



CARDI•OH

Ohio Cardiovascular Health Collaborative



In partnership with:



Cardi-OH ECHO Weight Management A Patient-Centered Approach

Thursday, November 21, 2019

Disclosure Statements



The following planners, speakers, moderators, and/or panelists of the CME activity have financial relationships with commercial interests to disclose:

- Adam T. Perzynski, PhD reports being co-founder of Global Health Metrics LLC, a Cleveland-based software company and royalty agreements for forthcoming books with Springer publishing and Taylor Francis publishing.
- Siran M. Koroukian, PhD received funds for her role as a site PI on a subcontract with the Cleveland Clinic.
- Christopher A. Taylor, PhD, RDN, LD, FAND reports grant funding and travel support for his role as a consultant, researcher, and presenter for Abbott Nutrition, and is also a member of the Scientific Advisory Council of Viocare, Inc.
- Goutham Rao, MD is the author of Child Obesity: A Parent's Guide to a Fit, Trim, and Happy Child. (Prometheus/Penguin-Randomhouse/Rowman & Littlefield) He has included a quotation from the book as part of this presentation.
- These financial relationships are outside the presented work.

All other planners, speakers, moderators, and/or panelists of the CME activity have no financial relationships with commercial interests to disclose.

Pharmacotherapy for obesity



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Objectives



- Define satiety and satiation.
- List and describe a minimum of 3 pharmacotherapeutic options for weight loss.
- Describe a minimum of 3 situations in which pharmacotherapy for obesity should be considered.

Treatment: Drugs

Two major concerns:

- Effectiveness
- Side effects

1940s: Thyroid hormone
heart rhythm disturbances
sudden death

1960s: Amphetamines
addiction, high blood pressure, death

Treatment: Drugs (Cont'd)

- 1992: Fenfluramine-phentermine
 - Primary pulmonary hypertension
 - Pulled off market in 1997
- Phenylpropanolamine (Accutrim, Dexatrim)
 - Widely used for many years.
 - Association with increased risk of stroke.
 - Pulled off market in 2000.

Treatment: Drugs (Cont'd)

- Sibutramine (Meridia) Average weight loss is approximately 10 lbs/year
 - Cost per year is approximately \$1080.00
 - Or roughly \$100/lb
 - REMOVED FROM MARKET OCTOBER 2010
- Rimonabant
 - CB1 antagonist
 - Associated with 5.3kg of weight loss in one year in adults who have diabetes and obesity
 - NEVER APPROVED

Physiological Factors

- Satiety
- Satiating
- Adaptive thermogenesis

Guidance



- Endocrine Society Guidelines (2015):
 - “In order to promote long-term weight maintenance, we suggest the use of approved weight loss medications to ameliorate comorbidities and amplify adherence to behavior changes, which may improve physical functioning and allow for greater physical activity in individuals with a BMI $\geq 30\text{kg/m}^2$ or in individuals with a BMI of $\geq 27\text{kg/m}^2$ and at least one associated comorbid medical condition such as hypertension, dyslipidemia, T2DM, and obstructive sleep apnea.”

Guidance (AHA, 2019)



- “All adults should consume a healthy diet that emphasizes the intake of vegetables, fruits, nuts, whole grains, lean vegetable or animal protein, and fish and minimizes the intake of *trans* fats, red meat and processed red meats, refined carbohydrates, and sweetened beverages. For adults with overweight and obesity, counseling and caloric restriction are recommended for achieving and maintaining weight loss.”

Advantages and Disadvantages Associated with FDA Approved Weight Loss Medications

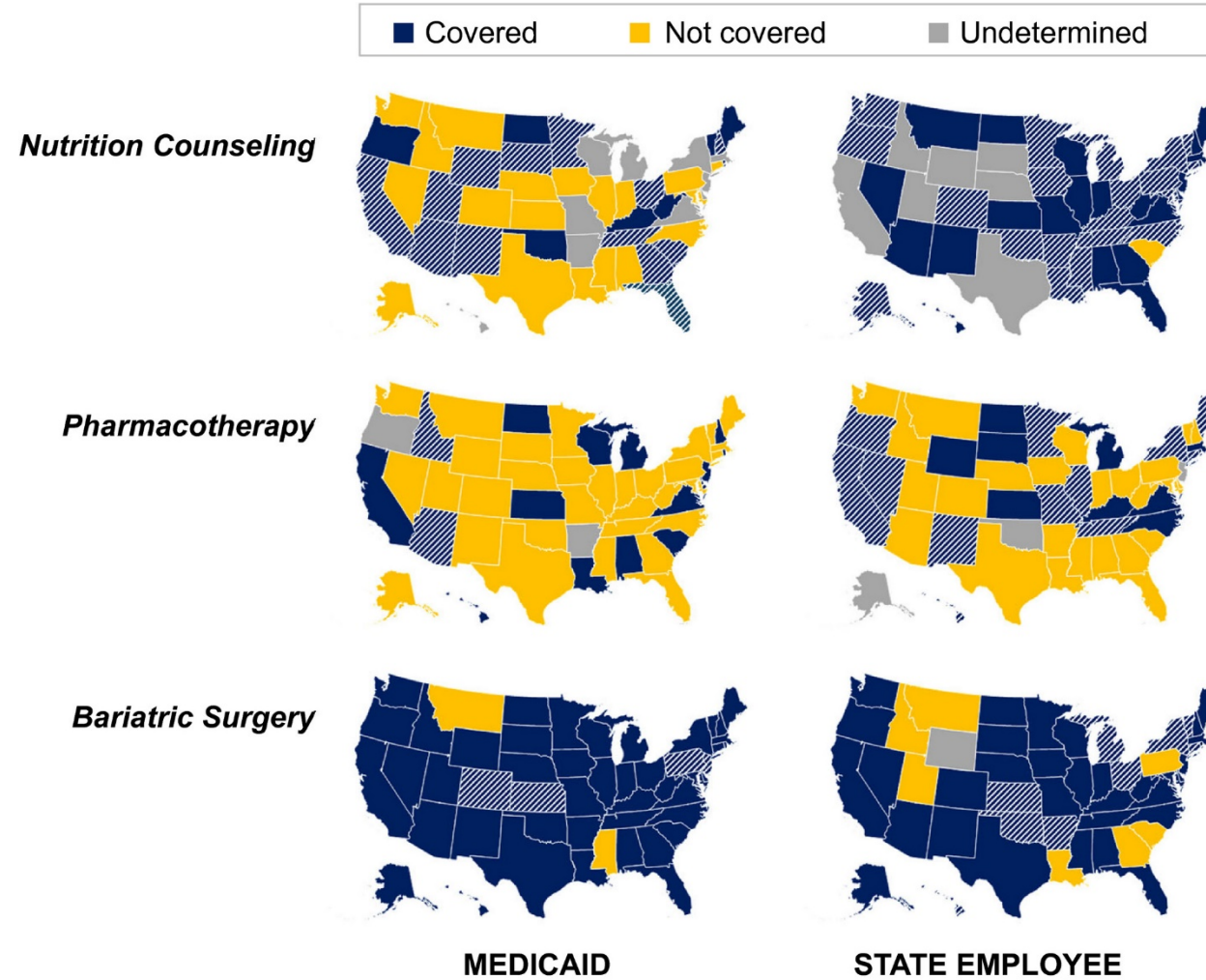


Drug	Advantages	Disadvantages
Phentermine	Inexpensive (\$)	Side effect profile
	Greater weight loss ^a	No long-term data ^b
Topiramate/phentermine	Robust weight loss ^a	Expensive (\$\$\$)
	Long-term data ^b	Teratogen
Lorcaserin	Side effect profile	Expensive (\$\$\$)
	Long-term data ^b	
Orlistat, prescription	Nonsystemic	Less weight loss ^a
	Long term data ^b	Side effect profile
Orlistat, over-the-counter	Inexpensive (\$)	Less weight loss ^a
		Side effect profile
Natrexone/bupropion	Greater weight loss ^a	Side effect profile
	Food addiction	Mid-level price range (\$\$)
	Long-term data ^b	
Liraglutide	Side effect profile	Expensive (\$\$\$)
	Long-term data ^b	Injectable

Off-Label

- Topiramate (-3.4kg)
- Bupropion (-4.4kg)
- Metformin (-2.23kg)

Coverage for Obesity Prevention and Treatment Services: Analysis of Medicaid and State Employee Health Insurance Programs



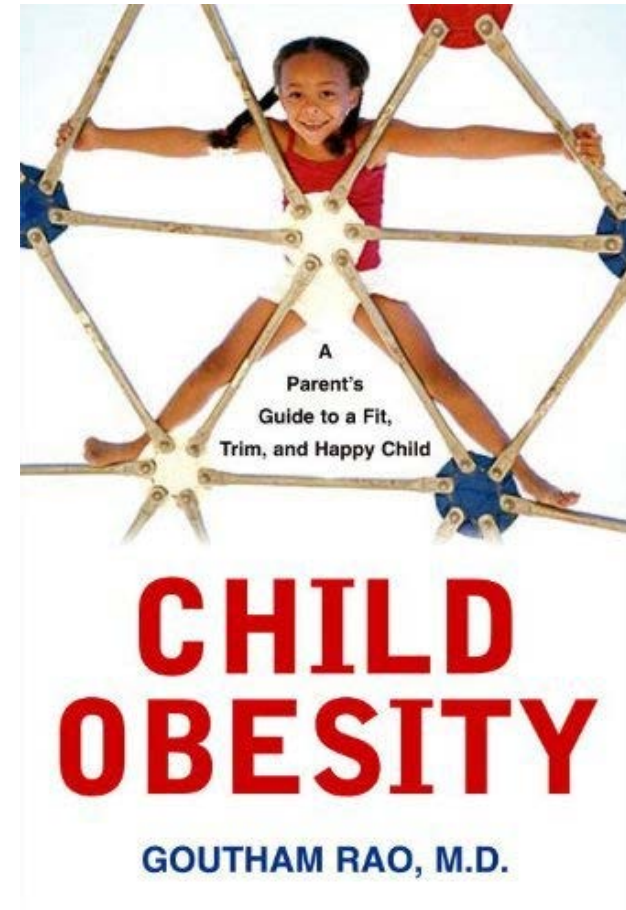
▨ indicates change from "non-covered / undetermined" (PY09/10) to "covered" (PY16/17)

Scenarios:

- Joanne is a fifty-six-year-old woman with hypertension and obesity. She has tried numerous commercial programs, self-directed diets, and exercise programs to lose weight over the past ten years. Despite these efforts, she is currently 5'5" tall and weighs 264lbs. (BMI 45.3kg/m²) You have been providing lifestyle counseling for the past three months both in person and by telephone. She has made a number of positive changes including having breakfast daily, and walking daily for up to one hour. At a recent follow-up visit she weighs 269lbs.

...The risk

- P. 212 “To them Katie’s weight had taken on a life of its own, something out of control against which they had battled frequently and lost.”



Another scenario

- Madison is a thirty-seven-year old attorney and former college swimmer. She has gradually gained weight over the past fifteen years and has grown increasingly concerned as a recent fasting lipid panel through her primary care provider revealed modestly elevated LDL cholesterol. Her father has obesity and a history of coronary heart disease. She is married and has a 9-year-old son. Both her husband and son are at a healthy weight. Madison is 5'7" tall and weighs 173lbs (BMI 27.1kg/m²)

Another scenario

- Victor is sixty-three years old and has obesity. He is 5'9" tall and weighs 334lbs (BMI 49.3kg/m²). He has a history of hypertension, dyslipidemia, type 2 diabetes (treated with metformin only), severe OSA, and also severe osteoarthritis in both hips. He has established coronary heart disease and has had two revascularization procedures over the past four years. Victor has developed a good relationship with a bariatric surgeon through a medical weight loss program. He has been asked to lose a minimum of twenty pounds prior to being considered for gastric bypass surgery. Through the medical program, he has made significant changes to his dietary habits, but his weight remains unchanged after four months at 334lbs.

Thank you!

Questions/Discussion