Serving the Underserved: 
Physical Therapy in the Federal System

On and after the Battlefield, on the Rez, and Behind Bars

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Physical Therapy in a Federal System:
- Department of Defense- DoD
- Department of Health and Human Services
  - Indian Health Service- IHS
  - National Institutes of Health
- Veterans Administration- VA
- Department of Justice
  - Federal Bureau of Prison

History of PT and the Military
- No rehabilitation services existed prior to WWI for soldiers.
- Army Surgeon General Gorgas created a Reconstruction Aide training program
- These “120-day wonders” who graduated from this program would lead to the formation of the American Physical Therapy Association.

### Department Year 2012 Spending (in millions) Estimate of employees

<table>
<thead>
<tr>
<th>Department</th>
<th>Year</th>
<th>2012 Spending (in millions)</th>
<th>Estimate of employees</th>
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</thead>
<tbody>
<tr>
<td>State</td>
<td>1789</td>
<td>26,847</td>
<td>30,266</td>
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<tr>
<td>Treasury</td>
<td>1789</td>
<td>464,714</td>
<td>115,897</td>
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<tr>
<td>Defense</td>
<td>1947</td>
<td>650,867</td>
<td>3,000,000</td>
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<tr>
<td>Justice</td>
<td>1870</td>
<td>31,159</td>
<td>117,000</td>
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<tr>
<td>Interior</td>
<td>1849</td>
<td>12,891</td>
<td>71,436</td>
</tr>
<tr>
<td>Agriculture</td>
<td>1889</td>
<td>139,717</td>
<td>104,000</td>
</tr>
<tr>
<td>Commerce</td>
<td>1903</td>
<td>10,273</td>
<td>38,000</td>
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<tr>
<td>Labor</td>
<td>1913</td>
<td>104,988</td>
<td>17,347</td>
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<tr>
<td>Health/Human Svcs</td>
<td>1953</td>
<td>848,056</td>
<td>67,000</td>
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<tr>
<td>Housing/Urban Develop.</td>
<td>1965</td>
<td>49,600</td>
<td>10,600</td>
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<tr>
<td>Transportation</td>
<td>1966</td>
<td>75,149</td>
<td>58,622</td>
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<tr>
<td>Energy</td>
<td>1977</td>
<td>32,484</td>
<td>116,100</td>
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<tr>
<td>Education</td>
<td>1980</td>
<td>57,249</td>
<td>5,000</td>
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<tr>
<td>Veterans Affairs</td>
<td>1989</td>
<td>124,124</td>
<td>235,000</td>
</tr>
<tr>
<td>Homeland Security</td>
<td>2002</td>
<td>47,422</td>
<td>194,000</td>
</tr>
</tbody>
</table>

Source: http://www.whitehouse.gov/omb/budget/Historicals

History of PT and the Military
- During WWII, increase in demand for therapists- course increased to 26 weeks
- After Vietnam, the Army had too few orthopedic surgeons and PT were used as “physician extenders”
- Since 1970’s, Army PTs have treated neuromusculoskeletal conditions without referral
Military Physical Therapy
- Primary providers for neuromusculoskeletal complaints
- Differential Diagnosis: know when patient does not belong in your clinic
- Evidenced Based Practice
- Treat and return to duty
- Injury Prevention

PTs in Austere Environments
- World War II
- Korean War
- Vietnam War
- Operation Desert Storm/Shield
- Bosnia/Kosovo
- Iraq and Afghanistan

Sports Medicine Model
The Role of US Military Physical Therapists
Col Josef Moore
- Treat far forward to maximize principles of EBP
- Prompt & accurate diagnosis & management of soldiers with minor wounds
- Expedite treatment to maximize healing and minimize secondary or chronic morbidity
- Free surgeons, other physicians, and PAs to manage soldiers with more complicated trauma and illness
- Reduce non-surgical referrals to orthopaedic surgeons

What do we do when we arrive?
- Force Multiplier to the Warfighters:
  - Optimize RTD status
  - Reduce unnecessary evacuations from theater
  - Consultant on injury surveillance, injury prevention and fitness & training
  - Enhance individual & unit morale cohesion
  - Readiness!!!
Mobile PT Clinic: Iraq

Ongoing care after Deployment

- Traumatic Brain Injury
  - Balance
  - Dizziness
  - Chronic Pain
- Amputation
  - Acute rehab and long term maintenance
- Post Traumatic Stress Disorder
  - Complicating factor to recovery

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Indian Health Service

Legal Basis for Federal Services to Native Americans and Alaskan Natives

- The provision of health services to members of federally-recognized tribes was established in 1787, is based on Article I, Section 8 of the Constitution
- The Snyder Act of 1921 and Indian Health Care Improvement Act 1976
  - Authorized funds for the "relief of distress… and employment of physicians for Indian Tribes throughout the U.S."

3
Legal Basis for Federal Services
Native Americans and Alaskan Natives
- 566 Federally recognized tribes
- Indian Self Determination and Educational Assistance Act of 1975
  - Tribes have option to assume administration of health care services from the IHS
- 338 tribes run their own health care. This program constitutes approximately nearly 35% of the IHS budget.

Indian Health Service

Our Mission... to raise the physical, mental, social, and spiritual health of American Indians and Alaska Natives to the highest level.

Indian Health Service

Our Goal... to assure that comprehensive, culturally acceptable personal and public health services are available and accessible to American Indian and Alaska Native people.

Indian Health Service

Our Foundation... to uphold the Federal Government's obligation to promote healthy American Indian and Alaska Native people, communities, and cultures and to honor and protect the inherent sovereign rights of Tribes.

Native American Health Disparities

- Life expectancy
  - Native American- 73.6 years
  - U.S. Population- 77.7 years
- Death rates (% higher than general US pop):
  - alcoholism (552% higher)
  - diabetes (182% higher)
  - unintentional injuries (138% higher)
  - homicide (83% higher)
  - suicide (74% higher)

(Age-adjusted mortality rates per 100,000 population)

<table>
<thead>
<tr>
<th>All Causes</th>
<th>AI/AN Rate 2005-2007</th>
<th>U.S. All Races Rate 2006</th>
<th>Ratio: AI/AN to U.S. All Races</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol induced</td>
<td>45.0</td>
<td>6.9</td>
<td>6.5</td>
</tr>
<tr>
<td>Breast Cancer</td>
<td>19.8</td>
<td>25.0</td>
<td>0.8</td>
</tr>
<tr>
<td>Cerebrovascular</td>
<td>63.9</td>
<td>63.8</td>
<td>1.0</td>
</tr>
<tr>
<td>Colorectal Cancer</td>
<td>2.8</td>
<td>4.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Diabetes</td>
<td>85.6</td>
<td>25.0</td>
<td>3.4</td>
</tr>
<tr>
<td>Heart Disease</td>
<td>91.7</td>
<td>200.2</td>
<td>0.4</td>
</tr>
<tr>
<td>HIV Infection</td>
<td>3.0</td>
<td>3.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Homicide (assault)</td>
<td>11.6</td>
<td>9.6</td>
<td>1.2</td>
</tr>
<tr>
<td>Intestinal Cancer</td>
<td>7.5</td>
<td>7.5</td>
<td>1.1</td>
</tr>
<tr>
<td>Malignant Neoplasm</td>
<td>170.1</td>
<td>180.7</td>
<td>0.9</td>
</tr>
<tr>
<td>Maternal Deaths</td>
<td>20.0</td>
<td>19.0</td>
<td>1.1</td>
</tr>
<tr>
<td>Pneumonia/Influenza</td>
<td>26.5</td>
<td>17.6</td>
<td>1.5</td>
</tr>
<tr>
<td>Suicide</td>
<td>19.5</td>
<td>19.9</td>
<td>1.0</td>
</tr>
<tr>
<td>Unintentional Injury</td>
<td>94.8</td>
<td>39.8</td>
<td>2.4</td>
</tr>
</tbody>
</table>

### Indian Health Service
- Provides services to 2.1 million Native American Indians and Alaska Natives
- Navajo Reservation
  - 1950: 20 doctors
  - 1970: 140 doctors
  - 2008: over 250 doctors

### IHS and Tribal Facilities
- Federal Facilities:
  - 28 hospitals, 61 health centers, 33 health stations, 33 urban Indian health projects provide a variety of health services.
- Tribal Facilities:
  - 16 hospitals, 235 health centers, 75 health stations, and 164 Alaska village clinics.

### Per Capita Personal Health Care Expenditures Comparison
- IHS expenditure on user population: $2741
- Total U.S. population expenditure: $7239

### IHS Physical Therapy
- Inpatient: Med/Surgical, ICU, Pediatrics
- Neurological rehabilitation
- Wound care
- Orthopedics
- Cardiac rehabilitation
- Geriatrics
- Pediatrics
- Pain clinics
- Women's health
- Hand clinics
- Amputee rehabilitation
- Wellness programs
Navajo Nation

- Second largest federally recognized tribe in the United States (Cherokee being first)
- Approximately 300,000 members nationwide
- 168,000 members reside on the reservation
- Half of the population is under age 25
- Growth rate is nearly 4x that of the U.S.

2000 Census Information

<table>
<thead>
<tr>
<th>Navajo</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median Age: 24</td>
<td>Median Age: 35</td>
</tr>
<tr>
<td>Annual Per Capita Income: $7,269</td>
<td>Annual Per Capita Income: $21,587</td>
</tr>
<tr>
<td>Persons Living Below Poverty Level: 42.9%</td>
<td>Persons Living Below Poverty Level: 12.4%</td>
</tr>
<tr>
<td>Unemployment Rate: 25.1%</td>
<td>Unemployment Rate: 5.8%</td>
</tr>
<tr>
<td>Persons with HS Diploma &gt;25 years: 55.9%</td>
<td>Persons with HS Diploma &gt; 25 years: 80.4%</td>
</tr>
</tbody>
</table>
2000 Census Information

<table>
<thead>
<tr>
<th>Navajo</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language spoken at home not English: 93.2%</td>
<td>Language spoken at home not English: 17.9%</td>
</tr>
<tr>
<td>Housing without plumbing: 31.9%</td>
<td>Housing without plumbing: 0.6%</td>
</tr>
<tr>
<td>Housing without phone: 60.1%</td>
<td>Housing without phone: 2.4%</td>
</tr>
<tr>
<td>Using Wood for Heat: 54.3%</td>
<td>Using Wood for Heat: 1.7%</td>
</tr>
</tbody>
</table>

Northern Navajo Medical Center

- Federal Medical Center
- Physical Rehabilitation Department
  - 6 PT's
  - 1 OT
  - 1 SLP

The Shiprock

IHS Employment Options

- Federal Employee
  - Commissioned Officer
  - Civil Service
- Tribal Hire
  - Many different tribal options
  - Each facility may have a different system

National Institutes of Health (NIH)

- Part of US Department of Health and Human Services
- Located in Rockville, MD
- NIH is the nation’s medical research agency—making important discoveries that improve health and save lives
NIH Goals:
- to foster discoveries, innovative research strategies, and their applications as a basis for protecting and improving health;
- to develop, maintain, and renew scientific human and physical resources that will ensure the Nation's capability to prevent disease;

NIH Goals:
- expand knowledge in medical and the sciences in order to enhance the Nation's economic well-being and ensure a continued high return on the public investment in research
- to exemplify and promote the highest level of scientific integrity, public accountability, and social responsibility in the conduct of science.

National Institutes of Health
- Largest hospital devoted entirely to clinical research
- Currently there are 1500 Clinical Research studies, with 50% documenting rare diseases not studied anywhere else
- Phase I and II trials, first-in-human trials of efficacy of therapies

National Institutes of Health
- Physical Therapists participate in numerous protocols and collaborate with investigators from 27 NIH Institutes
- Research involves protocol development, data management, data analysis, and presentations on the local, national, or international stage.

Federal- Civil Service
- 13 days paid vacation to start
- 10 paid Federal holidays
- Continuing education
- 13 days sick leave per year
- Comprehensive retirement program
- Comprehensive health care

National Institutes of Health
- Examples of PT research:
  - Assessment of muscle strength in patients with dermatomyositis or polymyositis
  - Assessment of impairments and disabilities in patients with Congenital Muscular Dystrophy or Neonatal Onset Multi-System Inflammatory Disease (NOMID)
  - Efficacy of Yoga in patients with arthritis
Federal- Commissioned Officer

- 30 days paid vacation
- 10 paid Federal holidays
- Continuing education
- Sick leave as needed
- Comprehensive health care
- Tax-free housing allowance

United States Public Health Service

- 6,800 well-trained, highly qualified health care professionals
- Essential component of the largest public health program in the world
- One of the 7 uniformed services

USPHS Mission

“To protect, promote, and advance the public health and safety of our Nation.”

Protect, Promote, and Advance:

- Rapid and effective response to public health needs
- Leadership and excellence in public health practices
- Advancement of public health science

US Surgeon General

Serves as America's Chief Health Educator by providing Americans the best scientific information available on how to improve their health and reduce their risk of illness and injury.

Current Acting Surgeon General:
RADM Boris Lushniak
USPHS Commissioned Corps

- Disease control and prevention
- Biomedical research
- Regulation of food and drugs
- Mental health care
- Substance abuse treatment
- Health care delivery
- International health
- Emergency and humanitarian response

Professions in the USPHS

- Physician—857
- Dentist—285
- Nurse—1643
- Pharmacist—1232
- Dietitian—107
- Engineer—417
- Environmental health officer—357
- Health services, including optometrists, social workers, physician assistants, and other health professionals—1296
- Scientist/researcher—348
- Veterinarian—96

- Therapist, including occupational therapy, physical therapy, speech-language pathology, and audiology—163

USPHS Duty Stations

USPHS Therapists Duty Stations
USPHS Therapists

- Clinical:
  - Indian Health Service
  - Bureau of Prisons
  - Dept of Defense
- Research:
  - National Institutes of Health
- Programatic:
  - Centers for Disease Control
  - Centers for Medicare Services

US Humanitarian Missions

CDR Hwang evaluates patients at Escuela El Higueral in Guatemala, a small sugar cane harvesting community that has not received health care in over 10 years.

LCDR Paul DeWitt is stationed in Gallup, NM, with the Indian Health Service.
On this particular day, the optometry department saw 124 patients and gave out 97 pairs of glasses.

CDR Kimberly Elenberg, a nurse officer, provides an illustration of proper hand-washing practices to a group of women as part of Operation Continuing Promise.

During Pacific Partnership, USS Peleliu works with Papua New Guinea and non-governmental organizations to provide medical, dental, construction, and engineering programs ashore and afloat, demonstrating commitment to the health and stability of the Pacific region.
CDR John Moroney with locals from Josephntual, a very remote area of Papua, New Guinea.
LT Christine Nemeti, a health services officer, distributes toothbrushes to Vietnamese families for the Corps' Pacific Partnership dental civic action.

Federal Medical Shelter; New Orleans

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Federal Bureau of Prisons
- Mission: provide necessary medical, dental, and mental health services to inmates by professional staff, consistent with acceptable community standards.

BOP Federal Medical Centers
- FMC Rochester
- FMC Carswell (women)
- FMC Lexington
- FMC Butner
- FMC Devins
- FMC Springfield
- 3 FCIs with PTs: Terminal Island, Tuscon, and Terre Haute
Physical Therapy Behind Bars

- General Population
  - Musculoskeletal complaints

- Chronic Ambulatory
  - Complications related to DM
  - Cardiac Conditioning
  - Obesity
  - Chronic Pain

Medical/Surgical Inpatient
- s/p Orthopedic Surgery
- Wound Care
- Cancer
AIDS
- Neuro: TBI, CVA, SCI
Mental Health
- All of the above, with the mental health overlay

Was It Scary??
Did you have an Armed Guard?

Physical Therapy Behind Bars
- Autonomy
- Access
- Advanced Credentials
- Musculoskeletal Experts
- Great working hours
- Exciting

Prison PT Goals
- Prevent inmates from needing outside trips to medical appointments
- Keep inmates at lower level institutions:
  - Keep inmates as self sufficient as possible
  - Keep inmates working

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Veterans Administration
VA Mission Statement

- To fulfill President Lincoln’s promise – “To care for him who shall have borne the battle, and for his widow, and his orphan” – by serving and honoring the men and women who are America’s veterans.

VA Vision

- To provide veterans the world-class benefits and services they have earned and to do so by adhering to the highest standards of compassion, commitment, excellence, professionalism, integrity, accountability, and stewardship.

Veterans Administration

- Goal
  - provide excellence in patient care, veterans' benefits and customer satisfaction.
  - striving for high quality, prompt and seamless service to veterans.
  - dedication and commitment to help veterans get the services they have earned.

Veterans Health Administration

- serving veterans by providing primary care, specialized care, and related medical and social support services.
- Comprehensive, integrated healthcare system that provides excellence in health care value, service, and education
- Organization characterized by exceptional accountability and an employer of choice

VA Population

- 25 million veterans are currently alive.
- 75% of vets served during a war or an official period of hostility

VHA Facilities

- 153 medical centers, in addition to community based outpatient clinics, community living centers, Vet Centers and Dorms
- Comprehensive care to over 5.5 million Veterans each year
VHA Medical Centers

- Services include hospital-based services such as surgery, critical care, mental health, orthopedics, pharmacy, radiology and **physical therapy**.

Veterans Administration

- **Civil Service Employment**
  - 13 days paid vacation to start
  - 10 paid Federal holidays
  - Continuing education
  - 13 days sick leave per year
  - Comprehensive retirement program
  - Comprehensive health care

21 Integrated Service Networks

VA Physical Therapy Vacancies

- [www.usajobs.gov](http://www.usajobs.gov)

- As of October 2013, 28 vacancies nationwide for Physical Therapists.

Serving the Underserved

- IHS, BOP, combat environments, veterans are underserved in a unique way, however all beneficiaries have health coverage
- Another aspect of underserved, are the many in this country who do not have access to affordable health care
- Paving the way for the role of PT and the Affordable Care Act

QUESTIONS?

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