Continuum of Care for Post-Traumatic Stress In The US Military Enterprise

Society for Health Systems Conference and Expo 2011
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Session Objectives

• Challenges across large-scale healthcare infrastructure, delivery and research systems
• The views and benefits of an enterprise systems perspective
• How an enterprise perspective can be applied to a large-scale healthcare system through the case of PTSD and related conditions within the military
Challenges

• “Even when an evidence-based innovation is implemented successfully in one part of a hospital or clinic, it may spread slowly or not at all to other parts of the organization.” (Berwick, 2003)

• “Various efforts to reduce waste have encountered challenges such as the high costs of initial investment and unintended administrative complexities.” (Bentley, 2008)
Enterprise Systems Thinking is Needed for Effective Healthcare Services

“Systems engineering has had an enormous impact in any number of fields, but it is only beginning to be applied in healthcare.

Part of the reason, I suspect, is that so many of the issues in healthcare are difficult to quantify societal questions, such as, should you spend the next marginal dollar on prevention, on research, or on treatment of the stricken?”

Norman Augustine,
Retired Chairman & CEO
Lockheed Martin Corporation
Enterprise as a System

An Enterprise is…

“a complex, integrated, and interdependent system of people, processes, and technology that creates value as determined by its key stakeholders.

An enterprise typically consists of multiple organizations (e.g., suppliers, partners, regulators) rather than a single corporation, division, or government unit.”

- An Enterprise Requires the Integration of
  - People
  - Processes
  - Organization
  - Information
  - Technology
  - Strategy

- Working with an Enterprise Requires a Holistic View
Enterprise Transformation Roadmap

**STRATEGIC CYCLE**

**Determine Strategic Imperative**
- Articulate the Case for Transformation & Convey Urgency
- Focus on Stakeholder Value
- Leverage Transformation Gains

**Perform Stakeholder Analysis**
- Assess Current Performance
- Create Vision of Future State
- Perform Gap Analysis Between Current and Future States
- Architect “To-Be” Enterprise

**Perform Enterprise Maturity Assessment**

**Analyze Processes & Interactions**
- Perform Enterprise Maturity Assessment
- Assess Current Performance Measurement System
- Align Performance Measurement System
- Align Incentives
- Empower Change Agents

**Perform Gap Analysis Between Current and Future States**
- Reconcile Systems, Policies & Vision
- Align Performance Measurement System
- Align Incentives
- Empower Change Agents

**Enterprise Vision**

**Pursue & Sustain Enterprise Transformation**

**Understand Current State**
- Monitor & Measure the Outcomes
- Nurture Transformation
- Capture & Diffuse Lessons Learned
- Synchronize Strategic, Planning & Execution Cycles

**Nurture Transformation & Embed Enterprise Thinking**
- Monitor & Measure the Outcomes
- Nurture Transformation
- Embed Enterprise Thinking
- Capture & Diffuse Lessons Learned
- Synchronize Strategic, Planning & Execution Cycles

**Capabilities & Deficiencies Identified**
- Perform Stakeholder Analysis
- Perform Gap Analysis Between Current and Future States
- Architect “To-Be” Enterprise

**Short-Term Corrective Action**

**Align Enterprise Structure and Behaviors**
- Reconcile Systems, Policies & Vision
- Align Performance Measurement System
- Align Incentives
- Empower Change Agents

**Envision & Design Future Enterprise**
- Create Vision of Future State
- Perform Gap Analysis Between Current and Future States
- Architect “To-Be” Enterprise

**Implement & Coordinate Transformation Plan**
- Communicate Transformation Plan
- Commit Resources
- Provide Education & Training
- Implement Projects and Track Progress

**Implementation Results**

**Engage Leadership in Transformation**
- Cultivate Enterprise Thinking
- Obtain Executive Buy-In
- Establish Executive Transformation Council

**Alignment Requirements Identified**

**Create Transformation Plan**
- Identify Improvement Focus Areas
- Determine Impact on Enterprise Performance
- Prioritize, Select and Sequence Project Areas
- Develop and Synchronize Detailed Implementation Plans

**EXECUTION CYCLE**

**Envision & Design Future Enterprise**

**Enterprise Vision**

**Transformation Plan**

**Pursue & Sustain Enterprise Transformation**

**Understand Current State**

**Long-Term Corrective Action**

**A Committed Leadership Team**

**Enterpris Transformation Roadmap**

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Case Example: Psychological Healthcare is an Enterprise Challenge

“The current system is insufficient to meet the needs of today’s forces and their beneficiaries and will not be sufficient to meet the needs of the future.”

- DoD Task Force on Mental Health, 2007

4-Star Speaks Out on Struggle with PTSD

“This isn’t just a debt of gratitude. This is a debt that must be repaid because they have sacrificed so much. They have done exactly what this country has asked. They have fought and suffered and their lives have been affected forever.”

Admiral Michael Mullen, Chairman of the Joint Chiefs of Staff
Army Times, 11-26-2008
Determine Strategic Imperative:
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PTSD: A Significant Pathology of War

- Challenges with Access to and Quality of Care
- Challenges with Culture and Stigma
- Consideration of Families

5% to 20% prevalence

Over $2 Billion Invested

Over 125 psychological health programs

Resources: RAND, 2008 Invisible Wounds of War
Challenge:
Develop innovative recommendations for transforming the military enterprise to better manage post-traumatic stress, and related conditions, in support of our warriors and their families
Engage Leadership in Transformation

- Cultivate Enterprise Thinking
- Obtain Executive Buy-In
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A Committed Leadership Team
Formal Project Kickoff: Tuesday, September 28th, 2010

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VADM Adam Robinson, Navy Surgeon General

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Enterprise Transformation Roadmap

STRATEGIC CYCLE
- Determine Strategic Imperative: Articulate the Case for Transformation & Convey Urgency
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PLANNING CYCLE
- Understand Current State
  - Perform Stakeholder Analysis
  - Analyze Processes & Interactions
  - Perform Enterprise Maturity Assessment
  - Assess Current Performance Measurement System

A Committed Leadership Team

Nurture Transformation & Embed Enterprise Thinking
- Monitor & Measure the Outcomes
- Nurture Transformation
- Embed Enterprise Thinking
- Capture & Diffuse Lessons Learned
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Long-Term Corrective Action

Implement Coordinated Transformation Plan
- Identify
- Determine
- Prioritize
- Develop

Capabilities & Deficiencies Identified

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LAI will perform an enterprise analysis of the PTSD process.

**Three Phases:**

1. Current state analysis
2. Model creation and validation
3. Future scenario planning and recommendations
Research Phase I: Current State Analysis

Four Areas of Interest

- Stakeholder Analysis
- Enterprise Organizations and Processes
- Performance Measurement Systems
- Resources and Outcomes

Research Activities

- Literature review
- Triangulation
- Gathering available data
- Interviews and site visits
Stakeholder Analysis Overview

MHS Stakeholder Network

Key:
USAFMS (United States Air Force Military Health System);
MEDCOM (Army Medical Command);
TMA (TRICARE Management Activity);
DCOE (Defense Center of Excellence for Psychological Health and Traumatic Brain Injury)
Holistic approach to the observation of occupational stress-related processes cross the military service lifecycle that relate both to service members and their families.
Performance Measurement Overview

- **Readiness** - ensuring that the total military force is medically ready to deploy and that the medical force is ready to deliver health care anytime, anywhere in support of the full range of military operations, including humanitarian missions.

- **Population Health** - Reducing the generators of ill health by encouraging healthy behaviors and decreasing the likelihood of illness through focused prevention and the development of increased resilience.

- **Experience of Care** - Providing a care experience that is patient and family centered, compassionate, convenient, equitable, safe and always of the highest quality.

- **Per Capita Cost** - Creating value by focusing on quality, eliminating waste, and reducing unwarranted variation considering the total cost of care over time, not just the cost of an individual health care activity.

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<thead>
<tr>
<th>Theme</th>
<th>Year</th>
<th>Key Events</th>
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<tr>
<td>Financial-Focused, Outputs Based</td>
<td>1997</td>
<td>Performance Contracts</td>
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<td>2003</td>
<td>Prospective Payment System</td>
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<td>2007</td>
<td>Mission Redefinition</td>
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<td></td>
<td>2010</td>
<td>Quadruple Aims</td>
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• Projected provider requirements cannot be met using available direct-care resources both DOD-wide and within the services.
• There is no evidence to suggest this shortfall in direct-care capacity can be easily absorbed using purchased care providers.
Envision & Design Future Enterprise

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Enterprise Vision
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Enterprise Architecting Enables Greater Efficiency and Effectiveness

- Effective integration – managing complex interdependencies
- System optimization, not local optimization
- Knowledge-based enterprise capabilities
- Achieving desired future state characteristics
  - Agility
  - Flexibility
  - Reconfigurability
Align Enterprise Structure and Behaviors

- Reconcile Systems, Policies & Vision
- Align Performance Measurement System
- Align Incentives
- Empower Change Agents
Align the PTSI Enterprise

• Match resource allocation to enterprise needs
  • Availability of treatment facilities
  • Adequacy of research and development efforts
  • Accessibility of health care providers

• Align Incentives and Behaviors

• Holistic alignment of strategic objectives, stakeholder values, enterprise processes and performance measures
Transformation Plan

Create Transformation Plan

- Identify Improvement Focus Areas
- Determine Impact on Enterprise Performance
- Prioritize, Select and Sequence Project Areas
- Develop and Synchronize Detailed Implementation Plans
Anticipated Recommendations

• Refine the value proposition centered around warriors and their families
• Determine high-leverage opportunities for improving the continuum of care
• Revise policies and procedures to enhance system performance
Implementation Results

- Communicate Transformation Plan
- Commit Resources
- Provide Education & Training
- Implement Projects and Track Progress

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Holistic approach to the observation of occupational stress-related processes cross the military service lifecycle that relate both to service members and their families.
Prevention/Resilience

- Need to enhance servicemember and family resilience (e.g., DoD Task Force on Mental Health, 2007)
- Continued research of prevention methods in certain high-risk populations (e.g., Bryant et al., 2003)
- Need to implement wellness and prevention guidelines (e.g., Task Force on the Future of Military Healthcare, 2007)
- Need to identify and utilize performance and resiliency outcomes that meet identified operational demands (Bates et al., 2010)
- Historically, psychological screening conducted prior to joining military found ineffective (Pols and Oak, 2007)
- Multiple resilience training programs with some evidence of success (Bowles and Bates, 2010, MHAT-V, 2008)
Identification/Treatment

- Improved psychological treatment over military history (e.g., Pols and Oak, 2007)
- Range of treatment options to date (Pols and Oak, 2007; Tanielian and Jaycox, 2008; IOM, 2010)
- Lack of provision of evidence-based treatments (Burnam et al., 2009)
- Servicemember education of treatment choices needed (Burnam et al., 2009)
- Challenges with access to care (e.g., Tanielian and Jaycox, 2008)
- Stigma of diagnosis and influence on diagnosis or “labeling” illness on symptoms/functioning (Jones et al., 2007)
- Continued research of neurological detection/diagnosis (e.g., Woodward et al., 2006)
Rehabilitation/Reintegration

- Need to ensure the recovery of servicemember (DoD Task Force on Mental Health, 2007)

- Difficulty readjusting/transitioning to family life, jobs, and communities after deployment (IOM, 2010)

- Recommended use of recovery plans and recovery coordinators (Dole and Shalala, 2007)
Preliminary Findings and Conclusions from Literature

- Identification and Treatment literature more mature than Prevention and Resilience or Rehabilitation and Reintegration
- Growing attention to Prevention and Resilience
- Least attention to Rehabilitation and Reintegration
- Limited collective attention in the literature to the full continuum of care

- Potential opportunities of taking a holistic approach to the targeted post-traumatic stress military enterprise
- Approach could be extended to other large-scale healthcare systems
Post-Traumatic Stress Innovations: U.S. Military Enterprise Analysis

**Challenge:**
Develop innovative recommendations for transforming the military enterprise to better manage post-traumatic stress, and related conditions, in support of our warriors and their families.

**LAI will perform an enterprise analysis of the PTSD process.**

Three Phases:
1. Current state analysis
2. Model creation and validation
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**Anticipated Outcomes:**
- Increased understanding of the total system, including stakeholders and system performance
- Determination of high-leverage opportunities for improving the total systems
- Examination of policy and treatment implications
Thank you

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