

Objective

- Determine the health and financial consequences of mandated insurance coverage for bariatric surgery

Background

- Obesity is one of the largest and fastest growing epidemics in the United States
- Thirty-one percent of American adults meet criteria for obesity diagnosis (BMI > 30.0 kg/m²), an increase of 36% over the past eight years
- Obesity, after smoking, is the second leading cause of preventable, premature death
- Bariatric surgery has proven an effective treatment for obesity; however, many private insurance companies do not cover the surgery
- Given the high cost of treatment (\$30,000 on average), many patients cannot afford to pay for bariatric surgery out-of-pocket

Assumptions

- Neglecting the interaction of genetics, gaining weight, which can lead to overweight and obesity, can simply be reduced to having an excess intake of calories
- Bariatric surgery results in significant improvement or resolution of obesity-associated diabetes, hypertension, cardiovascular dysfunction and decreased total cholesterol
- The financial ramifications of the obesity epidemic are staggering – over \$96 billion is spent treating obesity and obesity-related health problems each year

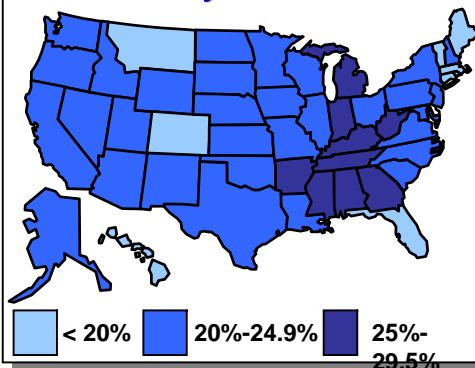
Methods

- A comprehensive literature review was performed to evaluate state obesity rates (as a percentage of population) and annual state spending to treat obesity
- A review of state laws mandating and/or prohibiting bariatric surgery was also conducted
- The advantages and disadvantages of state regulation were analyzed to determine the cost vs. benefit of state-mandated coverage of bariatric surgery.

Results

- Finkelstein found that in 1998, overweight and obesity medical expenses accounted for 9.1% of total US medical expenditures and may have reached as high as \$78.5 billion (\$92.6 billion in 2002 dollars)
- Using regression analysis, Strum showed that obese adults under age 65 incur medical expenditures that are 36% higher (\$395) annually than those of normal weight incur
- Compared to people in the normal weight range, the average expenditures of obese people for hospital care are 36% greater and the average expenditures for outpatient care are 77% greater

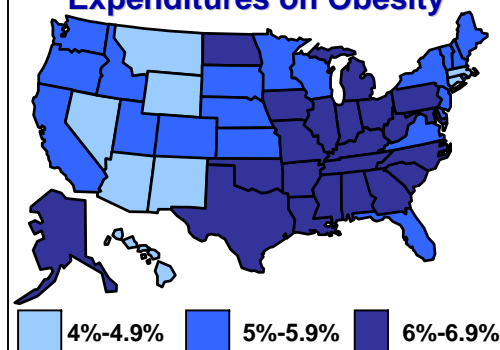
Obesity Prevalence



Analysis

- Christou et al. published a study showing that both overall mortality and the development of new health-related conditions in morbidly obese patients were reduced following bariatric surgery
- Monk et al published data indicating that the average monthly savings in prescription drug costs (conditions evaluated were sleep apnea, type II diabetes, hypertension, GERD, and asthma) were \$182.00 per year for patients undergoing bariatric surgery
- Despite the recommendation by the 1991 National Institutes of Health Consensus Development Panel that surgical treatment of obesity be considered for any patient with a BMI of 40 or more, or for those with a BMI of more than 35 who have serious coexisting medical problems, as of March 31, 2005, only four states (GA, IN, MD, VA) have legislation regarding insurance coverage of bariatric surgery as treatment for obesity
- The only other state that is currently considering legislation that would require insurance coverage of bariatric surgery is Connecticut

% of State Medical Expenditures on Obesity



Discussion

- The results of this analysis show that it is unclear whether implementing state laws requiring coverage of bariatric surgery in the morbidly obese will reduce overall state spending on obesity treatment
- Because these regulations are so new (the oldest was passed in 1999), there has yet to be published data that shows either the cost-effectiveness of requiring bariatric surgery coverage or the resulting health effects of mandated bariatric surgery coverage
- Although an intuitive link exists, until rigorous studies are published which delineate a reduction in co-morbidities and improvement in overall health as the direct consequence of bariatric surgery, legislators will continue to be hesitant to pass regulations requiring insurance coverage of bariatric surgery

Limitations

- Few studies have evaluated the long-term effectiveness of bariatric surgery and those that do have been unable to link bariatric surgery to decreased mortality
- There is no unequivocal evidence that weight loss reduces mortality in the obese
- After subtracting ERISA-governed insurance plans and Medicare benefits, state laws mandating coverage for surgical treatment of obesity realistically affect approximately 25% of the population, up to 50% of any given state's population at most, with an additional 15-20% that can be affected by State Medicaid policy

Future Implications

- Further formalized research is required to properly assess the legal, economic, and health-related implications