Assistive Technology Provided by VA
A Model for Policy & Practice

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Objectives
Participants will understand . . .
1. The structure of VHA, Prosthetics & Sensory Aids Service and client eligibility for AT.
2. Three aspects of VHA policy and recommended practice surrounding provision of AT to veterans.
3. Three areas of unique and innovative AT applications coordinated for VHA beneficiaries.

Veterans Health Administration

• Largest integrated healthcare system in US
  • 155 hospitals
  • 130 nursing homes
  • 45 domiciliaries
  • Nationwide out-patient clinics & programs
• More than 1400 sites of care
• More than 6 million veterans served in 2007

VHA

Geographic Organization
• 23 VISNs (regional networks)
• 23 regional SCI Centers
• Extensive PM&R program
• Blind Rehabilitation Centers
• 4 Polytrauma Rehabilitation Centers (PRC)
  • Minneapolis, Palo Alto, Richmond, Tampa
  • 22 Polytrauma Network Sites

VHA Health Care Services

• Veterans of the armed forces
  • Army, Navy, Air Force, Marine Corps, Coast Guard
  • Commissioned officers of Public Health Service, Environmental Sciences Service Administration or National Oceanic & Atmospheric Administration
• Honorable Discharge
• Active duty military personnel
  • Services
  • Equipment
Qualifications for VA Healthcare
www.va.gov/healtheligibility

- Service Connected (SC)
  - Injured in the line of duty
  - Illness or disease linked to military service
- Non Service Connected (NSC)
  - Injury or illness after discharge from service
  - Many VA patients are NSC

VA Comprehensive Services

- Primary Care
- Medical & Surgical
- Spinal Cord Injury
  - Intensive Care
  - Acute Rehabilitation
  - Out-patient
  - Lifetime services
- Rehabilitation
  - PM&R
  - Blind Rehabilitation
  - Speech & Audiology
  - Recreation Therapy
  - POLYTRAUMA program
- Mental Health
- Geriatrics
- Extended Care
- Out-patient care

VA Comprehensive Services

- Adaptive Equipment
  - All veteran issued equipment and technologies coordinated, provided and managed by . . .

Prosthetics and Sensory Aids Service

War Impacts Change

Advances & Challenges
- Survival of combat injured
- Technology Innovation
- Clinical Applications of Technology & Treatment Approaches

OEF/OIF: Blast Injuries
TBI “signature injury” of OEF/OIF

“The typical patient, Dr. Scott said, has head injuries, vision and hearing loss, nerve damage, multiple bone fractures, unhealed body wounds, infections and emotional or behavioral problems. Some have severed limbs or spinal cords.”

From The New York Times, Jan 31, 2006

OEF/OIF Blast Injuries

- Technology Advances
  - Prosthetic Limbs
  - Electronic Technologies
  - Wheeled Mobility
  - Sports & Recreation
  - Universal Design

A New Generation of Veterans

Many Generations to Support

Introduction to PSAS

PSAS includes the total process associated with replacing, supporting, and/or complementing human anatomy and/or function impaired or destroyed as a result of trauma or disease.

Provide technologies necessary due to loss or permanent loss of use of body part or function.

PCLO Web Sites

Prosthetics & Clinical Logistics Office

- VA INTRANET
  vaww.pclo.med.va.gov
- INTERNET
  www.prosthetics.va.gov
“Prosthetics” is artificial limbs . . .

And everything else

Comprehensive AT Interventions

- Wheeled Mobility
- Custom Seating
- Vehicle Modification
- Home Modification
- Computer Access
- Environmental Control
- Lift system
- Self care equipment
- Home Telehealth

Prosthetics & Clinical Logistics Office (PCLO)

National Office in Washington, DC
- Chief Officer Prosthetics and Clinical Logistics
- Deputy Chief Officer for PSAS
- Prosthetics Clinical Coordinator
- Program Managers
- Program Analysts
- VISN Prosthetics Representatives (23)
- Prosthetics Chiefs

Populations Served by PSAS

Veterans with needs related to . . .
- Amputation
- SCI/D
- Visual Impairment
- Podiatric Care
- Cardio-Pulmonary Dz
- Traumatic Brain Injury
- Neurological Dysfunction
- Muscular Dysfunction
- Orthopedic Care
- Diabetes/Metabolic DZ
- Peripheral Vascular DZ
- Cerebral Vascular DZ
- Geriatric Impairments
- POLYTRAUMA

OEF/OIF and PSAS Uniques

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<tbody>
<tr>
<td>Total OEF/OIF Veterans served by PSAS</td>
<td>1,437</td>
<td>3,928</td>
<td>4,341</td>
<td>22,910</td>
<td>34,491</td>
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<tr>
<td>Total All PSAS Patients</td>
<td>1,230,937</td>
<td>1,383,658</td>
<td>1,462,787</td>
<td>1,519,150</td>
<td>1,606,851</td>
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<tr>
<td>% of OEF/OIF to All PSAS Patients</td>
<td>0.12%</td>
<td>0.28%</td>
<td>0.30%</td>
<td>1.51%</td>
<td>2.15%</td>
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<tr>
<td>Total PSAS Expenditures</td>
<td>$478,568</td>
<td>$2,011,830</td>
<td>$2,730,873</td>
<td>$8,576,538</td>
<td>$14,643,790</td>
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<tr>
<td>% of OIF/OEF to All PSAS Expenditures</td>
<td>0.06%</td>
<td>0.21%</td>
<td>0.26%</td>
<td>0.78%</td>
<td>1.27%</td>
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- OEF/OIF and PSAS Uniques
- Total PSAS Expenditures
- % of OIF/OEF to All PSAS Expenditures
**OEF/OIF and PSAS Amputees**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
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<tr>
<td>OEF/OIF Amputees</td>
<td>4</td>
<td>30</td>
<td>50</td>
<td>138</td>
<td>211</td>
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<tr>
<td>PSAS Amputees</td>
<td>9,764</td>
<td>8,986</td>
<td>7,142</td>
<td>10,772</td>
<td>11,023</td>
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Includes provision of a new limb or repair to an existing limb in the AK, BK, and UE categories. Patients that fall into multiple categories are counted once.

**PSAS Costs for OIF/OEF Amputees with Major Amputation**
- $29,502
- $194,725
- $487,448
- $1,952,466
- $3,017,401

**PSAS Costs for All Amputees**
- $43,834,954
- $45,251,149
- $42,334,482
- $56,143,487
- $61,472,857

**% of Costs for OIF/OEF Amputees to Cost for All PSAS Amputees**
- 0.07%
- 0.43%
- 1.15%
- 3.48%
- 4.91%

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**VHA Coverage Policy**

- **VHA Handbook 1173**
  - Establishes uniform and consistent national policy and procedures for the provision of prosthetic services.
  - 17 chapter document designed to address the process for serving the core of VA’s disabled veterans

**VHA Handbook 1173 cont. .**
- 1173.9-Footwear
- 1173.10-Orthotic Support
- 1173.11-Ocular Prostheses/Restorations
- 1173.12-RX Optics and Low Vision
- 1173.13-Home O2
- 1173.14-HISA
- 1173.15-Clothing Allowance
- 1173.16-Driver Rehabilitation
- 1173.17-Home Telehealth

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**Chapter Table of Contents**

- 1173.08 Medical Equipment & Supplies
  - Beds
  - Lifts
  - Stair glides
  - Porch lifts
  - Ramps
  - Air conditioners
  - ECU's
  - Telehealth devices
  - Seat lift devices
  - Mobility/walking aids
  - Rehab/Recreational Equipment
  - Other items

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**Supporting Documentation**

- Clinical Practice Recommendations
  - Prosthetics Clinical Management Program
Prosthetic Clinical Management Program

Integrated Product Teams (IPT)
- Healthcare Professionals (Chair is Clinician)
- Central Office Representatives
- VISN Prosthetic Representatives
- Local Prosthetics Staff
- NAC Contract Specialist(s)
- Patient Safety Representative
- General Counsel (NAC)
- Veteran Service Officer

PCMP Goals for IPTs
- Develop specifications of Prosthetic appliances that meet the needs of the majority of patients
- Promote the development of uniform Prosthetic Clinical Practice Recommendations (CPRs)
- Support outcome measurements and research
- Enhance and standardize quality of care
- Reduce the acquisition cost of Prosthetic appliances

Active PCMP IPTs
1. Blood Pressure Monitors
2. TENS
3. VED
4. CCTV
5. Diabetic Socks
6. BIPAP/CPAP
7. Pacemakers/ICDs
8. Intra Ocular Lenses
9. Deep Brain Stimulator
10. Ortho Hips and Knees
11. Wheeled Mobility
12. Cochlear Implants
13. Coronary Stents
14. Computers & Software
15. Eyeglasses
16. Walkers
17. Hospital Beds
18. Home Oxygen
19. Scooters
20. Aids for the Blind
21. Orthotic Soft Goods
22. Assistive Listening & Alerting Devices
23. Speech Devices
24. Optical Aids for the Blind
25. Dental Implants
26. Footwear
27. Left Ventricular Assist Device
28. Lift Chairs
29. Artificial Limbs
30. Home Health Telemonitoring
31. Scooter Lifts
32. Ramps
33. Biomedical Implants

Clinical Practice Recommendations
- Available on Internet and VA Intranet
  - www.prosthetics.va.gov/cprs
- 39 CPRs currently published
- More in progress
- Many apply directly to Assistive Technologies

Supporting Documentation Example
- 1173.7 Audiology & Speech Devices
  - Clinical Practice Recommendations
    - Alerting Devices for Hearing Impaired
    - Assistive Listening Devices
    - Audible Prescription Reading Devices
    - Cochlear Implants
    - FM Systems & Personal Amplifiers
    - AAC Systems
    - Cognitive Prosthetic Devices
    - Tracheostomy Speaking Valves
    - Voice Prostheses

Clinical Practice Recommendations
- Hearing Impairment (6)
- Visual Impairment (5)
- Mobility (13)
- Computer Access (3)
- Speech/Cognition (4)
- Home Telehealth
- Sports & Recreation Equipment
CPR
Cognitive Prosthetic Devices

CPD is any electronic based product or system whether acquired as a retail item, modified retail item, or customized one, that is used by an individual to compensate for cognitive-communication impairments that affect his/her ability to participate in activities of daily living (ADLs) and higher level ADLs (IADLs) including work.

Handheld Computers

Prior to receiving a CPD . . .

- Formal clinical evaluation
- Reasonable & necessary device
- Measurable functional goals
- Client can operate device & will use it
- Planned follow up
  - Outcome Measurement

Cognitive Prosthetic Devices

Handheld Global Positioning Systems

Wheeled Mobility IPT

- Scooters
- Power wheelchairs
- PAPAWs
- Manual wheelchairs
- “Other” devices
Wheeled Mobility

- VHA Handbook 1173.6
  - Eligibility, procedures, guidelines
    - Power wheelchairs
    - Manual wheelchairs
    - Scooters
    - Sports Wheelchairs
- Clinical Practice Recommendations (CPRs)

Wheeled Mobility CPRs

  - iBOT Addendum
    - iBOT Directive pending
- Manual Wheelchairs
  - Standard manual wheelchairs
  - Rehab manual wheelchairs
  - All other technologies

Manual Wheelchair CPR Definitions

- Standard mwc
- Rehab mwc
- Ultralightweight mwc
- Heavy Duty
- Extra Heavy Duty
- Transport wheelchair
- Tilt-in-space
- Recline function
- Tilt/recline combo
- Standing function

Rehab MWC ~ National Contract

- Quick release wheels
- Back angle adjustment
- Back height adjustment
- Camber
- Wheel position adjustable
  - Horizontal
  - Vertical
  - Optimal rear wheel alignment needed
  - Invacare Patriot Plus

Seating Intervention

Polytrauma with Amputation

PSAS Support for Clinical Projects

- Program Evaluation System (Quality Improvement)
  - "The SmartWheel: Clinical Utility for Manual Wheelchair Propulsion Education"
**Specialized Equipment**

- 10-2641 “Authority for Issuance of Special and/or Experimental Appliances”
- Provide documentation (1173.02)
  - Client background/reason equipment needed
  - Home visit if applies
  - Alternatives considered or trialed
  - Ability of patient to use effectively
  - Training provided
  - Literature & scientific documentation

**Adaptive Sports & Recreation**

- 61 Accredited P&O Laboratories

**Prosthetic Limbs**

- 61 Accredited P&O Laboratories

**State of the Art Technologies**

- DEKA ARM
- i-Hand by Touch Bionics
VA National Contracting

- NOT the same as CMS Competitive Bidding
- Commodity equipment & supplies
- Complex Rehab NOT included
- Technical Evaluation completed by IPT
- Standardization
  - To a HIGHER standard
  - Not restrictive

National Prosthetics Patient Database (NPPD)

VA NPPD

- Comprehensive equipment tracking
- All devices & supplies for unique veterans
- Allows local, regional, national tracking
  - Individual
  - Products
  - Compliance with contracts
  - Cost Trends
  - Research

FY2007 ~ NPPD

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<th>Item</th>
<th>FY2007</th>
<th>Repairs</th>
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<tr>
<td>Orthoses/Orthotics</td>
<td>33,590,207</td>
<td>(678,401)</td>
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<tr>
<td>Artificial Arms</td>
<td>2,527,059</td>
<td>(380)</td>
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<tr>
<td>Artificial Legs</td>
<td>45,916,514</td>
<td>(8,058)</td>
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<tr>
<td>Wheelchairs &amp; accessories</td>
<td>$122,731,096</td>
<td>(86,945)</td>
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<tr>
<td>Medical Equipment &amp; Supplies</td>
<td>137,891,613</td>
<td>(2,200,000)</td>
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<tr>
<td>HISA</td>
<td>5,582,601</td>
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<tr>
<td>Surgical implants</td>
<td>354,630,421</td>
<td>(241,805)</td>
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</table>

Total Purchases + Repairs = $1.2 Billion 2007

Assistive Technology

Provided by VA

Moving PSAS forward . . .
- Clinician Education & Training
- RESNA AT Certification
- Outcome Measurement
- Consistency across the nation
- Further research & development
- Increased public awareness of VA programs, services & successes
Thank You!

Support Our Troops!

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Bilateral amputee