able to talk to each other. You have heard me over the years talk about that to the point where, well, I don't want to be redundant. And I am in quest of the virtue of patience. But I think what we are going to have to do is keep hand in hand, not only with the GAO but with this committee and with DOD and VA get there. And I suppose the reason I asked you to define the horizon is because I can't define it either based on all of your testimonies. I am just being very honest with you. I don't know where it is or how we get to that.

Mr. Bilirakis?

Mr. BILIRAKIS. Thank you, Mr. Chairman. And I join you in expressing our gratitude to these good people for being so patient and remaining. Hopefully, you have at least gotten lunch during the time that we have had to break. I express basically the same frustration as the chairman has expressed. We have had testimony from you and from the other gentlemen in terms of the help in terms of human errors and whatnot that would ensue from getting this system into place. So we are talking about human beings here. We talk about equipment and things of that nature but what we are really talking human beings, the bottom line and their health.

In Ms. Koontz' written testimony, "In discussing these matters last week, VA officials stated the Departments had recently designated a program manager for the plan prototype." Isn't a program manager a very fundamental part of an undertaking like this? Do you have a program manager? Who is going to answer that? Is there a program manager?

Mr. REARDON. Yes, sir. Yes, sir. There is a program manager. He was formally assigned the responsibility for this particular program. It is the same individual who was the program manager for the Federal Health Information Exchange Project, which the recommendations from the GAO in their report have been implemented and have proved to be successful. We were looking for somebody who we felt had the right experience and knew how to work in this DOD/DVA environment, knew who the individuals were and would be able to work with both the clinicians and the technologists. That person is in place.

Mr. BILIRAKIS. Well, Mr. Reardon, with all due respect, according to this statement, "recently designated a program manager," how recent is that?

Mr. REARDON. Within the last 3 weeks.

Mr. BILIRAKIS. The last 3 weeks?

Mr. REARDON. Yes, sir.

Mr. BILIRAKIS. Which means that prior to that, even though you have both talked about progress having been made, even though there have been other hearings prior to today on this subject, there was no program manager in place?

Mr. REARDON. We had.

Dr. KOLODNER. At that stage of the project, we each had project manager leads. We still have those leads and they had planned the projects and determined that the contract did not need to be awarded by our plan until recently. It is at this point that we needed to appoint an overall program manager. We now have that person in place, and we have the contract in place. We are progressing along the time line that we had laid out.

Mr. BILIRAKIS. Yes, but, sir, this has been in the planning and the discussion phase I guess for something like 17 years. There is no question maybe about the complexities that the Harvard system doesn't have or something of that nature, we are talking of course about more patients here when you take into consideration both DOD and VA. And also we're talking about it being government, which means bureaucracy. And I guess we are also talking about changes at the top every 4 years sometimes and things of that nature, and I know those can be problems too.

But if this is so important and if it is going to save so many lives, why is it taking so long? Help us out here a little bit. We are here not only to criticize, we are here to help. And this is so important and it hasn't taken place. And frankly, the Bay Pines thing just kind of blows my mind. Again, I don't understand—I am an engineer before I went into law, but you would never know it because I am not very literate when it comes to this stuff. But what has happened at Bay Pines is to me, and I am not sure what happened at Bay Pines, that is what the investigation is all about, and I guess we are going to find out.

And God knows we better find out, because if that is intended to be a national system, we better find out where the problems lie in that one particular location so that we don't make the same mistakes later on. God only knows when is that going to be put into place from a national system standpoint.

Well, what is the problem? Can you tell me have you run into resistence over the years on this health interface with DOD, what is the problem? Ms. Koontz, you said the interfacing has been "elusive" to use your word. Should it have been elusive? Why was it elusive, do you know?

Ms. KOONTZ. I think, just as the first panel clarified, as so often is the case, this isn't really a technical or a technological problem, it is a management problem. And I think what we are seeing here is the need to put in place the kind of structures that ensure that you have fleshed out what your plan is and that you have accountability for accomplishing it. Also, I did want to clarify that while the Departments have put in place a program manager, my understanding is that this program manager is for the pharmacy prototype. And the pharmacy prototype may be a first step toward defining the interface between the two health information systems that

they are developing. But by no means does that project define how they are going to get from where they are today to how they are going to be exchanging information in 2005 and specifically what information is going to be exchanged at that point and how they are going to move beyond to——

Mr. BILIRAKIS. So in essence we don't really have a program manager in place?

Ms. KOONTZ. I would agree with that, that we are looking for something more than what is in place.

Mr. BILIRAKIS. Any quick response to that?

Mr. REARDON. Yes, sir, the person who has been put in charge will be the program manager for the full interoperability project. Over the last 2 years, the VA and DOD have worked hard together under a program management structure to package a substantial amount of health information on our separating Service members and pass that to the VA when the Service member separates. At this time, we are packaging and sending to the VA the information on, depending on the number of separation notices we get on a monthly basis, 10 to 25,000 individuals each month. This information is available for the VA clinicians to use when they treat our separated Service members.

Mr. BILIRAKIS. Yes, well, I am not trying to belittle the task, I am not saying the task is not as large as it apparently is and obviously is, but I think if we were to pick up the record or the minutes of some of the prior hearings on this subject, Mr. Chairman, we would find it essentially much of the rhetoric that has taken place is similar to what we have heard here today. That is kind of frustrating. And I would hope, Dr. Roswell, come on, I know you well enough to know that we are talking about people's lives here and we have got to really spur this thing on. And if you need help from us, well, we all have budgetary problems and whatnot, but we don't know to even try to help unless we hear from you to that effect.

Thanks, Mr. Chairman.

Mr. BUYER. Thank you. Mr. Reardon, I have a question relative to timely and complete data for the service personnel who are returning from deployed operations around the world today. The FHIE provides patient record data from the current CHCS clinical system. How long does it take after separation for this data to be made available to the VHA or VBA?

Mr. REARDON. Sir, when we, the medical community, receive the separation notice, it is taking us approximately 15 days to pull the information out of the CHCS systems, compile it, and send it over to the VA. That doesn't include the time that the Service personnel systems take to get the separation notice to the Defense Manpower Data Center. I am not sure what that time is, sir, but I speculate it is roughly 60 days.

Mr. BUYER. Dr. Roswell, do you know what it is?

Dr. ROSWELL. I don't. I would say that when we look back 12 years to the first Gulf War, the flow of information, and in fairness with this committee's leadership efforts, is orders of magnitude better than it was. It is not a perfect system. But it is orders of magnitude better. We have complete rosters of all military personnel being separated. That allows us to overlay that against our system.

For example, I am pleased to tell you that 12 percent of those who have served in Operation Iraqi Freedom and Operating Enduring Freedom have already been seen in the VA health care system. And our data system has allowed us to analyze the types of illnesses, the types of services they are receiving. I am also pleased to tell you today that the overwhelming majority of care has been outpatient care for the types of medical problems one would expect to see in this age population.

So there is an ongoing continuous flow of information. And I think the importance of and the validity or the value of that information has reinforced to the current leadership how important our continued efforts will be.

Mr. BUYER. Mr. Reardon, I had heard that it was 90 days. That would be inaccurate according to your testimony?

Mr. REARDON. I am not sure, sir. I will have to take that for the record and we will get back to you.

(The information follows:)

Page 75/Line 1663

Question: How long does it take separation for patient record data from the Composite Health Care System to be made available to VA?

Answer: There is variability among the Services in reporting separations to the Defense Management Data Center (DMDC). Once separations are reported to DMDC, it takes 20 to 50 days to provide the information to VA. We are working to develop a process that could reduce this to about 20 days once the separation is reported to DMDC.

Mr. BUYER. Do you believe it would be the goal that you would provide, be able to provide the separation data to VHA and VBA in real time? And, if so, how would you define real time?

Mr. REARDON. Sir, the objective would be to provide the information to the VA very rapidly within a few days from the time that we receive the separation notice.

Mr. BUYER. In our efforts to bring this seamless, it is digitized, seamless in real time. That is how I envision it. That is how I think it is supposed to be. Do I get all nods?

Mr. REARDON. Yes, that is correct.

Mr. BUYER. That is where we want the horizon to be.

Mr. REARDON. Yes, sir.

Mr. BUYER. And so as we want to seek to provide not only the health care but then to define our compassionate sincerity for the sacrifice, it means we have to be responsive in real time. And so when the health care is there but then there is the delays in the claims processing, then we are not complete in our efforts. Do you concur?

Mr. REARDON. Yes, sir.

Mr. BUYER. All right. That is why I had to ask that particular question. I would ask unanimous consent for counsel for the minority to make any comment that they would like to make with regard to this panel. Hearing no objection, so ordered. Mr. Sistek is recognized.

Mr. SISTEK. Thank you, Mr. Chairman. And I would like to build upon your question to the first panel regarding the willpower of the agencies to make this seamless medical records transfer work. We note that the agencies have different missions. And GAO notes that

there are some management problems or they perceive some management problems. I don't think we doubt the willpower of the agencies to make it work in any way. But, as the vice chairman just said, sometimes there are changes every 4 years and something new rolls in. Agencies require strategic and performance plans at the highest level and these filter down and devolve to the different functions of those agencies.

My question is could each agency, could the DOD and the VA point to their strategic plans, point to their performance plans and find a way that they can demonstrate to this committee that the intent is there to actually make this work, that you are actually planning forward at the highest levels? Does that exist? Could you point that out? And then I have two quick follow-ups after we go there.

Mr. Reardon? Dr. Roswell?

Mr. REARDON. Sir, there is a joint strategic plan that has been approved by senior leadership in both DOD and VA. One of the areas in the plan addresses information sharing. It specifically lays out the objectives of information sharing between the two agencies.

Dr. ROSWELL. And let me add, Mr. Sistek, that also between the Departments, the Joint Executive Council structure has actually been formalized by law. We are compliant with that. And I think that is a very good thing that will assure that the leadership oversight, the joint leadership oversight is in place through any administration change. I would also point out that the procurement practices of both Departments certainly provide to my perspective strong testimony to the commitment in the respective Departments based on DOD and VA efforts to move towards key elements that are necessary to implement the data repository architecture within both Departments, it gives us that full interoperability.

Mr. SISTEK. I was aware of the joint strategic plan but my question really is how does that joint strategic plan link to the individual GPRA plans of each agency because each agency has a specific mission and if there is no linkage between the joint strategic plan and the two agency strategic plan, as you move forward, defending your agency GPRA plan to Congress or whoever else asks those questions, the joint plan kind of has the potential to be left out in the weeds. And that is the core of my question to you. Is there enough linkage to your overall agency GPRA plan to support the joint agency plan?

Mr. REARDON. Yes, sir, from the DOD perspective there is.

Mr. SISTEK. And then one follow-up question to this. By position in either agency, who is accountable for making this work? Can you name the position that ultimately would be held accountable for either success or failure?

Mr. REARDON. Yes, in DOD it would be my position.

Mr. SISTEK. Dr. Roswell?

Dr. ROSWELL. Well, I certainly would want to be held accountable. To me this is one of the most important things on my plate.

Mr. SISTEK. Thank you very much. Ms. Koontz, would you like to comment on the linkage of GPRA plans and how they would devolve down to this?

Ms. KOONTZ. I don't think there is anything I can add here, thank you, although I think your question is appropriate because

there should be linkage among all these elements in order to actually accomplish what they are trying to do.

Mr. SISTEK. Thank you very much and thank you, Mr. Chairman.

Mr. BUYER. Thank you. In my opening remarks, I had made reference to Bay Pines, and I didn't understand why you chose the second-busiest for implementation. Dr. Roswell, can you tell me the decision-making process that was made to select Bay Pines?

Dr. ROSWELL. I would defer to Mr. McFarland on the next panel to address this in more detail. But let me tell you that the CoreFLS software that is being tested at Bay Pines is a complex but critical component of our entire software suite, dealing with virtually all types of financial transactions. From my perspective, Bay Pines was a reasonable choice, for the following reasons: Bay Pines is the only medical center anywhere in the VHA system that has on a single location, on one piece of property, a complex VA medical center, a national cemetery system, a VA regional office, a VISN office, and a regional council office. In addition to all of those functions on that one site, there also is a large software services development and support staff office that provides a lot of technical expertise that would be available to facilitate the pilot testing that has taken place at Bay Pines.

Is it a complex medical center? Unequivocally. It is one of the most complex in the inventory. But by the same token, the complexity of the medical center adds all of the pieces that ultimately would need to be functioning in a fully implemented deployment of this type of software and the support services were deemed to be necessary.

Would I do it over again? Probably not.

Mr. BUYER. Was this your judgment?

Dr. ROSWELL. I concurred in the decision.

Mr. BUYER. You concurred in the decision. Then whose decision was it?

Dr. ROSWELL. Rob, can you help me?

Dr. KOLODNER. I am not sure, sir.

Dr. ROSWELL. Do we know, Ed?

Mr. BUYER. You can let us know.

Dr. ROSWELL. Yes, we will be happy to submit that for the record.

(Subsequently, the Department of Veterans Affairs provided the following information:)

THE SECRETARY OF VETERANS AFFAIRS
WASHINGTON

March 17, 2004

The Honorable Steve Buyer
Chairman
Subcommittee on Oversight
and Investigations
Committee on Veterans' Affairs
U. S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

In response to your question at today's VA Information Technology Programs Hearing regarding responsibility for the decision selecting VAMC Bay Pines as the CoreFLS test site, the following is provided.

The Under Secretary for Health is responsible and accountable for the decision to name VAMC Bay Pines as the test site for CoreFLS. I am responsible for the actions of the Department and accountable to Congress for all of the Department's decisions and policies. I regret that this question was not clearly answered at today's hearing.

Sincerely yours,

Anthony J. Principi

Mr. BUYER. I yield to Mr. Bilirakis.

Mr. BILIRAKIS. Just very briefly—well, let me ask you would we put that decision in a category of a high-risk decision? And if we would, or even if it is just close to it, was there a back-up plan maybe to some of the resources that were not available in order to perform the surgeries or whatnot where maybe a back-up plan where you could maybe get them from Hailey in Tampa or from another source? A commonsense question I think, I don't know, maybe I haven't phrased it correctly.

Dr. ROSWELL. Well, obviously it is an important question, and I would have to say that we didn't anticipate the complexity of the pilot testing based on what we have seen. There is no question about that. It is clear based on the knowledge we currently have that a better decision would have been to identify a smaller, less complex medical center where there weren't so many interdependencies which could fall like dominoes with a failure within the system.

Having said that, I think there was a back-up plan in place in that we anticipated that the existing systems and that the manual systems behind that would be sufficient. But I think in fairness, Mr. Bilirakis, that we don't fully understand exactly what the software, personnel, and process failures at Bay Pines were. That is a subject that is still under heavy scrutiny, and we are going to need to look very, very carefully at the IG findings in an effort to try to learn and understand where we have erred.

Mr. BILIRAKIS. Yes, I just hope that we focus on trying to determine where the errors and why the errors took place so that we don't make the same mistakes again. And sometimes politics gets in the way of that and hopefully that won't be the case here.

Mr. BILIRAKIS. Thanks, Mr. Chairman.

Mr. BUYER. Dr. Roswell, I have a ton of respect for you. And I am not going to do the Monday morning quarter backing on your judgments. It is easy to look back. I would like to know what impact, if any, this depreciable effect as had upon your schedule of implementation?

Dr. ROSWELL. Again, I would defer to the IT folks. I believe it probably will have at a minimum a 60 day delay.

Mr. BUYER. I will let the third panel cover that, if you will make a note to cover that. All right.

I want to thank you for your testimony. I want to thank the GAO. We will see each other again soon, I am quite sure. I have to concur with the statement, Ms. Koontz, that you put or that you wrote that, "Success lies at the highest levels of project disciplines." I concur. That is what I take away from this hearing today. And, if anything, what this hearing does is it brings us all to the table, it helps us focus, and helps us keep kicking the can down the road, so to speak. We know where we want to go. We keep trying to define that horizon. This is a very expensive endeavor. This is one in which the Congress is willing to take on.

And as we bring up the third panel, Mr. McFarland has a tremendous job ahead of him because not only is this one of the priorities of the Secretary, it is of the highest priorities of this full committee and of our chairman and the ranking member to take on the IT systems for we spend so much money in IT and to prevent these

three stove pipes. So as we take on the IT architecture, we want to do so smartly so that all this hardware and software is interoperable and seamless with DOD. And it is not. And that is where we want to take it. And we are willing to make that investment to do so.

So I appreciate your testimony. There will be follow-up questions from the committee for which we will submit to you in writing. And I appreciate your service.

Mr. REARDON. Thank you, Mr. Chairman.

Dr. ROSWELL. Thank you.

Dr. KOLODNER. Thank you.

Mr. BUYER. We will now call the third panel. If Mr. Robert McFarland, Assistant Secretary for Information and Technology, Department of Veterans Affairs, will please come forward and take a seat. We would also like to recognize Mr. Ted C. Davies, managing partner for Unisys.

I would note, I believe that Mr. Reardon had made mention that he had some written testimony. Mr. Reardon, are you still in the room? Would you submit that for the record?

Mr. REARDON. I did, sir.

Mr. BUYER. Oh, you did. All right, hearing no objections, his written statement will be submitted for the record. Thank you.

Gentlemen, if you have written statements—Mr. Davies, do you have a written statement?

Ms. DAVIS. Yes, I do.

Mr. BUYER. Would you like for that to be entered for the record?

Mr. DAVIES. Yes, I would.

Mr. BUYER. It shall be ordered.

Mr. McFarland, do you have a written statement to be entered for the record?

Mr. MCFARLAND. Yes, I do.

Mr. BUYER. It shall also be entered for the record.

I will now recognize the Honorable Mr. McFarland for any comments that he would like to make relative to our hearing today.

STATEMENTS OF ROBERT N. MCFARLAND, ASSISTANT SECRETARY FOR INFORMATION AND TECHNOLOGY, DEPARTMENT OF VETERANS AFFAIRS; ACCOMPANIED BY EDWARD F. MEAGHER, DEPUTY ASSISTANT SECRETARY FOR INFORMATION AND TECHNOLOGY, DEPARTMENT OF VETERANS AFFAIRS; BRUCE A. BRODY, ASSOCIATE DEPUTY ASSISTANT SECRETARY FOR CYBER AND INFORMATION SECURITY, DEPARTMENT OF VETERANS AFFAIRS; K. ADAIR MARTINEZ, DEPUTY CHIEF INFORMATION OFFICER FOR BENEFITS, VETERANS BENEFITS ADMINISTRATION; ROBERT M. KOLODNER, M.D., ACTING CHIEF INFORMATION OFFICER FOR HEALTH, VETERANS' HEALTH ADMINISTRATION; AND EDWARD C. (TED) DAVIES, MANAGING PARTNER, FEDERAL CIVILIAN AGENCIES, UNISYS CORPORATION; ACCOMPANIED BY JOSEPH MACIES, PARTNER, UNISYS CORPORATION

STATEMENT OF ROBERT N. MCFARLAND

Mr. MCFARLAND. Thank you, Mr. Chairman, members of the committee. Before I make my opening remarks, let me say that we have heard you, Mr. Chairman, and we apologize and regret the

fact that the proper testimony was not here in the time frame it was supposed to be. We have no excuses. In my vernacular, I promise you that will not happen on my watch again.

Thank you, Mr. Chairman. I am very pleased to appear before this committee representing the Secretary and the Department's information technology program. I am honored to return to the service of our country and to our veterans. I am most aware and energized by the size and the complexity of our task. While I have been here only a few short weeks, I believe I can make several useful observations.

First, and perhaps foremost, I have seen a level of commitment and dedication to the mission on the part of everyone I have encountered that is truly remarkable. Second, my impression so far is that the Department of Veterans Affairs has made significant progress over the last three years in obtaining the Secretary's stated commitment to reform how IT gets done at the VA.

However, much remains to be done. Over the past 2 years, VA's Office of Information and Technology has initiated a rigorous information technology process. This process includes a disciplined project management methodology and an information technology portfolio management system that has been recognized by the Office of Management and Budget. We are well under way with an enterprise architecture that aims to align the business with the information technology plans, goals, and efforts. We are in the final phase of rebuilding our nationwide telecommunications infrastructure and we are implementing aggressive cyber security and privacy programs to ensure the protection of our infrastructure from attack, both external and internal, and to ensure the privacy of our service peoples' personal information.

In parallel to building a safe, secure, and technically current infrastructure across the VA system, we are working diligently to improve both service delivery and our internal business processes. To improve the sharing of medical information between the Departments of Defense and the VA, we have taken positive steps to develop data standards, as well as interoperable health records. Communication and collaboration are key to our joint success in building seamless veteran information environments.

Internally, regarding VETSNET, I would like to reassure you, Mr. Chairman, that we are working hard to ensure that VETSNET remains on schedule. Development of the final components is complete and undergoing vigorous testing. VBA is scheduled to begin a live test deployment in April of 2004 in the Lincoln, Nebraska regional office, and we are committed to having VETSNET fully deployed to all regional offices by December of 2005.

In the financial business arena, we will continue to coordinate with the Office of Management on successfully implementing CoreFLS in order to provide VA with an integrated financial and logistics system. The system is critical to the success of efficient delivery of service to our nation's veterans, and will allow the VA to effectively manage the resources entrusted to us. Without CoreFLS, VA will not be able to remove the financial and security material weaknesses that currently exist. While there had been problems with the system and legitimate concerns raised over the selection of Bay Pines as the test site for this new integrated system, I be-

lieve that the system and the approach are sound and I fully support the Secretary's order that we will not roll the system to other sites until we have remedied all the critical issues identified at Bay Pines.

Finally, I believe it is important to mention again an area of great interest to me and to the subcommittee, cyber security. This remains one of our top priorities. We are currently implementing a comprehensive security configuration and management program designed to provide optimum protection of VA's infrastructure from both the outside and inside attacks. A comprehensive, VA-wide cyber security program is vital to not only the security and privacy of our veterans but also to our ability to provide the best service to our veterans.

This concludes my oral statement, and I would be pleased to answer questions.

[The prepared statement of Mr. McFarland appears on p. 107.]

Mr. BUYER. Thank you, Mr. Secretary.

Mr. Davies, you are now recognized.

STATEMENT OF EDWARD C. (TED) DAVIES

Mr. DAVIES. Mr. Chairman and members of the subcommittee, thank you for the opportunity to address the committee today on Unisys' role as the prime contractor for the Department of Veterans Affairs Patient Financial Services System Project. By incorporating industry standard billing information, PFSS will improve the computerized patient records process by providing the medical record with a greater level of detail about each veteran's care.

In 1990, the VHA health care system began an evolution from one where the VA paid for all veteran care to one in which third party insurance carriers now pay for veterans' non-service connected health care. While VA has made progress in its ability to collect these insurance claims, without an integrated financial software tool, VA will continue to struggle to improve the revenue cycle process. VISTA, which was originally designed exclusively around patient care, does not have internal capability to act as an efficient billing system.

Congress directed VA to test a commercial financial package with the VISTA system. Unisys is very pleased to have been selected in July 2003 by the VA to implement the PFSS pilot. We understand the objective is to obtain significant improvements in the timeliness and quality of billing and collections of first and third party claims. And we understand the strategic importance of the PFSS pilot. Our team is fully committed to success at all levels.

Our first task after contract award was to select a COTS vendor. We placed the two industry leaders in a head to head run off to identify the vendor that would provide the best value to the VA. The selected vendor, IDX, successfully demonstrated their solution's ability to perform VA-unique billing scenarios without any custom modifications to the software's core functionality.

We then worked to establish a partnership, including representation from Team Unisys, the VHA chief business office, the VHA Office of Information, and VISN 10, and have developed a roadmap for successful implementation in the first VISN 10 site. We have recently completed an analysis of the current revenue cycle process

flows within the medical center and the VISN. With that as a baseline, we have built a model for the future state to be processed. This future state will be supported by the IDX flow cast software integrated with VISTA.

Unisys and the VA understand that achieving medical improvements in the revenue cycle will depend not only the PFSS software but also on significant business processes and organizational changes. The business process changes needed have been documented, and we are working closely with the VA on effective change management to enable them.

Once implemented, the key improvements expected from PFSS include a 15 percent increase in collections, reduction of gross days revenues outstanding to 75, reductions of accounts receivables greater than 90 days to 26 percent, and a reduction in days to bill to 25. In addition to these key improvements, PFSS will directly benefit the veteran. One outcome of this project is an improved patient financial statement, which will combine in one easy to read document all charges for services provided. The project team will actively engage veterans to help identify the best ways to address veterans' concerns with a financial statement and to identify and develop solutions for what they consider chronic billing problems. The PFSS system also will enable quicker turnaround time on claims so that veterans can more consistently take advantage of insurance company coverage of co-pays.

A primary goal of PFSS is to provide a model for standardizing revenue cycle business practices throughout the VA enterprise. Standardization has many benefits, not the least of which is the ability to analyze performance and trends and to report accurately at the enterprise level.

A fundamental requirement for success in this project is VA and Unisys top-down commitment to providing necessary resources and accountability. We are coming together as partners to address all challenges and establish priorities.

Mr. Chairman, I look forward to continuing our partnership with the VA and working with you and the other members of the committee to ensure PFSS success. This concludes my oral testimony. My written statement includes a graphical representation showing how VISTA and our solution will seamlessly work together when fully implemented. I will be pleased to answer any questions members of the committee may have.

[The prepared statement of Mr. Davies appears on p. 121.]

Mr. BUYER. Mr. Secretary, I welcome you to your first Veterans' Affairs Committee hearing. As a former Vietnam veteran, welcome home. These flags that sit behind us depict a lot of sacrifice, and I know you have been successful in the private sector. And for you to come to public service when you really don't have to and then to serve your comrades, I know you bring that distant memory to life. I suppose not only the administration are most hopeful that obviously you didn't hang up the experience, your intellect and commonsense from Texas with your coat, that you have brought that to this position.

I want to ask this question because I was concerned when this position was created and the Admiral was in the position whether he felt that he had the authority to his job. It seems if you can con-

trol the money, you can get a lot of attention. But you don't necessarily control the money in this particular position. So you have to make noise, which is a little different and awkward.

So you come from the private sector, from a very successful company, Dell Computer, and now you step into this. Do you feel or sense that you will have the authority to make this change in the IT architecture to be successful in taking on the cultures of the three stove pipes?

Mr. MCFARLAND. Well, in the short period of time I have been here, I am gratified to say that everything I have questioned and everything I have asked to get done has been done with full cooperation of all three of the administrations. I have had no one question whether I had the right to ask a question or had a right to ask to initiate a process. I have also, based on your question from the subcommittee, I have conferred with our general counsel and I have conferred with the Secretary and I feel quite confident that I do have that authority.

I must tell you that one of the first things I learned was that all major acquisitions must currently come through my office for signature before they go up. And they have been coming through and I have been getting a look at where we are spending at least some of our money. You are right, I do come from an environment where I am used to having the authority and accountability, and I am prepared to accept both. I feel pretty comfortable, given what I know so far, that the answer is, yes, I do have the authority to implement what we have to do to get this job done.

Mr. BUYER. What are your impressions of the VA's IT culture in the short time you have been at VA?

Mr. MCFARLAND. I think the culture is reasonably consistent with what I have found in the private sector. I don't know about history here but I do know what exists today, and I am impressed with what I have seen that has been put in place. And some of this I think I have to give credit to my predecessor. We have a very significant project management process in place. We are very careful about the way we develop our OMB 300s and the process in which we develop those looks like it is working well. There are 59 OMB 300s in the VA so there is a significant amount of work going on here and the money we are spending has got a lot of projects.

I have to be honest with you and tell you I haven't dived into each of those 59 yet, but my intention is to do so. So far I think the culture fits my style pretty well. I am not at all surprised at anything I have found so far.

Mr. BUYER. What is your assessment in following the Secretary's directive to bring this seamless IT architecture to our three systems, of whom are sitting to your left?

Mr. MCFARLAND. I am sorry, sir?

Mr. BUYER. We are going to make them interoperable so they all talk to each other and what is your initial assessments on how that can be done?

Mr. MCFARLAND. Well, there seems to be a considerable history of, as you mention, of a stove-piped architecture. Based on what I have seen so far, we are on the third iteration of the one VA enterprise architecture. It is using a format that is very widely accepted,

and we are about to issue the third iteration of that. What I have seen so far on that says that we have the capability to do this.

Now, down at the individual level out in the field, day to day operations go on, and we do have some challenges I think in trying to centralize some of that environment so that we can really bring some economies of scale together for the VA and to be sure we have a good handle on the resources that are used out there to do some of the infrastructure things. I am very happy with what I see on the telecommunications modernization program. It looks like there is a very good architecture there. To me, that is the absolute train that all of our initiatives have to ride on. We have to do this very successfully in order to be sure that we can roll out the other initiatives that we have. They have to ride on this telecommunications infrastructure.

My intent so far is to try to take some of this infrastructure environment, pull it together from the various administrations, look at where we have duplication, try to eliminate that duplication without affecting the performance that the administrations have learned to expect and try to reduce the cost. To me that is kind of, if you will, my profit motive in this whole thing.

Mr. BUYER. Dr. Kolodner, I don't want to mis-pronounce that, Kolodner, I apologize, when the PFSS system was designed, who did that and, what stakeholders were at the table when this was designed?

Dr. KOLODNER. The project was one of installing billing, and then we evolved that to the PFSS. Replanning and design involved multiple levels of VHA leadership. Specifically, I think it preceded the creation of the Chief Business Office. The Chief Business Office took over as the business lead. It also involved the Office of Information and Deputy Under Secretary for Health for Operations and Management.

Mr. BUYER. At any time were the individuals that actually implement these kinds of systems ever brought into the processes, from admin to the clerical to the inputting to the processing?

Dr. KOLODNER. The decision to go ahead with the billing system was made at the leadership level. The project itself, including PFSS, is a partnership with the staff in VISN 10, which will be where the pilot system is located. We have put in a process when we need to do business process re-engineering, which this requires, that actively involves the front-line medical center staff, those in this case VISN and medical center. And they are part of the process to define what is needed, how we do it, and the support and training that are needed in order to be successful in the process.

Mr. BUYER. And were you present at the negotiations with Unisys with the system and the contract?

Dr. KOLODNER. My staff were present in the process of the evaluation and their recommendations were presented to me and, at that time, to Bob Perrault, the chief business officer.

Mr. BUYER. And in order for this pilot to be successful, a lot of cooperation is necessary, and I want to have this go both ways. Do you feel as though the VA is cooperating sufficiently for this pilot to be successful? And I ask that question to both of you?

Dr. KOLODNER. Yes, I think that this has been one of the projects where we really are following a pathway of working with an inte-

grator, with the COTS product, and it working in a way that is really functioning as a unified team, both across the necessary elements of VA and VHA as well as with our counterparts from the private sector.

Mr. BUYER. Mr. Davies?

Mr. DAVIES. Before I respond to the specific question about how well it is working, let me comment on the requirements part of this effort. We responded to a statement of objectives, which gives us a lot of flexibility in how we implement at different VISNs. So at the initial site we are really spending a lot of time with the people on the ground there allow us to understand the requirements. They are truly getting a lot of input into the requirements. So that is very positive, as Dr. Kolodner just said, that is very important.

Mr. BUYER. Are you getting employee resistance?

Mr. DAVIES. No, actually the employees are very excited to have this come in to their center. It gives them some functionality they would like to have. So we see that as a very positive step and we have engaged a lot of them in the process.

To your question about cooperation, we have had a lot of very constructive dialogue. There were some important meetings out in Cleveland where we were piloting this about 2 weeks ago, and that included folks from OI and the CBO as well as Unisys and the VISN 10 staff. There were a number of issues that were raised in terms of making this work, and we are studying how do we get through these issues right now. So we are working together very, very well and we have just got to get closure on a few of these as we move forward.

Mr. BUYER. Thank you. I have further questions but at this time I yield to Mr. Bilirakis.

Mr. BILIRAKIS. Well, thank you, Mr. Chairman. Mr. Secretary, I guess I am going to congratulate for having achieved this position but I say "I guess" only because I am not sure that it did you any good. Ordinarily it is a reward for whatever, and I don't know that you would consider this a reward especially after sitting through this hearing here this morning, you are probably wondering.

Organization, quite often we hear, and an investigation is taking place at Bay Pines, but some of the things that we hear is that there is sort of resistance on the part of some of the personnel regarding some of these newfangled ideas I guess type of thing, which there is just no excuse for. But anyhow it might be part of our real world. But other than that, there have to be I think organizational charts all the time. And in an organizational chart now, Mr. Meagher, Mr. Brody, Mr. Martinez, and Mr. Kolodner would all be kind of part of your organizational line, right?

Mr. MCFARLAND. Yes, sir.

Mr. BILIRAKIS. Okay, do you have full, would you then have full responsibility, let's go to—I do want to get into something on Bay Pines, but let's go to this common medical concept with DOD, would you have full responsibility for that?

Mr. MCFARLAND. I believe to the best I can tell so far, Congressman, I believe I have shared responsibility for that. Certainly I believe, along with my staff, we have responsibility on VA's part for doing what we have to do make sure this common sharing works. So, yes, I believe on VA's behalf I think the buck stops here.

Mr. BILIRAKIS. Stops with you or with the VA? God knows it stops with the VA—well, it would stop with the VA and DOD in general.

Mr. MCFARLAND. Well, my feeling is that when it comes to IT issues, to make this work, that I think Mr. Reardon and I both share the responsibility to try to lead through to get this kind of thing implemented as quickly as we can. Having been in that side of the house, having come out of the service and drawn on benefits and having to wait, candidly, for quite a while to get my benefits done, I can share the pain that the veterans go through when they don't have the seamless interface. So I have an additional motive to try to move it forward.

Mr. BILIRAKIS. And you heard the significance of some sort of a new system that would cut down on medical errors and things of that nature so we are talking about live human beings here who have served their country and it is something, if it is ever installed, would be very helpful in terms of quality of health care, is that right?

Mr. MCFARLAND. Absolutely. Absolutely.

Mr. BILIRAKIS. And I know Dr. Kolodner being an MD, certainly all of us, all of you, but it would be Dr. Kolodner particularly being an MD, should and would care about that. But we just sometimes wonder, we are talking about caring and yet delay after delay after delay.

So, in any case, the next time the chairman, if he is still chairman of this subcommittee, Mr. Buyer holds a hearing on oversight on that particular project, you would be the one coming here to let us know that it has been taken care of or the progress of it, right?

Mr. MCFARLAND. Well, I would believe that I would share in that responsibility, yes.

Mr. BILIRAKIS. Okay, now you have heard and you sat through all of the hearing, and we commend you and are thankful to you for that. But you heard there is a time line of some time in 2005, the middle of 2005, something like that time line, have you had any input into that? You are awfully new on the job but any input at all in that?

Mr. MCFARLAND. I have not had any input in that. I have had just a cursory review of where they are trying to go with the whole subject of DOD sharing and of course it is medical and other things as well. So I am not qualified at this point to answer any questions regarding that.

Mr. BILIRAKIS. So you can't tell us that you feel that it is a realistic goal, not at this point?

Mr. MCFARLAND. I would not feel comfortable telling you that, not with the little knowledge that I have about the task.

Mr. BILIRAKIS. But you are going to be looking into that, aren't you? You are concerned enough to determine whether or not——

Mr. MCFARLAND. I am a full member of the JEC as Dr. Roswell is and it is my responsibility to look into it and understand where we are going with it.

Mr. BILIRAKIS. Okay, sir. Shifting now to the problems with the CoreFLS at Bay Pines, that is a $472 million project. Is there a project manager for that project, do you know?

Mr. MCFARLAND. Yes, there is a process manager, a program manager and a good one.

Mr. BILIRAKIS. And he has been there since the inception of that system now?

Mr. MCFARLAND. I am not sure how long he has been there. He has been on that job, I believe——

Mr. BILIRAKIS. Mr. Meagher shakes his head no so apparently not?

Mr. MCFARLAND. It has been about a year.

Mr. BILIRAKIS. He has been there about a year?

Mr. MCFARLAND. Yes.

Mr. BUYER. Mr. Bilirakis?

Mr. BILIRAKIS. Be glad to yield.

Mr. BUYER. Would you yield?

Mr. BILIRAKIS. By all means.

Mr. BUYER. Your question was is there a project manager, the answer was there is a process manager.

Mr. MCFARLAND. I am sorry, yes, there is a project manager. I consider a project manager to be in charge of process as well as the project being on time and on schedule. So I believe their job is to look at both.

Mr. BILIRAKIS. Is it true as far as you know that this project has been in place since what, the year 2000 or something like that, January of 2000, and that there was not a project manager or a process manager or whatever name, title we want to give him, in place until a year ago?

Mr. MCFARLAND. I would have to yield to Mr. Meagher on that regard.

Mr. MEAGHER. That is true. The answer would be true.

Mr. BILIRAKIS. Any explanation for that? Did we seriously address it, Mr. Meagher, and just decided it wasn't necessary to have one or did we just not address it at all? Somebody has got to be in charge of these things.

Mr. MEAGHER. Well, sir, I believe there were people in charge. We didn't have one individual, I think we had several different individuals, and we realized that that is not the way to do this. So about 14 months ago I believe they selected a very, very qualified and competent project manager. And he has done a fantastic job over the last 14 months.

Mr. BILIRAKIS. I mis-pronounced your name. Mr. Meagher, is that the way you prefer it?

Mr. MEAGHER. Yes, sir.

Mr. BILIRAKIS. It is not spelled that way. Mr. Davies, would private industry undertake this type of an effort without having someone who would be called a project manager or a program manager or whatever in charge?

Mr. DAVIES. Well, I can only draw—I can easily draw an analogy to PFSS in that we have a senior program manager dedicated to this effort, as well as a full-time partner, which is a vice president of our company, Mr. Joe Macies, actively involved everyday. And then I have oversight.

Mr. BILIRAKIS. From the inception, right?

Mr. DAVIES. Yes, from the inception.

Mr. BILIRAKIS. Why do you think the VA has not had the same sort of luxury, if you will? It is not a luxury. What, lack of funding?

Mr. MEAGHER. No, sir, there were several people who were in that role.

Mr. BILIRAKIS. Yes, but that is the problem though, isn't it?

Mr. MEAGHER. Yes, sir.

Mr. BILIRAKIS. Several people?

Mr. MEAGHER. Yes, sir.

Mr. BILIRAKIS. That is the problem.

Mr. MEAGHER. And I think it would be wrong to say there wasn't a project manager or there wasn't project management. I think perhaps given how important this was and is, that having someone of the current project manager's caliber probably should have happened a little sooner. But there has been project management throughout.

Mr. BILIRAKIS. By several, lack of consistency, et cetera, et cetera.

Mr. MEAGHER. Yes, sir.

Mr. BILIRAKIS. Wow. Well, thank you, Mr. Chairman. You weren't prepared to have it back to you?

Mr. BUYER. You know, Mr. Bilirakis, you have got the latitude to keep going if you like because you are asking the right questions. In fact, if there was a particular project manager—well, let me ask you this. You are at Dell Computer, you have got somebody in charge of a multi-million dollar project like this and it had a catastrophic result. Now you have a choice. You could either say that was one hell of an investment in a person, of whom we will never make that mistake again, or look for another job. About right?

Mr. MCFARLAND. That would be correct, sir.

Mr. BUYER. So tell me what is your assessment as a senior executive with regard to who is in charge of that project?

Mr. MCFARLAND. Well, I can't pass on history because I haven't been part if it here but if I could, I would like to make a comment about my perspective on CoreFLS, if you are interested.

Mr. BUYER. No, what I am interested in is accountability. This is the oversight investigation function of the VA. We send a lot of money your way to perfect particular systems. If they fail, we have a right to ask the questions as to why they fail. Would you concur?

Mr. MCFARLAND. I would concur.

Mr. BUYER. That is where we would like to focus. Now recognizing, I don't want to pull you into an area that would be premature, we recognize that we, this committee, have asked the IG to go down and send their team. So I don't want you to pull the trigger too early. So I will defer on the question and perhaps it is not fair nor timely to ask of you. But it sort of lets you know how this subcommittee feels, not only Mr. Bilirakis, by his line of questioning, which I thought was relevant, material, and appropriate.

Let me switch over to VETSNET. This is a 10 year program. This is a $680 million program. In the 2005 budget, you asked for $5 million. During the budgetary hearings, nobody could tell us what the $5 million was for. Ms. Martinez, can you tell us what the $5 million was for?

Ms. MARTINEZ. It is called VETSNET capacity planning. This is to buy system processors, hardware, memory, and the ability to be

sure that we are going to have the most responsive system for the users trying to process the claims.

Mr. BUYER. And I understand that you are prepared to test VETSNET, is that correct?

Ms. MARTINEZ. Yes, we are starting parallel testing on March 22nd in Lincoln, Nebraska.

Mr. BUYER. Lincoln, Nebraska. Why not Bay Pines? I suppose you went through a judgment process as to why not Bay Pines?

Ms. MARTINEZ. The field operations group and C&P services met together to talk about what kind of impact doing the parallel testing would have on the workload. Lincoln is considered a very productive, one of the very productive ROs, and we felt that it was the right size with the right people to take it on.

Mr. BUYER. And when will this occur?

Ms. MARTINEZ. March 22nd we go into parallel tests. As you know, today we don't have a real time system. We close out stuff and then pay the veterans. There are a lot of timing issues involved. And we will, as we go through the parallel test, be very careful and cautious about being sure that we can move forward. And we hope to be going to our live field test on April 26 in Lincoln.

Mr. BILIRAKIS. Mr. Chairman, may I ask Mr. McFarland Ms. Martinez sort of delineated for us some of the criteria that were used in selecting Lincoln, Nebraska for that project. Do you know, you have got to be concerned, and I know you have just recently been on the job, so we don't want to be unfair, but are you concerned as to the criteria that was used to pick Bay Pines?

Mr. MCFARLAND. Well, with the cursory review that I have had, and I have not had the opportunity to dig into CoreFLS in the depth I would like to and intend to dig into it, I am concerned. I am concerned at a couple of things. One, I am concerned at the size of, as has already been stated here, at the size of the installation that we chose to do the basic implementation on. It has been my experience that you have to look a little deeper than just the installation. I think you have to look also at the process used to train and to implement. And I have had a cursory look at that, and I am concerned about how we trained. And I am concerned about the implementation process that we used. I am candidly less concerned about the software than I am the implementation aspects. And my intent is to dig into those and see if I can come out of there with some lessons learned on this.

Mr. BILIRAKIS. So I have already gone into the organizational chart and responsibilities and authority and whatnot. So CoreFLS is within the purview of your authority?

Mr. MCFARLAND. It is a joint project, really managed out of the Office of Management by the CFO of the VA. And we are the support organization to that project. I do not own CoreFLS as the chief executive of that project. The CFO does. But I certainly, I own the project management office, of which this fits in, and so from a project management standpoint, we are part of the management of the program.

Mr. BILIRAKIS. I wonder, Mr. Chairman, if we certainly shouldn't be micro-managing. We are an ivory tower here. I wonder if there isn't a specific authority here.

Mr. BUYER. Mr. Bilirakis, you are asking the right questions. If we are going to create a position such as this, and he is going to be in charge and responsible for the architecture of the VA and yet we are going to have, we are back to the stovepipe stuff all over again. And that is why we talked about lines of authority. So I don't view you at all as micro-managing. You are trying to understand how this gentleman right here will have more than just a title. And we debated this over the last few years when they created this position, whether Congress should come in and start making distinct lines of authority. I would give you budget authority. I would give you money. That is what I would do. If you want to start talking about people who would be hopping up and down, I would give you the money and let them come to you. That is what I would do.

So I yield back to you, Mr. Bilirakis, I think you are right on point.

Mr. BILIRAKIS. Well, that is a great concern. And I again, to what extent should we be pressing lines of authority and things of that nature. But, by God, if it is going to take, if you don't have the complete authority here to be able to discuss it with us, and it is going to take bringing in people from maybe at your level but from other offices, if you will, or whatever the case may be, then we are never really going to get, I wonder if we are ever going to get to the problem and what resulted in all this. And you have already said you are not as concerned with the software as you are with the people involved, the implementation of it all, which is where basically my concern comes from. But somebody else on the same level as you, or maybe even higher, is more concerned with the software. So here we have a conflict.

Mr. BUYER. Does the gentleman yield?

Mr. BILIRAKIS. Yes, sir.

Mr. BUYER. If you would, go back to the last panel when we asked a very simple question about, all right, whose judgment was it at Bay Pines and who was responsible? Well, I concurred. Well then who made the decision? Nobody knows who can make the decision? What would be awful is is that you have a particular position, and there are a lot of these different projects that are out there on numerous time-lines, a lot of money, dates being consistently pushed back, yet who is going to be responsible and accountable? Sure, we can send it through and you can be signed off on it, but how from an accountability standpoint do we then do our oversight upon the VA. That is why I believe we need empowerment of you. If you have comments on it, stay in your lane but good luck.

Mr. MCFARLAND. I can tell you that, again having only 5 weeks here, if I were here, I will say this unequivocally, if I were here,——

Mr. BUYER. Your personal opinion is welcome.

Mr. MCFARLAND. Pardon me?

Mr. BUYER. Your personal is welcome.

Mr. MCFARLAND. My personal opinion is that if I were here at the time that a major business process software system were being implemented and I were the CIO, I would insist that that business software system be under the control of the Department of Infor-

mation and Technology. Now, that being said, I was not here, and it is easy for me to be a Monday morning quarterback in that environment. I was not here and I don't know the reasons why the project was run through Office of Management. It is a financial and logistics system. And certainly any major complex system needs to have user specifications and the users have to dictate how the product is developed. I don't ever question that. I believe OIT's job is to provide the tools and the management of projects but the specifications need to come from users. They are the ones that have to use it. But I would say that in most situations, such a complex system would be run through the CIO.

Mr. BUYER. I yield back to Mr. Bilirakis.

Mr. BILIRAKIS. Well, just very quickly, sir, and you have been very patient. There is a private contractor on the Bay Pines situation?

Mr. MCFARLAND. Yes, sir, there is.

Mr. BILIRAKIS. Is that private contractor one that has been in place since January of 2000?

Mr. MCFARLAND. Yes, I believe there are actually two contractors. It is an Oracle E-Business suite of products, which a highly respected software. And then there is an integrator that is responsible for managing that project.

Mr. BILIRAKIS. Who is that?

Mr. MCFARLAND. It is Bearing Point.

Mr. BILIRAKIS. Bearing Point.

Mr. MCFARLAND. It used to be someone else but they are called Bearing Point now.

Mr. BILIRAKIS. They are responsible for managing it so they would have been responsible for training, getting to again your people's thing, they would have been responsible for training those people?

Mr. MCFARLAND. I would believe, yes, they would be in charge of the implementation and the training aspects, yes.

Mr. BILIRAKIS. Do we know, Mr. Meagher, what type of training may have taken place? Was it adequate? Is that within your purview?

Mr. MEAGHER. Well, again, I was part of several meetings that took place when that was being discussed, and I have spoken to Mr. McFarland about that. I will tell you that at the time it was very sophisticated training. It was fairly expensive. And my opinion at that time was this might be a little bit of overkill. We were spending a lot of money——

Mr. BILIRAKIS. At that time?

Mr. MEAGHER. Last summer.

Mr. BILIRAKIS. Last summer.

Mr. MEAGHER. What has turned out, in all candor, is that it was not near enough. There was not a near enough hands on. And I think, as Mr. McFarland, with a fairly fresh set of eyes pointed out, we may have gone too high-tech too soon. It may have really required more hand holding, more on the ground sooner, training sooner, the development of advocacy groups. We have learned a lot. Unfortunately, sir, in your district, but we have learned a lot about how big a change what we are proposing to do here is and how much training is really required. We are going to change that. But

again in candor and in honesty at the time I thought it was perfectly adequate training. It turned out I was wrong.

Mr. BILIRAKIS. Mr. Chairman, your staffer here as spent some time with the private contractor on the subject of training. And I wonder, I think that his findings maybe could be a part of a record. I would ask unanimous consent that maybe he might share that with us. I think it is important for you all to hear this too. Could we do that, sir?

Mr. BUYER. I think that would be unusual.

Mr. BILIRAKIS. It would be darn unusual. But we are trying to get the bottom of what happened here so that we don't make the same mistakes in the future. And these gentlemen, Mr. Meagher, has already admitted that it was probably rather than overkill, it was under kill.

Mr. MEAGHER. Yes, sir.

Mr. BILIRAKIS. If that is the right word. And I don't know that——

Mr. BUYER. Let us, Mr. Bilirakis, be a little patient again. I say this because it is a virtue which I will strive for. We have got the IG. They are going to do their investigations. And we can do our follow-up when we get the IG report.

Mr. BILIRAKIS. Okay, but I guess I get concerned with that, and I like to think that we ought to learn from our mistakes and from history. So we don't know specifically how much time they spent on the training or anything of that nature or do we?

Mr. MEAGHER. Well, they spent a considerable amount of time and money doing the training starting back in September and October of last year. And, again, without having this experience, it seemed adequate and probably more than adequate, both in terms of the amount and the type of training. As we got into it, we realized how big a change this was to how folks have to do business down there. I would say now that we were mistaken. More training was required, maybe not so much high-tech training, maybe much more hands-on personal training. It would have been a lot more expensive. It is going to be more expensive to do that kind of training. But it has been shown I believe that that is what it is going to take.

Mr. BILIRAKIS. Yes, obviously it is turning out to be a hell of a lot more expensive, isn't it? We are talking about a lot of money burned as a result of not maybe spending what additional it may have taken to get these people trained adequately.

All right, I guess maybe this is in the hands of the IG and we are not sure what they are going to come up with here. But from what we understand, Mr. McFarland, most of the training took place through the Internet, hardly any of it was on a personal basis and things of that nature. And voluntarily, and what voluntarily you are told, if you really want to get trained here, just plug into this particular net, Web site and whatever.

All right, sir, thank you.

Mr. BUYER. I had asked the question of the second panel and Dr. Roswell asked that I defer to you and that is the question about the delay of implementation. You have a schedule of implementation and now things are sort of on hold because of Bay Pines. How long will this be delayed?

Mr. MCFARLAND. Well, I will give you a personal estimate. My suspicion is that we would probably see at least a 60-day delay based on the last schedule of defects that I looked at. I don't think that is necessarily optimistic but I think it is probably realistic.

Mr. BUYER. Thank you. Mr. Davies, in your testimony you state, "Unisys understands that technology alone rarely, if ever, succeeds in transforming agency or business operations. Achieving improvements in the VA revenue cycle will depend not only on the PFSS software but also on significant business process and organizational changes." What are these business processes and organizational changes for which you refer to?

Mr. DAVIES. I am actually going to let Joe Macies, who is accompanying me answer that since he has been intimately involved in this the whole way.

Mr. BUYER. And he is? Is he the project manager?

Mr. DAVIES. Joe is the vice president at Unisys overseeing the project on a day to day basis.

Mr. BUYER. All right, sir, you are recognized.

Mr. MACIES. Thank you. The changes that we are talking about is that we are fundamentally trying to change the VA to be more like a commercial operation. As a result, we are redefining all of the business processes, the flows and trying to automate a lot more than currently exists. This involves changing jobs, job descriptions, roles that people will have, how the data is captured, how it flows. And result, we are looking at not just re-engineering so that it suits the commercial software, we are also looking at structural changes in how the organization is going to look like. And we recognize that when you are putting in that much change, particularly for adults, it is a massive effort. They need to understand and see the benefits of what this whole new process.

To date we have identified the current and to be processes. We have identified the differences. We are going to put an overall change plan in place to communicate, to educate, and ultimately to implement the changes throughout the organization.

Mr. BUYER. How many hospitals in VISN 10?

Mr. MACIES. There are five.

Mr. BUYER. How many clinics?

Mr. MACIES. Over 40.

Mr. BUYER. And since you are the one that is working hands-on, how do you rate the level of cooperation here between the employees, i.e., even the culture, with regard to what is being proposed?

Mr. MACIES. I would say that the people who are close to the project and are participating in defining the requirements and how the system is to work in the future are very excited, very supportive, understand what needs to change, and in fact are the ones driving to identify the changes that are required. I think as you go further down the line, people who are less involved, as you would anticipate and expect, there are I would say fears of the unknown. Thus with the change plan that I referred to earlier, we need to communicate to them what it is that is going to happen.

We plan to do that through their peers and formal training. There are 20 some odd people who are currently participating from VISN 10 on our project team and that number is going to get larger. We have a communication plan and a roll out effort that is

going to include a lot of the VA folks to carry the word and help us with the change. But I would say overall the cooperation is outstanding.

Mr. BUYER. This is a 5 year contract, correct?

Mr. MACIES. For a national roll-out.

Mr. BUYER. What are your benchmarks for success?

Mr. MACIES. I think our benchmarks for success is to have a successful pilot to begin with in Cleveland and then roll out the rest of the VISN. The keys are we would like to standardize so that all of the medical centers from a collection perspective are the same, they are using the same measurement metrics, and to improve the collections obviously. There is a whole list of metrics that have been identified that we need to meet. Clearly we understand that once we go live with the pilot, there will be some——

Mr. BUYER. Have these metrics, have they been agreed to?

Mr. MACIES. It is a set of metrics that that have been agreed to within the VA.

Mr. BUYER. So you have laid out your principles in a matrix for which you then to begin to break down?

Mr. MACIES. Correct, and one of the things that we are very cognizant of is as we go through the analysis and design of the system, is that we are constantly looking at the metrics and seeing if we make a certain design decision, to achieve the metric.

Mr. BUYER. Also, Mr. Davies, in your testimony, "So while Unisys' responsibilities for PFSS are focused initially on technology enhancements, we are working with the VA to ensure that relevant business processes and change management issues are identified and addressed." Could you elaborate on that?

Mr. DAVIES. Well, I think the discussion we just had gets at a lot of that. The general theme is one of "we can't just put the technology in and hope it works. We have got to really re-engineer all the processes around it." And those were some of the things that Joe was just discussing with you.

Mr. BUYER. Well, I have every imaginable vendor in line and everyone has an idea on how to put down processes, how to change culture, how to improve collections, how to improve claims processing, I am serious. They are all out there. And they have got their ideas. We are watchful. We are most hopeful with regard to this pilot project. Actually, this has gone much larger than what we first envisioned for it to be. And we are sort of struggling as to whether we say, okay, we are going to let you move out with your pilot project but it is 5 years. I am telling you I am still working on that virtue. Five years.

So I have to look at this, Mr. Davies, and go, okay, do we go ahead and authorize some smaller ones at some other particular hospitals so we can look at what you are doing and compare it to perhaps some other ideas because I don't want there to be a Bay Pines. I want to make sure that we have got the right processes with the right management decisions so when they come through that door, the inputting is correct and the back-end is correct. And that is about where we are, Mr. Davies.

Mr. DAVIES. If I could comment on that.

Mr. BUYER. Yes.

Mr. DAVIES. The first comment would be that I know you have a line of vendors that are out there. Plese keep in mind that we won this contract competitively so any one of those vendors could have competed on this, maybe some of them did. The VA did choose Unisys as the best value for the VA. We are in the middle of a pilot project right now. Before we roll out nationally, we are going to have to demonstrate to the VA and probably to you that we have success here. So don't feel like you have no other say in this. You are still going to get another look at it after we get done with the pilot and we will demonstrate success.

I think what we are showing right now, and we are trying to demonstrate right now, is that we are absolutely committed to the success of this project by doing the right things up front. And the right things include heavy involvement from the user community, which is what Joe was talking about. We have involved literally 20 people right now and many, many more coming down the pike. It also requires a lot of coordination with multiple offices within the VA, which we are in the middle of doing. So we are doing the right things up front and that is going to set us up for success at the end. But you certainly will get another whack at this before it goes national.

Mr. BUYER. Oh, you are absolutely correct.

Mr. DAVIES. I know you will.

Mr. BUYER. I guess now I am going to ask about your resume. Then I can get to how you have measurable outcomes. Tell me about some of your successes around the country with regard to what you are applying with VISN 10?

Mr. DAVIES. I can tell you about successes around the country. Are you talking about my personal experience now?

Mr. BUYER. I am talking about with Unisys.

Mr. DAVIES. Okay, in terms of—I will combine a couple of them. One thing that I look at when I look at the oversight of a project, it comes from a lot of work I have done with the Department of Defense over the years where you baseline a project, both from a cost, schedule and a technical perspective. You lay out what you are trying to accomplish and you measure that on a regular basis.

So what we are doing, the way we apply that within Unisys is we have regular project reviews and take a look at where we are. That is one of the mechanisms that we use. Another mechanism is as was asked before in terms of dedication of senior resources on this project. We have a dedicated senior project manager and some very experienced senior staff from industry that we have applied to this project. We have a vice president, Joe Macies, who has run large projects before, who is dedicated to this as well. And our senior management looks at it on a regular basis.

So we are dedicating the kind of management oversight that is required. I think at the end of the day, and it has been somewhat of a theme that I have heard today here, these kind of things happen because you have leaders involved in projects in doing the right things. And that is one of the best measures of success that I can put out here.

Mr. BUYER. Have you taken on other large medical centers or health systems in the private sector?

Mr. DAVIES. I don't think we have an implementation like this right now. I think I am going to let Joe talk a little bit about some of our private sector capabilities because he was involved in those earlier.

Mr. MACIES. Yes, I think that when you look at a national role under the VA, it is clearly one of the more unique aspects. It would be probably difficult to find as large a health provider anywhere, certainly in the U.S. However, when you look at what we are trying to do in Cleveland, I think that you would find hundreds, if not many hundreds, of hospitals that have implemented similar systems in a timely and very successful manner. I think the other critical aspect of what we are trying to do in Cleveland, if you break it down into two or three risk areas. The software that we are implementing has been implemented at Iowa University Hospital successfully, a little larger than what we are doing in VISN 10. So it works. It has been proven to work. That same software has been implemented in the software so it works.

I think the question you asked earlier, on top of the software and the technology, we recognize that some of the challenges within the VA is making changes. And, as I indicated too, what we are finding is that users management at VISN 10 are very interested in change and they are welcoming it, and are looking at the system as something that is going to be very beneficial for them. So with that, I think we understand that if we combined the change with the technical solution, we should have success.

Mr. BUYER. All right, I am trying to follow this. We have a pilot project ongoing. Secretary, you testified that you don't necessarily own CoreFLS. So what about this system, you don't own this one, either?

Mr. MCFARLAND. No, sir, I do own this one.

Mr. BUYER. This one you own?

Mr. MCFARLAND. Yes, I do. It falls within VHA and my deputy CIO, Dr. Kolodner, and that purview rolls up to me. And I have a note here that I will be getting regular updates on this project.

Mr. BUYER. Oh, you beat me to the next question. Because the next question is if in fact you own this, how do you measure successful outcomes with regard to the project and the contract?

Mr. MCFARLAND. I am going to look at the agreed upon schedule between VA and Unisys. I am going to look at the implementation dates. I am going to ask a lot of questions about training. And I am going to have regular meetings with these folks on how we are doing on the project.

Mr. BUYER. You know, Mr. Bilirakis, he is going to do really well in this job. I yield to you, Mr. Bilirakis.

Mr. BILIRAKIS. I think he will probably realize in no time at all Vietnam might have been a snap compared to this current job. It might have been good training.

Mr. Davies, just very quickly, in the process of bidding for a job or considering whether you should bid for a job, do you take into consideration the demographics of an area in terms of the manpower that would be available and their backgrounds and that sort of thing? Yes, let me just please stop at that point.

Mr. DAVIES. Are you asking about the people that we staff the job with? When you say the demographics of as area?

Mr. BILIRAKIS. Well, I am talking for instance in St. Petersburg and Bay Pines, if you were the contractor or considering whether you should be the contractor, and you know that the implementation would be the employees at the center——

Mr. DAVIES. Yes.

Mr. BILIRAKIS (continuing). Right, do you take on that consideration in terms of demographics, their backgrounds and that sort of thing?

Mr. DAVIES. Absolutely.

Mr. BILIRAKIS. You do.

Mr. DAVIES. When we go national, whenever we go to a location, we need to have people that understand that location. Maybe they have worked there before or they have had a lot of experience there, we would definitely want some of those people on the team. Couple those people with folks that have been successfully involved with the pilot and you have got a winning combination. So it is a combination of people, absolutely.

Mr. BILIRAKIS. And that would be a factor in maybe determining what type of training you should be giving those people?

Mr. DAVIES. Oh, absolutely. Through our experience with the folks in VISN 10, we get a pretty good understanding of the types of people that are going to have their hands on the system. Based on our understanding of the types of people that have their hands on the system, we will define training programs that will work for them. No question about that. That is why I think it is so important for us to be so involved with them early on in the program so we can think about that down the road.

Mr. BILIRAKIS. Have you considered in your own mind what happened at Bay Pines and maybe what some of the problems may have been?

Mr. DAVIES. I am only superficially aware of what happened in Bay Pines. Some of the things I have heard today I think are relatively, I don't want to say commonsense type mistakes, but you can sort of see where they happened. I think we can all kind of deduce our reactions to that. But I don't think I really want to add any more.

Mr. BILIRAKIS. Yes, I can understand that you probably would not want to. Thank you very much. Thank you, Mr. Chairman.

Mr. BUYER. We are about finished. Mr. Secretary, as we move to the digitized world, and you know this far more than I do, it is far reaching more than at first blush. So when we talk about IT architecture, we are not talking about just what the lap tops and the PDAs and those types of things. This is also moving into a lot of very expensive equipment that is used to digitize, to go seamless. And in order to make it all work, hopefully you—I know you have got that signature authority with regard to the purchasing of hardware and software.

But there are other systems that speak into them. And if you are not involved in that process of the purchases of very expensive equipment out there in the medical world that sends these X's and O's into the system, we are not there. So hopefully, what I am hopeful here is that you have to be at the table. You have got to make sure that they all understand because the challenges that we have is working with DOD and VA, they are continuously today

buying equipment that is not compatible with each other. They can't talk to each other. It blows my mind.

So we use great language and we say all the right words but we still have got blinders on and we are still buying equipment that is incompatible with each other. So I want you to go beyond just an IT architecture of data and inputting and administration and claims processing, VHA, and health, in order to make that health, it has got to go beyond. Do you concur?

Mr. MCFARLAND. I concur.

Mr. BUYER. All right. Yes, Mr. Bilirakis?

Mr. BILIRAKIS. Well, when you finish, Mr. Chairman.

Mr. BUYER. Go ahead, I yield.

Mr. BILIRAKIS. All right. Would it be beyond the realm of the way we do things here if we receive from Mr. McFarland a periodic update on what is happening regarding all of these systems but particularly the common medical concept? In other words, rather than 2 years from now, if we are both here, we find out that the problem is developing and that sort of thing.

Mr. BUYER. I think what would be really appropriate, Mr. Bilirakis, on that point, and you have beaten me to it, is and I will yield to you, Mr. Secretary, let's let you do your assessment of what all is out there, what are the lists of all these contracts, where they are, where the costs are, and trying to think beyond where you presently are in a digitized world. And you then let us know and come meet with us in a formal meeting. I think that would be an excellent idea.

Mr. BILIRAKIS. I would like to see a date, though, tied into that, Mr. Chairman.

Mr. BUYER. Okay.

Mr. BILIRAKIS. I would like to see us choose a date here that maybe——

Mr. BUYER. Two or 3 weeks, how long would it take for you to do that assessment?

Mr. MCFARLAND. Sir, it is going to take me a while. There are 59 major projects in the $1.6, $1.7 billion. I could give you a cursory overview in a couple of weeks. I don't know that you want me to give you a cursory overview.

Mr. BUYER. No. All right, well, Mr. Bilirakis, your request is noted and we will work with the secretary on a realistic time line for him to do his assessment.

Mr. MCFARLAND. I will dig into them. You have my promise on that.

Mr. BUYER. Thank you. In September 2000, the VA testified on the implementation of the VA SmartCard with a national implementation of January 2002. That is another one of these 59 programs. Do you know what happened? All right, we will talk to you in 6 weeks.

On the cyber security question, the VA IG was extremely critical of the Department's cyber security posture with regard to the Worm. Mr. Brody, can you tell us what happened and why the systems were shut down for such a period of time and things were in chaos?

Mr. BRODY. You are referring to MS Blaster?

Mr. BUYER. Yes.

Mr. BRODY. That would have been in the late summer time frame last year. What occurred was that we did not have a comprehensive security configuration and management program in place across the Department. That program, that initiative is now underway so that in the not too distant future we should be able to deal in a more automated fashion with that kind of a malicious code attack. The situation we were in late last summer is that each individual machine across the Department had to actually be physically touched by a human being because we didn't have the ability to push out patches on an automated fashion. And so while we were working diligently to do that, the manual effort takes many days whereas an automated effort would only take hours.

Mr. BUYER. Mr. Secretary, does cyber security come under your responsibility?

Mr. MCFARLAND. Yes, it does and it is a very important thing to me. I am not used to an environment where this kind of vulnerability has been as prolific as it has been here. I am working daily with Mr. Brody on making sure that he has the funds and the people and the contracts to try to get this process done. I do not want to touch 400 information security officers out there to try to get a patch out. I want to do it in the dead of night. And I don't want to ask anybody if they will please install a patch. That is my philosophy on this subject.

Now, there are tools out there that will do that. And we are evaluating those tools right now. Candidly, there are approximately 230,000-plus desktops that we need to touch out there to be 100 percent secure. The question I have, and we are trying to determine right now, is there a tool in the commercial space that can scale to that degree. And that is my only concern. If this were Dell Computer, sir, we would be touching 40,000 desktops and it wouldn't be an issue. It is done everyday. I believe that the technology is there to do this but it is something we have to test very carefully. But we are going to do this. It is possible and we are going to do this.

Mr. BUYER. How do you do that when you don't have the authority? You don't own 430 information security officers, do you?

Mr. MCFARLAND. Well, as of a discussion I had with both the general counsel and the Secretary within the last 24 hours, I do have that authority, sir.

Mr. BUYER. I like it. I like it. I like it. This hearing is concluded. I like it.

[Whereupon, at 2:20 p.m., the subcommittee was adjourned.]

APPENDIX

PREPARED STATEMENT OF CHAIRMAN BUYER

Good Morning. Today's hearing is our sixth hearing on the Department of Veterans Affairs Information Technology programs. This hearing will revisit some key VA initiatives, including VETSNET, its automated claims processing program.

We will also review two new programs, the VA's Core Financial and Logistics System (CoreFLS) and the Patient Financial Services System (PFSS). CoreFLS is currently undergoing operational testing in VISN 8 at the Bay Pines Medical Center in St. Petersburg, Florida. Unfortunately, during this testing phase it became necessary to repeatedly postpone surgeries because of multiple problems with implementation of the new system.

This is unacceptable and I am at a loss as to why the Department would choose the second busiest hospital in the nation for its test site. When I learned about this situation, I asked the VA's Office of Inspector General to conduct a comprehensive review of the ongoing implementation of CoreFLS at the Bay Pines facility. This request was made by my Subcommittee on February 19.

We requested that the IG's investigation focus on the adequacy and effectiveness of the training provided to employees at the facility, the cost of the two consecutive 30 day delays prior to full implementation, and the total penalties assessed for delinquent payment of invoices over 30 days old and current delinquent invoice inventory. I understand that the IG has sent (15) personnel down to the Bay Pines facility.

The Patient Financial Services System (PFSS) pilot project is currently underway in VISN 10 at the Cleveland Medical Center. The pilot project is designed to test PFSS in order to demonstrate how integrated, commercial patient management and patient financial software will improve VA's third party collections.

The Subcommittee's last hearing on November 19, 2003 dealt with the efforts being made by the VA and DOD to develop and deploy electronic medical records that are interoperable, bi-directional, and standards-based. Currently, we have servicemembers deploying overseas and we have servicemembers transitioning from active duty back to civilian status. How much easier would it be for these men and women if their medical information was in electronic format in a common medical record? I guess we want to hear from both the VA and DOD what is the latest and greatest in your endeavors to move this process forward. The President has identified moving toward electronic medical records as one of his top priorities. In his State of the Union address, the President said, "By computerizing health records, we can avoid dangerous medical mistakes, reduce costs, and improve care." In fact, the Institute of Medicine, commonly referred to as IOM, issued a report entitled: "Patient Safety Achieving a New Standard for Care." The report was the work product of the IOM's Committee on Data Standards for Patient Safety and focused on improving quality of care in America and fostering the use of information technology within the health care system. We will hear from Dr. John Clarke, a member of the IOM's Committee, and get his thoughts about the advantages of moving more aggressively toward paperless medical records.

During our last hearing it was acknowledged by me and others that more progress had been made in the last fourteen months than the prior twenty years. It's been four months since our last hearing.

How much closer are the two departments to providing a seamless transition to veteran status?

Another area of interest to the Subcommittee is the VA's smart card initiative. The VA testified before this Subcommittee back in September of 2000 that a Smart Card proof-of-concept demonstration was conducted on August 31, 2000 for the Acting Secretary and Veterans Service Organizations. The demo project showed how the Smart Card could support express registration which would save time for the vet-

eran and VA staff while improving data quality. The demonstration also showed how a veteran using a kiosk could digitally sign forms using keys securely carried on the card. The goal was to implement this program nationally by January 22, 2002. It is my understanding that a new Smart Card initiative has been underway. Hopefully, we will learn what went wrong with past efforts to implement the Smart Card after conducting the demo project in 2000.

This hearing will also give the new Assistant Secretary for Information and Technology, Mr. Robert N. McFarland, an opportunity to provide the Subcommittee with an update on implementation of the One-VA Enterprise Architecture plan and the state of the Department IT program.

Statement of Congresswoman Hooley
Ranking Democratic Member
Subcommittee on Oversight & Investigations
Committee on Veterans Affairs
March 17, 2004

The public should take note at the frequency this Subcommittee holds hearings related to oversight of VA information technology programs generally and to two specific related issues.

One is accountability for management of VA Information Technology (IT) projects and programs. The second recurring theme with this subcommittee is DoD/VA records sharing and the seamless transfer of medical records. These issues are vital – solutions are necessary – and yet those solutions appear illusive.

On April 4, 2001, this subcommittee held a hearing on the Information Technology program at VA. This hearing was held before Dr. Gauss was confirmed as the VA Chief Information Officer (CIO). In post hearing questions, Chairman Buyer asked Secretary Principi about the relationship between the CIO and the Administration CIOs -- his concern then was regarding the adequacy of control to accomplish the job. Also at that hearing, the subcommittee took testimony recommending the creation of a security czar position at VA.

In subsequent hearings this subcommittee has revisited these same issues -- in effect, we have asked the VA IT community, "where does the "buck" really stop?" These problems are not new.

In the last decade, we have observed serious performance problems with major VA information technology systems. These include HR LINK$, VETSNET, and most recently CoreFLS.

The VA Office of the Inspector General had reviewed the HR LINKS$ system and noted a host of management related problems. HR LINK$ was discontinued last year with little to show its quarter-of-a-billion-dollar price tag. We later learned that the IG could not address specific accountability for HR LINK$. The "buck" stopped nowhere.

The development of VETSNET followed a rocky road with many delays, many years running. In 2001, problems and delays with VETSNET were already

over one decade old. In the last two years we have seen both progress and setbacks.

The "phase-in" of various modules and application suites has progressed reasonably well. But system-wide glitches, lost or unrecoverable data and some problems with basic business requirements still remain. Overall this is progress – do we credit this progress to the VBA CIO or to the VA CIO? Should, for example, the Finance and Accounting Suite – the FAS – that will replace the Benefits Delivery Network encounter serious problems in 2005, who will be accountable?

The CoreFLS system pilot project at Bay Pines, FL, has also encountered problems to suggest it was fielded too soon. It has encountered many problems since it was launched six months ago at the medical center. Basic system requirements such as populating the National Item File were not accomplished prior to CoreFLS start up in October 2003.

The field agency had reportedly requested assistance with populating the National Item File with data, but no assistance was given. Other problems involved training, business model development and alignment, and excessive time delays to complete system transactions.

Manager accountability must be assured for these major projects.

Thank you, Mr. Chairman, I look forward to hearing from the witnesses today.

House Veterans' Affairs Committee
Subcommittee on Oversight and Investigations
March 17, 2004

John D. Halamka, MD, MS
CIO, Beth Israel Deaconess Medical Center and Harvard Medical School

Mr. Chairman and distinguished members of the Subcommittee, I am Dr. John Halamka, the CIO of Beth Israel Deaconess Medical Center and Harvard Medical School. I am grateful for the opportunity to testify before you today on the creation, management and exchange of both clinical and administrative electronic medical records.

Exchanging Clinical Records via the Web

Introduction

The same technologies that send web pages from one site to another on the public Internet can shape a private medical intranet that assembles a "virtual" medical record that draws on sources of heterogeneous information. But, barriers to creating virtual medical records on intranets abound. Some are technical: correctly identifying patients, guaranteeing data integrity, and protecting confidentiality. Some are organizational: standardizing the types of information exchange, providing appropriate sanctions for violation of security policies, and obtaining patient consent for transmitting information among multiple institutions.

Several groups have proposed solutions for such technical and organizational challenges and have implemented systems that use intranets to provide clinical information to health care providers. [Kohane, Fraiser] This holds special impact for emergency departments that constantly struggle with providing care based on incomplete information about medical histories. To illustrate both the challenges and some early solutions, we describe the early experiences with a live implementation, CareWeb, that shares complete medical records information between multiple healthcare organizations on a corporate intranet.

The Beth Israel Deaconess Medical Center, the Joslin Diabetes Center, two Boston area community hospitals, and several satellite outpatient clinics have clinical affiliates that that required the integration of existing electronic medical records. Each site has different clinical computing systems, different institutional vocabularies, and varying completeness of clinical information.

Beth Israel Deaconess stores clinical data and several related practices in a comprehensive, custom built computing system [Bleich], while clinical data at Joslin Diabetes Center resides in an industry standard database. Our goal was to consolidate medical records "virtually" at these heterogenous institutions, using the corporate intranet and to make that information available to practitioners at the point of care.

CareWeb operates in response to a care provider who, using a standard web browser, creates a query for information by specifying patient identification. This information is submitted over the intranet to CareWeb which, in turn, generates a request for information the Beth Israel Deaconess, Joslin and community clinical computing systems. The systems respond with demographics, problems, medications, and records of allergies, notes, and visits. CareWeb interprets the incoming messages and creates a single, unified presentation that it returns to the health care provider as a series of web pages. Tool bars enable full navigational control, allowing the medical record to be scanned using a tab folder-like paradigm.

Barriers to using an intranet

Barriers, both technical and organizational, preclude a uniform infrastructure for exchange of medical records on an intranet. To exchange patient identified information among hospitals, even apparently simple tasks, such as identifying the correct patient, can be a challenge.

Identifying the patient

In the United States, there is no universal healthcare identifier to identify individual patients. A logical approach is to use a combination of demographic identifiers – such as name/date of birth/gender or social security number. However, demographic identifiers are often mis-entered or mis-reported, making patient identification a difficult problem. Teich and colleagues at Partners Healthcare in Boston [Teich] found a 3% discrepancy in birth month for known matched patients, and a 39% discrepancy in last name. Another study [Goldberg] found a 2.4% discrepancy in gender for known matched patients.
The Health Insurance Portability and Accountability Act of 1996 (PL 104-191) [HIPAA] stipulates that Health and Human Services devise a strategy for universal patient identification by 1998. Current suggestions span the gamut from the social security number to the use of long random numbers, unique to each individual. [Szolovits]

CareWeb uses a statistical probabilistic best match of name, gender, date of birth and other demographics to group the medical record numbers of each patient together into a community member index. All clinical data resides in the clinical computing systems of each health care facility, but the common patient index provides pointers to patient specific information at each location. Beth Israel Deaconess, Joslin and the Community Hospitals are electronically interfaced to this community member index such that each new patient registration automatically updates the index with patient demographic information, medical record numbers and pointers to clinical data at each site.

Data format and Vocabulary

Medical records contain data elements that vary widely among hospital systems, both in definition and in the amount of data available. To exchange electronic medical records successfully, all partners involved in the exchange must first define the uses for the data and then elect a consistent set of elements most relevant to the intended use. For example, a clinical emergency department application requires a set of data far different from an application assaying managed care eligibility. Data elements must also address potential legal and social sensitivities. A patient may agree to share insurance authorization information, but not HIV status.

Several standardized data sets have been suggested for emergent clinical use, including the Center for Disease Control's Data Elements for Emergency Department Systems (DEEDS) [Pollack], the Boston Collaborative data set [Kohane], and the National Information Infrastructure Health Information Network Emergency Medicine data set. [Barthell]

But even if partners agree on data elements to exchange and a consistent way to request information, the data exchanged may not be easily comparable. Hospital systems are heterogeneous, and most lack uniform vocabulary. One hospital may list a diagnosis as "hypertension," while another may code the same diagnosis as "high blood pressure." Similarly, medication lists assembled from multiple hospitals might appear as Naproxen Sodium, Naprosyn, and Aleve.

Vocabulary standards solve the problem of data comparability. ICD-9-CM coding is one of those most familiar. By coding all medical records with ICD-9-CM codes instead of physician-generated English descriptions, hospital discharge records become comparable. The international Systemized

Nomenclature for Medical and Veterinary Medicine (SNOMED) provides a comprehensive set of over 150,000 terms organized into twelve categories – anatomy, morphology, normal/abnormal functions, symptoms or signs, chemicals, drugs, enzymes, organisms, physical agents, spatial relationships, occupations, social contexts, diseases, and procedures. [SNOMED]. The National Library of Medicine's Unified Medical Language System (UMLS) has concept identifiers that group these ICD-9 and SNOMED terms into a single nomenclature. [Humphreys] The Logical Observation Identifier Names and Codes (LOINC) provides a library of over 6500 clinical test names or identifiers. [LOINC] Finally, the National Drug Code (NDC) provides a standard dictionary of medications. Although most institutions do not use all of these vocabularies, it is possible to translate institution specific data into standard terminologies during the presentation of medical information to clinicians. [Law]

At each hospital, a site-specific CareWeb program intercepts incoming requests for information. These programs have knowledge of the computer systems at each site and translate hospital specific information into standard vocabularies – ICD-9-CM for diagnoses, NDC for drug information, and LOINC for laboratory. Once translated into standard vocabularies, messages are sent between CareWeb sites using Health Level 7 [HL7], a standard data format for medical information interchange.

Security/ Confidentiality

In his 2004 state of the Union address, President Bush noted that we should implement interoperable electronic medical records to reduce medical errors and healthcare costs. However, the security and confidentiality implications of web-connecting the nation's clinical data from a major impediment in realizing this goal. [Woodward, Rind]

In 1995, the National Research Council of the National Academy of Sciences was charged with evaluating practical measures that can reduce the risk of improper disclosure of confidential health information, while providing appropriate access to those interested in improving quality and reducing the cost of care. Their March 1997 report, "For the Record: Protecting Electronic Health Information," presents the findings of two years of collaborative investigations which delineate best technical and organizational practices to protect patient confidentiality [NRC]. Intranet medical record systems should incorporate these recommendations, and recent legislation emphasizes the need to implement strong security measures. For each unauthorized disclosure, the Health Insurance Portability and Accountability Act of 1996 (PL 104-191) [HIPAA] imposes a fine of up to $250,000 per incident, and up to five days of imprisonment. In addition, failure to protect patient information and patient privacy can result in loss of accreditation. Implementation of this act is anticipated in mid-1998. CareWeb incorporates all NRC guidelines for protecting health care information and the techniques for this are discussed elsewhere. [Halamka]

Authentication

The authenticity of each CareWeb user is guaranteed with a strong username and password. Passwords expire every 90 days, must be at least 6 characters in length and may not be English words.

Access Control

Once authorized, CareWeb determines each user's role from a database, and this role is used to restrict access to specific areas of the medical record. Currently, clinicians are allowed to examine the full record, while registration clerks are limited to demographic information.

Audit Trails

The security policy of the Beth Israel Deaconess Medical Center is to provide auditing at the level of the specific patient queried and the individual menu selections used. [Safran] CareWeb implements a complete multi-organizational audit trail.

In any multi-institutional reporting system, there are two places to capture the audit – either at the institutional level where the information is stored (the sites), or at the point where the information is delivered. Careweb audit information is captured at the site level. By storing audit trails at each site, each hospital can control and audit the information that leaves its site, regardless of where it is delivered. Each hospital site server captures patient identification information, the requester, the requester's location, date, time, and information requested. Although information is stored at the site level, a multi-institutional auditing system that provides patients with the details of the movement of their medical information throughout the healthcare enterprise is available. The auditing query system has the same hardware token authentication and access controls required for any CareWeb healthcare data request. Once authenticated, an auditor enters patient identification information and submits the information to the CareWeb auditing system. It produces a consolidated report showing all flows of information about the patient for all institutions.

Protection of External Communications

The existing hospital computing systems at all the healthcare facilities connected to CareWeb employ a complex series of hardware controls that limit direct connectivity to clinical servers from outside the institution.

Encryption of Public Network Transmissions

For communications between data sources and CareWeb users, we implemented a cryptographic system that incorporates industry standard components for digital signature and encoding of messages, using the most secure keys available.

Electronic Authentication of Records

CareWeb uses digital signature cryptography methods for all network transmissions, ensuring the integrity of all health data delivered. The NRC recommends an implementation of digital signature to ensure that medical records are not changed on the individual systems where they are stored. The CareWeb architecture provides a secure mechanism to transport each institution's data and can guarantee that the data were not changed during the retrieval process. Security policies of each institution providing data dictate the reputability of the data.

Physical Security and Disaster Recovery

Multi-institutional architecture provides significant physical protection for health data. Instead of physically locating all patient records in a central data source vulnerable to physical disasters, the CareWeb architecture creates a virtual record that is assembled on demand and not stored in a central repository. Currently, all hospital computers linked by CareWeb are geographically dispersed and are locked in secure computer rooms accessed by electronic key code. The CareWeb architecture depends upon the physical security and disaster recovery practices of the individual sites that provide data. However, if any sites sustain a disaster and cease to provide data, CareWeb notes that a site is currently unavailable and provides a virtual medical record comprised of all functioning sites.

Software Discipline

Web pages returned by CareWeb cannot be stored on local hard disks by the browser. Three specific techniques are used to prevent such behavior. The pages are given an expiration date of January 1, 1970 and arrive "out of date." The pages are sent with a special message instructing the browser not to store them. Finally, the pages are sent in a secure mode (secure sockets) which most browsers use as an indicator to not store pages.

Discussion

Continuing reports of flaws in Internet security give a public impression that internet technologies are not suitable for transmission of sensitive information, and this creates difficulty in obtaining institutional support. Consensus for deploying such a system must include information systems personnel, hospital administrators, patients, and clinicians.

Several groups are working to define data and security standards to encourage the development of a national infrastructure for medical data exchange, including HL7 (www.hl7.org), the EHR Collaborative (http://www.ehrcollaborative.org) , and the NHII project (http://aspe.hhs.gov/sp/nhii/).

Implementation of federal legislation mandating universal patient identification combined with the efforts of researchers, public interest groups, and industry fuels a rapid evolution of the infrastructure required to exchange medical records using intranets. With an appropriate balance between confidentiality and the need for clinical information, an intranet-based system will benefit patients and physicians and ultimately lead to better care.

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Exchanging Administrative Records via the Web

Overview

The New England Health EDI Network (NEHEN) was formed in 1998 by a collaborative of non-profit payers and providers to implement HIPAA administrative simplification for the region. Three of the provider organizations, Partners Healthcare, CareGroup, and Lifespan helped found NEHEN. Boston Medical Center joined in December 1999. UMassMemorial and Children's Hospital joined in February 2000. Tufts Health Plan, Harvard Pilgrim Health Care, and Neighborhood Health Plan are the three payer members exchanging HIPAA-compliant eligibility transactions. NEHEN also provides connectivity to Medicaid and Medicare, which are affiliates rather than members. Together, these payers insure more than 80% of all people with healthcare coverage in Massachusetts.

Architecture

NEHEN is fundamentally different from the typical healthcare electronic transaction models seen in the marketplace. Today, the electronic solutions available generally fall into the payer proprietary model or the clearinghouse model. In the payer proprietary model, the providers conform to the specification provided by the payer, leading to a different solution for each payer that a provider deals with. In the clearinghouse model, the clearinghouse handles any translation between the provider's preferred data formats and that of the payers the provider wishes to trade with. This model is typically funded through per transaction fees.

In the NEHEN model, the participants agreed to the following guiding principles that drove and continue to drive the architecture decisions:

- Standards-based approach
- Security and Privacy are of paramount concern
- Common program management
- Share innovation

One of the members initially developed the software used to route transactions to the appropriate trading partner and then donated that software to NEHEN, enabling the other members to quickly ramp up their transaction volumes with minimal cost. Because the members feel that their primary arena for competition is not in administrative costs, but in clinical care, all are willing to collaborate on such tasks as software development for the purpose of driving down costs.

To make concurrent development possible and to ensure HIPAA compliance, the members agreed to implement their communications according to the standards proposed by HIPAA. This approach allows all members to implement the same base solution for each of their trading partners, greatly reducing the overall cost of their EDI solution. In addition, by relying solely on publicly available and universally recognized standards, interested prospective members can easily estimate their cost to join and begin trading. When those members join, the incremental cost to the existing network to beginning trading is minimal because of the standard approach.

In order to ensure privacy and security of the highly confidential data being exchanged, the NEHEN members have implemented a private network rather than using the Internet as the transport mechanism. In addition, there is no central database that tracks or even counts the transactions, thus all patient-identifiable data is transitory in nature.

To get the greatest benefit out of electronic transactions, initiating and reviewing them must be integrated into the standard workflow at within a provider organization. This has meant integrating transaction initiation and review into the Hospital Information Systems at each of the large provider members. This integration ensures that it is easy for employees to request information and use it when it is returned.

Work to date

When NEHEN formed, the members decided to concentrate first on developing the eligibility inquiry and response transaction. Because this transaction takes place at the beginning of the patient visit and can lead to costly rework and write-off of claims if eligibility is not verified, this was a natural first step. Eligibility has now been live since June 1998 and the providers currently are making over 1 million inquiries per month. With the addition of BMC, UMassMemorial, and Children's hospital and increased usage by existing members, NEHEN now processes 2.1 million transactions per month (December 2003)

In addition to eligibility, NEHEN also provides referral, claims, claim status and remittance transactions. As of the HIPAA deadline, October of 2003, all members in NEHEN were fully compliant with all mandated transactions.

The typical return on investment for a new provider joining is measured in months and will continue to decrease as the connectivity options that NEHEN provides its members expand.

Future of NEHEN and Administrative Simplification

Over the past five years, NEHEN has focused first on implementing the initial set of electronic transactions, and then on expanding its base by recruiting other large provider organizations to join. Now that several of the large providers have joined (BMC, UMassMemorial, Children's), NEHEN and its program managers are thinking about the best way to expand effectively to allow smaller provider organizations the potential administrative cost reductions that have been realized by their larger cousins.

There are several potential solutions, with distinct options targeted at the community hospitals, medium-sized physician practices, and individual or very small physician practices. Any of the solutions, however, can leverage the investment that the NEHEN members have made in developing a standards-based, secure approach to administrative simplification. Today, the NEHEN payers and, through NEHEN software, the other major payers in Massachusetts, can respond to a standard eligibility inquiry in less than a minute in a fashion that can be integrated into the provider's practice management or hospital information system. In the future, NEHEN will continue to develop the supported transactions, and it should also develop the connectivity options for smaller providers because the existing connectivity solution becomes unmanageable after the number of members expands much beyond ten to fifteen.

Once these connectivity issues are solved, the end result in terms of administrative cost reductions for the entire Massachusetts health care system has the potential to be industry changing. The following example of the "Life of a Claim" illustrates this point by describing the differences that will take place once the electronic transactions NEHEN is working to develop are a reality.

Life of a Claim before NEHEN

Patient A comes in to their primary care provider for their yearly physical and forgets to bring her new insurance card showing that because of a change in jobs, Patient A is now covered by Insurance B rather than Insurance A as they were last year. Since eligibility is difficult and time consuming to check without electronic means, the registration clerk relies on the information already in the system about Patient A to check her in.

After that day's visit, the provider's practice management system prints claim for Patient A and it is sent to Insurance A, because that's what the patient had last year. After about one week of traveling through

the mail, the mailroom of Insurance A, and the sorting, scanning, and data entry process at Insurance A, the claim is loaded into Insurance A's system.

That night, the claim bounces because Patient A is no longer covered. Without an electronic means of claim status inquiry, the provider doesn't know this fact until they happen to call or Insurance A sends out the monthly tape with updated claim status information.

After learning that Insurance A will not pay the claim, the provider bills Patient A directly. Patient A receives the bill and if they are conscientious, calls the provider immediately to inform them that Insurance B is now their insurer. If Patient A is not so conscientious, it can easily take 60 or 90 days before the provider learns that they should have sent the claim to Insurance B initially.

By this time, even if the provider submits the claim to Insurance B, there is no guarantee that Insurance B will pay the claim since it has been so long since the date of service. Even if the claim is eventually paid, it is very likely to need more intervention from the billing and accounts payable departments in the provider and payer organizations before it is complete. Finally a paper check will be cut and mailed to the provider's lockbox, adding another 4-5 days to the amount of time it takes to be paid.

Overall, the current manual claims submission process results in the average taking 100 or more days to be paid in Massachusetts.

Life of a Claim after NEHEN

With electronic eligibility, claim status inquiry, and claims submission, the overall financial picture changes dramatically.

With the same situation as above, the following changes are immediate:
Patient A comes in for their physical without their card. While the registration clerk is validating demographics like address and birth date, their system automatically requests eligibility verification from Insurance A. Before the registration is complete, Insurance A notifies the provider that Patient A is not covered. At this point the registration clerk can ask the patient what their correct Insurance Carrier, another inquiry can be initiated, and the correct copay and insurance are recorded.

That night, the practice management system submits the claim electronically to Insurance B. Because the standard requires it, all items on the claim are coded according to the national standard.

Later that night, Insurance B's claims engine runs and suspends the claim because one of their claims adjudication rules was violated. The next day, the provider's staff can use their electronic claims status inquiry facility to check on the claim and if necessary, call to proactively try to get the issue resolved.

After any issues are resolved, and many current issues are directly related to problems solved by electronic access to data at the front end of the process, the payer's system sends electronic funds transfer instructions to their bank and a payment remittance advice to the provider.

Overall, with electronic access to data on the front end and electronic claims submission available to every provider, it is a realistic possibility for claims to be paid in three to five days rather than the current 100 plus. Obviously, there is a great deal of work to be done to the existing payers' and providers' systems to make this vision a reality. However, with the NEHEN consortium already trading standards-based common transactions, the framework is in place and ready to be expanded.

Value of the NEHEN model to the Massachusetts healthcare system

There are several components to the value of NEHEN to the Massachusetts healthcare system. The first is that because payer connectivity exists for such a large proportion of the total covered market, providers can quickly see a return on investment when they integrate electronic connectivity into their standard processes. In addition, because so many of the large providers are members, new payers that join could see a large proportion of their Massachusetts membership start using electronic transaction.

In addition to providing significant value to new and existing members due to the high penetration of the marketplace, the NEHEN model has at its core several key principles that significantly differentiate it from the usual healthcare electronic commerce model. These core differences are a flat fee for membership without transaction-based charges and collaboration to share innovations in administrative simplification.

The flat fee is perhaps the most significant because it provides an incentive for every member to raise its own transaction volumes. Over time, the per transaction cost to the most active of the NEHEN provider members has already dropped to $.05 per transaction with just eligibility being traded today. As upcoming transactions are created and come online, this cost will drop even further, to a projected $.02 - $.03 per transaction later this year. When this is compared to the typical $.35 - $.40 per transaction charged by a clearinghouse for this service, it becomes clear that the NEHEN model allows most of the value gained by the electronic transaction exchange to remain inside the healthcare system with the payers and providers and the value doesn't leave the system and go to the clearinghouse or other third-party. As an example, a specialty hospital in Massachusetts with 300,000 patient visits per year will minimally use five electronic transactions to support each claim (eligibility and referral inquiries, claims submission, remittance advice, and actual payment). Under the NEHEN model, the hospital would keep at least $450,000 more of the administrative cost savings than under a clearinghouse model because they would be paying $.30 less per transaction.

When NEHEN formed, the members decided that in order to achieve electronic trading at large volume they needed to act collaboratively rather than competitively. In addition to agreeing to standards and employing a common program management to help drive decisions, the members donate software developed to solve a specific member problem to the NEHEN consortium for use by other members. This sharing of the development cost has greatly lowered the bar to entry for provider organizations that are often cash poor and prefer to concentrate their resources on providing clinical care rather than administration.

PATIENT SAFETY: ACHIEVING A NEW STANDARD FOR CARE

Statement of

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Board on Health Care Services
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before the

Subcommittee on Oversight and Investigations
Committee on Veterans' Affairs
U.S. House of Representatives

March 17, 2004

Introduction

Good morning, Chairman Buyer and members of the Committee. My name is John Clarke. I am a professor of surgery at Drexel University in Philadelphia, an adjunct professor of computer and information science at the University of Pennsylvania, and the physician project manager for the Pennsylvania patient safety reporting system. I have also served two years in the U.S. Army, primarily as an emergency physician at Martin Army Hospital in Ft. Benning, GA, and two years as Chief of the Medical College of Pennsylvania's Surgical Service at the Philadelphia VA Medical Center.

Over the past two years, I have served as a member of the Committee on Data Standards for Patient Safety of the Institute of Medicine. The Institute of Medicine is part of the National Academies, chartered by Congress in 1863 to advise the government on matters of science and technology.

The study that I am going to talk about today sought to foster health data standards to improve patient safety. The study was sponsored by the Department of Health and Human Services. A major part of the study's recommendations concerned the use of electronic health record systems.

A National Health Information Infrastructure Is Needed

All Americans, whether in service to our country or in civilian life, should be able to expect to receive health care that is safe. To achieve this, a new health care delivery system is needed – a system that provides accurate information that both prevents errors and learns from them when they occur. The development of such a system requires, first,

a commitment by all stakeholders to a culture of safety and, second, improved information systems.

Specifically, a national health information infrastructure is needed:

- To provide immediate access to complete patient information and decision-support tools for clinicians and their patients, and
- To capture patient safety information and other quality of care outcome measures as by-products of care and use this information to design even safer delivery systems.

Electronic health record systems and health data standards are both crucial building blocks of the national health information infrastructure.

Definition of an Electronic Health Record System

What does our committee mean by an electronic health record system? An Electronic health record system includes a longitudinal collection of electronic health information for and about individuals. It also provides immediate electronic access to individual- and population-level information by authorized users, and provides clinical knowledge and decision-support that enhance the quality, safety, and efficiency of patient care. It provides the essential information infrastructure for an efficient health care delivery system.

Benefits of Electronic Health Record Systems

The standard use of electronic health records has enormous potential to improve the safety, quality, and efficiency of health care in the United States, as called for in previous Institute of Medicine reports.

More immediate access to computer-based clinical information, such as laboratory and radiology results, can reduce redundancy and improve quality. Computer-assisted diagnosis and care management programs can improve clinical decision making and adherence to clinical guidelines designed to optimize outcomes.

Computer-based reminder systems for patients and clinicians can improve compliance with protocols for disease prevention. Likewise, the availability of complete patient health information at the point of care delivery, together with clinical decision support systems such as those supporting physician order entry, can prevent many errors and adverse events (injuries caused by medical management rather than by the underlying disease or condition of the patient) from occurring.

With a robust IT infrastructure, patient health information can be shared among all authorized participants in a patient's health care community.

Challenges

There are some excellent examples of successful electronic health records in health care settings in both the private and public sectors. A handful of communities and systems have established secure platforms for the exchange of data among providers, suppliers,

patients, and other authorized users. Among the most notable of these are the systems developed by the Veterans Health Administration (VHA) and the Department of Defense DOD).

Other examples are the New England Healthcare Electronic Data Interchange Network, the Indiana Network for Patient Care, Intermountain Health Care, the Santa Barbara County Care Data Exchange, the Patient Safety Institute's National Benefit Trust Network, and the Markle Foundation's Healthcare Collaborative Network.

But these examples are the exception, not the rule. In most of the nation's hospitals, orders for medications, laboratory tests, x-ray studies, and other services are still written on paper, and many hospitals lack even the capability to deliver laboratory, radiology, pathology, and other results in an automated fashion. The situation is no different in most small practice settings, where there has been little migration to electronic records.

In addition to purely technological challenges, there are sizable policy, organizational, and financial challenges that must be addressed to facilitate the adoption of electronic health record systems. Some attempts to introduce computerized provider order entry systems and other components of an electronic health record system have been unsuccessful. Currently available personal health records, which allow patients to enter their own information, have demonstrated limited functionality to date.

Encouraging Deployment

Government health care programs, along with various private-sector stakeholders, are considering options to encourage the implementation of electronic health record systems

by providers. To achieve widespread implementation, some external funding, incentive programs, or other federal initiatives will be necessary. For example, the Centers for Medicare and Medicaid Services might provide some form of financial reward to providers participating in the Medicare program that have deployed electronic health record systems.

On the private-sector side, various insurers, purchasers, and employer groups are instituting quality incentive programs for specific electronic health record system functionalities, such as computerized provider order entry for prescription drugs and electronic reporting of performance measures.

In addition, a number of employers, health plans, and physicians have recently formed a coalition called Bridges to Excellence, which will provide financial bonuses to providers to encourage improved patient care management systems, including electronic health record systems. Another option is to provide grant funding or access to "low-cost" capital to enable providers, especially those with a safety net function, to invest in acquiring electronic health record systems. Certain regulatory strategies might also be pursued, such as requiring providers to have an electronic health record system as a condition of participation in Medicare.

Consideration should also be given to the best means of creating public-private partnerships in a geographic area to leverage existing resources and to ensure that no providers (for example, safety net providers) or citizens are excluded. One possibility might be for state government, VHA and private-sector health care organizations and

vendors to work in partnership to establish information and communications technology infrastructure. Additional support may be provided to the VHA so that it can offer safety net providers (e.g., public hospitals and community health centers) the opportunity to participate in the VHA's information and communications technology system and receive technical assistance for that purpose.

To implement any of the above strategies, one must first clearly define a functional model of the key capabilities for an electronic health record system. The committee's report detailed essential components of such a functional model.

Health Care Data Standards Are Also Needed

Electronic health records are important components of the national health information infrastructure. But to ensure that health information is understandable to all users and can be exchanged efficiently between health care settings, health care data standards are also needed.

The National Committee on Vital and Health Statistics, a public-private advisory committee established to provide advice to Department of Health and Human Services and Congress on national health information policy, has for many years recommended that the federal government assume a more active role in establishing national data standards. In 1996, Congress passed the Health Insurance Portability and Accountability Act, which mandated standardization of administrative and financial transactions.

In 2001, the Consolidated Health Informatics (CHI) initiative, an inter-agency effort, was established as part of the Office of Management and Budget's eGOV initiative to

streamline and consolidate government programs among like sectors. The mission of the CHI initiative is to articulate and execute a coherent strategy for the adoption of federal interoperability standards for health care information. Department of Health and Human Services was designated the managing partner for the CHI initiative, with both the Department of Defense and the Veterans Administration being major partners in the initiative. The CHI initiative played a pivotal role in the recent decision by the federal government that programs of the Department of Health and Human Services, the Veterans Administration, and the Department of Defense would incorporate certain data standards and terminologies.

The CHI initiative, although off to a very promising start, lacks a clear mandate to establish standards. In addition, once initial standards and gaps have been identified, the future of the initiative is unclear. The initiative would also benefit from closer collaboration with the National Committee on Vital and Health Statistics (NCVHS) to ensure the active participation of private-sector stakeholders.

The Committee's Recommendations regarding Health Care Data Standards

The Data Standards for Patient Safety Committee recommended that Congress should provide clear direction, enabling authority, and financial support for the establishment of *national* (not just federal) standards for data that support patient safety. Various government agencies will need to assume major new responsibilities, and additional support will be required. Specifically:

(1) The Department of Health and Human Services should be given the lead role in establishing and maintaining a public-private partnership for the promulgation of standards for data that support patient safety.

(2) The Consolidated Health Informatics initiative, in collaboration with the National Committee on Vital and Health Statistics, should identify data standards appropriate for national adoption and identify gaps in existing standards that need to be addressed. The membership of National Committee on Vital and Health Statistics should continue to be broad and diverse, with adequate representation of all stakeholders, including consumers, state governments, professional groups, and standards-setting bodies.

(3) The Agency for Healthcare Research and Quality in collaboration with the National Library of Medicine and others should provide administrative and technical support for the CHI and NCVHS efforts. In particular, these agencies should ensure the development of implementation guides, certification procedures, and conformance testing for all data standards. They should also provide financial support and oversight for developmental activities to fill gaps in data standards. And, finally, these agencies should coordinate activities and maintain a clearinghouse of information in support of national data standards and their implementation to improve patient safety.

(4) The National Library of Medicine should be designated as the responsible entity for distributing all national clinical terminologies that relate to patient safety, and for ensuring the quality of terminology mappings.

Using Government Leverage To Establish National Standards

Given both the sizable purchasing power (over 40 percent of health care expenditures) and the regulatory authority of the federal government, the incorporation of data standards into government programs is a logical approach to establishing national standards. After providing a reasonable time period for health care organizations to comply with national standards identified by CHI initiative, the major government health care programs, including those operated or sponsored by Department of Health and Human Services, the Veterans Administration, and the Department of Defense, should immediately incorporate these data standards into their contractual and regulatory requirements (e.g., Medicare conditions for participation).

The Data Standards for Patient Safety Committee detailed an action plan for the deployment of standards for classifying and coding health data, for electronically interchanging data, and representing clinical knowledge. With federal leadership in the establishment of standards for data that support patient safety, information technology systems built over the coming decades should achieve the success to support the delivery of safe and effective care that we have so long been waiting for. Our committee report offers a blueprint to address the standards necessary to make electronic health records universal not only within the federal sector, but across the country as well.

In conclusion, I would like to thank the subcommittee for the opportunity to testify. I would be happy to take questions at the appropriate time.

United States General Accounting Office

GAO

Testimony

Before the Subcommittee on Oversight and Investigations, Committee on Veterans' Affairs, House of Representatives

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COMPUTER-BASED PATIENT RECORDS

Sound Planning and Project Management Are Needed to Achieve a Two-Way Exchange of VA and DOD Health Data

Statement of Linda D. Koontz
Director, Information Management Issues

GAO-04-402T

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Highlights

Highlights of GAO-04-402T, testimony before the Subcommittee on Oversight and Investigations, House Committee on Veterans' Affairs

March 17, 2004

COMPUTER-BASED PATIENT RECORDS

Sound Planning and Project Management Are Needed to Achieve a Two-Way Exchange of VA and DOD Health Data

Why GAO Did This Study

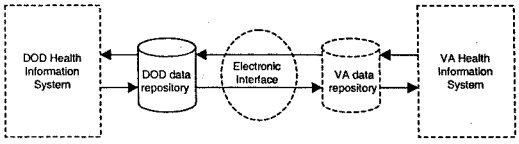
A critical component of the Department of Veterans Affairs' (VA) information technology program is its ongoing work with the Department of Defense (DOD) to achieve the ability to exchange patient health care data and create electronic records for use by veterans, active military personnel, and their health care providers.

GAO testified before the Subcommittee last November that one-way sharing of data, from DOD to VA medical facilities, had been realized. At the Subcommittee's request, GAO assessed, among other matters, VA's and DOD's progress since that time toward defining a detailed strategy for and developing the capability of a two-way exchange of patient health information.

What GAO Found

Since November, VA and DOD have made little progress in determining their approach for achieving the two-way exchange of patient health data. Department officials recognize the importance of an architecture to articulate how they will electronically interface their health systems, but continue to rely on a nonspecific, high-level strategy—in place since September 2002—to guide their development and implementation of this capability (see figure).

High-Level Strategy Intended To Allow Two-Way Exchange of Health Data



Source: VA and DOD

VA officials stated that an initiative begun this month to satisfy a mandate of the Bob Stump National Defense Authorization Act for Fiscal Year 2003 will be used to better define the electronic interface needed to exchange patient health data. However, this project is at an early stage, and the departments have not yet fully identified the approach or requirements for this undertaking. Given these uncertainties, there is little evidence of how this project will contribute to defining a specific architecture and technological solution for achieving the two-way health data exchange.

These uncertainties are further complicated by the absence of sound project management to guide the departments' actions. At present, neither department has the authority to make final decisions binding on the other, and day-to-day oversight of the joint initiative to develop an electronic interface is limited. Progress toward defining data standards continues, but delays have occurred in the development and deployment of the agencies' individual health information systems.

www.gao.gov/cgi-bin/getrpt?GAO-04-402T.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Linda D. Koontz at (202) 512-6240 or koontzl@gao.gov.

Mr. Chairman and Members of the Subcommittee:

I am pleased to be here today to participate in continuing discussions of the Department of Veterans Affairs' (VA) information technology program. My testimony focuses on a critical aspect of that program—VA's work with the Department of Defense (DOD) to achieve the ability to exchange patient health care data and create an electronic medical record for veterans and active duty military personnel. As you are well aware, having readily accessible medical data on these individuals—many of whom are highly mobile and may have health records at multiple medical facilities within and outside of the United States—is important to providing high-quality health care to them and to adjudicating any disability claims that they may have. VA and DOD have been pursuing ways to share data in their health information systems and create electronic records since 1998, yet accomplishing a two-way health data exchange has been elusive.

When we testified on this initiative last November,[1] VA and DOD had achieved a measure of success in sharing data through the one-way transfer of health information from DOD to VA health care facilities.[2] Yet VA and DOD faced significant challenges and were far from realizing a longer term objective: providing a virtual medical record based on the two-way exchange of data, as part of their HealthePeople (Federal) initiative. The departments had not clearly articulated a common health information architecture, and lacked the details and specificity essential to determining how they would achieve this capability.

At your request, my testimony will discuss our review of VA's and DOD's actions since November toward defining a detailed strategy and developing the capability for a two-way exchange of patient health information. In addition, I will provide an update on actions that the departments have taken to address recommendations resulting from prior

[1]U.S. General Accounting Office, *Computer-Based Patient Records: Short-Term Progress Made, but Much Work Remains to Achieve a Two-Way Data Exchange Between VA and DOD Health Systems*, GAO-04-271T (Washington, D.C.: November 19, 2003).

[2]The one-way transfer of health care data from DOD to VA is being accomplished as part of the Federal Health Information Exchange initiative.

reviews of their efforts to share medical data,[3] including those articulated in the May 2003 report of the President's task force on the development of electronic medical records.[4]

In conducting this work, we analyzed key documentation supporting VA's and DOD's strategy for developing and implementing the two-way electronic exchange of health data, including deployment and conversion plans, project schedules, and status reports for their individual health information systems. In addition, we reviewed documentation to identify the costs incurred by VA and DOD in developing technology to support the sharing of health data, including costs associated with the government computer-based patient record and federal health information exchange initiatives, and with VA's and DOD's ongoing projects to develop new health information systems. We supplemented our analyses with interviews of VA and DOD officials responsible for key decisions and actions on the initiatives. Further, we analyzed documentation and interviewed relevant VA and DOD officials to determine actions that have been taken to address our previous recommendations related to the government computer-based patient record initiative and those contained in the President's task force report. We did not verify the departments' reported actions in response to the President's task force recommendations. We performed our work in accordance with generally accepted government auditing standards, from December 2003 through March of this year.

Results in Brief

Since November, VA and DOD have made little progress toward defining how they intend to achieve the two-way exchange of patient health data under the HealthePeople (Federal) initiative. Although VA officials recognize the importance of having an architecture to describe in detail how they plan to develop an electronic interface between their health information systems, they acknowledged that the departments' actions are continuing to be driven by a less-specific, high-level strategy that has been in place since September 2002. VA and DOD officials stated that they

[3]U.S. General Accounting Office, *Veterans Affairs: Sustained Management Attention Is Key to Achieving Information Technology Results*, GAO-02-703 (Washington, D.C.: June 12, 2002) and *Computer-Based Patient Records: Better Planning and Oversight By VA, DOD, and IHS Would Enhance Health Data Sharing*, GAO-01-459 (Washington, D.C.: April 30, 2001).

[4]*President's Task Force to Improve Health Care Delivery For Our Nation's Veterans*, Final Report (Washington, D.C.: May 26, 2003).

intend to rely on an initiative being undertaken this month to satisfy a mandate of the Bob Stump National Defense Authorization Act for Fiscal Year 2003[5] to better define the electronic interface needed to exchange patient health information. However, this project is at an early stage, and the departments have not yet fully determined the approach or requirements for this undertaking. Given these uncertainties, there is little evidence as to whether and how this project will contribute to defining an explicit architecture and technological solution for achieving the two-way exchange of patient health information.

Adding to the challenge and uncertainties of developing the electronic interface is that VA and DOD have not fully established a project management structure to ensure the necessary day-to-day guidance of and accountability for the departments' investment in and implementation of this capability. Although maintaining that they are collaborating on this initiative through a joint working group and receiving oversight from executive-level councils, neither department has had the authority to make final project decisions binding on the other. Further, the departments are operating without a project management plan describing the specific responsibilities of VA and DOD in developing, testing, and deploying the interface. In the absence of an explicit architecture and critical project management, VA and DOD are progressing slowly in their development of this important technology. The departments have continued to define data standards that are essential to facilitating the exchange of data, but have experienced delays in key milestones associated with the development and deployment of their individual health information systems. Such delays call into question the departments' ability to meet their target date for beginning to exchange patient health information in 2005.

Both the President's task force and we have made multiple recommendations aimed at improving VA's and DOD's success in undertaking projects intended to achieve the electronic exchange of patient health records. For example, the task force recommended developing and deploying, by fiscal year 2005, electronic medical records that are interoperable, bidirectional, and standards-based. The departments reported that they are currently in various stages of acting on the specific recommendations that the task force made for providing timely, high-quality care through effective electronic sharing of health information. Beyond this, we previously recommended that, among other

[5]P.L. 107-314, sec. 724 (2002).

actions, VA and DOD designate a lead entity with final decisionmaking authority and establish a clear line of authority for the earlier, near-term government computer-based patient record project. In line with our recommendations, VA and DOD made overall management and accountability enhancements that could provide lessons learned for improving the departments' approach to successfully accomplishing the longer term initiative to develop a two-way health information exchange.

Background

In 1998 VA and DOD, along with the Indian Health Service (IHS), began an initiative to share patient health care data, called the government computer-based patient record (GCPR) project. At that time, each agency collected and maintained patient health information in separate systems, and their health facilities could not electronically share patient health information across agency lines. GCPR was envisioned as an electronic interface that would allow physicians and other authorized users at VA, DOD, and IHS health facilities to access data from any of the other agencies' health facilities. The interface was expected to compile requested patient information in a "virtual" record that could be displayed on a user's computer screen.

In reporting on the initiative in April 2001,[6] we raised doubts about GCPR's ability to provide expected benefits. We noted that the project was experiencing schedule and cost overruns and was operating without clear goals, objectives, and consistent leadership. We recommended that the participating agencies (1) designate a lead entity with final decisionmaking authority and establish a clear line of authority for the GCPR project, and (2) create comprehensive and coordinated plans that included an agreed-upon mission and clear goals, objectives, and performance measures, to ensure that the agencies could share comprehensive, meaningful, accurate, and secure patient health care data. VA, DOD, and IHS agreed with our findings and recommendations.

In March 2002, however, we again reported that the project was continuing to operate without clear lines of authority or a lead entity responsible for final decisionmaking.[7] Further, the project continued to move forward

[6]GAO-01-459.

[7]U.S. General Accounting Office, *VA Information Technology: Progress Made, but Continued Management Attention Is Key to Achieving Results*, GAO-02-369T (Washington, D.C.: March 13, 2002).

without comprehensive and coordinated plans and an agreed-upon mission and clear goals and measures. In addition, the participating agencies had announced a revised strategy that was considerably less encompassing than the project was originally intended to be. For example, rather than serve as an interface to allow data sharing across the three agencies' disparate systems, as originally envisioned, the revised strategy initially called only for a one-way transfer of data from DOD's current health care information system to a separate database that VA hospitals could access. In further reporting on this initiative in June 2002, we recommended that VA, DOD, and IHS revise the original goals and objectives of the project to align with their current strategy, commit the executive support necessary to adequately manage the project, and ensure that it followed sound project management principles.[8]

In September 2002 we reported that VA and DOD had made some progress toward electronically sharing patient health data.[9] The two departments had renamed the project the Federal Health Information Exchange (FHIE) program and, consistent with our prior recommendation, had finalized a memorandum of agreement designating VA as the lead entity for implementing the program. With this agreement, FHIE became a joint effort between VA and DOD to achieve the exchange of health care information in two phases. The first phase, completed in mid-July 2002, enabled the one-way transfer of data from DOD's existing health information system to a separate database that VA hospitals could access. A second phase, finalized earlier this month, completed VA's and DOD's efforts to add to the base of patient health information available to VA clinicians via this one-way sharing capability. VA and DOD reported total FHIE costs of about $85 million through fiscal year 2003.

The revised strategy also envisioned VA and DOD pursuing a longer term, two-way exchange of health information. This initiative, known as Health$_e$People (Federal), is premised upon the departments' development of a common health information architecture comprising standardized data, communications, security, and high-performance health information systems. The joint effort is expected to result in the secured sharing of health data required by VA's and DOD's health care providers between

[8]GAO-02-703.

[9]U.S. General Accounting Office, *VA Information Technology: Management Making Important Progress In Addressing Key Challenges*, GAO-02-1054T (Washington, D.C.: September 26, 2002).

systems that each department is currently developing—DOD's Composite Health Care System II (CHCS II) and VA's HealthEVet VistA.

DOD began developing CHCS II in 1997 and has completed its associated clinical data repository that is key to achieving an electronic interface. DOD expects to complete deployment of all of its major system capabilities by September 2008.[10] The department reported expenditures of about $464 million for the system through fiscal year 2003. VA began work on HealthEVet VistA and its associated health data repository in 2001, and expects to complete all six initiatives that make up this system in 2012.[11] VA reported spending about $120 million on HealthEVet VistA through fiscal year 2003.

Under the HealthEPeople (Federal) strategy, VA and DOD envision that, upon entering military service, a health record for the service member will be created and stored in DOD's CHCS II clinical data repository. The record will remain in the clinical data repository and be updated as the service member receives medical care. When the individual separates from active duty and, if eligible, seeks medical care at a VA facility, VA will then create a medical record for the individual, which will be stored in its health data repository. Upon viewing the medical record, the VA clinician would be alerted and provided access to clinical information on the individual also residing in DOD's repository. In the same manner, when a veteran seeks medical care at a military treatment facility, the attending DOD clinician would be alerted and provided with access to the health information existing in VA's repository. According to VA and DOD, the planned approach would make virtual medical records displaying all available patient health information from the two repositories accessible to both departments' clinicians. VA officials have stated that they anticipate being able to exchange some degree of health information through an interface of their health data repository with DOD's clinical data repository by the end of calendar year 2005.

[10]DOD's CHCS II capabilities are being deployed in blocks. Block 1 provides a graphical user interface for clinical outpatient processes; block 2 supports general dentistry; block 3 provides pharmacy, laboratory, radiology, and immunizations capabilities; block 4 provides inpatient and scheduling capabilities; and block 5 will provide additional capabilities as defined.

[11]The six initiatives that make up HealthEVet VistA are health data repository, billing replacement, laboratory, pharmacy, imaging, and appointment scheduling replacement.

Lacking A Defined Strategy, VA And DOD Have Made Limited Progress Toward A Common Health Information Exchange

VA's and DOD's ability to exchange data between their separate health information systems is crucial to achieving the goals of HealthyPeople (Federal). Yet successfully sharing patient health information via a secure electronic interface between each of their data repositories can be complex and challenging, and depends on their having a clearly articulated architecture, or blueprint, defining how specific technologies will be used to achieve the interface. Developing, maintaining, and using an architecture is a best practice in engineering information systems and other technological solutions. An architecture would articulate, for example, the system requirements and design specifications, database descriptions, and software descriptions that define the manner in which the departments will electronically store, update, and transmit their data.

Equally critical is an established project management structure to guide project development. Industry best practices and information technology project management principles[12] stress the importance of accountability and sound planning for any project, particularly an interagency effort of the magnitude and complexity of this one. Inherent in such planning is the development and use of a project management plan that describes, among other factors, the project's scope, implementation strategy, lines of responsibility, security requirements, resources, and estimated schedule for development and implementation.

As was the situation when we testified last November, VA and DOD continue to lack an explicit architecture detailing how they intend to achieve the data exchange capability, or just what they will be able to exchange by the end of 2005—their projected time frame for putting this capability into operation. VA officials stated that they recognize the importance of a clearly defined architecture, but acknowledged that the departments' actions were continuing to be driven by the less-specific, high-level strategy that has been in place since September 2002.

The officials added that just this month, the departments had taken a first step toward trying to determine how their separate data repositories would interface to enable the two-way exchange of patient health records. Specifically, officials in both departments pointed to a project that they are undertaking in response to requirements of the National Defense Authorization Act for Fiscal Year 2003, which mandated that VA and DOD

[12]Institute of Electrical and Electronics Engineers, *IEEE/EIA Guide for Information Technology* (IEEE/EIA 12207.1- 1997), April 1998.

develop a real-time interface, data exchange, and capability to check prescription drug data for outpatients by October 1, 2004.[13] VA's Deputy Chief Information Officer for Health stated that they hope to determine from a prototype planned for completion by next September whether the interface technology developed to meet this mandate can be used to facilitate the exchange of data between the health information systems that they are currently developing.

By late February, VA had hired a supporting contractor to develop the planned prototype, but the departments had not yet fully defined their approach or requirements for developing and demonstrating its capabilities. DOD officials stated that the departments would rely on the contractor to more fully define the technical requirements for the prototype. Further, according to VA officials, since the departments' new health information systems that are intended to be used under HealthePeople (Federal) have not yet been completed, the demonstration may only test the ability to exchange data in VA's and DOD's existing health systems—the Veterans Information Systems and Technology Architecture and the Composite Health Care System, respectively. Thus, given the early stage of the prototype and the uncertainties regarding what capabilities it will demonstrate, there is little evidence and assurance as to how or whether this project will contribute to defining the architecture and technological solution for the two-way exchange of patient health information.

Further compounding the challenges and uncertainty that VA and DOD face is the lack of a fully established project management structure to ensure the necessary day-to-day guidance of and accountability for the departments' investments in and implementation of the electronic interface between their systems. Officials in both departments maintain that they are collaborating on this initiative through a joint working group and with oversight provided by the Joint Executive Council and VA/DOD

[13]Sec. 724 of the act mandates that the Secretaries of Veterans Affairs and Defense seek to ensure that, on or before October 1, 2004, the two departments' pharmacy data systems are interoperable for VA and DOD beneficiaries by achieving real-time interface, data exchange, and checking of prescription drug data of outpatients and using national standards for the exchange of outpatient medication information. The act further states that if the specified interoperability is not achieved by that date, then the Secretary of Veterans Affairs shall adopt DOD's Pharmacy Data Transaction System for VA's use.

Health Executive Council.[14] However, neither department has had the authority to make final project decisions binding on the other, and there has been a visible absence of day-to-day project oversight for the joint initiative to develop an electronic interface between the departments' planned information systems. Further, VA and DOD are operating without a project management plan describing the overall development and implementation of the interface, including the specific roles and responsibilities of each department in developing, testing, and deploying the interface and addressing security requirements. In discussing these matters last week, VA officials stated that the departments had recently designated a program manager for the planned prototype. Further, VA and DOD officials added that they had begun discussions to establish an overall project plan and finalize roles and responsibilities for managing the joint initiative to develop an electronic interface. Until these essential project management elements are fully established, VA and DOD will lack assurance that they can successfully develop and implement an electronic interface and the associated capability for exchanging health information within the time frames that they have established.

Progress Toward Achieving a Two-Way Data Exchange Has Been Limited

In the absence of an architecture and project management structure for the initiative, VA and DOD have continued to make only limited progress toward developing the technological solution essential to interfacing their patient health information. To their credit, the departments have continued essential steps toward standardizing clinical data—important for exchanging health information between disparate systems. The Institute of Medicine's Committee on Data Standards for Patient Safety has reported the lack of common data standards as a key factor preventing information sharing within the health care industry. Over the past 4 months, VA and DOD have agreed to adopt additional data standards[15] for uniformly presenting in any system data related to demographics,

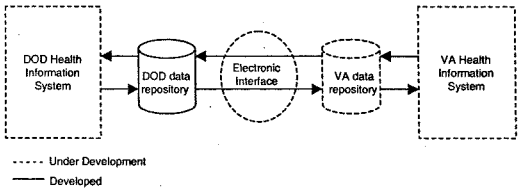
[14]The Joint Executive Council is composed of the Deputy Secretary of Veterans Affairs, the Undersecretary of Defense for Personnel and Readiness, and the cochairs of joint councils on health, benefits, and capital planning. The council meets on a quarterly basis to recommend strategic direction of joint coordination and sharing efforts. The VA/DOD Health Executive Council is composed of senior leaders from VA and DOD, who work to institutionalize sharing and collaboration of health services and resources. The council is cochaired by the VA Undersecretary for Health and DOD Assistant Secretary of Defense for Health Affairs, and meets on a bimonthly basis.

[15]When we testified last November, VA and DOD had agreed to four standards to allow the transmission of messages and one standard allowing laboratory results.

immunizations, medications, names of laboratory tests ordered, and laboratory result contents.

Nonetheless, as reflected in figure 1, the technology needed to achieve a two-way exchange of patient health information remains far from complete, with only DOD's data repository having been fully developed.

Figure 1: VA/DOD High-level Strategy for the Two-Way Exchange of Health Data



Source: VA and DOD.

Since November, both departments have delayed key milestones associated with the development and deployment of their individual health information systems. VA program officials told us that completion of a prototype for the department's health data repository has been delayed approximately a year, until the end of this June. The officials explained that earlier testing of the prototype had slowed clinicians' use of the clinical applications, necessitating a revised approach to populating the repository. In addition, while DOD officials previously stated that the department planned to complete the deployment of its first release of CHCS II functionality (a capability for integrating DOD clinical outpatient processes into a single patient record) in September 2005, the agency has now extended its completion date to June 2006. According to DOD officials, the schedule for completing this deployment was revised because of a later than anticipated decision on when the department could proceed with its worldwide deployment. Collectively, the lack of an architecture and project management structure, coupled with delays in the departments' completion of key projects, places VA and DOD at increased risk of being unable to successfully accomplish the Health $\mathcal{E}$ People (Federal) initiative and the overall goal of more effectively meeting service members' and veterans' health care and disability needs.

VA and DOD Could Benefit From Current And Past Recommendations On Sharing Electronic Medical Records

Mr. Chairman, as part of our review, you asked that we update the status of VA's and DOD's actions to address prior recommendations related to sharing electronic medical information. In this regard, both the President's task force and we have made a number of recommendations to VA and DOD for improving health care delivery to beneficiaries through better coordination and management of their electronic health sharing initiatives. In its final report of May 2003,[16] the President's task force recommended specific actions for providing timely, high-quality care through effective electronic sharing of health information, such as the development and deployment, by fiscal year 2005, of electronic medical records that are interoperable, bidirectional, and standards-based. The departments reported that they are in various stages of acting on these recommendations, with anticipated completion dates ranging from June of this year to September 2005. Our attachment to this statement summarizes these specific recommendations, and the departments' reported actions to address them. Giving full consideration to these recommendations could provide VA and DOD with relevant information for determining how to proceed with the HealthePeople (Federal) initiative.

Also, as mentioned earlier, our prior reviews of the departments' project to develop a government computer-based patient record determined that the lack of a lead entity, clear mission, and detailed planning to achieve that mission had made it difficult to monitor progress, identify project risks, and develop appropriate contingency plans. As a result, in reporting on this initiative in April 2001 and again in June 2002, we made several recommendations to help strengthen the management and oversight of this project. VA and DOD have taken specific measures in response to our recommendations for enhancing overall management and accountability of the project, with demonstrated improvements and outcomes. Extending these practices to current activities supporting the development of HealthePeople (Federal) could strengthen the departments' approach to successfully accomplishing a two-way health information exchange.

In summary, Mr. Chairman, achieving an electronic interface to enable VA and DOD to exchange patient medical records between their health information systems is an important goal, with substantial implications for improving the quality of health care and disability claims processing for our nation's military members and veterans. However, in seeking a virtual

[16]President's Task Force, Final Report, May 26, 2003.

medical record based on the two-way exchange of data between their separate health information systems, VA and DOD have chosen an approach that necessitates the highest levels of project discipline, including a well-defined architecture for describing the interface for a common health information exchange and an established project management structure to guide the investment in and implementation of this electronic capability. At this time, the departments lack these critical components, and thus risk investing in a capability that could fall short of their intended goals. The continued absence of a clear approach and sound planning for the design of this new electronic capability elevates concerns and skepticism about exactly what capabilities VA and DOD will achieve as part of HealthePeople (Federal), and in what time frame.

Mr. Chairman, this concludes my statement. I would be pleased to respond to any questions that you or other members of the Subcommittee may have at this time.

Contacts and Acknowledgments

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Appendix: VA's and DOD's Reported Actions to Address Recommendations in the President's Task Force Report of May 26, 2003

	Reported Actions	
Recommendations	**Department of Veterans Affairs (VA)**	**Department of Defense (DOD)**
1. VA and DOD should develop and deploy by fiscal year 2005 electronic medical records that are interoperable, bi-directional, and standards-based.	The VA/DOD Joint Strategic Plan and the Joint Electronic Health Records Plan have set September 2005 as the target date by which VA and DOD will achieve interoperability of health data. The VA/DOD Health Executive Council Information Management/ Information Technology Work Group is on track to complete this capability by the end of fiscal year 2005. In March 2004, the departments awarded a contract to develop a bi-directional pharmacy solution that will demonstrate interoperability in a prototype environment. The departments are on track to complete the prototype by October 2004.	Operational interoperability is planned for fiscal year 2005.The pharmacy prototype is the initial effort within the Clinical Health Data Repositories (CHDR) framework. This framework is the effort to develop software component services that will be used by the VA and DOD data repositories. The prototype has a planned completion date of October 2004.
2. The Administration should direct the Department of Health and Human Services to declare the two departments to be a single health care system for purposes of implementing the Health Insurance Portability and Accountability Act (HIPAA) regulations.	This issue remains under review by the Veterans Health Administration's HIPAA Program Office. It is VA's understanding that VA and DOD have concluded that this is not necessary in order to share information on patients that both departments are treating.	DOD believes that it and VA can achieve the appropriate sharing of protected health information within the guidelines of the current regulations. The HIPAA privacy rule has a specific exception authorizing one-way sharing of health data at the time of a service member's separation. This supports the "seamless transition to veteran status."
3. The departments should implement by fiscal year 2005 a mandatory single separation physical as a prerequisite of promptly completing the military separation process. Upon separation, DOD should transmit an electronic Department of Defense (DD) 214 (discharge paperwork) to VA.	The Joint Strategic Plan has set June 2004 as the target date for the departments to develop an implementation plan for the one physical exam protocol. VA and DOD are currently piloting the single separation physical exam that meets DOD needs and VA's rating criteria at 16 Benefits Delivery at Discharge sites.	The departments are currently testing an advanced technological demonstration project that transfers images of paper personnel documents to VA from official military personnel file repositories in the Army, Navy, and Marine Corps, with Air Force integration into the program in process (including the DD214). When fully operational, this system will send digital images of any personnel record to the VA within 48 hours of the request.

	Reported Actions	
Recommendations	**Department of Veterans Affairs (VA)**	**Department of Defense (DOD)**
4. By fiscal year 2004, VA and DOD should initiate a process for routine sharing of each service member's assignment history, location, occupational exposure, and injuries information.	Both the Health Executive Council (through the Deployment Health Work Group) and the VA/DOD Benefits Executive Council are currently developing and implementing processes to address these issues.	DOD is already providing VA with daily information on personnel separating from active duty, which includes assignment history, location, and occupational duties through the DD214. DOD's TRICARE On Line provides health care professionals with access to the individual service member's pre- and post-deployment health assessments The Defense Occupational and Environmental Health Readiness System with CHCS II, is capturing data on occupational exposures and transferring it to the clinical data repository. When these systems are fully operational, appropriate information will be able to be shared via a two-way exchange with VA.

Source: VA and DOD.

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Prepared Statement

of

Mr. James C. Reardon

Military Health System, Chief Information Officer

on

The Progress Being Made by the Department of Defense and the Department of Veterans Affairs with the Sharing Of Medical Information and the Development of a Seamless Electronic Medical Record

Before the

Subcommittee on Oversight and Investigations
Committee on Veterans' Affairs
U.S. House of Representatives
March 17, 2004

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Introduction

Mr. Chairman and distinguished members of this committee, thank you for the opportunity to discuss the progress being made by the Department of Defense (DoD) and the Department of Veterans Affairs (VA) with the sharing of medical information and development of interoperable electronic medical records. DoD is committed to providing the best health care services for our beneficiaries. Today, we have more than 253,000 service men and women deployed in support of our nation's defense, including those serving in Afghanistan and Iraq. We have awarded a full suite of new TRICARE contracts, extended our sharing and cooperative efforts with other federal agencies, and continued to provide excellent healthcare to our 8.9 million beneficiaries. Using the balanced scorecard approach to strategic planning, we have focused on readiness, effectiveness of our health plan and patient satisfaction with access to care.

In the information technology area we are focusing on enhancing our enterprise architecture to ensure that our information technology investments directly support military health care around the world and aligns with the Department's Business Management Modernization Program. We continue to refine our information technology capital investment and portfolio management process, ensuring that all proposed information technology investments are evaluated against objective, business focused criteria. Protecting sensitive beneficiary information is very important. To do so, we have implemented a strong information assurance program which addresses information security from electronic, physical, and personnel perspectives.

The DoD Military Health System Information Management/Information Technology (IM/IT) Program mission is to acquire, develop, deploy, and maintain superior IM/IT solutions and

services in support of health care delivery provided by the Army, Navy, and Air Force. These Tri-Service systems support the complex and varied aspects of peacetime and wartime medical operations. The Department continues to implement and sustain a secure standards-based, shared infrastructure in the support of key healthcare automated information systems. This robust infrastructure ensures essential patient and population-level healthcare information is well protected, and is available at the right time, to the right staff, around the clock and around the world. This enables the continuation of critical e-business functions, enhancing access to care and quality of care, and improves our ability to efficiently manage our business. Over the past year, working with the Services, VA, and key commercial business partners, we have implemented and enhanced transport security and standards-based encryption capabilities to prevent the disclosure of confidential and sensitive protected health information.

A key achievement has been the deployment of the initial Composite Health Care System (CHCS) to over 500 DoD medical facilities worldwide. CHCS is the military computerized provider order entry (CPOE) system. For more than 10 years, military health care providers have utilized CHCS to electronically order millions of lab tests, radiology exams, and prescriptions, as well as record diagnoses, enter treatment codes, and schedule patients. CHCS permits health care providers to issue clear orders efficiently and effectively and enhances patients' safety through CPOE. It documents over 50 million outpatient appointments and performs 70 million prescription transactions yearly. Furthermore, the Department implemented the Pharmacy Data Transaction Service (PDTS), which builds patient medication histories compiled from prescriptions filled at civilian pharmacies, through a mail-order pharmacy and at military treatment facilities. CHCS interfaces to PDTS to display the medication history

maintained in PDTS and issue alerts when prescribed medications could negatively interact with medications on record in PDTS.

A major focus within the Department is the Composite Health Care System II (CHCS II) – the military Electronic Health Record (EHR). CHCS II is an enterprise-wide medical and dental clinical information system that generates, maintains and provides worldwide secure online access to comprehensive patient records. CHCS II is patient centric, secure and scalable for use from our largest garrison based medical facilities to our forward deployed medical units. CHCS II is a core component of military medical readiness, supporting uniform, secure, high-quality health care delivery and continuity of care to Military Health System beneficiaries. With this system, doctors and other medical workers can create and add to electronic medical records for the individuals they treat – one patient, one record. It is a windows-based application that further enhances CHCS capabilities and provides a user-friendly interface with improved coding and expanded documentation of medical care. CHCS II is a leader in the area of health informatics. It meets the eight care delivery functions identified by the Institute of Medicine as essential for electronic health records to enhance safety, quality and efficiency of health care delivery. CHCS II has received approval for full rate production and began worldwide deployment in January 2004. CHCS II full implementation will be achieved by June 2006. The military EHR centrally stores all electronic patient medical records in the Clinical Data Repository (CDR). Concurrent with the worldwide implementation of CHCS II, medical data stored at the regional locations is being aggregated and aligned with a patient's single medical record in the CDR.

As you know, DoD and VA have joined forces to provide our nation's military and veterans with improved health care services. Over the past year, the two Departments have launched a new era of DoD/VA collaboration, with unprecedented strides toward a new federal partnership that promises to transcend business as usual, and establish common business practices. Such collaboration has been going on for a few years and is already seen as a model for inter-agency cooperation across the federal government.

We are pleased to report that we have approved a VA/DoD Joint Strategic Plan to guide our future relationship. We believe that this plan institutionalizes our current collaborative efforts. It also identifies joint objectives, strategies, and best practices for future collaboration. Through our VA/DoD Joint Executive Council, we ensure leadership oversight and endorsement of all initiatives as we continue to develop our strategic partnership. Many of the recommendations of the President's Task Force to Improve Health Care Delivery For Our Nation's Veterans are reflected in the VA/DoD Joint Strategic plan. Importantly, the ability to transfer and share electronic health information is a major area of focus in this joint strategic plan.

Seamless Exchange of Electronic Health Care Data

DoD and VA have a number of initiatives addressing clinical data interoperability and data exchange that will benefit Service members as they transition to veteran status. I would like to review a few of these with you.

Federal Health Information Exchange (FHIE) This exchange supports the transfer of electronic health information from DoD to VA at the point of a Service member's separation. As a model of collaboration between DoD and VA, it markedly enhances continuity of care for our nation's veterans. VA providers nation-wide have access to this data thereby facilitating the delivery of needed care. FHIE is also being used by Veterans Benefits Administration claims adjudicators to assist in fulfilling the evidentiary requirements for processing disability compensation claims and in determining eligibility for Vocational Rehabilitation and Employment Benefits. DoD patient data is displayed in the same format was other data residing in the VA Health Information System, thus facilitating its use.

FHIE leverages existing agency information systems to facilitate the electronic transfer of patient information from DoD to VA. The first phase included patient demographics and pharmacy, laboratory, and radiology information. FHIE was further expanded to include discharge summaries. Enhancements continued, including allergy data in June 2003 and consultation information in September 2003. Information from the PDTS, which included mail order and retail pharmacy profiles, was incorporated shortly thereafter. Our most recent enhancement includes key elements of the standard ambulatory data record, such as diagnostic codes, primary care manager, treatment provider, and clinical service. FHIE has sent information from DoD to VA on over 1.9 million veterans, including over 25.7 million laboratory, 26.4 million pharmacy, and 4.5 million radiology clinical messages, as well as over 310,000 consult reports.

Joint Electronic Medical Record Interoperability DoD and VA are now building on the foundation of the Federal Health Information Exchange to provide a more robust capability. The

successful iterative development process used to develop FHIE will serve as a model for interoperability. We are now developing interoperability between DoD's CDR and VA's Health Data Repository (HDR). This initiative responds to the President's Task Force to Improve Health Care Delivery For Our Nation's Veterans recommendation and the VA/DoD Joint Strategic Plan objective for interoperable electronic medical records. Projects such as Clinical Data Repository/Health Data Repository (CHDR) are laying the ground work for the clinical information exchange that will enable a consolidated view of health data from DoD and VA medical records. This approach will enable clinicians from both Departments to access clinical information from the two repositories.

A DoD/VA integrated product team was formed to manage development of this important capability. It is led by senior health information technology managers and clinicians from both Departments. The initial interface between DoD's CDR and VA's HDR will be the pharmacy prototype, which will test the exchange of outpatient pharmacy data in a laboratory environment, by October 2004. The bi-directional exchange of patient demographics, outpatient pharmacy (MTF, mail order, and retail pharmacy network), laboratory, and allergy information by October 2005.

Laboratory Data Sharing and Interoperability (LDSI) The LDSI initiative facilitates the electronic transfer/sharing of laboratory order entry and results reporting among DoD, VA, and commercial reference labs. DoD has interfaces between various DoD sites and external reference labs. Using this application in Hawaii, the Spark M. Matsunaga VA Medical Center uses the Laboratory module of VistA to electronically route laboratory requests to the CHCS

Laboratory at Tripler Army Medical Center. Upon completion of the ordered test, Tripler electronically routes the laboratory test results back to VistA. Computerized order entry and results reporting support the delivery of high quality patient care and patient safety by eliminating much of the manual entry of test results which may contribute to medical errors. Following the successful pilot test of LDSI in Hawaii, this capability is being deployed to DoD and selected joint venture sites. We are currently planning implementation at Wilford Hall Medical Center, Brooke Army Medical Center, and South Texas Veterans Health Care System. The product will be enhanced to include Anatomic Pathology and Microbiology and to allow DoD to order lab tests from VA.

Health Information Standards DoD and VA are lead partners in the Consolidated Health Informatics project, one of the 24 eGov initiatives supporting the President's Management Initiative. The goal of the Consolidated Health Informatics initiative is to establish federal health information interoperability standards as the basis for electronic health data transfer in federal health activities and projects. In March 2003, the Department of Health and Human Services (HHS) announced the first set of standards to be adopted. They included standards in clinical laboratory results, health messaging, prescription drug codes, digital imaging, and connectivity of medical devices to computers. HHS is planning to announce adoption of additional standards related to areas such as demographics, units, lab results contents, medications, lab test order names, and immunizations. The standards adopted will be used in new acquisitions and systems development initiatives. As federal entities use common standards it will be easier to exchange appropriate health information. DoD and VA are also leading partners in many national standards development efforts. Both Departments participate in

multiple standards boards to collaborate and share expertise. We are also active partners in the new Federal Health Architecture initiative being managed by HHS.

Closing

Mr. Chairman and distinguished members of this committee, I am proud of the accomplishments that have been made to support sharing of appropriate medical information and development of a seamless electronic medical record. These accomplishments are paying dividends in the health of our veterans, and we will continue to improve in the coming year. All systems and currently implemented information collection and exchange activities comply with privacy and security safeguards mandated by the Health Insurance Portability and Accountability Act (HIPAA), the Privacy Act, the E-Government Act, and other applicable regulations and standards. The partner agencies ensure that mandated privacy and security measures are integrated in the design and development of planned activities as well. Where appropriate, information is encrypted prior to transmission and sent using a virtual private network. To ensure that these, and other DoD/VA initiatives, continue to progress, VA/DoD Health Executive Council receives updates bi-monthly and the VA/DoD Joint Executive Council monitors progress quarterly. Additionally, DoD and VA share information on a quarterly basis with the Office of Management and Budget on the status of the DoD/VA Joint Electronic Medical Care Record Interoperability Plan.

The Department of Defense and the Department of Veterans Affairs have made significant progress in improving the sharing of medical information and continue to make progress on development of interoperable electronic medical records. The ground work has been laid for even greater progress in the future and I am firmly committed to continued improvement. Our

shared commitment to strong DoD/VA collaboration in the area of information technology places us in the forefront of interagency cooperation and health data exchange across the federal government.

This cooperative technology sharing serves as one vital tool to assist both Departments in caring for and assuring the availability of appropriate care for the men and women who serve and have served this country. They are the focus of our efforts. It is our responsibility to work together to share important information that will facilitate the care of veterans.

Thank you for the opportunity to highlight our continued progress.

Statement of

Robert N. McFarland

Assistant Secretary for Information and Technology

Before the

Subcommittee on Oversight and Investigations

Committee on Veterans' Affairs

U. S. House of Representatives

March 17, 2004

Thank you, Mr. Chairman. I am very pleased to appear before this committee representing the Secretary and the Department's information technology program. I am honored to return to the service of our country and to our veterans. I am most aware and energized by the size and complexity of our task.

While I have been here for only a short period, I believe I can make several useful observations. First, and perhaps foremost, I have seen a level of commitment and dedication to the mission on the part of everyone I have encountered that is truly remarkable.

Second, my impression so far is that the Department of Veterans Affairs has made significant progress over the last three years in attaining the Secretary's stated commitment to reform how "IT" gets done at the VA. However, much remains to be done.

Over the past two years, VA's Office of Information and Technology has initiated a rigorous information technology process. This process includes a disciplined project management methodology and an information technology portfolio management system that have been recognized by the Office of Management and Budget. We are well underway with an enterprise architecture that aims to align the business with the information technology plans, goals and efforts. We are in the final phase of rebuilding our nationwide telecommunications infrastructure, and we are implementing aggressive cyber security and privacy programs to ensure the protection of our infrastructure from attack, both external and internal, and to ensure the privacy of our service peoples' personal information.

In parallel to building a safe, secure, and technically current infrastructure across the VA system, we are working diligently to improve both service delivery and our internal business practices. To improve the sharing of medical information between the Departments of Defense (DoD) and VA we have taken positive steps to develop data standards, as well as an interoperable health record. Communication and collaboration are key to our joint success in building a seamless veteran information environment.

Internally, regarding VETSNET, I would like, to reassure you, Mr. Chairman, that we are working hard to ensure that VETSNET remains on schedule. Development of the final components is complete and undergoing vigorous testing. VBA is scheduled to begin a live test deployment in April 2004 at the Lincoln, Nebraska, RO, and we are committed to having VETSNET fully deployed to all regional offices by December 2005.

In the financial business arena, we will continue to coordinate with the Office of Management on successfully implementing CoreFLS in order to provide VA with

an integrated financial and logistics system. This system is critical to the successful, efficient delivery of service to our nation's veterans and will allow the VA to effectively manage the resources entrusted to us. Without CoreFLS, VA will not be able to remove the financial and security material weaknesses that currently exist.

While there have been problems with the system and legitimate concerns raised over the selection of Bay Pines as the test site for this new integrated system, I believe that the system and the approach are sound and I fully support the Secretary's order that we will not rollout this system to other sites until we have remedied all critical issues identified at Bay Pines.

Finally, I believe it is important to mention again, an area of great interest to me and to this Subcommittee, cyber security. This remains one of our top priorities. We are currently implementing a comprehensive security configuration and management program designed to provide optimum protection of VA's infrastructure, from both outside and inside attacks. A comprehensive VA-wide cyber security program is vital to not only the security and privacy of our veterans, but also to our ability to provide the best service to our veterans.

VA/DoD Systems Interoperability

In April 2002, VA and DoD gained the approval of Office of Management and Budget (OMB) to proceed with implementing the Joint VA/DoD Electronic Health Records Plan – HealthePeople (Federal). Pursuant to the plan, VA and DoD are on schedule to achieve interoperability of health information systems by 2005, through the implementation of common standards, interoperable health information software, and interoperable data repositories. The plan is overseen by the VA/DoD Health Executive Council, co-chaired by the Under Secretary for Health in VA, and in DoD, by the Assistant Secretary of Defense, Health Affairs.

The development of interoperable health information systems will lead to a seamless medical record where authorized providers in one health system will have access to health data that resides in the other system. This seamless electronic access will have multiple advantages for beneficiaries of both military and VA health systems. Redundant tests and procedures will be eliminated, thereby freeing up scarce medical resources; providers in both systems will have real-time access to electronic data, therefore reducing medication errors such as adverse drug interactions or missed allergy checks; and the cost and burden of handling paper-based records will be eliminated.

Since implementing the plan, the Departments have made significant progress toward sharing medical data. In June 2002, VA and DoD began implementing Phase I of the plan, the Federal Health Information Exchange (FHIE) (formerly known as Government Computer-based Patient Record (GCPR). FHIE supports the one-way transfer of pre-separation data on all retired and separated service members and reservists from the DoD Composite Health Care System (CHCS) into a secure repository where it is available for viewing by clinicians using the VA Computerized Patient Record System (CPRS). FHIE data are available for viewing in every VA medical facility. The initial release of FHIE permitted DoD to transfer laboratory, outpatient government pharmacy, and radiology report data to VA. Subsequent enhancements to FHIE now support the transfer of admission, disposition and transfer (ADT) data, consult reports and allergy data, retail pharmacy data from the DoD Pharmacy Data Transaction Service (PDTS), and the International Classification of Diseases, ninth edition, and Current Procedural Terminology (CPT) codes available in the DoD Standard Ambulatory Data Record. [DoD]

In addition to the one-way data flow from DoD to VA, FHIE supports the transfer of data from the FHIE repository to the Veterans Benefits Administration (VBA) for use in adjudicating disability claims. VBA can access the information about

the patient using Compensation and Pension Records Interchange (CAPRI) seamlessly as needed. The Clinical Data Repository/Health Data Repository (CDR/HDR) effort, known as Clinical Health Data Respository (CHDR), is on target to demonstrate bi-directional interoperability and movement of pharmacy and demographic data in a prototype environment by the end of 2004.

In addition to FHIE and CHDR, the Departments are progressing in the development of interoperable software applications to include laboratory, credentialing and scheduling systems for beneficiaries. Presently, the Departments have the capability to support the one-way electronic ordering and results retrieval of labs by VA from DoD. The Departments are presently enhancing the Lab Data Sharing and interoperability software application to permit bi-directional support of lab requests and results retrieval. The Departments anticipate providing this enhanced capability by the 4th quarter of FY 04. The Departments are also prepared to test a prototype of interfaced credentialing systems that will permit data sharing between VA's VetPro system and the DoD CCQAS (Centralized Credentialing Quality Assurance System). This application will decrease the time and resources needed to credential providers who need to practice in both VA and DoD health care settings. The Departments have formed a joint credentialing work group, developed the prototype, and are testing the prototype at approved locations. The Departments continue to work together on interoperable outpatient scheduling functionality between a DoD commercial system and a VA-built outpatient scheduling application and shared wellness content for e-portal systems for beneficiaries.

Phase II of the plan also addresses joint work on architecture, data, software, communication, security and information standards. As part of the federal Consolidated Health Informatics (CHI) effort led by VA, DoD and the Department of Health and Human Services, the Departments have adopted standards in five of twenty-four targeted clinical domain areas needed to support sharing of electronic health data and the others will be released soon. Each Department continues to develop and identify internal standards that will support future enhancements to software applications and permit interoperable health systems. Working together, DoD and VA have completed an updated mapping of their respective business activities, architectures, and standards comparison report in order to facilitate their continuing collaboration.

The Departments have also made significant progress toward Phase II of the plan to achieve bi-directional data exchange and interoperability. In August 2002, the Departments chartered a joint integrated project team to manage the development and acquisition of interoperable data repositories. Under this project, the DoD CDR and the VA HDR will support sharing of electronic health data.

In November, 2002, VA in coordination with DoD, developed a plan for an electronic pharmacy interface between CHCS and VistA to be tested at a joint venture site. The HUI (HUI is a Hawaiian word meaning "group" and is the name that participants chose for this effort)Pharmacy interface provides for the one-way electronic transmission of outpatient medication orders between Tripler Army Medical Center's CHCS system to VA's Spark Matsunaga Medical Center's VistA system for dispensing medications to VA patients. The interface improves patient safety by eliminating the need for VA to manually transcribe pharmacy orders which could result in transcription errors on patients referred to DoD by VA for shared care.

The Advantage of the Electronic Medical Record

At VA's Veterans Health Administration (VHA), the Computerized Patient Record System (CPRS) allows clinicians to access medical records wherever patients are seen—in acute settings, clinics, exam rooms, nursing stations, and offices. The system has been implemented at all VHA medical centers nationwide and at

VHA outpatient clinics, nursing homes, and other sites of care since the late 1990's.

With CPRS, providers can access patient information at the point of care across multiple sites and clinical disciplines. It provides a single interface through which providers can update a patient's medical history, submit orders, and review test results and drug prescriptions.

The effectiveness of CPRS is due to its degree of integration with other Veterans Health Information System and Technology Architecture (VistA). Applications include:

- Automated order entry for consultations and procedures that alerts clinicians of a possible problem if the order is executed, as well as tracking and reporting of results;
- Clinical reminder system that allows caregivers to track and improve preventative health care for patients and help to ensure the initiation of timely clinical interventions;
- Remote data view function that allows clinicians to view a patient's medical history from another VHA facility to ensure that clinicians have access to all clinically relevant data from VHA facilities;
- Health summary reports that display relevant patient data, vital signs and measurements, etc., in a comprehensive report format; and
- Adverse drug reaction tracking with supportive drug reference software and linkage to Food and Drug Administration (FDA) systems to report data.

CPRS provides a single graphical user interface to data from a variety of packages including laboratory, radiology, pharmacy, dietetics, consults, and vitals allowing users to enter, view, and update information without having to log into each application separately. Providers can quickly flip through electronic pages of the chart to review or add information.

Providers are encouraged to enter progress notes directly into CPRS, either during or immediately after the encounter. Some providers use CPRS as an educational tool by graphing lab results so that patients can see their progress over time. For providers who prefer to dictate, notes are transcribed, then uploaded into the system and linked to patient encounters. Reports from external providers can be scanned, indexed, and incorporated into the patient's record.

CPRS also enables providers to electronically order lab tests, medications, diets, radiology tests, and procedures; record a patient's allergies or adverse reactions to medications; request and track consults; enter progress notes, diagnoses, and treatments for each encounter; and enter discharge summaries. Currently, 92 percent of VHA prescription orders are entered electronically.

In many cases, veterans obtain health care at more that one location. When necessary, veterans are referred to other sites for care, or may choose to seek treatment at different sites while traveling or vacationing. CPRS's remote data views feature enables data retrieval from all VA facilities at which a patient has sought care. When a user pulls up a patient record and requests remote data views, CPRS uses VHA's master patient index to obtain treatment sites for that veteran, and then retrieves and displays patient data from the sites selected by the user. The user can easily review and compare data from different sites.

This capability has virtually eliminated the problem of transferring paper records from location to location to provide care by enabling the clinician to review the veteran's complete medical record at the time of care. More importantly, the remote data view feature has reduced the likelihood that duplicate tests or incompatible medications are ordered for veterans seeking care at more than one site location of care.

The benefits of this electronic medical record to providers and patients are obvious: immediate access to information, elimination of duplicate orders, increased patient safety, and improved information sharing. VHA scientists, quality managers, and decision makers also use CPRS to collect data for clinical research, quality assurance, program planning, and financial management. Multiple users at different sites for a variety of purposes can access a single record simultaneously.

CPRS has been enhanced and refined continuously since its initial implementation, and has been recognized as one of the most sophisticated, broadly implemented electronic health record systems in the world. VHA was recognized in the Institute of Medicine publication *Leadership by Example* as a leader in the development of the following components:

- Computerized patient medical record for clinical documentation, clinician order entry and information retrieval;
- Performance measurement supported by electronic clinical reminders; and
- Patient safety reporting system to document adverse events and near misses.

Reduction of Medical Errors

Several features of the VHA's HealtheVet/Veterans Health Information System and Technology Architecture (VistA) Computerized Patient Record System (CPRS) electronic medical record reduce medical errors. First, the information is available -- and legible. Errors and mistakes found with verbal orders or interpretation of handwriting are eliminated. There are checks in the system for drug-drug interactions, and other contraindications. Order checks and reminders are present to support clinical decision making. CPRS improves medical decision making and adherence to clinical guidelines. The Institute of Medicine (IOM) cited the development of an electronic health record as an essential to improve safety of health care. In the IOM 2002 publication *Leadership by Example,* it was noted "Computerized order entry and electronic medical records have been found to result in measurably improved health care and better outcomes for patients."

The use of computerized provider order entry of medications is one of the areas in which VHA monitors the adherence to the usage of CPRS. Currently, 92 percent of all medication orders are entered directly by the ordering provider. The use of computerized provider order entry eliminates the patient safety hazards introduced by illegible handwriting and misinterpretation of medication order dosages, strengths and confusion of medication names.

Systems, such as the Bar Code Medication Administration (BCMA), are integrated into HealtheVet/VistA/CPRS to help ensure that patients receive the correct medication, in the correct dose, at the correct time. BCMA visually alerts staff, prior to administration of a medication, when the correct parameters are not met. The software reduces reliance on short-term memory by providing real time access to medication order information at the patient's bedside.

BCMA also provides a system of reports to remind clinical staff when medications need to be administered, have been overlooked, or the effectiveness of doses administered should be assessed. The system also alerts staff to potential allergies, adverse reactions, special instructions concerning a medication order, and order changes that require action. During the medication administration process, visual alerts signal the nurse when the software detects a wrong patient, wrong time, wrong medication, wrong dose, or no active medication order. These alerts require a nurse to review and correct the reason for the alert before actually administering the drug. Computerization allows multiple users to access medication administration information at the same time without competing for or attempting to locate a paper record. Interruptions for the

nurse administering medications and the potential for medications to be omitted during the administration process are reduced.

BCMA also helps prevent administering medications outside the medication administration window, because the information is presented to the medication nurse even if another individual is accessing the patient's medication administration information. The BCMA system offers many advantages to nurses. Order changes are communicated instantaneously to the nurse administering medications, eliminating the dependency on verbal or handwritten communication of order changes. Therefore, time delays are avoided and administration accuracy is improved.

VistA Rad (Radiology), filmless radiology component of HealtheVet VistA Integrated Medical Imaging System is a core image capture and archiving system that integrates all types of images, from advanced directives to multi-media gait studies, into CPRS, enabling clinicians to have a complete view of the patient's status. VistA Rad augments VistA imaging providing radiologists tools that enable them to "read" x-ray studies directly from computer screens without the need for x-ray film.

VHA's Office of Information continually collaborates with clinicians to improve and increase the tools available to augment the safe, effective delivery of health care to veteran patients.

VA implemented software in October 2003, to enable each VA medical facility to electronically request health insurance coverage information from **third party payers for non-service connected medical care**; this software was developed in accordance with the requirements of the Health Insurance Portability and Accountability Act (HIPAA). Also, the FY 2004 Appropriations Act includes a requirement that non service-connected veterans disclose current accurate health insurance information and annual income in order to receive health care services from VA. VA will implement this new requirement in June 2004.

The expectation that the HIPAA requirements, in conjunction with VA's efforts, would increase our capability for identifying third party health insurance, has been met with some level of disappointment, because the health care industry as a whole is not yet fully prepared to operate with any appreciable level of sophistication in this much-needed interaction between health care providers and health plans. While the capability now exists to bring health insurance coverage information into the electronic medical record, VA quickly discovered that simply building the infrastructure was not sufficient to eliminate the need for staff intervention for insurance discovery and verification, and thus reap the expected benefits. Another challenge has been establishing electronic connections to all health plans. VA has contracted with the largest health care clearinghouse with the largest number of payer connections, and while that is a major step forward, VA and health care providers as a whole have recognized that the challenge ahead is the achievement of timely electronic connections to all business partners. In light of these current constraints, VA is pursuing a combination of initiatives to acquire health insurance information, including a VA/DoD venture, mentioned below.

The Development of the Seamless Medical Record

In the early 1980's, VHA developed a set of core medical record applications for use in a variety of health care settings, including inpatient, outpatient, home health, and long-term care. These applications include: Laboratory, Radiology, Surgery, Pharmacy, Progress Notes, Discharge Summary, Mental Health, Consults/Request Tracking, Problem List, and Dietetics. In the mid-1990s, VHA embarked upon an ambitious effort to improve the delivery and coordination of care by providing access to all clinical data through a single, integrated user interface, the Computerized Patient Record System (CPRS). Using CPRS, providers could quickly flip through the electronic pages, review lab and radiology

results, enter orders, write progress notes and discharge summaries and receive timely alerts about recommended clinical interventions. CPRS quickly became the state-of-the-art tool for retrieving and entering clinical data.

In the late 1990's, VHA recognized that with CPRS, providers could access information about a patient at the point of care, but did not have seamless access to other medical record information about that same patient at another location within VHA. At that time, VHA developed and implemented an electronic Master Patient Index (MPI) that linked patient information across multiple sites. This index allows providers to access all patient health information at different locations of care.

In 1996, VHA implemented the ambulatory care reporting project, which supported the VHA's rapid move to outpatient services by providing a mechanism to electronically record the orders and text related to an encounter and the coded data required for third party billing. Prior to this time, only the total number of encounters was known, and not the diagnosis or the procedures performed. This project also enhanced the clinical reminder capabilities in CPRS, promoting the ability to remind providers of clinical interventions related to a diagnosis. For example, the reminder regarding foot examinations for diabetic veterans has contributed to a marked reduction in amputations related to diabetes. There is growing evidence that supports the conclusion that automated clinical information and decision support are critical to addressing the Nation's health care quality gap (Institute of Medicine 2001).

Using CPRS at one location of care, the provider can update the current patient's medical history, submit orders, and review test results and drug prescriptions and access all available electronic health information about the patient.

In 2001, the concept of sharing clinical data between VA and DoD became a reality through implementation of the Federal Health Information Exchange (FHIE). This initiative provided VA authorized providers with access to DoD patient health record information about separated military reservists and service members. Complying with appropriate privacy laws and requirements, FHIE functionality provides seamless access for VHA health care providers to DoD health information for those patients who seek care from VA.

We are pursuing a joint venture with DoD to help identify veterans' health insurance information that can be used to offset VA care costs. This Federal Shared Third Party Obligation Program, or F-STOP, could potentially enable VA to identify health insurance coverage by comparing existing Centers for Medicare and Medicaid Services data against veteran self-reported data, as well as verifying insurance coverage information from known employers. This project is in the first phases of scope development and identification of responsibilities,

Core FLS

CoreFLS is an integrated commercial off-the-shelf (COTS) software financial and logistics system solution that will be used by every financial and logistics office within VACO, VHA, VBA, and NCA. While it is being developed to address material weaknesses and reportable conditions, it will be integrating the financial and logistics data into one data base and will allow accurate financial reporting and management review of centralized data. This initiative supports the President's Management Agenda and the VA strategic goal to provide a world-class service to veterans and their families through the effective management of people, technology, processes, and financial resources.

Once implemented, it will be a fully-integrated system that will provide timely, easily accessible financial and logistical information. CoreFLS will provide better data management, automate data reconciliation, automate consolidated financial statements, and enable VA to comply with the Federal Financial Management Improvement Act (FFMIA) and other regulatory requirements. It will also

establish a foundation of business processes for the VA enterprise architecture, reduce the number of stovepipe legacy systems, and align with VA and Federal e-government initiatives.

CoreFLS will be used by approximately 1,000 VA sites, including medical centers, outpatient clinics, nursing homes, domiciliaries, counseling centers, regional offices, and national cemeteries. Eventually, it will replace VA's existing Financial Management System (FMS), VHA's Integrated Funds Distribution Control Point Activity Accounting and Procurement (IFCAP) system, and Automated Engineering Management System/Medical Equipment Reporting System (AEMS/MERS). In addition, CoreFLS will interface with 74 specialized VA systems. The system will have an estimated 100,000 users and 15,000 concurrent users. The software will provide the following major functions: accounting, payments processing, receivables processing, debt management, asset management, billing, costing, financial analysis, budget, purchasing, contract management, and inventory management. Critical core activities will be the highest priority initially to expedite and maximize return on investment with no interruption to service.

CoreFLS is currently in System Development Milestone II of the project life cycle, which began in July 2002. Although this phase is scheduled to end in July 2004, due to issues at Bay Pines, the phase is likely to be extended. A "focus site" approach for the project was determined to be the best solution for the system development as the main emphasis of this phase is building and pilot testing the CoreFLS product at actual VA sites. Administration officials selected the focus sites, based upon VA protocol office-specific criteria, and identified the VHA medical center at Bay Pines, FL, the VBA regional office at St. Louis, MO, and the NCA cemetery at Bushnell, FL (supported by the VHA medical center at Tampa). The focus sites are supported by VA's Financial Services Center and Austin Automation Center in TX, and VA Central Office in Washington, DC, for enterprise-wide activity.

CoreFLS has completed Build 1.1 of the Systems Development Phase, and as a result of the successful testing, VA leadership rendered a "Go – Decision to Proceed" with Build 1.2, a continuation of Systems Development. This phase encompasses the Integrated Test Cycles I and 2 (ITC2) and (ITC2), Operational/User Acceptance Testing (also called pilot testing), and Build 1.3. All components of the Systems Development phase have been incorporated and tailored within the CoreFLS products to meet the VA financial and logistics business needs and to meet the requirements for full implementation. After discussions with key VA Central Office leadership and stakeholders regarding potential Veterans Integrated Service Network (VISN) candidates for further testing, it was decided that VISN 8 (which includes VAMC Bay Pines), would serve as the best candidate for continued pilot testing of CoreFLS.

A comprehensive Fallback Plan was developed prior to implementation of pilot testing. There were lessons learned from the pilot, or Operational Test Phase 1 (OT1), that were collected from key stakeholders. The lessons learned recommendations were organized into seven topical areas: user provisioning, site readiness/communications, training, post-production support, help desk, finance, and logistics. CoreFLS has developed response time standards and continues to experience satisfactory performance. The transaction response time standard is 8 seconds, 90 percent of the time. The technical performance components of each user's interaction with the applications included the amount of network time; the forms server (middle tier) response time; and the database processing time.

CoreFLS has demonstrated the ability to sufficiently support station operations in a pilot or operational test environment and can support continued operational testing. Issues remain, however, as of February 20, 2004, 97.4 percent of identified issues have been resolved. The CoreFLS staff is working closely with pilot, or OT1 sites, to resolve issues and continue normal business operations.

Upon the completion of operational testing in its entirety, the CoreFLS National Deployment Rollout Plan will provide the framework for transitioning the project from the development phase to the deployment phase. The plan will focus on the activities required to migrate a site to CoreFLS, including the following: migration of the current legacy systems, management of rollout sites, and detailed planning required for preparation of the cutover phase. Execution of this plan will be accomplished by utilizing a set of detailed tools such as Reports, Interfaces, Conversions, Extensions (RICE) dashboard, Deployment Rollout schedules, Site Readiness database, and Work Breakdown Structures. These tools will facilitate the rollup of the data into actionable, executive level information, while providing the granular level of data to perform analysis.

Successful implementation of CoreFLS will reduce the number of independent, disparate systems, resulting in an overall reduction of operations, maintenance, and life cycle costs. Any external system, not replaced in their entirety, must be modified to comply with CoreFLS requirements.

CoreFLS is a commercial off-the-shelf (COTS) product that was developed to track and control finances, vendor payouts and supply inventories. This system involves not just a change in technology but also a change in the way that its users will perform their jobs. We will intensely examine the lessons learned from this system and incorporate them into future system deployment methodologies.

For the immediate future and as directed by Secretary Principi, we will remain focused on resolving the Bay Pines issues before we deploy CoreFLS to additional sites. The initial placement of CoreFLS within Bay Pines is an excellent example of conducting a pilot in order to identify and correct problems prior to an expanded deployment of a new application or system.

While there is concern that the selection of Bay Pines was inappropriate because it is one of our largest hospitals, the advantage is that such a site should allow us to identify and resolve most issues. As of March 3, 2004, 97.8 percent of identified issues (4,238) have been resolved, with only 2.1 percent remaining open (93).

VETSNET

In the past few weeks, I have had the opportunity to learn of this Subcommittee's interests regarding the Veterans Service Network (VETSNET). These interests include such questions as: (1) When will VETSNET be deployed to all regional offices? (2) How do the security/fraud prevention capabilities of VETSNET differ from the current system? and (3) What is the justification for the fiscal year 2005 budget request for $5 million in funding for increased platform capacity for VETSNET?

Before I answer those questions, I would like to explain my own review and understanding of this important project.

In testimony before this Subcommittee on April 4, 2001, Secretary Principi recognized the past problems of VETSNET. According to Secretary Principi's testimony, these problems included the fact that this project had been under development far too long, that its development had been delayed as new technologies and technical approaches came and went, and that over time VETSNET had suffered from a lack of focus, the absence of clear goals and, at some points, inadequate management.

Secretary Principi also recognized that those problems were behind us and that a VETSNET management plan that addressed these problems was in place. However, he informed this Subcommittee that, because of his concern about critical issues of performance and effective systems integration, he had directed

an independent audit of the overall system before proceeding to a fully operational status of VETSNET.

As explained by Secretary Principi, the purpose of this audit was to assure "that this system will meet all the security, functional, and performance requirements that we have set for it." Secretary Principi committed to this Subcommittee that if VETSNET were found to meet our needs, we would not hold past failures against it and would go into production with the system. On the other hand, if VETSNET were found not to meet our needs, we would terminate its development.

The independent audit directed by Secretary Principi was conducted during the summer of 2001. Since the results of the independent audit of VETSNET were favorable, Secretary Principi permitted work on this project to continue.

In testimony before this Subcommittee on September 26, 2002, my predecessor, Assistant Secretary for Information and Technology, Dr. John Gauss, explained that both he and Admiral Daniel Cooper, Under Secretary for Benefits, had personally reviewed VETSNET and recommended to Secretary Principi that this project continue.

According to Dr. Gauss, there was a plan in place for VETSNET and all milestones had been met. Dr. Gauss also noted that there was a successful "glide path" in place for meeting the April, 2004, deadline for the beginning of VETSNET deployment.

I fully recognize the concerns of this Subcommittee regarding VETSNET, so I believe that it is important to review the progress that has been made as well as what remains to be completed. From the review conducted by Admiral Cooper and Dr. Gauss, it is clear that satisfactory actions have been taken to successfully address many long-standing issues identified by this Subcommittee.

Two actions (assignment of a dedicated VETSNET Program Manager, and revalidation of user requirements) have been completed and three are satisfactorily underway (end-to-end testing, Benefits Delivery Network continuity plan, and integrated project management plan). Also, it is very significant that we have already developed, deployed and are enjoying the benefits, nationwide, of two of the four major VETSNET applications.

The two applications that have already been developed and deployed and are in use in all Regional Offices are Modern Award Processing – Development or MAP-D, which is used to establish and develop the claim, and Rating Board Automation (RBA) 2000, which supports rating the claim.

The remaining two applications are Award, which is used to prepare the claim award, and the Financial and Accounting System or FAS, which is used to pay the claim. These two applications are undergoing extensive testing.

We are already enjoying the benefits of both MAP-D and RBA 2000 and next month (April, 2004), we will begin live field testing of all four of the VETSNET applications in the Lincoln, Nebraska, Regional Office.

We have learned important lessons about the deployment of new applications. Many of these have been documented in the November 15, 2001, Information Technology Task Team Report to the Under Secretary for Benefits. For example, lessons learned about the deployment of RBA 2000 include the fact that there is a steep learning curve, that this learning curve often includes a change to the business process as well as the introduction of a new technology, that adequate testing must be done prior to deployment, and that an increase in the claims processing work load can further complicate the deployment.

In testimony before this Subcommittee in March, 2002, my predecessor, Dr. John Gauss, advised that actual deployment of VETSNET would be determined as a function of when VBA can afford to insert a new system into the regional offices, with the companion learning curve, such that the impact on working off backlogged claims can be effectively managed. That remains the case today.

We have also learned that initial deployment at a large facility may not be the best approach, and that introduction of a new system with a new way of doing business requires a completely collaborative training and implementation process. Mr. Chairman, it is for these and other reasons that we have chosen to begin live field testing of VETSNET in the Lincoln Regional Office in April 2004.

Therefore, we are planning the deployment of VETSNET based on these and other past experiences. We have built these past experiences into our deployment planning, and what we learn at Lincoln and at subsequent sites will also be incorporated into our deployment implementation.

The Lincoln, Nebraska, Regional Office will begin using the remaining two applications next month (April, 2004). These two are Award, which is used to prepare the claim award, and the Financial and Accounting System or FAS, which is used to pay the claim.

It is our intention that these two applications will be used by all remaining Regional Offices by December, 2005.

Together, the Under Secretary for Benefits and I will continue to review this timeline and monitor the impact of these and other factors.

The next question I would like to address is "How do the security/fraud prevention capabilities of VETSNET differ from the current system?"

The VETSNET architecture builds in automated tools to protect against fraudulent claims processing. The three-tiered client/server architecture provides the basis for instituting security at multiple levels. Access to VETSNET applications is monitored by the Common Security System.

This means that there are stringent approval chains in the rating and award processes that have been implemented for the VETSNET applications MAP-D, RBA 2000 and Award. Three electronic signatures are required from three distinct users for large payments and other special situations, such as retroactive awards above established thresholds. The user generating the award cannot authorize the same award.

Additionally, the Finance and Accounting System or FAS allows real time and online auditing. FAS also allows online reporting of suspicious circumstances for immediate review and action by appropriate staff.

Using the Corporate Database, historical data is retained online and is available for validation and auditing. All database updates are journalized, which creates and maintains an accurate, online audit trail (i.e., all efforts to create, edit or delete records are recorded). Also, VETSNET will ultimately increase the amount of data available for review for consistency, meaning that more historical data will be capable of being mined using the Veterans Benefits Administration's Data Warehouse tools. Data mining will enhance the ability to detect possible security or fraud incidents. Also, use of VETSNET should increase the consistency and equity of awards across all regional offices.

Finally, VETSNET addresses several of the recommendations contained in the Office of Inspector General Report, "Audit of the Compensation and Pension Program's Internal Controls at VA Regional Office St. Petersburg, FL" including (1) establishing a positive control (system edit keyed to employee ID number) that ensures employee claims are adjudicated only at the assigned regional

office or jurisdiction and prevents employees from adjudicating matters involving fellow employees and VSOs at their home office, (2) the feasibility of direct input and storage of rating decisions in the system, (3) establishing a system field for third-person authorization and a control to prevent release of payments greater than the established threshold without third-person authorization and (4) the use of Social Security Number (or other acceptable number) to tie employee system access to a perpetual, unique identifier.

The next VETSNET question I would like to address is "What is the justification for the fiscal year 2005 budget request for $5 million in funding for increased platform capacity for VETSNET?"

The basis of this question is the February 4, 2004, testimony by Secretary Principi regarding the Department of Veterans Affairs' proposed budget for fiscal year 2005. In that testimony, Secretary Principi stated that sufficient platform capacity is required to successfully deploy VETSNET and to ensure the continued and uninterrupted payment of benefits to deserving veterans and their beneficiaries.

In that same testimony, Secretary Principi noted that the Veterans Benefits Administration (VBA) has made excellent progress in addressing the Presidential priority of improving the timeliness and accuracy of claims processing, including the facts that (1) VBA has hired and trained more than 1,800 new employees in the last three years, and (2) that the productivity of the VBA staff has increased dramatically as well, with the average number of claims completed per month growing by 70 percent, from 40,000 to 68,000.

It is this dramatic increase in claims processing that is the main basis of our request for increased platform capacity. Additional supporting factors are (1) mandated use of applications in all regional offices and (2) nationwide deployment and use of the first two VETSNET applications (MAP-D and RBA 2000). This dramatic increase in workload has been reflected in production system usage charts, and the transaction volume is predicted to more than double over the next two years.

Therefore, we have filed this initiative in order to increase the capacity of the VBA corporate production system processors, memory and Direct Access Storage Device (DASD). This increase in capacity is absolutely necessary to support the continued deployment of applications for VETSNET, including those to be used to deliver the Compensation and Pension, Education and Vocational Rehabilitation and Employment benefits.

In summary, it is our projection (and the basis of this request) that (1) additional processors are required to sustain an acceptable performance level given the anticipated increase in transaction volume, (2) additional memory is required in order to support the increased number of concurrent applications processing and (3) additional DASD is required to support the growth of the corporate database as it expands to accommodate the storage of information required to administer the benefit programs of the VBA business services.

Mr. Chairman, VETSNET has been a long time in coming, but I believe we must continue to move forward to see it through to completion. This project has been made stronger as the result of each scrutiny it has undergone. We are already enjoying the benefits of two of the four major VETSNET applications and the remaining two will begin live field testing next month.

I know this is a very sensitive issue and I will personally oversee progress to ensure VETSNET continues to meet the projected time line. Admiral Cooper and I have agreed to continue the close monitoring established under my predecessor and we will do everything in our power to keep VETSNET on the right track.

The Patient Financial Services System

The Patient Financial Services System (PFSS) Project, as many of you know, is the implementation of a COTS health care billing and accounts receivable software system intended to replace the legacy VistA Integrated Billing and Accounts Receivable applications.

Consistent with commercial best practices, implementation of the PFSS pilot should demonstrate increased revenues through three avenues:

- First, staff efficiency through streamlined, standardized, re-engineered processes;
- Second, more accurate bills through better charge capture and a fully-integrated billing solution; and
- Third, shortened bill lag times through greater effectiveness in the automated processes.

To date, we have selected a system integrator and a COTS vendor for the project, and have completed the Analysis Phase.

The Cleveland VA Medical Center has been identified as the first implementation test site for PFSS, and a project management office has been established at that location. Hardware to support the new COTS software has been procured, delivered and installed at Cleveland.

Once the COTS product was selected, the integrator's analysis phase commenced. This phase ended in February 2004. Critical insights into the complexities of the task ahead have emerged from this analysis, including the knowledge that additional enabling functionality will be required

What we have learned from the Analysis Phase has necessarily forced a reconsideration of the development and implementation timeline. Reassessment of timeframes, as rapidly as possible, is underway at the present time, consistent with thorough investigation and the objective of proceeding as good stewards of the VA Enterprise and with all due speed toward a successful implementation of PFSS.

Cyber Security and Privacy

Finally, another area of great interest to me and to this Subcommittee is that of cyber security. In many ways, this must remain one of our top priorities. We cannot and will not delay our forward movement in this area, so we are implementing as rapidly as possible the recommendations contained in the report of the Inspector General regarding the Blaster worm. The focus of this entire effort is a comprehensive security configuration and management program designed to provide optimum protection of the VA infrastructure from both outside and inside attacks.

VA is a diverse organization, with broad business operations and requirements, encompassing the largest health care organization in the Nation and conducting financial services on the order of some of the Nation's largest financial institutions in the country. In addition, we are ensuring that all activities involving the collection, sharing and warehousing of individually identifying health and other information comply with the privacy requirements of the Health Information Portability and Accountability Act, the Privacy Act, the E-Government Act and related regulations and standards. -

Smart Card

In order to address our business requirements, seek improvements in operations, and reduce the Department's risk exposure, VA has an enterprise-wide initiative that calls for issuance of **smart cards** to each VA employee, as well as designated contractors and business affiliates. This OMB-approved

initiative is formally known as the Authentication and Authorization Infrastructure Project (AAIP), which also includes an enterprise public key infrastructure (PKI) implementation and a modern Identity and Access Management (IAM) solution. AAIP is directly in line with emerging Federal policy where VA's smart cards will be used to provide three core functions: act as an official Federal ID card; provide a secure method for VA staff to manage digital credentials that support authentication, digital signature, and encryption services; and, over the course of time, allow VA to move to more cost-effective physical access controls at VA facilities.

VA is confident that the incorporation of smart cards will provide a number of benefits, acting as a foundation to implement a number of business process improvements, such as:

- Smart cards are part of VA's strategy to address our "material weakness" deficiencies related to authentication and account management. Smart cards will support VA activities related to Health Insurance Portability and Accountability Act compliance.
- Authentication using a smart card will be the basis for single sign-on.
- VA is exploring how we can streamline business processes using digital signatures in automated workflow transactions.
- Smart cards will enable enterprise physical access management, where VA anticipates potential savings of up to 20 percent.

Smart cards hold great promise at VA, and while it is understood that there may be challenges with the implementation of these smart card activities, VA is moving forward in a prudent manner. Extensive prototype testing will be conducted to protect the investment in this area, and VA will remain committed to gaining the benefits represented by this technology as VA enterprise evolves to serve its constituents and employees.

This concludes my written statement. Thank you, again, Mr. Chairman, for the opportunity to discuss these important matters.

Testimony
The Department of Veterans Affairs
Information Technology (IT) Program

Before the
House Committee on Veterans Affairs
Subcommittee on Oversight and Investigations
334 Cannon House Office Building

Testimony of
Mr. Edward C. Davies (Ted), Managing Partner
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Accompanied by Mr. Joseph Macies, Partner

March 17, 2004

Mr. Chairman and members of the subcommittee, thank you for the opportunity to address the subcommittee today on Unisys role as the prime contractor for the Department of Veterans Affairs Patient Financial Services System (PFSS) project.

As you know, PFSS is a congressionally-mandated pilot in Veterans Integrated Service Network (VISN 10). Its objective is to obtain significant improvements in the timeliness and quality of billing and increase collections of first and third party claims by implementing industry proven, commercial off-the-shelf (COTS) financial billing and accounts receivable software in the Veterans Health Administration (VHA), and by integrating it with the VistA legacy environment.

Although the PFSS project is not envisioned as a means to improve the computerized patient records process, per se, an indirect benefit of the system - incorporating industry standard billing information such as CPT and ICD9 codes and associating them with every episode of care - contributes to the improvement of the medical record. The electronic patient account enabled by PFSS will provide the medical record with a greater level of detail about each veteran's care. Further, as the subcommittee has been tracking this project, Unisys was asked to testify on the progress of this effort at this hearing.

Unisys is pleased to have been selected by VA to implement the PFSS pilot. Our team is fully committed to success at all levels. We understand the strategic importance of the PFSS pilot, and are committed to a partnership with the VA to ensure we achieve the results desired by the government.

My testimony today will cover the following topics:

- PFSS project background
- PFSS project objectives and vision for the future:
    - Revenue cycle business transformation in VA – Involving people, process and technology
    - Benefits of PFSS to veterans
    - PFSS as an enabler of standardization and improved business practices in the VA enterprise
- Project status and accomplishments to date
- Critical success factors
    - Partnership and mutual commitment to success

PFSS Background

Public Law 101-508, enacted in 1990, expanded VA's revenue recovery program by providing authority to seek reimbursement from veterans and private health insurers for costs incurred providing health care for veterans' non-service-connected (NSC) disabilities. The law also authorized the per diem co-payment and medication co-payment programs.

Public Law 105-33, enacted in 1997, established the Medical Care Collections Fund (MCCF) and authorized VA to retain collections from health insurers and veterans' co-payments at their local medical center.

These were important milestones in evolving the VHA health care system from one in which VA paid for all veterans' care, to one where third-party insurance carriers paid for veterans' non service connected health care services. And while progress was made during this time, it was difficult to achieve the desired revenue goals within the context of the VistA legacy system environment, which was originally designed exclusively around patient care, not patient financials.

As reported in their testimony before this subcommittee on May 7, 2003, GAO found that although third-party collections have increased in recent years, operational problems, such as missed billing opportunities, persist and continue to limit the amount VA collects.

Recognizing these challenges, in the conference report accompanying the FY '02 Appropriations Bill, Congress directed VHA to implement up to three pilot programs to test the viability of commercial patient financial software in the VA environment. The language specifically required the pilots to be contractor installed and operated. In response to this directive, VHA during 2002 conducted extensive market research of COTS software and determined that they would run a single pilot based in VISN 10, Healthcare System of Ohio. In April 2003, VA issued a competitive, performance-based statement of objectives to industry to select a systems integrator to lead the pilot effort.

In July 2003, Unisys Corporation was selected as the prime contractor to implement the Patient Financial Services System (PFSS) pilot. Unisys convened an experienced health care financial system team and we are engaged in the planning and analysis stage of the PFSS pilot program.

Company Background and Experience

Unisys is a worldwide information technology services and solutions company. Our people combine expertise in consulting, systems integration, outsourcing, infrastructure and server technology with precision thinking and relentless execution to help clients, in more than 100 countries, quickly and efficiently achieve competitive advantage and improve responsiveness to their customers. Unisys has extensive experience delivering end-to-end solutions for government clients worldwide, including integration of commercial off-the-shelf (COTS) financials, supply chain, and customer relationship management (CRM) applications. We provide enterprise systems integration, e-government solutions, professional services, and enterprise-class server and related technologies to help transform the way government, selected public sector, and commercial organizations manage information. Unisys U.S. Federal Government Group employs almost 3,000 people, with about 2,000 employees located throughout the Washington, D.C. metropolitan area.

Unisys has more than 25 years' experience providing information technology to the health care industry. Clients have included the VA, National Institutes of Health, Eli Lilly, Maimonides Hospital, CHAMPUS, UnitedHealth Group, Department of Health and Human Services, the Department of Defense, OSD Health Affairs, and five state Medicaid fiscal agent customers.

- In cooperation with VA Pittsburgh Medical Center, Unisys developed the Unisys Collections Management System (UCMS) to improve the VA Medical Center accounts receivables collections process, resulting in a15 percent increase in collections.
- Unisys systems processed more than $20 billion in Medicaid claims in 2002.

Patient Financial Services System (PFSS)

- *Project objectives and vision for the future*

The PFSS pilot will demonstrate how integrated, commercial patient management and patient financial software will significantly improve VA's first- and third-party collections by capturing and consolidating inpatient and outpatient billing information. Unisys and VA's objective is to ensure that PFSS is thoroughly integrated with and works efficiently in the VHA environment and is scaleable and flexible enough to support any future iterations or migrations of VistA.

- *Revenue cycle business transformation involving people, process and technology*

Based on extensive experience integrating and implementing complex information system solutions, Unisys understands that technology alone rarely, if ever, succeeds in transforming agency or business operations. Achieving

meaningful improvements in the VA revenue cycle will depend not only on the PFSS software, but also on significant business process and organizational changes.

Recognizing the importance of addressing each of these key areas, VA in 2001 contracted for an evaluation of the VA's processes related to the overall revenue cycle. There were 24 recommendations addressing the need for both re-engineered business processes and technology enhancements. VA, as documented in the revenue action plan formulated with the establishment of the Chief Business Office and discussed before congress during last May's hearings, has completed many of these recommended changes and is working on the remainder. While Unisys responsibilities for PFSS are focused initially on technology enhancements, we are working with VA to ensure that relevant business process and change management issues are identified and addressed. Throughout the analysis stage of the project, business processes that are required to support the current and future revenue cycle state have been documented. Process gaps have been identified and we are working closely with VA on effective change management to fill them.

- *Benefits of PFSS to veterans*

PFSS will benefit the veteran in many direct and indirect ways. One outcome of the project will be an improved patient financial statement which will combine in one easy-to-read document all charges for services provided. In the pilot, this statement will identify charges for services provided in all VISN 10 facilities. Ultimately, one statement will reflect charges for all services delivered throughout the VHA health care system. PFSS will allow VA to provide better information on the patient statement (i.e., date of service vs. transaction date, insurance billed date and payment date). The project team is engaging VISN 10 Veterans Service Organization(VSO) leadership to identify veterans who are willing to participate in working groups to help identify the best way to address veteran concerns with the financial statement and to identify and develop solutions for what they consider chronic billing problems. In other client sites where this combined patient statement has been implemented, customer service call levels have been reduced by up to 50 percent, clearly indicating improved customer service and satisfaction.

The PFSS system also will enable quicker turnaround time on claims so that veterans can more consistently take advantage of insurance company coverage of co-pays, eliminating the time consuming process for VA of issuing statements to veterans for co-pays after 90 days, and processing subsequent refunds. This improved automation will enable checks and balances in the system, automatically matching Veterans Benefits Administration (VBA) codes with industry standard billing (ICD9) codes, ensuring that VA is billing only for services it is allowed to bill for, under the law, and not for service- connected care. Indirectly, PFSS benefits the veteran by ensuring that VA collects all revenue it is

entitled to from third party insurance, putting more dollars back into the facilities' operational budgets, which in turn supports enhancements to patient care.

- *PFSS as an enabler of standardization and improved business practices in the VA enterprise*

One of the goals of PFSS is to provide a model for standardizing revenue cycle business practices throughout the VA enterprise. Standardization has many benefits, not the least of which is the ability to analyze performance, trends, and to report accurately at the enterprise level. PFSS will provide VA with full visibility into all services provided to veterans, and the charges associated with them.

Regardless of whether the charge is billable because of a service-connected disability, VA will, for the first time, improve its understanding of the "universe" of services provided and both the potential and actual charges that result. As the pilot in VISN 10 proves successful and the system is rolled out across VHA, each VISN will adopt standard practices, enabling the consistency of operation and delivery of services that is required for efficient revenue cycle operations and sustainable improvements in billing and collections.

- *Project status and accomplishments to date*

One of the key differentiators for Unisys in being selected to lead this project was the company's innovative approach to selecting the most capable COTS patient financial software solution. Unisys placed in a run-off the two top vendors who provide combined professional and technical medical billing solutions to identify the vendor that would provide the best value to VA. Each vendor underwent a rigorous evaluation process that included a live demonstration of more than 60 VA-specific patient encounter scenarios. The vendor selected - IDX - successfully demonstrated the ability of its solution to perform these scenarios using industry standard process flows and using VA data. IDX performed these scenarios without any custom modifications to the software's core functionality.

In October 2003, with the IDX Flowcast solution selected, the PFSS project management team led the partners - Unisys, VHA Chief Business Office (CBO), VHA Office of Information (OI - the CIOs office), and VISN 10 - through a planning process using a best practices project management approach. The result was a detailed project management plan, a roadmap that outlines the specific processes the PFSS project leadership team will use to ensure a successful implementation of IDX in the first VISN 10 site

Following completion of the planning stage, the project team moved immediately into analysis. The purpose of this stage was to document the current revenue cycle process flows within the medical center (and VISN). With that as a baseline, the next task was to build a model of the future state process. This

future state will be supported by the IDX Flowcast software and integration with VistA, providing the improvements required to drive to the threshold values for the business metrics established for the project.

- 15 percent increase in collections
- Reduction of gross days revenue outstanding (GDRO) to 75 days,
- Reduction of accounts receivable greater than 90 days to 26 percent, and
- Reduction of days to bill to 25.

The analysis stage revealed that improved patient management functionality, including inpatient scheduling, pre-arrival and bed management, was critical to the success of the project. VA, OI and CBO decided in December 2003 to include patient management in the project scope, utilizing IDX's Visit Management module, as part of the pilot.

Finally, the teams analyzed the gaps between the current systems and the target future state flows to identify issues that would result in barriers to success. A number of these issues were identified and have been the focus of discussions among Unisys, CBO, OI and VISN 10. Potential solutions to the gaps identified in these sessions are being evaluated and the team has begun documenting business process change requirements. This week, we are completing work to define workload and timeline impacts of all of the changes that will be required to support the pilot solution.

The design stage comes next, and planning for design began this week.

- *Critical success factors*

As should be expected, this project is not without its challenges. Implementing a COTS product in the VistA environment is complex and must be accomplished in the middle of a massive re-hosting initiative, HealtheVet VistA, which the VA has undertaken. Changes in VistA required to support a COTS billing and accounts receivable solution challenge the very fabric of a system never designed to produce bills. In a similar commercial implementation, a patient/ account level database where visits are easily married with orders and charges is fundamental to ensuring profitability. In VistA, the concept is foreign.

- *Partnership and mutual commitment to success*

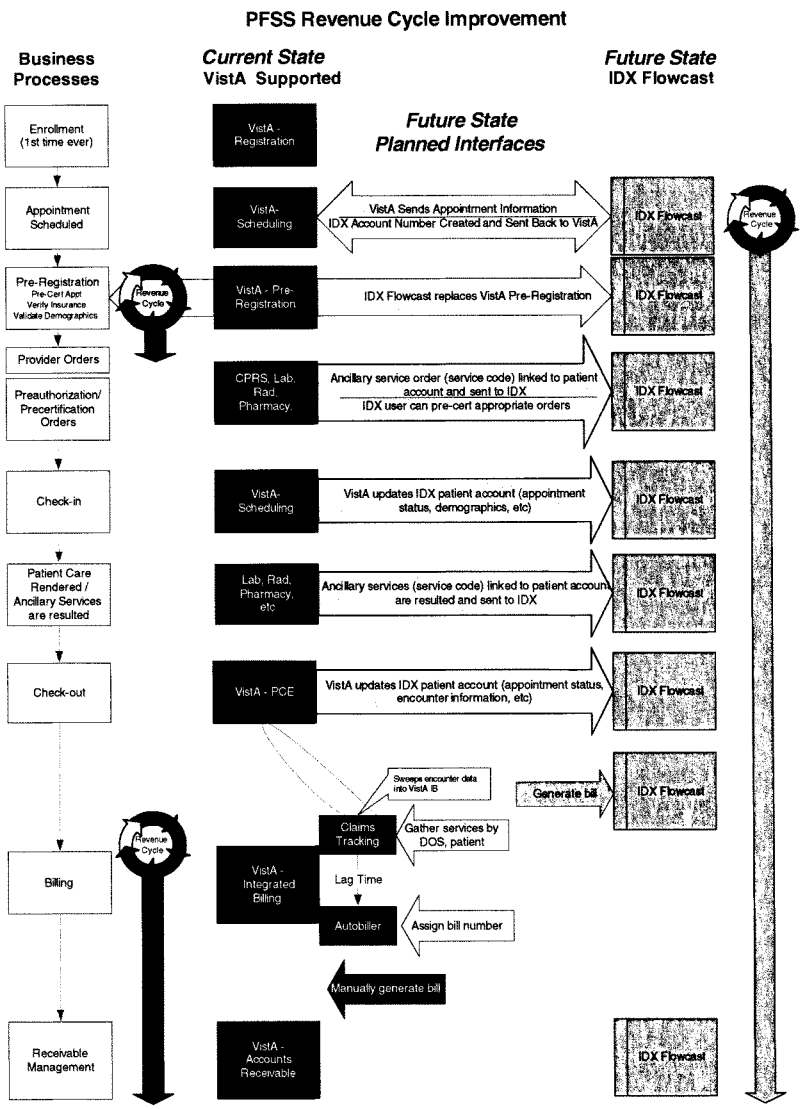
A fundamental requirement for success in this project is the partners' mutual commitment. It is well understood that resources are limited and that there are competing priorities for IT projects in the VA enterprise. To ensure success, we are partnering to address all challenges, establish priorities and ensure that we are all contributing the resources required to make PFSS a success. The Unisys team is focused on meeting or exceeding all performance objectives, and on working closely with the VA team to identify, communicate and address all potential issues as they arise.

While there are many areas which Unisys' performance, as the prime contractor, depends largely on our expertise, skill and decision-making, we likewise are highly dependent on our VA colleagues to implement key information system changes or other program components that are completely outside our control. We are fully committed to ensuring these dependencies are well understood and defined in a timely, thorough manner, so that our mutual goals and objectives can be achieved.

Conclusion

Mr. Chairman, in my testimony I have outlined the elements of the PFSS program and suggested ways to ensure its success. I look forward to working with you and the other members of the committee. PFSS is an essential component of the VA's efforts to re-engineer business processes, re-define personnel responsibilities and roles and use state of the art technology to facilitate those processes. For this project to be successful, we must have top/down commitment to providing necessary resources and to holding all parties accountable for delivering the expected and defined results.

Thank you for the opportunity to provide my comments to the subcommittee today. I look forward to your questions and comments.


PFSS Revenue Cycle Improvement
Business Processes
Current State
VistA Supported
Future State
IDX Flowcast
Future State
Planned Interfaces
Enrollment (1st time ever)
Appointment Scheduled
Pre-Registration
Pre-Cert Appt
Verify Insurance
Validate Demographics
Provider Orders
Preauthorization/ Precertification Orders
Check-in
Patient Care Rendered / Ancillary Services are resulted
Check-out
Billing
Receivable Management
Revenue Cycle
VistA - Registration
VistA- Scheduling
VistA - Pre-Registration
CPRS, Lab, Rad, Pharmacy,
VistA- Scheduling
Lab, Rad, Pharmacy, etc
VistA - PCE
Claims Tracking
VistA - Integrated Billing
Autobiller
VistA - Accounts Receivable
VistA Sends Appointment Information
IDX Account Number Created and Sent Back to VistA
IDX Flowcast replaces VistA Pre-Registration
Ancillary service order (service code) linked to patient account and sent to IDX
IDX user can pre-cert appropriate orders
VistA updates IDX patient account (appointment status, demographics, etc)
Ancillary services (service code) linked to patient account are resulted and sent to IDX
VistA updates IDX patient account (appointment status, encounter information, etc)
Sweeps encounter data into VistA IB
Generate bill
Gather services by DOS, patient
Lag Time
Assign bill number
Manually generate bill
IDX Flowcast

WRITTEN COMMITTEE QUESTIONS AND THEIR RESPONSES

Question for the Record
Honorable Steve Buyer
Subcommittee on Oversight and Investigations
House Committee on Veterans Affairs
March 17, 2004

Hearing on the VA's IT Programs

Question: At the hearing, reference was made to a Joint Strategic Plan that addresses information sharing between the two agencies, a plan that should lead to seamless medical records transfer. How do your agency's GPRA Strategic and Performance Plans link to this Joint Strategic Plan and how does that linkage devolve through the directly linked subordinate strategic and performance plans in your agency?

Response: The VA/DoD Joint Executive Council (JEC), with the purpose of documenting a strategic plan to guide collaboration between the Departments of Veterans Affairs and Defense, wrote the Joint Strategic Plan (JSP). The JSP contains Goal 4, *Integrated Information Sharing - Enable the efficient sharing of beneficiary data, medical records, and other information, through secure and interoperable information management systems.* JSP Goal 4 provides the framework by which VA and DoD will implement the activities associated with development of interoperable health records. VA's GPRA Plan (the VA Strategic Plan) contains multiple provisions in which the mandate to develop interoperable records is expressed and measured.

VA Strategic Plan, identifies use of interoperable health records as a performance measure to assess performance of VA's Strategic Goal Two, *Ensure a smooth transition from active military service to civilian life, which includes objective 2.1, Ease the reentry of new veterans into civilian life, by increasing awareness of and access to and use of VA health care, benefits, and services.*

- VA's performance goal 2.1 for FY2004 is to ensure that 90% of VA medical centers provide electronic access to DoD health information on separated service members; and
- VA's performance goal 2.1 for FY2008 is to ensure that 100% of the medical centers provide electronic access to DoD data).

VA Strategic Plan Goal Three, to *Honor and serve veterans in life and memorialize them in death for their sacrifices on behalf of the nation*, includes the following crosscutting strategy: "VA will continue its partnership with DoD to develop an interoperable VA/DoD medical information system and ensure the availability of veterans' active duty health records to VA care providers."

VA Strategic Plan Enabling Goal E.3, *Deliver world-class service to veterans and their families by applying sound business principles that result in effective management of people, communications, technology, and governance*, includes a section on collaboration with DoD: "VA and DoD will develop an interoperable information technology framework and architecture that will enable the efficient, effective, and secure interchange of records and information to support the delivery of benefits and services."

The entire VA Strategic Plan document can be located at this URL: http://www.va.gov/opp/organizations/planning.htm

In addition to the VA Strategic Plan, leadership within VA and DoD have further committed to implementing JSP goal 4 by creating an implementation plan that will guide the specific tasks and activities necessary to lead to interoperable health records. This implementation plan, the Joint Electronic Health Records Plan, which was signed by the VA Under Secretary for Health and the DoD Assistant Secretary of Defense for Health Affairs, contains a strategy to ensure that interoperable data repositories are developed, jointly-adopted standards are implemented into health systems, and interoperable health software applications are developed or acquired by the agencies. This Plan is jointly managed at the executive and project levels within each agency.

GAO
Accountability * Integrity * Reliability
United States General Accounting Office
Washington, DC 20548

May 14, 2004

The Honorable Steve Buyer
Chairman, Subcommittee on Oversight and Investigations
Committee on Veterans' Affairs
House of Representatives

Subject: *Computer-Based Patient Records: Subcommittee Questions Concerning VA and DOD Efforts to Achieve a Two-Way Exchange of Health Data*

Dear Mr. Chairman:

This letter responds to your April 7, 2004, request that we provide answers to questions relating to our March 17, 2004, testimony.[1] At that hearing, we discussed the Department of Veterans Affairs' (VA) and Department of Defense's (DOD) progress toward defining a detailed strategy and developing the capability for a two-way exchange of patient health information. Your questions, along with our responses, follow.

1. *How many times has the GAO testified on VA-DOD sharing of medical information in the last 10 years?*

In the last 10 years we have testified seven times on matters pertaining to VA's and DOD's efforts toward achieving the capability to electronically exchange patient health information. VA and DOD have been working to achieve this capability since 1998. Our testimony was delivered between October 2001 and March of this year, and is summarized in enclosure I.

Our statements at these hearings have highlighted significant challenges that VA and DOD have faced in pursuing ways to share data in their health information systems and create electronic medical records. Although noting the departments' ultimate success in sharing data through the one-way transfer of health information from DOD to VA health care facilities, as part of the Federal Health Information Exchange,[2] we

[1]U.S. General Accounting Office, *Computer-Based Patient Records: Sound Planning and Project Management Are Needed to Achieve a Two-Way Exchange of VA and DOD Health Data*, GAO-04-402T (Washington, D.C.: Mar. 17, 2004).

[2]When undertaken in 1998, the initiative to share patient health care information was called the Government Computer-Based Patient Record project. The project was renamed the Federal Health Information Exchange in 2002.

also detailed persistent weaknesses in the departments' actions toward achieving a two-way health data exchange—the focus of the HealthePeople (Federal) initiative. For example, our most recent testimony highlighted the limited progress that the departments had made toward establishing sound project management and defining a specific architecture and technological solution for developing the electronic interface that is fundamental to exchanging data between the individual health information systems that VA and DOD are developing.

2. *What recommendations have either VA or DOD implemented independently or cooperatively?*

VA and DOD have taken action on several recommendations that we have made over the past 3 years. These recommendations were aimed at improving the coordination and management of the departments' initial efforts to achieve electronic information sharing via the Government Computer-Based Patient Record (GCPR) project, and furthering DOD's development of its new health information system, the Composite Health Care System II. Our recommendations, along with the departments' actions to implement them, are summarized in enclosure II.

In particular, our prior reviews of the project to develop a government computer-based patient record determined that the lack of a lead entity, clear mission, and detailed planning to achieve that mission had made it difficult to monitor progress, identify project risks, and develop appropriate contingency plans. As a result, in reporting on GCPR in April 2001[3] and again in June 2002,[4] we made several recommendations to help strengthen the management and oversight of this project. VA and DOD agreed with and took actions that addressed all of these recommendations, including designating VA as the lead entity for the initiative, reevaluating and revising its original goals and objectives, and assigning a full-time project manager and supporting staff to oversee its implementation.

In addition, in September 2002 we reported on DOD's acquisition of the Composite Health Care System II.[5] DOD envisioned achieving a state-of-the-art automated medical information system that would lead to improved health-care decisions and lower medical and system costs through creating computer-based patient records that doctors and other health service providers would be able to access from any military treatment facility, irrespective of location. However, our review of the initiative noted, among other concerns, DOD's limited progress during early stages of

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[3]U.S. General Accounting Office, *Computer-Based Patient Records: Better Planning and Oversight by VA, DOD, and IHS Would Enhance Health Data Sharing,* GAO-01-459 (Washington, D.C.: Apr. 30, 2001).

[4]U.S. General Accounting Office, *Veterans Affairs: Sustained Management Attention Is Key to Achieving Information Technology Results,* GAO-02-703 (Washington, D.C.: June 12, 2002).

[5]U.S. General Accounting Office, *Information Technology: Greater Use of Best Practices Can Reduce Risks in Acquiring Defense Health Care System,* GAO-02-345 (Washington, D.C.: Sept. 26, 2002).

the system's development that led to a change in its redesign and development/deployment schedule. We recommended five actions aimed at increasing the project's likelihood of success, three of which have been implemented. DOD is in various stages of implementing the remaining two recommendations.

3. What is the total dollars spent by DOD and VA on their individual or collective efforts on the development of an interoperable medical record?

From fiscal year 1998, when VA and DOD began pursuing ways to share data in their health information systems and create electronic records for active duty personnel and veterans, through fiscal year 2003, the departments reported spending a total of about $670 million on their individual and collective efforts. As shown in table 1, this amount is attributable to the departments' joint actions on the Government Computer-Based Patient Record (GCPR) project and subsequently the Federal Health Information Exchange (FHIE) initiative, which have resulted in the one-way transfer of data from DOD's existing health information system (the Composite Health Care System) to a separate database that VA hospitals can access. The amount also includes the departments' reported expenditures for individual health information systems—VA's HealtheVet (VistA) and DOD's Composite Health Care System II—that each is currently developing and anticipates using to support the two-way exchange of health data as part of the HealthePeople (Federal) initiative.[6] However, through fiscal year 2003, VA and DOD did not report any costs associated with the critical tasks of defining and developing the electronic interface that is essential to achieving the two-way exchange of patient health information between these systems.

Table 1: Dollars (in millions) Spent by VA and DOD to Develop Electronic Health Information Systems and Sharing Capabilities through Fiscal Year 2003

			HealthePeople (Federal)		
Agency	GCPR	FHIE	HealtheVet VistA[a]	Composite Health Care System II	Total
VA	$27.8	$20.4	$120.0	0.0	$168.2
DOD	17.7	18.8	0.0	$464.0	500.5
Total	**$45.5**	**$39.2**	**$120.0**	**$464.0**	**$668.7**

Source: VA and DOD data.

[a] Veterans Health Information Systems and Technology Architecture

[6] DOD began developing CHCS II in 1997 and has completed its associated clinical data repository that is key to achieving the electronic interface. DOD expects to complete deployment of all of its major system capabilities by September 2008. VA began work on HealtheVet (VistA) and its associated health data repository in 2001, and expects to complete the six initiatives that make up this system in 2012.

4. *GAO testified that there had been very little progress since our last hearing in November 2003. How did VA and DOD explain this to you? When Congress scheduled its March 17, 2004, hearing, did GAO get the sense that this provided an incentive for the two departments to move forward on this issue?*

In discussing with VA and DOD their actions since last November toward achieving a two-way exchange of patient health information under the Health*e*People (Federal) initiative, officials in both departments expressed their belief that progress was being made. In response to our finding that the departments had not yet defined an architecture to describe in detail how specific technologies will be used to achieve the capability to electronically exchange data between their health information systems—a significant concern that we also raised in our November testimony—the officials stated that they had recently taken an important first step toward accomplishing this task.

In particular, VA and DOD officials referred to a pharmacy prototype project, undertaken in response to the Bob Stump National Defense Authorization Act for Fiscal Year 2003, to develop a real-time interface, data exchange, and capability to check prescription drug data for outpatients by October 1, 2004. According to VA's Deputy Chief Information Officer for Health, the departments hope to determine from the prototype, planned for completion by September 2004, whether the interface technology developed to meet this mandate can be used to facilitate the exchange of data between the health information systems that VA and DOD are currently developing. However, as our testimony noted, the departments had not fully defined their approach or requirements for developing and demonstrating the capabilities of the planned prototype. Further, since VA and DOD have not yet completed their new health information systems that are intended to be used under Health*e*People (Federal), the demonstration may only test the ability to exchange data in VA's and DOD's existing health systems—the Veterans Health Information Systems and Technology Architecture (VistA) and the Composite Health Care System (CHCS), respectively. Consequently, the early stage of the prototype and the uncertainties regarding what capabilities it will demonstrate provided little evidence or assurance as to how or whether this project would contribute to defining the architecture and technological solution for the two-way exchange of patient health information.

The information collected during our review of the Health*e*People (Federal) initiative suggests that the Subcommittee's scheduled hearing may have provided an incentive for VA and DOD to move forward on this issue. In conducting our review from December 2003 through March 2004, we observed that the level of activity undertaken by the departments to support the initiative increased significantly in the month preceding the hearing. For example, the departments' officials first informed us of their intent to rely on the planned pharmacy prototype to determine the technology interface for the two-way data exchange capability in early February; a contract for development of the prototype was finalized on February 27. Beyond these actions, VA and DOD began steps toward designating a program manager for

the pharmacy prototype project and establishing an overall project plan in the week before the hearing.

5. *GAO stated that success lies with the highest levels of project discipline, including a well-defined architecture and an established project management structure. At the present time, these criteria are absent. Is that correct? Please provide your recommendations on the top five priorities that need to be addressed in 2004.*

At the time of our testimony, these critical project components were absent from VA's and DOD's initiative to develop a two-way exchange of patient health information. Specifically, VA and DOD lacked a clearly defined architecture to describe how they planned to develop the electronic interface needed to exchange data between their health information systems. In addition, the departments had not fully established a project management structure to ensure the necessary day-to-day guidance of and accountability for their investments in and implementation of this capability.

Given the implications that an electronic interface can have for improving the quality of health care and disability claims processing for military members and veterans, the top five priorities that VA and DOD need to address in 2004 to increase the likelihood of a successful outcome are

- development of an architecture for the electronic interface that articulates system requirements, design specifications, and software descriptions;
- selection of a lead entity with final decision-making authority for the initiative;
- establishment of a project management structure (i.e., project manager and supporting staff) to provide day-to-day guidance of and accountability for the investments in and implementation of the electronic interface capability;
- development and implementation of a comprehensive and coordinated project plan that defines the technical and managerial processes necessary to satisfy project requirements and that includes the authority and responsibility of each organizational unit; a work breakdown structure and schedule for all of the tasks to be performed in developing, testing, and deploying the electronic interface; and a security plan; and
- implementation of project review milestones and measures to provide the basis for comprehensive management, progressive decision making, and authorization of funding for each step in the development process.

VA and DOD officials stated at the conclusion of our review that they had begun discussions to establish an overall project plan and finalize roles and responsibilities for managing the joint initiative to develop an electronic interface.

6. To your knowledge, has any major VA or DOD IT project ever been initiated with such criteria firmly established from the beginning?

To date, we have evaluated only a small portion of VA's and DOD's respective portfolios of information technology investments. Based on our work, we cannot point to any instances in which either department has initiated a major information technology project with a clearly defined architecture and sound project management having been established. At the same time, we are generally aware that DOD has held out certain projects undertaken by its component organizations as examples in which well-defined architectures and sound project management existed. However, we did not participate in, and therefore cannot comment on, the validity of those representations.

During our reviews of the Government Computer-Based Patient Record project, we did see evidence that implementing critical project management processes after a project has been undertaken can positively affect its outcome. As our testimony noted,[7] VA's and DOD's designation of clear lines of authority and a manager to provide day-to-day oversight helped strengthen overall project management and accountability and contributed to successfully achieving the transfer of patient health information from DOD to VA's medical facilities.

Agency Comments and Our Evaluation

We received comments orally and via e-mail on a draft of this correspondence from VA's Assistant Secretary for Information and Technology and DOD's Interagency Program Integration and External Liaison for Health Affairs. In commenting on our responses, these officials offered additional perspectives and suggested clarifications, which have been incorporated where appropriate. Both departments' officials disagreed with the way in which our response to question 4 characterized their progress toward developing a two-way electronic data exchange capability.

Regarding our response to question 1, VA and DOD officials commented that they have now designated a single manager for the electronic interface initiative. They have not yet, however, provided for our analysis any documentation on the project management structure and the manager's and supporting staff's roles and responsibilities for overseeing and ensuring accountability for this initiative.

Regarding our response to question 2, VA and DOD officials stated that both departments have cooperatively implemented our recommendations. Our response has been clarified to reflect that VA and DOD took actions that addressed all of our recommendations for improving management of the Government Computer-Based Patient Record project, and to reflect that DOD has implemented three of five recommendations that we made to improve its CHCS II project.

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[7]GAO-04-402T.

In commenting on our response to question 3, which addressed the total dollars spent by VA and DOD on developing an electronic medical record through fiscal year 2003 (the latest time frame for which we had complete information reported by the departments), both VA and DOD referred to initiatives other than GCPR, FHIE, and their individual health information systems, which they believed reflected work on developing the electronic data exchange capability. For example, both departments identified the pharmacy prototype as a critical effort toward developing an electronic interface for which resources were being expended. Our testimony, as well as this correspondence, acknowledges that the departments had taken action related to the pharmacy prototype. However, this initiative was not undertaken until late February of this year, which was outside of the time frame of the reported costs reflected in our response to the question. We have revised our response to more clearly reflect our use of cost information reported through fiscal year 2003.

Beyond the pharmacy prototype, VA stated that a number of other initiatives had also demonstrated progress toward achieving an electronic interface. It stated, for example, that the departments had contributed "in-kind" resources to efforts supporting the Consolidated Health Informatics initiative and internal standards boards within each department. However, VA did not provide any specific cost information for these actions.

Finally, in commenting on the reported costs, DOD suggested that we clarify the title of our table identifying the departments' expenditures, to better reflect that not all costs reported through fiscal year 2003 were directly attributable to achieving the two-way electronic health data exchange. We have revised the table to more clearly reflect the reported expenditures for GCPR, FHIE, and the departments' individual health information system initiatives.

Regarding our response to question 4, VA and DOD stated that they did not agree with our assessment that the departments' progress since November 2003 had been limited, or that most progress had been apparent just before the March hearing. Both departments cited their work related to the pharmacy prototype project as evidence of their progress toward developing the electronic interface. For example, DOD stated that although the departments may not have informed us, before last February, of their intent to rely on the pharmacy prototype to determine the technology for the electronic interface, a memorandum discussing the pharmacy data exchange strategy had been signed in October 2003. However, we were not provided with copies of any such documentation, and without information on such an activity, we cannot offer an assessment of any actions taken by VA and DOD on the pharmacy prototype earlier than February 2004—the point at which we were made aware that this prototype would be used to help define the electronic interface. Further, in its comments, VA said it continued to anticipate that the prototype would assist in determining an appropriate architecture for the electronic interface. Given the stage of the pharmacy project and the supporting documentation available to us when our review ended, our analysis determined that the departments lacked evidence as to how or whether the

project would contribute to defining the architecture and technological solution for a two-way exchange of patient health information.

Beyond the pharmacy prototype, VA cited numerous other initiatives involving the departments' existing health information systems (VistA and CHCS) and infrastructure that it considered to be evidence of progress. These included a project aimed at automatically sending to VA relevant electronic health information for patients sent to DOD for VA-paid care as veterans; and a data-sharing interface project, involving the use of VA's and DOD's existing health information systems to produce real-time, bidirectional exchange of clinically relevant data, including outpatient pharmacy, allergy, and patient demographic information at VA and DOD locations with medical sharing agreements. During our review, VA and DOD did not offer information on these initiatives or identify them as being part of the Health*e*People (Federal) strategy for an electronic two-way data exchange capability. Therefore, we are unable to make an assessment of these initiatives or how they relate to VA's and DOD's progress toward achieving the intended capability to electronically exchange patient data between the new health information systems—Health*e*Vet (VistA) and CHCS II—that the departments are developing.

In commenting on the response to question 5, the departments identified various actions that, in their views, addressed our identified priorities for disciplined project management. Regarding the development of an architecture to define the electronic interface, the departments anticipated that the pharmacy prototype would assist them in determining the appropriate architecture and emphasized their continued work on developing standards that will affect the interface requirements. Our testimony acknowledged the departments' actions on developing data standards, and also noted their plans for using the pharmacy prototype to determine the architecture for the electronic interface. As we pointed out, however, the early stage of the prototype and the uncertainties regarding what capabilities it would demonstrate provided little evidence or assurance as to how or whether the project would contribute to defining the architecture and technological solution for a two-way exchange of patient health information.

Regarding the selection of a lead entity with final decision-making authority for the electronic interface initiative, the departments stated that the VA/DOD Health Executive Council was serving in this capacity. VA added that this council provides a fully integrated body in which decisions are made and accountability for progress is provided for both departments. We agree that the Health Executive Council plays an important role in helping to ensure full accountability for the Health*e*People (Federal) initiative. Nonetheless, as established, this council meets on a bimonthly basis and is composed of senior VA and DOD leaders who work from a high-level, departmentwide perspective, to institutionalize all of VA's and DOD's sharing and collaboration on health services and resources. As our testimony noted, there is no one entity dedicated to making binding decisions for the Health*e*People (Federal) project. Our prior work on GCPR noted the importance of a lead entity to exercise final authority over the project, and VA and DOD demonstrated improvements in

managing GCPR as a result of implementing our recommendation that it establish such an entity.

On establishing a project manager and supporting staff to provide day-to-day guidance for the electronic interface initiative, VA and DOD cited their designation of a single manager with accountability and day-to-day responsibility for project implementation. However, as discussed, the departments have not yet provided documentation of the management structure that they have implemented, including information on the roles and responsibilities that the manager and supporting staff will have for the joint electronic interface initiative.

Regarding the development and implementation of a comprehensive and coordinated project plan for the electronic interface initiative, the departments stated that a project management plan had been developed for the pharmacy prototype. We agree that such a plan is necessary for the pharmacy prototype. However, it is also essential that the departments have a project management plan for the electronic interface initiative to define the technical and managerial processes needed to satisfy project requirements, and assign responsibilities, tasks, and schedules associated with developing, testing, and deploying the electronic interface between the new health information systems that VA and DOD are developing.

Further, regarding the implementation of project review milestones and measures for the electronic interface initiative, VA and DOD stated that the departments provide updates to the Health Executive Council and the Joint Executive Council. VA added that performance measures for interoperability are built into the joint strategic plan managed by the Joint Executive Council. As our March testimony noted, the Health Executive Council meets bimonthly to institutionalize sharing and collaboration of health services and resources, and the Joint Executive Council meets quarterly to recommend strategic direction of joint coordination and sharing efforts. VA and DOD did not provide any evidence to explain the levels of update being provided to these councils or how the councils' reviews address critical milestones and measures of the initiative's progress. In addition, our review of the joint strategic plan found that this high-level strategy established broad time frames and a general approach for achieving a health data exchange between VA and DOD, but did not articulate specific details regarding the incremental design and development of the electronic interface capability. For example, the strategy lacked specific milestones or measures that would enable the departments to track the status of their actions toward developing the interface at critical intervals in the project's life cycle.

Finally, in commenting on our response to question 6, VA officials stated that the department has implemented all of its major health information initiatives under the Veterans Health Information Systems and Technology Architecture. For its part, DOD stated that it is guided by a rigorous project management system, and cited our September 2002 report[8] in which we stated that the CHCS II initiative was generally

[8]GAO-02-345.

aligned with the Military Health System's (MHS) enterprise architecture. As noted, our evaluations have not identified any major initiatives that VA and DOD have begun with both a clearly defined architecture and sound project management already established. While our report on DOD's CHCS II noted that this system and the MHS architecture were generally aligned, it also highlighted deficiencies in the project's management during its early years. For example, performance-based contracting methods were not used to ensure contractor accountability.

In responding to these questions, we relied on past work related to our review of VA's and DOD's actions since last November toward defining a detailed strategy and developing the capability for a two-way exchange of patient health information. We reviewed our prior analyses of key documentation supporting the departments' strategy, including deployment and conversion plans, project schedules, and status reports for their individual health information systems. In addition, we reviewed documentation identifying the costs incurred by VA and DOD in developing technology to support the sharing of health data, including costs for the Government Computer-Based Patient Record and Federal Health Information Exchange initiatives, and with their ongoing projects to develop new health information systems. We did not audit the reported costs, and thus cannot attest to their accuracy or completeness. We conducted our work in accordance with generally accepted government auditing standards, during April 2004.

We are sending copies of this letter to the Secretaries of Veterans Affairs and Defense, and to other interested parties. Copies will also be available at no charge at our Web site at www.gao.gov.

Should you or your office have any questions on matters discussed in this letter, please contact me at (202) 512-6240 or Valerie Melvin, Assistant Director, at (202) 512-6304. We can also be reached by e-mail at koontzl@gao.gov and melvinv@gao.gov, respectively. Key contributors to this correspondence include Barbara S. Oliver, J. Michael Resser, and Eric Trout.

Sincerely yours,

Linda D. Koontz
Director, Information Management Issues

Enclosure I: GAO Testimony on VA-DOD Sharing of Patient Health Information

Testimony date/number	Summary of results
March 17, 2004 GAO-04-402T	VA and DOD had made little progress since November 2003 toward defining how they intended to achieve the two-way exchange of patient health information under the HealthePeople (Federal) initiative. While VA officials recognized the importance of an architecture to describe in detail how the departments would electronically interface their health systems, they continued to rely on a less-specific, high-level strategy—in place since September 2002—to guide the development and implementation of this capability. The departments intended to rely on a pharmacy prototype project undertaken in March 2004 to better define the electronic interface needed to exchange patient health data, but had not fully determined the approach or requirements for this undertaking. Thus, there was little evidence of how this project would contribute to defining a specific architecture and technological solution for achieving a two-way exchange of patient health information. These uncertainties were further complicated by the absence of sound project management to guide the departments' actions on the HealthePeople (Federal) initiative. Although progress toward defining data standards continued, delays had occurred in VA's and DOD's development and deployment of their individual health information systems, critical for achieving the electronic interface.
November 19, 2003 GAO-04-271T	The one-way transfer of health information resulting from VA's and DOD's near-term solution—the Federal Health Information Exchange (FHIE)—represented a positive undertaking and had enabled electronic health data from separated (retired or discharged) service members contained in DOD's Military Health System Composite Health Care System to be transmitted monthly to a VA FHIE repository, giving VA clinicians more ready access to DOD health data, such as laboratory, pharmacy, and radiology records, on almost 2 million patients. The departments' longer term strategy to enable electronic, two-way information sharing—HealthePeople (Federal)—was farther out on the horizon, and VA and DOD faced significant challenges in implementing a full data exchange capability. Although a high-level strategy existed, the departments had not clearly articulated a common health information infrastructure and architecture to show how they intended to achieve the data exchange capability or what they would be able to exchange by the end of 2005. Critical to achieving the two-way exchange was completing the standardization of the clinical data that the departments planned to share.
September 26, 2002 GAO-02-1054T	VA and DOD reported some progress in achieving the capability to share patient health care data under the Government Computer-Based Patient Record (GCPR) initiative. The agencies had, since March 2002, formally renamed the initiative the Federal Health Information Exchange and begun implementing a more narrowly defined strategy involving the one-way transfer of patient health data from DOD to VA; a two-way exchange was planned by 2005.
March 13, 2002 GAO-02-369T	VA had achieved limited progress in its joint efforts with DOD and the Indian Health Service to create an interface for sharing data in their health information systems, as part of GCPR. Strategies for implementing the project continued to be revised, its scope had been substantially narrowed from its original objectives, and it continued to operate without clear lines of authority or comprehensive, coordinated plans. Consequently, the future success of this project remained uncertain, raising questions as to whether it would ever fully achieve its original objective of allowing health care professionals to share clinical information via a comprehensive, lifelong medical record.

Testimony date/number	Summary of results
February 27, 2002 GAO-02-478T	DOD's and VA's numerous databases and electronic systems for capturing mission-critical data, including health information, were not linked, and information could not be readily shared. DOD had several initiatives under way to link many of its information systems—some with VA. For example, to create a comprehensive, lifelong medical record for service members and veterans and to allow health care professionals to share clinical information, the departments, along with the Indian Health Service, initiated the Government Computer-Based Patient Record (GCPR) project in 1998. However, several factors, including planning weaknesses, competing priorities, and inadequate accountability, made it unlikely that they would achieve a GCPR or realize its benefits in the near future. To strengthen management and oversight of the project, we recommended designating a lead entity with clear lines of authority for the project and the creation of comprehensive and coordinated plans for sharing meaningful, accurate, and secure patient health data. For the near term, DOD and VA had decided to reconsider their approach to GCPR and focus on allowing VA to access selected service members' health data captured by DOD, such as laboratory and radiology results, outpatient pharmacy data, and patient demographic information. However, GCPR would not provide VA with access to information on the health status of personnel when they entered military service; on medical care provided to Reservists while not on active duty; or on the care military personnel received from providers outside DOD, including those from TRICARE.*
January 24, 2002 GAO-02-377T	DOD improved its medical surveillance system under Operation Joint Endeavor. However, system problems included lack of a single, comprehensive electronic system to document and access medical surveillance data. Some DOD initiatives to improve information technology capability were several years away from full implementation. The ability of VA to fulfill its role in serving veterans and providing backup to DOD in times of war was to be enhanced as DOD increased its medical surveillance capability. GCPR was a joint DOD/VA initiative in conjunction with the Indian Health Service to link information systems. However, because of planning weaknesses, competing priorities, and inadequate accountability, it was unlikely that the departments would accomplish GCPR or realize its benefits in the near future. To strengthen management and oversight of the initiative, we again recommended designating a lead entity with clear lines of authority for the project and the creation of comprehensive and coordinated plans for sharing meaningful, accurate, and secure patient health data.
October 16, 2001 GAO-02-173T	DOD and VA were establishing a medical surveillance system for the health care needs of military personnel and veterans. The system was to collect and analyze uniform information on deployments, environmental health threats, disease monitoring, medical assessments, and medical encounters. We identified weaknesses in DOD's medical surveillance capability and performance in the Gulf War and Operation Joint Endeavor, and uncovered deficiencies in its ability to collect, maintain, and transfer accurate data. The department had several initiatives under way to improve the reliability of deployment information and to enhance its information technology capabilities, although some initiatives were several years away from full implementation. VA's ability to serve veterans and provide backup to DOD in times of war was to be enhanced as DOD increased its medical surveillance capability. GCPR was one initiative to link the departments' information systems. However, because of planning weaknesses, competing priorities, and inadequate accountability, it was unlikely that they would accomplish GCPR or realize its benefits in the near future. To strengthen management and oversight of the initiative, we recommended designating a lead entity with clear lines of authority for the project and the creation of comprehensive and coordinated plans for sharing meaningful, accurate, and secure patient health data.

Source: GAO.
*TRICARE is the Department of Defense's worldwide health care program for active duty and retired uniformed services members and their families.

Enclosure II: Actions Taken by VA and DOD on GAO Recommendations

Report date/number	Recommendations	Actions taken by VA and/or DOD
June 12, 2002 GAO-02-703	The Secretary of Veterans Affairs, to make significant progress beyond the current strategy for the government computer-based patient record, should instruct the Veterans Health Administration (VHA) undersecretary and VHA chief information officer, in cooperation with DOD and the Indian Health Service (IHS), to revisit the original goals and objectives of the Government Computer-Based Patient Record (GCPR) initiative to determine if they remain valid, and where necessary, revise the goals and objectives to be aligned with the current strategy and direction of the project.	The Department of Veterans Affairs (VA), in conjunction with DOD, implemented this recommendation. The departments reevaluated and revised the original goals and objectives of the GCPR initiative. A May 3, 2002, memorandum of agreement between VA and DOD established the Federal Health Information Exchange (FHIE), which replaced the GCPR initiative. As of mid-July 2002, all VA medical centers had access to FHIE data on over 1 million service personnel who separated between 1987 and 2001.
June 12, 2002 GAO-02-703	The Secretary of Veterans Affairs, to make significant progress beyond the current strategy for GCPR, should instruct the VHA undersecretary and VHA chief information officer, in cooperation with DOD and IHS, to commit the executive support necessary for adequately managing the project, and ensure that sound project management principles are followed in carrying out the initiative.	VA, in conjunction with DOD, implemented this recommendation. The departments committed the executive support necessary for adequately managing the GCPR project. They also ensured that project management principles were followed in carrying out the initiative. Specifically, in May 2002 VA and DOD signed a memorandum of agreement that designated VA as the lead entity in implementing the project (formally renamed FHIE). VA committed executive support for the project by way of monthly updates, given by the FHIE program manager, to the VA chief information officer, as well as quarterly updates to the joint VA/DOD Executive Council. In addition, VA procured and implemented project management software to better track the assignment and status of project tasks and initiatives.
September 26, 2002 GAO-02-345	The Secretary of Defense, through the Assistant Secretary of Health Affairs, should direct the Military Health System (MHS) chief information officer to give expanded use of best practices in managing CHCS II the attention and priority it deserves. At a minimum, the Assistant Secretary should direct the MHS chief information officer to, as part of the CHCS II deployment decisions, consider the aggregate impact on defense health affairs mission performance caused by the workarounds needed to compensate for all unresolved defects affecting the system's operational efficiency.	DOD implemented this recommendation. In late 2002, the program office produced a maintenance release for CHCS II that corrected many of the remaining bugs that required workarounds, and the limited deployment sites have that version. In addition, MHS has put a standard operating procedure in place to evaluate the effect of all workarounds required for new systems/versions before implementation. The standard operating procedure is part of the configuration control board procedures and the service components have agreed to these procedures. Finally, a test and evaluation master plan that addresses the aggregate impact of workarounds has been completed for the CHCS II release of functionality supporting general dentistry, and will be used as a template for future plans.

Report date/number	Recommendations	Actions taken by VA and/or DOD
September 26, 2002 GAO-02-345	The Assistant Secretary of Health Affairs should direct the MHS chief information officer to verify that the CHCS II inventory of risks is complete and correct, and report this to the Assistant Secretary for Health Affairs every 6 months, along with a report on the status of all top priority risks, including each risk's probability of occurrence and impact on mission.	DOD implemented this recommendation. The program office updated the risk management plan to require continuous risk management database updates and monthly risk reports. An initial 6-month report was provided to the Assistant Secretary in April 2003 that included the status of all program risks, with details on priority 1 risks, including probability of occurrence and impact on mission.
September 26, 2002 GAO-02-345	The Secretary of Defense should direct the Assistant Secretary of Defense for Command, Control, Communications, and Intelligence, who is the designated approval authority for CHCS II, to monitor the project's use of best practices, including implementation of each of the above recommendations, and use this information to oversee the project's movement through its acquisition cycle. To this end, the Assistant Secretary, or other designated CHCS II approval authority, should not grant any request for deployment approval of any CHCS II release that is not justified by reliable analysis of the release's costs, benefits, and risks.	DOD implemented this recommendation. The program office updated its cost-benefit analysis in September 2002, and the Naval Center for Cost Analysis validated the cost estimate. This was used to approve the limited deployment of a graphical user interface for clinical outpatient processes in January 2003, and is available for use by the milestone decision authority for the full deployment decision.
September 26, 2002 GAO-02-345	The Secretary of Defense, through the Assistant Secretary of Health Affairs, should direct the MHS CIO to give expanded use of best practices in managing CHCS II the attention and priority they deserve. At a minimum, the Assistant Secretary should direct the MHS CIO to define and implement incremental investment management processes to include (1) modifying the CHCS II investment strategy to define how this approach will be implemented; (2) justifying investment in each system release before beginning detailed design and development of the release; (3) requiring that such justification be based on reliable estimates of costs, benefits, and risks; (4) measuring whether actual return-on-investment for each deployed release is in line with justification forecasts; and (5) using actual return-on investment results in deciding whether to begin detailed design and development of the next system release.	Actions to implement this recommendation are ongoing. MHS has contracted with the Army Test and Evaluation Command and a private contractor to assess limited deployment sites and obtain data on initial benefits to support return-on-investment analyses. Deployments of the initial version of the system were delayed until fiscal year 2004; it is therefore unlikely that this recommendation will be fully addressed before the end of the fiscal year.

Report date/number	Recommendations	Actions taken by VA and/or DOD
September 26, 2002 GAO-02-345	The Secretary of Defense, through the Assistant Secretary of Health Affairs, should direct the MHS CIO to give expanded use of best practices in managing CHCS II the attention and priority they deserve. At a minimum, the Assistant Secretary should direct the MHS CIO to employ performance-based contracting practices on all future CHCS II delivery orders to the maximum extent possible, including (1) defining performance standards against which deliverables can be judged, (2) developing and using quality assurance plans that describe how contractor performance against the standards will be measured, and (3) defining and using contractor incentives and penalties tied to the quality plan.	Actions to implement this recommendation are ongoing. The program office received approval to begin acquiring commercial off-the-shelf software packages to develop prototype pharmacy/laboratory/radiology capabilities, and plans to conduct full and open competition contracts for these packages. A performance-based, firm fixed-price integration contract, with incentives, is being prepared and is expected to be awarded in the 3rd quarter of fiscal year 2004. As the program office re-negotiates the contracts for a graphical user interface for clinical outpatient processes and general dentistry, they will also be moved to this performance-based type of contract.

Source: GAO.

(310712)

Hearing Date: March 17, 2004
Committee: HVAC
Member: Chairman Steve Buyer
Witness: Mr. Reardon
Question #1

Question: The Federal Health Information Exchange (FHIE) provides patient record data from the current Composite Health Care System (CHCS) clinical. How long does it take after separation for this data to be made available to VHA/VBA?

Answer: Once the Military Health System has received the separation notice, it takes approximately 20 days for CHCS clinical data to be available to the VA.

Hearing Date: March 17, 2004
Committee: HVAC
Member: Chairman Steve Buyer
Witness: Mr. Reardon
Question #2

Question: Are there plans to shorten this time lag?

Answer: Recently the Military Health System (MHS) modified the data extraction process, shortening it from 45 days to approximately 20 days after the MHS receives the separation notice. It continues to look at opportunities to further shorten this time.

Hearing Date: March 17, 2004
Committee: HVAC
Member: Chairman Steve Buyer
Witness: Mr. Reardon
Question #3

Question: Are there other sources of individual/population health data being collected for deployed Service members?

Answer: Several sources are used to collect individual population health data on deployed Service members. These sources include: Composite Health Care System II-Theater, Global Expeditionary Medical System, Shipboard Automated Medical System, and compiled Disease Non-Battle Injuries. The collected data is then stored in a database on a classified network.

Hearing Date: March 17, 2004
Committee: HVAC
Member: Chairman Steve Buyer
Witness: Mr. Reardon
Question #4

Question: What plans are there to make that additional data available in the near term?

Answer: The Department of Veterans Affairs has access to the reports from Defense Information Operations. The reports provide population health data and are published on Defense LINK. The Military Health System is concurrently studying technical solutions to permit the transfer of this data into the Clinical Data Repository once it has been declassified.

Hearing Date: March 17, 2004
Committee: HVAC
Member: Chairman Steve Buyer
Witness: Mr. Reardon
Question #5

Question: What is the timeline for two-way data sharing and a complete lifetime patient record available to VA and DoD? What is being done in the interim to meet requirements?

Answer: The timeline for having the technology in place to permit bi-directional transfer of medical data is October 2005. The first set of information to be transferred includes demographic, pharmacy, allergy, and laboratory data.

In the interim, the Federal Health Information Exchange continues to send the following types of information to the VA:

- Demographic data
- Laboratory results
- Outpatient pharmacy data
- Allergy information
- Radiology results
- Discharge summaries
- Consult reports
- Admission, discharge and transfer information
- Standard Ambulatory Data Record

To date, DoD has transferred health information on more than 1.9 million separated service members to VA. This number continues to grow on a monthly basis.

Hearing Date: March 17, 2004
Committee: HVAC
Member: Chairman Steve Buyer
Witness: Mr. Reardon
Question #6

Question: On page 5 of your testimony, you stated "we have approved a VA/DoD Joint Strategic Plan to guide our future relationship." Please provide a copy to include milestone dates.

Answer: A copy of the DoD/VA Joint Strategic Plan is attached. Through the VA/DoD Joint Executive Council, the Departments are proceeding to review and update the plan.

VA/DoD Joint Strategic Plan

Introduction
Over the past twenty years, DoD and VA have collaborated to increase the sharing of resources and reduceethe cost of operations. A majority of this interaction has occurred in the delivery of health care. Today there are over 600 sharing agreements in place covering over 6,000 health care services.

In 1982, the VA/DoD Health Resources and Emergency Operations Act directed cost effective use of federal health care resources to minimize duplication of services and under use of federal facilities. In 1997, VA's Under Secretary for Health and the Assistant Secretary of Defense (Health Affairs) formed the VA/DoD Health Executive Council (HEC) to establish a high-level program of DoD/VA cooperation and coordination in a joint effort to reduce costs and improve health care for VA and DoD beneficiaries.

Building on the success of the HEC, in January 2002, VA's Under Secretary for Benefits and the Principal Deputy Under Secretary of Defense (Personnel and Readiness) established a VA/DoD Benefits Executive Council (BEC) to examine ways to expand and improve information sharing and refine the process of records retrieval and identify procedures to improve the benefits claim process.

In February 2002 VA's Deputy Secretary and the Under Secretary of Defense (Personnel and Readiness) convened a joint meeting of the co-chairs of both the Health Executive Council, the Benefits Executive Council and other Senior leaders at DoD and VA to further promote VA/DoD collaboration, provide guidance and policy direction on cooperative initiatives, enhance collaboration in other program areas, and resolve obstacles to sharing. This group was formally established as the VA/DoD Joint Executive Committee (JEC).

In May of 2002 the JEC embarked on a joint strategic planning effort to identify and develop additional sharing opportunities. The VA/DoD Joint Strategic Plan is the culmination of that effort. As co-chairs of the JEC, we the undersigned are committed to overseeing the implementation of this Joint Strategic Plan and achieving our shared *mission "To improve the quality, efficiency and effectiveness of the delivery of benefits and services to veterans, service members, military retirees and their families through an enhanced VA and DoD partnership."*

Dr. Leo S. Mackay Jr.
Deputy Secretary of Veterans Affairs

Dr. David S.C. Chu
Under Secretary of Defense
Personnel and Readiness

VA/DoD Joint Strategic Planning Initiative
4/15/03

Mission:

To improve the quality, efficiency and effectiveness of the delivery of benefits and services to veterans, service members, military retirees and their families through an enhanced VA and DoD partnership.

Vision Statement:

A world-class partnership that delivers seamless, cost-effective, quality services for beneficiaries and value to our nation.

Guiding Principles:

- *Collaboration-* to achieve shared goals through mutual support of both our common and unique mission requirements
- *Stewardship* - to provide the best value for our beneficiaries and the taxpayer.
- *Leadership* – to establish clear policies and guidelines for VA/DoD partnership, promote active decision-making, and ensure accountability for results

Strategic Goals:

Goal 1 Leadership Commitment and Accountability - Promote accountability, commitment, performance measurement, and enhanced internal and external communication through a joint leadership framework.

Goal 2 High Quality Health Care - Improve the access, quality, effectiveness and efficiency of health care for beneficiaries through collaborative activities.

Goal 3 Seamless Coordination of Benefits - Promote the coordination of benefits to improve understanding of and access to benefits and services earned by service members and veterans through each stage of life, with a special focus on ensuring a smooth transition from active duty to veteran status.

Goal 4 Integrated Information Sharing - Enable the efficient sharing of beneficiary data, medical records, and other information through secure and interoperable information management systems.

Goal 5 Efficiency of Operations - Improve management of capital assets, procurement, logistics, financial transactions, and human resources.

Goal 6 Joint Contingency/Readiness Capabilities - Ensure the active participation of both agencies in Federal and local incident and consequence response through joint contingency planning, training, and exercising.

Goal 1 Leadership Commitment and Accountability
Promote accountability, commitment, performance measurement, and enhanced internal and external communication through a joint leadership framework.

VA and DoD will establish a leadership framework to provide the necessary support for a successful partnership, help to institutionalize change, protect efforts from a loss of momentum, and sustain collaboration into the future. This framework will consist of the Joint Executive Council (JEC), the Health Executive Council (HEC), the Benefits Executive Council (BEC), and any other necessary sub councils or boards. Council membership will be comprised of senior leaders of both departments. The JEC co-chairs will develop a joint strategic plan to shape, focus, and prioritize the activities of the partnership, and ensure that clear and measurable performance targets are established. The JEC will oversee the implementation of the strategic plan, be responsible and accountable for the development and implementation of a communication plan to increase the exchange of knowledge and information between agencies and to external stakeholders.

1.1 Formalize the VA/DoD Executive Councils governance structure

1.1.1 Develop charter for the Joint Executive Council (JEC).
1.1.1.1 The Joint Strategic Planning Committee shall develop JEC Charter
a. Charter will include descriptions of membership, roles and responsibilities, chairmanship; frequency of meetings, decision-making process and staff support
i. Target Date: Charter approval: April, 2003
1.1.1.2 The JEC will specify charter requirements for HEC and BEC and other councils as determined
a. Charters will include descriptions of membership, roles and responsibilities, relationships with other Councils, chairmanship; frequency of meetings, decision-making process, description of the communications process between committees (including tasking) and staff support.
i. Target Date: HEC/BEC Charter approval: July 2003

1.2 Oversee the Development and Implementation of a Joint Strategic Plan

1.2.1 Develop and assign accountability for goals, objectives, strategies, and performance targets and maintain the strategic plan.
1.2.1.1 The Joint Executive Council shall:
a. Develop a Joint Strategic Plan
i. Target Date: July 2003
b. Review, revise and approve and communicate subsequent strategic plans annually.
ii. Target Date: March 2004
c. Perform periodic reviews of progress and achievements.
iii. Target Date: October 2004 and quarterly thereafter
d. Provide an annual report to the Secretaries of the respective
iv. Target Date: December 2003

1.2.1.2 The Joint Strategic Planning Council shall:

a. Review strategies and recommend adjustments/updates as necessary
   i. Target Date: January 2004 and semi-annually thereafter
b. Conduct quarterly reviews and make recommendations for corrective actions and improvements and submit recommendations at quarterly JEC meetings
   i. Target Date: September 2003
c. Provide an annual report to the JEC on current status of joint strategic planning
   i. Target Date: October 2003
d. Report on the feasibility of synchronizing the two Departments strategic planning cycles.
   i. Target Date: January 2004

1.3 Enhance internal and external communication regarding VA/DOD collaboration

1.3.1 Develop a joint communications plan to:

a. Promote VA/DoD collaborative initiatives within each Department
b. Educate internal and external stakeholders about joint VA/DoD initiatives
c. Provide periodic updates on accomplishments, new initiatives and other activities arising from VA/DoD collaboration
   i. Target Date: July 2003

Goal 2 High Quality Health Care
Improve the access, quality, effectiveness and efficiency of health care for beneficiaries through collaborative activities.

VA and DoD will expand the use of partnering and sharing arrangements to improve support to all beneficiaries. Collaboration will continue on the development of joint guidelines and policies for the delivery of high quality care and assurance of patient safety. VA and DoD will identify centers of excellence where specialized services can be made available to eligible beneficiaries; engage in joint training in multiple disciplines including ancillary services; and explore opportunities to enhance collaborative activities in Graduate Medical Education. Sharing research and development will be aggressively supported and encouraged. For dual beneficiaries, VA and DoD will seek to ensure that similar services are available and that the two systems are mutually supportive.

2.1 To be recognized as leaders in the development and delivery of innovative clinical processes and programs designed to enhance the quality of care delivered
The Health Executive Council shall develop collaborative processes in:

2.1.1 Reporting, training and other activities related to the promotion of patient safety and improved outcomes; and continue to work with other national agencies to assure patient safety and improved outcomes remain a primary focus for health care delivery systems.
    i. Target Date: Process and implementation plan: October 2003

2.1.2 Upgrading clinical practice guidelines, facilitating their communication to the field and monitoring their integration into the care delivery system on a periodic basis.
    i. Target Date: Process and implementation plan: October 2003.

2.1.3 Establish a VA/DoD Centers of Excellence working group to
    a. Define their nature and use
    b. Develop an inventory of existing Centers within each Department and the criteria used to establish them
    c. Identify their advantages and disadvantages
    d. Identify barriers and obstacles to their establishment and how they may be overcome
        i. Target Date: Report and recommendations completed: October2003.

2.1.4 Identify and foster opportunities for sharing information and resources between VA and DoD in the areas of deployment health surveillance, assessment, follow-up care, and health risk communication to include
    a. Pre-deployment health assessments
    b. Medical environmental and CBRNE surveillance during deployments
    c. Individual assignments and unit location during deployments
    d. Post-deployment health assessments and clinical practice guideline data
    e. Post-deployment briefings on VA benefits and services, particularly for those who served in a combat zone.
        i. Target date: July 2003

2.2 Actively engage in joint training and sharing of research and development
The Health Executive Council shall:

2.2.1 Explore and actively seek out opportunities for shared and/or combined Graduate Medical Education and develop a Pilot Program consistent with the provisions of P.L. 107-314 (National Defense Authorization Act of 2003).
- a. Develop and Implement Pilot Program
- b. Target Date: January '04
- c. Publish and disseminate initial lessons learned from the Pilot
- d. Target Date: July '04.
- e. Utilize the findings of the Pilot for the basis for the development of additional collaborative initiatives in joint GME programs.
  - i. Target Date: FY'05 and beyond.

2.2.2 Explore and actively seek out opportunities for shared and collaborative research initiatives by establishing criteria through the Deployment Health Work Group responsible to:
- a. Explore Military and Veteran related health research, to include deployment health issues.
- b. Identify opportunities for collaborative research and avoidance of duplicative efforts.
- c. Increase non-federal research funding in support of VA/DoD mission specific research.
- d. Establish a forum for the sharing of best practices in health research.
- e. Develop a mechanism to ensure the research outcomes are shared throughout the Departments.
  - i. Target Date: Report on findings and recommendations- January '04

2.3 Encourage continued development of sharing agreements that make the most efficient use of federal resources
The Health Executive Council shall:

2.3.1 Quantify and qualify where sharing agreements already exist (to include formal and informal partnership arrangements).
- i. Target Date: July 2003

2.3.2 Identify and disseminate [see 1.3 communications plan] best practices in VA/DoD Resource sharing
- i. Target Date: September 2003.

2.3.3 Establish criteria for administration and management of the Joint Incentive Fund to include:
- a. Assessing the legal administrative and fiscal implications of the Joint Incentive Fund as directed by P.L. 107-314
  - i. Target Date: July 2003
- b. Based on assessment above, develop criteria for the management of the Joint Incentive Fund to include the process by which funds will be awarded in support of sharing initiatives

i. Target Date: September 03

c. Establish targeted goals for increasing VA/DoD health care sharing by identifying additional opportunities for increased DoD/VA sharing activity, establishing targets, and reviewing and updating targeted goals on an annual basis. These goals shall include specific dollar volumes and/or transaction targets obtained through shared workload and bartering activities.
   i. Target Date: Goals determined by September '03 and updated annually
d. Establish a business case analysis process to assess the impact of VA/DoD sharing agreements on resource utilization, access to care, patient satisfaction and quality.
   i. Target Date: Implementation plan: October 2003.

Goal 3 Seamless Coordination of Benefits
Promote the coordination of benefits to improve understanding of and access to benefits and services earned by service members and veterans through each stage of life, with a special focus on ensuring a smooth transition from active duty to veteran status.

VA and DoD will enhance collaborative efforts to improve access to benefits; streamline application processes, eliminate duplicative requirements and correct other business practices that complicate the transition from active duty to veteran status. This will be accomplished through joint initiatives that: ensure wide dissemination of information on the array of benefits and services available to both VA and DoD beneficiaries; enhance educational programming on eligibility criteria and application requirements, increase sites providing Benefits Delivery at Discharge (BDD), improve the physical examination and claim process; and develop interoperable information management systems necessary for the administration and management of beneficiary claims.

This goal includes all benefits available to VA and DoD beneficiaries, including healthcare, educational assistance, home loans, disability compensation, pension, insurance, burial and memorial services.

3.1 Enhance collaborative efforts to educate active duty, reserve, and National Guard personnel on VA and DoD benefits programs, eligibility criteria and application processes.

The Benefits Executive Council shall develop implementation plans to:

3.1.1 Ensure wide dissemination of information on the array of Federal benefits and services available to both VA and DoD beneficiaries throughout the military personnel lifecycle with emphasis on active duty personnel at accession and separation.

3.1.2 Enhance communication and educational programming for active components on eligibility criteria and application processes necessary to access VA/DoD benefits at accession, periodically during active duty, and at separation.

3.1.3 Enhance communication and educational programming for reserve and National Guard personnel on eligibility criteria and application processes necessary to access VA/DoD benefits.

3.1.4 Promote participation in Transition Assistance Program (TAP) and Disabled Transition Assistance Program (DTAP) briefings for all separating service members, and explore development of online TAP/DTAP briefings and training on Federal benefits and entitlements in order to provide widest possible access to information and contacts for assistance.

3.1.5 Enhance collaboration between VA, DoD, Homeland Security, the Department of Labor and the individual states to ensure a comprehensive packet of information on federal benefits (including eligibility requirements) is provided to all VA and DoD beneficiaries.

i. Target Date: Implementation plan: October 2003 with annual reports thereafter.

3.2 Provide for a seamless transition from active duty to veteran status through a streamlined benefits delivery process.
The Benefits Executive Council shall:

3.2.1 Conduct an evaluation of the various components of the current BDD program, including an economic analysis, to determine effectiveness of, and recommendations for enhancing the program.
- i. Target Date: October 2003
  Suggested Performance Targets
  (i) Incremental increase from 60% (current rate) to 90%
  (ii) BDD program to account for 90% of CONUS separations by 2006.

3.2.2 Develop a physical examination protocol that is considered valid and acceptable for all Military Service separation requirements and acceptable for VA's disability compensation requirements.
- a. Provide the JEC an evaluation of current practices, the results of pilot studies, and recommendations regarding broader implementation of a "one physical examination" protocol.
  - i. Target Date: January 2004
- b. Assess and report on resource requirements for full implementation.
- c. Target Date: March 2004
- d. Develop an implementation plan to ensure separating service members undergo a single physical examination that meets service separation requirements and is acceptable for VA's disability compensation requirements.
  - i. Target Date: June 2004

3.2.3 Develop an online benefits application process that allows service members to submit applications directly to the appropriate federal agency. This tool should be available to members stationed in CONUS and OCONUS.
- a. Application tool online
  - i. Target Date: October 2004
- b. Market on-line application and monitor utilization
  - i. Target Date: FY 2004
- c. 100% of online applications will have electronic eligibility verification
  - i. Target Date: October 06

3.3 Provide for the seamless transfer of beneficiary data between VA and DoD to expedite all benefit and entitlement processes.
The Benefits Executive Council shall make recommendations to

3.3.1 Ensure the timely transfer of complete and accurate benefit eligibility information regardless of media
- i. Target Date: January 2004

3.3.2 Define data requirements for electronic transfer of standardized and validated VA benefit eligibility information target
- i. Target Date: January 2004

3.3.4 Define requirements for electronic availability of future Service Medical Records
- **i.** [Placeholder June 2004]

Goal 4 Integrated Information Sharing

Enable the efficient sharing of beneficiary data, medical records, and other information through secure and interoperable information management systems.

VA and DoD will develop an interoperable information technology framework and architecture that will enable the efficient, effective, and secure interchange of records and information to support the delivery of benefits and services. The emphasis will be on working together to reduce redundant applications and procedures and make access to services and benefits easier and faster.

4.1 DoD and VA will improve the interoperability of their enterprise architectures to support sharing of timely, consistent, health, personnel and business data.
The Health Executive Council and Benefits Executive Council shall:

4.1.1 Report on the status of current level of interoperability between VA and DoD information systems that support health, personnel and business operations
- i. Target Date: October2003.

4.1.2 Identify joint information needs and assess current availability of information.
- i. Target Date: October 2003

4.1.3 Develop Implementation plan to attain full interoperability with intermediate milestones, as appropriate
- i. Target Date:
  - a. Health: October 2003
  - b. Personnel: January 2004
  - c. Business: October 2004

4.1.4 Achieve full Interoperability
- i. Target Date:
  - a. Health: September 2005
  - b. Personnel: September 2008
  - c. Business: September 2008

4.2 Adopt common data standards to facilitate greater interoperability
The Health Executive Council shall

4.2.1 Adopt initial set of health data standards
- i. Target Date March 03 (completed)

4.2.2 Adopt additional health data standards and updates as available
- i. Ongoing

The Benefits Executive Council in coordination with the Health Executive Council, shall:

4.2.3 Assess current Military Personnel data standards in support of benefits and entitlement determinations; develop new standards as appropriate; and, implement/use standards.
- i. Target Dates
  1. Assessment by October 2003
  2. Establishment of requirements of new standards Jan 2004
  3. Implementation by 2nd qtr 2007

The Health Executive Council and Benefits Executive Council shall:

4.2.4 Assess current Business data standards (financial, personnel, logistics) to facilitate interdepartmental business transactions.
- i. Target Date: April 2004

4.3 Increase the effectiveness and efficiency with which separating and separated military member data is transferred from DoD to VA.
The Health Executive Council and Benefits Executive Council shall:

4.3.1 Enhance existing technical capability (Federal Health Information Exchange (FHIE)) to transfer separating military members health data from DoD to VA, while maintaining appropriate security
- i. Target Date September 03

4.3.2 Demonstrate new technical capability (Clinical Data Repository (CDR)/Health Data Repository (HDR)) to exchange all appropriate health data between DoD and VA while maintaining appropriate security.
- i. Target Date: September 05

4.3.3 Design, develop, and test enhancements to existing systems for exchanging separating military data to include creating an environment whereby individual personnel demographic data is shared between DOD's personnel systems and VA's Registration and Eligibility System.
- i. Target Dates: October 05

4.4 Create an environment whereby personnel demographic data is shared between DoD and VA to support the delivery of services of both organizations
The Benefits Executive Council shall:

4.4.1 Create a single shared DoD/VA personnel data repository with a bi-directional electronic feed between VA and DEERS Data repositories
- i. Target Date: September: 2004 (Prototype)
- ii. Target Date: September, 2005 (full implementation)

4.4.2 Create necessary integration points so VA legacy systems are added and that appropriate technologies are in place to migrate to the DIMHRS integration points.
- i. Target Date: System Requirement Definitions March 2004

4.5 Develop Plan to Share Information Needed by VA to Support the Claims Adjudication Process
The Benefits Executive Council shall

4.5.1 Establish an Information Sharing Task Force to develop a plan to automate the collection of supporting documentation process so that the necessary information is received in a timely and accurate manner. The plan shall address
- a. What information is needed to process a claim
- b. Where the information is located
- c. How the information is stored
  - i. Target Date: Establish Task Force July 2003
  - ii. Target Date: Plan July 2004

4.5 **Develop and document the information technology infrastructure to support the Objectives listed above, to include telecommunications interconnections and security, which include individual identification for information access, such as Public Key Infrastructure (PKI) solutions.**
The Joint Executive Council shall:

4.5.2 Perform an assessment of VA and DoD technology infrastructures
   i. Target Date: Complete assessment September 2003

4.5.3 Develop an implementation plan for VA and DoD to have in place an appropriate technology infrastructure to support the Objectives listed above.
   i. Target Date: Implementation Plan complete: January 2004

Goal 5 Efficiency of Operations
Improve management of capital assets, procurement, logistics, financial transactions, and human resources.

VA and DoD will enhance the coordination and management of business processes and practices through improved coordination in the planning and managing capital assets; leveraging the Departments' purchasing power; maximizing the recovery of funds due for the provision of health care services; developing complementary workforce plans; and designing methods to enhance the coordination of other key business functions.

5.1 VA and DoD will improve coordination in planning and managing capital assets in order to enhance long-term partnering and achieve cost savings

5.1.1 The JEC will establish a Capital Coordination Process that will provide joint policy recommendations and monitoring of capital asset planning to ensure an integrated approach to capital coordination between VA and DoD, to include.
- a. Identifying high-priority sites that represent the best opportunities for potential VA/DoD partnerships in facility sharing.
  - i. Target Dates
    1. Process established: September 2003
    2. First Quarterly report to JEC: January 2004

5.2 VA and DoD will improve collaboration in the acquisition of commodities and services related to health care.
The Health Executive Council shall:

5.2.1 Conduct an assessment of VA and DoD processes related to the acquisition of goods and services and make recommendations to achieve joint operational and business efficiencies.
- i. Target Date: October 2003

5.2.2 Continue to enhance and implement acquisition and procurement processes to include converting all DoD Distribution and Pricing Agreements (DAPAs) to VA Federal Supply Schedule contracts (FSS)
- i. Target Date: DAPA Conversion-December 2004

5.2.3 Develop a plan to implement standard purchasing of medical/surgical supplies and high-tech equipment, dental, laboratory, x-ray, and prosthetics to leverage joint purchasing power.
- i. Target Date: January 2004

5.2.4 Establish a common electronic catalog for all items under contract
- i. Target Date: Plan to the JEC-October 2003
- ii. Target Date: Implementation TBD by the JEC

5.2.5 Provide input to the Joint Communications Plan (Goal 1.3.1) to improve communication and education promoting the use of joint acquisition and procurement programs.
- i. Target Date: July 2003

5.2.6 Evaluate the pilot project involving DoD's use of VA's Consolidated Mail Outpatient Pharmacy Program and make recommendations concerning potential expansion

i. Target Date: July 2003

5.3 VA and DoD will collaborate to improve the efficiency and effectiveness of financial transactions between the two Departments

The Health Executive Council shall

5.3.1 Develop interfaces between the Departments' financial systems, in order to increase standardization and to improve the accuracy and timeliness of payments

i. Target Date July 2004

5.3.2 Enhance collaboration efforts to share collection information in order to reduce duplicate payments and decrease staff time spent on debt management activities.

i. Target Date: July 2004

5.4 VA and DoD will develop methods to facilitate recruitment, retention, and potential sharing of personnel in positions critical to the Departments' complementary missions.

The Health Executive Council and the Benefits Executive Council

5.4.1 Identify the mission-critical positions common to both Departments and the number of staff needed in each of these positions during the next 3 to 5 years.

i. Target Date: Identify positions September 2003

5.4.2 Develop and implement human resource strategies to fill mission-critical positions in both Departments

i. Target Date: January 2004 (plan)

ii. Target Date: TBD by JEC (implementation)

Goal 6 Joint Contingency/Readiness Capabilities
Ensure the active participation of both agencies in support of the VA/DoD Contingency Plan and National Response Plan.

VA and DoD will enhance collaborative efforts in support of the VA/DoD Contingency Plan and the National Response Plan, to include the National Disaster Medical System (NDMS). This collaboration includes coordinating individual agency response plans and supporting local, state, regional, and national incident management systems. VA and DoD will also collaborate in the training and education of health care responders; and identify opportunities to provide medical readiness training and platforms for first responders and military medical personnel.

6.1 The Health Executive Council shall establish a Contingency Response Work Group to:

6.1.1 Oversee the Departments' collaborative efforts with respect to incident and consequence management.
- i. Target Date: July 2003 (establish workgroup)
- ii. Target Date: ongoing (oversight)

6.1.2 Support the development of the National Response Plan through participation in existing national/federal forums to include:
- a. Catalogue DoD/VA linkages in support of federal incident and consequence management planning
  - i. Target Date: September 2003
- b. Provide recommendations regarding opportunities for joint actions in support of the National Response Plan
  - i. Target Date: January 2004
- c. Collaborate with other Federal partners to enhance all components of the NDMS to reflect current and future requirements
  - i. Target Date: Quarterly report October 2003

6.1.3 Review and update the VA/DOD Hospital Contingency Plan to reflect current and future requirements to include:
- a. Review current and future requirements for hospital-based care for casualties returning from a military deployment or for casualties generated as a result of a domestic homeland security incident.
- b. Assess utilization of TRICARE Network, as it would impact on requirement for VA support of DOD and of the NDMS system.
- c. Review current medical regulating processes.
- d. Integrate the Integrated CONUS Medical Operations Plan (ICMOP) into VA/DOD contingency planning, and VA/DOD contingency planning into NDMS planning for support of military casualties.
- e. Review comprehensive VA involvement in care of selected DOD casualties that would not return to duty.
- f. Review the portion of the NDMS that supports war- time casualties and its relationship with ICMOP, VA/DOD contingency planning and NDMS operations.
  - i. Target Date: Initial Report January 2004
  - ii. Target Date: Final Report TDB by JEC

6.1.4 Coordinate Departmental directives to implement DoD and VA responsibilities identified in the National Response Plan.
   i. Target Date: October 2003

6.1.5 Provide semiannual reports to the Joint Executive Council on the status of joint initiatives in support of the National Response Plan.
   i. Target Date: Initial JEC Report October 2003.

6.2 Collaborate in the training and education for incident and consequence management.
The Health Executive Council shall:

6.2.1 Identify common training requirements and joint training opportunities for medical personnel participating in incident and consequence management.
   i. Target Date: Status report October 2003
   ii. Target Date: Implementation Plan TBD

6.2.2 Develop clinical practice guidelines for incident and consequence management
   i. Target Date: Status Report October 2003

6.2.3 Develop continuing education programs and other information products (e.g., satellite broadcasts, pocket guides) to enhance incident and consequence management training and emergency preparedness for DoD/VA personnel involved in contingency response activities and provide an annual report
   i. Target Date: Report on joint training initiatives: January 2004

Hearing Date: March 17, 2004
Committee: HVAC
Member: Chairman Steve Buyer
Witness: Mr. Reardon
Question #7

Question: On page 8 of your testimony, you stated that, "DoD and VA are also leading partners in many national standards development efforts." To date, which standards have been agreed upon?

Answer: DoD and VA are lead partners in the Consolidated Health Informatics project, one of the 24 eGov initiatives supporting the President's Management Initiative. To date, the adopted standards are:

- Logical Observation Identifier Names and Codes (LOINC) for laboratory result names
- Health Level 7 (HL7) for clinical messaging
- National Council on Prescription Drug Programs (NCPDP)
- Digital Imaging Communications In Medicine (DICOM) for digital imaging
- Institute of Electrical and Electronics Engineers (IEEE) 1073 for connectivity of medical devices to computers.

Work continues toward adoption of additional standards in support of this effort. We anticipate an announcement by the Department of Health and Human Services on additional standards this quarter.

The Military Health System has membership on technical committees for standards development organizations such as the: American National Standards Institute/Health Informatics Standards Board, American Society for Testing and Materials, Health Level 7, Accredited Standards Committee X 12 Electronic Data Interchange, and National Council for Prescription Drug Program.

Hearing Date: March 17, 2004
Committee: HVAC
Member: Chairman Steve Buyer
Witness: Mr. Reardon
Question #8

Question: On page 9 of your testimony, you stated "Additionally, DoD and VA share information on a quarterly basis with the Office of Management and Budget on the status of DoD/VA Joint Electronic Medical Care Interoperability Plan." Please specify all information shared in the last four quarters of 2004.

Answer: Over the last four fiscal quarters DoD and VA have shared the following information with the Office of Management and Budget on the status of DoD/VA Joint Electronic Health Care Records Plan:

Federal Health Information Exchange (FHIE) – Update on progress to deploy additional enhancements which provide VA: discharge summaries, admission, discharge and transfer, cytology reports, allergy, consult reports, outpatient mail order and retail network pharmacy data, and Standard Ambulatory Data Record data.

Credentialing - Update addressed the following:

- Identification of the common data elements to be exchanged between the DoD and VA credentialing systems.
- Development of an application for testing.
- Approval by the VA/DoD Health Executive Council of the test sites:
  - Naval Hospital Great Lakes/North Chicago VA/Edward J. Hines VA Hospital
  - Ireland Army Community Hospital (Ft. Knox, KY)/Louisville VA
  - Mike O'Callaghan Federal Hospital (Nellis AFB, NV)/Las Vegas VA
- Testing of the Centralized Credentialing Quality Assurance System/VetPro credentialing solution is still ongoing, with evaluation to be completed in 3rd Quarter Fiscal Year (FY) 2004.

Scheduling - Information provided addressed the following:

- Sharing technical requirements to ensure interoperability between DoD and VA scheduling solutions. This will allow providers to see all appointments a patient might have scheduled at both VA and DoD facilities and, where authorized, to schedule appointments in each other's clinics.
- Joint evaluation of technical requirements indicates a greater than 90 percent match in ambulatory scheduling requirements.
- VA completed the requirements gathering phase and initial construction of its application is underway.
- DoD awarded a contract for the Enterprise Wide Scheduling and Registration project for a commercial-off-the-shelf (COTS) product.

- VA completed coding of Resource Set-Up and Make-Appointment (RSA), the core components of the VA Scheduling Replacement application.
- The DoD-VA Interoperability Work Group is developing the requirements for achieving interoperability between the DoD COTS and the VA RSA module.

Lab Data Sharing and Interoperability (LDSI) – Information covered the following:

- This project supports the ability of VA and DoD to use one another as reference laboratories electronically, using secure encryption services for order entry and result return, for inclusion in the patient's electronic health record.
- Departments completed successful testing of the software in Hawaii.
- Signed Systems Interconnection Agreements for the interface between DoD and VA systems.
- LDSI software permitting VA to initiate lab requests for filling at DoD labs has been tested and is available for installation at all VA medical centers.
- Successfully completed release of software supporting VA ability to initiate lab requests for filling at DoD labs. Expansion in DoD's Region 6 is scheduled in 2nd quarter FY 2004.
- Development of software permitting DoD to initiate the request for filling at VA labs began December 1, 2003. The Departments are exploring several test sites for testing this additional capability.

Development of CHCS II and HealtheVet-VistA - Interoperable Data Repositories

- The Departments continue to work to ensure interoperability between the DoD Clinical Data Repository (CDR) and the VA Health Data Repository (HDR). This working integrated project team (WIPT), known as the CHDR, continues to meet on a monthly basis. The following has been accomplished:
  - Defined key functional and technical areas such as: architecture, standards, information management/data quality, functional, program management, and information assurance/privacy.
  - Began reviewing technical architecture options for supporting data sharing.
  - Shared CHCS II functional requirements.
  - Completed the documentation of CHDR business rules scenarios.
  - Actively exploring re-use of FHIE technical architecture and other alternative solutions to support other shared initiatives.
  - Demonstrate the exchange of patient demographics and pharmacy data in testing environment by October 2004. The prototype will test the proposed architecture and demonstrate the data exchange capabilities.
  - Completed an acquisition strategy for prototype development.
  - Jointly prepared a draft Statement of Work in preparation for selection of a vendor to build the pharmacy prototype.
  - Completed the draft Concept of Operations to include the business rules to support the exchange of health information.
  - Completed a draft Systems Requirements Specification.

- Conducted CHDR In-process Review (IPR) with joint agency leadership to review progress.

Collaboration on Standards Development

- Through the CHI effort, the Departments finalized adoption of the following standards:
  - Logical Observation Identifier Names and Codes (LOINC) for laboratory results
  - Health Level (HL) version 2.4, XML encoded for messaging
  - National Council on Prescription Drug Programs (NCPDP)
  - Digital Imaging Communications In Medicine (DICOM) for digital imaging
  - Institute of Electrical and Electronics Engineers 1073 for connectivity of medical devices to computers.
- VA and DoD participated in the Markle Foundation's Connecting for Health initiative meetings held in Washington, DC, in January. One of the outcomes of that meeting was the identification of context management as an area requiring standardization. CHI endorsed the adoption of the standard for context management to enable a variety of standards-based application integration capabilities.
- VA and DoD continue to work on enterprise architectural development boards and standards groups for DoD CHCS II and VA HealtheVet-VistA.
- Prepared final Vocabulary Domain standards for Lab Domain Interventions/Procedures and Lab Result Content to be voted on at a July meeting.
- The Departments moved closer to finalizing a recommendation to adopt the Systematized Nomenclature of Medicine (SNOMED) set of standards as the agreed upon framework for clinical terminology.
- CHI has identified a target portfolio of 24 clinical domains. Teams for 22 of 24 domains are in place. These teams are in various stages of review and analysis.
- Standards for six more domains have been approved and cleared for final adoption by the full CHI council.
- Each Department continues to develop and identify internal standards, such as architecture, that will support future enhancements to software applications.
- DoD and VA have completed an updated mapping of their respective business activities architectures and standards comparison report in order to facilitate their continuing collaboration.

Consolidated Mail-Outpatient Pharmacy

- The Departments have concluded testing and are now in production of the prototype of a system that supports VA's refilling of outpatient prescription medications from DoD's Military Treatment Facilities at the option of the beneficiary.
- The Departments are conducting a pilot test where VA CMOP-Leavenworth is refilling outpatient prescription medications from DoD's Military Treatment Facilities at the option of the beneficiary. The DoD sites are Naval Medical Center, San Diego, CA; Fort Hood Army Community Hospital, Killeen, TX; and 377th Medical Group, Kirtland AFB, NM.

- The Departments have reviewed analysis of the joint DoD/VA CMOP Pilot prepared by Center for Naval Analysis (CNA). The CNA report is inconclusive on whether the CMOP program is cost-effective for DoD.

Clinical User Interfaces

- The Departments continue to explore jointly developed requirements for a unified user interface to support interoperability between CHCS II and HealtheVet-VistA.
- The Departments are working to develop an architecture that will enable integrated views of health data.

E-portal Systems

- Collaborating on a joint acquisition of health content for their electronic web portal systems to provide uniform patient health information to beneficiaries of both Departments.
- VA recently procured their health and wellness content from Healthgate Data Corporation, providing to MyHealtheVet access to the same 18 million pages of content used by DoD's TRICARE Online.
- DoD TRICARE Online is deployed and supports over 97,500 registered users.
- VA successfully released the first version of MyHealtheVet on Veterans Day, November 11, 2003.

Status of CHCS II

- DoD continues development and fielding of its computerized patient record and the establishment of its clinical data repository and clinical data warehouse.
- The Assistant Secretary of Defense (Command, Control, Communications and Intelligence) signed the Acquisition Decision Memorandum January 28, 2003, certifying that the CHCS II program is being developed in accordance with applicable laws, regulations, and policies and authorizing the limited deployment of CHCS II Block 1 in FY 2003.
- An Acquisition Decision Memorandum was signed on June 13, 2003, permitting the procurement of infrastructure hardware and end user devices in preparation for CHCS II worldwide deployment approval.
- Limited deployment of CHCS II Block 1 was completed at Tinker AFB. Fort Eustis, VA; Naval Medical Center Portsmouth, VA; Goodfellow Air Force Base, TX; and Fort Bliss, TX.
- Training for limited deployment sites was completed. 531 providers have been trained on CHCS II. There were 80,876 outpatient encounters produced in October; 60,695 in November; and 75,336 in December. On average, 82% of outpatient encounters at the limited deployment sites are produced using CHCS II.
- An Acquisition Decision Memorandum for CHCS II Block 1 worldwide deployment was signed on November 17, 2003. Deployment will begin in January 2004 and last over a 30-month period.

- Activities for worldwide deployment started with 20 functional site surveys conducted at facilities slated for deployment early in the schedule.

Status of VA HealtheVet-VistA

- VA continues development of the HDR Prototype, to include work on architecture, security, and clinical domain validation.
- VA completed an award of Phase II deliverables to the same contractor system-integrator as Phase I.
- VHA completed and published its HDR Technical Strategy document.
- VHA HDR team began work to obtain an Interim Authority to Operate (IATO) from the VA Office of Cyber Security. The IATO will ensure that the HDR Prototype meets all technical security provisions necessary to maintain system integrity.
- VA demonstrated successful transmission of data between a VistA test system and an early HDR prototype.
- VA architects and developers met and reached a final decision on the architecture that will support HealtheVet-VistA systems.
- VA is re-hosting and re-architecting several of the VistA applications to take advantage of the availability of commercial tools and the relational data model. Some of the applications to be reengineered include billing replacement systems, pharmacy, scheduling, CPRS, imaging, blood bank modernization, and laboratory package upgrading software.
- The HDR team identified and delivered to the commercial developer all trigger event code sets for building; the HDR team also began installation and adjustment of prototype software applications at three prototype test sites: Martinsburg, Heartland East and Salt Lake City.
- VHA architects documented health information architectural requirements for a service-based architecture. A service-based architecture will more closely support lines of business and improve overall management of health information within the VA.
- The HealtheVet Desktop was released and has been loaded in all the required test sites.
- The Clinical Documents/Practice Integration track of CPRS-R has now been started. The CPRS-R team conducted some requirement gathering sessions with providers and the output is now being analyzed.
- With the expiration of the vendor contract, the VA HDR team made necessary adjustments to the underlying code and began development of internal applications and conducted load testing.

Hearing Date: March 17, 2004
Committee: HVAC
Member: Chairman Steve Buyer
Witness: Mr. Reardon
Question #9

Question: At the hearing reference was made to a Joint Strategic Plan that addresses information sharing between the two agencies, a plan that should lead to seamless medical records transfer. How do your agency's GPRA Strategic and Performance Plans link to this Joint Strategic Plan and how does that linkage devolve through the directly linked subordinate strategic and performance plans in your agency?

Answer: In accordance with the Government Performance and Results Act, the Military Health System (MHS) has a Strategic Plan and uses the Balanced Scorecard approach to define operational objectives and measure performance against the plan. One of the key objectives is to "improve interoperability with partners." This high level linkage to the Joint VA/DoD Strategic Initiative devolves to the MHS Information Management/ Information Technology (IM/IT) Program's Strategic Plan as the objective to "improve the VA/DoD sharing of beneficiary data, medical records, and other information through secure and interoperable information management systems." In turn, performance plans support implementation of the MHS IM/IT Strategic Plan, the MHS Strategic Plan, and the VA/DoD Joint Strategic Plan.

Post Hearing Questions for Mr. Macies (UNISYS)

Question 1:

How does UNISYS intend to differentiate between service and non-service connected care for billing purposes?

Answer 1:

The determination of service and non-service connected care for billing purposes is the sole responsibility of the VA following the then current policies and procedures for that determination. The capture of the service or non-services determination occurs primarily at the time the services is being provided and is captured in the clinical VistA systems. Unisys has not received the time line that OI plans to automate the capture of the service and non-service related transactions in VistA.

Question 2:

The VA Medical Center in Tampa found a solution to this important aspect of billing for services. Does UNISYS intend to visit this facility?

Answer 2:

Unisys is always interested in existing solutions. In coordination with the VA, Unisys has contacted the MCCF Coordinator at Tampa to learn how we can benefit from their experience. In a preliminary discussion, we have found that their claims development unit researches all cases regarding service connection. When they come across a service connection which might be ambiguous or unclear they run a HINQ and then contact the Regional Office for clarification on the condition and rating. If they get clarification, they load the new eligibility information. Our understanding is that they have developed and implemented a business process improvement that is complementary to the automation provided by PFSS. It is our plan to visit Tampa and further explore their process and asses how it can best be incorporated into the PFSS environment.