

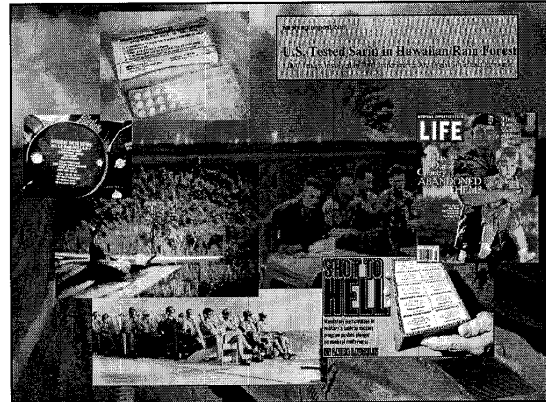


**Presentation 9 – Charles Engel**


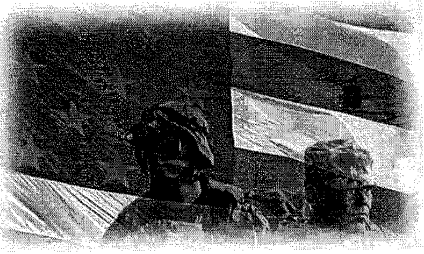


**“In Return for Their Sacrifice”**  
Conceptual Basis & Clinical Outcomes of  
the Specialized Care Program

*(Decorative stars in the bottom right corner)*



**Gulf War Health Center**  
*Caring for America's Finest*  
Walter Reed Army Medical Center



**DoD Centers for Deployment Health**  
ASD(HA) Policy Letter – 30 Sep 1999

- ★ Deployment Health Clinical Center  
at Walter Reed Army Medical Center
- ★ Deployment Health Research Center  
at Naval Health Research Center in San Diego
- ★ Deployment Health Surveillance Center  
at Center for Health Promotion & Preventive Medicine

*(Decorative stars in the bottom right corner)*

### **DHCC Mission**

**Improve post-deployment health care for  
Department of Defense health care  
beneficiaries and Reserve Component**



### **Specialized Care Program Mission Statement**

Deliver a coordinated multidisciplinary  
treatment program for those with  
persistent, disabling, or treatment  
refractory symptoms related to the Gulf.

### **Specialized Care Program History of the Program**

- Initiated by LTG Blanck in January 1995 per tasking from DoD/HA
- Evidence-based model adapted from chronic pain programs
- Validated for treating Gulf War veterans by a multi-institutional expert panel
- Program started March 1995
- over 600 veterans & 100 cycles

### **Specialized Care Program Candidates for Care**

Anyone with persistent, disabling Gulf War-related symptoms that:

- remain undiagnosed after appropriate medical evaluation; and/or
- are unlikely to respond to specific biomedical treatments.

**Specialized Care Program**  
**Many symptoms and services**

	<u>mean</u>	<u>sd</u>
Symptom Count	9.7	( 3.6)
CCEP Visits	16.9	( 8.2)
Other Visits (6-mo)	12.5	(25.2)
CCEP Tests	62.0	(28.8)
CCEP Diagnoses	5.9	( 2.3)
Med Fills (6-mo)	13.1	(10.9)

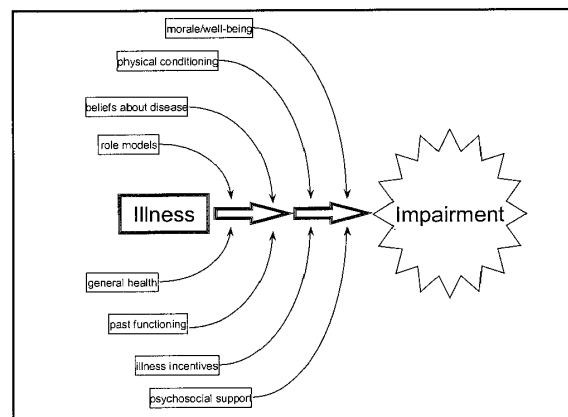
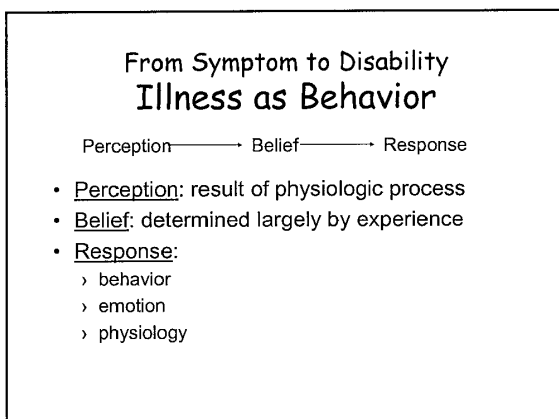
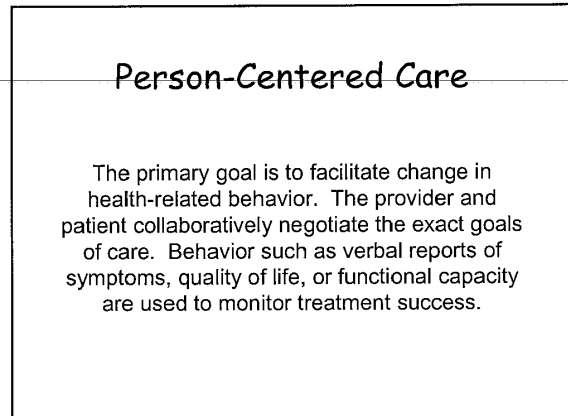
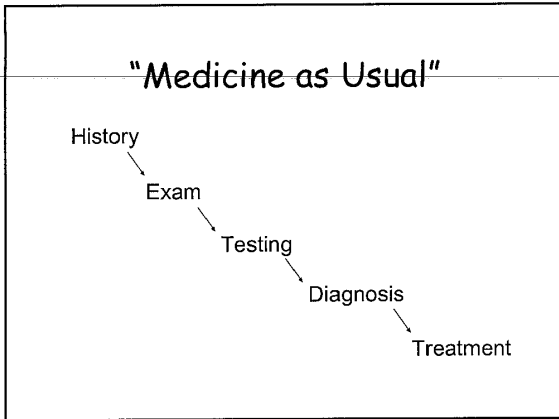
- Successful Intervention**  
**Requires...**
- 'embracing the veteran' to build trust
  - carefully coordinated delivery
  - many medical perspectives
  - comprehensive intervention
  - treatment of overall functional status and quality of life rather than a narrow set of symptoms

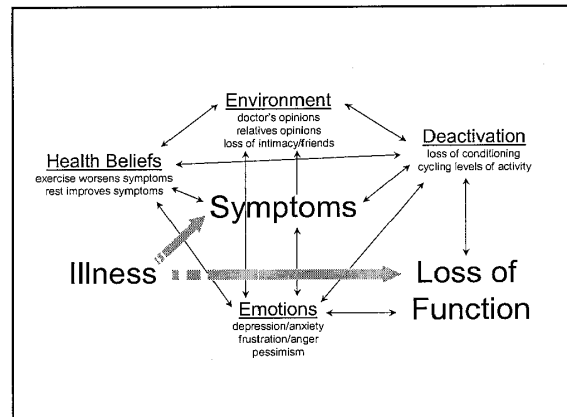
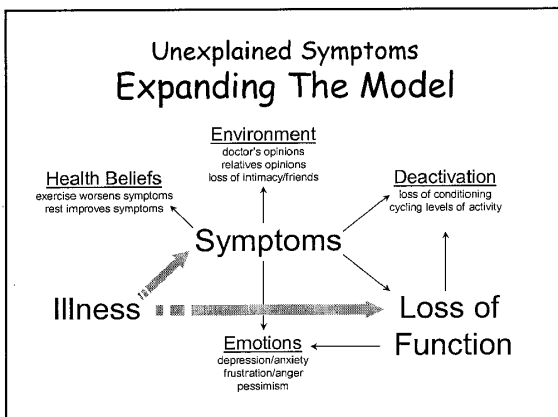
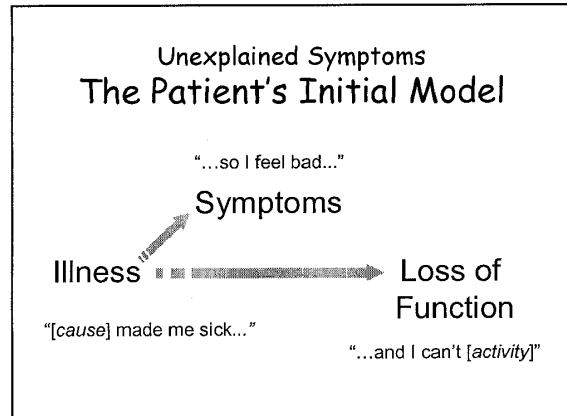
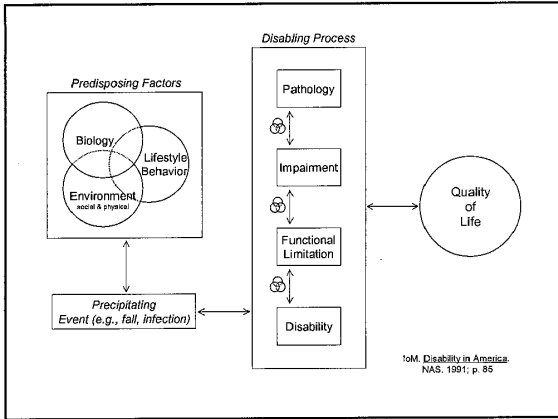
**Specialized Care Program**  
**Demographics** (n=78)

	SCP	CCEP	All
Age (GW)	33.3 (±8.3)	26	26
Females	27% (20 )	12%	7%
Caucasian	57% (42 )	57%	70%
Officers	10% ( 7 )	11%	10%
Army	73% (54 )	81%	50%
Active	74% (55 )	83%	83%

**Disease-Centered Care**

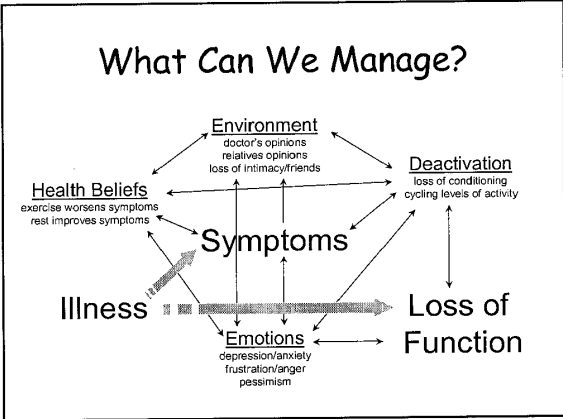
The primary goal is to improve the medical status of a disease. Disease status is typically determined through objective indices such as examination signs or laboratory tests.



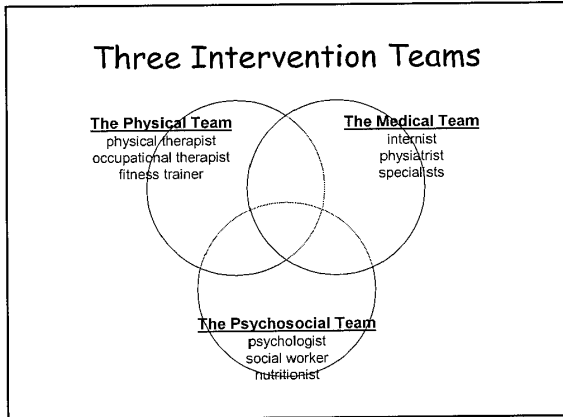


### A Reverberating System

The factors determining prognosis among chronic illnesses are often far more complex than simply the cause of the illness.



- ### Specialized Care Program Intensive Evaluation & Treatment
- CCEP & multidisciplinary reassessment
  - 3-week intensive outpatient program
  - 4 to 8 patients per cycle
  - Key Objectives:
    - » Form symptom management plan
    - » Coordinate primary care follow-up



### Specialized Care Program A Typical Day

0720	Warm-Up/Stretching
0800	Medical System Review
0900	Occupational Therapy
	Physical Therapy
	Individual Counseling
1115	Team Rounds
1200	Lunch/Nutritionist
1230	Autonomic Response Training
1300	Occupational Therapy
	Physical Therapy
	Individual Counseling
1500	Participatory Seminar
1600	End of Day

### Specialized Care Program Participatory Seminars

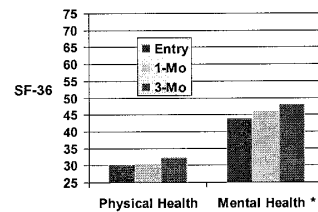
- Orientation & overview
- Illness series:
  - Illness and Impairment
  - Acute and chronic illness
  - Illness and emotions
- Users' Guide to:
  - Your doctor
  - Prescription meds
  - Disability compensation
  - Medical labs & tests
- Learning about your body:
  - Activity and morale
  - The nervous system
- Learning about body (cont'd):
  - Impact of diet on symptoms
  - Review of common symptoms
- Strategies for coping with illness
  - Overcome illness flares
  - Pacing
  - Sleep hygiene
  - Goal-setting
  - Overcoming inactivity
  - Autonomic Training
  - Problem-solving
  - Communication skills

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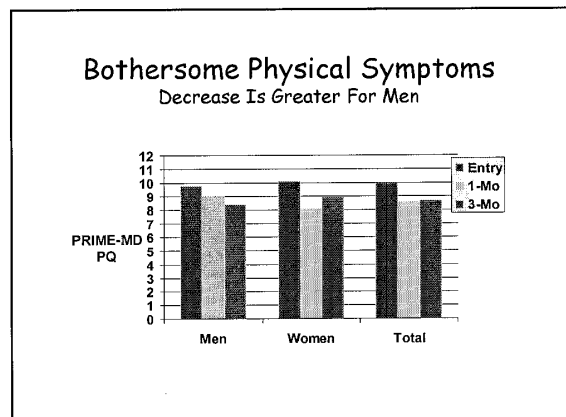
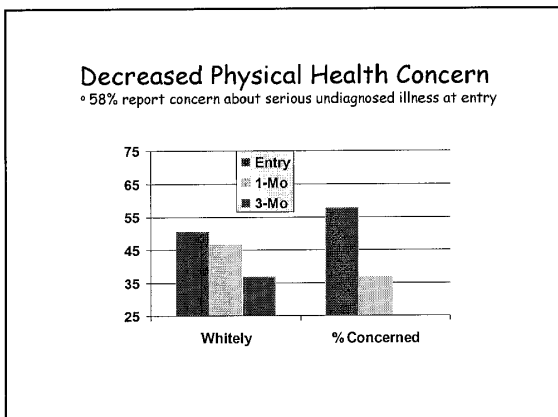
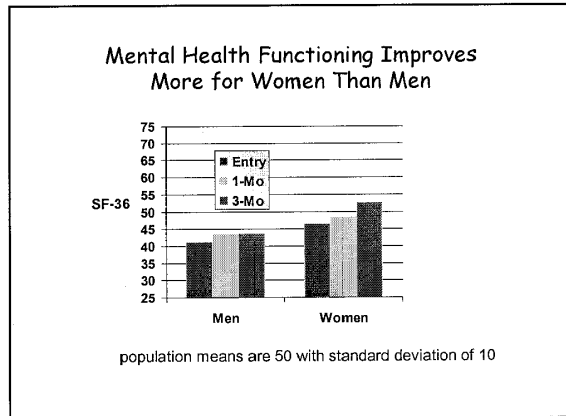
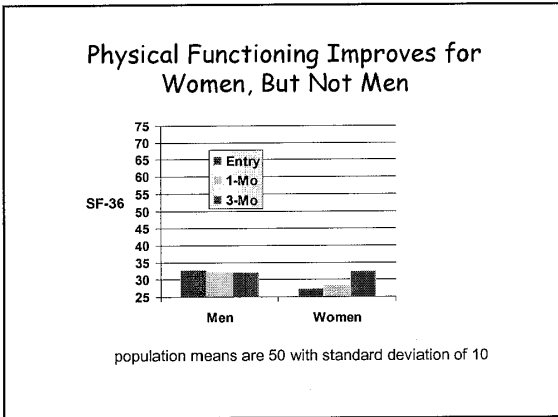
### Improved Functioning/Quality of Life

- Poor at entry, especially physical health functioning
- Improved mental health functioning after treatment

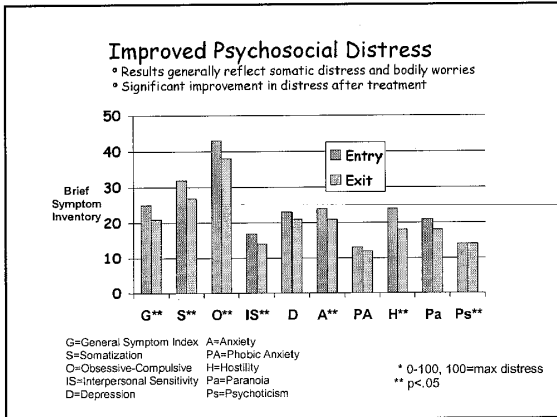


population means are 50 with standard deviation of 10

\* p<.0001







### Specialized Care Program Summary of Outcomes

- **At program entry --**
  - › High users of health care
  - › High numbers of bothersome physical symptoms
  - › Poor physical and emotional functioning
- **Significantly improved after treatment --**
  - › mental health-related quality of life
  - › level of physical health concern
  - › level of psychosocial distress

### Limitations

- Lack of a control group of comparable veterans receiving usual medical care or another active intervention
- Improvements are global but modest

### Cognitive Behavioral Therapy and Aerobic Exercise for Gulf War Veterans' Illnesses A Randomized Controlled Trial

Sam T. Donta, MD; Daniel J. Claw, MD; Charles C. Engel, Jr. MD, MPH; Peter Guarino, MPH; Peter Deluzi, PhD; David A. Williams, PhD; James S. Skinner, PhD; André Buckmeier, MD; Thomas Taylor, MD; Lewis F. Kozis, Sr.D; Stephanie Sugg, PhD; Stephen C. Hunt, MD; Cynthia M. Dougherty, PhD; Ralph D. Richardson, PhD; Charles Knackel, MD, William Rodriguez, MD; Edwin Allison, MD; Philippe Châliade, MD; Margaret Ryan, MA, MPH; Gregory C. Gray, MA; Alrik L. Lury, Lisieck, MD; Dorothy Norwood, MD; Samantha Smith, PhD; Michael Evered, PhD; Warren Blackmore, MD; Wade Martin, MD; J. McLeod Griffin, MD; Robert Cooper, MD; Ed Benson, PhD, MPH; James Schmitt, MD; Gretchen McWherry, MD.

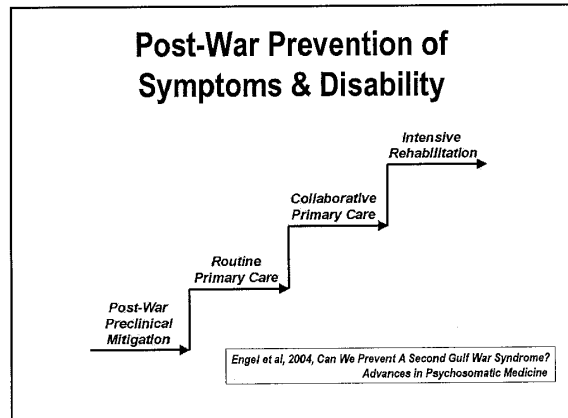
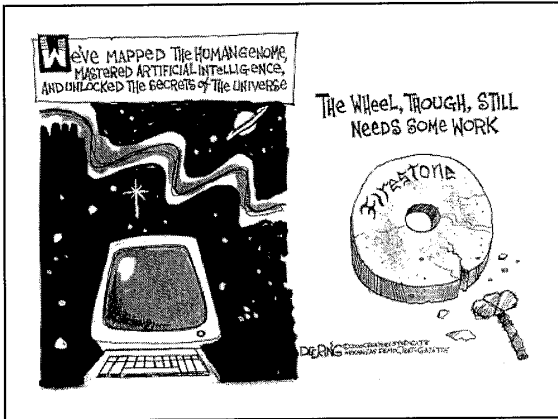
**Context** Gulf War veterans' illnesses (GWVI), multisymptom illnesses characterized by persistent pain, fatigue, and cognitive symptoms, have been reported by many War veterans. There are currently no effective therapies available to treat GWVI.

**Objective** To compare the effectiveness of cognitive behavioral therapy (CBT) exercise, and the combination of both for improving physical functioning and reducing the symptoms of GWVI.

**Design, Setting, and Patients** Randomized controlled 2 x 2 factorial trial conducted from April 1999 to September 2001 among 1092 Gulf War veterans reported at least 2 of 3 symptom types (fatigue, pain, and cognitive) for more than 6 months and at the time of screening. Treatment assignment was unmasked for a masked assessor of study outcomes at each clinical site (10 Department of Veterans Affairs [VA] and 2 Department of Defense [DOD] medical centers).

**Interventions** Veterans were randomly assigned to receive usual care (n=277) consisting of any and all care received from inside or outside the VA or DOD health systems; CBT plus usual care (n=286); exercise plus usual care (n=269); or CBT exercise plus usual care (n=266). Exercise sessions were 60 minutes and CBT sessions were 60 to 90 minutes; both met weekly for 12 weeks.


**Main Outcome Measures** The primary end point was a 7-point or greater increase (improvement) on the Physical Component Summary scale of the Veterans Form 36-Item Health Survey at 12 months. Secondary outcomes were standardized measures of pain, fatigue, cognitive symptoms, distress, and mental health functioning. Participants were evaluated at baseline and at 3, 6, and 12 months.



### Toward Collaborative Post-Deployment Health Care

- ★ practice guidelines and clinical information systems
- ★ performance indicators and incentives
- ★ science-based technical assistance
- ★ stakeholder involvement in effort to improve care

Von Korff et al, Ann Intern Med, 1997;127:1097-1102



Uniformed Services University

