Polytrauma System of Care
South Texas Veterans Health Care System
New Model of Care

• “Polytrauma” describes unique, complex patterns of injuries:
  – Complex, multiple injuries occurring as result of same event
  – Unpredictable patterns including: brain injury, amputation, hearing and vision impairments, spinal cord injuries, psychological trauma, and musculoskeletal wounds

• Individuals with polytrauma require extraordinary level of integration and coordination of medical, rehabilitation, and support services
  – Brain injury is primary injury that drives care
  – Unique rehabilitation challenges with blast related injuries
  – Higher level of acuity due to severity of injuries
  – Simultaneous treatment of multiple injuries
  – Sequence and integrate therapies to meet patient need
  – Coordinate interdisciplinary team effort with expanded team of consultants
Provide a comprehensive, patient-centered, integrated system of rehabilitation care for Veterans and Service Members with Polytrauma and Traumatic Brain Injury
VHA Polytrauma / TBI System of Care

• **Level 1: Polytrauma Rehabilitation Centers (5)**
  – Regional referral centers for acute, comprehensive rehabilitation
  – Lead clinical care, research, education, program development
  – Tampa, Minneapolis, Richmond, Palo Alto, San Antonio

• **Level 2: Polytrauma Network Sites (23)**
  – Veteran Integrated Service Network referral sites for post-acute rehabilitation

• **Level 3: Polytrauma Support Clinic Teams (87; 2-8 per VISN)**
  – Interdisciplinary team follow-up and management of stable TBI/Polytrauma symptoms at local VA facilities

• **Level 4: Polytrauma Points of Contact (41 VA medical centers)**
  – Care coordination and referral to appropriate services
Polytrauma System of Care Transitional Process

Trauma Care
- Surgical
- Medical

Rehabilitation
- Emerging Consciousness
- Inpatient - Immediate
- Inpatient - Ongoing
- Outpatient Care
- Evaluation and Management

Community Reintegration
- Transitional/Community Re-entry - Residential
- Transitional/Community Re-entry - Day Program
- Outpatient Care
- Neurobehavioral

Lifetime Community Care
- Supported Living
- Vocational
- Educational
- Day Activity
- Support Groups
- Skilled Nursing
- Total Care
- Outpatient Care

Family Support
Case Management
Benefits Management
Medical Information Management
VHA Polytrauma Rehabilitation Center (PRC) Sites

Richmond

Minneapolis

Palo Alto

Tampa

San Antonio
PRC Overview

• Five Level 1 medical centers provide the highest echelon of comprehensive medical and rehabilitative services (inpatient and outpatient) for the most complex and severely injured:
  – 12-18 inpatient bed unit providing acute interdisciplinary evaluation, medical management, and rehabilitation
  – 10 inpatient bed residential Transitional Rehabilitation Program
  – Emerging Consciousness Program
  – Assistive Technology Lab
  – Polytrauma Telehealth Network

• National leaders in polytrauma, TBI, and blast-related injuries, providing consultation, medical education, research, & program development for VHA

• Accredited by Commission on Accreditation of Rehabilitation Facilities (CARF) for inpatient TBI and general rehabilitation

• Collaborative partner sites with DVBIC and national TBI Model Systems
1,532 Active Duty Service members

- 115 *new AD patients in FY12 (through Q3)*

1,132 injured in foreign theatre

- 99 *new patients in FY12 (through Q3)*

1,203 Veterans

- 125 *new patients in FY12 (through Q3)*

166 with Disorder of Consciousness
Current Utilization of the PRCs

• Occupancy rates fluctuate; 85% occupancy rate is preferred maximum
  – June 2012 - Average inpatient occupancy rate = 75% across all PRCs

• Average length of stay (LOS) in PRC: 46 days
  – More severely injured average 83 days LOS
  – Less severely injured average 28 days LOS

• Discharge destinations vary; nearly two-thirds are discharged to home
Patient Referral Sources to PRCs
Foreign Theatre
PRC Rehabilitation Team

- Physiatrist
- Rehabilitation Nursing
- Speech Language Pathologist
- Occupational Therapist
- Physical Therapist
- Blind Rehabilitation Specialist
- Therapeutic Recreation Specialist
- Counseling Psychologist
- Neuropsychologist
- Family Therapist

- Patient/Family Educator
- Nurse Educator
- Social Work / Care Manager
- Driver Trainer
- Prosthetist / Orthotist
- DoD Military Liaison
- Wound Care Team
- Nutritionist
- Pet Therapy
- Assistive Technology Specialist
# PRC Specialty Consultants

- Anesthesiology
- Audiology
- Chaplain Services
- Dentistry
- Gastroenterology
- General Surgery
- Infectious Disease
- Internal Medicine
- Neurology
- Neuro-Ophthalmology
- Neurosurgery
- Optometry
- Oral and Maxillofacial Surgery
- Orthopedics
- Otolaryngology
- Pain Clinic
- Plastic Surgery
- Prosthetics
- Pulmonology
- Radiology
- Urology
- VBA Vocational Specialist
Discharge Destination from PRCs

**Over 82% of total are Community DC’s (Home or military with FIM>90)**
South Texas Veterans Health Care System
San Antonio, Texas
PRC – San Antonio

- 5th PRC
- Opening Ceremony October 2011
- $66 Million Project
- 3 levels - 12 Bed Unit
- Includes inpatient and outpatient programs
- Inpatient Referrals from San Antonio Military Medical Center, Walter Reed National Military Medical Center, community hospitals, Other VAs
- Service veterans and active duty with polytrauma injuries including TBI, Amputations, SCI, burns, limb salvage, multiple fractures, etc.
PRC – San Antonio
Dec 2010- present

Polytrauma-115
Rehab-146

Active Duty- 75
Veteran- 186

261 Total Patients

Average Age- 45.3

Total average LOS- 26.0 days
Polytrauma LOS- 38.7 days
Polytrauma Transitional Rehabilitation Program (PTRP)

- PTRP - Residential Rehabilitation
  - One at each PRC site
  - 10-20 beds for extended stay rehabilitation (1-6 months)
  - Focus on community reintegration and vocational rehabilitation
  - Linked in with local and regional military treatment facilities
  - Focus of care is on independent living with less family interaction
<table>
<thead>
<tr>
<th>PTRP Experience</th>
<th>FY08-FY12</th>
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<tbody>
<tr>
<td>Average Length of Stay</td>
<td>66.9 days</td>
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<tr>
<td>Average Age</td>
<td>32.8</td>
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<tr>
<td>OEF/OIF</td>
<td>23.4%</td>
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<tr>
<td>Female</td>
<td>5.1%</td>
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<td>415 Unique Patients</td>
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Discharge Destination from PTRPs

Source: PTRP Rosters
Transitional Rehabilitation Program Vocational Outcomes

- Employed, 66.7%
- Unemployed, 23.6%
- Student, 5.6%
- Other, 2.8%
- Retired, 1.4%
PTRL – San Antonio
PTRP - San Antonio
April 2013- present

Average Length of Stay
62.1 days

Average Age
34.6

21 Unique Patients

Active Duty - 10
Veterans - 11

Polytrauma - 15
Rehab - 6
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<thead>
<tr>
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<th>October 2012 – September 2013</th>
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<tr>
<td></td>
<td>All Patients</td>
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<td>(1N) POLYTRAUMA REHAB UNIT</td>
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<td></td>
<td>Unique Patients</td>
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<td>Tampa, FL</td>
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<tr>
<td>San Antonio, TX</td>
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<td>Palo Alto, CA</td>
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<td>Minneapolis, MN</td>
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Polytrauma Network Sites (PNS)

• 23 regional (Level 2) medical centers providing full range of comprehensive follow-on medical and rehabilitative services (inpatient and outpatient) for patients recovering from polytrauma and TBI (1 per VISN, and San Juan):
  – Develop and support patient’s rehabilitation plan through comprehensive interdisciplinary, specialized team
  – Serve as resource and coordinate services for TBI and polytrauma across VISN (VHA, DOD, private sector)
• VISN leader for polytrauma/TBI consultation, education, monitoring outcomes, and program development for system
• Accredited by CARF for inpatient general rehabilitation
Screening for Mild Traumatic Brain Injury for OEF/OIF/OND Veterans

- VHA (April 2007 – August 31, 2013)
  - 768,744 have been screened for possible mild TBI
  - 144,787 screened positive and consented to follow-up
    - 108,807 have completed comprehensive evaluation so far
    - 62,545 received confirmed diagnosis of mild TBI
TBI Outpatient Uniques

Sources: Uniques with prior TBI – VSSC ad hoc query
PNS - San Antonio

• Outpatient Clinic dedicated to TBI (mild to severe) and other polytrauma injuries
• Interdisciplinary Team that includes PM&R physicians, clinic nurse, social work, psychology, neuropsychology, physical therapy, occupational therapy, speech therapy, blind rehab
• Consults received as a result of positive TBI screening
• Currently 3rd nationally in number of uniques
• Treat symptoms related to TBI and other injuries including headaches, dizziness, vision deficits, hearing loss, concentration/ memory deficits, mental health issues (including PTSD), sleep issues
• Goal of community reintegration
### PNS - San Antonio

<table>
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<th>POLYTRAUMA/TRAUMATIC BRAIN INJURY (TBI)-INDIVIDUAL</th>
<th>POLYTRAUMA/TRAUMATIC BRAIN INJURY (TBI)-GROUP</th>
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<tr>
<td><strong>Unique Patients</strong></td>
<td><strong>Encounters</strong></td>
<td><strong>Unique Patients</strong></td>
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<tr>
<td><em>All Facility</em></td>
<td>50,516</td>
<td>173,131</td>
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<tr>
<td>San Antonio, TX</td>
<td>1,073</td>
<td>6,610</td>
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Leaders’ Vision
One Mission – One Policy – One Plan

- Secretary Shinseki and Secretary Panetta met three times to discuss the issue, set the tone, and establish their expectations:
  - Common, interagency guidance driven by an overarching formal interagency governance structure in support of the wounded, ill and injured & their families
  - Integrated interagency community of practice comprised of professionals that coordinate and manage care, benefits, and services....with shared measures of success to include utilization, quality, and satisfaction
  - Single comprehensive, interagency plan developed and shared by both Departments that produces a common operational picture, visible to patient, family, and care recovery team...will drive effectiveness/efficiencies for the recovery process in support of both recovering service member and recovery team
  - Sustainable model that transcends current conflicts and is scalable to meet both peacetime and wartime support requirements
  - The first step is to designate a Lead Coordinator for Service Members and Veterans at each stage of their recovery
Transitioning from DoD to VA

- VA & DoD partnership began in August 2003

- Social Workers and Nurses embedded at Military Treatment Facilities (MTFs)

- Care Management begins at the MTF

- Smooth transition to VA provides the Service member or Veteran and their family a sense of security that VA can meet their needs
VA Liaison initial contact is made through a DoD CM referral process when medically ready to be discharged from the military. The next step is to coordinate with the VA OEF/OIF program.

New OEF/OIF/OND Veteran presents to OEF/OIF/OND Office.

New OEF/OIF/OND Veteran completes screening questionnaire per 1010.01 Handbook.

New OEF/OIF/OND Veteran meets with Transition Patient Advocate (TPA) who assists with enrollment and education on the OEF/OIF/OND Program and VA Healthcare.

OEF/OIF/OND Case Manager meets with OEF/OIF/OND Veteran and completes psychosocial assessment and clinical reminders.
If the TBI clinical reminder is positive, OEF/OIF/OND Case Manager submits a consult to Polytrauma for further assessment.

OEF/OIF/OND Veteran contacted by Polytrauma and scheduled.

OEF/OIF/OND Veteran evaluated by Polytrauma and assigned a level of care of one, two, or three. All level three OEF/OIF/OND Veterans are case managed by the outpatient Polytrauma Case Manager.

Outpatient Polytrauma Case Manager and Polytrauma Social Work Supervisor attend the OEF/OIF/OND Care Management Review Team meeting biweekly to complete a warm handoff on OEF/OIF/OND Veterans that will be case managed by Polytrauma.
**VA Liaisons for Healthcare**

### Why VA Liaisons?

| Coordinate VA healthcare for Service members (SM) transitioning from DoD to VA |
| Coordinate and coordinate with MTF treatment team and OEF/OIF/OND Program Manager throughout the referral process |
| SM has appointments at the VAMC prior to leaving the MTF |
| SMs who are severely injured are connected with the State Department of Veterans Affairs |

### Service Members and families/caregivers...

| Are educated about VA Healthcare and resources |
| Discuss individualized VA treatment options and resources with VA Liaisons |
| Easily access VA Liaisons who are co-located onsite with Military Case Managers |
| May meet with VA treatment teams via video teleconference at MTF |
Lead Coordinator Overview

• The Lead Coordinator (LC) serves as the primary point-of-contact within a DoD or VA Care Management Team (CMT) for a Service member / Veteran (SM/V) and their families/caregivers during their recovery, rehabilitation, and transition.

• By assigning a primary point-of-contact on the CMT, it reduces confusion and eliminates complexities for SMs/Vs and their families/caregivers.

• Ensures a warm hand-off at the time of transition between DoD/VA facilities, including transfer of documentation and the checklist.
Best Practices for Seamless Transfer at South Texas

- Case management hand-offs
  - Lead Coordinator
- V-tel communication with MTF’s and other VA’s to ensure a comprehensive handoff is completed
- Family meetings with care team
- Family tour of the PSC facilities
- Reintegration plans of care completed prior to discharge and shared for efficient continuation of care
- Liaison involvement from admission to discharge
PTRP – San Antonio hosts a family conference day with each family on Fridays that include:

- Family conference focusing on plan of care
- Safety and awareness in the community
- Caregiver TBI education group
- Family support & reintegration group
- Meeting with the lead therapist
Rebuilding Injured Lives