

VA Health Care: An Amazing Transformation

By **Jonathan H. Gardner**

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I am honored to receive the George W. Romney Institute of Public Management's N. Dale Wright Distinguished Alumnus Award. Many family members and friends are here to celebrate this event. I would like to thank the faculty and students for this recognition. My graduate school experience was meaningful; it prepared me to make a contribution. I have learned that as a public servant I can make a difference and that a government organization can be truly effective.

I want to introduce an organization currently setting the industry standard for quality healthcare. I am speaking of the government-run Department of Veteran's Affairs, Veterans Health Administration to which I have devoted the last twenty-six years of my professional life. The Veterans Health Administration is the largest health care system in the country, providing care to approximately eight million enrolled veterans at fourteen hundred sites with about a \$30 billion budget.

One hundred and fifty years ago, President Abraham Lincoln pledged the resources of the United States "to care for him who shall have borne the battle, and for his widow, and his orphan." The Veterans Health Care System fulfills our nation's commitment by treating honorably discharged men and women from our nation's military. They are among our nation's most cherished citizens, who literally answered their country's call to duty so you and I can enjoy our constitutional rights and freedoms.

When our nation's warriors return from the battle theater with broken bodies or wounded minds, many are discharged back to civilian life. These men and women face an uncertain future and require the love of their families and friends to help them heal. They deserve the best health care our nation can provide—administered by a health care system that understands the physical and mental trauma faced by those who have experienced combat. This health care system should assure the patient's medical record is portable and available in seconds anywhere in the country. The well-trained employees of this system should utilize the latest clinical practices and state-of-the-art technologies to provide effective, efficient, compassionate, and safe medical care. The system should promote good health as well as prevent disease to avoid future medical crises, thereby ensuring a higher quality of life for its patients.

The health care system I described is one you would probably attribute to a consortium of university-based medical centers like Harvard or Yale. Maybe you envisioned a large health care group sponsored by an industry-based insurance company like Kaiser Permanente or even a private health care system like Utah's own Intermountain Health Care.

I believe that many of us would agree that the state of health care in the United States needs improvement. In 1999, the Institute of Medicine issued a ground-breaking study titled, "To Err Is Human." It is found that up to 98,000 people died of medical errors in American hospitals each year. This means that approximately four percent of all deaths in the United States are caused by mistakes such as improperly filled or administered prescription drugs—a death toll exceeding that of AIDS, breast cancer, or even motor vehicle accidents.

Since then, studies have documented how a lack of systematic attention leads to medical errors, making appropriate treatment extraordinarily risky. When strong scientific evidence emerges about appropriate protocols and treatments, the health care industry is extremely slow to implement them. For example, there's little controversy over the best way to treat diabetes; it starts with keeping close track of a patient's blood sugar level. Yet if you have diabetes, your chances are only one out of four that your health care system will actually monitor your blood sugar level or teach you how to do it. According

to a Rand Corporation study, this oversight causes 2,600 diabetics to go blind every year and another 29,000 to experience kidney failure.

According to the same Rand study, Americans received evidence-based care or appropriate care from their doctors only about half of the time. The results can be deadly. On top of the 98,000 killed by medical errors, another 126,000 died from the doctor's failure to observe evidence-based protocols for just four common conditions: hypertension, heart attacks, pneumonia, and colorectal cancer.

A recent NBC news piece reported that the Veterans Health Administration now provides arguably the best health care in the country. You may remember the VA in the mid-1990s when its healthcare system was in deep crisis, and a quarter of its hospital beds were empty. The number of veterans utilizing the system was falling, as aging WWII and Korean Vets began to pass away. At the same time there was a mass migration of veterans from the snow-belt to the sun-belt, overwhelming hospitals in southern states, while northeastern states had empty wards. At that time we had no way of knowing whether our quality of care was great, good, or poor, because we did not measure performance.

While private sector health care systems were expanding outpatient clinics, the VA still required hospital stays for routine operations like cataract surgery. Our management system was so top-down and ossified that managers were required to seek permission from Washington for trivial expenditures like a computer cable costing less than \$10. At the same time, serious political and editorial voices were calling for the dismantling of the system. Many still thought of the VA hospitals as it was portrayed in the films *Article 99* and *Born on the Fourth of July*, with antiquated equipment, uncaring administrators, and incompetent staff.

But that all changed in the last decade. Consider the following: Who do you think receives higher-quality care, Medicare patients who are free to pick their own doctors and specialists, or veterans who either choose to go to a VA hospital or have no other options? An answer came in May 2003, when the prestigious *New England Journal of Medicine* published a study comparing veterans' health facilities on eleven measures of quality with fee-for-service Medicare. On all eleven measures, the quality of care in veterans' facilities proved to be significantly better.

Here's another fact. The *Annals of Internal Medicine* recently published a study that compared veterans' health facilities with commercial managed-care systems in their treatment of diabetes patients. In seven out of seven measures of quality, the VA provided better care. Pushed by large employers who were eager to know what they are buying when they purchase health care for their employees, an organization called the National Committee for Quality Assurance (NCQA) today ranks health care plans on seventeen different performance measures. These include how well the plans manage high blood pressure or how closely they adhere to standard protocols of evidence-based medicine such as prescribing beta blockers for patients recovering from a heart attack. Winning NCQA's seal of approval is the goal standard in the health care industry. Who do you suppose the 2005 winner was: Johns Hopkins? The Mayo Clinic? Massachusetts General? In every single category, the VA Health Care System outperformed the highest-rated private sector nongovernment hospitals.

In February 2006, *U.S. News & World Report* published an article titled "Military Might—Today's VA Hospitals Are Models of Top-Notch Care." The article concluded, "The care provided to 5.2 million veterans by the nation's largest health care system has improved so much that often it is the best around."

Outside experts agree that VA Health Care has become an industry leader in its safety and quality measures. Dr. Donald M. Berwick, president of the Institute for Health Care Improvement and one of the nation's top health care quality experts, praises the VA's information technology as spectacular.

What happened to veteran's health care? How did VA health care pull out of a downward spiral that gripped the organization in the mid '90s and a decade later increase its enrollment almost 100

percent and emerge as a national benchmark for quality of patient care? Let me suggest five strategies that made a difference:

First, a culture of patient safety was implemented system-wide that emphasized employee awareness, reporting, and accountability.

Second, the system was organizationally realigned from 172 independent medical centers, into twenty-two integrated health care networks of hospitals, nursing homes, and clinics providing fourteen hundred points of access.

Third, a national performance management system was developed to measure results. Employees at all levels within the organization were then held accountable.

Fourth, development and use of a computerized medical record was mandated system-wide to ensure that patient records were available to a practitioner at anytime and anywhere the patient chose to engage the system.

Fifth, the use of cutting-edge technology was encouraged and expected to be integrated within the system's electronic medical record.

1. Culture

The first strategy was to develop a culture of employee awareness, reporting, and accountability. This means that employees are encouraged to continually alert management of system failures without fear of retribution. We took lessons from NASA and hired a former physician astronaut to create a national office of patient safety that set standards and measured performance. He created a culture where error reporting was expected, not for punitive issues, but to enhance the safety and effectiveness of patient care within the system. When staff members make a mistake, they are expected to disclose the facts to management, their colleagues, and the patient. But they are also expected to share the information with the system nationally. To date more than 200,000 close call and error reports have been voluntarily filed by VA staff without anyone being punished, which means that 200,000 learning opportunities have been used to improve patient safety.

The VHA also uses root cause analysis and failure mode effect analysis tools in a formalized retrospective and prospective system review of the data. The outcomes of this analysis are shared nationally across the VA Health Care System so the same mistakes are not repeated. Patient safety is improved when medical staff learns from others' mistakes.

2. Organizational realignment

The VA Health Care System operated for decades by providing care to patients through 172 independently operated medical centers. We were an acute care system focused on inpatient or hospital care with little interest in outpatient care. Patient access was not a high priority. Patients needing care came to the hospital, which in many cases required hours of travel just to receive routine primary care from a doctor. Specialty patient care programs were unnecessarily duplicated in each hospital, with inappropriate staffing and poor patient outcomes.

In 1994, the VA Health Care System realigned its patient care delivery system into twenty-two integrated health care networks of hospitals, nursing homes, and clinics. Operational authority was decentralized from Washington, D.C., to the networks, making them the fundamental financial and accountability units of the system. Each network was expected to seek efficiencies and demonstrate cost reductions that were medically sound. Network and facility managers were empowered to make decisions locally.

Access to care for veteran patients is now considered a priority. Community-based outpatient clinics, which focused on primary and preventive health care, were opened across the country. We didn't want veterans to travel more than thirty minutes for a personal health care provider. We

achieved this goal; we now have fourteen hundreds sites geographically dispersed (a 350 percent increase) so veterans can easily access the system.

3. Measurement

The third strategy was the development of a national performance measurement system to assess care at all levels within the organization. Each year, a performance contract is created by a national performance measures workgroup. The workgroup comprises headquarters and field leaders, including clinicians and administrators who work collaboratively to prioritize measures for inclusion in the contract. The contract is signed by the under secretary and network leaders and then cascades to clinicians and managers throughout the system.

This contractual agreement includes clinical performance measures that are evidence-based clinical practice guidelines and prevention measures. It also includes performance measures in satisfaction, access, function, community health, and cost-effectiveness. Results of the VHA's performance are distributed within the VA and known to stakeholders such as Congress, veteran advocacy groups, and the Office of Management and Budget.

The VA has invested in an audit program to assess clinical performance. Using VA performance criteria, audits are performed by an independent external contractor under the External Peer Review Program to measure our performance with the clinical practice guidelines and prevention indicators.

How do we compare to the competition? One example of success is with the prevention indicator of pneumococcal vaccination of at-risk patients. In January 1995, the rate of pneumococcal vaccination in eligible VA patients was 29 percent. Today, it is 90 percent. Outside the VA, the rate averages below 55 percent. We have not only saved the lives of six thousand patients with emphysema, but we have cut hospitalizations in half for patients with community-acquired pneumonia.

Performance improvement has similarly occurred in the areas of disease treatment, such as coronary artery disease, heart failure, diabetes, and depression. We continue to outperform Medicare and non-VA, non-Medicare organizations in comparable performance quality indicators. The VHA has been proclaimed as the benchmark for heart disease treatment, according to a 2006 report from the American Heart Association statistics committee and stroke statistics subcommittee.

The quality of the Southern Arizona VA Health Care System, where I am the director, can also be assessed via the Joint Commission on Accreditation of Healthcare Organizations ORYX web site. The joint commission is an independent, nonprofit organization that evaluates and accredits more than fifteen thousand health care organizations and programs in the United States; it is the nation's predominant standards-setting and accrediting body in the health care field. As you can see, the Tucson VA has the highest quality rankings in Tucson, matched only by the Tucson Heart Hospital, which specializes in cardiac areas.

Veterans are increasingly more satisfied with their health care than the average American, according to an annual report on customer satisfaction that compare with Department of Veterans Affairs health care system with private-sector health care.

The American Customer Satisfaction Index, an independent survey of customer satisfaction within both the federal and private sectors, gave VA's inpatient care an eight-three rating on a one hundred-point scale. That's ten percentage points higher than the seventy-three rating achieved by the private-sector health care industry and nine percentage points higher than the average satisfaction rating for all federal services. The latest findings mark the sixth consecutive year VA's health care system has outranked the private sector for customer satisfaction.

4. Electronic records

The fourth strategy was the development and mandated use of an electronic patient medical record. Before the implementation of the VA Computerized Patient Record System or CPRS, a VA

patient's chart was only available at 60 percent of outpatient appointments. At two out of every five visits, the physician was relying on his or her memory to guide their medical decisions. Even with the chart available, reminders of immunizations and tests were buried deep within the page. If you wanted to conduct a quick pre-appointment quality analysis . . . forget about it!

The computerized medical record ushered in an era where all of the patient's information is available to the doctor, nurse, pharmacist, or allied health professional at any time or place. The electronic medical record provides automatic reminders to alert providers when immunizations and/or tests are due. The same system also reminds doctors to prescribe appropriate care for patients when they leave the hospital, such as beta blockers for heart attack victims or eye exams of diabetics. It also keeps track of which patients are for a flu shot, a breast cancer screen, or other follow-up care—a task virtually impossible to pull off using paper records. Allergy and drug interaction alerts automatically appear on the screen when medication orders are written by a physician and verified by a pharmacist. The computer does not perform the clinical work or make medical decisions; rather it allows the health care professional to utilize their experience and education to focus on the patient's medical issues with the added comfort of knowing the automated record is designed to watch for errors.

The electronic record also provides up-to-date information on disease state, medications, vital signs, and laboratory test results. In the absence of the medical record a doctor may have forgotten about a past problem or may not have an understanding of lab trends. If the patient should get seriously sick, it's not just one doctor who would be involved in his care. It is likely the patient will be seen by many doctors, including different specialists. How well these doctors communicate and work as a team matters a lot. The electronic medical record facilitates communication and coordination of care. The electronic medical record never forgets the patient or his medical story . . . and it's legible!

Medical records within the VA Health Care System are available more than 99 percent of the time and can be accessed from almost anywhere. The impact became evident during the Hurricane Katrina emergency. The VA was able to evacuate all patients from the New Orleans and Gulfport/Biloxi facilities with little or no disruption to their treatments. The receiving physicians at multiple nationwide locations did not have to guess about the patient's condition or history. Seamless patient treatment continued despite the hurricane. To my knowledge no other health care system in the country can make that claim.

Another benefit of electronic records became apparent last year when the drug maker Merck announced a recall of its popular arthritis medication Vioxx. VHA was able to identify which patients were on the drug in minutes and switch them to less dangerous substitutes within days. Similarly, in the midst of a nationwide flu vaccine shortage, the system has allowed the VHA to identify, almost instantly, those veterans who were in greatest need of a flu shot to make sure those patients had priority.

5. Technology

The fifth strategy involved leveraging the electronic medical record through the use of cutting edge technology. Let me illustrate.

In the late '90s, a VA nurse at an airport noticed the airline skycaps utilizing bar coding to track luggage. Applying this process to medication, she thought, might help nurses track when medications were given and could be used to ensure the right medication was given, at the right time, to the right patient. She had a great idea and management listened. Information technology developers were assigned and VA's Bar Code Medical Administration System or BCMA program was implemented system-wide.

Today, inpatients at VA hospitals wear barcoded wrist bands. When a nurse scans the patient's wrist band, the computer displays the patient's prescribed medications. The medications are scanned and the computer alerts the nurse if the patient is approved for the medication and if it is the right time to administer it. Its route is also tracked and any variance in time outside of the norm requires a reason

from the nurse before proceeding. The BCMA system also allows the nurse to record the medication's effectiveness as needed. Utilizing this technology has virtually eliminated medication-dispensing errors.

But the technology does not stop there. A second application utilizes robotic and other automated systems to fill and distribute both inpatient and outpatient prescriptions. When an outpatient requires a medication, the order can be placed by phone or email. It's then electronically verified against the patient's medical record and processed by one of eight national mail-out pharmacies. The pharmacies fill more than 230 million prescriptions annually with a failure rate of only seven in one million.

The third technology application utilized by the VA is its home-grown VISTA radiology program, which facilitates the integration of its imaging program with the electronic medical record. This means a veteran living in Big Spring, Texas, can have a CT scan done at a local VA hospital and have it transmitted to Tucson, Arizona, where it's read by radiology specialists. The interpretation is dictated into a voice activated system, which electronically places the Tucson radiologist's report directly into the Big Spring patient's medical record the same day. The Big Spring patient's primary care physician receives an alert simultaneously. The physician can view the image with a few key strokes while reading the Tucson interpretation. If it is a STAT reading, the whole process is completed within an hour. Routine reads are completed within twenty-four hours.

Leveraging the power of the electronic medical record improves patient care. For example, when a VA hospital in Kansas City noticed a rare form of pneumonia outbreak among its patients, its computer system quickly spotted the problem. All of the patients had been treated with the same bad batch of nasal spray.

The electronic medical record system developed by the VA is being used by public health care systems in Finland, Germany, and Nigeria. There is even an Arabic language system running in Egypt. VA health system practices are also currently being evaluated for use in the United Kingdom, Denmark, and Canada.

Let me conclude on the issue of cost. The VA health care system runs circles around Medicare in both costs and quality. Unlike Medicare, it's allowed by law to negotiate for deep drug discounts approaching 48 percent. Unlike Medicare, it provides long-term nursing home care and delivers some of the best quality health care in the United States with amazing efficiency. Between 1999 and 2003, the number of patients enrolled in VA health care increased 70 percent, yet funding (not adjusting for inflation) increased 41 percent. VA health care also reduced its staff by ten thousand employees during the same period of time. The VA has become the health care industry's best quality performer, and it has done so while spending less and less on each patient. The VA health care system has performed an amazing transformation and given taxpayers full value for their investment. The turnaround may point the way to solving America's health care crisis.

If I sound proud of the Veterans Health Care System, it's because I am. I am blessed to serve our nation and its heroes. My family, church, and this great educational institution, which has honored me with this award, instilled in me the value of service. Thanks to them I sought a career as a public servant that has given me the chance to make a contribution to this great country. If this presentation has inspired even one of you to seek a career in public service, and hopefully in the Department of Veterans Affairs, then I will be doubly blessed by this sincerely appreciated recognition.

Thank you and God bless.