



Introduction to VA Health Care System for

Gulf War Advisory Committee

June 17, 2008

Lawrence Deyton, MSPH, MD

Chief Public Health & Environmental Hazards Officer



***"To care for him who shall
have borne the battle and for
his widow and his orphan."***

-Abraham Lincoln, Second Inaugural address in 1865

Outline

- VA Health Missions
- Veterans Served – Demographics
- VA Eligibility Reform – Changes since 1996
- VA Electronic Health Record System
- Targeted Programs for Gulf War Veterans
- Questions

Department of Veterans Affairs

Major Organizational Units:

- **Veterans Health Administration (VHA)**
- **Veterans Benefits Administration (VBA)**
- **National Cemetery Administration (NCA)**

History

- Veterans programs date back to Colonial times
- VA created in 1930 as an independent agency
- Cabinet-level department created in 1989
- Major eligibility changes in 1996
- Now the 2nd largest Cabinet-level department (second to DoD)
 - Budget over \$87,000,000,000
 - VHA \$40 B, VBA \$37 B, NCA \$10B
 - 210,000 employees (health, benefits, memorials)

Missions of the Veterans Health Administration

- Medical care
- Graduate medical education
- Research
- Emergency preparedness

VHA Mission 1: Medical Care

The largest integrated healthcare system in US (FY07):

- 153 hospitals (17,593 beds, 4.9M BDOC)
- 135 nursing homes (33,649 ADC)
- 73 home care programs
- 47 domiciliary programs
- 209 veterans counseling centers
- 731 clinics (62.3 M outpatient visits)
- 210,702 employees in health care system

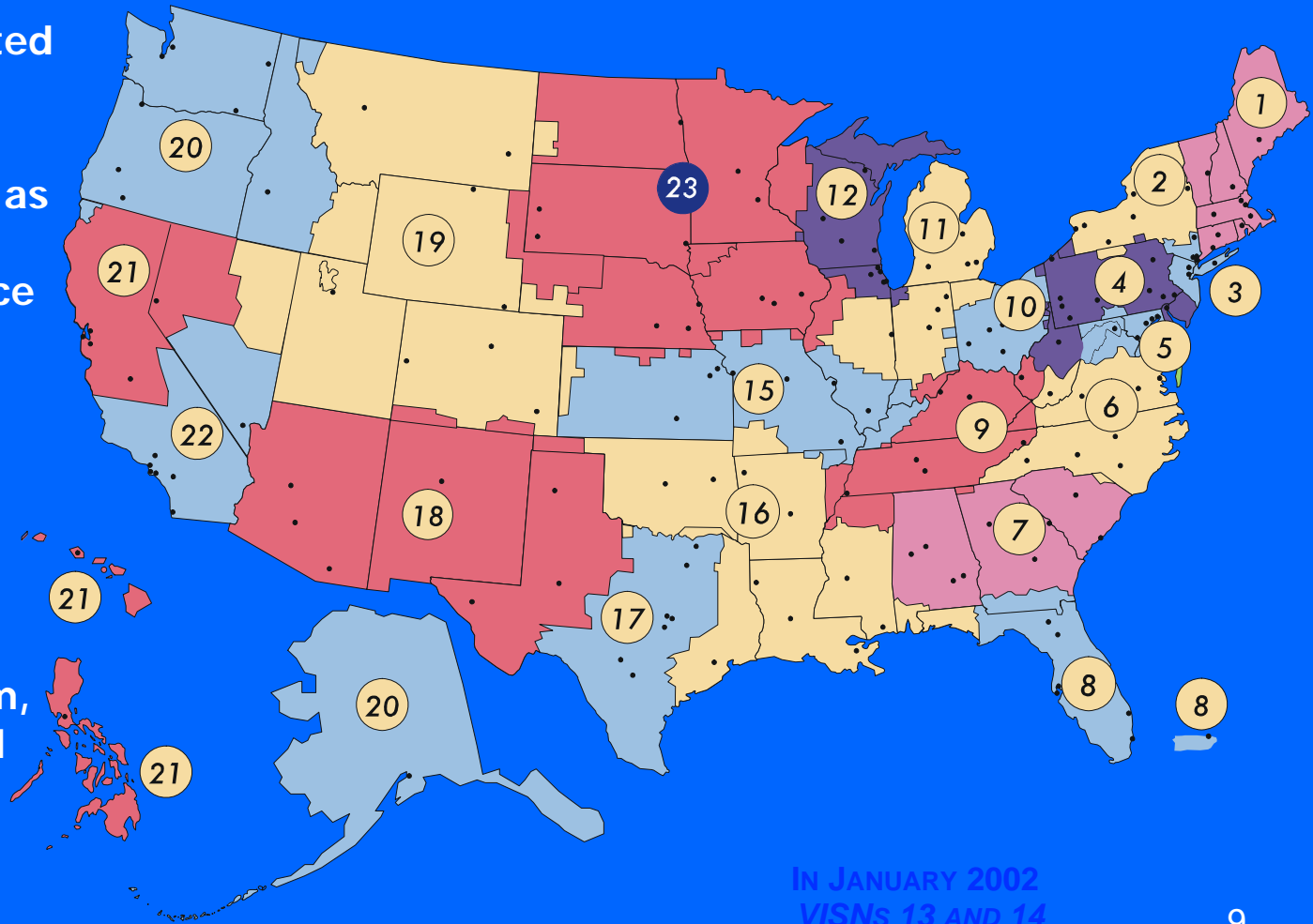
Fiscal Year 2007 – VHA statistics

- 7.8 million total enrollees of 25 million US veterans
- 5.5 million patients treated
- \$35 billion total budget (medical care)
- 63 million outpatient visits
- 17,593 average # inpatient beds
- 33,649 nursing home avg daily census
- 240 million 30-day equivalent Rx's dispensed
- 228 million lab tests performed

21 Veterans Integrated Service Networks

VISNs are the Funding & Accountability Unit in VA

- Resources Allocated to VISNs
- Reimbursement scheme is known as VERA (Veterans Equitable Resource Allocation) model
 - Allocates according to number of patients and severity
 - Incentives: A Health System, not a Hospital System



IN JANUARY 2002
VISNs 13 AND 14
WERE INTEGRATED AND
RENAMED VISN 23

VHA Medical Care

- Enrolled veterans eligible for full spectrum of general and specialty medical/preventive services including drug benefit
- Special focus on conditions related to military service:
 - Prosthetics, rehab and blind rehab
 - Environmental exposures (agent orange, Gulf War syndrome, depleted uranium & radiation, cold injury, etc.)
 - PTSD and mental health issues
- Special focus related to VA populations served:
 - Geriatrics/extended care
 - Women Veterans programs and services
 - Chronic diseases; diabetes, cardiac, kidney, cancer, infectious diseases, mental health/substance abuse, homelessness

VHA Mission 2: Graduate Medical Education

- Affiliated with 107 of 125 U.S. Medical Schools and 1,200 education institutions
- VA has more than 5,000 affiliation agreements for Associated Health Programs
- 84,510 Total trainees

VHA Mission 3: Research

FY04: \$1.5 billion for VA research (\$446m VA \$)

Mission: improve veterans health care

Medical Research

Rehabilitation Research

Cooperative Studies (large multi-center clinical trials)

Health Services Research

Accomplishments:

Invention of cardiac pacemaker, CT technology

First successful liver transplant, insulin pump

Multi-center clinical trials; Tb, MI & CHF tx, HTN, DM

2 Nobel Prize winners, 6 Lasker Awards

VHA Mission 4: Emergency Responses

- **VA/DoD Contingency (PL 97-174) – VA back up for DoD in event of war or national emergency involving armed conflict**
- **National Response Plan (NRP) Support – VA role in 7 Emergency Support Functions**
- **NDMS – VA, HHS, DoD, FEMA (DHS) – assists state/local govts with medical & PH disasters and hospital capacity**
- **Ad hoc – local responses to emergencies**

Who Are VA Patients?

Older - Median 59y, 49% over age 65, 278,000 > 85y

Sicker - Compared to Age-Matched Americans

- 3 Additional Non-Mental Health Diagnoses
- 1 Additional Mental Health Diagnosis

Poorer

- 70% with annual incomes < \$26,000
- 40% with annual incomes < \$16,000
- 31% have no health insurance

Changing Demographics – 7% female overall now and 10% female by 2010

- 22.5% of outpatients less than 50 years of age are women veterans

This is NOT Your Father's VA Restructuring began in 1996

WHY?

- Declining veteran population
- Concurrent profound changes in US health care system (inpatient to outpatient focus)
- Quality and consistency of VA care needed attention
- Many reports recommended significant VA change
- Many veterans needed VA as a 'safety net'

“Prescription for Change” 1996

- VHA restructured into Regional Networks
- Eligibility reform & defined priority groups
- Treatment Reform: Uniform Benefits Package (including a drug benefit)
- Third-party recoupment
- System-wide electronic medical record started
- Clinical benchmarks established
- Performance monitoring and accountability systems put in place

Who is VHA? 1995 vs 2005

VA has transformed from a hospital system to a comprehensive health care system

VA health care now predominantly an outpatient system
197,000 Employees (~15,000 Doctors, 56,000 Nurses, 33,000 AHP)

- **6% decrease** since 1995
 - 13,000 fewer employees than 1995

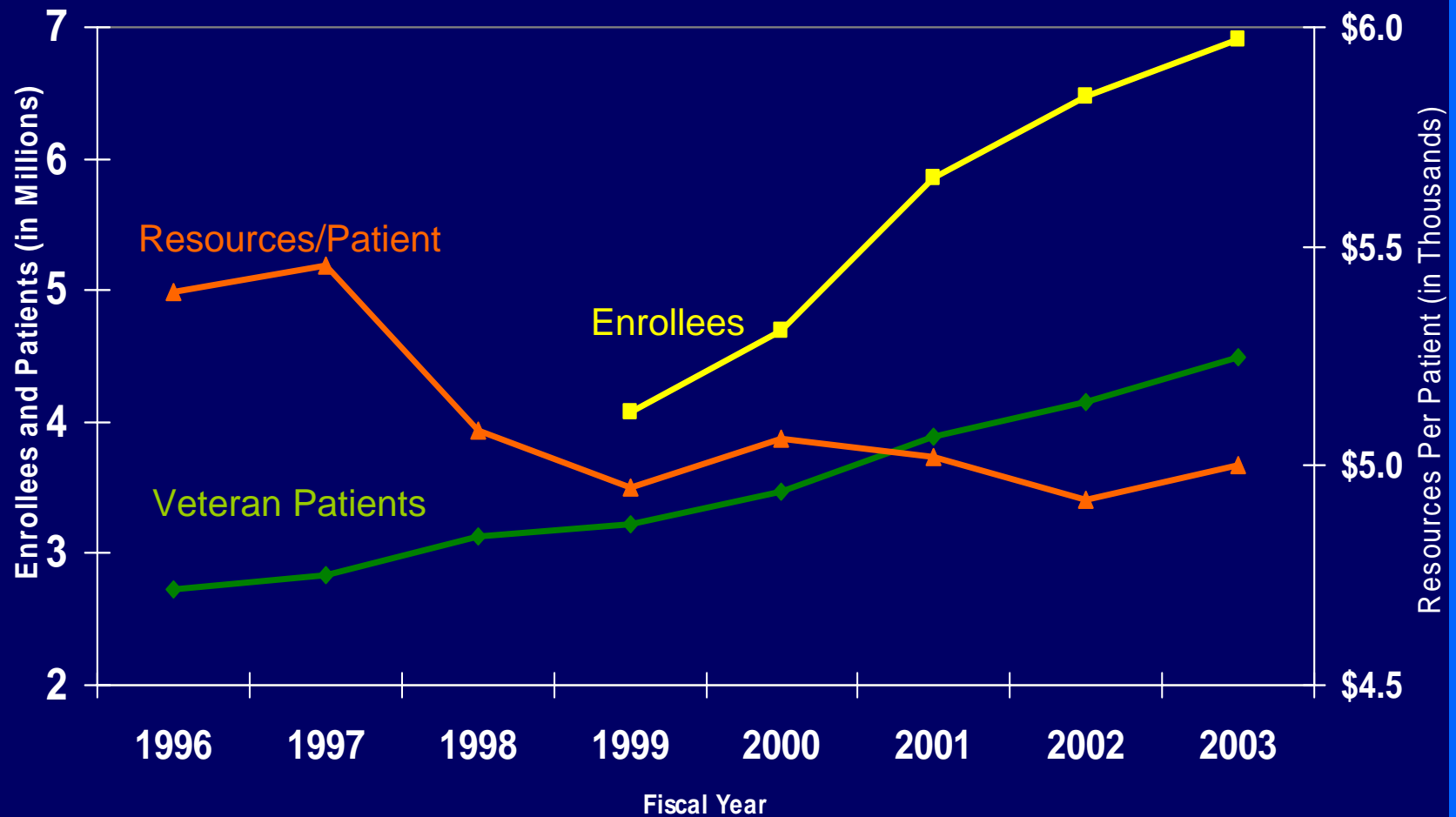
\$30 Billion budget

- **47% increase** since 1995
 - Flat at ~ \$19B from 1995 - 1999

5.4 million patients, ~ 7.7 million enrollees

- **104% increase in patients treated** since 1995
 - From 2.5 million patients / enrollees in 1995

Improved Efficiency: Enrollees, Patients & Resources/Patient



VA Eligibility Categories

Hierarchy of Priority for VA Service reset annually

- **Priority Group 1:** Veterans with service-connected disabilities rated 50% or more disabling
- **Priority Group 2:** Veterans with service-connected disabilities rated 30% or 40% disabling
- **Priority Group 3:** Veterans who are former POWs, Purple Heart, or with service-connected disabilities rated 10% or 20%
- **Priority Group 4:** Veterans who are receiving aid and attendance or housebound benefits or who have been determined by VA to be catastrophically disabled

VA Eligibility Categories

- **Priority Group 5:** Non-service-connected veterans with income below VA Means Test thresholds (approximately \$30,000 for veterans with 1 dependent)
- **Priority Group 6:** WWI, Mexican Border War, certain exposures (Agent Orange) and Gulf War illness
- **Priority Group 7:** Veterans with income above the VA Means Test threshold & income below the HUD geographic index (Copayments apply)
- **Priority Group 8:** Veterans with income above the VA Means Test threshold and the HUD geographic index (Copayments apply)

As of Jan 17, 2003, VA is not accepting new Priority Group 8 veterans for enrollment

VA's Electronic Health Record

Every VA medical facility has the computerized patient record system



The screenshot shows the CNN.com website interface. At the top, the CNN logo and "MEMBER SERVICES" are visible. A search bar is present. On the left, a navigation menu lists categories like Home Page, World, U.S., Weather, Business, Sports, Politics (highlighted), Law, Technology, and Science & Space. The main content area features a headline "INSIDE POLITICS" and a sub-headline "Bush calls for electronic medical records". Below this, a quote from President Bush is displayed: "President: 'We're kind of still in the buggy era'". The article text begins with "BALTIMORE, Maryland (AP) -- When it comes to patients' health records, the United States hasn't left the 'buggy era,' President Bush said Tuesday at a veterans hospital." and continues with a quote from Bush: "On the research side, we're the best," Bush told about 120 guests, including veterans, health care professionals, doctors from Johns Hopkins Hospital and the staff from the Veterans Affairs Medical Center in Baltimore. "We're coming up with more innovative ways to save lives. ... On the providers' side, we're kind of still in the buggy era." A photo of President Bush speaking is included, with a caption: "President Bush makes remarks at the Baltimore Veterans Affairs Medical Center on Tuesday." and a credit to "AP PHOTO". At the bottom of the article, it says "ON CNN TV".



Foundation for VA's "Systems Approach"²¹

VistA Electronic Health Record

The screenshot displays the VistA Electronic Health Record interface with several open windows:

- VISTA Imaging Display - MADTL,F F (Vista)**: Shows patient information for MADTL,F F (DOB: 1924, age: 75, SSN: 000-50-5000, type: NON-VETERAN (OTHER)). It indicates 6 images are loaded and shows a list of radiology exams.
- Radiology Exam listing - MADTL,F F**: A table listing radiology exams for patient MADTL,F F.

#	Day-Case	Procedure	Exam Date
1	113098-35	CHEST SINGLE VIEW	1998 - 11/30
2	113098-34	ABDOMEN 1 VIEW	1998 - 11/30
3	072897-30	CHEST SINGLE VIEW	1997 - 07/28
4	072797-27	ANGIO VISCERAL SELECT CD	1997 - 07/27
- Abstract...**: Shows patient information and a list of problems, including "Colonoscopy, Colonic" and "Bleeding of Gastrointestinal Tract".
- VISTA Imaging: MUSE EKG Display**: Displays an EKG tracing for patient MADTL,F F (DOB: 000-50-5000) on 8/13/1997 at 09:45:00. The tracing shows a regular rhythm with a heart rate of 80 bpm. The EKG is labeled "1: Resting - 8/13/1997 - 09:45:00".
- Medications**: A list of medications including "0.1mg Tabs", "thasone 4mg S.T.", "opa 500 Hctz 30mg Tab", and "0.2mg Tab".
- Lab Results**: A section for lab results, currently showing "ing in background...".
- Vitals**: A section for vital signs, showing "T 98 F", "P 86", "R 18", "BP 120/75", "HT 58 in", and "WT 140 lb".

Clinical Reminders for Decision-Support

Contemporary
Expression of
Practice Guidelines

- Time & Context Sensitive
- Reduce Negative Variation
- Create Standard Data
- Acquire health data beyond care delivered in VA

Reminder Resolution: Pneumococcal vaccine (pneumovax)

ORDER PNEUMOCOCCAL IMMUNIZATION:

☐ Order for pneumococcal vaccine placed.

☐ Order for influenza vaccine entered.

PRIOR IMMUNIZATION:

☒ Patient indicated that the pneumococcal vaccine was received previously.

Date/Time: 1997 ... Location: East Orange, NJ

Comment:

REFUSAL/CONTRAINDICATION:

☐ Patient indicates a history of contraindication to pneumococcal vaccination.

☐ Pt. has an acute illness. Vaccinations will be delayed until recovery from this illness.

☐ Patient has a life expectancy of less than 3 months. Evaluation and treatment may not be useful at this time.

☐ Patient refuses pneumococcal immunization.

☐ Patient refuses all immunizations at this time.

Clear < Back Next > Finish Cancel

Pneumococcal vaccine (pneumovax):
Patient indicated that the pneumococcal vaccine was received previously.
Location: East Orange, NJ

Immunizations: PNEUMO-VAC (Historical)

Links Reminder

With the Action

With Documentation

Bar-Coded Medication Administration (BCMA)



BCMA Assures:

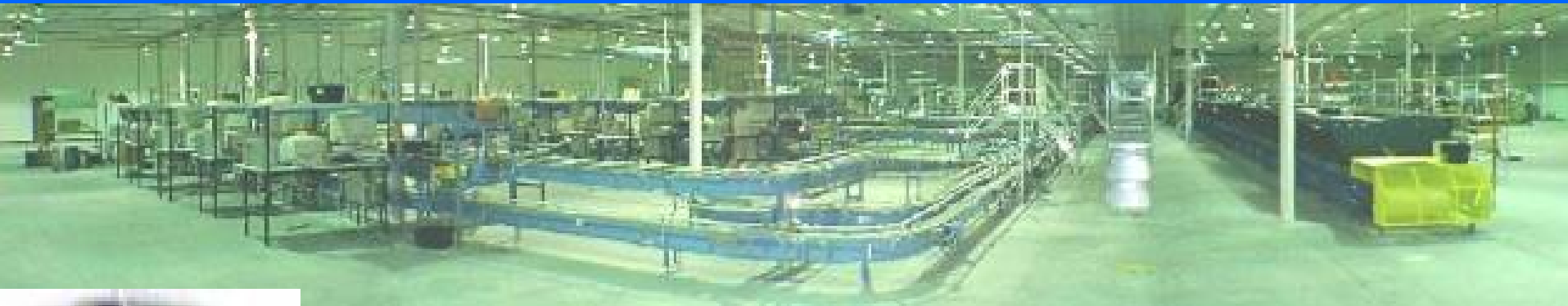
- Right Medication
- Right Dose
- Right Patient
- Right Provider
- Right Time

Virtually Eliminates Errors at the Point of Administration

... Coming Soon: Bar-Coded Lab Acquisition

CMOPs: Technology at Work

Consolidated Mail Outpatient Pharmacy



- > 200 Million "30 Day Equivalents" / Year
(> 40K Rx *per shift per* CMOP)
- Performance: 5.85 Sigma
 - Wrong Medication: 0.0007%
 - Patient Satisfaction Rating: 90% VG/E
- Helped hold per prescription costs virtually constant for 5 years (~2½% increase / year), in contrast to 16% in 2004 alone, in non-VA settings (*per* CBO estimate)

Teleretinal Imaging for Screening Diabetic Retinopathy

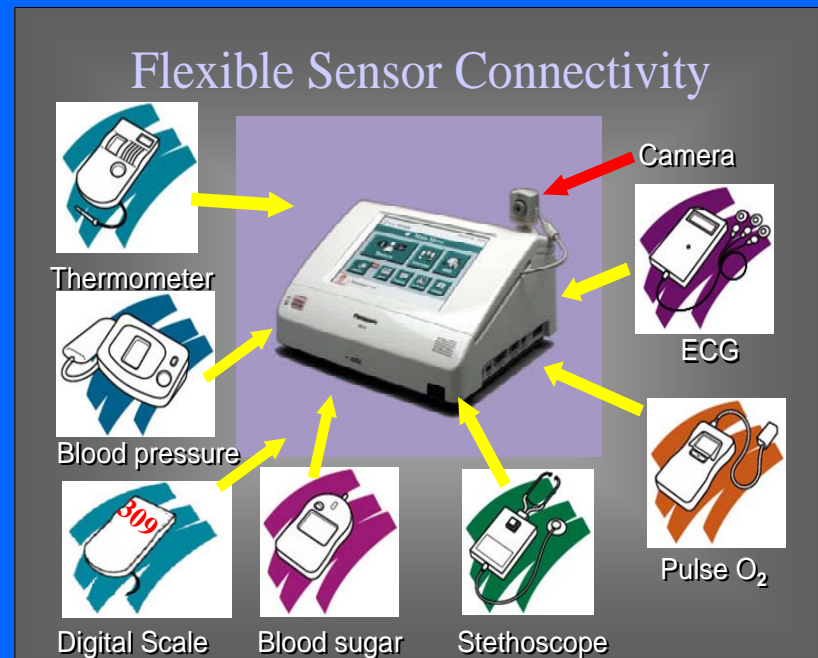


Home-Telehealth

**TeleVyou
500**
Stand-alone Color
Videophone



“Remote Physiological Monitoring”



Teleradiology Center

Radiology interpretation will be provided in real time to every point of care from expert centers



My Health eVet

- Internet-based, secure Personal Health Record.
 - Provides veterans with copies of key parts of their VA health information
 - Veterans can view, retain, and update their personal health data (BP, glucose, wt, etc.)
 - Comprehensive, Personalized Health Education Information
 - Personalized Health Assessments
- Activate & Empower patients as (responsible) partners with health care providers in achieving optimal health, through the sharing of health information

MHV Personal Health Record



Track Health

Vitals & Readings

Labs & Tests

Health History

Family Health History

Military History

Allergies

Immunizations

Journals

Personal Health Summary

www.myhealth.va.gov

VA Continues to Exceed HEDIS

CLINICAL PERFORMANCE INDICATOR	VA FY 07 ⁽¹⁾	VA FY 06 ⁽¹⁾	HEDIS ⁽²⁾ Commercial 2006	HEDIS ⁽²⁾ Medicare 2006	HEDIS ⁽²⁾ Medicaid 2006
Breast cancer screening	86%	85%	69%	70%	49%
Cervical cancer screening	91%	91%	81%	NA	66%
Colorectal cancer screening	78%	76%	55%	53%	NA
LDL Screening after AMI, PTCA, CABG	93%	92%	87%	88%	76%
LDL Cholesterol < 100 after AMI, PTCA, CABG	62%	60%	57%	56%	36%
Beta blocker on discharge after AMI	98%	98%	98%	94%	88%
Diabetes: HgbA1c done past year	97%	96%	88%	87%	78%
Diabetes: Poor control HbA1c > 9.0% (lower is better)	16%	17%	27%	27%	49%
Diabetes: Cholesterol (LDL-C) Screening	92%	96%	83%	85%	71%
Diabetes: Cholesterol (LDL-C) controlled (<100)	64%	61%	43%	47%	31%
Diabetes: Good Control HbA1c <7	48%	47%	42%	46%	30%
Diabetes: Eye Exam	85%	85%	55%	62%	51%
Diabetes: Renal Exam	91%	66%	80%	85%	75%
Diabetes: BP < 140/90	77% (measure is less than or equal to)	78% (measure is less than or equal to)	61%	58%	57%
Hypertension: BP < 140/90 most recent visit	76%	75%	60%	57%	53%
Smoking Cessation Counseling ⁽³⁾	83%	80%	74%	44%	43%
CLINICAL PERFORMANCE INDICATOR	VA FY 2007 ⁽¹⁾	VA FY 2006 ⁽¹⁾	HEDIS ⁽²⁾ Commercial 2006	HEDIS ⁽²⁾ Medicare 2006	BRFSS ⁽⁴⁾ 2006
Immunizations: influenza, (note patients age groups HEDIS 50-64)	72% (age 50-64 match HEDIS)	71% (age 65 and older or high risk)	46%	NA	69.6% (age 65 and older or high risk)
Immunizations: pneumococcal, (note patients age groups) ^{(4) (5)}	90% (all ages at risk)	89% (all ages at risk)	Not Reported	Not Reported	67%

Winning Scorecard

Hospitals in the Veterans Affairs system outpace those in the private sector by many measures

The McGraw-Hill Companies

BusinessWeek

QUALITY of Care

The latest Rand Corp. study found that VA patients, on average, received about two-thirds of the care recommended by national standards, compared with just half for patients at a sample of the nation's other hospitals. Here's the breakdown:

HEALTH INDICATOR	VA SCORE*	NATIONAL SAMPLE**
Overall	67%	51%
Chronic care	72	59
Lung disease	69	59
Heart disease	73	70
Depression	80	62
Diabetes	70	47
Hypertension	78	65
High cholesterol	64	53
Osteoarthritis	65	57
Preventive care	64	44
Acute care	53	55
Screening	68	46
Diagnosis	73	61
Treatment	56	41
Follow-up	73	58

*2005 VA patients. **2002 patients at non-VA hospitals.
Data: Rand Corp.; Agency for Healthcare Research & Quality

Patient SATISFACTION

For the sixth year in a row, veterans in 2005 were happier than other patients with their health care.

	VA	PRIVATE SECTOR
Inpatient	83*	73
Outpatient	80	75

*Out of 100. Data: American Customer Satisfaction Index

TECHNOLOGY Use

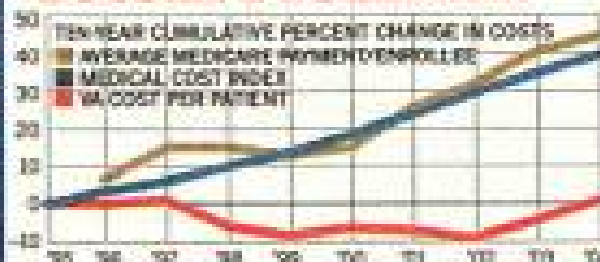
The VA has the most advanced electronic-records system in the U.S.

PERCENTAGE OF NEW DRUG AND PROCEDURE ORDERS ENTERED ELECTRONICALLY

VA	94%
Academic medical centers	30
Nationwide	8

Data: Commonwealth Foundation

Cost EFFICIENCY



Data: VA, Health & Human Services; Bureau of Labor Statistics



Patient Satisfaction

- In the American Customer Satisfaction Index (ACSI), VHA has led private-sector health care in both inpatient and outpatient scores.

	1999	2000	2001	2002	2003	2004	2005	2006
VHA Inpatients	NM	NM	82	81	81	84	83	84
VHA Outpatients	79	78	79	79	80	83	80	82
Medicare Recipients	71	74	79	76	77	76	76	73
Private-sector Hospitals	70	69	68	70	73	76	71	74

NM = Not Measured; Source: <http://www.theacsi.org>
(accessed April 24, 2007)

2006 “Innovations in American Government Award”



Department of Veterans Affairs electronic health records system (VistA)

Harvard University's Ash
Institute for Democratic
Governance and Innovation at
the Kennedy School of
Government and Council for
Excellence

NEWS

The Innovations in American Government Awards



For Embargoed Release

July 10, 2006

Contact: Anne Singer
(202) 728-0418, asinger@excelgov.org

HEALTHCARE PROGRAM SERVING U.S. VETS WINS GOVERNMENT INNOVATION AWARD

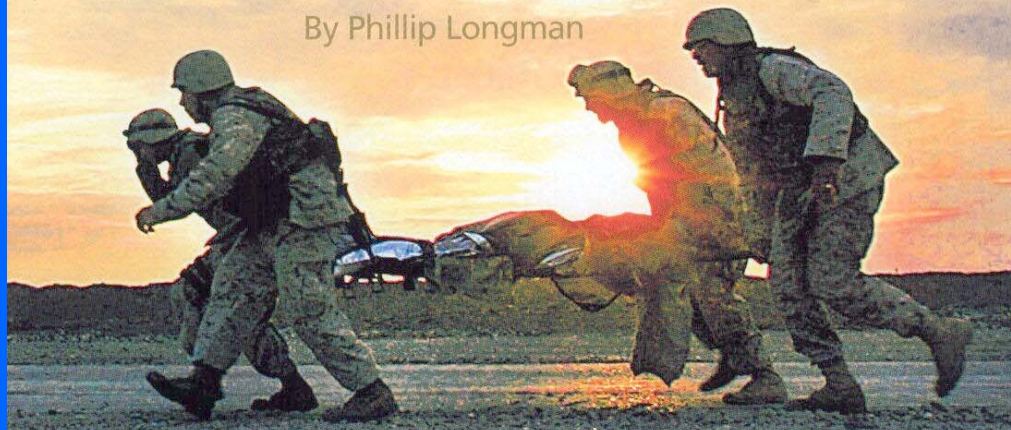
HI-TECH VistA PROGRAM ONE OF TWO FEDERAL INITIATIVES TO WIN \$100K GRANT

Washington MONTHLY

BEST CARE ANYWHERE

Today's troops are headed into the country's best health-care system—the VA. If you just did a double-take, it's time to look again at veterans hospitals. Their remarkable turnaround points the way toward curing America's health-care crisis.

By Phillip Longman



BEST U.S. HOSPITAL SYSTEM (P.50) | PARKER ON WINE FUTURES (P.78)

The McGraw-Hill Companies

BusinessWeek

JULY 17, 2006

www.businessweek.com

HealthHospitals

The Best Medical Care In the U.S.

How Veterans Affairs transformed itself—
and what it means for the rest of us

Programs Targeted to 1991 Gulf War Veterans

Health Care

- 335,000 of the 700,000 Gulf War Veterans have come to VA for health care
- Gulf War Veterans are eligible to participate in the Gulf War Registry
 - 14% of registered veterans have been identified as suffering from a wide variety of common and recognized illness

Health Care (cont.)

- Special Depleted Uranium Program: “DU Follow Up Program” expanded to all veterans
- Development of Clinical Guidelines by VA and DoD to assist veterans with unexplained symptoms

Health Care (cont.)

- War Related Illness and Injury Study Centers (WRIISC): provide specialized care for combat veterans for all deployments who experience difficult to diagnose illness:
 - Washington, DC – Dr. Han Kang
 - East Orange, NH – Dr. Gudrin Lange
 - Palo Alto, CA – Dr. Jerome Yesavage
- National Educational Symposia – Clinical Care for Gulf War Combat Veterans

Outreach

- Gulf War Review Newsletter
 - 39 issues have been distributed to over 400,000 veterans since 1991
- Veterans Health Initiative (VHI)
Independent Study Guides
 - “A Guide to War Veterans Health”
 - “Health Effects from Chemical, Biological and Radiological Weapons”
 - “PTSD: Implications for Primary Care”

Research

- Over \$250,000,000 invested in Gulf War health issues (DoD, VA, and HHS)
- VA Surveillance Cohort Study
- National Academy of Sciences/Institute of Medicine Reviews (8 reviews have been completed)
- VA research on health effects of Gulf War Continues: \$6,800,000 to Gulf War research in FY 07

Compensation

- Compensation for chronically disabled Gulf War Veterans with undiagnosed illnesses
- VBA reports 3,280 Veterans have received this benefit

Conclusions

- VA health care has undergone a transformation
- Veterans' satisfaction with VA health care and the quality of VA care are objectively measured as the best in the US in many areas
- Since early 1990's VA has implemented multiple programs specifically targeted to the needs of veterans of the 1991 Gulf War
- VA's commitment to veterans of the 1991 Gulf War is steadfast
- VHA looks forward to work with this Commission and to your recommendations to continue to serve the veterans of the 1991 Gulf War



***"To care for him (and her)
who shall have borne the
battle and for his widow and
his orphan."***

-Abraham Lincoln, Second Inaugural address in 1865