



Usability Present and Future

Current and future usability experience: “Consumer perspective” in the Department of Veterans Affairs

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VA
HEALTH
CARE | Defining
EXCELLENCE
in the 21st Century

Usability: The Veteran Consumer Perspective

Patient-Facing Health Information Technology (HIT) Principles

- Information Access. Patients must be provided with access to all their information. Sharing data with patients provides access to that which a Veteran is already entitled.
- Consistency. Information and services must be delivered consistently to patients regardless of location or provider. Information must exchange across systems and platforms.
- Accessibility. Veterans with no technology access or limited capacity to use patient-facing HIT must be accommodated to mitigate disparities in care and outcomes.
- Veteran Experience and Health. To enhance the patient experience and improve Veteran health, patient-facing HIT must meet Veterans' needs and be evidence-based.
- Participatory Design. End-user participation is integral to achieve a high level of usability and utility that is critical for Veteran meaningful use of services.

Usability: The Voice of the Veteran

- Use my time wisely → Online appointment manager; virtual visits; Secure Messaging (SM)
- Notify me → Automatic reminders by email or text; SM
- Help me care for myself → Shared care plan; tailored interactive care; self-monitoring
- Help my family caregivers → Delegate Personal Health Record (PHR) access; mobile SM; Prescription (Rx) refill/renew help me
- Let me see all → Full record access; point-of-care health record access my health records
- Let me add to the record → Patient-entered data; shared problems & care plan
- When and how I want it → Usability is in the eye of the end user

Complementary Tools

VA Electronic Health Record (EHR)



My HealtheVet PHR



- Award-winning, comprehensive electronic record for all care sites
- Authoritative medical record
- Computerized Patient Record System (CPRS), Veterans Health Information Systems and Technology Architecture (VistA), Bar Code Medication Administration (BCMA), Imaging
- Decision support, Clinical reminders
- Patient safety
- CPRS Button indicator for authenticated My HealtheVet user accounts

- Award-winning PHR for Veterans
- Secure, web-based portal
- Easy access to information, tools, and resources
- Veteran “owns” information
- Self-entered information
- Incremental addition of data extracts copied from the EHR for authenticated VA patients
- Consumer empowerment
- Prescription Refills, Secure Messaging, VA Blue Button: Download My Data

My HealtheVet Portal



www.myhealth.va.gov

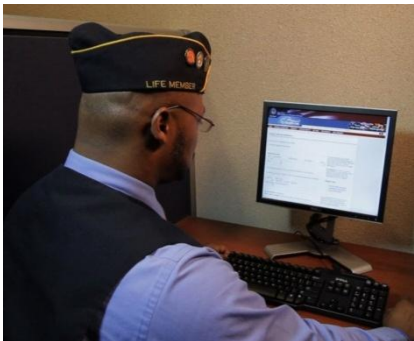
3-Tier Access Model:

- Visitors
- Registrants
- In-Person Authenticated (IPA)

September 2011:

- More than 57 Million visits
- Over 1.4 Million registered users (76% are VA patients)
- More than 427,000 users have an authenticated account (IPA)
- Over 24 Million VA Rx refills since August 2005
- More than 334,000 unique Blue Button users
- More than 691,000 Blue Button file downloads

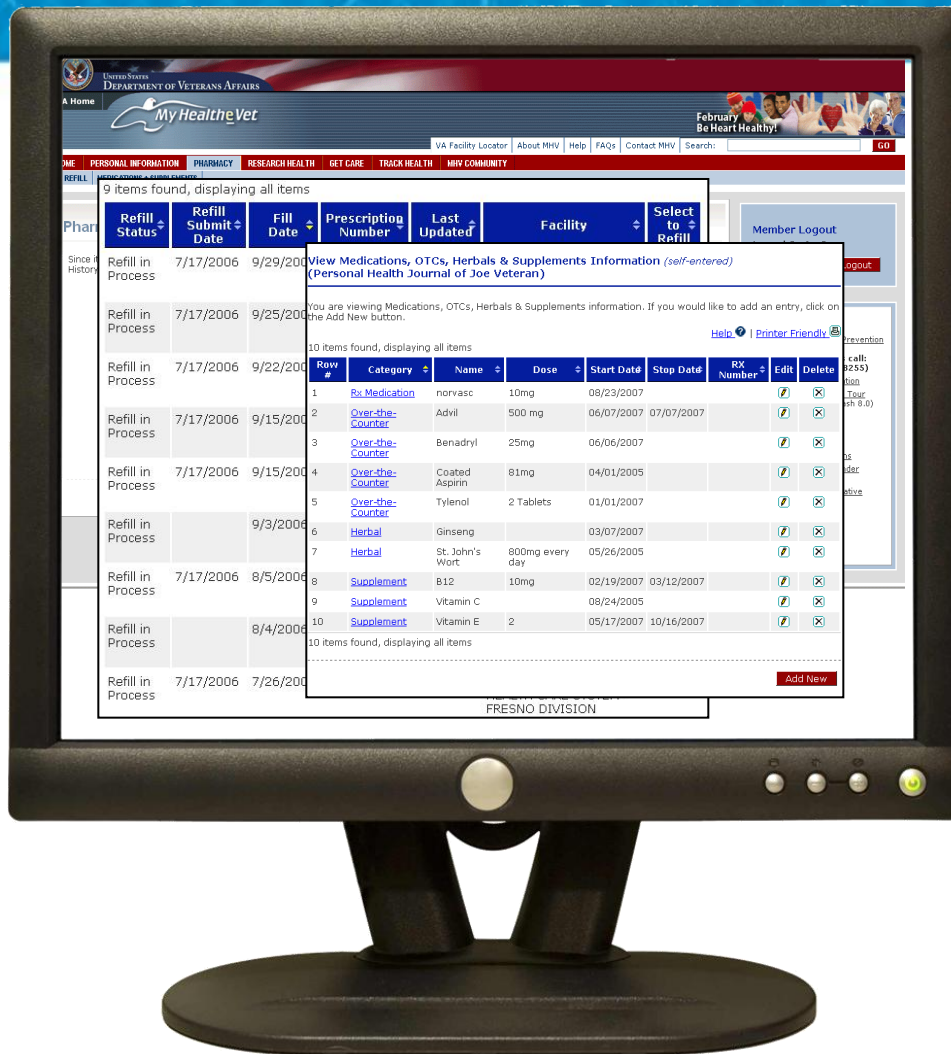
My HealthVet Features *Today*



- Personal information (contacts, providers, insurance, etc.)
- Personal, family, and military health history
- HealtheLogs (blood sugar, blood pressure, weight, etc.)
- Medications (over the counter drugs, herbals, etc.)
- Allergies, Immunizations, Medical Events
- Food and activity journals
- Online VA prescription refills, VA prescription history
- My Complete Medications (printable summary)
- Health calendar
- Trusted health education information, online courses
- Self-assessment tools
- Mental health resources (including online courses)
- Secure Messaging with the Health Care Team
- VA Blue Button: Download My Data
- VA Wellness Reminders
- VA Appointments (list, calendar, email reminders)
- VA Allergies, VA Chemistry/Hematology Lab Results

My HealthVet: Pharmacy

Veterans' Top Request for Online Services



Pharmacy:

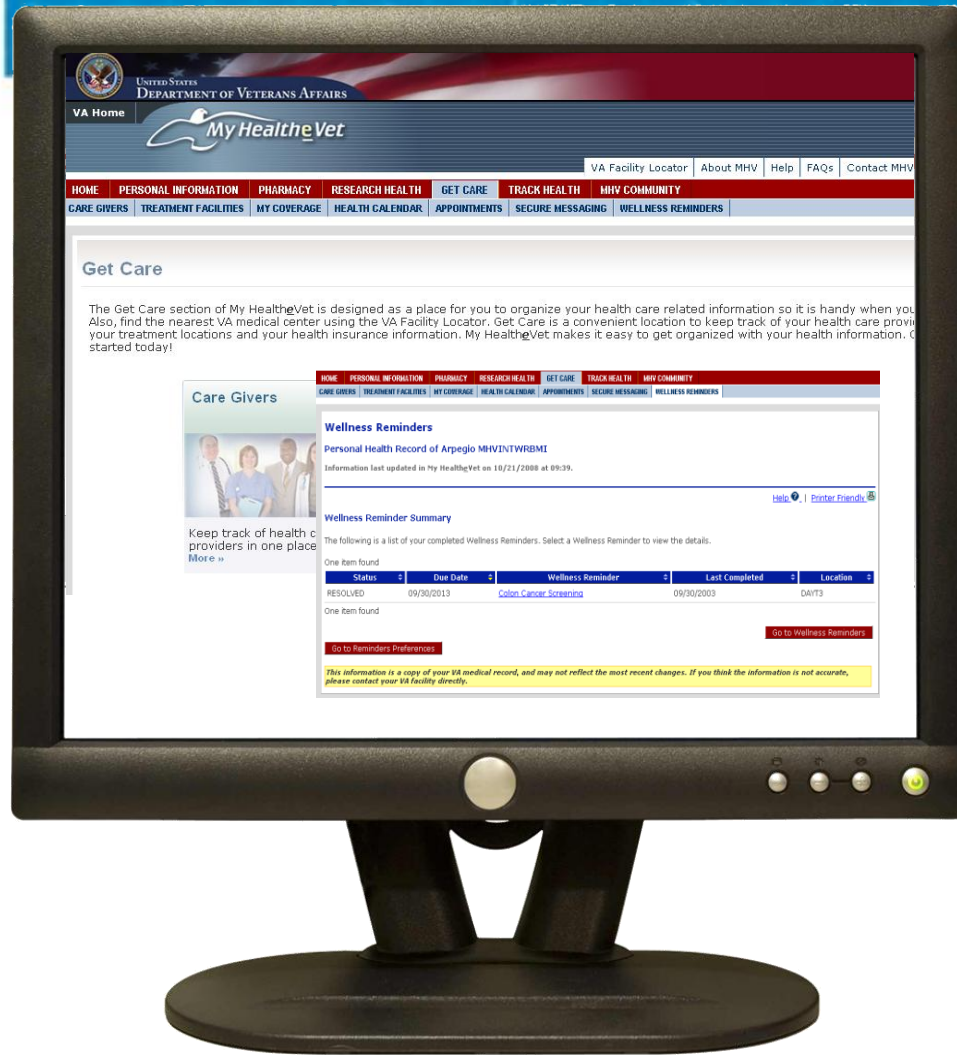
- VA Prescription Refills
- VA Prescription Refill History
- Self-entered medications, herbals, over-the-counters (OTCs), and supplements
- VA Medications List*
- My Complete Medications List (VA and self-entered)*

Over 24 Million VA prescription refill requests since launched in August 2005

Encouraging VA patients to play an active role in the medication reconciliation process

*requires authenticated account

My HealtheVet: VA Wellness Reminders*



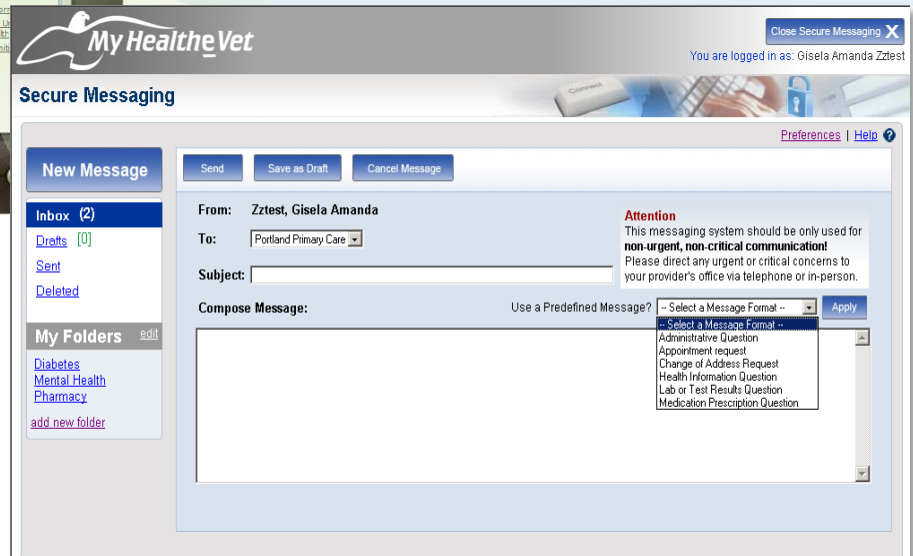
1. Hypertension
2. Influenza vaccine
3. Pneumococcal vaccine
4. Colorectal cancer screening
5. Lipid measurement
6. LDL control
7. Body mass index (BMI)>25.0
8. Diabetes foot exam
9. Diabetes hemoglobin A1C
10. Diabetes retinal exam
11. Mammography screening
12. Cervical cancer screen

- Empower patients
- Improve access to information
- Promote patient and health care team collaboration
- Improve health outcomes

My HealtheVet Secure Messaging (SM)*



- eHealth Clinical Service for non-urgent communication with patient's health care team
- Veterans can request appointments, request prescription renewals, ask health or administrative questions, etc.



Blue Button

- Veterans click the “Blue Button” to
 - **View/Print** their personal health information in the browser window and/or
 - **Download** as a text, PDF, or bluebutton file.



**Blue Button
Download
My Data**

- Between August 2010-September 2011:
 - 334,691** unique registered users have submitted download requests
 - 691,449** files have been downloaded
 - 360,127** blue button outputs have been viewed in the browser

VA Blue Button Data Classes

Data Class	Source
Demographics (Includes Emergency Contacts)	Self-entered
Health Care Providers	Self-entered
Treatment Facilities	Self-entered
Health Insurance	Self-entered
VA Wellness Reminders*	VA Electronic Health Record
VA Appointments*	VA Electronic Health Record
VA Medication History	VA Electronic Health Record
Medications and Supplements	Self-entered
VA Allergies*	VA Electronic Health Record
Allergies and Adverse Reactions	Self-entered
Medical Events	Self-entered
Immunizations	Self-entered
VA Laboratory Results*	VA Electronic Health Record
Labs and Tests	Self-entered
Vitals and Readings	Self-entered
Family Health History (Self and Relatives)	Self-entered
Military Health History	Self-entered

*requires authenticated account

Recommendations for Future Patient HIT

Practice User-Centered, Participatory Design

- **Seamless User Interface.** Develop a "One-VA" Veteran access interface across all services.
- **Optimize Usability and Utility.** Initiate new designs or redesigns with human factors and usability testing to optimize ease of use and patient satisfaction with interface and functionality.
- **New Types of Built Environments.** Bring HIT tools and services directly to patients by re-designing facilities and clinic areas; use high-traffic areas and venues where Veterans tend to wait. Utilize Navigators (assistants) and Volunteers to give education and support to Veterans.
- **Patient & Family Support.** Provide patients with education, training and support so they are able to make the best use of the HIT services. Develop smart help functions within applications.
- **Personal, Customized Services.** Enable personalization of systems to better reflect Veteran preferences and to personalize the experience.

Where Are We Headed Next?

- Integrated patient-facing IT tools and services within the fabric of VA health care that:
 - Improve care delivery
 - Empower Veterans and their family members and caregivers to be active partners with their health care team
- Alignment across the institution – patient-centered care, telehealth, point-of-service kiosk, etc.
- Patient Aligned Care Teams (PACT) with SM
- eHealth QUERI Center Implementation Science
- Health Services Research and Development (HSR&D) Research Collaboration for approved My HealtheVet Institutional Review Board (IRB) studies
- CPRS My HealtheVet Integration
- Telehealth Initiatives
- Personal Health Care – Blue Button
 - Tailored to the patient
 - “Care Anywhere” – Interaction of data (health, benefits, claims, etc.) from internal and external sources

Questions?

Contact Information

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