



**CSHIIP**

Center for the Study of Healthcare  
Innovation, Implementation & Policy



# Using Lessons from VA to Improve Care for Women with Mental Health and Trauma Histories

## Overview: Women Veterans in the VA

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VA Greater Los Angeles Healthcare System  
July 22, 2014

# Goals of Session

- Part I: (Today's Cyberseminar)
  - Overview of women veterans
  - Mechanisms of trauma's impact on health
  - Interventions in Prim Care for treatment of PTSD
- Part II: (2<sup>nd</sup> Cyberseminar TBD)
  - Gender differences in trauma/PTSD
  - Trauma prevalence & retraumatization issues
  - Mental Health interventions for trauma in Prim Care
  - Relevance for trauma research/findings for Prim Care practice inside and outside of VA

# Poll Question #1

- What is your primary role in VA?
  - student, trainee, or fellow
  - clinician
  - researcher
  - manager or policy-maker
  - Other

# Poll Questions #2

- In what setting, do you usually work with women Veterans?
  - Clinical, Primary Care
  - Clinical, Mental Health
  - Research
  - Admin
  - Other
  - I do not usually work with women Veterans

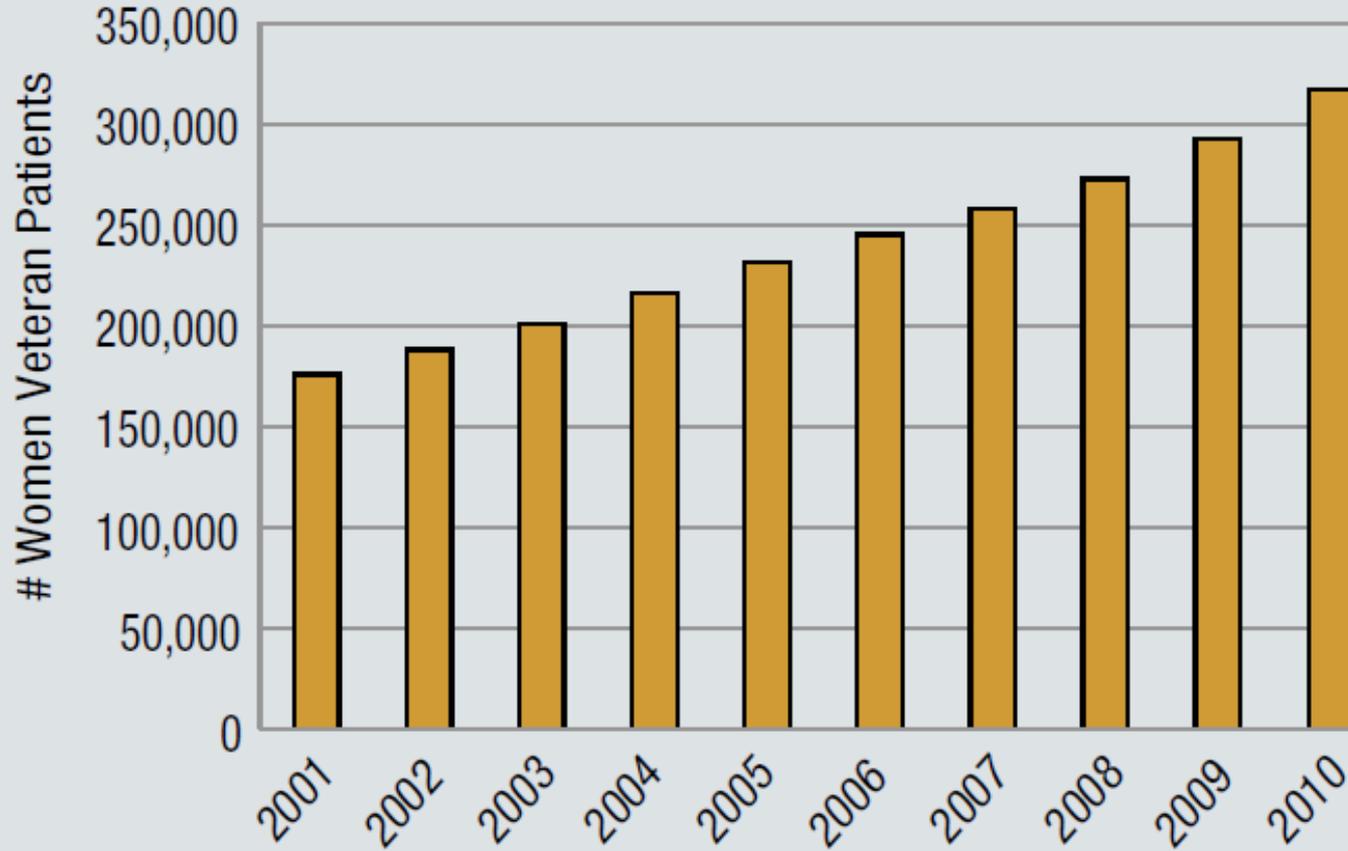
# Women Veterans

- WV represent 1.8 million (8%) of the 22 million Veterans nationally in the US
- WV are the fastest growing cohort of the Veterans
- VA Health System serves 5 million unique Veterans, and WV comprise 7% of this VA user population
- Returning Veterans: Approximately 55% of OEF/OIF/OND women Veterans use VA care

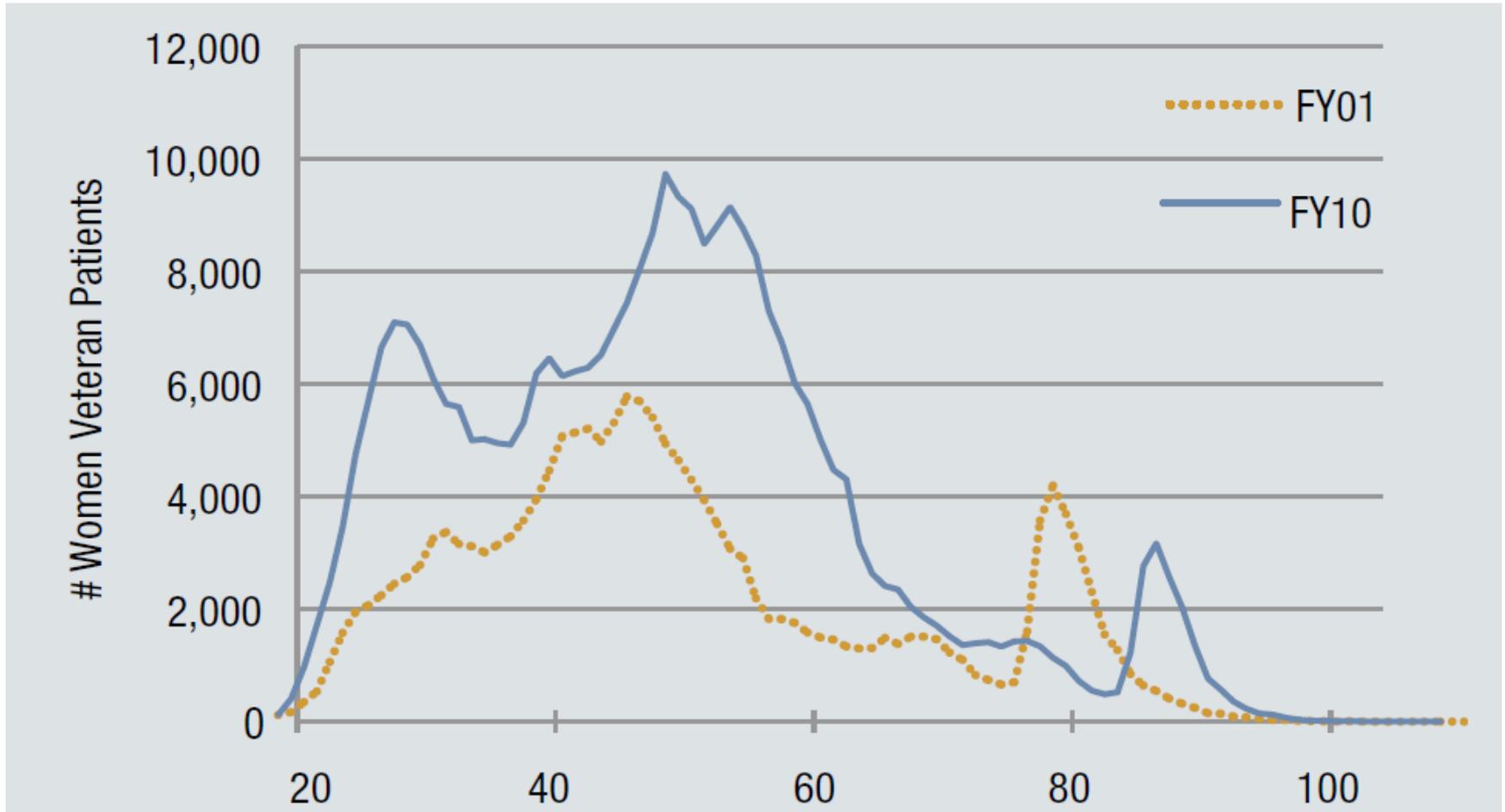
# Women Veteran VA Users

- How many women Veterans (WVs) use VA?
- What is the age distribution of WVs?
- How do WVs differ from the men?
- How do WVs utilize the VA?
  
- Sourcebook: Women Veterans in the Veterans Health Administration. Volume 2. Sociodemographics and Use of VHA and Non-VA Care (Fee). (Frayne et al 2012)

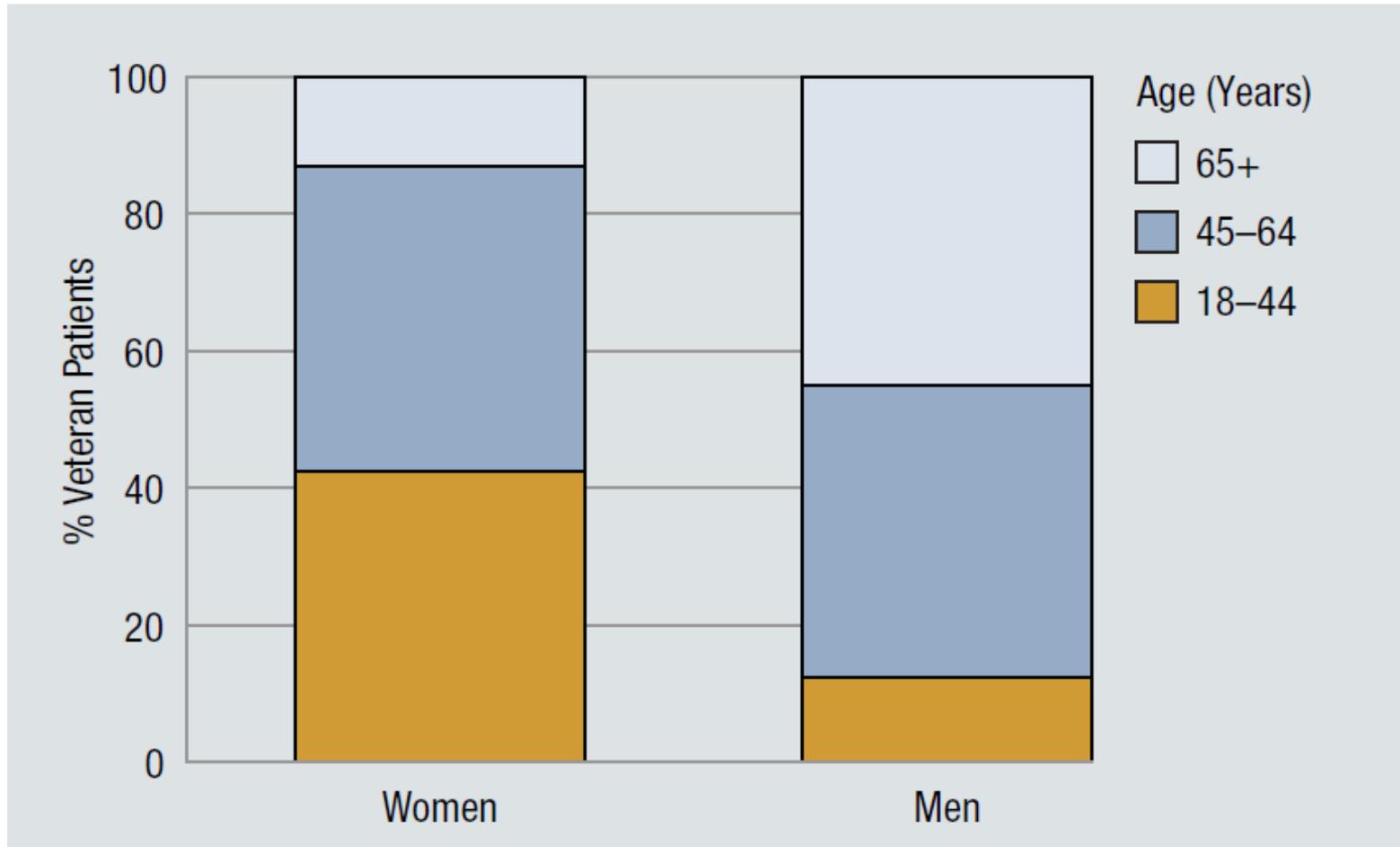
# Number of women Veteran patients in each year, FY01-FY10



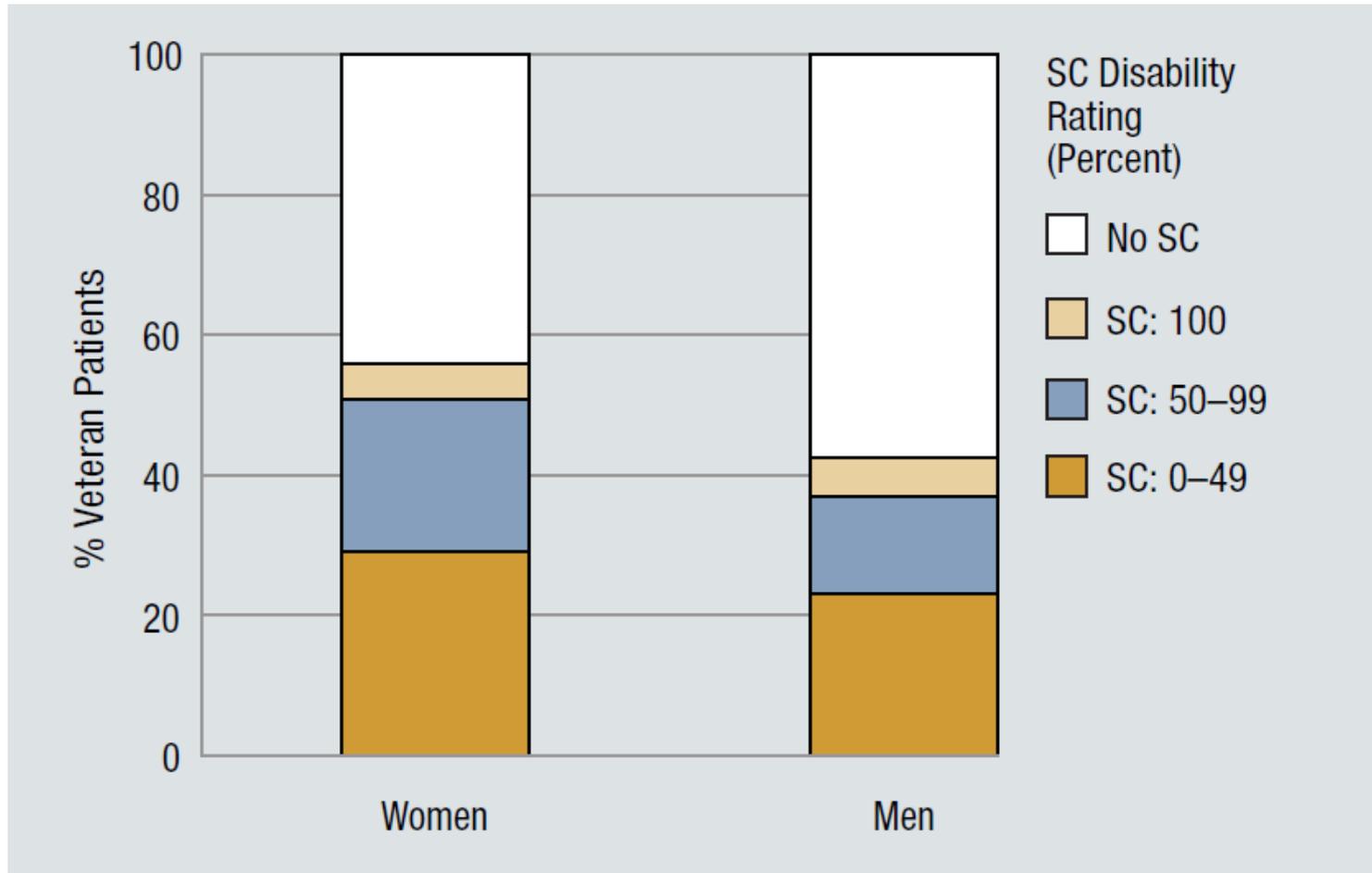
# Age distribution of women Veteran patients, FY01-FY10



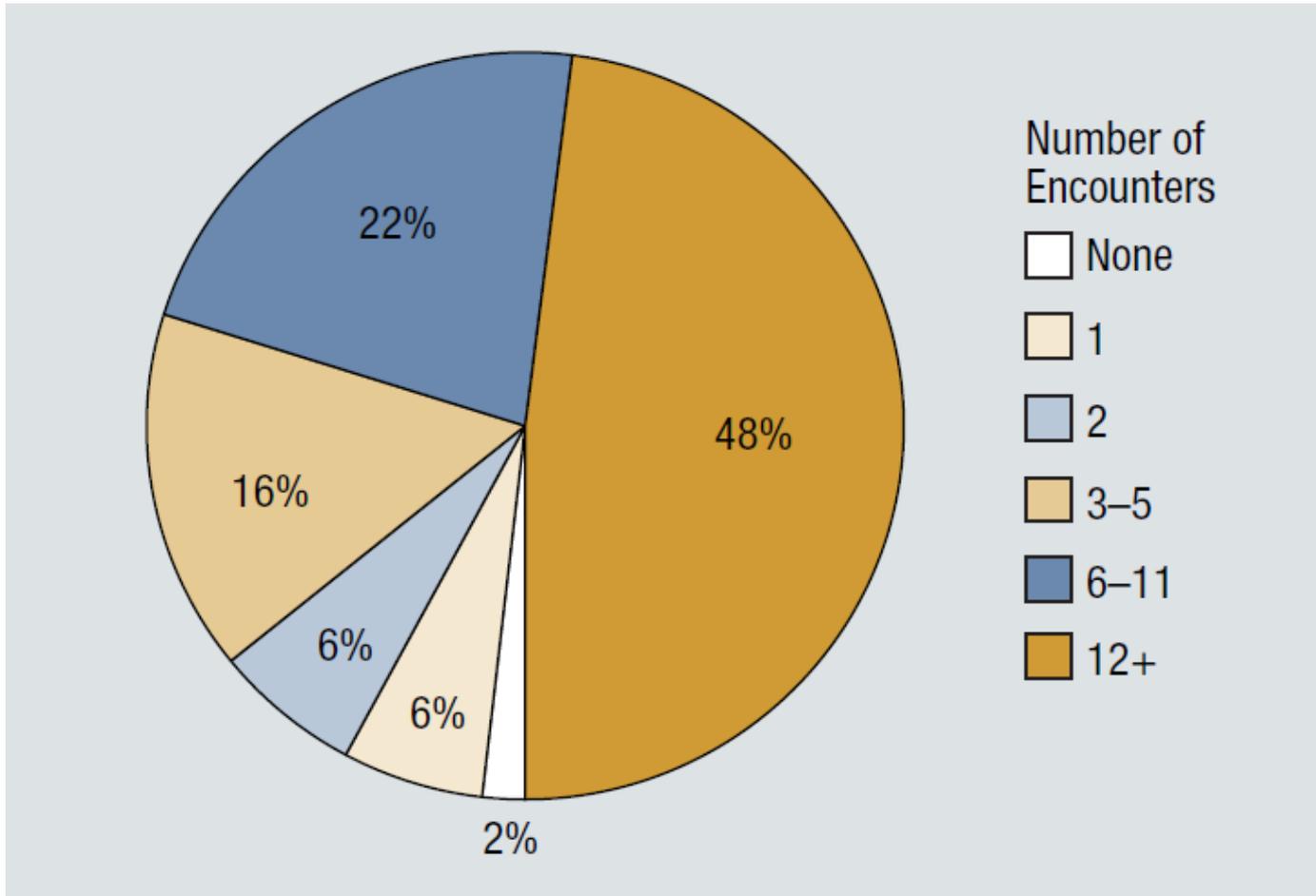
# Age distribution of women and men Veteran patients, FY10



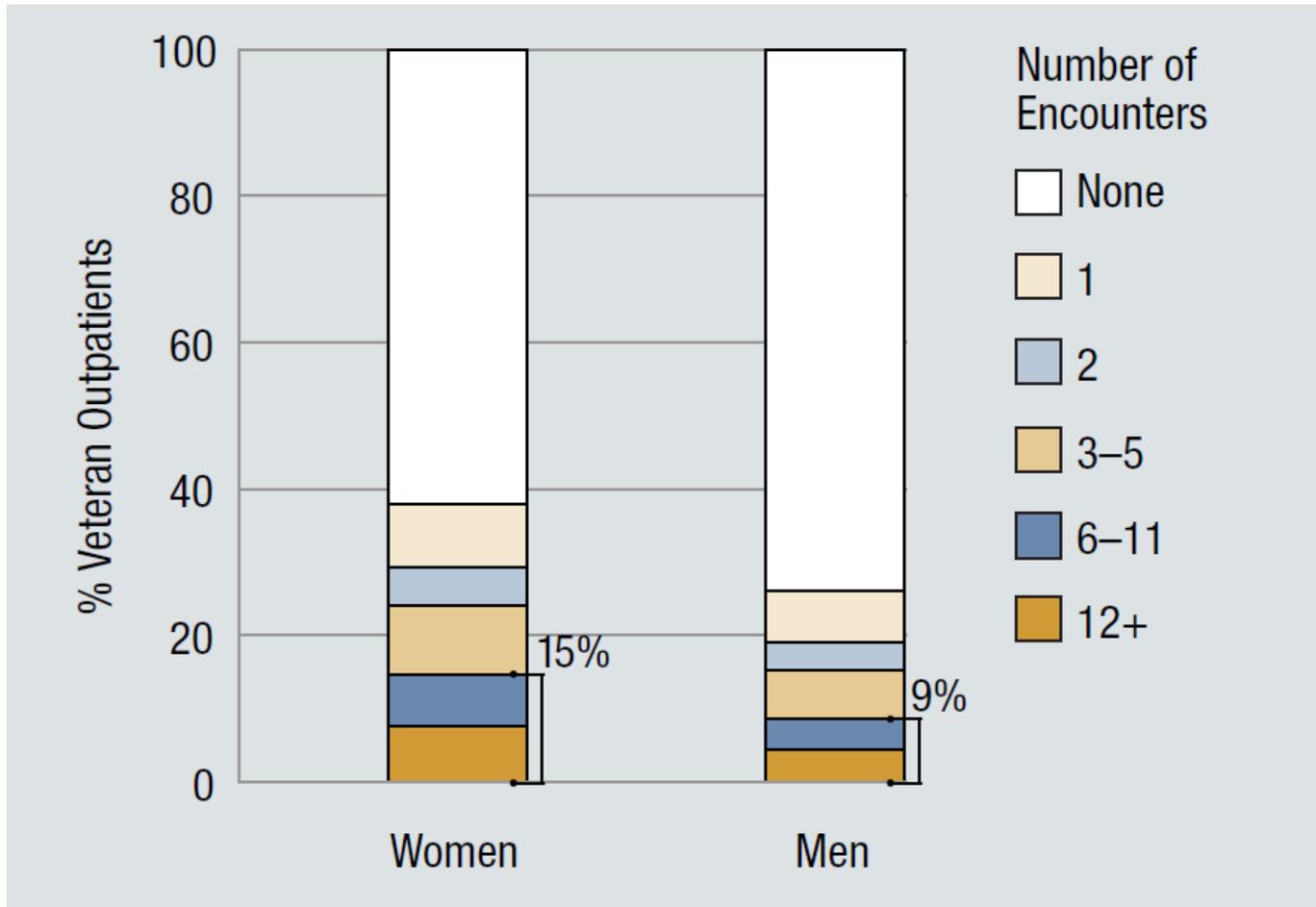
# Service-connected disability status of women and men Veteran patients, FY10



# Proportion of women Veteran patients by VHA outpatient encounters, FY10



# Proportion of women and men Veteran outpatients by MH/SUD encounters, FY10



# Key Points on Women Veterans

- Population of women in VA has nearly 2x
- The age distribution has shifted and women veterans are younger when they enter VA
- Women in VA are more often service connected for care
- Compared to men in VA, women use primary care often and use mental health care with higher frequency

# Thank You!

## ***Women's Health Evaluation Initiative***

- Susan Frayne, MD, MPH & Ciaran Phibbs, PhD

## ***VA Women's Health Research Consortium***

- Elizabeth Yano, PhD
- Ruth Klap, PhD

## ***VA Women's Health Practice-Based Research Network***

- Susan Frayne, MD, MPH
- Diane Carney, MA

## ***GLA HSR&D Center of Innovation & GLA Comprehensive Women's Health Program***

# **Implications of PTSD for Women Veterans Treated in Primary Care Settings**

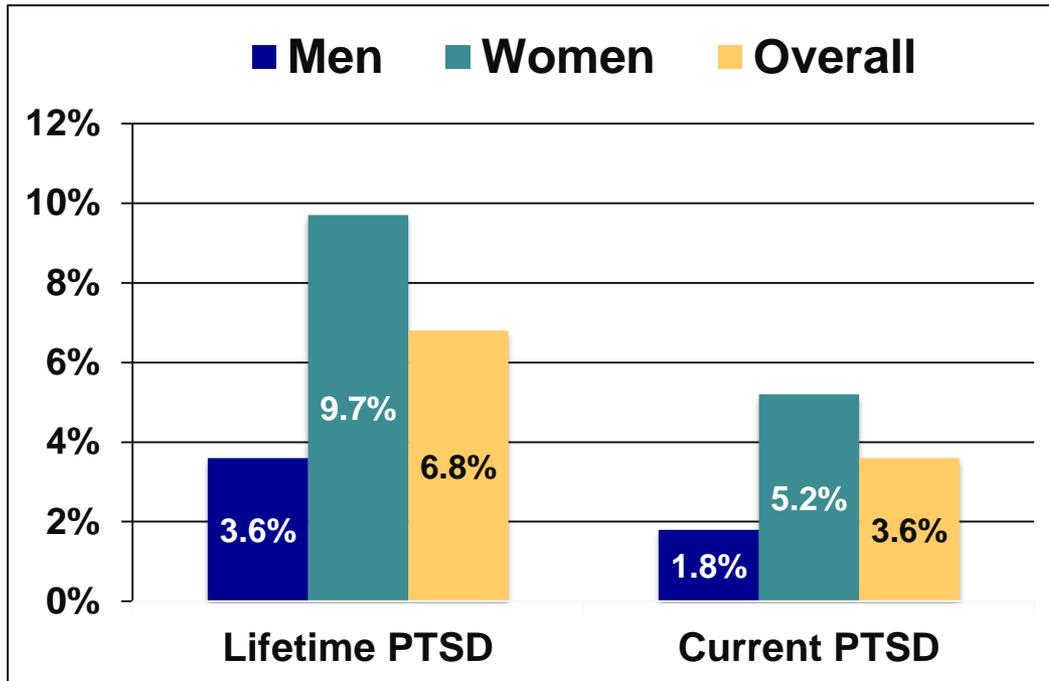
**Paula P. Schnurr, Ph.D.**

***National Center for PTSD, White River Junction VT  
& Geisel School of Medicine at Dartmouth***

# Basic Facts about PTSD: Posttraumatic Stress Disorder

- Exposure to traumatic events such as assault, accidents, disaster, and combat is common: 50%-60% of US adults
- Most people have symptoms after a traumatic event
  - e.g., intrusive memories, nightmares, avoidance of reminders, hyperarousal
- Most people recover, but some do not
  - PTSD is diagnosed when severe and characteristic symptoms persist for 1 month or more
  - Reexperiencing, avoidance, alternations of cognitions and mood, hyperarousal

# PTSD is a Women's Health Issue



**FY 2013 Prevalence  
In VA Users**

**Men: 9.3%**

**OEF/OIF/OND: 26.0%**

**Women 13.1%**

**OEF/OIF/OND: 20.5%**

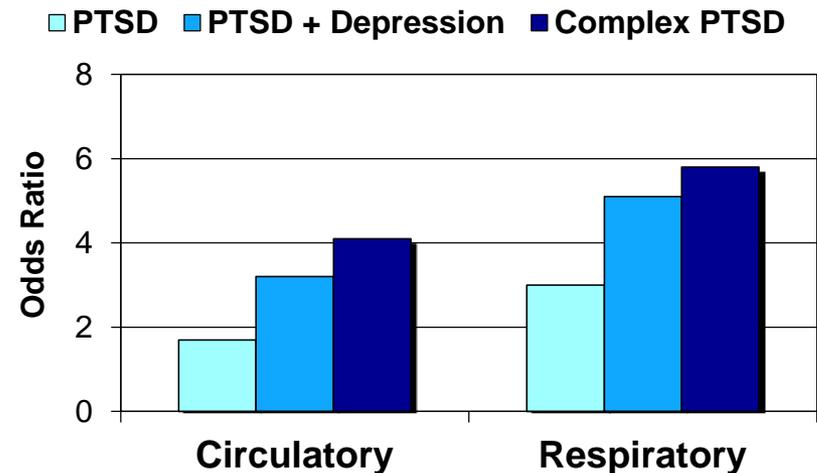
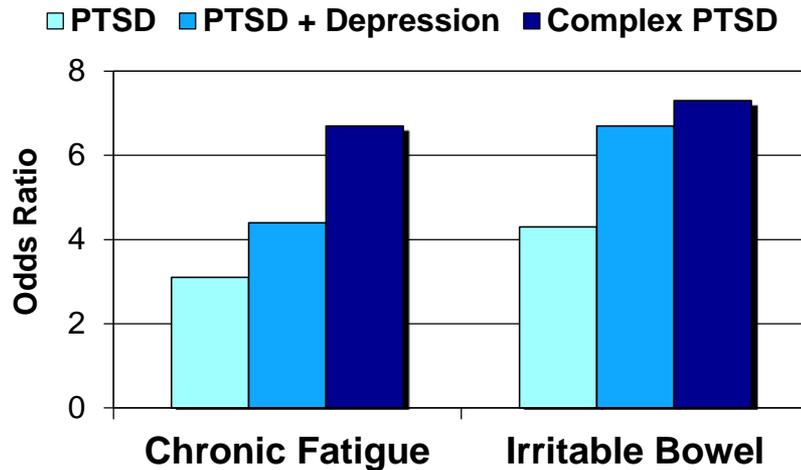
*US General population estimates from the National  
Comorbidity Survey*

# Women's Health is a PTSD Issue

Prevalence of physician-diagnosed disease is elevated in women (and men) with PTSD

*Occurrence of “somatic” syndromes is higher*

*But occurrence of “real” disease is higher too*



$p < .05$  for odds vs. women with no mental health condition; Seng et al., 2006

# Presentation Goals

- **To increase understanding that trauma and PTSD are related to poor health**
- **To increase awareness about the implications for women Veterans treated in primary care settings**
- **To increase knowledge about treatment options for women Veterans with PTSD in primary care**



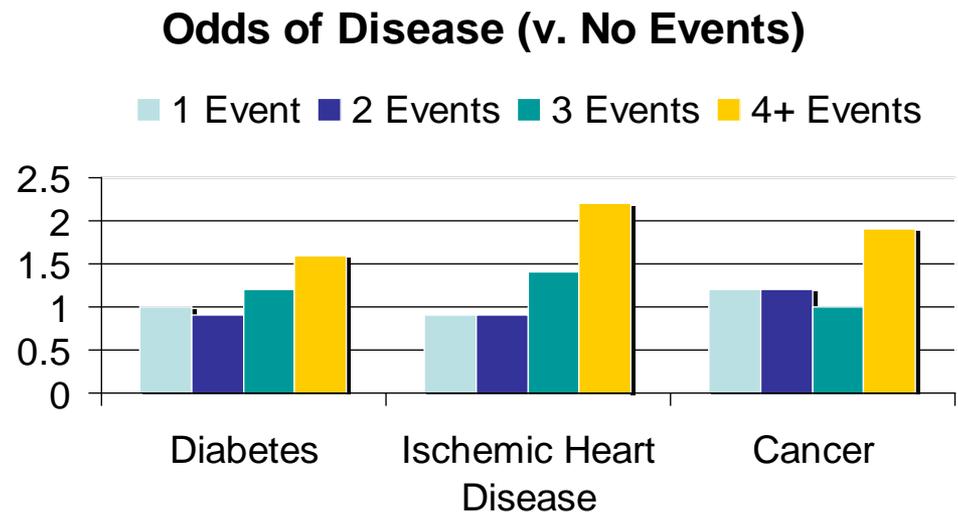
## **Poll Question #3**

**In general, I find that treating women Veterans with PTSD (pick one):**

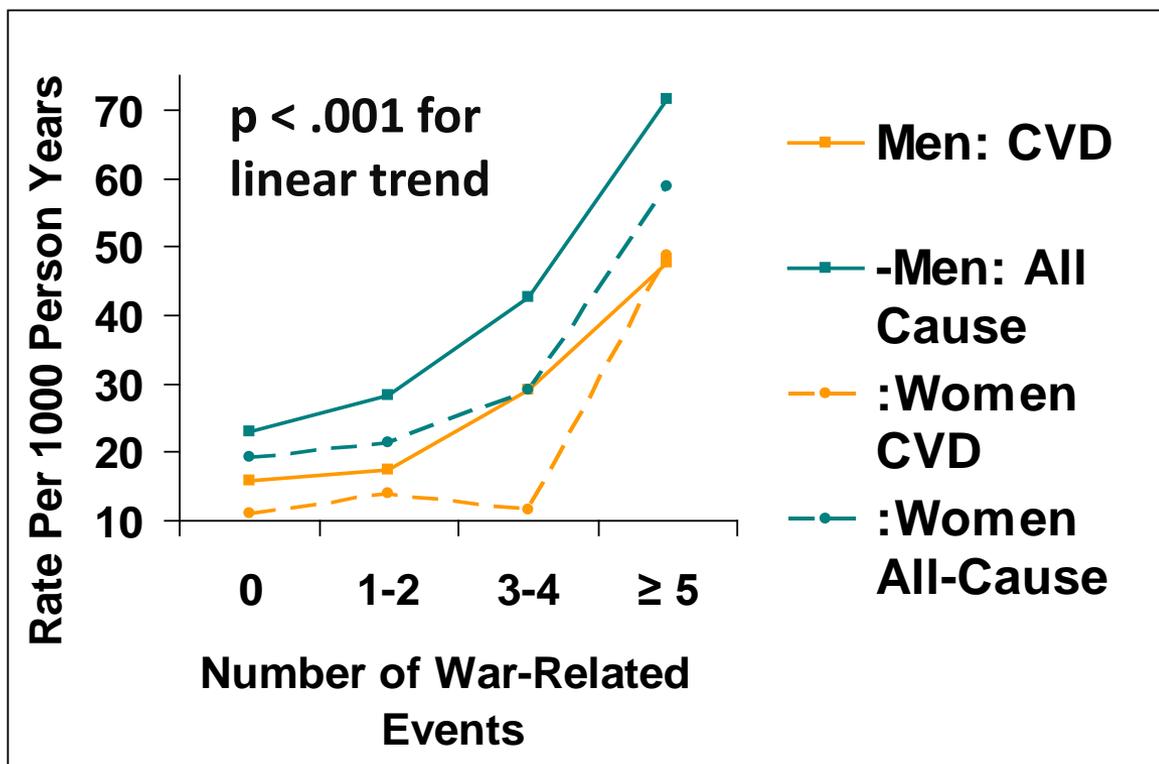
- Is not different than treating other women Veterans**
- Is sometimes more challenging than treating other women Veterans**
- Is usually more challenging than treating other Veterans**

# Traumatic Exposure is Associated With Poor Physical Health

- Trauma is associated with worsening of pre-existing medical illness
- Trauma also is related to development of illness
  - *e.g., Felitti et al. (1998) found higher odds of disease in adults with 4+ types of traumatic childhood events (vs. 0 types)*

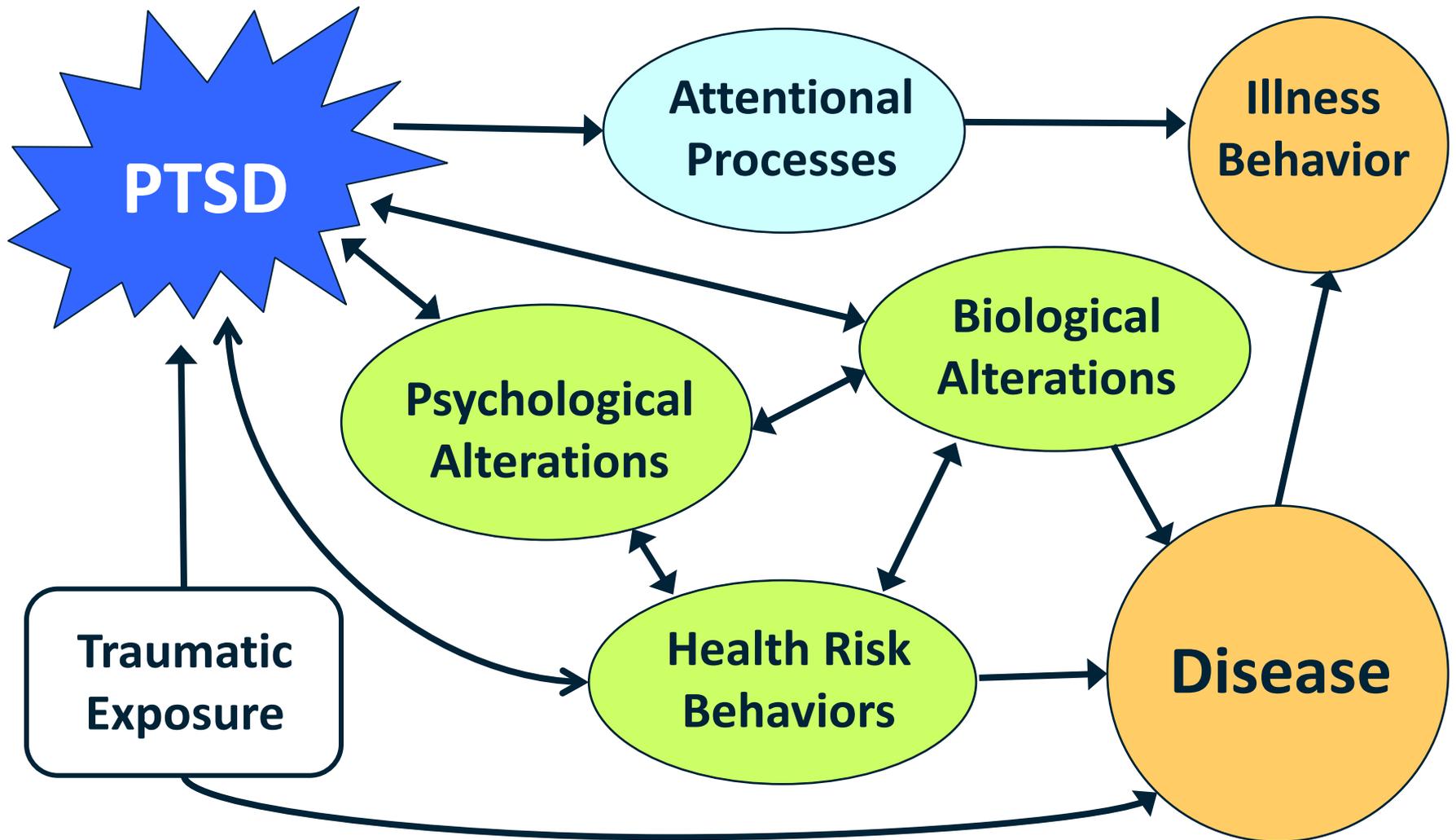


# Trauma is Even Associated With Increased Mortality



e.g., 10-year mortality due to cardiovascular disease and to all causes was elevated in Lebanese civilians with more exposure to war trauma

# Multidimensional Model of Trauma, PTSD, and Health

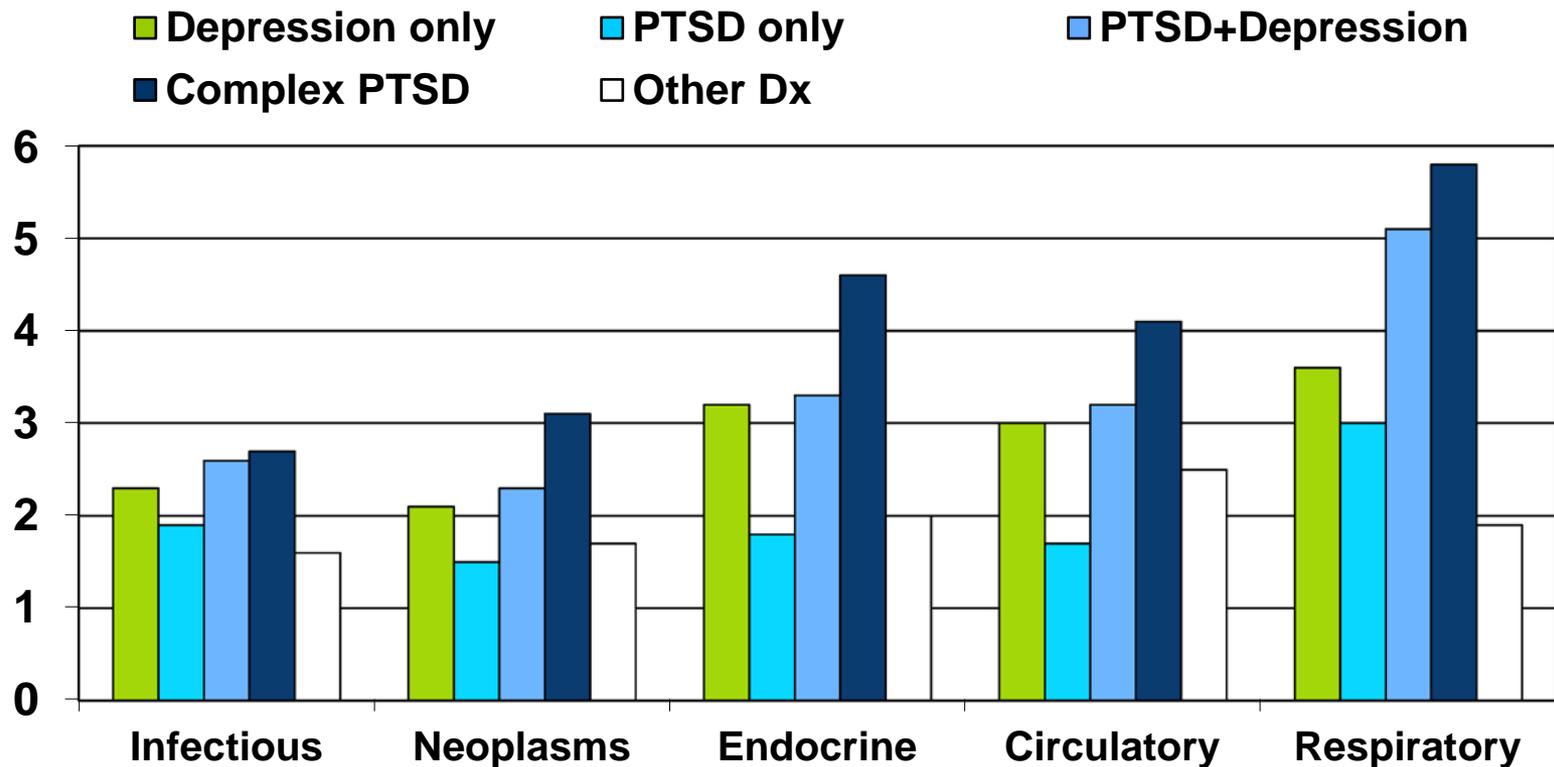


# **PTSD is Associated With Poor Physical Health Across the Continuum of Outcomes**

- **PTSD has significant and unique effects on health:**
  - **Poorer health perceptions and physical functioning**
  - **More medical utilization**
  - **Higher morbidity**
  - **Higher mortality**
- **PTSD has unique effects that are not due to comorbid disorders or health behaviors**
  - **But comorbid disorders and health behaviors do partially mediate the relationship between PTSD and poor health**

# PTSD is Associated with a Range of Physician-Diagnosed Disorders

## Adjusted Odds of Disorder in Women Receiving Medicaid

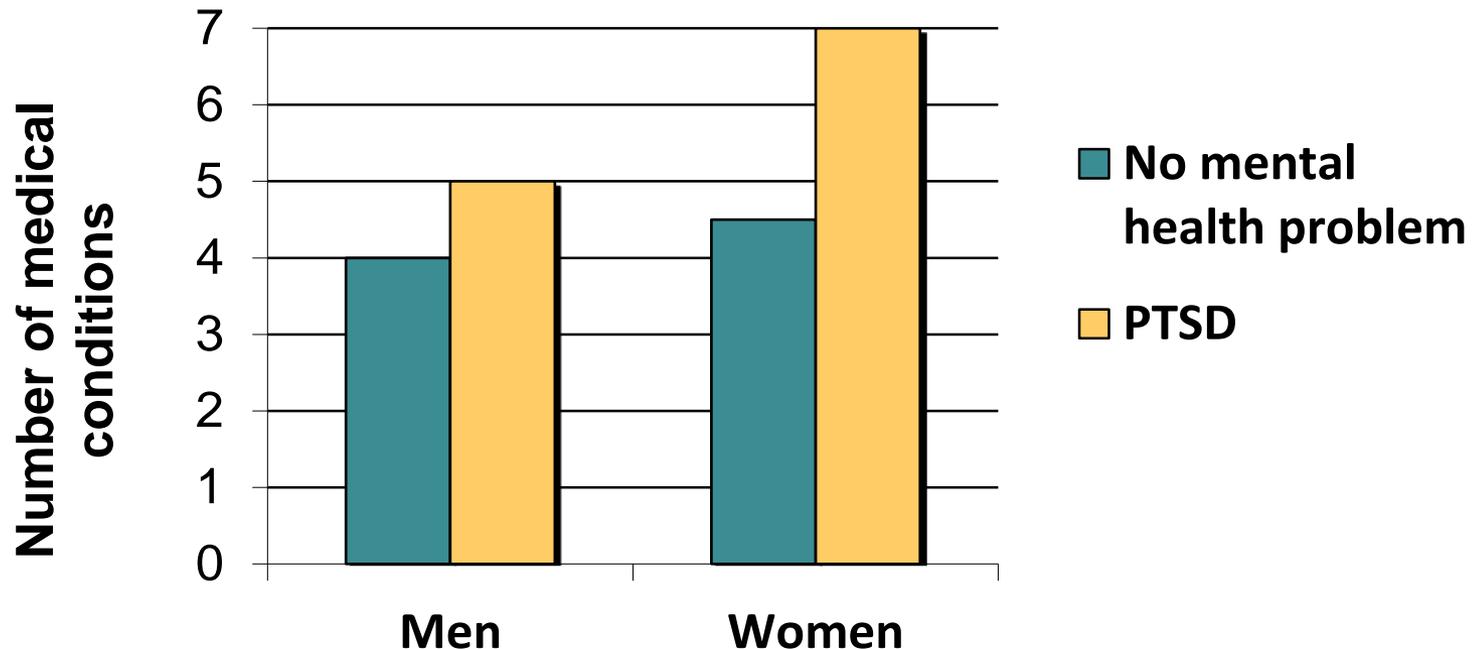


N=17,081. All ORs  $p < .002$  compared to women with no psych diagnosis. From Seng et al., 2006.

# Effects of PTSD on Physical Health in Men and Women are Generally Similar...

*but some evidence that in Veterans with PTSD, the burden is greater in women*

FY06-07, OEF/OIF Veterans (N = 90,558)



# Many Correlates of PTSD Could Affect Health

## Biological

e.g., cardiovascular reactivity, autonomic hyperarousal, adrenergic dysregulation, disturbed sleep physiology, enhanced thyroid function, altered HPA activity

*But most of these changes are subtle...  
how could they promote disease?*

## Behavioral

e.g., smoking, lack of exercise, poor diet

## Psychological

e.g., depression, hostility, poor coping



# PTSD and Other Mental Disorders are Associated with Cardiovascular Risk Factors in Male and Female OEF/OIF Veterans

*Data are odds ratios adjusted for demographic and military characteristics*

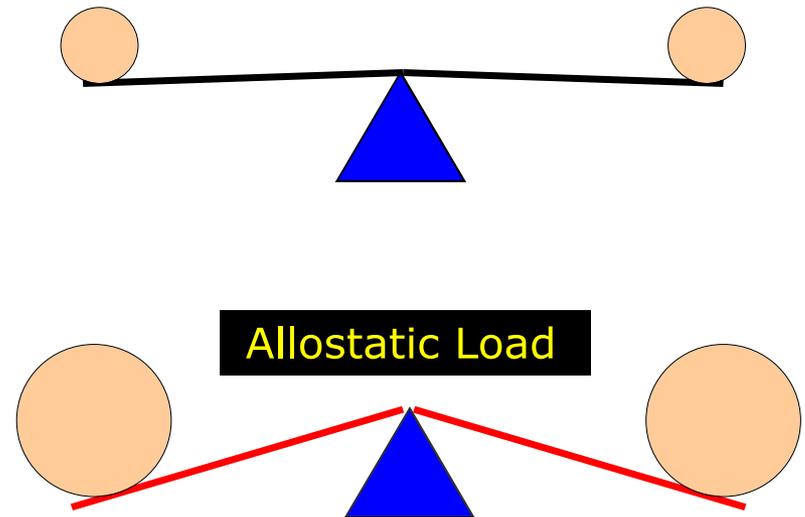
	Other MH Disorders		PTSD	
	Men	Women	Men	Women
<b>Tobacco use</b>	<b>3.0</b>	<b>3.0</b>	<b>3.6</b>	<b>3.6</b>
<b>Hypertension</b>	<b>2.4</b>	<b>2.3</b>	<b>2.9</b>	<b>3.0</b>
<b>Dyslipidemia</b>	<b>2.3</b>	<b>2.1</b>	<b>2.7</b>	<b>2.7</b>
<b>Obesity</b>	<b>2.0</b>	<b>2.6</b>	<b>2.4</b>	<b>3.0</b>
<b>Diabetes</b>	<b>2.6</b>	<b>2.2</b>	<b>2.6</b>	<b>2.9</b>

–Cohen et al., 2009; VA OEF/OIF Roster 2001-2008; VA administrative data sources

# Allostatic Load Can Explain How Subtle Alterations Could Result in Disease

“The strain on the body produced by repeated up and downs of physiologic response, as well as the elevated activity of physiologic systems under challenge, and the changes in metabolism and wear and tear on a number of organs and tissues”

–McEwen & Stellar, 1993



# Example: How to Define Allostatic Load

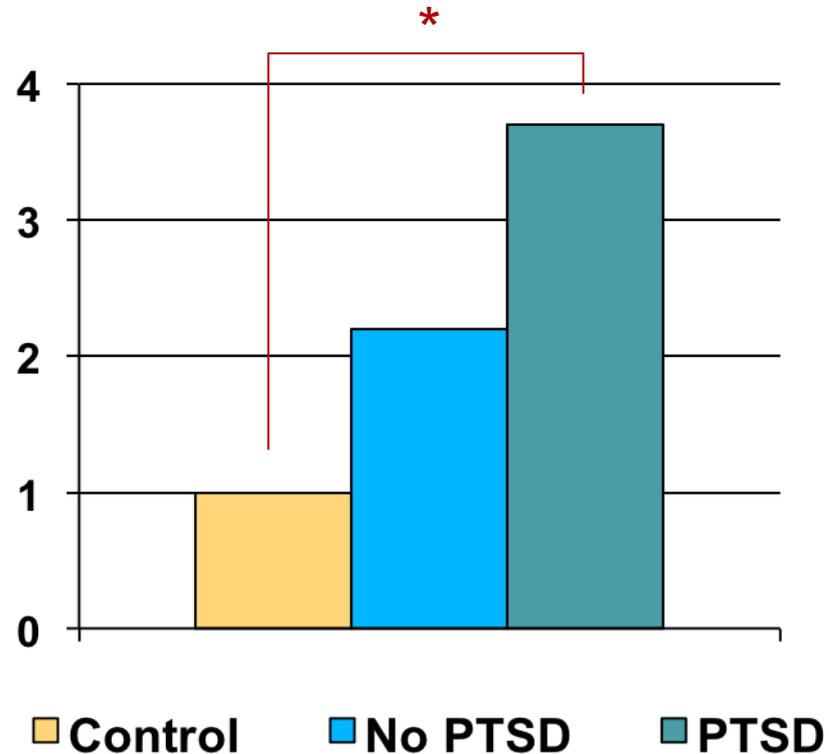
## Sum of 10 high risk indicators (highest quartile):

- **BMI  $\geq 28.4$**
- **Diastolic BP  $\geq 79$**
- **Systolic BP  $\geq 136$**
- **HDL cholesterol  $\leq 46$**
- **Total cholesterol  $\geq 204$**
- **Glycosylated hemoglobin  $\geq 5.6\%$**
- **DHEA  $\leq 204$  ng/ml**
- **Norepinephrine  $\geq 12.4$   $\mu\text{g}/12\text{hr}$**
- **Epinephrine  $\geq 2$   $\mu\text{g}/12\text{hr}$**
- **Cortisol  $< 6.7$  (12.5%) or  $> 23.7$  (12.5%)  $\mu\text{g}/12\text{hr}$**

# Allostatic Load is Higher in PTSD

- Allostatic load:**
- higher in PTSD vs. no PTSD,  $*p < .05$
  - not related to N of traumatic events,  $r = .05$
  - related to N of PTSD symptoms,  $r = .43$ ,  $p < .05$

Number of Allostatic Load Indicators



# Metabolic Syndrome as Allostatic Load

- Metabolic Syndrome is defined as metabolic risk factors that predict morbidity and mortality, e.g.,
  - Obesity
  - Hyperglycemia
  - Hypertension
  - Dyslipidemia
- Heppner et al. (2009) study of 253 male & female Veteran patients
  - PTSD: 43%
  - PTSD/depression: 46%
  - Higher severity associated with higher risk

***PTSD not linked to most individual components, only total metabolic syndrome***

# Implications for the Treatment of Women Veterans in Primary Care



- **Women with PTSD may have increased health burden relative to women with other mental disorders or no disorder**
  - **more disease, impairment, and utilization**
- **PTSD may be a hidden variable that is driving and/or affecting symptom presentation and response**

# PTSD Can Be Effectively Treated: Recommend Treatments

<http://www.healthquality.va.gov/guidelines/MH/ptsd/>

## Medication

- **Selective Serotonin Reuptake Inhibitors**
  - Paroxetine and sertraline have FDA indication
- **Serotonin Norepinephrine Reuptake Inhibitors**

## Psychotherapy

- **Exposure Therapy:** Focus on emotional processing through repeated exposure to trauma memories
- **Cognitive Therapy:** Focus on changing beliefs about self and the world
- **Stress Inoculation Training:** Focus on skills for anxiety management
- **EMDR:** Focus on mental images of trauma during eye movements, then instilling positive images

# VA/DoD Practice Guideline: Pharmacotherapy Recommendations

	Balance = Benefit - Harm			
SR	SUBSTANTIAL	SOMEWHAT	UNKNOWN	NONE or HARM
A	SSRIs, SNRIs			
B		Mirtazapine, TCAs, MAOIs (phenelzine; caution), Prazosin (sleep), Nefazodone (caution)		
C			Prazosin (PTSD)	
D				Guanfacine, Topiramate, Valproate, Risperidone, Benzodiazepines (harm), Tiagabine
	<b><i>SR = Strength of recommendation</i></b>			
I			Buspirone, Bupropion, Non-benzo hypnotics, Lamotrigine, Clonidine, Gabapentin, Trazodone (adjunct), Atypical anti-psychotics (mono or adjunct), Conventional anti-psychotics, Propranolol	

# Randomized Clinical Trials of Treatment for PTSD in Primary Care

- **Pharmacotherapy for PTSD**
  - None published
- **Behavioral health interventions for PTSD**
  - None published; promising open trials
- **Integrated care for multiple disorders, including PTSD**
  - WAVES (TIDES model), IMPACT, CALM: unclear benefit for PTSD
- **Integrated care specifically for PTSD**
  - RESPECT-PTSD: changed process of care but not effective
  - “Stepped Enhancement of PTSD Services Using Primary Care (STEPS UP): A Randomized Effectiveness Trial” is underway

# Does Treating PTSD Improve Physical Health?

- **Maybe, but evidence is limited to self-reported symptoms**
- **In some cases, treatment may be too late...**
  - e.g., psychotherapy is unlikely to treat stenosis
- **Need further study, including trials:**
  - In patients with conditions that could respond to behavioral and psychological change, e.g., diabetes
  - Of integrated efforts to reduce health risk behaviors in PTSD patients, e.g., weight loss, smoking cessation
  - Of strategies for primary care

# Conclusions and Caveats

- **Primary care providers who treat women Veterans are treating PTSD**
- **Women with PTSD may have poorer self-care and greater health burden**
- **Addressing PTSD is important: evidence-based treatment (psychotherapy and pharmacotherapy) can substantially improve PTSD**
- ***Despite lack of research on integrated care for PTSD, primary care providers can address self-care and offer pharmacotherapy, psycho-education, support, and information about online resources***

# Breaking Down Barriers to Treatment: *visit [www.ptsd.va.gov](http://www.ptsd.va.gov)*

## PTSD COACH ONLINE

Self-help tools build coping skills.

Learn to manage troubling symptoms following trauma, such as:

- sleep
- trauma reminders
- anger

Our video coaches will guide you.

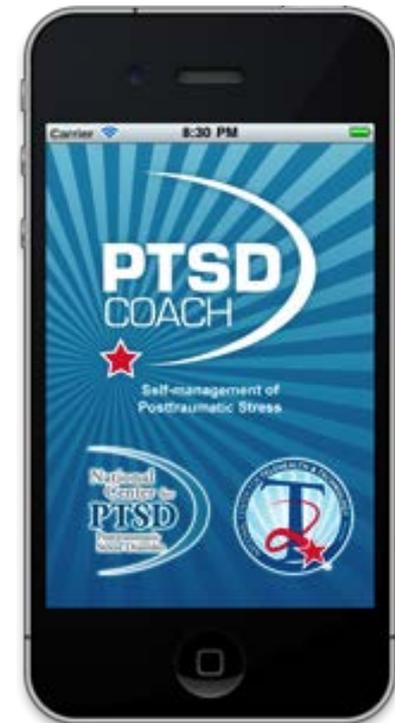


Also see the PTSD  
Coach Mobile App



**Choose from 17 tools to  
help you manage stress.**

GET STARTED



# Questions/Comments?

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