

# The Future of Bariatric Surgery: Day-Case

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# Disclosures

- Consultant for Medtronic
- Founder of Transform Weight Loss
- Partner Transform Health Partners
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# Threats to our surgical practices

- Declining surgical volumes
- Declining reimbursement.
- Bias against bariatric surgery
- Decreasing insurance coverage
- GLP1 Medications
- Economy
- Political Climate



# Concerns of a Bariatric ASC

- Safety.
- Equipment.
- Training.
- Reimbursement.
- Accreditation.
- Malpractice risk.
- Setting expectations.
- Protocols.

# Benefits of a Bariatric ASC

- Access to care.
- Value Based Surgery
- Dedicated team.
- Consistent messaging.
- Improved patient satisfaction.
- Lower risk of infections.
- Improved outcomes.
- **Surgeon Autonomy.**

# Outpatient laparoscopic sleeve gastrectomy in a free-standing ambulatory surgery center: first 250 cases

Billing PS, Crouthamel MR, Oling S, Landerholm RW. Outpatient laparoscopic sleeve gastrectomy in a free-standing ambulatory surgery center: first 250 cases. *Surg Obes Relat Dis.* 2014 Jan-Feb;10(1):101-5. doi: 10.1016/j.soard.2013.07.005. Epub 2013 Jul 17. PMID: 24094869.

# Our First 250 Day Case Procedures

Complications within 30 days post-op	
Mortalities	0
Hospital Transfer Rate	0.8% (2/250)
Hospital Re-admission	3.6% (9/250)
Post-op Bleeding	0.8% (2/250)
Leaks	0.4% (1/250)



# Selection Criteria

- Age  $\geq$  18.
- Weight  $\leq$  450 lbs. No BMI limitations.
- Expected operative time  $\leq$  2 hours.
- Low cardiac risk.
- Ambulate.
- Sleep apnea clearance and no significant pulmonary concerns.
- No expected ongoing medical monitoring beyond 23 hours.
- No need for specialized equipment or specialist consultation.

# Low acuity vs High acuity

## Low Acuity Patient and Procedure Selection

Age  $\geq 18$  and  $< 65$

Males with a BMI  $< 55$  and females with a BMI  $< 60$

Patients without organ failure, organ transplant, or significant cardiac or pulmonary impairment

Patients must be ambulatory

Patients must not be a candidate on a transplant list

ASC's are only approved to perform revisional procedures when classified as an emergent case with the exception of gastric band revisions.

# High Acuity Sleeve Gastrectomy Patients In A Free-Standing Ambulatory Surgical Center

Billing P, Billing J, Kaufman J, Stewart K, Harris E, Landerholm R. High acuity sleeve gastrectomy patients in a free-standing ambulatory surgical center. *Surg Obes Relat Dis.* **2017** Jul;13(7):1117-1121. doi: 10.1016/j.soard.2017.03.012. Epub 2017 Mar 27. PMID: 28456510.

# High Acuity Patient Cases Performed in an ASC

- Revisions
- Elderly (age 65 or above)
- BMI > 55 Male
- BMI > 60 Female

Complications	
Re-admissions	3.3% (4/120)
Re-operations	0.83% (1/120)
Transfers	0.83% (1/120)
Leaks	0
Open Conversion	0
Mortalities	0

# Does the future of laparoscopic sleeve gastrectomy lie in the outpatient surgery center? A retrospective study of the safety of 3162 outpatient sleeve gastrectomies

Nine surgery centers

Twenty-one surgeons

Same day sleeve gastrectomy cases

- Surve A, Cottam D, Zaveri H, Cottam A, Belnap L, Richards C, Medlin W, Duncan T, Tuggle K, Zorak A, Umbach T, Apel M, **Billing P**, Billing J, Landerholm R, Stewart K, Kaufman J, Harris E, Williams M, Hart C, Johnson W, Lee C, Lee C, DeBarros J, Orris M, Schniederjan B, Neichoy B, Dhorepatil A, Cottam S, Horsley B.
- **Surg Obes Relat Dis. 2018 Jul 29. pii: S1550-7289(18)30441-6. doi: 10.1016/j.soard.2018.05.027**

# Safety and efficacy of outpatient sleeve gastrectomy: 2,534 cases performed in a single free-standing ASC

Billing P, Billing J, Harris E, Kaufman J, Landerholm R, Stewart K. Safety and efficacy of outpatient sleeve gastrectomy: 2534 cases performed in a single free-standing ambulatory surgical center. Surg Obes Relat Dis. 2019 Jun;15(6):832-836. doi: 10.1016/j.soard.2019.03.003. Epub 2019 Mar 20. PMID: 31129000.

# Replicating Day-Case MBS Programs

- **Multispecialty ASC**
  - 139 cases 2019-2023
  - Two bariatric surgeons
  - New OR team
  - MDAs
  - 4 OR
  - No overnight stays
- **Bariatric specialty ASC**
  - 72 cases 11/2023-present
  - Two bariatric surgeons
  - New OR team
  - CRNAs
  - 1 OR
  - No overnight stays

# Procedures

- Sleeve (n=194)
- Roux-en-Y gastric bypass (n=3)
- SADI-S (n=1)
- Gastric band removal (n=9)
- Gastric balloon placement/removal (n=4)



# Demographics

## Multi-ASC

Age: 19-72

Weight (lbs.): 144- 399

BMI: 29-68

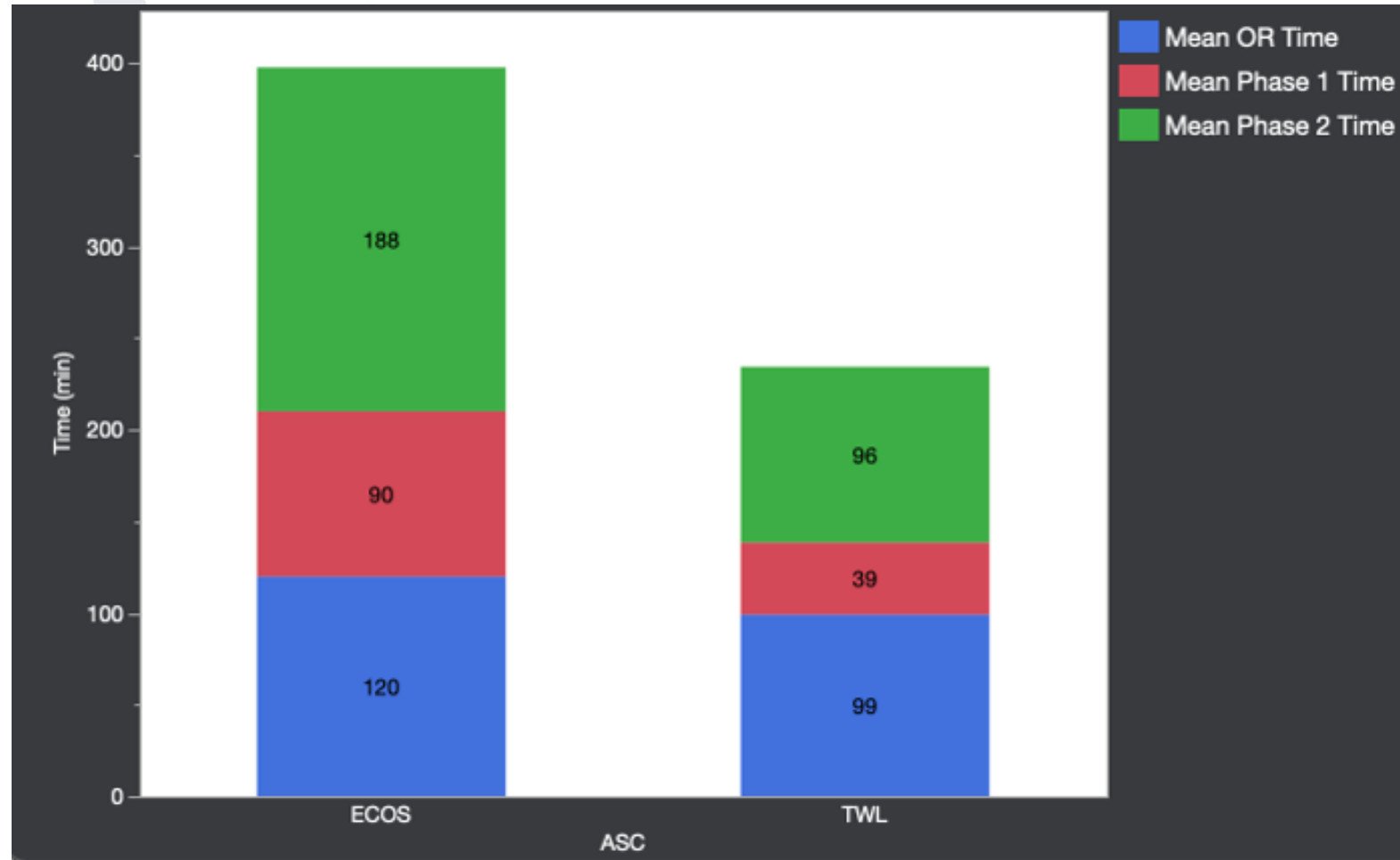
## Bariatric ASC

Age: 18-70

Weight (lbs.): 168-416

BMI: 31-59

# Total ASC time



# Multi ASC: ED visits 30 days (10/139)

- Portal vein thrombosis, death due to bowel ischemia at rural hospital
- Pulmonary embolism day POD 11, admitted and discharged.
- Postop bleed night of surgery, reoperated
- Hypoxemia in PACU, direct transfer to ED from ASC, observed overnight.
- Intraoperative hypotension, direct transfer to ED, observed overnight.
- Dehydration, discharged
- Dehydration, discharged
- Leg pain, discharged
- Leg pain, discharged
- Pelvic pain, discharged

# Bariatric ASC Complications



# Enhanced Recovery After Metabolic Surgery

- Age  $\geq$  18.
- Weight  $\leq$  400 lbs. No BMI limitation.
- Expected operative time  $\leq$  2 hours.
- Low cardiac risk.
- Low pulmonary risk
- Ambulatory.
- Patient screened/treated for sleep apnea.
- No need for specialized equipment or specialist consultation.

# Enhanced Recovery After Metabolic Surgery

- Set patient expectations.
- Minimize narcotics.
- IV fluids 2-4 liters
- Operative times 1-2 hours.
- Avoid concomitant procedures.
- Minimal use of intraabdominal drains.
- No need for studies prior to discharge.
- Provide patient with your contact information.

# ERAMS Medications

- Scopolamine transdermal patch placed the night before.
- Aprepitant 80 mg po within 3 hours of the procedure.
- Acetaminophen 1000 mg po in preop holding.
- Dexamethasone 4 mg IV intraoperatively.
- Minimal intraoperative use of fentanyl (100-200 ug).
- Ondansetron 4-8 mg IV.
- Ketorolac 30 mg IV.
- Hydromorphone orally for pain control.

# Lessons learned

- Experienced surgeon.
- ERAMS protocols.
- Set expectations.
- Patient selection.
- Institutional support.



# Thoughts

- Day case bariatric surgery is safe.
- Decreases cost.
- Improves access.
- An alternative to medical tourism.
- Two-thirds of bariatric cases can be done same day.
- Most bariatric cases will be done outpatient



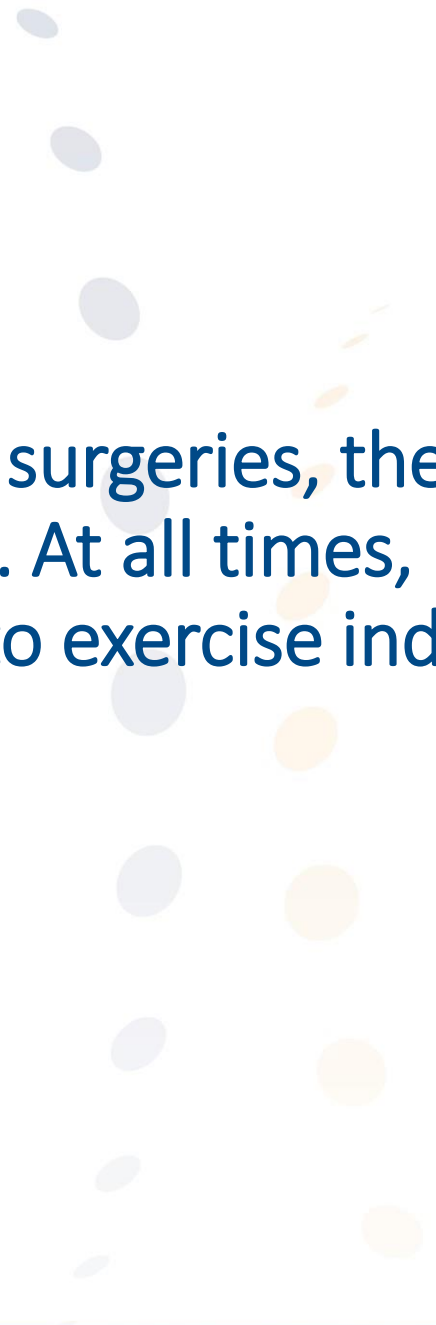
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As with all surgeries, there are risks associated with this procedure. At all times, it is the professional responsibility of the physician to exercise independent clinical judgment in a particular situation.



**The future is bright!**

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