VetLink: VA / VistA-integrated Patient Self-Service

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By Jack Killian, VP / Program Manager, Vecna Technologies
About Vecna

- Healthcare technology company (Cambridge, MA & DC)
- Patient Engagement & Robotic solutions
- Est. 1999 by a consortium of MIT engineers
- Interoperability with information systems
- Implementations in hundreds of facilities
- Strong research & development partnerships in healthcare
- Processed over 8 million self-service check-ins
Veterans Point of Service (VPS)

• Kiosks began to appear organically in VA Medical Centers in 2005
  – Portland VA Medical Center APHID program used kiosks to collect patient data (e.g. contact and billing info, medical history, medications), allow for patient appointment check-in, and gather medical adherence history
  – Pittsburgh (VAPHS) pilot was the first comprehensive, self-service pre-registration and patient check-in system, increasing the accuracy of the patient record. This program expanded to include all of VISN 4’s 9 medical centers and many Community Based Outpatient Clinics (CBOCs)
  – VA understood the need to capitalize on the experiences and demonstrated success of these early adopters and decided to pursue an enterprise level, national-wide kiosk solution that was coined “Veterans Point of Service”
Anatomy of a Kiosk in VA

Magstrip Reader
Interactive Touch Screen
Card Imager
Audio Jack
Printer
Proximity Sensor
Introduction of the VPS Vitals Chair

Offers patients a comfortable and convenient way to measure their own vital signs. Patients enter their height, and the Chair measures their weight, core temperature, blood oxygen saturation, and BP using a connected set of clinical devices. The Chair then prints a receipt of the patient’s measurements. By giving patients access to the tools to proactively manage their own health, the Vitals Chair supports patient engagement and the patient-provider partnership.

**Intuitive and comfortable.**
- Touchscreen
- Magstripe reader
- Digital Signage
- Blood Pressure Cuff
- Antibacterial wipes

**Simple and safe.**
- One network cable
- FDA approved devices
- Antimicrobial screen
- Wheelchair accessible
- Thermometer
- SP02 Sensor
- Armchair
- Printer
- Scale
- One power cord
- No harddrive or data stored

**In any environment.**
- Outpatient clinics
- Primary care clinics
- Emergency departments
- Pharmacy and lab waiting areas
- Cafeterias and other high-traffic areas
Quick Stats

• 4,000+ Kiosks have been deployed in 120 out of 152 VA Medical Centers and 459 out of 708 CBOCs across 15 VISNs
• 2,000,000+ Unique Patients uses (since program start May 2011)
• 8,000,000 total number completed check-ins/pre-reg workflows (number is lower than total kiosk interactions given hard stops due to business rules such as eligibility checks, etc)
• 1,500,000 number patient-sponsored demographic updates
• 275,000 race & ethnicity updates
• 10,000,000+ total interactions to date
Mission: Collaborate with Success

- The mission of the Veterans Point of Service (VPS) Kiosk Program is to provide devices (e.g., stand-alone, tablet, mobile) to VA Medical Facilities and CBOCs that empower Veterans, patients, and staff to efficiently and easily perform a variety of administrative, financial, and clinical tasks related to their healthcare services and management.

- VPS also seeks to ensure that online capabilities at VA healthcare facilities are strategically aligned with complimentary capabilities offered through other portal technologies such as My HealtheVet, eBenefits, VA for Vets – Employment Center, etc.

- VPS helps VA provide the best possible care for Veterans by delivering a beneficial technology platform and leveraging collaborative partnerships to serve Veterans and healthcare facilities across the VA healthcare system.
Benefits: Convert wait into service time

Deployment of the kiosks at VAMCs/CBOCs will provide several benefits to the Veteran.

- Clinical benefits including improved patient engagement, medication and allergy review, prescription refill, effective utilization of patient waiting time, and electronic questionnaires and screenings toward improved health & wellness
- Higher level of patient safety through medication and allergy reviews (MRAR)
- Administrative workflow efficiencies including time savings per transaction for staff and patients, reduction in patient waiting time, and efficiencies in transaction processing
- Improvement of financial controls will affect the accuracy of insurance information, leading to better performance of payment collection from patient co-pays and payers, as well as fraud reduction
- VA and Cross-cutting opportunities, such as an extension of services to DoD patients at joint facilities and the integration with VA systems and associated data
Collaboration: Promote convergence toward a seamless experience

Improved access to quality of care and services through tighter collaboration with key initiatives involving:

- Scheduling
- Mental Health
- Homelessness
- PACT
- Rural Health
- Telehealth
- Women’s Health
- HRC
- Patient Screening
- C&P Disability Exams/Claims Backlog Reduction
- My HealtheVet (MHV)
- Connected Health patient and clinician facing initiatives
- eBenefits & VBA
- Memorials Benefits & NCA
- DoD MHS
- VLIER Health & eHealthExchange
VPS Deployed Capabilities

Capabilities Deployed Nationally

- Key capabilities on all kiosks include the following:
  - Appointment check-in
  - Update contact information
  - Update next of kin
  - Update demographic information
  - Card swipe function
  - Logic checks
  - Allow for identifying Tort and workman’s compensation billing
  - Printing – First party copay balances, canteen coupons, routing slips
  - Printing to kiosk groups
  - Behavioral flags
  - Staff interface contact information updates
  - Million Veteran Program (MVP)
  - Wayfinding

Capabilities Deployed – VetLink Release 5.3 (April 2014)

- 5.3 capabilities include the following:
  - Release of Information (ROI) Request a Copy of Medical Record
  - Insurance Hard Stop
  - Bene Mileage Reimbursement Phase 1
  - Patient Usability Improvements Phase 1
  - VistA Printing Health Summaries
  - Patient Queuing Pilot Phase 2
  - Patient Queuing Pilot Phase 3
  - Remote Procedure Calls (RPCs) Read/Write Phase 2
  - Reporting Warehouse
  - Automated Clinic Information Loading Phase 2
  - Million Veteran Program (MVP) Phase B
  - Alternative Patient Lookup
  - Optional Workflow
  - VIC 4.0
# Software Roadmap (Aug 2014)

## Release 5.3
- **3/14/2014**
  - Patient Queuing Pilots Increment 2 and 3
  - Implement RPCs for Read/Write Veteran updates on VistA Increment 2
  - Automate Clinic Information Loading Increment 2
  - Million Veteran Program (MVP) Increment 2
  - Implement ability to read VHIC

## Lounge Pilot
- **09/30/2014**
  - Request Rx Refill – Increment 1
  - Clinical Screening Questionnaires (CSQ) Enhancements
  - Medication & Allergy Review (MRAR) – Increment 1
  - After Visit Summary (AVS) – Increment 1

## Release 5.5
- **10/20/2014**
  - CSQ – e.g., Depression
  - Clinical Reminders
  - Improve visualization of patient flow and work items
  - Co-Pay Payment/Credit Card Processing
  - Patient & Staff Usability Improvements
  - User Group Permission Configuration
  - Request Beneficiary Mileage Reimbursement Increment 2
  - Audit Log Frequency Check
  - Automate Patient Updates to VistA
  - Insurance Card Scanning

## FY 15 Potential New Functionality
- **Mirror Lounge Capabilities on the Kiosks**
- **Prescription Refill**
- **After Visit Summary**
- **CSQ – Increment 2**
- **Clinical Reminders Integrating Kiosks**
- **Pharmacy Customer Care**
- **Clinical Symptom Tracker**
- **CSQ – Increment 3**

## Administrative
- **Release of Information (ROI) Form Submission**
- **Direct Veteran to staff for Insurance Updates**
- **Request Beneficiary Mileage Reimbursement Increment 1**
- **Patient Usability Improvements Increment 1**
- **VistA Printing – Medication Reconciliation Worksheet**
- **Deploy Tablet & Mobile Device Pilot Mirroring Current Kiosk 5.3 Functionality**
- **Way-finding Enhancements**
- **Improve visualization of patient flow and work items**
- **Co-Pay Payment/Credit Card Processing**
- **Patient & Staff Usability Improvements**
- **User Group Permission Configuration**
- **Request Beneficiary Mileage Reimbursement Increment 2**
- **Audit Log Frequency Check**
- **Automate Patient Updates to VistA**
- **Insurance Card Scanning**
- **Biometrics**
- **Data Analytics/Warehouse**
- **Insurance Card Scanning Increment 2**
- **MVP Increment 3**
- **Veterans Authorization and Preferences items (VLER)**
  - 10-0485
  - 10-3045 33A
  - 16-0944p
  - 10-0256 and 10-0355a
- **VistA Appointment Status integration (appointment request)**
- **Automate text to checked-in patient when MD is ready for them**
- **Assignment of Benefits form completion**
- **Real-Time Address Verification Service**
- **ROI enhancements**
- **Enhance building capabilities to enhance user experience**

## Cross-Cutting
- **Integrate with Identity Management Service (IdMS)**
- **Integrate with AccessVA Authorization Service**
- **Enterprise Service leveraging Clinical Inventory to provide searchable Clinical Services List by Zip Code**
- **Secure Messaging – Increment 1**
- **Logic-Based Satisfaction surveys**
- **Patient Queuing Pilot Increment 4**
- **HOWDY (Lab Kiosk Innovation solution) Integration**
- **Appointment Barcode Scanning**
- **Appointment Request**
- **Consume VLER Servers**
- **Doc. Refill (patient), Fast Track (provider), walk-in (patient)**
- **MHV Integration**
- **Million Veteran Program – Increment 3**
- **Mobile App**
- **Patient Context Management**
- **Requiring Warehouse**
- **Single Sign-On for staff facing application**
- **Veteran Center Service**
- **Built and Customize Workflows**
- **Legislative Mandates**
VPS Development Timeline

Timeline:

• VA launched the VPS Program in 2009
  – Pilot planning work started in 2010
  – The program began its pilot phase in 2011 at four sites with 10 devices each: Atlanta, Oklahoma City, Pittsburgh, and Portland
  – 11 sites were added in 2012 as part of the Rapid Deployment stage
  – National Deployment to all remaining VA Medical Centers (VAMCs) and CBOCs initiated August 2013 and will complete by December 2014
  – As of today, >80% of planned VPS kiosks have been deployed nationwide
VPS Development Timeline (cont’d)

Timeline:

• VistA Patch Releases
  – VPS*1*1 (READ RPCs) was released nationally in December 2012
  – VPS*1*2 (WRITE RPCs) was released nationally in April 2014
  – VPS*1*3 (MRAR RPCs) is in a development-pause state
  – VPS*1*4 is in early development
  – VPS*1*5 has not yet begun development

• VetLink patch releases
  – 5.3 (combined with 5.4 to accommodate the VistA development resource pause) was nationally released in April 2014
  – 5.5 planned for Q2 FY15 delivery, with a pilot starting September 2014
  – 6.0 – 6.2 releases in FY15-16
Architecture

- Local instantiations but moving toward SaaS model (Aug 2014)
- Online presence is HTML5 device agnostic Responsive Design (adheres to ASD Design Patterns)
- Optimized Kiosk UI (performance optimized)
- Mash-up and integration friendly
- Full SDK for 3rd party app developers with open source smart platforms (available by Oct/Nov 2014)
- All integrations are contributed to OSEHRA