

### METABOLIC & BARIATRIC SURGERY

Gordon Wisbach, MD, FACS, FAMBS

Program Director

Kyle Gadbois, MD, FACS, FAMBS

Deputy Program Director



Metabolic & Bariatric Surgery Team Surgeons

CAPT Gordon Wisbach, MD

CDR Kyle Gadbois, MD

CDR Jesse Bandle, MD

Program Coordinator

Eva Brzezinski MS RD CDE

Nurse Practitioner

Kimberly Hallgren, NP

Internal Medicine

LT Denise Teh, MD

LT Faith Kim, MD

Dietitian

Eva Brzezinski, MS, RD, CDE

Administrative Assistant

Antonio Isidro, LVN

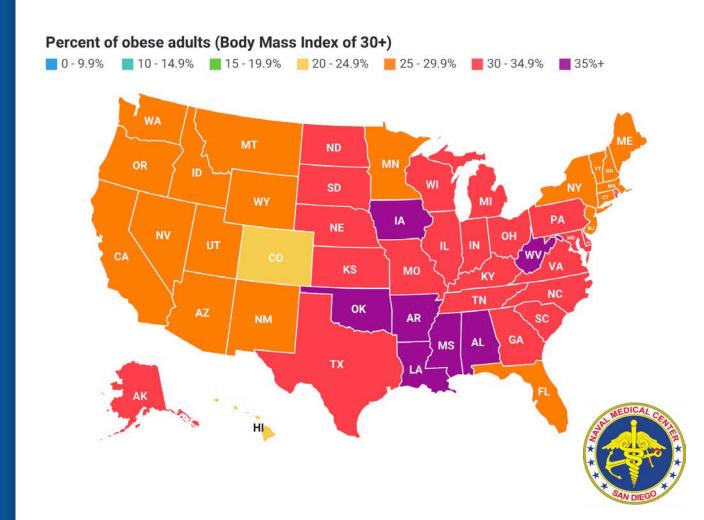
### The Obesity Epidemic

World Health Organiztion, 2013.

- Rise in obesity → rise in related comorbidities
- Comorbidities responsible for 2.5 million deaths per year worldwide
- Loss of life expectancy is profound
- 25 year-old morbidly obese male has 22% reduction in lifespan, representing a loss of 12 years of life
- Obesity is preventable!

More than 65% of Americans are overweight to obese.

Adult Obesity Rate by State, 2017



### The Obesity Epidemic

- Diet therapy is ineffective long term
- Currently, there are no effective long-term pharmaceutical agents to treat obesity, especially morbid obesity

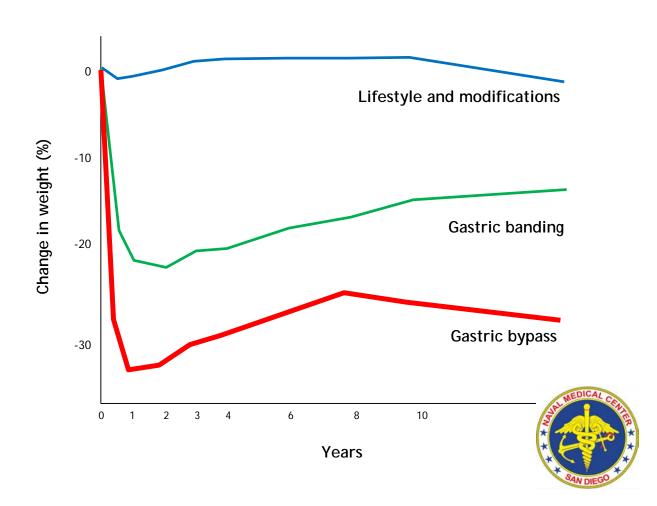
Clinical Practice Guidelines for the bariatric surgery patient, 2013 update



# Weight Loss Overtime with Different Interventions

Mean Percent Change during a 15-Year Period in the Control Group and the Surgery Group, According to the Method of Bariatric Surgery. Weight

Sjöström L et al. N Engl J Med 2007;357:741-752.



## Bariatric & Endoscopic Procedures

#### Minimally Invasive Bariatric Procedures



**Procedure Invasiveness** 

# Metabolic & Bariatric Surgery Program: At a Glance

- Started in 2004
- Nearly all operations are laparoscopic
- High volume
- Goal: assist patients in loosing weight long term while minimizing risks



### Services offered

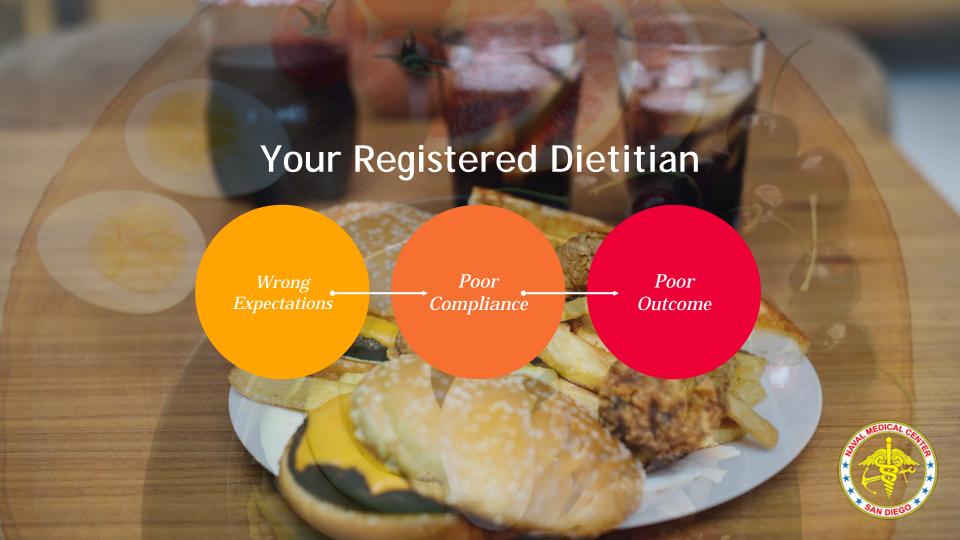
- Surgery
  - Min. Invasive Surgery
  - Laparoscopic
  - Robotic
  - Open
- Endoscopy
  - Diagnostic
  - therapeutic

- Bariatric
- Metabolic
- Revisional
- Diabetes
  Surgery
- Weight Loss
  Surgeries

### The **Team** Approach

The key to a successful weight loss journey is multidisciplinary. Education and preparation are essential.





### Defining Obesity

#### Underweight

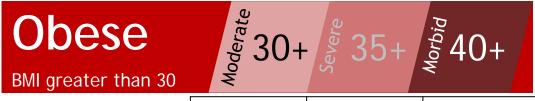
BMI less than 18.5

#### Normal

BMI 18.5 to 24.9

#### Overweight

BMI 25 to 25.9



Class 1 Class 2 Class 3

#### Qualifications for Surgery

BMI 40+ BMI 35+ with comorbidities

#### Comorbidities

- 1. High blood pressure
- 2. Diabetes
- 3. High cholesterol
- 4. Reflux
- 5. Sleep apnea
- 6. Arthritis



### Consider<br/>Surgery if...

NIH Consensus Conference Ann Intern Med 1991



Age 18-65 years of age



Failure of diet for more than 6 months



More than 5 years history of obesity



Low surgical risk



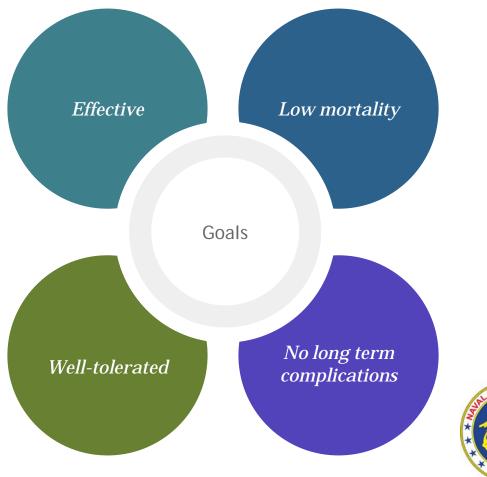
No endocrine disease



Psychologically sound



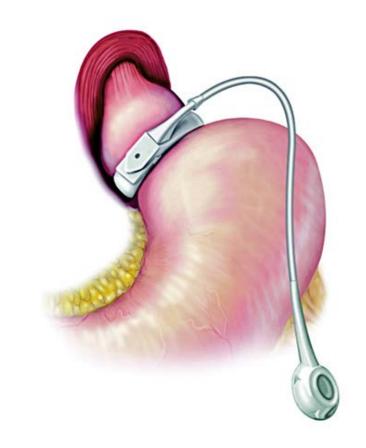
### Goals of surgery



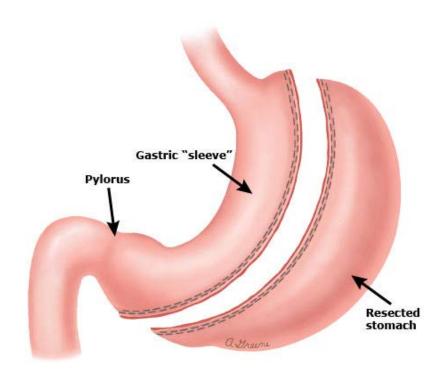


### Adjustable gastric band

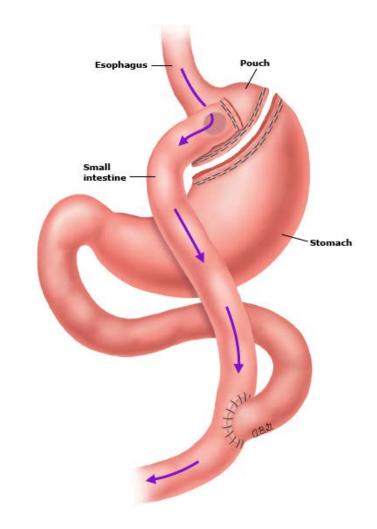
No longer performed.



#### Sleeve gastrectomy

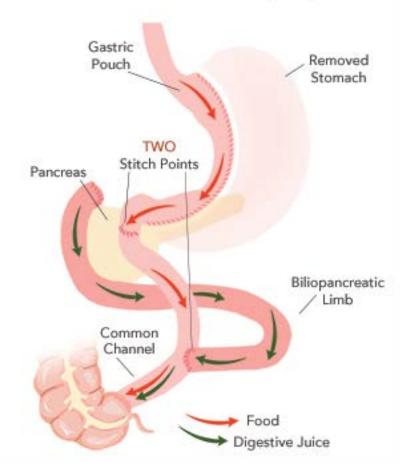


#### Gastric bypass



#### **Duodenal Switch**

#### Duodenal Switch (DS)



#### Intra-gastric Balloon

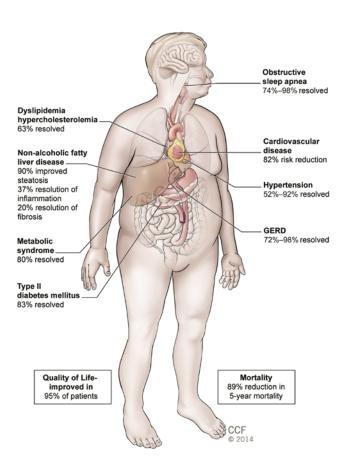
#### Indications:

- -> Short-term Weight Loss
- -> Active duty members ONLY

VA/DoD Clinical Practice Guidelines, "Management of Adult Overweight & Obesity", 2020

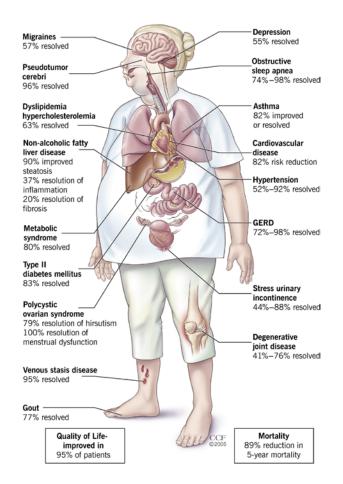
Recommendation 16: We suggest offering intragastric balloons in conjunction with a comprehensive lifestyle intervention to patients with obesity (body mass index ≥30 kg/m²) who prioritize short-term (up to six months) weight loss.





### Improvement in Comorbidities after Surgical Weight Loss

- ✓ Breathing problems:
- ✓ High blood pressure
- ✓ Heart problems
- **✓** Diabetes
- ✓ Joint pain
- ✓ High cholesterol
- ✓ Reflux



### Post - Operative Complications

- Overall: 16%
  - Leak
  - Internal bleeding
  - Clots
  - Stomal stenosis
  - Marginal ulcer
  - Internal hernia
  - Incisional hernia
  - Micronutrient deficiencies:
    - Vitamins A, D, B1, B12,
    - Iron, Calcium, folate, protein
  - Mortality: 0.2%



#### Recovery and the Outpatient Clinical Pathway

1-2 Days Inpatient

Light
Activity
for 2
Weeks

Full
Activity
in 4
Weeks

- Follow up at 2 weeks, 6 weeks, 3 months, 6 months, 9 months, 12 months, 18 months, then annually
- Labs: vitamins, electrolytes, blood count, A1c
- Adjusting your medications as you lose weight
- Registered Dietitian close follow up
- Bone scan at 2 years



#### PATIENT AFTERCARE AND THE IMPACT ON WEIGHT LOSS

**Surgical Options** 

Gastric Bypass, Sleeve

Permanent anatomical change

Intra-gastric Balloon

Temporary device, 6 month placement

**Aftercare Program** 

Significant sustained response leads to recommended *quarterly contact* over 12-month program with MD. RD appointments are more often in the first 12 – 18 months post-op.

Need for more contact points—
recommend 2 weeks after
insertion and their once per
month with RD for 12 months

#### Intra-gastric Balloon Patient Care Protocol

#### 12 Month Program





#### Supplements

- Bariatric specific multi with iron, folic acid, B12, B1, vitamin D 3, etc.
   Meets ASMBS recommendations.
- Chewable calcium citrate for bypass and carbonate for sleeve.
- Daily iron for those with history of anemia.



#### Bariatric Program Checklist



LAST:	FIRST:
DATE OF INFO SESSION:	_ LAST 4:
SURGICAL EVALUATION SURGEON:	

#### NAVAL MEDICAL CENTER SAN DIEGO BARIATRIC SURGERY

#### RARIATRIC DROGRAM CHECKLIST

	gical Evaluati	on – Bariatric Info Session	F M
Need	Done		Location
Х		<ol> <li>Nutrition Consultation – registration required 2 hour group dass. Arrive 10</li> </ol>	General surgery clinic Bldg. 3, 4n floor
		minutes early to be weighed. Bring completed questionnaire.	
Х		<ol> <li>Healthy Lifestyle Classes - registration required: 1.5 hr. dass</li> </ol>	virtual
Х		<ol> <li>Nutrition needs after bariatric surgery – registration required: 2 hr. class</li> </ol>	virtual
Х		<ol> <li>Perioperative expectations – registration required: 1.5 hr. dass</li> </ol>	virtual
Х		<ol><li>Attend 1 Support Group Meeting – Usually last Tuesday of the month.</li></ol>	Virtual
		Check calendar: 2 hour meeting. Requires registration.	
		6 Month Weight Loss Management	
Х		Lose pounds (10% Excess Body Weight)	Ht: Wt:
			BMI:
			IBW: EBW:
			Waist: Hips:
Х		Start Written or On-Line Food Journal & Regular Physical Activity	
Х		Psychology Consultation	See Provider List Below
Х		Pulmonary Consultation for Sleep Study	
Х		<ul> <li>PAP report current within 3 – 5 years (Females 21 years or &gt;)</li> </ul>	□ Fax or email copy
Х		<ul> <li>Mammogram report current within 1 year (Females 50 years or &gt;)</li> </ul>	□ Fax or email copy
		Colonoscopy (50 years or >)	
		<ul> <li>Smoker: Yes or No ""MUST STOP 3 – months before surgery and never start again -</li> </ul>	Date Quit:

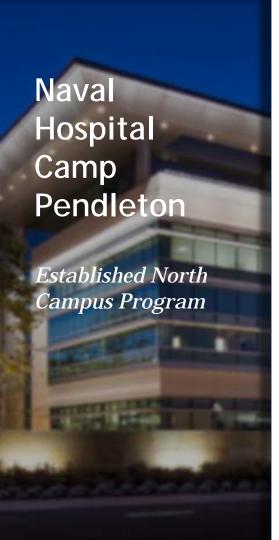
#### Surgical Evaluation – Consultation with Surgeon after Pre-Surgical Evaluation Completion

Need	Done	AS INDICATED FOR INDIVIDUAL PATIENT	Location
		Upper GI Study	Radiology – Bldg. 1, Deck 2
		Gallbladder Ultra-Sound	Radiology - Bldg. 1, Deck 2
		Chest X-Ray	Radiology – Bldg. 1, Deck 2
		Blood and urine test (12 hour fasting)       Nicotine Panel	Laboratory – Bidg. 1, Deck 3
		H. Plyori    Neg    Pos - Abx Tx:Stool Test:	Laboratory – Bidg. 1, Deck 3
		EGD (Upper Endoscopy)	Gen Surgery Clinic - Bldg. 3, Deck 4
		Internal Medicine Consultation	Int. Med. Clinic – Bldg. 3, Deck 3
		Cardiology Consultation or Echocardiogram	Cardiology Clinic – Bldg. 3, Deck 3
		Pulmonary Consultation	Pulmonary Clinic - Bldg. 3, Deck 3
		<ul> <li>Read &amp; Sign Bariatric Consent &amp; Contract – RETURN @ Pre-Op appointment</li> </ul>	
		Pre-Op Date:	
		Surgery Date:	□ OSA □ OSA w/CPAP use
		Surgery will be scheduled when ALL Pre-Op requirements are completed	

#### Long-Distance Patients



- Before Surgery
  - Expect at least 4 visits to NMCSD
  - Info Session & Initial Nutrition Consult
  - Coordinated with proper advanced planning
  - Education Classes 1&2
  - Surgical evaluation with surgeon in-person
  - Pre-operative visit/OR day
- After Surgery
  - Stay local until 2 week follow-up appointment with MD and RD
  - Return for 12 week post op appointment with MD and RD



- To be eligible, you must be a lower risk patient
  - BMI less than 50
  - Less than 60 years of age
  - No significant comorbidities
- Sleeve gastrectomy
- Gastric bypass



#### Patient/ Provider Letter



#### BARIATRIC SURGERY PROGRAM

BERVICE - PROFESSIONALISM - TEAMWORK - RESPECT - COMPASSION

Dear Patient and Provider,

We received a referral from your provider regarding your interest in Bariatric (weight loss) surgery. An enduring alliance with your Primary Care Provider (PCP) will serve as a key role in your success. This guideline contains useful information necessary to proceed with Bariatric Surgery at Naval Medical Center San Diego. Please note these guidelines/requirements are based on the National Institute of Health¹ and Clinic Practice Guidelines.²

#### Our Mission

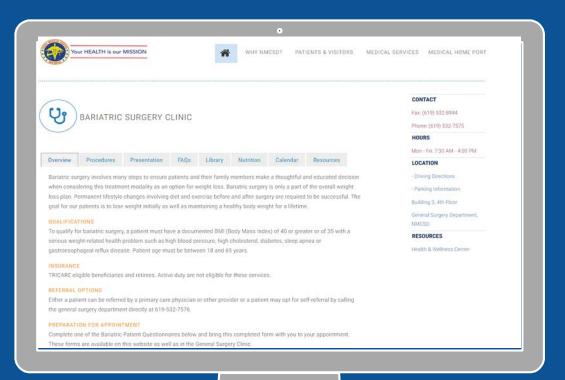
We provide a multidisciplinary team approach centered on patient care that focuses on education and healthy lifestyle changes. Our program, started in 2004, has grown to a high volume center with our main goal of assisting patients to lose weight long term with minimized risks. Please refer to the following website for more details: http://www.med.navy.mil/sites/nmcsd/Patients/Pages/Bariatric.aspx.

### Stay connected!

Find us on our website! Go to

https://www.med.navy.mi l/sites/nmcsd/Pages/Care /Bariatric-Surgery-Clinic.aspx

to find more information!



## Next step for virtual appointments

- Bring completed questionnaire to general surgery clinic (NMCSD Bldg 3, 4<sup>th</sup> floor) Monday through Friday anytime from 0800 to 1430.
- When you come in your height, weight, waist and hip measurements with be obtained.
- You will be then provided with your check list.
- Referrals to nutrition clinic and sleep study will be placed within three days of you turning in your questionnaire.



# Thank you.

We're in this together!

