

In my current assignment as the Commanding General, Tripler Army Medical Center, Hawaii, and the United States Army Pacific Command Surgeon, I am somewhat in awe at being designated as the DOD spokesman. However, I am very pleased to have the opportunity because telemedicine and telehealth initiatives are vital to the mission of my medical center. To say that I am the DOD spokesperson does exaggerate my accountability with the Department. So to be safe, I should at this point go with the standard disclaimer, which says my information does not necessarily reflect the views of the Department or the Secretary of Defense.

I am most pleased to be participating in the congressional Ad Hoc Committee on Telehealth forum. This event acknowledges the vision and support congressional representatives have offered to enhance the applications of information technology to healthcare in general with special emphasis on clinical practice.

Within the Department of Defense, and most particularly in the Pacific, there are significant distances, time zone disparities, and geographic boundaries that present challenges to the delivery of patient care. In the Pacific, a variety of both public and private sector agencies are involved in health care services, with the overall goal to transcend time, distance, and structural barriers to provide quality healthcare to Department of Defense beneficiaries. Because of our global role, it is incumbent that the Department of Defense work collaboratively to afford responsive health care services, and this challenge can only be addressed with innovative technology and telecommunication solutions. Hence, I would like to illustrate a few examples from my Hawaii experience, on how the linkage between information, knowledge, and technologies have enhanced access to health care services and improved the quality of care rendered.

Tripler Army Medical Center is the only Department of Defense tertiary care medical treatment facility in the Pacific. Tripler serves the health care needs of more than 750,000 active-duty military, their families, military retirees, retiree families and other Pacific island beneficiaries. Using the systems developed through Department of Defense, such as the Composite Health Care System II, or CHCSII, Corporate Executive Information System or CEIS, AKAMAI, and the Pacific Medical Network or PACMEDNET, have enabled us to improve the quality of care and access to health services for our beneficiaries.

Healthcare information systems and telehealth applications within the Department of Defense strive to accomplish the following 5 goals: Keep Active Duty forces on the job; Reduce the Military Health System skill mix and size in staffing model; Increase productivity of the direct care component; Enhance and measure health and fitness of beneficiaries, and lastly, Promote and measure customer satisfaction with Information Technology.

The healthcare information management initiatives within the Department of Defense focus on research and the value of information and telehealth applications along with implementation of automation support to enhance patient care delivery. I can attest that information management support provided by systems such as the CHCSII, CEIS, and the telehealth support from Akamai and PACMEDNET, have provided significant readiness and humanitarian implications for regional care in the Pacific. Being responsible for delivery of healthcare to a region as big as the Pacific—which encompasses 70 countries and 14 time zones—requires me to use and support the development of technology tools. These technology tools and

clinical capability offer tremendous opportunities for reuse by other federal agencies, as well as transferability to private sector agencies.

As stated earlier, healthcare information technologies are an essential element of health care services within the Department of Defense because of the need to overcome the dispersion of beneficiaries over great distances. The telehealth possibilities are highly opportunistic and provide a window on the future. Our technology is a means of demonstrating US engagement in other nations by providing a telepresence in other than US military medical treatment facilities. Specific benefits healthcare technology has offered Tripler Army Medical Center and the Pacific include:

Ability to provide a health profile for a person that will facilitate decision making by a provider who doesn't have access to a complete medical record.

We can integrate patient administrative and clinical data between multiple and diverse healthcare systems.

The same network and technology that provides information for diagnosing and treating patients can also be utilized for teaching via distance learning techniques.

Use of the Internet and web-enabled solutions has fostered a sense of community amongst clinicians and consumers by enabling information sharing, education, and collegial relationships.

From my perspective as a military medical center commander and the Command Surgeon, healthcare information technologies contribute to the readiness and health care delivery mission. I mention this as a single mission because the role of military medicine is to stay trained and ready for contingency operations that directly support the US military. The business of health care in and of itself is not our focus. It is the link between readiness and health care delivery that makes military medicine vital to our nation. The linkage between readiness and health care is good business for the military.

Through the application of information systems and telehealth technologies, the quality of care and utilization of scarce medical resources are positively effected thereby improving both military readiness and health care delivery. Utilization of information systems and telehealth applications provides immediate access even when specialists are not on site. For example, Tripler will be interpreting echocardiograms from Yokoto, Japan and Guam. This can be life saving information if you are talking about the patient's need for surgery or the functioning of the heart after a heart attack. These technologies also project medical specialty expertise without deploying them from the medical center. This saves significant dollars by not taking the medical specialist away for a minimum of two days travel to do a day's work. In addition, for those clinicians who are forward deployed, this access to specialists decreases their professional isolation and improves their decision-making ability. In some cases there is the added benefit of eliminating the need to air-evac patients for definitive care and continuity of care is maintained at their home station.

Healthcare information technologies are good new stories for the Department of Defense but the potential is in its infancy. Only by working with our partners in other government agencies, industry, and academia, will we be able to maximize the investment in technology by increasing its utility and clinical efficacy. In closing, my goals for attending the congressional Ad Hoc Steering Committee on Telehealth Demonstration and Briefing are twofold:

To communicate the reality of the technological solutions currently available within

the Department of Defense to provide quality health care and improve access;

And second, to encourage networking among the congressional supporters, speakers, attendees, and exhibit presenters to further maximize our capabilities. As we share information and establish relationships with one another I am sure our collective efforts will produce more and better applications of the technology than what is already here. Ideas for future integration and information management technologies should be the most valuable outcome of today's activities. I hope most of you will be staying through the day and spending time in the exhibit area. Many of the leading edge health care technology companies have displays, as well as Department of Defense, Veterans Administration, and Indian Health Service enterprises. Individually as well as together we are all involved in re-engineering health care processes to incorporate emerging technologies!

I am very pleased to be sharing the podium with distinguished leaders from Congress, the military, government service, and industry. Those of us in the military know that it is only through the vision and support of Congressional representatives that the Department of Defense has progressed to our current level of sophistication in healthcare information technologies and telehealth. Ladies and Gentlemen, I challenge you to continue to exploit the capabilities in healthcare information technologies; to capitalize on the improvements it can offer the business practice of patient care, and to nurture the positive and sustained impact of technology on enterprise value. I encourage you to take advantage of the sense of community the Internet enables by sharing your ideas and solutions with fellow government, industry and academic colleagues.●

#### TRIBUTE TO DR. SYLVIO L. DUPUIS

● Mr. SMITH of New Hampshire. Mr. President, I rise today to pay tribute to Dr. Sylvio L. Dupuis, Executive Director of McLane, Graf, Raulerson and Middleton Law Firm, for receiving Business NH Magazine's 1999 Business Leader of the Year Award. Dr. Dupuis received this honor due to his outstanding civic involvements coupled with his exemplary leadership in the business world.

Dr. Dupuis took the position of Executive Director in April of 1996. His philosophy of personalization—solving problems with an interview rather than a phone call or a memo—has given him and his law firm an excellent reputation. Under his capable and inspiring leadership, the firm grew from fifty lawyers to eighty. Dr. Dupuis will retire from the McLane Law Firm in June of 1999 but will continue to have an active role in community affairs. The McLane, Graf, Raulerson and Middleton Law Firm is sure to miss Sylvio's leadership.

Besides being one of the most talented and well-established businessmen in the state, Dr. Dupuis has countless other achievements in virtually every facet of New Hampshire life. He has been widely involved in areas ranging from health care to the arts. He is the former President and CEO of Catholic Medical Center, the former Commissioner of the Department of Insurance

for New Hampshire, the former President of New England College of Optometry and he has served with distinction, as the Mayor of Manchester, New Hampshire.

I commend Dr. Dupuis for his outstanding leadership and shining example. His varied professional experience shows him to be the ideal representative of New Hampshire business. I wish him the best as the new President of Notre Dame College in Manchester, New Hampshire. I am proud to represent him in the United States Senate. ●

### 30TH ANNIVERSARY OF THE FIRST LUNAR LANDING

Mr. WARNER. Mr. President, I ask unanimous consent that the Senate now proceed to the immediate consideration of S. Con. Res. 46, submitted earlier today by Senators SHELBY and SESSIONS.

The PRESIDING OFFICER. The clerk will report.

The legislative clerk read as follows:

A concurrent resolution (S. Con. Res. 46) expressing the sense of Congress that the July 20, 1999, 30th anniversary of the first lunar landing should be a day of celebration and reflection on the Apollo-11 mission to the Moon and the accomplishments of the Apollo program throughout the 1960's and 1970's.

There being no objection, the Senate proceeded to consider the concurrent resolution.

Mr. SESSIONS. Mr. President, I rise today to offer a few thoughts about space, the vision that is needed to take us there, and to say a few words of appreciation on the anniversary of one of the greatest accomplishments in world history. First, I recognize and thank all the people—scientists, flight operations experts, administrators, maintenance experts, astronauts, and every other member of the NASA team and Apollo program—who worked so hard to make the successful launch and mission of Saturn V to the moon a reality and victory for America.

When President Kennedy announced his intentions to devote the resources and support to NASA that would be necessary to accomplish the monumental task of landing men on the surface of the moon, our space program was born. Up until that magnificent moment when Neil Armstrong let everyone watching and listening know that the "Eagle had Landed" and for many years afterward, our space program flourished and steamed ahead making great strides in nearly every area of space exploration. Unfortunately, in recent years, while marked by continuing and important scientific medical research and several noteworthy events, our space program has become stagnant in comparison to the growing and vibrant NASA of the past. I am one member of Congress who feels very strongly that too much remains to be learned and explored for our space program to remain in neutral any longer.

Mr. President, on the anniversary of one of our greatest accomplishments, we have slipped dangerously close to the edge. If we do not act, we may lose one or more of the most historically significant pieces of our space program in existence. I am proud to say that one of the last three of these great artifacts remaining from the Apollo Project—the Saturn V rocket—stands on the grounds of the U.S. Space and Rocket Center in Huntsville, Alabama. But the fact remains that this rocket is in need of restoration and protection. I join my colleague and fellow Alabamian, Senator SHELBY, as an original cosponsor of the resolution that has been introduced which calls upon the Congress to provide federal assistance to fund the much-needed restoration and protection projects for the Saturn V rocket at the U.S. Space and Rocket Center. This funding will enable this great monument to our space program to live on as an enduring symbol of America's greatness both here on earth and beyond. I call on my colleagues in Congress to lend the assistance that is needed to protect the great history of our space program.

Mr. President, as I stated earlier, I am one member of Congress who believes that NASA embodies many of the most important qualities of our nation. We are a nation of explorers and inventors—proud, hardworking and brave. Our legacy as a nation is one of unmatched proportion. We must do our part to continue to build upon the past for the benefit of our future generations.

Mr. President, safe, reliable, low-cost transportation has been the key to the development of frontiers from the dawn of time. Ocean-going vessels enabled the discovery of the New World and initiated global commerce. The stagecoach transported early settlers and cargo across the untamed American West, and the transcontinental railway opened up this new frontier to vast numbers of settlers. Today, modern airways are a critical element of international commerce.

Transportation has made it possible to explore and develop the frontiers that emerged throughout history. Thirty years ago it was a Saturn V rocket carrying three men to the moon. And now, transportation is again the driver as we boldly prepare to explore deeper and develop the largest frontier of all—the frontier of space.

As a nation of explorers, I would like to think that we see the opportunities for scientific research and new space industries as limitless in scope and benefit to mankind.

Consider the possibilities:

Manufacturing medicines that are far superior to drugs made on Earth.

Even today the work that is being lead by NASA and its Marshall Space Flight Center, in particular, in Microgravity Research is paying tremendous dividends. Already this research is saving lives. The research that will be conducted on the International Space Station will take us even farther.

Consider the possibility of Mining resources from orbiting bodies, or servicing large communications and remote sensing platforms in low earth orbit without bringing them back to Earth.

Consider: Generating cheap, clean power from the Sun, or exploring new worlds and safely, routinely and affordably transporting passengers to and from space.

It all sounds like science fiction today and it is because the current high cost of space transportation has locked the door to these opportunities. I believe that NASA is ready to start turning science fiction into science reality—to unlock the door to a new frontier of opportunity.

The problem is this, space launch is not fully and completely reliable as we want it to be and its costs have been very expensive. Current launch costs consume valuable NASA resources and limit the ability to achieve its science and exploration goals. Only the highest priority science payloads are being launched and human exploration is on hold until we can solve this problem of launch costs.

Launch costs have also slowed the commercial development of space. While the U.S. space program faces new challenges to its decades long, global leadership position, the U.S. commercial space launch industry has dwindled from complete market dominance in the mid-1970's to only 30% on a greatly expanded worldwide market today. The United States has lost 70% of market share to the Russians, to the French, and to the Chinese. Several factors including foreign government subsidization and the constant optimization of 30 year old technology by foreign firms are at the heart of a problem this Congress ought to solve—now!

While improvement and evolution of existing systems and technologies are necessary in the face of ever increasing competition abroad, it will take a revolution to open the space frontier and enable the development of space. Our investments in launch technology have been sporadic over the years, resulting in high costs and small, incremental improvements in launch safety and capability. Today, many entrepreneurs realize the significance of the expanding commercial space marketplace, but are left to solve the hard problem of access to low Earth orbit with just their innovative spirit and today's technology.

We have had a rash of failures of expendable launch vehicles recently; 6 of the last 8 launches have been failures. Still, NASA continues to fly the Space Shuttle safely. But that safety record comes at a high cost to the people at United Space Alliance, NASA Kennedy, Marshall, and Johnson Space Flight Center (JSC).

Space launch is expensive because of complex systems that require extensive checkout and human intervention. Small margins result in high maintenance and replacement. Flight hardware reuse is limited. Launch facilities