

*Office Of  
Community-  
Based  
Public Health*

*Fay W.  
Boozman  
College of  
Public Health*

*University of  
Arkansas  
for Medical  
Sciences*

*Physician counseling and  
patient action for weight loss*  
*American Public Health Association Annual Meeting*  
*Washington, DC, November 6, 2007*

**Holly C. Felix, PhD, MPA**

Fay W. Boozman College of Public Health,  
University of Arkansas for Medical Sciences  
Little Rock, AR

# Background

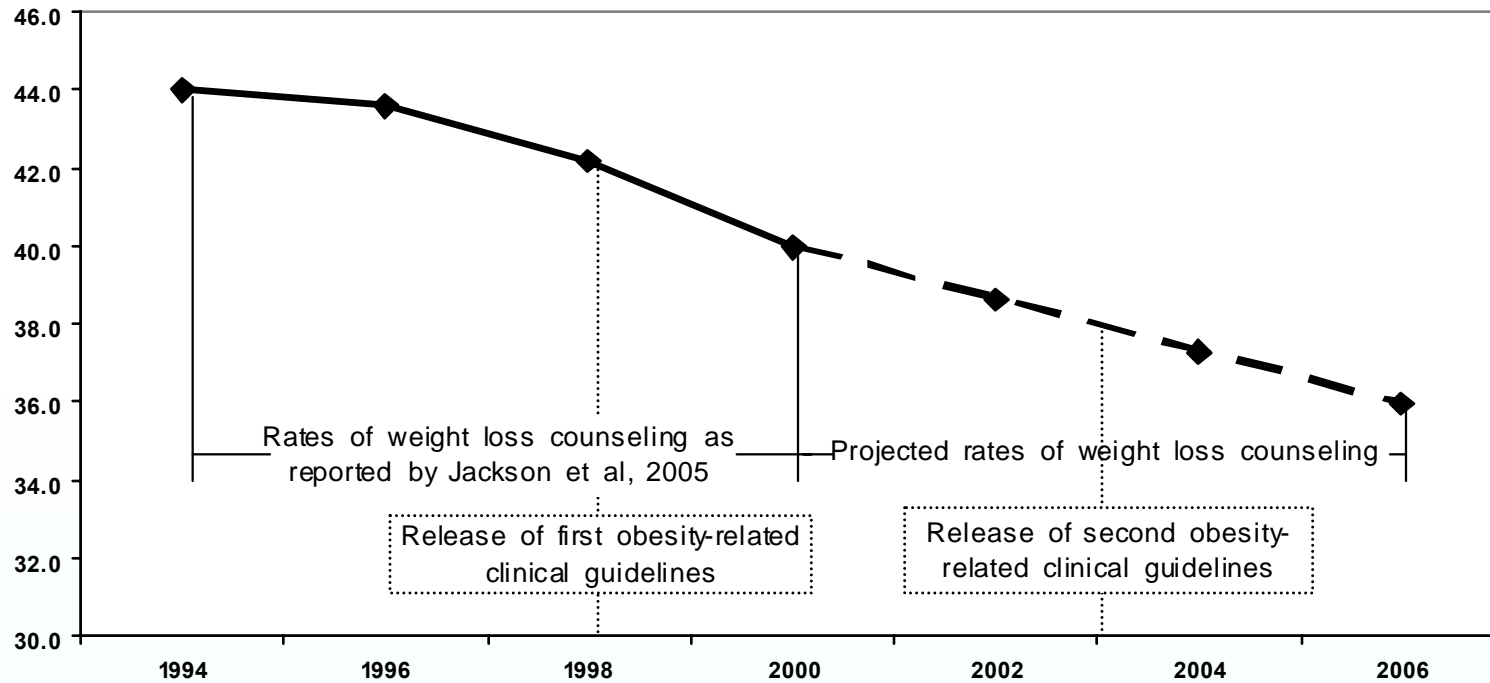
## **Clinical Guidelines for screening and treating obesity**

- NHLBI, 1998**
- USPSTF, 2003**

*Office of Community-Based Public Health, College of Public Health*

# Background

- No direct evaluations known
- Trend analysis shows little impact



Data Source for graph: Jackson et al, JGIM, 2005, author's calculations

*Office of Community-Based Public Health, College of Public Health*

# Study Questions

- **What are the current weight loss counseling behaviors of health care providers as reported by their obese patients?**
- **What has been the impact of the 2003 USPSTF guidelines on health care provider weight loss counseling?**

*Office of Community-Based Public Health, College of Public Health*

# Study Design

- **2005 BRFSS data**
- **Limited to obese (BMI  $\geq 30$ ), non-pregnant adults who reported a check-up in the previous year, and answered weight counseling questions (n=11,691)**
- **Analysis performed using SAS v. 9**
- **BRFSS sampling weights used**

*Office of Community-Based Public Health, College of Public Health*

Finding:  
Weight Loss Counseling (WLC)

**43.8 % of obese adults who visited a provider in the last year reported receiving WLC**

*Office of Community-Based Public Health, College of Public Health*

# Characteristics Associated with Weight Loss Counseling

		% Advised to Lose Weight	Adjusted Odds Ratios (95% CI)			% Advised to Lose Weight	Adjusted Odds Ratios (95% CI)
Total (N=11,691)		43.8					
Sex	Male	44.9	1.00	Marital Status	Never married	45.6	1.00
	Female	43.2	0.97 (0.85-1.11)		Previously married	42.7	0.93 (0.72-1.20)
Age	18-29	36.5	1.00		Currently married	44.1	0.82 (0.65-1.03)
	30-39	44.1	1.29 (0.93-1.78)	Current Smoker	No	44.3	1.00
	40-49	48.4	1.67 (1.21-2.31)		Yes	41.2	0.86 (0.71-1.09)
	50-59	48.6	1.63 (1.19-2.24)	Current Insure	No	39.5	1.00
	60-69	44.3	1.31 (0.94-1.82)		Yes	44.3	1.43 (1.13-1.82)
	70+	32.2	0.79 (0.55-1.14)	Health Status	Excellent	31.8	1.00
Race/Ethnicity	Non-Hispanic-white	43.1	1.00		Very Good	40.2	1.17 (0.89-1.56)
	Non-Hispanic-black	46.6	0.97 (0.81-1.15)		Good	45.0	1.52 (1.16-2.01)
	Hispanic	47.1	1.08 (0.77-1.53)		Fair	49.2	1.84 (1.36-2.49)
	Other	42.6	0.65 (0.46-0.90)		Poor	47.3	1.73 (1.24-2.41)
Education	< High School	39.0	1.00	BMI	30-34.9	36.8	1.00
	High School diploma	41.1	1.11 (0.90-1.37)		35-39.9	50.4	1.76 (1.50-2.05)
	Some college	44.6	1.39 (1.11-1.74)		40+	66.4	3.73 (3.08-4.51)
	College +	50.1	1.79 (1.41-2.26)	Diabetes	No	40.3	1.00
			Yes		54.9	1.54 (1.32-1.80)	

\*Models adjusted for all covariates in the table. Shaded areas significant at <0.0001.

*Office of Community-Based Public Health, College of Public Health*

## Finding: Weight Loss Action

- **90.6% of obese adults who received WLC reported current efforts to lose weight**
- **69.8% of obese adults who did not receive WLC reported current efforts to lose weight**  
**( $p < 0.0001$ )**

*Office of Community-Based Public Health, College of Public Health*



# Characteristics Associated with Weight Loss Action

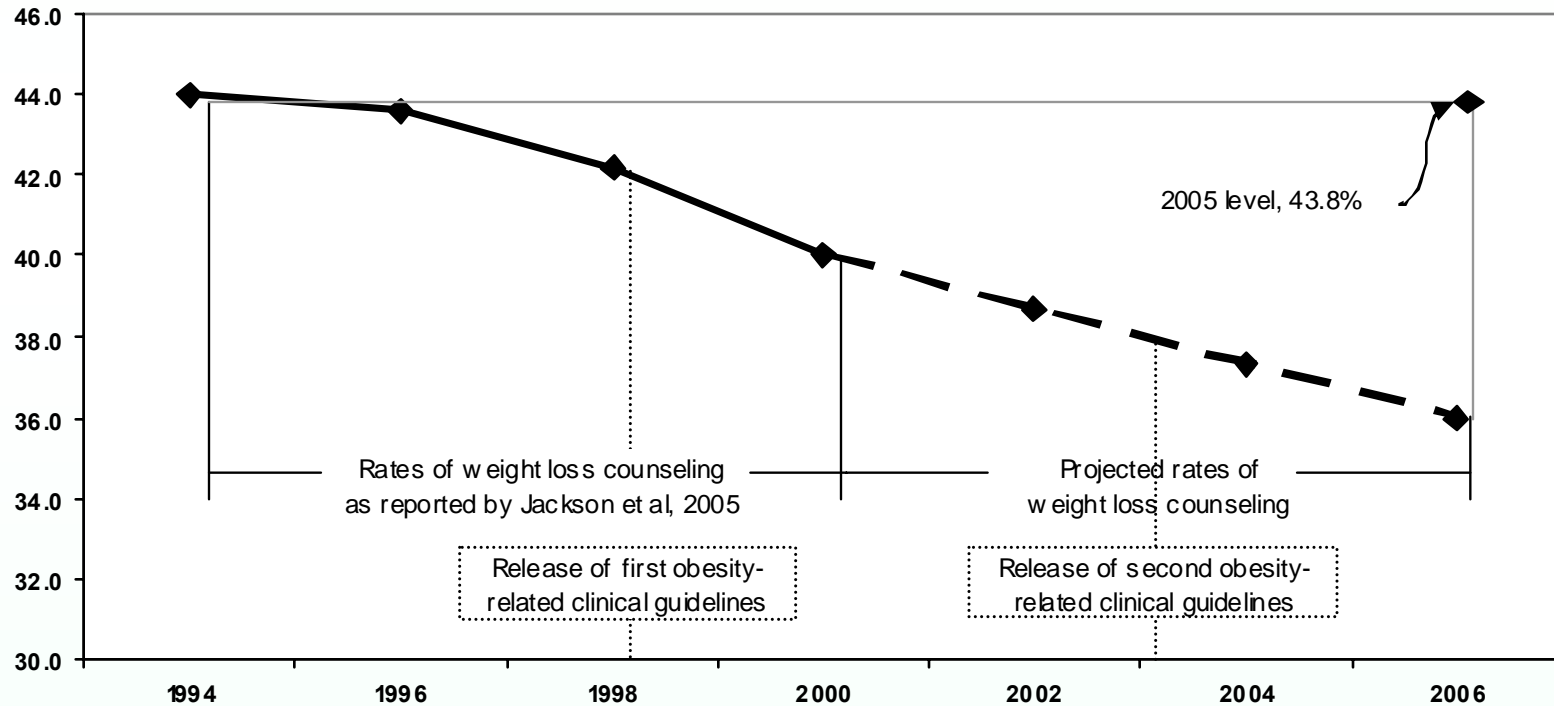
		OR (95% CI)			OR (95% CI)
Total		4.18 (3.75-4.65)	Marital Status	Never married	4.14 (3.03-5.64)
Sex	Male	4.35 (3.69-5.12)		Previously married	4.16 (3.45-5.02)
	Female	4.17 (3.61-4.81)		Currently married	4.19 (3.62-4.84)
Age	18-29	3.08 (1.93-4.91)	Current Smoker	No	4.18 (3.71-4.71)
	30-39	3.83 (2.82-5.21)		Yes	4.10 (3.18-5.30)
	40-49	3.92 (3.06-5.01)	Current Insure	No	5.20 (3.60-7.52)
	50-59	3.70 (2.99-4.57)		Yes	4.07 (3.64-4.56)
	60-69	4.61 (3.64-5.84)		Health Status	Excellent
70+	4.60 (3.50-6.03)	Very Good	3.64 (2.90-4.58)		
		Good	3.63 (3.05-4.33)		
Race/Ethnicity	Non Hispanic-white	3.93 (3.47-4.44)		Fair	5.62 (4.44-7.12)
	Non-Hispanic-black	5.22 (3.98-6.85)		Poor	5.41 (3.97-7.36)
	Hispanic	4.00 (2.48-6.45)	BMI	30-34.9	4.31 (3.75-4.95)
	Other	6.43 (3.39-12.21)		35-39.9	3.22 (2.58-4.01)
Education	< High School	4.43 (3.38-5.81)		40+	3.55 (2.60-4.86)
	High School diploma	4.63 (3.86-5.54)	Diabetes	No	3.92 (3.46-4.44)
	Some college	4.21 (3.35-5.29)		Yes	4.89 (3.93-6.10)
	College +	3.23 (2.61-3.99)			

Unadjusted ORs. All p values <0.0001

*Office of Community-Based Public Health, College of Public Health*

# Discussion

- **Current WLC levels low**
- **2003 guidelines may have helped WLC**



Data Source for graph: Jackson et al, JGIM, 2005 and author's calculations

*Office of Community-Based Public Health, College of Public Health*

# Discussion, continued

## **Persons most likely to receive WLC:**

- middle-aged persons
- those with higher education
- those with health insurance
- those with higher BMIs
- those with diabetes

**Other research has shown some of these characteristics associated with better patient-provider relationships (e.g. having insurance, higher education)**

*Office of Community-Based Public Health, College of Public Health*

# Discussion, continued

**All persons significantly more likely to engage in WL efforts after receiving WLC**

**Those with highest odds of WL efforts**

- **Older persons**
- **Blacks and persons of other racial/ethnic groups**
- **High school educated**
- **Not insured**
- **Those in fair/poor health**
- **Diabetics**

*Office of Community-Based Public Health, College of Public Health*

# Conclusion

- **WLC promotes WL efforts**
- **Current WLC levels low**
- **Interventions to improve WLC should be developed**

*Office of Community-Based Public Health, College of Public Health*

# Questions?

**For more information, contact:**

**Holly Felix, PhD, MPA**

**501-526-6626**

**[felixholly@uams.edu](mailto:felixholly@uams.edu)**

*Office of Community-Based Public Health, College of Public Health*