# Military Health System Disease Management and Campaign for Healthy Lifestyles



COL John P. Kugler, USA, MC Deputy Medical Director, TRICARE Management Activity

Sept 19, 2007



**MHS Mission:** To enhance DoD and our Nation's security by providing health support for the full range of military operations and sustaining the health of all those entrusted to our care.

Patient Care, Sustain Skills and Training Deploy to
Support the
Combatant
Commanders

and

Promote & Protect Health of the Force and Communities





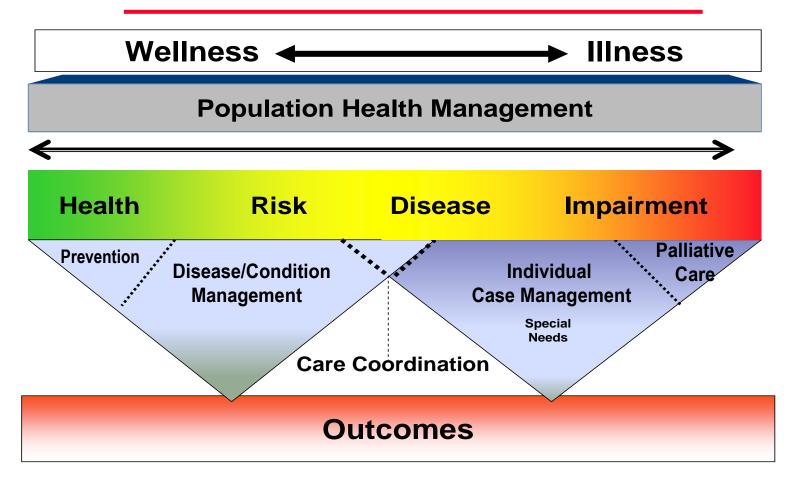
Manage and Deliver Beneficiary Care Deploy Medical Capability

Deploy

**Deploy Fit and Protected Force** 

**Support Homeland Defense** 

#### Population Health and Medical Management Model



#### **Disease Management**





#### Disease Management (DM)

- The MHS DM program directly supports the MHS strategic goals of providing patient-centered care by establishing effective patient partnerships and using evidence-based medicine. This is accomplished by emphasizing patient self-management skills and advocating the use of VA/DoD clinical practice guidelines (CPGs).
- Disease Management Goals
  - Improve health status (clinical outcomes), increase patient and provider satisfaction, and ensure appropriate utilization of resources.



#### **MHS MCSC DM Programs**

#### Background

- In an effort to improve on existing successes, and to identify best practices in the direct and purchased care systems, the MHS Disease Management Summit was held on September 8, 2005
- During the Summit, the ASD (HA) charged the MHS attendees to develop action plan for a system-wide approach to DM
- As a direct result of the Summit, the MHS has adopted a unified approach to DM across the three regions with a focus on the same disease states



# Disease Management - Consistent and Comparable

 WHAT – Uniform, high quality and cost-effective DM program targeting the following diseases:

CHF
Asthma
Diabetes
Implemented 01 Sep 06
Implemented 01 Jun 07

#### WHO

- Direct AND Purchased Care TRICARE Prime Enrollees
- Standard beneficiaries included as a demonstration project
- The Government determines the uniform methodologies to be used relative to:
  - Population identification
  - Measures of success/ formal evaluation plan
- To encourage innovation, the Government is NOT prescribing strict program protocols (e.g., how often to call patients, use of technology)
  - Program details must be provided to the Government as part of the evaluation process



#### **General Description of DM Program**

- Eligible patients identified by TMA/Office of the Chief Medical Officer
  - Use of administrative data
  - Based on prior history of outpatient visits, ED visits, hospitalizations, and medication usage (asthma and diabetes, only)
  - Monthly generation by Kennell & Associates
  - Each patient placed in 1 of 4 levels, each month
  - Levels 3 & 4 patients are targeted for DM intervention



#### **Disease Management Evaluation**

- To Determine the best approach to DM in the MHS
  - Identify best overall processes and practices
    - Who should be targeted for DM?
    - What services should be provided?
    - How can TRICARE's DM program be improved?
    - How do we compare with other health plans DM efforts?
  - Quantify impact of DM on
    - Patient health status and quality of life
    - Healthcare utilization and expenditures



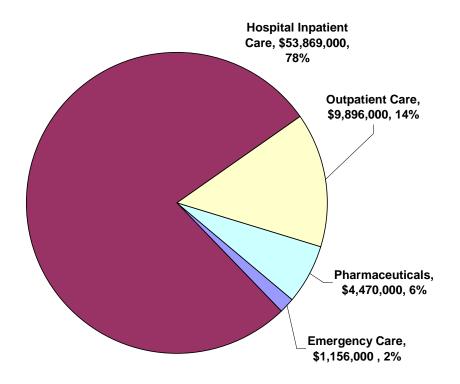
#### **Disease Management Evaluation**

- 1<sup>st</sup> Comprehensive report due December, 2007
  - Evaluation will include critical performance composite measures:
    - Clinical outcomes = changes in clinical processes
      - (e.g., increase in the percentage of diabetics with A1C testing)
    - *Utilization* = appropriate resource consumption
      - (e.g., decrease in emergency department visits)
    - Financial outcome measures = changes in medical costs
      - (e.g., return on investment)



# FY 2006 (Baseline) CHF Medical Costs for DM-eligible (Levels 3 & 4) Patients

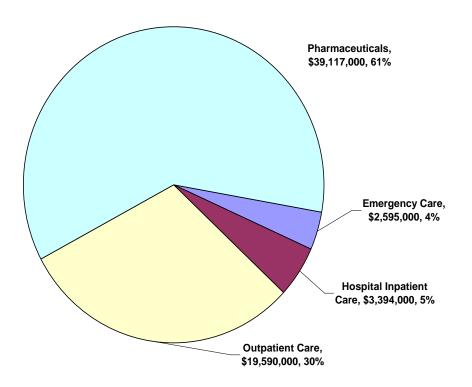
- 5,004 patients eligible for DM thus far (Sept 06 to March 07)
- In FY06 (the year preceding DM) these patients had
  - \$69 M in total CHF-related expenditures
  - 80% of expenditures for inpatient and emergency care
  - \$13,900 PMPY in CHF-related costs (out of \$36,600 PMPY in total TRICARE costs)





# FY 2006 (Baseline) Asthma Medical Costs for DM-eligible (Levels 3 & 4) Patients

- 25,897 patients eligible for DM thus far (Sept 06 to March 07)
- In FY06 (the year preceding DM) these patients had
- \$65 M in total asthma-related expenditures
  - 10% of expenditures for inpatient and emergency care
  - \$2,500 PMPY in asthma-related costs (out of \$8,500 PMPY in total TRICARE costs)



# THE NT OF THE PLANT OF THE PLAN

#### **DRAFT DM Score Card**

Outcomes	DM Metrics (risk adjusted)	Metric Description	Goals	Weight of Each Outcome Contribution		Evaluation		Score
<b>Utilization</b> (Disease specific visit/admission using diagnostic codes)	Emergency Visits	Total emergency department visits per 1000 identified members per year.	TBD	50%	\$ weighted			
	Hospital     Admissions     Bed days     ALOS	<ul> <li>Total acute hospital admissions per 1000 identified members per year.</li> <li>Total bed days per 1000 identified members per year.</li> <li>Average length of stay for acute hospital admissions for identified members per year.</li> </ul>	TBD					
Humanistic	Patient Satisfaction with DM	Patients' satisfaction with:  Program staff  Overall program  Usefulness of information  Assistance with adherence to treatment and self-management plan	TBD	20%	50%			
	Patient Quality of Life	Composite score from quality of life questions in patient surveys	TBD		25%			
	Patient's Understanding of Disease and Management of Disease	Composite score from patient management questions in patient surveys	TBD		25%			
<b>Financial</b> (Per Diagnosed Member Per Month (PDMPM))	Total	Setting specific cost per identified diagnosed						
	Inpatient	member per month						
	Emergency		TBD 10		\$			
	Other ambulatory			10%	weighted			
	Specialist							
	Pharmacy							
	Other Ancillary							
Clinical	Specific to targeted disease			20%				
Total				100%				



#### **Future NDAA 2007: Disease Management** 5 Minimum requirements

#### OCMO is working collaboratively with the Service SMEs and the TROs to meet NDAA 2007 requirements:

#### 1. Address specific diseases and conditions

- **Diabetes**
- Cancer
- Heart Disease
- Asthma
- Chronic Obstructive Pulmonary Disorder
- **Depression and Anxiety Disorders**

#### 2. Meet nationally recognized accreditation standards

 Disease Management Association of America Components (e.g., population identification processes and evidence-based practice guidelines)



#### NDAA 2007: Disease Management 5 Minimum requirements

- 3. Specify outcome measures and objectives
  - The MHS (TMA) must be able to capture and report this data across the Services AND the purchased care arenas in order to provide the Congress comprehensive DM reports demonstrating an "integrated" approach
- 4. Include strategies for all beneficiaries including Medicare (dual-eligible). Must be able to identify ALL beneficiaries using consistent methods
- 5. Conform to HIPAA laws and regulations

01 Mar 2008: Report on design, development and implementation plan for disease and chronic care management due to the Congress



#### **Disease Management Challenges**

- Providing consistent DM services and uniform program evaluations as mandated in NDAA 2007 by each of the Services, as well as each of the 3 managed care contractors
- Avoiding duplication and increasing costs of DM services provided by MCSCs and Military Treatment Facilities (part of the evaluation)
  - Allowing for flexibility (e.g., less MCSC DM involvement where MTFs have robust programs; more at small MTFs with few pts, and /or in response to MTF deployments)
  - Complexity of "patient list management"
- Administrative data lacks clinical information such as laboratory values



#### **Key Points**

- Significant parts of the NDAA 2007 Disease and Chronic Care Management requirements are already being met by existing Service and MCSC DM initiatives
  - Some uniform processes are in place and we are refining those processes
    - Patient identification, risk stratification, & evaluation
- At a minimum, we must define a cohort of beneficiaries with NDAA 2007 conditions & disease states— August 2007
- MCSCs bring expert clinicians who can spend considerable time with individual beneficiaries; premiere educational materials
- Services are leaders in many areas
  - VA/DoD Clinical Practice Guidelines
  - MHS Population Health Portal
  - Dashboards & Evaluations (quality measures)
- A system-wide approach requires collaboration & coordination = ongoing communication
- MCSC DM programs can be complementary for DM efforts at MTFs

#### **Campaign for Healthy Lifestyles**





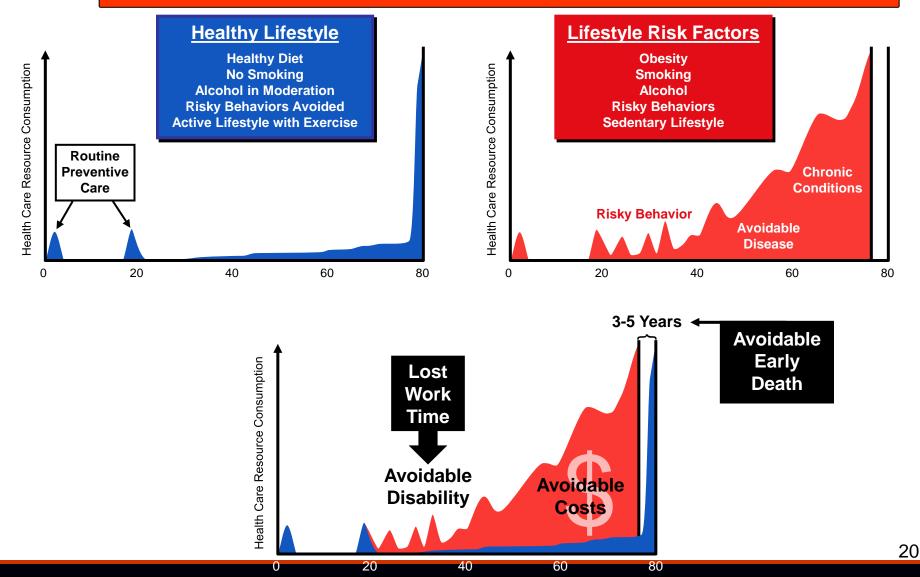
#### **Campaign for Healthy Lifestyles**

#### Vision

- Reverse recent negative health trends in active duty and military family populations
- Make the MHS a more proactive healthcare system by increasing awareness of negative health and combat performance effects of poor lifestyle choices
- Partner with commands, communities, other agencies and departments to support healthy lifestyle choices by our personnel and their families



### Quality Care and Lifestyle Reduce Lifetime Health Care Costs





#### **Campaign for Healthy Lifestyles**

- DoD (HA/TMA) has awarded contracts for a series of health promotion demonstration and pilot projects -
  - Tobacco, alcohol and obesity
    - Leading causes of preventable death in the US
    - Also identified as the leading negative health behaviors in 2002
       Health Related Behaviors Survey http://www.tricare.mil/main/news/art0514.html
  - Clinical evidence-based studies
  - Will help MHS develop policies that enhance the TRICARE benefit by gathering statistical information on the effects of altering beneficiary behavior and/or the use of medications to reduce obesity and tobacco use



#### **Tobacco Cessation Initiatives**



#### Impact of Tobacco On Readiness

- Predictor of military training failure
- Increased hospitalization and lost work days
- More likely to sustain injury
- 20-50% reduction in night vision
- Exacerbation of noise induced hearing loss
- Increased surgical risk, and poor wound healing

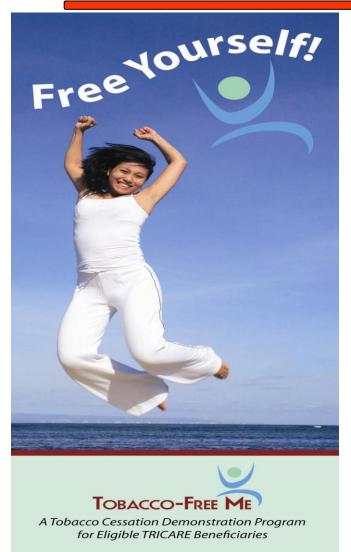
#### Cost

\$1.6B per year for additional medical care.





#### **Tobacco-Free Me Demonstration Program**









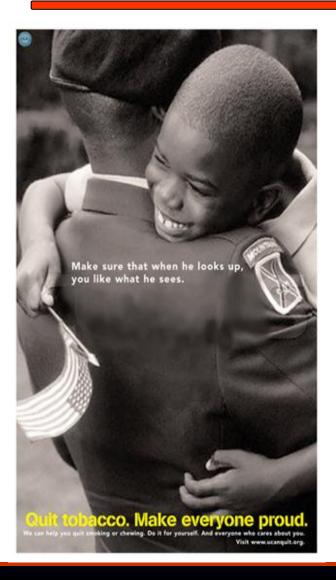
# "Tobacco Free Me" Tobacco Cessation Demonstration Project

- Objective: To evaluate participation and effectiveness of a tobacco quitline demonstration program in Colorado, Kansas, Minnesota, and parts of Missouri serviced by TriWest
- Key components include: (1) toll free tobacco cessation quit line, (2) behavioral counseling, (3) web-based cessation material, (4) personalized "quit kits", and (5) access to nicotine replacement therapy and buproprion via TRICARE Mail Order Pharmacy (TMOP)
- 384 Enrolled beneficiaries as of 28 August 2007
- -30 Sept 2008: Demonstration end date

DoD will use study results to determine the utility and feasibility of a comprehensive tobacco cessation benefit among its beneficiaries.



# "Make Everyone Proud" Tobacco Use Counter-Marketing Campaign









#### Focus Groups with AD E1s-E4s

#### Tobacco use:

- Overestimated
- Perceived as normative across ranks
- Consistent with image of military success
- Scheduling for cessation classes appears to present challenges

- Perceptions of military and supervisory support:
  - Smoke pit crosses ranks, creates an "in" group
  - Acceptable for smokers
     to take breaks from work
  - Cheap tobacco sales on base implies tacit endorsement



# **Tobacco Counter-Marketing Campaign Implementation**

- Findings from series of focus groups conducted in 2006 were used to develop:
  - Print materials and radio messages
  - Campaign-related web site
  - Message theme "Quit tobacco, make everyone proud"
- Web site traffic statistics as of July 2007
  - Web unique site visitors 119,173
  - Average time on site 10:40
    - More than half of current Web traffic is from Pendleton thanks to a link on their home page



#### **Alcohol Abuse Prevention**



# Campaign for Healthy Lifestyles Alcohol Use and Abuse

#### Impact of Heavy Alcohol Use

- Estimated medical costs to DoD for AD = \$364M/year<sup>1</sup>
- Contributes to 20 25% Private Motor Vehicle fatalities
- Alcohol-related admin separations over 700/year
- Reduces productivity by at least 1,764 FTEs/year



#### Web-Based Alcohol Prevention Education Pilot Project

# Program for Alcohol Training, Research, and On-line Learning (PATROL)



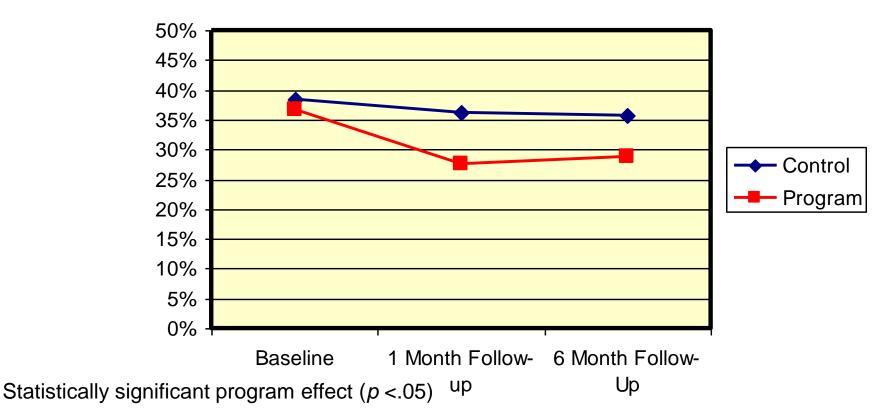
#### **Campaign for Healthy Lifestyles**

#### Web-based Alcohol Abuse Prevention Education Pilot Project

- Educational program used to evaluate the attitudes and knowledge of alcohol misuse, abuse and responsible drinking among active duty Service members
- Installations
  - Air Force: Hurlburt Air Field & Tyndall Air Field
  - Marine Corps: Marine Corps Base Camp Pendleton & Marine Corps Air Station Cherry Point
  - Army: Fort Bliss & Fort Sill
  - Navy: Naval Station Norfolk & Naval Base Ventura County
- 30 Sept 2007: Pilot study end date



# Combined Program Effect on Proportion of Binge Drinkers, 6-Month Follow-Up



- Significant reduction from baseline to 1-month for combined program group (p < .05)
- Differences were sustained from 1-month to 6-months for treatment group (p < .05)
- {Baseline program group: 2, 975 participants -- Completed 6-month follow-up: 859 participants}



#### **Campaign for Healthy Lifestyles** That Guy Campaign





# Campaign for Healthy Lifestyles That Guy Campaign

#### Objectives

- Raise awareness of the negative effects of excessive drinking
- Help reduce alcohol abuse among active duty military

#### Who is "That Guy"?

- -We've all seen "That Guy".
  - "That Guy" starts the night as a normal guy
  - After one too many he becomes "That Guy"
  - "That Guy" is not in control sometimes in a big way sometimes in a subtle way
  - "That Guy" is at the mercy of those around him
  - It's not hard to become "That Guy"
- You could be "That Guy", too.



# Campaign for Healthy Lifestyles That Guy Campaign

#### Target Audience

- –Primary
  - Active duty enlisted military personnel
  - Grade E1-E4
  - 18-24 year-old males
- -Secondary
  - Military and DoD leadership
    - Commanders
    - Chain of command



## Campaign for Healthy Lifestyles That Guy Campaign

#### Pre-Campaign Focus Group Testing

- Exploratory (eight groups; 75 participants; four installations; segregated to ensure candor: E1 to E3 (37 participants), E4 (38 participants); May 2006)
- Web Site Usability Testing (two groups; 12 participants; two installations; September 2006)

#### Post-Campaign Launch

- Campaign feedback among those aware of campaign (15 groups;
   131 participants; four installations; March 2007)
- That Guy Web site survey (about 170 respondents, spring 2007)



## Campaign for Healthy Lifestyles That Guy Campaign

#### Online

- > Website
- > Promotions

#### **Advertising**

- > Military Times
- Media Group
- > Online Banners
- > Base Papers

#### **Broadcast**

- > Radio Promotions
- > PSAs Radio/TV

TARGET AUDIENCE□

## Non-Traditional Marketing

> Point-of-Decision Materials (coasters, t-shirts, posters, clings, etc...)

Partnerships And Events

#### Peer-to-Peer

- > Downloadables
- > Targeted marketing



### That Guy Launched 1 Dec 2006

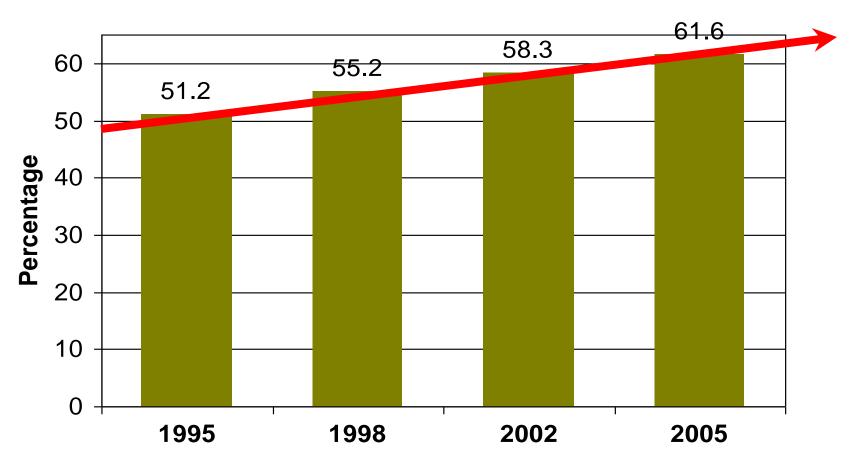
- 27 million reached through outdoor advertising
- 1,200 commercial radio spots aired
- Approximately 74,000 promotional items distributed
- Four weeks print advertising with 340,000 circulation
- 115 installation theaters reaching audiences through end of March 2007
- 166,170 Web sessions as of August 2007
  - 689,756 page views
  - Average page views per session: 4.2
  - Average time on site: 5:35
- Won the Webby Award
  - Awards presented to the "world's best websites"



# Reducing Overweight and Obesity



### Overweight Epidemic: AD Not Immune



Overweight AD over 20 years old 2005 Health Behaviors Survey



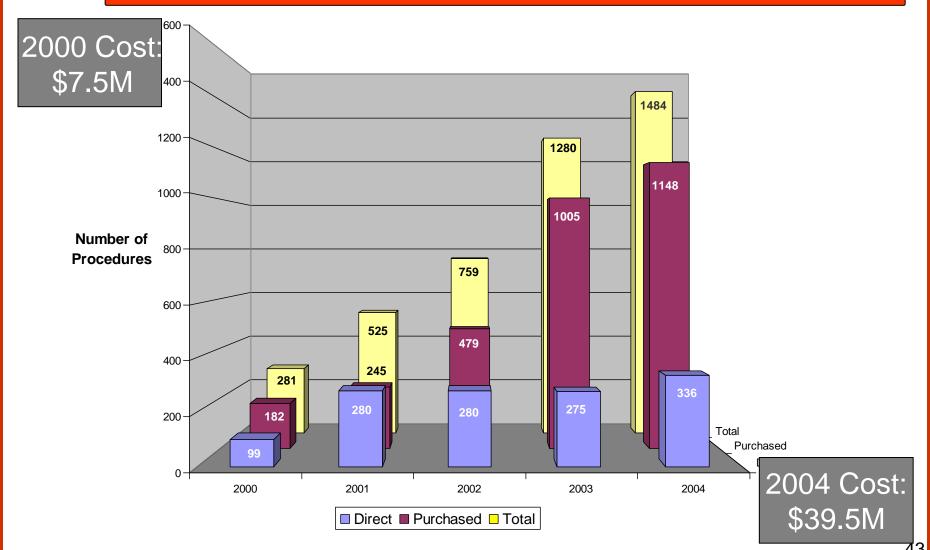
## Negative Impact of Obesity on Readiness

- Increased musculoskeletal injury<sup>1</sup>
- Increased daytime sleepiness<sup>2,3</sup>
- Poor heat tolerance and increased risk of heat injury<sup>4,5</sup>
- Increased military fitness test failure<sup>6,7</sup>
- Increased surgical risk, and poor wound healing<sup>8,9</sup>
- Increased rates of depression, suicide<sup>10, 11</sup>

1 Reynolds 2002, 2 Stoohs 1994, 3 Kryger 2004, 4 Chung 1994, 5 Wallace 2006 6 Zajdowicz 2003, 7 Robbins 2001, 8 Cottam 2003, 9 Lamas 2002, 10 Kress, 11 Magnusson 2006



## Weight Surgery for DoD Beneficiaries





## **TRICARE** Weight Management Demo



#### **HEALTH**

<u>Healthy Eating and Active Living</u> in TRICARE <u>Households</u>







## **HEALTH Demonstration Project**

- An interactive weight loss program with multiple participant options that vary in intensity. Options include...
  - Self-paced activities
  - One-on-one support from HEALTH lifestyle coaches via telephone and Internet
- TRICARE Prime non-active duty beneficiaries who are...
  - Overweight with a body mass index (BMI) greater than 25 and less than 51
  - Aged 18 to 64 years
  - Residents of Illinois, Indiana, Michigan, or Ohio
- 30 Sept 2008: Demonstration end date
  - As of 28 August 2007: 2,471 Enrolled beneficiaries

This comprehensive weight management study will test the efficacy of a benefit that includes: behavioral, nutritional counseling, and pharmacotherapy.



#### **Other Areas of Focus**

- Defense Commissary Agency (DeCA TRICARE collaboration)
- NEXCOM Healthy Alternatives Program
- DoD/VA Clinical Practice Overweight/Obesity Guideline
- Overweight and Obesity metric monitored on the MHS Balanced Score Card



## Healthy Lifestyles Campaign Summary

- TRICARE Management Activity is funding evidencebased demonstration and pilot projects that address the leading causes of preventable death (tobacco use, obesity, alcohol misuse and abuse) among its beneficiaries
- Purpose--To evaluate the feasibility and effectiveness of interventions that do not currently exist as benefits and other programs that encourage healthier lifestyles for beneficiaries
- Healthy Lifestyles Campaign has the potential to help support readiness, prevent chronic disease and reduce health care costs



## **Questions/Discussion**

## **Back-up Slides**





## **Campaign for Healthy Lifestyles**

#### DoD Smokers Want To Quit...

- -52.8% tried to quit previously
- -23.1% plan to quit within 30 days
- 14% quit within past year
- Average person attempts to quit 7 times before success



## Post-Pilot Tobacco Counter-Marketing Campaign

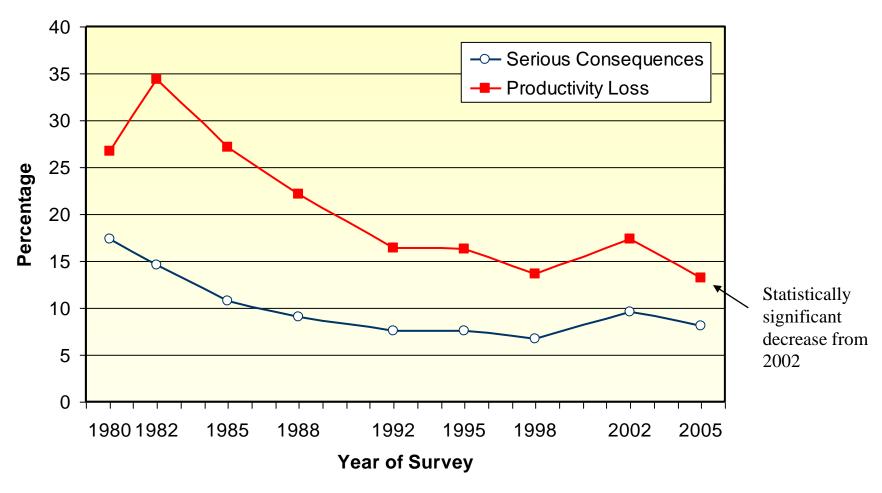
Change from Baseline	McChord AFB	<u>Ft Lewis</u>	San Diego Naval Base*	<u>Camp</u> Pendleton**
Completed Interviews (n=)	100	101	158	201
Quit	10%	0%	no change	5%
Decided to Quit	5%	8%	no change	24%
Began/resumed Thoughts of Quitting	5%	25%	no change	47%

<sup>\*</sup>Our pilot public media effort at San Diego was insufficient to establish campaign awareness. We hope to bring more resources to bear in Phase II of the proposed FY08 public media advertising effort.

<sup>\*\*</sup>Greatest local command support was at Camp Pendleton.



## Campaign for Healthy Lifestyles 2005 Health Related Behavior Survey – Impact of Alcohol Abuse





### Family Matters: DoD Pediatric Obesity

- 60% of AD are married and/or parents<sup>1</sup>
- Parental overweight is a strong risk factor for overweight in children<sup>2,3</sup>
- 18.9% of military dependent adolescents are obese (civilian benchmark: 15%)<sup>4</sup>

2005 Child Healthcare Survey of DoD Beneficiaries				
	6-12 y/o	13-17 y/o		
watch > 3 hrs of TV each day	23-28%	32-33%		
play > 3 hrs on video games each day	6-8%	9-21%		
eat fast food 3 or more times/week	9-13%	16-21%		

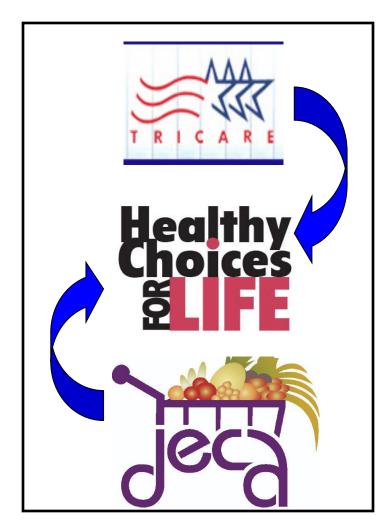
1 NMFA; 2 Magnusson and Rassmussen; 3 Danielzik et al 2004; 4 NQMP Study on Prevalence of Obesity in DoD (2002)



## **Stepping Forward**

DeCA - TRICARE 'Healthy Choices' Partnership

- 64% of grocery industry uses nutrition to reach consumers
- Involves DoD Nutrition Committee
- Emphasis on customer choice
- Posters, buttons, banners, handouts, employee magazine, customer newsletter, news releases from DeCA home economist, educational "shelf talkers"
- Sampling events and tours
- Industry tie-ins: specials on healthy products such as produce





#### "Shelf Talkers"



- Shelf Talkers provide guidance on categories of commonly purchased foods. Intention is solely to offer "food for thought" to customer, not endorse or recommend products
- The talkers attach to shelves via a tag that can be bent and inserted in shelf rails





#### **Canned Vegetables**

Nutritionally similar to fresh or frozen
Aim for 21/2 cups per day!
Look for "no-salt" or lowest sodium content
Include dark green & orange vegetables like
beans, spinach, greens, carrots & sweet
potatoes

Based on guidance from the USDA and DoD Nutrition Committee







### **Navy: Healthy Alternatives**

- Navy Environmental Health Center (NEHC) and Naval Exchange Service Command (NEXCOM) partnership
- Healthy snack food provided and identified in vending machines
- Working on initiative to increase visibility of healthy choices offered by vendors in NEX food courts



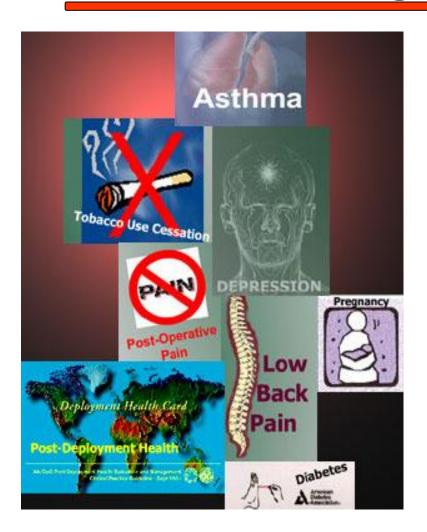


- Whole Grain Snacks
- Granola Bars
- Breakfast Cookies
- Baked Chips
- Tuna Packs
- Dried Fruits
- Trail Mixes
- Nuts
- Sport Bars
- Sport Gels





## DoD/DVA Overweight/Obesity CPG



VA/DOD Clinical Practice Guideline Management of Overweight and Obesity Modula A: Screening for Overweight and Obesity

