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OHSU

Treating Severe Obesity

Metabolic & Bariatric Surgery

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Definition of Severe Obesity

1991	BMI > 40, or BMI > 35 with comorbidity
2017	BMI > 30, or less with metabolic disease / T2DM

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Comorbidity Remission

		RYGB	LAGB
DM:	Remission	61.9%	37.1%
	Incidence	0.9%	3.2%
HTN:	Remission	38.2%	17.4%
	Incidence	12.6%	18.0%
Dyslipidemia:	Remission	61.9%	27.1%
	Incidence	3.2%	16.0%

Courcoulas/LABS: JAMA. 2013; 310(22):2416.

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LABS 1: Mortality

0.3%	All patients
0.2%	Laparoscopic gastric bypass
2.1%	Open gastric bypass
0%	Laparoscopic adjustable gastric banding

LABS Consortium: N Engl J Med 2009;361:445-54

LABS 1: Serious Complications

4.1%	All patients
4.8%	Laparoscopic gastric bypass
7.8%	Open gastric bypass
1.0%	Laparoscopic adjustable gastric banding

LABS Consortium: N Engl J Med 2009;361:445-54

Bariatric Surgery Safety
Center Accreditation

Surgeon training, experience, laparoscopy

Data to central registry

Quality improvement

Standardized care protocols

- Patient selection
- Pre- and post-operative care

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Roux-en-Y Gastric Bypass (RYGB)

Long-term Complications (1)

- Variable weight loss, comorbidity response
- Nutrient deficiency
  - Vitamin/mineral
  - Anemia
  - Central or peripheral neuropathy
  - Bone
- Metabolic
  - Hypoglycemia
  - Renal function, stones

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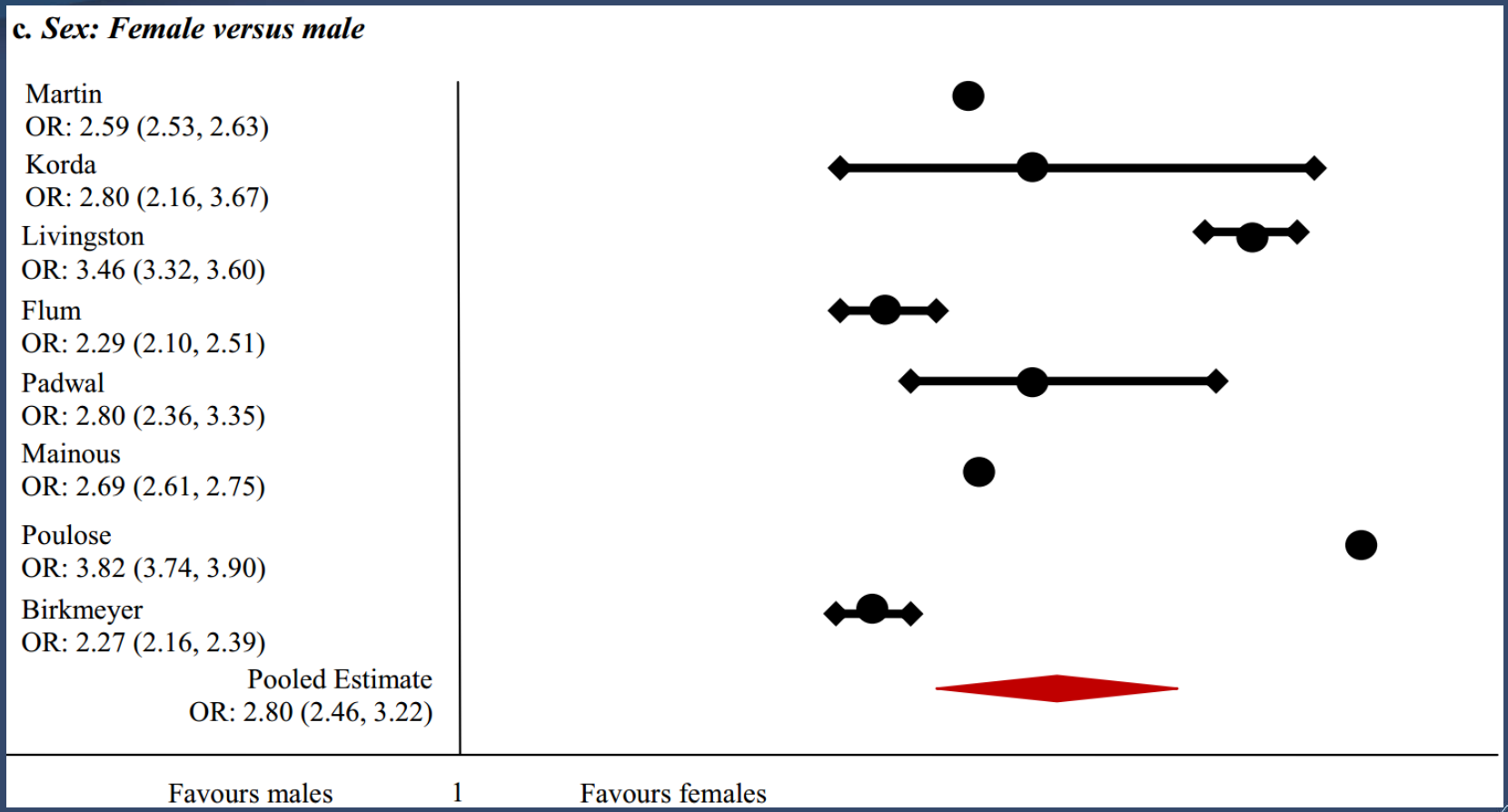
Roux-en-Y Gastric Bypass (RYGB)

Long-term Complications (2)

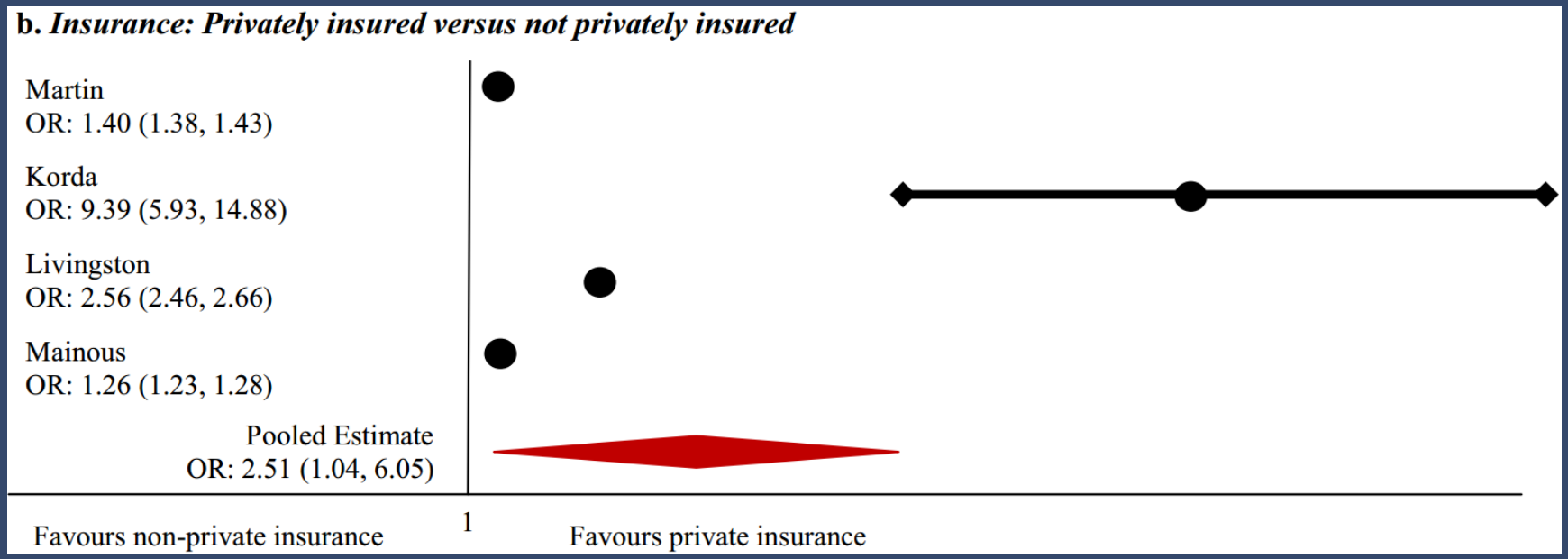
- Surgical
  - Intestinal obstruction
  - Peptic ulcer
  - Abdominal pain
- Behavioral/psychological
  - Depression, suicide

Sociodemographic Predictors



Bhogal: Obes Surg. 2015;25:888.

Sociodemographic Predictors



Bhogal: Obes Surg. 2015;25:888.

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LABS: Commercial vs Medicaid Payment

Commercial > Medicaid

- White
- Never smoker
- BMI 47 vs 50 kg/m^2
- Diabetes 31% vs 40%
- Walking limitation 3% to 26%

Takemoto: Unpublished, 2017

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Access vs Actual Care

- Actual Payment
  - High copays, specific requirements
  - Provider rejection
- Information Gap
  - Health consequences of obesity
    - Patients, family, provider
    - Benefits vs risks of treatment

Metabolic/Bariatric Surgery:
A Population Intervention?

Numbers could be increased

- LOS sleeve 1.1 day, RYGB 2.1 days
- Training programs
- Identify patient populations who will benefit most
- Less invasive procedures combined with medical therapy

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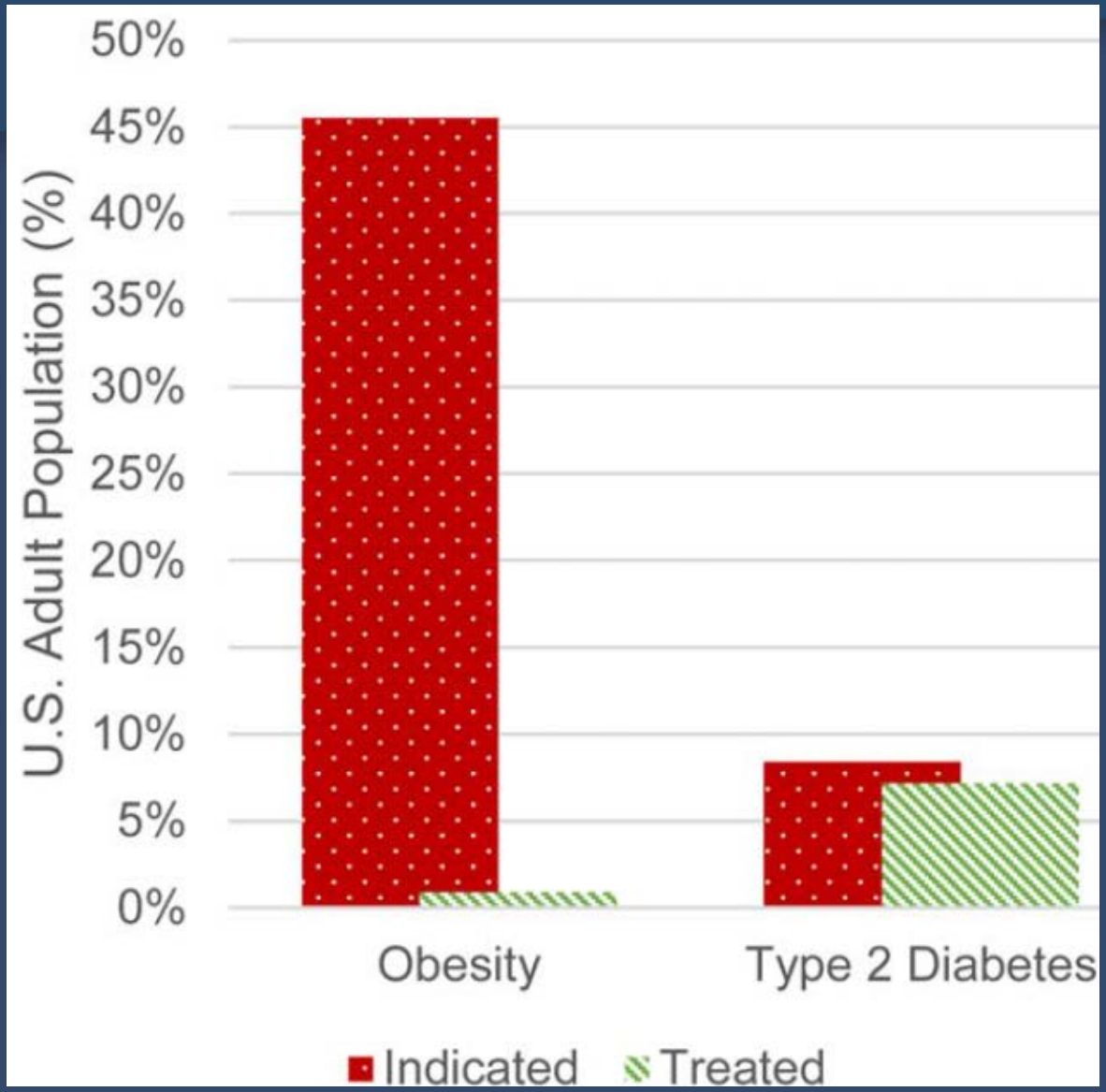
Obesity v. Diabetes: Rates of Under-Treatment



Thomas: Obesity. 2016;24:1955-1961

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Knowledge Gaps for Efficacy of Obesity Treatments

- Efficacy of drug and surgical treatments in racial/ethnic minority and other health disparities populations (low SES, rural, etc)
- Effectiveness of newer modes of delivery for lifestyle intervention in large and diverse populations
- Predictors of response, beyond initial weight loss for all obesity treatments
  - Genetic and phenotypic (including behavioral and metabolic) characteristics to allow more targeted treatment recommendations
- Long-term safety and efficacy of Sleeve Gastrectomy and other newer procedures and devices for obesity treatment, combination therapy
- Identify best treatment for specific patients

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