Obesity Information

Health Care Commission

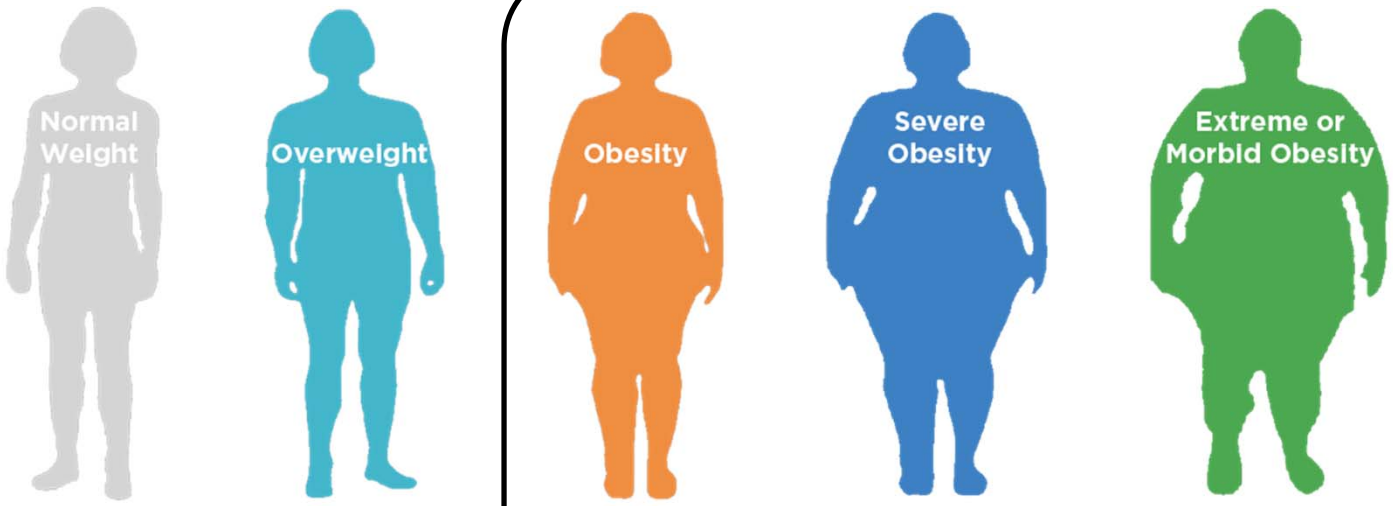
State Employee Health Plan

February 25, 2013

The Obesity Epidemic

- Obesity in the workforce creates medical cost and lost productivity challenges
- 30 percent of adults are obese and another 35 percent are overweight
- If current patterns continue, 43 percent of U.S. adults will be obese by 2018
- Most obese individuals struggle to lose weight or maintain weight loss with diet and exercise
- Between 1986 and 2000, obesity prevalence doubled, while morbid obesity (BMI >40) increased 400%
- The average obese individual costs $1,429 per year in additional medical expenses.
- Workers' compensation injury rates, duration of absence and medical costs for obese claimants greatly exceed experience for non-obese workers.
- Increased obesity during the past 20 years is largely responsible for the doubling of the prevalence of diabetes during the same time period

Defining Obesity

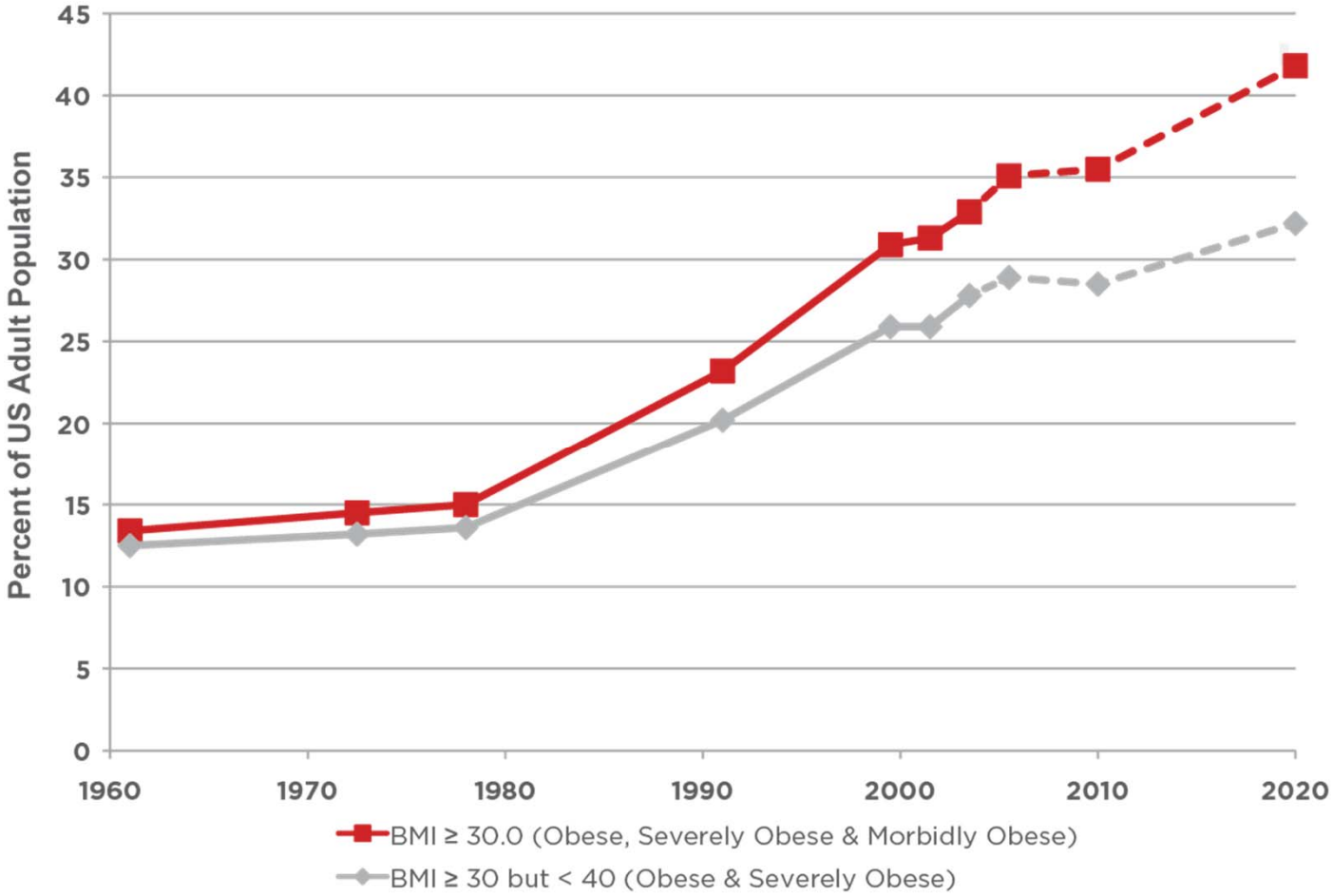


BMI	18.5 to 24.9	25 to 29.9	30 to 34.9	35 to 39.9	40 or more
International Clinical Classification	Normal Weight	Pre-obese	Obesity I	Obesity II	Obesity III
Approximate Population %	32%*	34%	20%	8%	6%

* Normal weight population percentage includes underweight persons. All data shown for United States.

Flegal KM, Carroll MD, Ogden CL et al. Prevalence and trends in obesity among US adults, 1999-2008. JAMA 2010; 303(3):235-241.
World Health Organization. BMI Classification. Retrieved April 22, 2011 from http://apps.who.int/bmi/index.jsp?introPage=intro_3.html

Future projections for obesity and morbid obesity to 2020



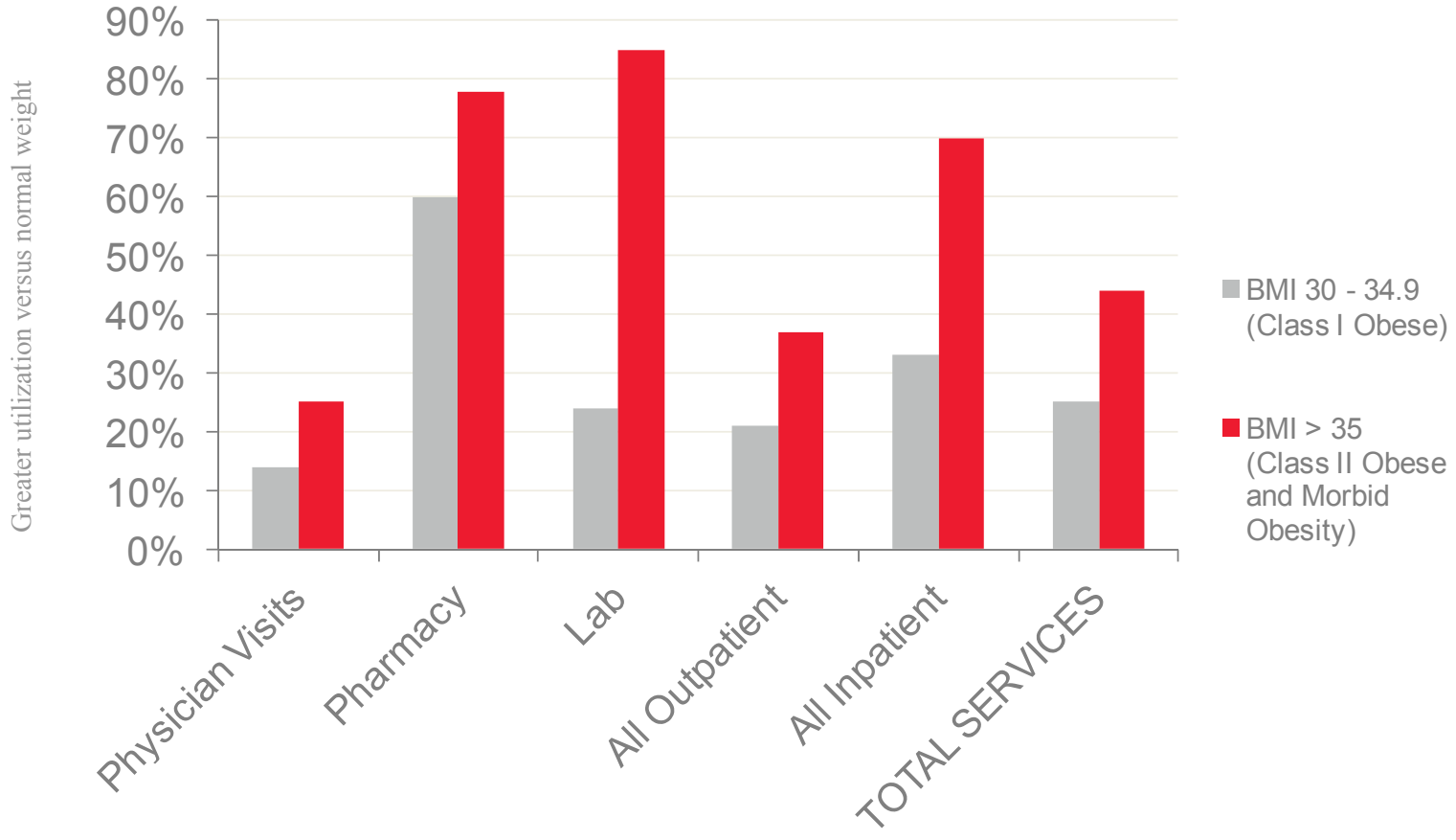
2010 and 2020 data projected based on data through NHANES 2003-2004.
Centers for Disease Control. NCHS Health E-Stat. Retrieved April 22, 2011 from http://www.cdc.gov/nchs/data/hestat/overweight/overweight_adult.htm
Ruhm C. Current and Future Prevalence of Obesity and Severe Obesity in the United States. Forum for Health Economics & Policy 2007; 10(2):Article 6.

Health Consequences of Obesity

- Obesity contributes to coronary artery disease, cancer (breast, cervix, colon, esophagus, kidney, pancreas, prostate, and uterus), diabetes, hypertension, pancreatitis, gall bladder disease, gout, infertility, liver problems, osteoarthritis, sleep apnea and stroke.
- Causes 100,000 cancers each year in the United States
- Many morbidly obese (BMI >40) individuals die prematurely without corrective surgery

Obesity's cost is in medical utilization

Greater medical utilization compared to normal weight

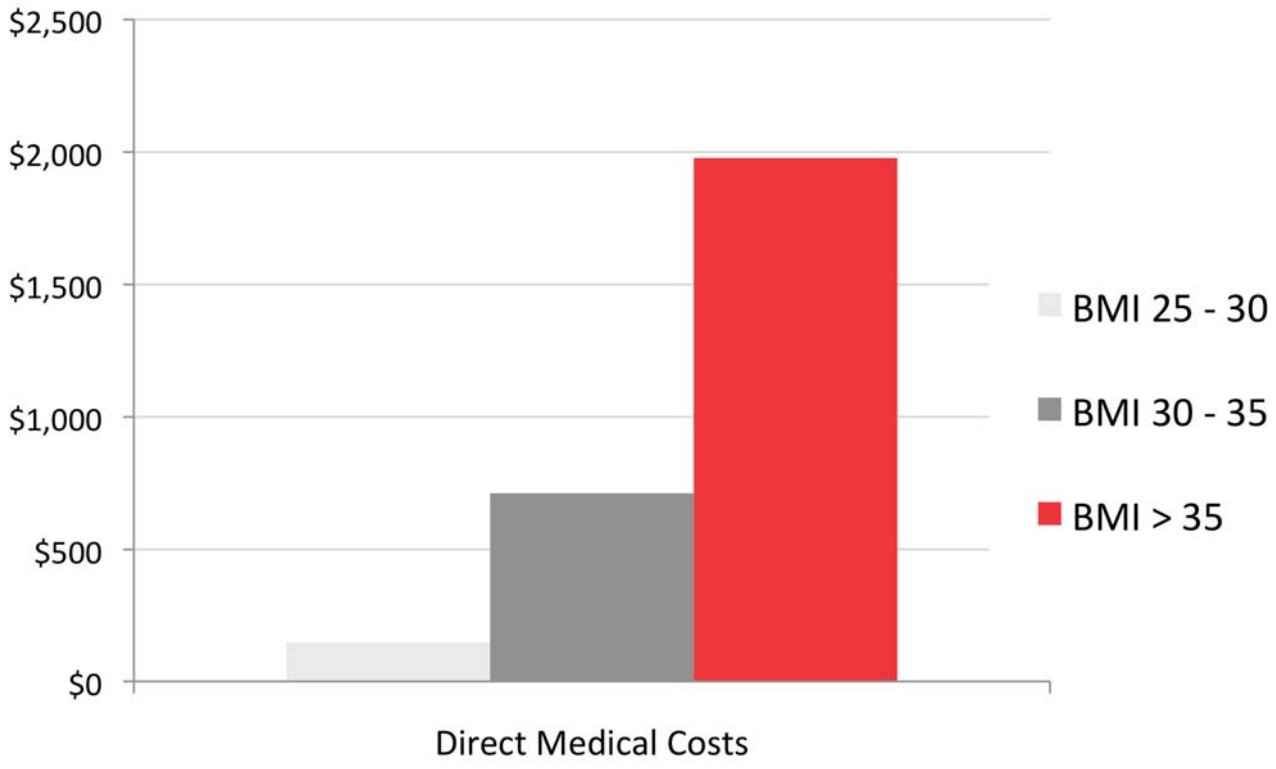


Utilization rates as a proportion compared to normal or underweight persons (BMI<25).

Quesenberry CP, Caan B, Jacobson A. Obesity, health services use, and health care costs among members of a health maintenance organization. Arch Intern Med 1998;158:466-472.

Obesity's cost is in direct medical costs

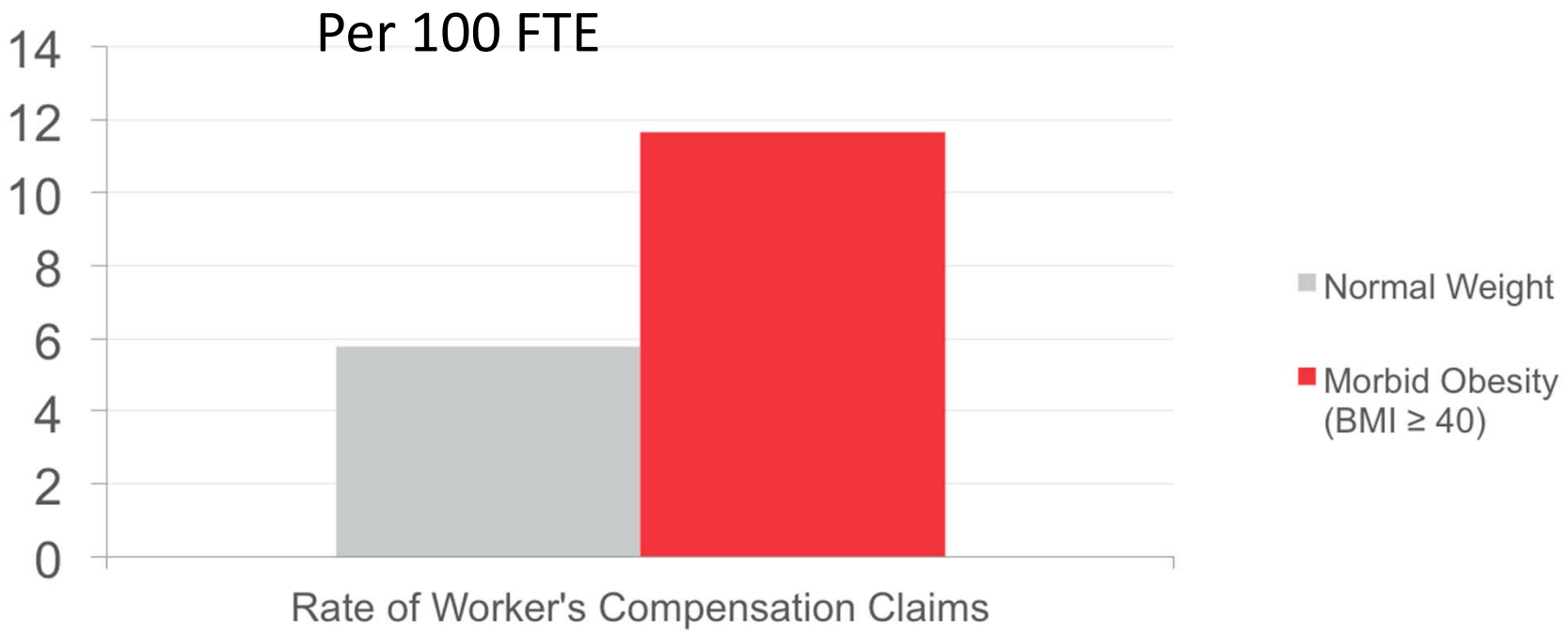
Increased medical costs in more obese patients



Durden ED, Huse D, Ben-Joseph R, et al . Economic costs of obesity to self-insured employers.J Occup Environ Med 2008; 50: 991-997

Morbid obesity's cost is in more claims

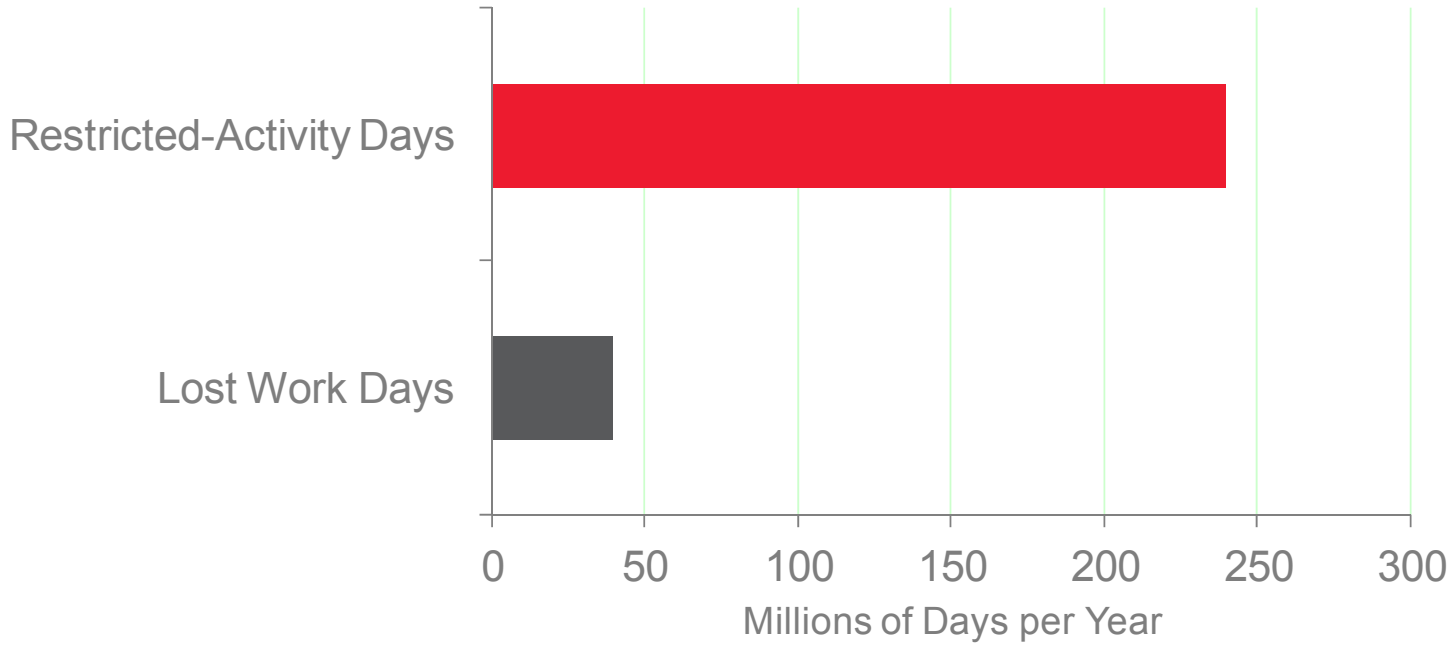
More worker's comp claims compared to normal weight



Østbye T, Dement JM, Krause KM et al. Obesity and workers' compensation: Results from the Duke Health and Safety Surveillance System. Arch Intern Med. 2007;167:766-773

Obesity's cost is in decreased productivity

Days affected due to obesity



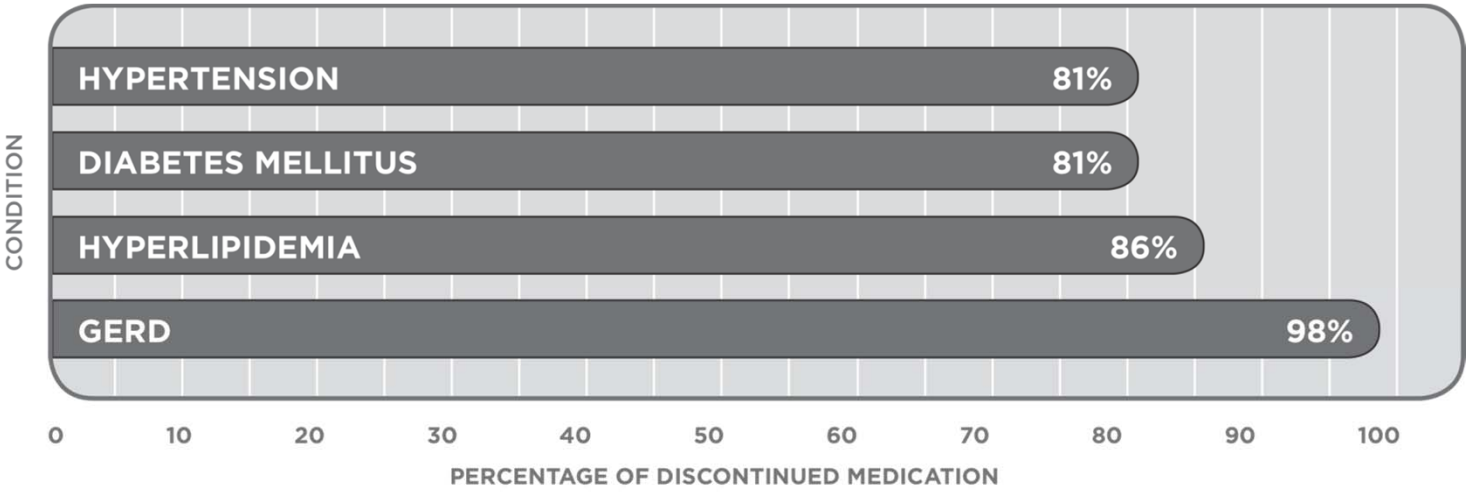
Wolf AM, Colditz GA. Current estimates of the economic cost of obesity in the United States. Obes Res 1998; 6(2):97-106.

Advances in Bariatric Surgery

- Bariatric surgery has the potential to deliver rapid weight loss, reduce the likelihood of diabetes, high blood pressure, and cholesterol while improving the patient's psychology.
- In 2009, there were over 250,000 bariatric surgeries in the United States–more than a tenfold increase since 1998.
- Increasing numbers of plan sponsors cover bariatric surgery due to growing evidence of better outcomes, health-status improvement and increasing member demand.
- The costs of bariatric surgery are recovered within 2 years for laparoscopic surgery and 4 years for open surgery
- The risk of bariatric surgery complications has significantly dropped, especially when performed by experienced surgeons in hospitals that perform high volume. High performing bariatric surgery programs report extremely low mortality and complications.
- Studies show bariatric surgery has more positive health impacts on many obesity-related diseases than traditional weight loss tactics

Benefits Include Reduced Prescription Use

Discontinued prescription medication 12 months post-operatively

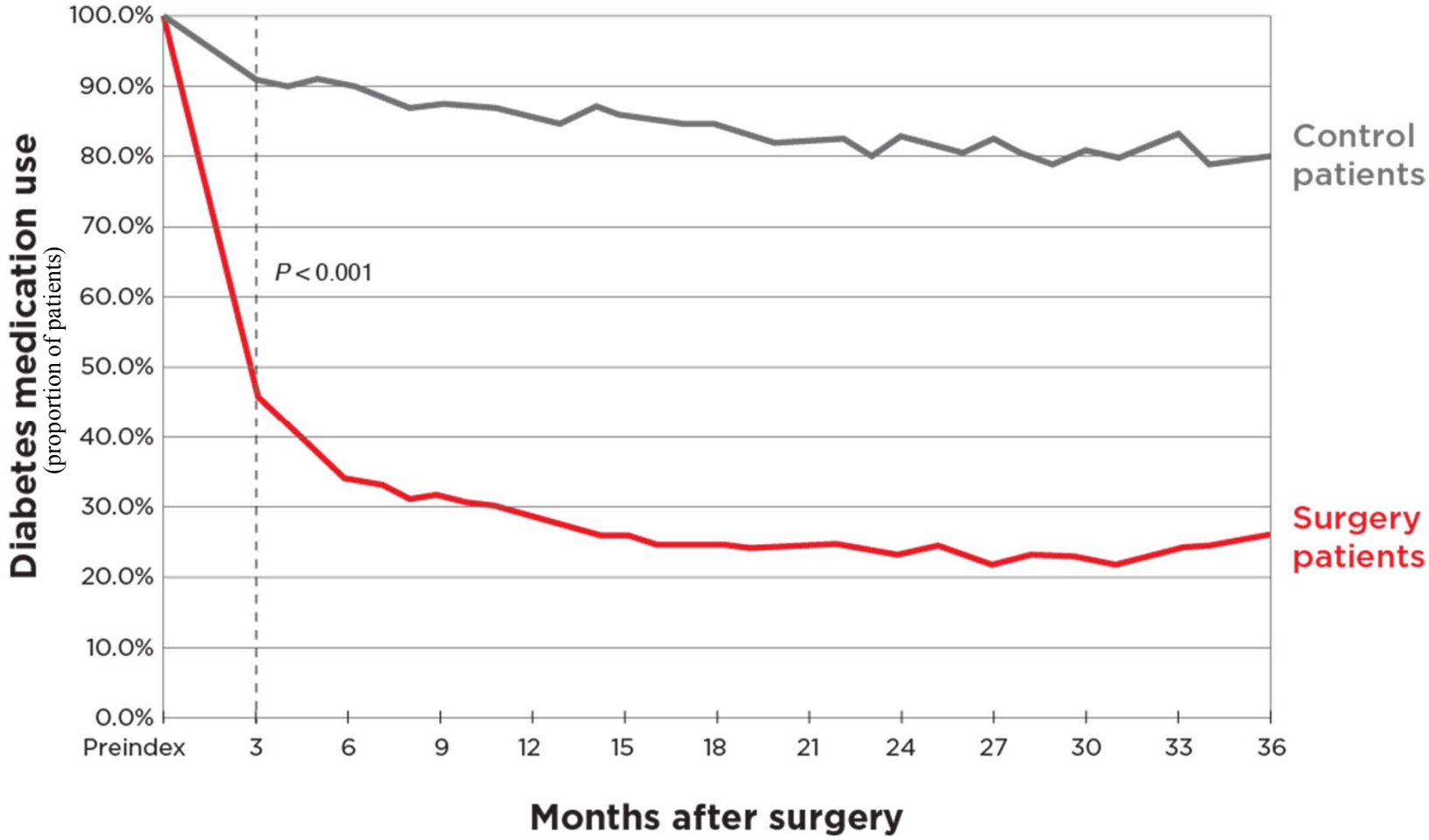


Note: Snow, et al. (2004) Reached similar conclusions on the dramatic impact of bariatric surgery on the reduction of drugs used for several key comorbidities. With one year follow-up, the reduction was 91% for type 2 diabetes, 49% for hypertension and 74% for GERD (in number of drugs for each of these comorbidities).

Nguyen NT, Varela JE, Sabio A et al. Reduction in prescription medication costs after laparoscopic gastric bypass. Am Surg 2006; 72:853-856.

Reduced Prescription Use - Diabetic patients

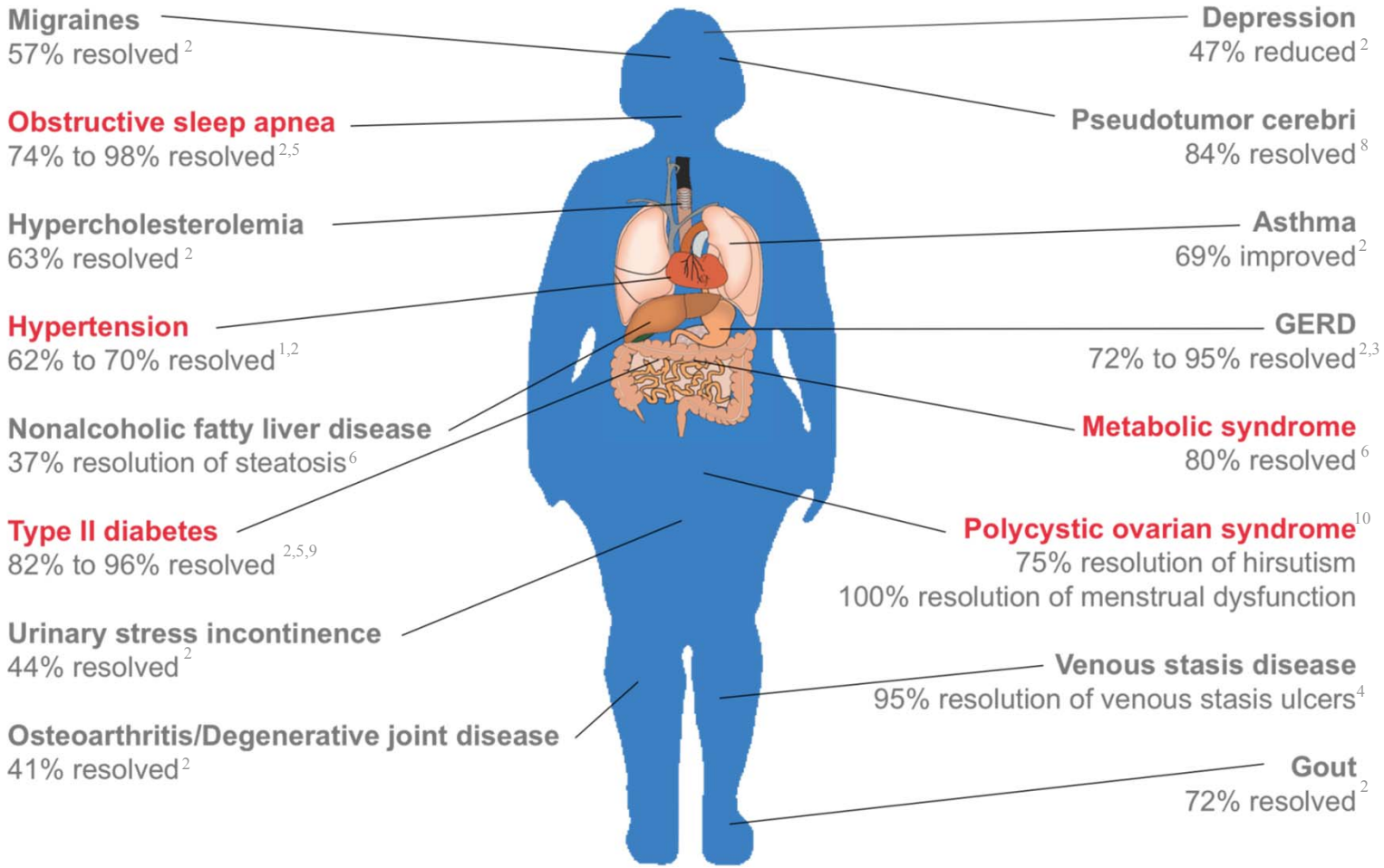
Patients discontinuing medications after bariatric surgery



Klein S, Ghosh A, Cremiux PY et al. Economic Impact of the Clinical Benefits of Bariatric Surgery in Diabetes Patients With BMI ≥35 kg/m2 . Obesity (2011) 19(3):581-587

Weight loss is not the only potential benefit…

Comorbidity reduction as found in various studies



Resolution observed in the confines of studies. EES has no independent data to suggest permanent resolution.
See end of presentation for references.

Safety & Complications

Results from 2001 to 2006 show a marked improvement in safety

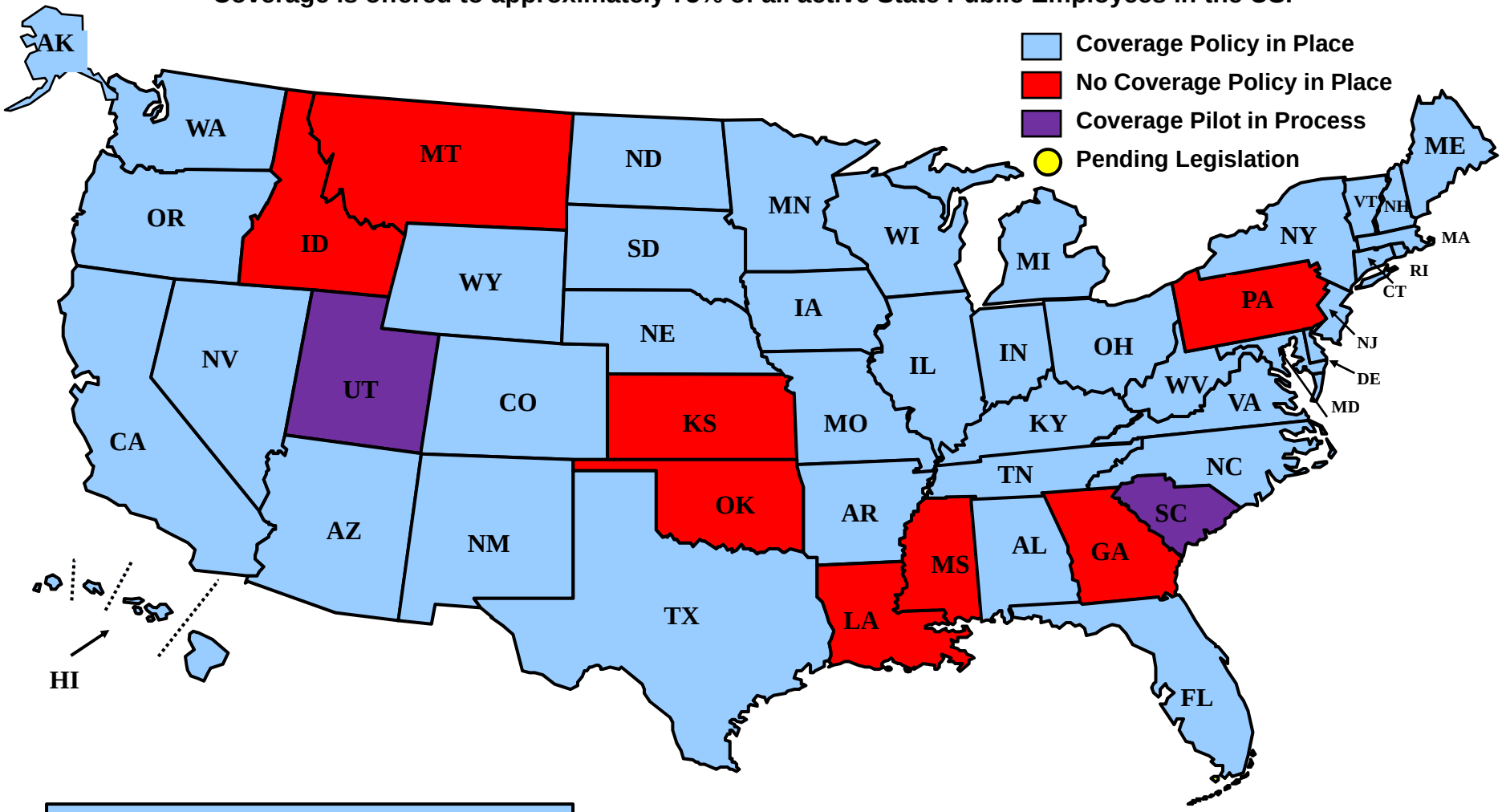
RISK-ADJUSTED CHANGES IN BARIATRIC OUTCOMES AND UTILIZATION OVER TIME

		RISK ADJUSTED	
		2001–2002	2005–2006
	Inpatient Complication Rate	23.60%	14.81%*
	30-Day Overall Complication Rate	33.68%	25.45%*
	180-Day Overall Complication Rate	41.69%	32.81%*
Specific 180-Day Complications	Anastomosis Complications	13.01%	9.26%*
Specific 180-Day Complications	Marginal Ulcer	1.81%	2.05%
Specific 180-Day Complications	Abdominal Hernia	7.19%	4.81%*
Specific 180-Day Complications	Dumping, Vomiting, Diarrhea, etc.	21.44%	18.63%
Specific 180-Day Complications	Hemorrhage	1.96%	1.94%
Specific 180-Day Complications	Wound Dehiscence	2.19%	2.15%
Specific 180-Day Complications	Infection	7.16%	3.03%*
Specific 180-Day Complications	Deep Vein Thrombosis/Pulmonary Embolism	2.50%	2.40%
Specific 180-Day Complications	Respiratory Failure	4.27%	2.15%*
Specific 180-Day Complications	Pneumonia	5.02%	3.01%‡
Specific 180-Day Complications	Postoperative Acute Myocardial Infarction	0.46%	0.37%
Specific 180-Day Complications	Postoperative Stroke	—	0.10%
	Readmission with Complication	9.78%	6.79%*
	Emergency Room Visit with Complication	1.44%	1.79%
	Outpatient Hospital Visit with Complication	14.78%	13.26%*
	Office Visit with Complication	12.61%	10.60%
	180-day Total Hospital Days (days)	6.1	3.7*
	180-day Total Hospital Payments ($)	29,563	27,905*
	180-day Inpatient Physician Payments ($)	3383	3128

* Significantly different from the 2001-2002 complication rate at the 99% level.
‡ Significantly different from the 2001-2002 complication rate at the 95% level.
Encinosa WE, Bernard DM, Du D et al. Recent improvements in bariatric surgery outcomes, Medical Care 2009; 47(5):531-535..

Public Employer Coverage Policy for Obesity Surgery

Coverage is offered to approximately 75% of all active State Public Employees in the US.



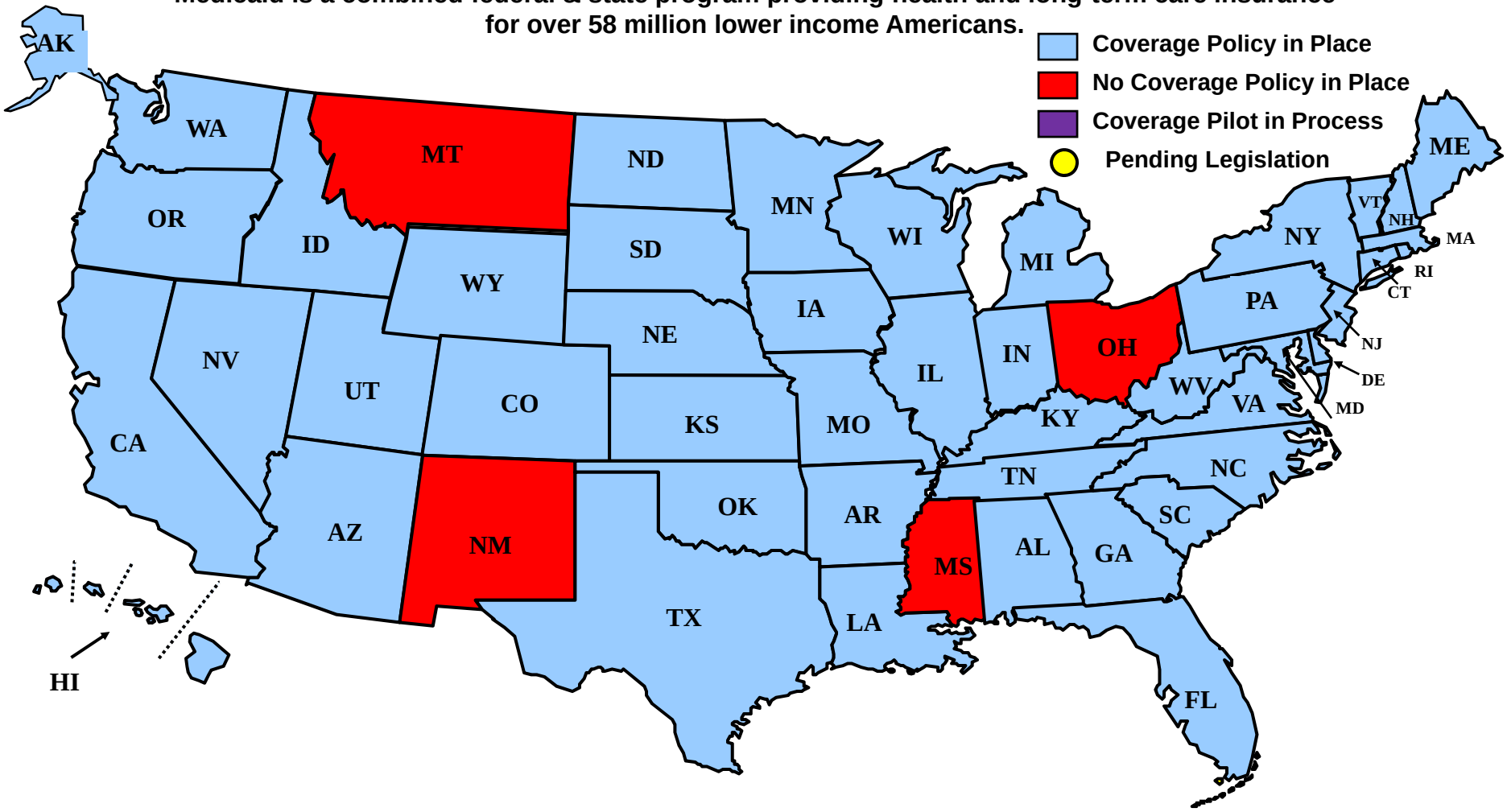
Partial Coverage: (<50% of population) WI
State Mandates: IN, MD, NH, CA (HMOs only)
MS: Coverage Policy in Place effective 1/2013

DSL#10-0523.PEC Rev. 10-16-12

Current as of 10-16-12: Coverage may have Changed Since this Printing

Medicaid Coverage (FFS) Policy for Obesity Surgery

Medicaid is a combined federal & state program providing health and long-term care insurance for over 58 million lower income Americans.



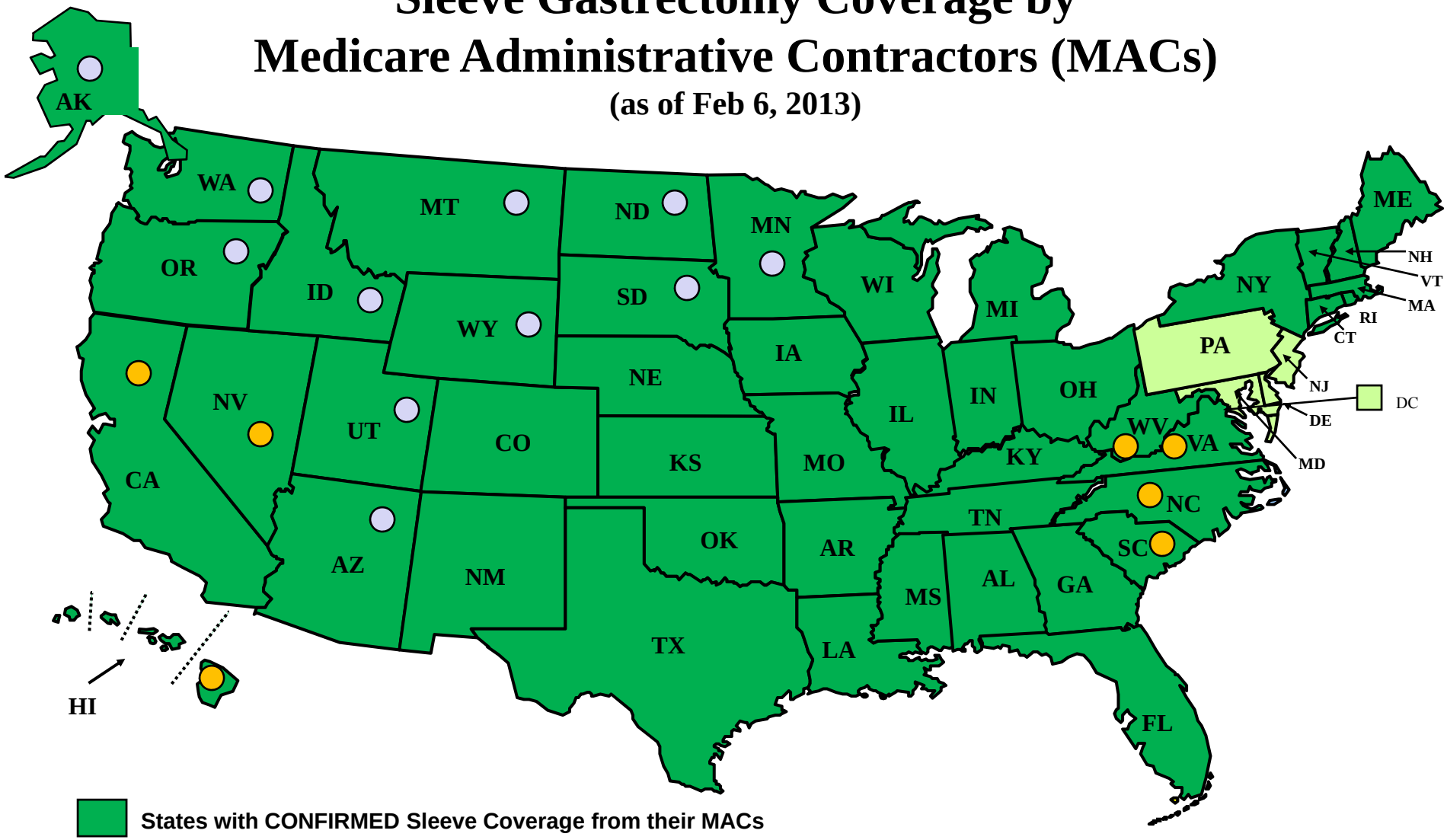
State Mandates: IN, NH, OK, CA (HMOs only)

DSL#10-0523.MCP; Rev 10-11-12

Current as of 10-11-12; Coverage may have changed since this printing

Sleeve Gastrectomy Coverage by Medicare Administrative Contractors (MACs)

(as of Feb 6, 2013)



States with CONFIRMED Sleeve Coverage from their MACs

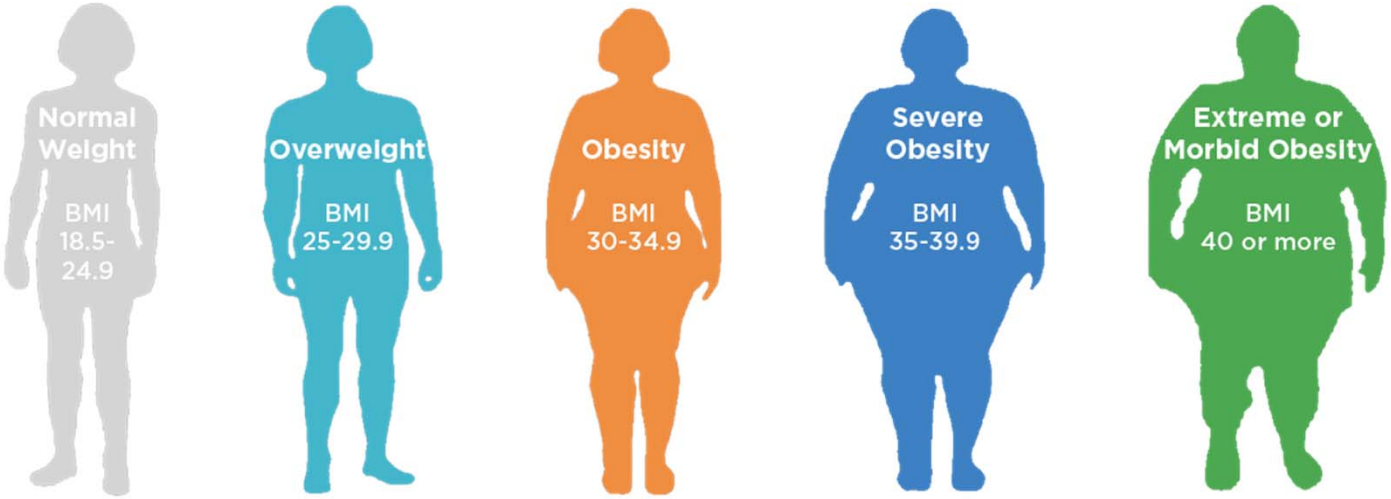
States with DRAFT Local Coverage Decision (LCD) - MAC to decide within next 30-60 days

States with ≤ 60 Age Restriction (Noridian: WA, OR, ID, AK, ND, SD, MT, WY, UT, AZ, MN (MAC A only))

States with ≤ 64 Age Restriction (Palmetto GBA: SC, NC, VA, WV, CA, NV, HI)

Coverage current as of 2/6/13; coverage may have changed since this printing

•NIH Recommendations for Treating Obesity Based on body type



Treatment				
	Lifestyle Modification	Lifestyle Modification	Lifestyle Modification	Lifestyle Modification
	Medical Management*	Medical Management	Medical Management	Medical Management
			Surgery**	Surgery

What obesity looks like based on a 5'4" tall woman
* Medical management recommended if comorbidities exist and BMI ≥ 27
** Surgery recommended for patients with at least 1 comorbidity

Metabolic & Bariatric COEs in KS

Centers of Excellence	
Minimally Invasive Surgery Hospital Lenexa, KS ASMBS BSCOE - Inpatient	Fully Accredited June 25, 2007
NewHope KC, LLC Overland, KS ACS BSCN Outpatient	Fully Accredited March 25, 2008
Shawnee Mission Medical Center Shawnee Mission, KS ASMBS BSCOE - Inpatient	Fully Accredited January 22, 2007
St. Francis Health Center Topeka, KS ASMBS BSCOE - Inpatient	Fully Accredited April 23, 2007
Tallgrass Surgical Center Topeka, KS ASMBS BSCOE - Freestanding	Fully Accredited July 13, 2009
Wichita Surgical Specialists, P.A. ***Via Christi Regional Medical Center*** Wichita, KS ASMBS BSCOE - Inpatient	Provisionally Approved April 23, 2010
Olathe Medical Center Olathe, KS	Working towards COE Accreditation

Comparison of Bariatric Surgeries and the Descriptions

Types of Procedures		Description of Procedure
RYGBP	Roux-en-Y Gastric Bypass - open or laparoscopic	Reduction of the stomach to a small gastric pouch (30 cc)
BPD/DS	Biliopancreatic Diversion with Duodenal Switch - open or laparoscopic	Stomach is partially resected, but the remaining capacity is generous compared to RYGBP
LAGB	Laparoscopic Adjustable Gastric Banding- laparoscopic only	A band creates a gastric pouch with capacity of 15 to 30 cc's encircles the uppermost portion of the stomach
Sleeve	Sleeve Gastrectromy - stand alone surgery - open or laparoscopic	70%-80% greater curvature gastrectomy with continuity of the gastric lesser curve being maintained while simultaneously reducing stomach volume
VGB	Vertical Gastric Banding - procedures are essentially no longer performed	Upper part of the stomach is stapled creating a narrow gastric inlet or pouch that remains connected with the remainder of the stomach

Comparison of Medicaid and Medicare Criteria for Coverage

Kansas Medicaid	Medicare
Body mass index > 35 with at least two obesity-related co-morbidities or one severe co-morbidity (coronary heart disease, Type 2 diabetes mellitus, obstructive sleep apnea, obesity related cardiomyopathy, hypertension)	Body mass index > 35 and have at least one co-morbidity related to obesity (hypertension, coronary artery disease or osteoarthritis)
Or	Medical and psychological assessment
Body mass index (BMI) > 40 and at risk for severe co-morbidity	Have been previously unsuccessful with medical treatment for obesity
Medical assessment and psychological assessment of patient ability to adhere to pre and post operative requirements	Effective 2/12/09 - persons with type 2 diabetes mellitus (T2DM) is considered a co-morbidity
Failed participation in medically supervised weight loss program for at least six months	
Prior authorization by the plan	

Covered Procedures and Facilities

	Kansas Medicaid	Medicare
Covered Procedures	Open or Laparoscopic Roux-en-Y bypass (RYGBP), Open or laparoscopic biliopancreatic diversion (BPD), with or without duodenal switch (DS), or laparoscopic adjustable silicone gastric banding (LASGB)	Effective 2/21/2006 - RYGBP, BPD/DS Effective 6/27/12 - LAGB
Facilities covered	Bariatric surgery is covered only when performed at a Center of Excellence	Level 1 Bariatric Surgery Center certified by the American College of Surgeons Bariatric Surgery Center of Excellence certified by the American Society of Bariatric Surgery

Non-covered Services

Kansas Medicaid	Medicare
Bariatric surgery as a treatment for idiopathic intracranial hypertension	Open adjustable gastric banding
Gastroplasty, more commonly known as "stomach stapling"	Open sleeve gastrectomy
Intragastric balloon	Laparoscopic sleeve gastrectomy prior to 6/27/12
Laparoscopic gastric lication	Open and laparoscopic vertical banded gastroplasty
LASGB. RYGB, and BPD/DS procedures not meeting the medical necessity criteria above	Intestinal bypass surgery
Loop gastric bypass	Gastric balloon for treatment of obesity
Mini gastric bypass	Effective 2/12/09 LAGB are not covered for members who have a BMI < 35 and T2DM
Roux-en-Y gastric bypass as a treatment for gastroesophageal reflux in non-obese persons	
Silastic ring vertical gastric bypass (Fobi pouch)	
Transoral endoscopic surgery (e.g. the stomach X device/procedure	
Vertical Banded Gastroplasty VBG	
Open or laparoscopic sleeve gastrectomy	
Resource MMIS Policy# E2012-083 pages 2 to 11 Medicare	Resource Medicare National Coverage Determination Manual - Rev. 149, 11-30-12