

Gulf War Veterans Health Advisory Committee

January 14, 2009

VA Puget Sound

Post-Combat Care for Gulf War Veterans

What do we know?

What don't we know?

What can we do,

knowing what we know

and knowing what we don't know?

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**“Everything has changed for me and
my family since the war.”**

“I feel like I am a different person.”

“Nothing seems right anymore.”

How does combat affect health?

How are the health affects from the Gulf War different from those of other wars?

How are they similar?

How do we address the health concerns of Gulf War veterans?

How do we address the health concerns of combat veterans in general?

Post-war syndromes in the past century

1870: Civil War veterans present with “irritable heart”

1920: WWI veterans present with “shell shock” “effort syndrome”

1950: WWII veterans present with “combat fatigue”

1975: Vietnam veterans present with Agent Orange exposure, “post traumatic stress disorder”

1995: Gulf War veterans present with Gulf War Syndrome (“medically unexplained symptoms”

Most Common Disabilities in Veterans

“How does military service effect health?”

1. Scars	4.5%
2. Skeletal	4.1%
3. Knee	3.6%
4. Arthritis due to trauma	3.5%
5. Tinnitus	3.1%
6. Hearing loss	3.1%
7. LS strain	2.9%
8. PTSD	2.6%
9. Hypertension	2.5%
10.DDD	2.4%

Peacetime Era Veterans Most Common Disabilities

“How does military service effect health?”

1. Knee	5.4%
2. Skeletal	5.2%
3. Arthritis due to trauma	3.9%
4. Scars	3.8%
5. LS strain	3.6%
6. Hypertension	3.3%
7. Hearing loss	3.2%
8. DDD	2.9%
9. Tinnitus	2.8%
10.Hemorrhoids	2.4%

World War II Era Veterans
Most Common Disabilities

“How did WWII effect combatants?”

1. Anxiety Disorder	5.3%
2. Scars	4.7%
3. Cold injury residuals	4.0%
4. Arthritis due to trauma	3.4%
5. PTSD	2.5%
6. Pes planus	2.4%
7. Hearing loss	2.9%
8. Tinnitus	2.3%
9. Scars	2.2%
10. Head/neck scars	2.3%

Korean War Era Veterans
Most Common Disabilities

“How did the Korean War effect combatants?”

1. Scars	5.0%
2. Cold injury residuals	3.9%
3. Hearing loss	3.0%
4. Tinnitus	3.0%
5. Arthritis due to trauma	2.8%
6. Ulcer, duodenal	2.3%
7. PTSD	2.2%
8. Scars	2.0%
9. Anxiety disorder	1.9%
10. Skeletal	1.8%

Vietnam War Era Veterans
Most Common Disabilities

“How did the Vietnam War effect combatants?”

1. Scars	5.6%
2. PTSD	5.4%
3. Diabetes	3.9%
4. Skeletal	3.6%
5. Hearing Loss	3.4%
6. Tinnitus	3.1%
7. Knee	2.9%
8. Hypertension	2.7%
9. Arthritis due to trauma	2.6%
10. LS strain	2.3%

Gulf War Era Veterans
Most Common Disabilities

“How did the Gulf War effect combatants?”

1. Skeletal	6.4%
2. Knee	4.8%
3. Arthritis due to trauma	4.5%
4. LS strain	4.3%
5. Tinnitus	4.0%
6. Scars	3.4%
7. DDD	3.2%
8. Hypertension	3.0%
9. Hearing Loss	2.9%
10. Ankle	2.3%

Veterans from Iraq/Afghanistan deployment

Seen at VA by 6-30-08

N=371,123
(41% of 908,690)

Diagnoses:	Musculoskeletal	48.5%
	Mental disorders	43.7%
	Symptoms/signs	40.9%
	Nervous system	35.9%
	GI	32.1%
	Endocrine/Nutrition	22.6%
	Injury/Poisoning	22.2%
	Respiratory	20.9%

VHA Office of Public Health and Environmental Hazards
October 2008

Table 6. Frequency of Major ICD-9 Diagnostic Categories Among Gulf War Veterans

ICD-9 Code	VA Registry Initial Format (n = 49079)	VA Registry Revised Format (n = 21306)	DoD's CCEP (n = 32876)
	% (Number)	% (Number)	% (Number)
290 – 319 Mental Disorders	15.0 (7345)	35.7 (7615)	48.4 (15923)
320 – 389 Nervous System/Sense Organs	8.2 (4049)	17.9 (3805)	19.4 (6369)
460 – 519 Respiratory System	14.2 (6966)	18.4 (3926)	19.0 (6253)
520 – 579 Digestive System	11.3 (5569)	17.7 (3773)	24.0 (7896)
680 – 709 Skin and Subcutaneous Tissue	13.4 (6562)	19.6 (4167)	21.4 (7051)
710 – 739 Musculoskeletal/Connective Tissue	25.1 (12328)	39.4 (8404)	70.0 (23012)
780 – 799 Symptoms, Signs, and Ill-Defined	3.2 (1552)	16.2 (3451)	63.8 (20982)

* Used for a diagnosis of "healthy" (V65.5) among CCEP participants

+ "Complications of Pregnancy, Childbirth, and the Puerperium," "Congenital Anomalies," and "Certain Conditions Originating in the Perinatal Period"

++ Not included in this entry are 1131 individuals evaluated in the revised VA registry who were given a special diagnostic code for a diagnosis of chronic fatigue syndrome, sleep apnea, or fibromyalgia.

Combined analysis of the VA and DoD Gulf War Clinical Evaluation Programs
DVA/VHA and DoD (Office of the Assistant Secretary of Defense, Health Affairs)
September 2002

Table 4. Self-reported Health Status of Gulf War Veterans

Scale	VA Registries		DoD CCEP	
	Initial Format	Revised Format	Scale	% (number)
	% (number)	% (number)		
<i>Very good</i>	5.3 (2,559)	5.6 (1,196)	<i>Excellent</i>	5.6 (485)
<i>Good</i>	24.6 (11,935)	26.4 (5,632)	<i>Very good</i>	21.0 (1,833)
<i>Fair</i>	41.6 (20,170)	42.0 (8,957)	<i>Good</i>	41.0 (3,610)
<i>Poor</i>	23.4 (11,327)	20.6 (4,399)	<i>Fair</i>	26.0 (2,261)
<i>Very poor</i>	5.2 (2,501)	5.3 (1,122)	<i>Poor</i>	6.0 (522)

* Data on health status were provided by 99% of VA registry participants but by only 35% of veterans evaluated in the CCEP.

Combined analysis of the VA and DoD Gulf War Clinical Evaluation Programs
DVA/VHA and DoD (Office of the Assistant Secretary of Defense, Health Affairs)
September 2002

In Summary: How Does Combat Effect Health?

In all wars we see generic post-combat health problems including:

- physical injuries with residual pain
- diagnosable mental health conditions
- unexplained symptoms with general health decline
- hearing problems
- dental problems
- psychosocial distress: marriage/work/social
- post-war death/injury from “incidental trauma”

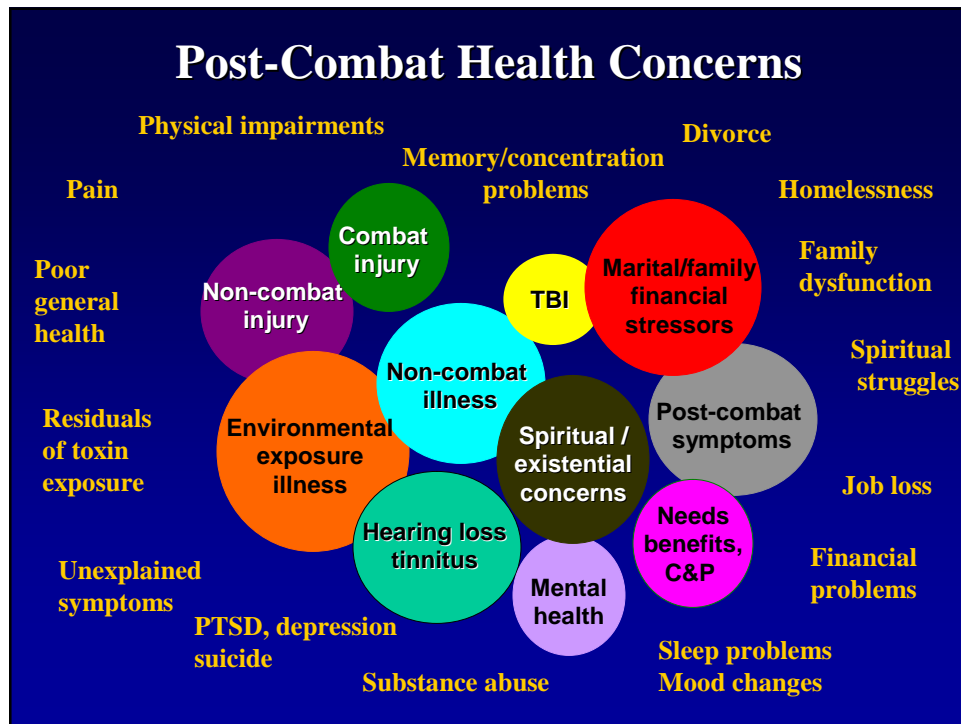
In Summary: How Does Combat Effect Health?

In each war we see unique post-combat health problems including:

- specific environment exposures (Agent Orange in Vietnam, DU/PB/nerve agents in GW, ionizing radiation post-atomic testing)
- exposures related to geography (cold/heat injury, infectious diseases)
- risk related to nature of combat chemical weapons, blast wave exposures, increased amputation/cord/brain injuries resulting from better battlefield equipment/trauma care
- social context for the war

Combat Environment





Traditional Medical Model

The Ideal:

A specific agent/cause leads to a specific disease.

Origins in early epidemiology, infectious disease models, Koch's postulates on causality

The Reality:

For most symptoms that bring us to a doctor, a cause or disease will not be found

Most diseases are multi-factorial in cause

The Critical Question...

Traditional Medical Model:

A specific cause leads to a specific disease.

What is your diagnosis? Are your symptoms caused by disease/condition X, Y or Z?

If we can't come up with a diagnosis for your symptoms, how can we provide you with the support you need?

False Dichotomies in the Medical Model...

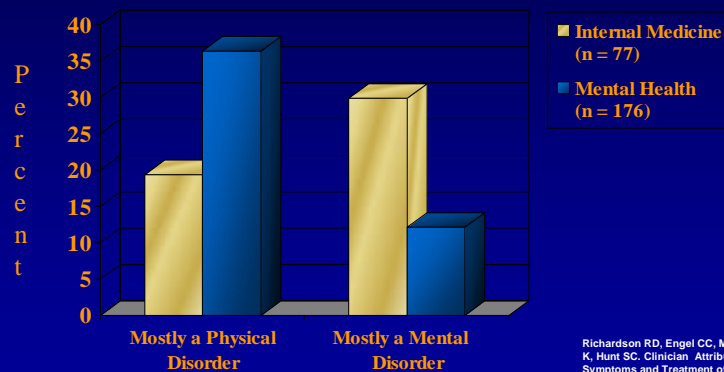
Gulf War Veterans and their providers:

Are your symptoms from a “real” cause (environmental agent exposure) or are they “just” PTSD (“in your head”, “mental”, “not real”, “just stress”)

Iraq/Afghanistan War veterans and their providers:

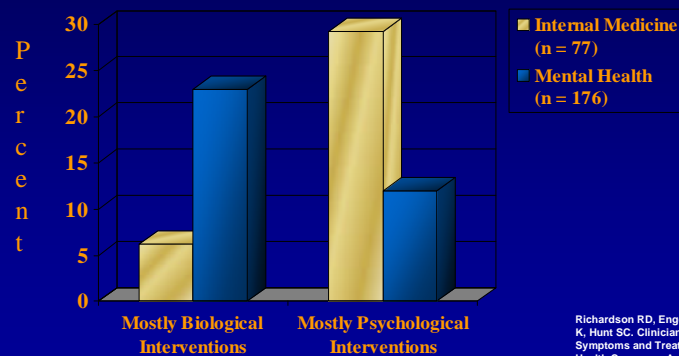
Are your symptoms from a “real” injury (blast wave exposure, head injury) or are they “just” PTSD (“in your head, mental, not “real”, “just stress”)

Rate the degree to which you believe “Persian Gulf Illness” is:



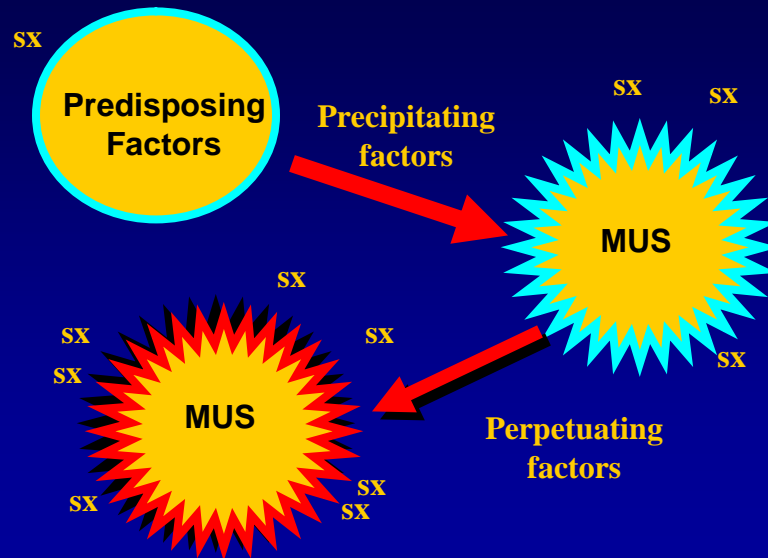
Richardson RD, Engel CC, McFall, M, McKnight K, Hunt SC. Clinician Attributions for Symptoms and Treatment of Gulf War-Related Health Concerns. Archives of Internal Medicine 2001; 161: 1289-1294.

Rate the degree to which you believe “Persian Gulf Illness,” in general, is most effectively treated by:

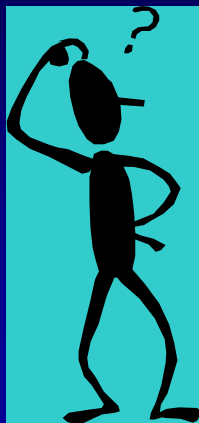


Richardson RD, Engel CC, McFall, M, McKnight K, Hunt SC. Clinician Attributions for Symptoms and Treatment of Gulf War-Related Health Concerns. Archives of Internal Medicine 2001; 161: 1289-1294.

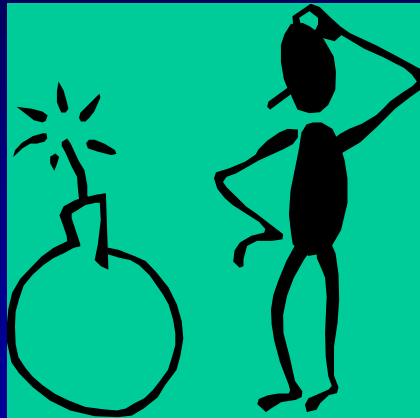
Medically Unexplained Symptoms



Provider's Beliefs about Gulf War symptoms



Gulf War Veterans' Beliefs about their Symptoms



What we don't know about GW veterans health...

- The specific effects of many of the numerous combat related exposure on post-war health
- The specific cause(s) of the medically unexplained symptoms so commonly see in GW veterans
- The specific cause(s) of “Gulf War Syndrome” (fatigue, muscle/joint pains and memory/concentration problems)
- The relative contributions of the many combat related stressors, exposures and experiences to specific post-war health symptoms and concerns
- The long term health risks of many of the numerous combat related exposures and experiences

What we do know about GW veterans health...

- GW veterans have more medically unexplained symptoms than veterans of other conflicts
- GW veterans have a particular constellation of symptoms (“GW Syndrome”: fatigue, muscle/joint pain and memory/concentration problems) more often than combat veterans from other conflicts
- GW veterans have more concerns about, and perhaps more exposure to, a wider variety of chemicals and environmental agents than combat veterans of other conflicts
- GW veterans have poorer general health and functioning than expected
- GW veterans had less exposure to traditional combat stressors but more exposure to chemical/biological stressors than combat veterans from other conflicts

What we do know about individuals with unexplained symptoms...

- Unexplained symptoms are not unique to GW veterans
- Most individuals coming in to see their primary care doctors have symptoms for which a specific cause will not be found
- In most cases, we do not have to know the specific cause of a symptom to effectively treat the symptom
- Attributing a symptom to an incorrect cause may result in incorrect or ineffective management of the symptoms
- Living with medically unexplained symptoms can be more challenging than living with a diagnosed disease

*What we do know about treating individuals
with unexplained symptoms...*

- **To effectively manage unexplained symptoms:**
 - Comprehensive initial assessment and testing
 - Effective communication and education of patient
 - Validation of the patient's experience and symptoms; acknowledgement that "it is real"
 - A willingness to acknowledge complexity and "not knowing"
 - Must understand the predisposing, precipitating, perpetuating factors associated with medically unexplained symptoms
 - Symptomatic treatment
 - Patient centered: health maintenance, preventive medicine, health recovery; shift from medical to self-management approach
 - Ongoing monitoring of care and status; life long commitment
 - Ongoing research into the specific syndrome/condition involved

*To say that we do not know the cause of a
symptom is not to say...*

- **We do not care**
- **We are not doing our best**
- **It is not real**
- **It does not matter**
- **It is not serious**
- **There is nothing we can do**

To say that we do not know is to say...

- This is complex; to be simplistic is to dishonor the complexity of this reality
- It is important not to guess or to act upon assumptions
- It matters a great deal that we are honest and straightforward
- It is more important than ever to pay attention, take care of one's self, stay involved in care, conduct ongoing research
- This is complex...there are no “magic bullets”...treatment will take time and a team effort
- Our goal is not to eradicate all symptoms related to disease; our goal is to mitigate symptoms, improve functioning and optimize quality of life for the veteran and his/her family

The Critical Question...

Integrated Post-Combat Care Model:

How are you doing? How has your combat experience affected you and your life? What risk exposures/conditions from combat might be contributing to your symptoms?

How can we manage your symptoms/conditions, improve your functioning and reduce further impairment?

How can we provide you with the support you need to get your health, your family and your life back on track?

Health Concerns of Combat Veterans

What are the risks of war?

- *Generic risks in all combat*
- *Unique risks of each conflict*

Perform Risk Assessment:

Physical

Psychological

Psycho-social

Health Concerns of Combat Veterans

What are the risks of war?

Physical factors

injury	noise
temperature	sleep deprivation
diet	austere conditions
toxic agents	infectious agents
immunizations	blast wave exposure

Health Concerns of Combat Veterans

What are the risks of war?

Psychological factors

anticipation of combat
combat trauma
non-combat trauma (including MST)
separation from family/home
deprivation/hyper-stimulation

Health Concerns of Combat Veterans

What are the risks of war?

Psycho-social factors

Marital/family disruption
Financial challenges
Vocational impacts
Impairments in social networks

Risk Assessment:

“What factors (exposures, experiences, etc) are present that increase the likelihood of your having particular negative health outcomes?”

Risk Communication:

“What are your potential health concerns, given your personal risk factors?”

Risk Management:

“How can we minimize negative health impacts of combat?”

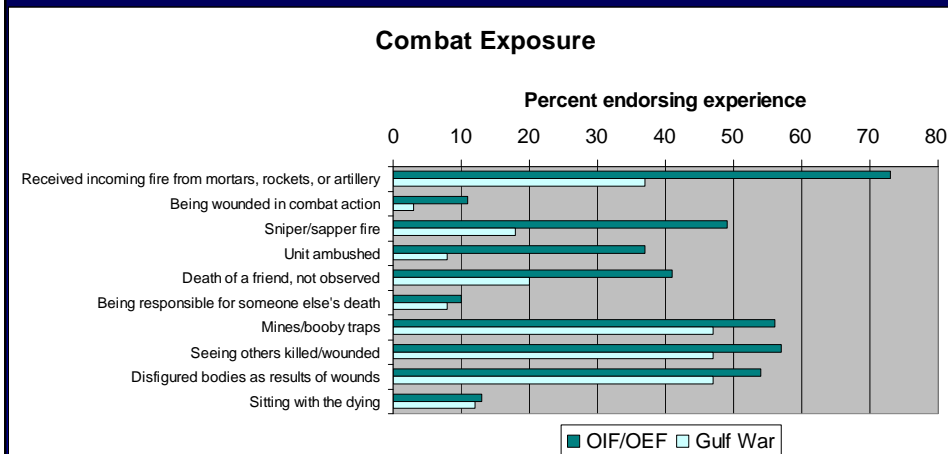
- Pre-deployment**
- During deployment**
- Post-deployment**

***What can we say
to returning combat veterans?***

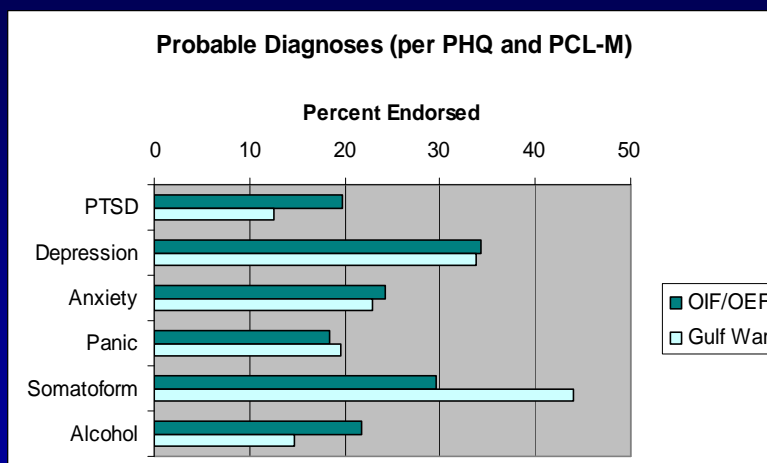
You are at risk for certain health concerns:

- 1.Hearing loss and tinnitus**
- 2.Dental problems**
- 3.Musculo-skeletal injuries/physical war wounds**
- 4.Environmental agents effects**
- 5.Medically unexplained symptoms/general physiological distress**
- 6.Effects of psychological trauma**
- 7.Iraq/Afghanistan specific concerns: Leishmaniasis/TBI**
- 8.Family/marital/work/psychosocial concerns**

D: Combat Exposure



F: PHQ and K: PCL-M



Total PCL score 33(OIF/OEF) vs. 29 (Gulf)

Veterans from Gulf War **(deployed to conflict)**

Enrolled in VA	248,008 (40% of 618,283)
Using Vet Centers	83,913 (13.6% of 618,283)
Claims granted SC	210,697 (34.1% of 618,283)
SC for Undiagnosed Illness	3,381 (.5% of 618,283)

Gulf War Veterans Information System
February 2008

**What Can We Do as a Treatment Community
to Best Help Those Who Are Experiencing
Health Affects of War?**

Gulf War Veterans' Clinic Philosophy

Beliefs

- ◆ **There are symptoms and health problems which have arisen subsequent to service in the Gulf.**
- ◆ **Some symptoms may be related to exposures/experiences in the Gulf.**
- ◆ **Symptoms can affect all aspects of life.**

Beliefs

- ◆ **Psychological trauma and environmental exposures can lead to psychological, emotional and physical changes in the body. There is no mind/body dualism.**
- ◆ **We may never fully understand the complex relationships between exposures/experiences and symptoms.**

Beliefs

- ◆ **Guesses and unproven theories regarding etiologies can be confusing and harmful.**
- ◆ **The search for truths and understanding must continue to be a priority.**
- ◆ **We do not need to fully understand the causes of symptoms to effectively manage them.**

Gulf War Veterans' Clinic Philosophy Goals

- ◆ **Maximize health and overall functioning.**
- ◆ **Symptom management not symptom eradication.**
- ◆ **Improve quality of life, not cure of disease**

Gulf War Veterans' Clinic Philosophy Methods

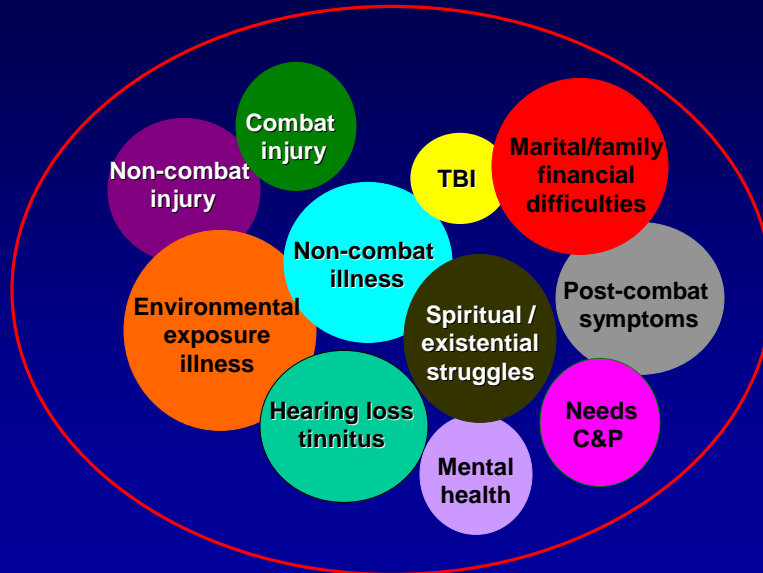
- ◆ **health focus not disease focus**
- ◆ **clear, open communication/easy access**
- ◆ **continuity in providers and care**
- ◆ **regularly scheduled visits**
- ◆ **integrated approach**
- ◆ **family oriented care**
- ◆ **cooperative partnership led by the veteran**

Integrated Post Combat Care

•Premises

- The health care risks and health care needs of combat veterans differ from those of non-combat veterans.**
- The health care needs of combat veterans are best served by clinicians familiar with the unique health risks of combat.**
- The health care needs of combat veterans are best served in a setting utilizing multidisciplinary resources and integrated care.**

Integrated Post-Combat Care



Management of Post-Combat Health Concerns

Integrated, interdisciplinary intervention including medical and mental health clinicians, SW, PT, Rehab, who are sensitive to the combat experience.

Accessing and utilizing available benefits (C&P, educational, marital/family support)

Must involve not only VA/DoD but also include community integration/community organizations

Post Deployment Integrated Care

Philosophy of Post-Combat Care:

Using the five years of post-combat priority eligibility proactively as a period for assessment, monitoring and utilization of appropriate resources directed towards optimal recovery, rehabilitation and reintegration into post-combat, non-military life by the end of the five year period.

Integrated Post Combat Care

The purpose of the integrated post-combat care is to:

- Address and support the veteran in all aspects of life which have been affected by their combat experience (including environmental exposure, TBI, mental health and psychosocial concerns)**
- Provide that support in an accessible and integrated way (working in concert with PTSD/ Polytrauma/specialty clinics and outside providers)**
- Provide that support in an ongoing way for as long as it is needed**

Post Deployment Integrated Care

Clinic is a collaboration between primary care, mental health, social work and support from Polytrauma/rehab, pain management/addictions treatment, specialties, C&P

Clinic staff includes:

- Clinic coordinator
- Primary care MD/NP
- Combat stress specialists (mental health)
- Psychiatrist / Internist
- Social Work support
- Liaison with Polytrauma Clinic, specialty clinics, external resources

Post-Deployment Integrated Care: An Approach to VA Post Combat Care

What do we say to a veteran returning from a combat deployment?

We would recommend a post-combat evaluation:

- 1. Physical exam, mental health evaluation and social work assessment with attention to pertinent combat related exposures, experiences and psychosocial impacts**
- 2. Ongoing care to provide necessary treatment and monitoring for any emerging combat related conditions**
- 3. Education regarding available benefits/sources of support for the veteran and his/her family**

Post-Deployment Integrated Care: An Approach to VA Post Combat Care

What do we say to a Gulf War veteran 18 years after his/her combat deployment?

We would recommend ongoing contact with the VA system:

1. Even if you receive all of your medical care outside the VA system, it is important to be knowledgeable about VA benefits
2. If you have medical conditions for which you are service connected or which you suspect may be related to a combat deployment or military service, or if you have significant changes in your health status, you should consider VA enrollment and ongoing contact with the VA
3. It is important that you are up to date on information regarding VA benefits/sources of support for you and your family as well as ongoing research into health concerns of combat veterans
4. The VA is the premier system for the assessment and treatment of war related health concerns and it is continually improving its services

Post-Deployment Integrated Care: An Approach to VA Post Combat Care

What do we say to any combat veteran regardless of how many years it has been since his/her combat deployment?

We would recommend ongoing contact with the VA system:

1. Even if you receive all of your medical care outside the VA system, it is important to be knowledgeable about VA benefits
2. If you have medical conditions for which you are service connected or which you suspect may be related to a combat deployment or military service, or if you have significant changes in your health status, you should consider VA enrollment and ongoing contact with the VA
3. It is important that you are up to date on information regarding VA benefits/sources of support for you and your family as well as ongoing research into health concerns of combat veterans
4. The VA is the premier system for the assessment and treatment of war related health concerns and it is continually improving its services

**“How are you doing?
How has your combat experience affected you”**

- **Acknowledges the full range of potential impacts of the combat deployment on the veterans health and life.**
- **Provides a sense of risk exposure: environmental agents, psychological/combat trauma, psychosocial factors**

“We know that there are many exposures and experiences which can occur during a combat deployment that can lead to changes in our health and lives...we are going to be sure to identify and address any problems you may be having as a result of your combat experiences.”

Health Concerns of Combat Veterans

Risk Assessment

Post-combat evaluation:

Dates in theater
Unit/Location
MOS
Actual duties
Immunizations
Environmental exposures
Combat exposures
Psychosocial factors
In-theater concerns
Interval concerns/current concerns
Possibility of re-deployment

Health Concerns of Combat Veterans Returning from Iraq and Afghanistan

Using an Integrated Care Model: Potential advantages of a post-combat evaluation and treatment clinic:

1. Normalizes the post-combat reintegration experience
2. Utilizes a rehabilitative orientation
3. De-stigmatizes the mental health aspects of care
4. Appreciates the common as well as the unique aspects of military service as an occupation and combat as an environment
5. Acknowledges the veteran's service

Health Concerns of Combat Veterans Returning from Iraq and Afghanistan

Integrated Care Model: Roles and Responsibilities

Team Responsibilities:

Safety

Rapport

Accessibility

Integration

Continuity

Commitment to Recovery

Health Concerns of Combat Veterans Returning from Iraq and Afghanistan

Integrated Care Model: Roles and Responsibilities

Primary Care Clinician:

Initial primary contact

Risk Assessment/Risk Communication

Medical Care: assessment/treatment, preventive, health
maintenance

Do no harm

Health Concerns of Combat Veterans Returning from Iraq and Afghanistan

Integrated Care Model: Roles and Responsibilities

Mental Health Clinician:

De-stigmatize care

Mental Health Care: assessment/treatment, preventive, health
maintenance

Marital/Family and Psychosocial support

Do no harm

Health Concerns of Combat Veterans Returning from Iraq and Afghanistan

Integrated Care Model: Roles and Responsibilities

Psychiatric Clinician:

De-stigmatize care

Consultation/management

Liaison with PTSD inpt/outpt treatment

Do no harm

Health Concerns of Combat Veterans Returning from Iraq and Afghanistan

Integrated Care Model: Roles and Responsibilities

Social Work Clinician:

Benefits counseling/support

Mental health support

Marital/family and psychosocial support

Case management

Health Concerns of Combat Veterans Returning from Iraq and Afghanistan

Integrated Care Model: Roles and Responsibilities

Other Team Members:

Benefits counseling/support

Specialized care (TBI/Polytrauma, SCI, medical specialty)

Spiritual support

Integrated Post Combat Care

By welcoming each veteran back to our community,
to our VAMC, and saying:

Welcome home.

We appreciate your service.

We want to know how your combat experience
affected your health and your life.

We want you to know your risk factors and
potential health concerns.

Let's get you the resources and assistance
you need to take care of those
concerns.

We are here for you and your family now...
and will be here for you in the long run

**Integrated Post Combat Care
A Life long Commitment**

The Health Impacts of War May Last a Lifetime

To our WWII veteran, our Korean War veterans our Vietnam veteran, our GW veteran, our Irag/Afghanistan veteran, our other combat veterans say:

We appreciate your service.

We know how going off to war can effect your life and your health and some of those effects can last for years.

We want you to know your risk factors and potential health concerns and monitor you for any problems down the road.

We are here for you and your family now...
and will be here for you in the long run

Integrated Post-Combat Care

Not to guide the veteran away from the war and its effects, but to support and accompany them through it...



Luis Sinco
LA Times 2004

**We do not come home *from* war.
We come home *with* war.
Finding home is a complex journey...
a journey we must make together.**

Post Combat Care for Gulf War Veterans:

Post-Combat Care
A Lifelong Commitment

We know what to do.
We honor your service by serving you...

Stephen C Hunt MD MPH
National Director, Post-Deployment Integrated Care Initiative
Katheleen Z Andrews, Co-Director
Gordon Schectman MD, Chief Consultant Primary Care

Department of Veteran Affairs

...we appreciate your service...

Department of Veteran Affairs
Post-Deployment
Integrated Care Initiative

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