Modern Bariatric and Metabolic Surgery for Your Patients

Living with Obesity

Beacon Hospital

THIS IS MODERN MEDICINE

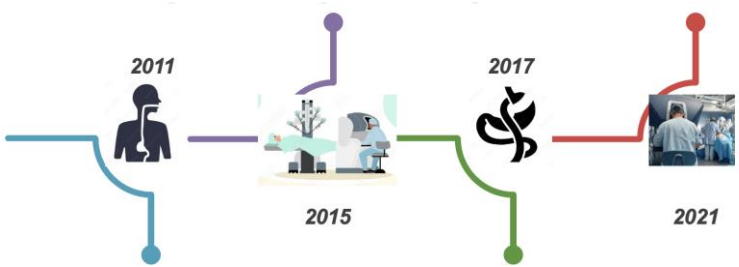
Introduction and Background and COI

Consultant Upper GI Surgeon – Oesophago-Gastric Cancer, Bariatric and General Surgeon

- Undergraduate – Trinity College Dublin , Upper GI Surgical Training in Dublin Ireland,
- **Fellowship in Lille**, France - Professor Christophe Mariette - 2.5 year in Department of
- **Current Practice** - Upper GI Surgeon in Beaumont Hospital, Dublin Ireland
- First **Robotic Oesophagectomy** Program in Beaumont Hospital
- **One of the Highest Volume Robotic Bariatric Surgery Programs in Europe**
  > 400 bariatric cases per annum

My Practice

- Hernias
- Gallbladders
- Reflux
- Bariatrics



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Obesity and Bariatric Surgery

1. Obesity and Ireland
2. Obesity a Disease
3. Bariatric Surgery

- Who?
- What can you expect for your patient?

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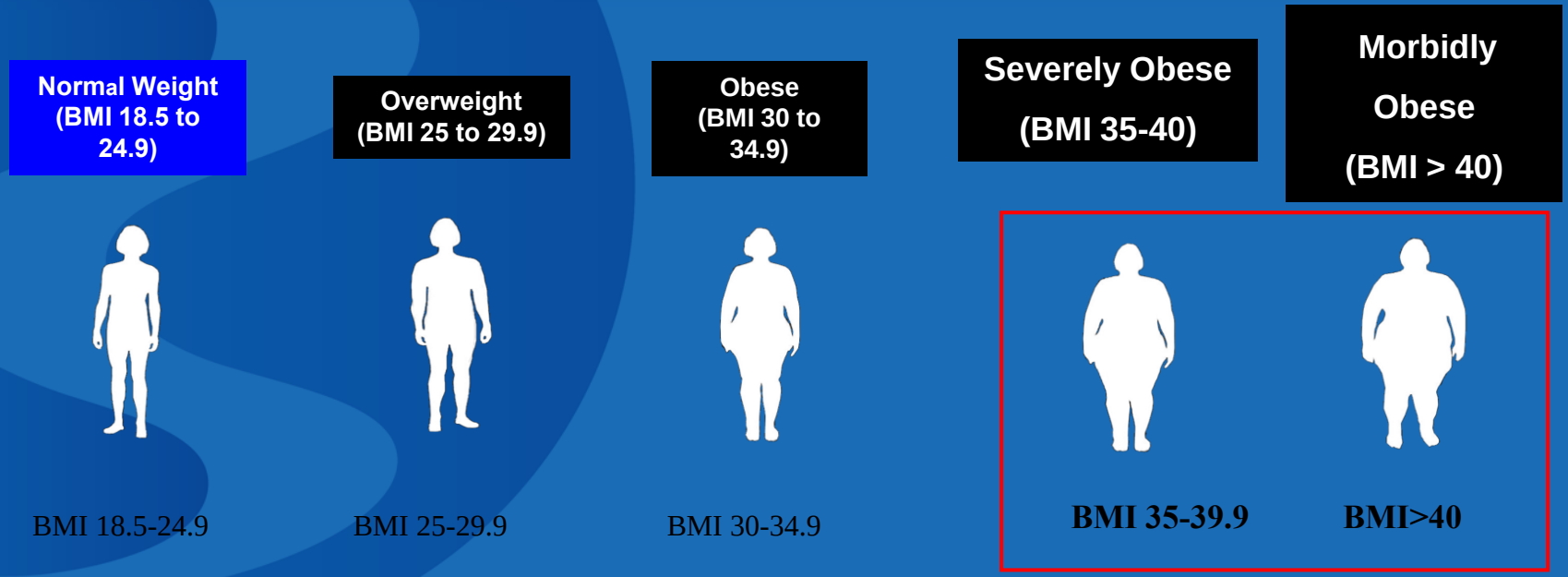
What is The Disease of Obesity ?

- Abnormal or excessive fat accumulation that presents a risk to health.
- **BMI> 25 is overweight, BMI over 30 is obese.**



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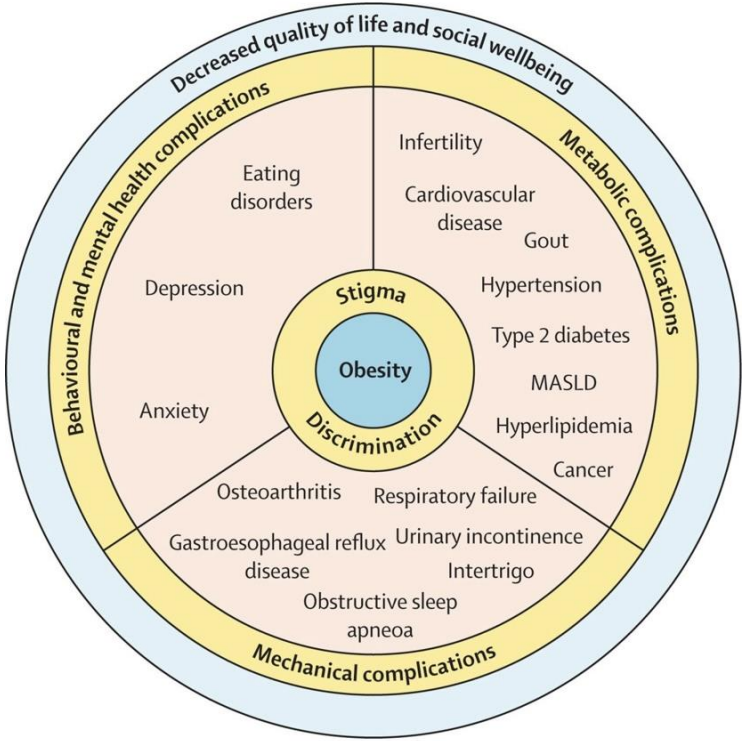
Ireland on Course to be Most obese country in Europe by 2030

- 60% Irish adults living with overweight or obesity
- Obesity rates in females set to increase from 23% to 57% by 2030
- *Obesity is set to overtake smoking as the leading cause of cancer*
- *Female Cancers a particular concern*



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Patient 1

- 46 year old
- On public waiting list for 7 years.
- **Discovered his insurance covers surgery**

- Type II DM - 10 years
- Obstructive Sleep Apnoea
- Hypertension
- NAFLD
- Arthralgia

- **193kg BMI 61**

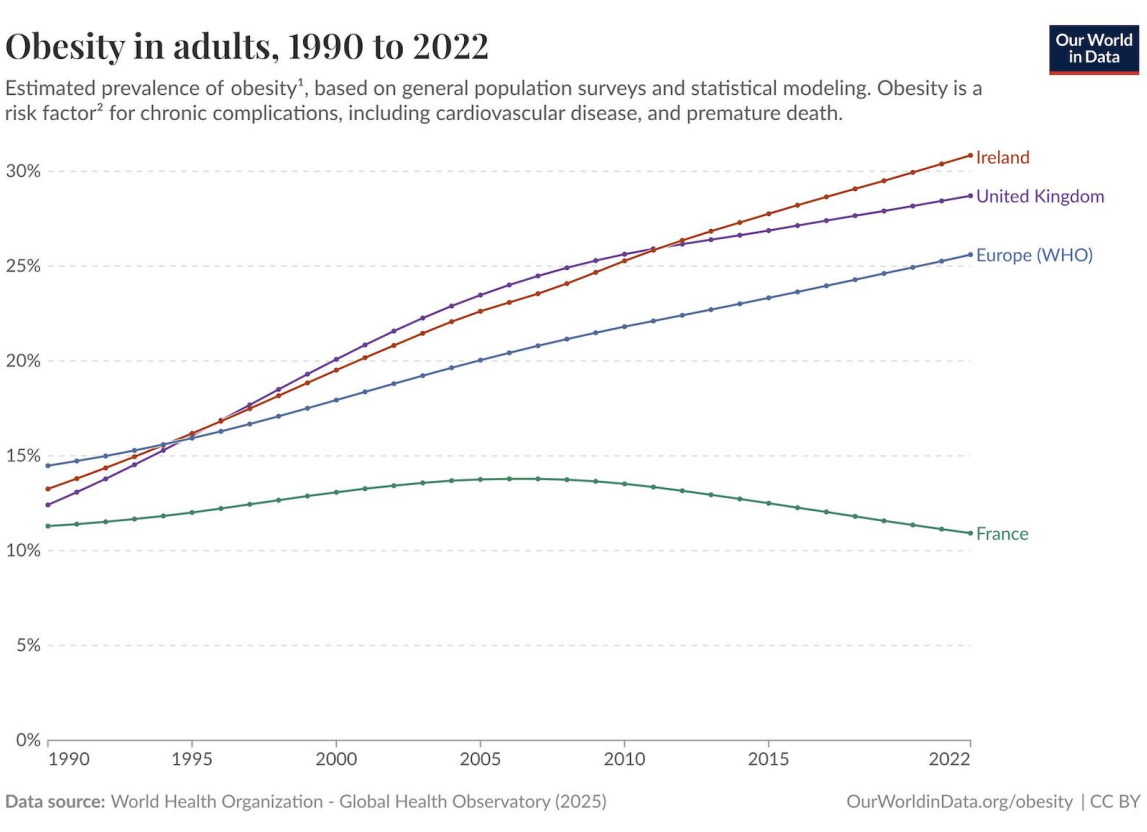
- **Robotic RYGB** 14 months ago

Patient 1

- Type II DM resolved
- OSA resolved
- Single medication for BP
- Mobile and active
- 123kg BMI 38

“Life now is an absolute joy—I’m out walking, playing golf, and back on the roads. I’m off all insulin now—it’s all been reversed. I love going shooting, heading to rugby matches, and just enjoying this new version of me. I’m a very happy man with what I’ve achieved in just over a year.

How does Ireland Fare in Obesity Statistics – WHO Data



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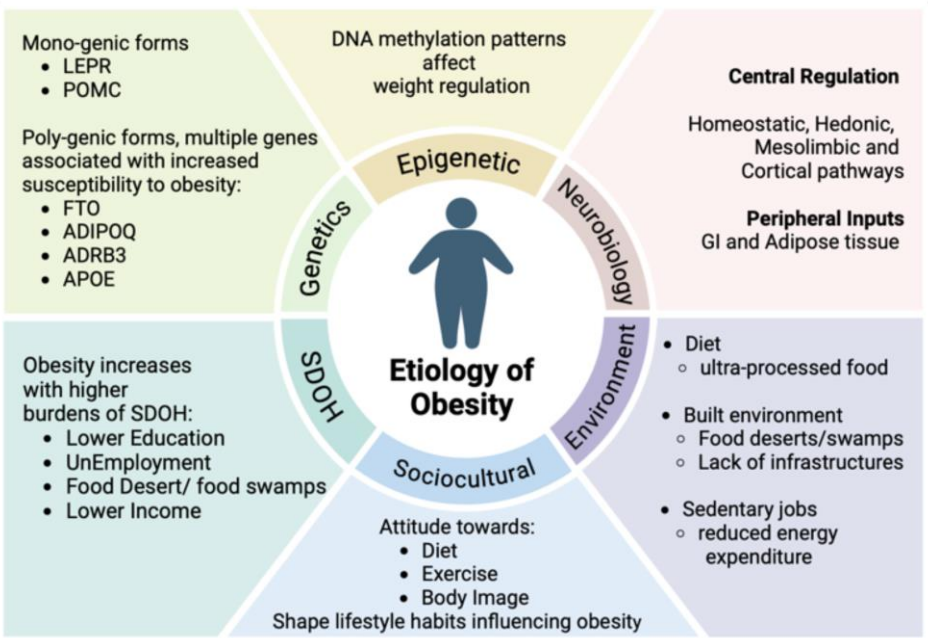
End the Myth

Obesity is not the result of laziness

Obesity is not your patient's fault

The Drivers of Obesity – Genetics Play a Major Role



Genetic contributions to body mass index over adolescence and its associations with adult weight gain: a 25-year follow-up study of Finnish twins

Alvaro Obeso[1,2✉], Gabin Drouard[2], Aline Jelenkovic[1], Sari Aaltonen[2], Teemu Palviainen[2], Jessica E. Salvatore[3], Danielle M. Dick[3], Jaakko Kaprio[2] and Karri Silventoinen[4]

The NEW ENGLAND JOURNAL of MEDICINE

CURRENT ISSUE SPECIALTIES TOPICS

ORIGINAL ARTICLE

The Body-Mass Index of Twins Who Have Been Reared Apart

Authors: Albert J. Stunkard, M.D., Jennifer R. Harris, Ph.D., Nancy L. Pedersen, Ph.D., and Gerald E. McClearn, Ph.D. Author Info & Affiliations

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Five Steps on Obesity in Primary Care – Talking Obesity is Not Always Easy

1. Initiate
- 1.A Ask permission

2. Diagnose
- 2.A Assess BMI
- 2.B Measure waist circumference

3. Discuss
- 3.A Start the conversation
- 3.B Take weight history
- 3.C Set realistic and attainable goals

4. Treat

Discuss a multifaceted approach:
- 4.A Lifestyle therapy
- 4.B Pharmacotherapy
- 4.C Bariatric surgery

5. Follow-up
- 5.A Assess progress
- 5.B Modify treatment
- 5.C Make a new appointment

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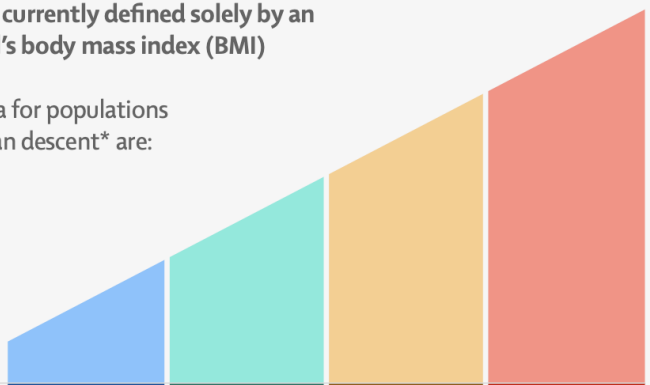
Weight and Health not Linear Relationship – BMI a Simplistic Tool?

Limitations of the current definition of obesity

Obesity is currently defined solely by an individual's body mass index (BMI)

The criteria for populations of European descent* are:



Diagnosis	Underweight	Normal	Overweight	Obesity
BMI (kg/m²)	Under 18.5	18.5 to 24.9	25 to 29.9	30 and over

- ✓ Although BMI is **useful** for identifying individuals at increased risk of health consequences...
- ✗ It **is not** a direct measure of fat
- ✗ It **does not** establish the distribution of fat around the body
- ✗ It **cannot** determine when excess body fat is a health problem

THE LANCET Diabetes & Endocrinology

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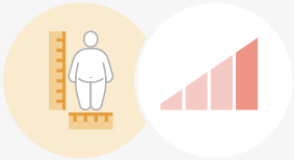
Diagnosis and Management of Pre-Clinical and Clinical Obesity

Excess body fat?
The first step in such a diagnosis is confirming excess body fat, which can be achieved via one of the following three criteria:

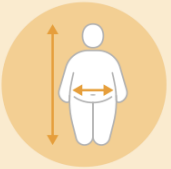


At least one measurement of body size and BMI

Measurements of body size
The commission defines three measurements of body size that can be used to confirm excess body fat:

Waist circumference
≥102 cm for men*
≥88 cm for women*

Waist-to-hip ratio
>0.90 for men*
>0.85 for women*



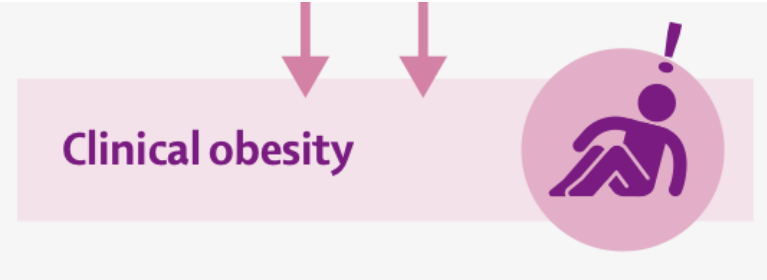
Waist-to-height ratio
>0.50 for all*

Excess body fat can pragmatically be assumed if BMI is >40 kg/m²

Diagnosis and Management of Pre-Clinical and Clinical Obesity

4 **Medical history, physical examination, and standard blood test**

- Are there signs/symptoms of organ dysfunction?
- Does the individual experience limitations of day-to-day activities?



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Obesity is a Disease – Obesity is not a Choice Treatment is not a Choice

Prescription Pad

vs

Multidisciplinary Beacon Bariatric Team

…. Maybe Both!

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Medication –vs- Referral for Bariatric Surgery

- **GLP-1 agonist (e.g. semaglutide, tirzepatide):**
  - Suitable **BMI ≥30**, or ≥27 with comorbidities.
  - Works well in patients with **moderate obesity** or those unwilling/unfit for surgery.
  - Ongoing Injections , Adherence, Cost

- **Bariatric surgery:**
  - **BMI ≥40**,
  - ≥35 with significant comorbidities.
  - Most effective Treatment
  - Once off - Lifelong

Weight Loss Expectations

- **GLP-1s:**
  - **10-15% total body weight loss** (if continued).
  - Effect is medication-dependent; weight regain occurs if stopped.
  - GI Side effect, pancreatitis

- **Bariatric Surgery:**
  - **25–35% total body weight loss** sustained long-term.
  - Safe

Stronger and more durable then medication impact on obesity and comorbidity remission.

Medication –vs- Referral for Bariatric Surgery

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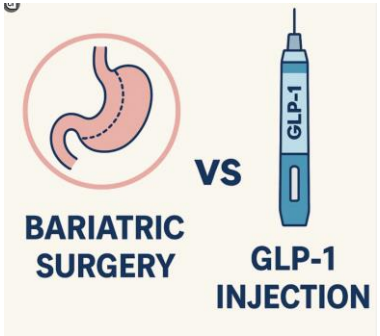
GLP1 vs Surgery – Who Wins Long Term ?



2-year comparative study —results are clear:

📊 **Bariatric Surgery vs GLP-1s** (semaglutide/tirzepatide):

◈ **25.7%** total body weight loss with **Surgery** vs **5.3%** with **GLP-1s** (intention-to-treat)

◈ Surgery had better HbA1c and other health outcomes

🔍 Low weight loss in the medication group - therapy interruptions and discontinuation.

But that's exactly the point!

⍈ If a treatment is regularly interrupted by high out-of-pocket costs, drug shortages, that limits its real-world effectiveness.

📌 Bottom line:

Severe obesity (BMI ≥35), **Bariatric surgery still provides superior long-term outcomes**—and it does so reliably, without being derailed by market forces.

TOP PAPERS SESSION I | TUESDAY, JUNE 17TH, 2025 · Volume 21, Issue 6, Supplement , S1, June 2025

RZY8JY68MG COMPARATIVE EFFECTIVENESS OF SEMAGLUTIDE AND TIRZEPATIDE vs BARIATRIC SURGERY

Article Info

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Patient 2

- 32 year old Female
- **Infertility -** Unable to conceive
- Hypertension
- Arthralgia
- 128 kg BMI 44
- Sleeve Gastrectomy 3 years ago

Patient 2

- 32 year old Female

- **Conceived surprisingly** 10 months after surgery
- **Beautiful baby girl Ella**

- Hypertension resolved
- Arthralgia gone and mobility soared

- **80 kg**

- Sleeve Gastrectomy 2.5 years ago

So What about Surgery

Evidence of its outcomes and Long Term Data

Swedish Obese Subjects Study

Carlsson LMS et al.
N Engl J Med2020;383:1535-1543

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Life Expectancy after Bariatric Surgery in the **Swedish Obese Subjects Study**

- Compared long-term mortality and life expectancy bariatric surgery v usual obesity care
- 4047 obese subjects
  - 2010 bariatric surgery
  - 2037 conventional treatment
- Surgery- Life expectancy 3.0 years longer than in control patients

ESTABLISHED THAT

Bariatric Surgery results in

- **long-term weight loss**
- **decreased mortality**

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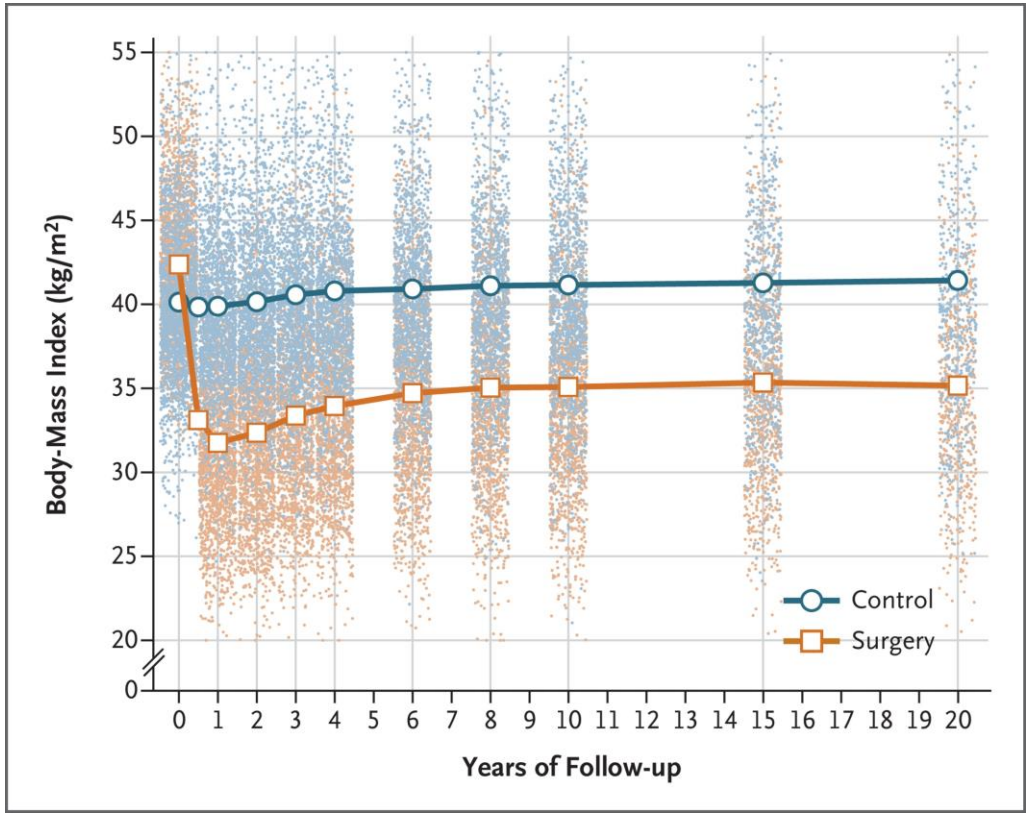
Body-Mass Index over a Period of 20 Years in the Control and Surgery Groups.



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Weight Loss:

Controls was less than ±2% during the period of up to 15 years

Surgical 1 to 2 years: gastric bypass, 32% - After 10 years, losses from baseline stabilized at 25%.

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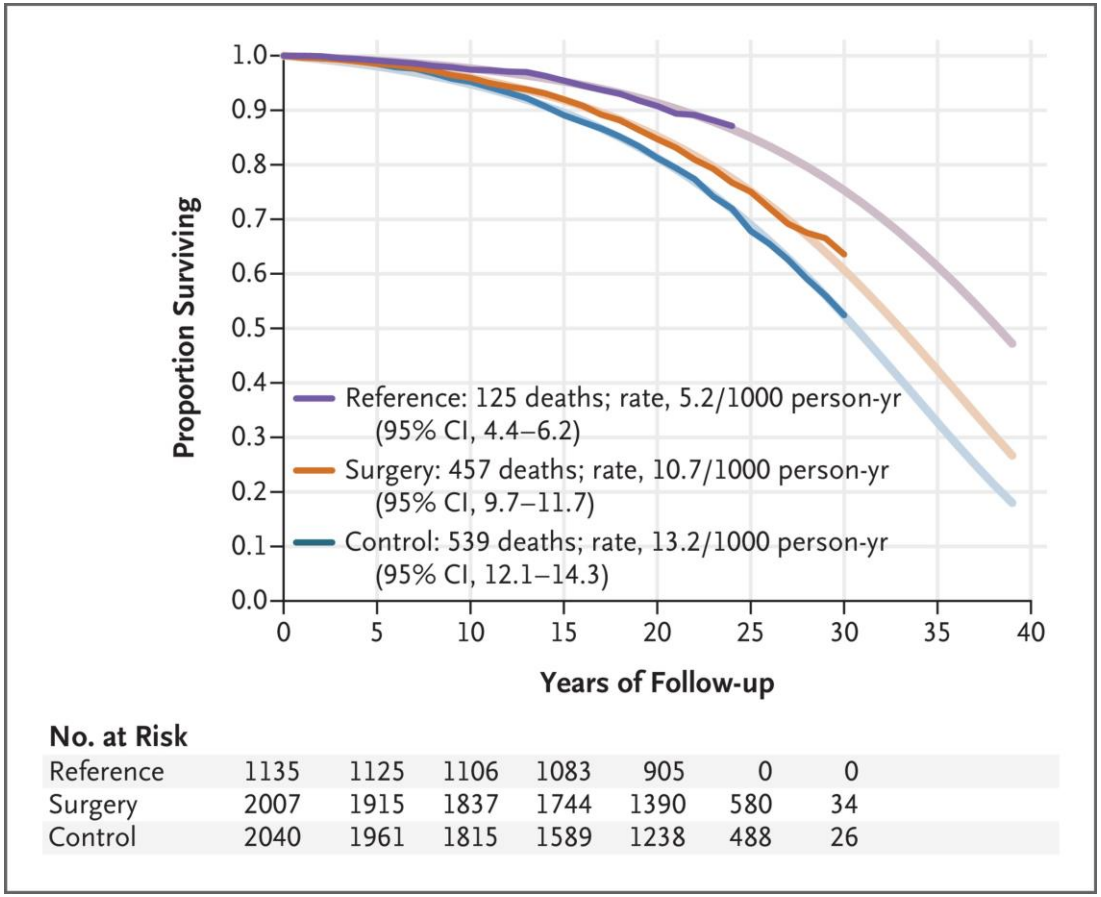
Survival in the Surgery and Control Groups and in the Reference Cohort.



No. at Risk

Reference	1135	1125	1106	1083	905	0	0
Surgery	2007	1915	1837	1744	1390	580	34
Control	2040	1961	1815	1589	1238	488	26

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Carlsson LMS et al.
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129 deaths in control group
101 deaths in surgery group.

Reduced deaths after surgery from Cardiovascular and Cancer Causes

CONCLUSIONS

Bariatric surgery for severe obesity is associated

- **long-term weight loss**
- **decreased mortality.**

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Building Bariatric Surgery in the Beacon Hospital - Who, Why and How and Our Goals

- Criteria
- Team
- Assessment
- Surgery
- Aftercare
- Nutrition and Exercise
- Outcomes in 5 -10 years?

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Beacon Bariatric and Metabolic Surgery

- **Criteria**
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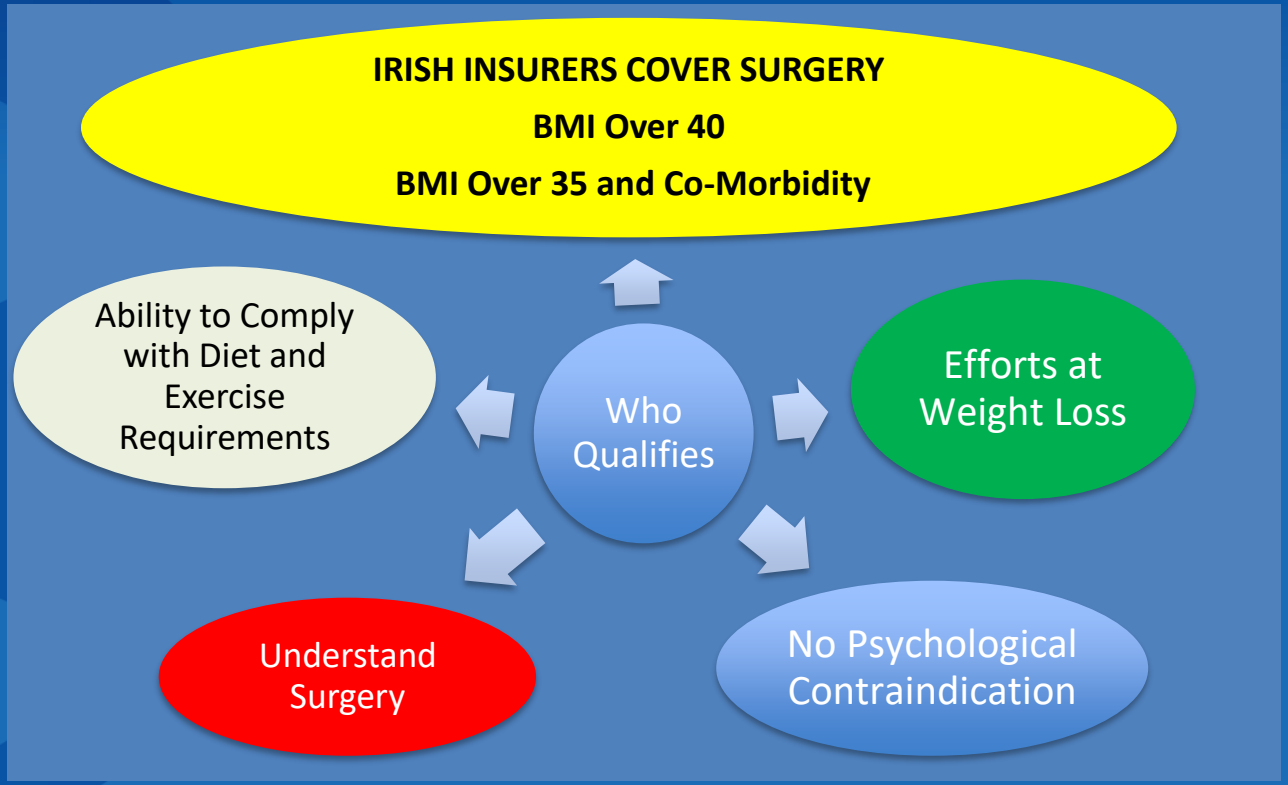

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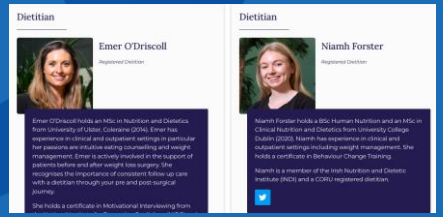

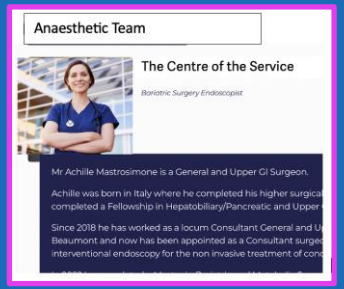

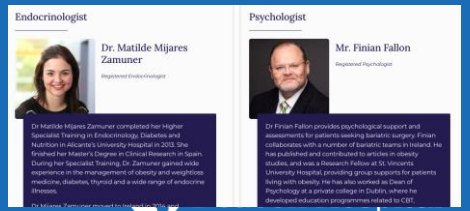

Beacon Bariatric and Metabolic Surgery

- Criteria
- Team
- **Assessment**
- Surgery
- Aftercare
- Nutrition and Exercise
- Outcomes in 5 -10 years?

Refer to william.robb@imeddoc.net

1. Admin Team Call
2. First Appointment – Dietitian and Surgeon
3. Psychologist, Endoscopy, Bloods, Ultrasound Gallbladder
4. Insurance Application – Approval
5. Pre-Surgery Appointment – Dietitian, Bariatric Nurse Specialist and Surgeon

Beacon Bariatric and Metabolic Surgery

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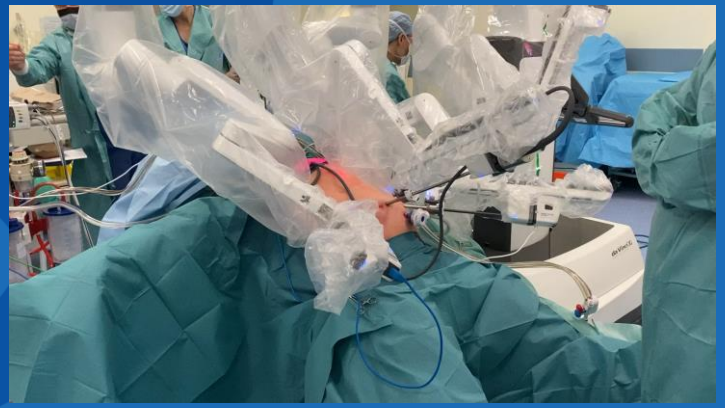

1252 Total cases		Cases
Gastric Bypass (Roux-en-Y)	555	44%
Sleeve Gastrectomy	336	27%
Hiatal Hernia - Paraesophageal	119	10%
Esophagectomy Transthoracic - Chest Anastomosis	101	8%
SADI-S	32	3%
Gastrectomy - Subtotal	26	2%
Heller Myotomy	20	2%
Revision - Band to Bypass	19	2%
Gastrectomy - Total	16	1%

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Beacon Bariatric and Metabolic Surgery

- Criteria
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- **Surgery**
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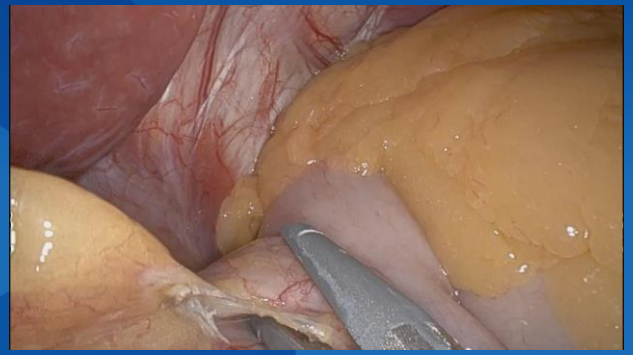

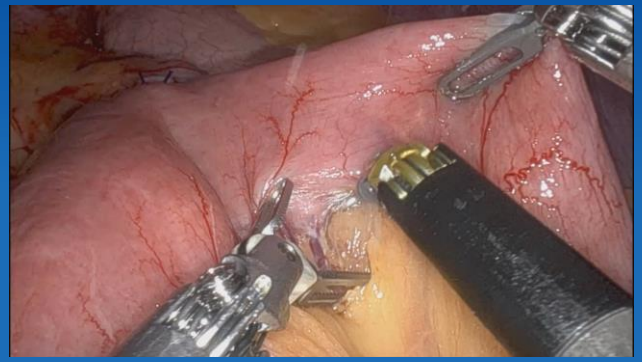

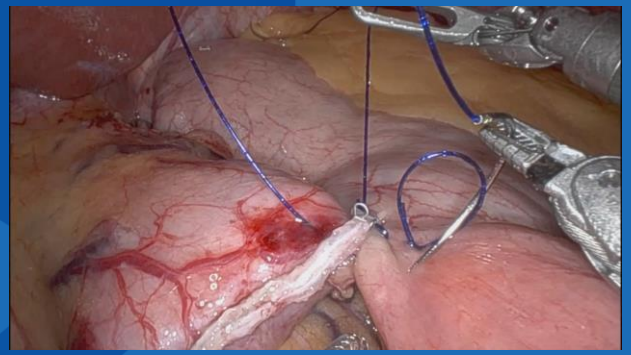

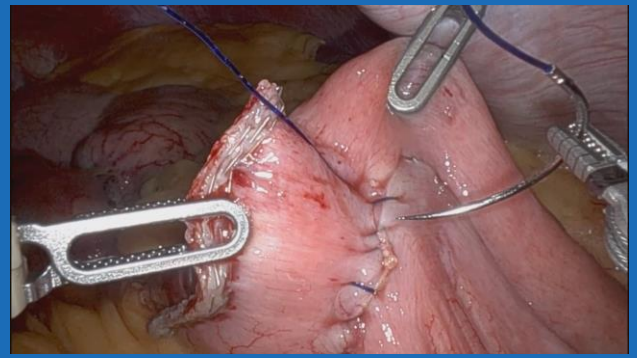

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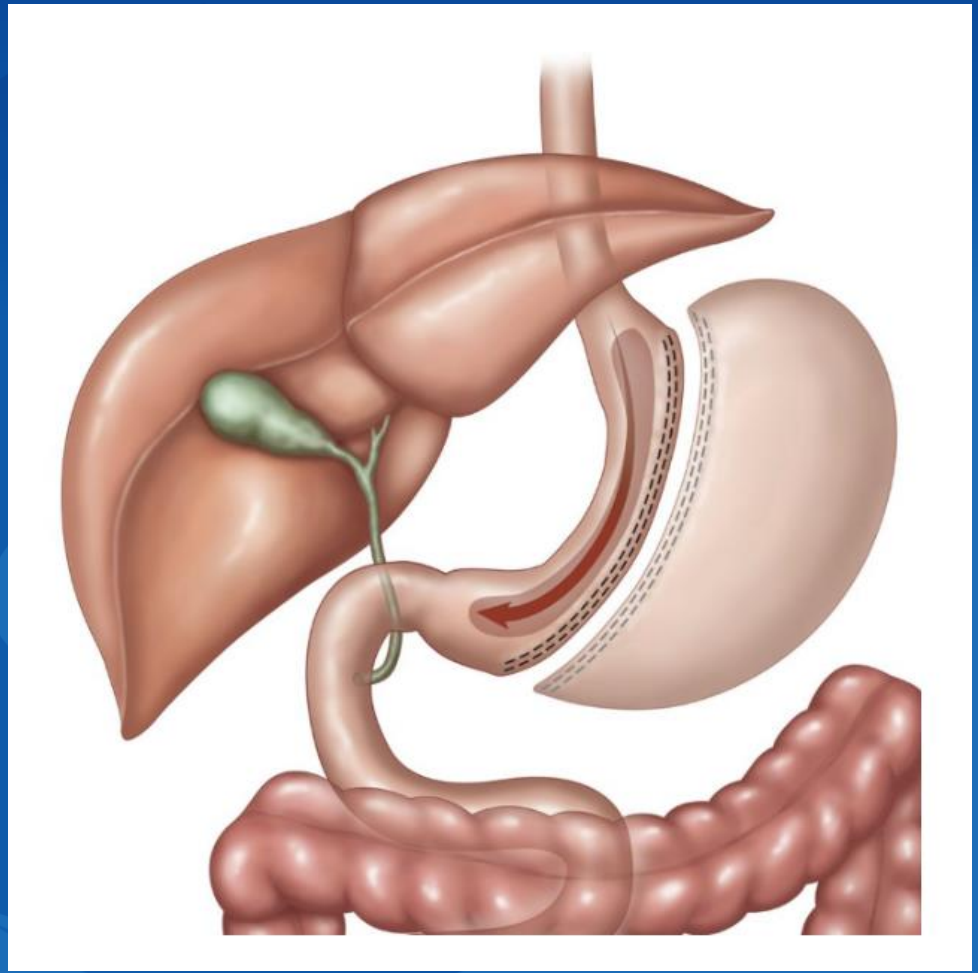
What Operations?

Sleeve Gastrectomy

Roux en Y Gastric Bypass

SADI-S



Sleeve Gastrectomy

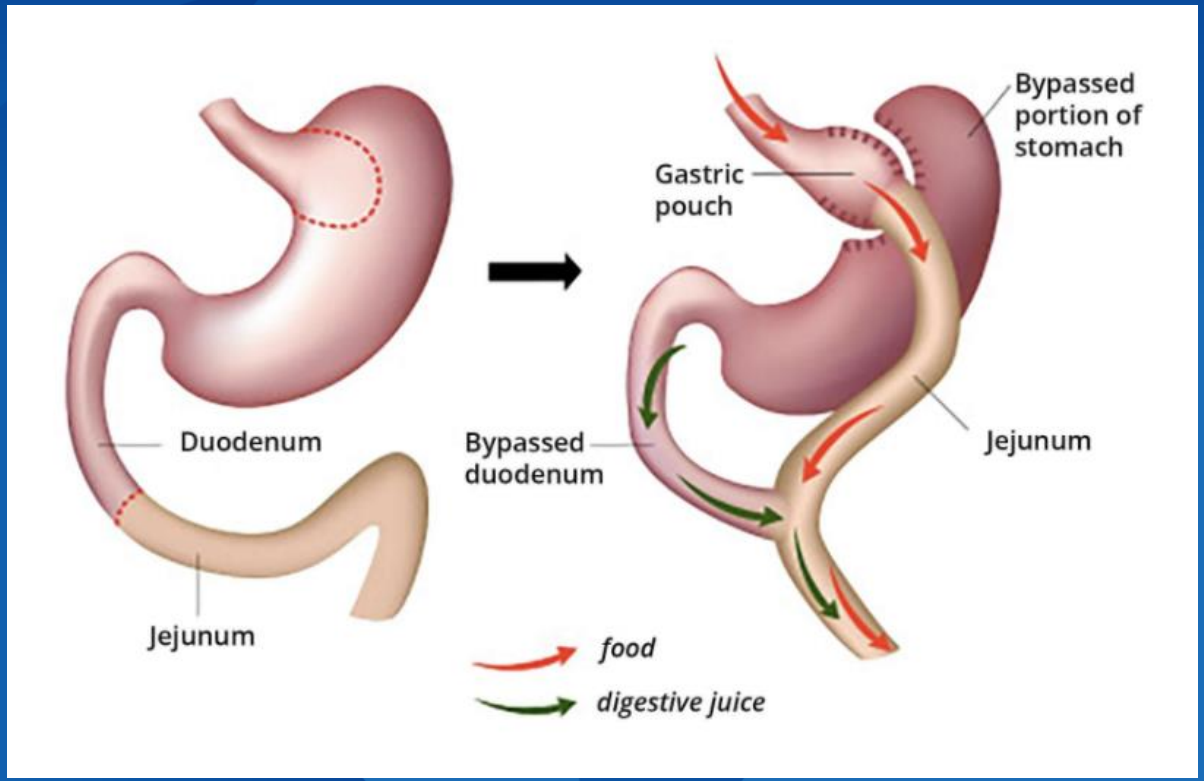
Expected excess weight loss:
60%

Weight Regain MORE Common

Average length of hospital stay:
2 nights

Multivitamin
Ca2+/Vitamin D

Vitamin B12 and Iron



Gastric Bypass

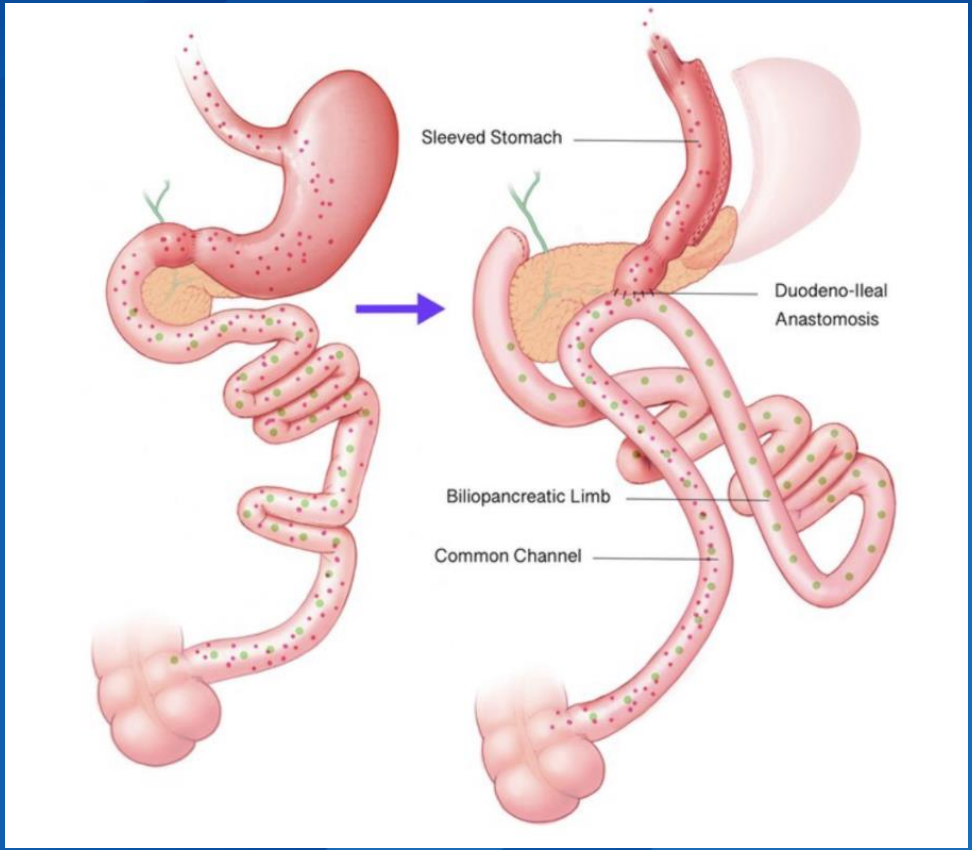
Expected excess weight loss:
70%

Average length of hospital stay:
2 nights

Multivitamin
Ca2+/Vitamin D

Vitamin B12 and Iron

Dumping Syndrome



SADI-S

Single Anastomosis
Duodeno-Ileal Bypass + Sleeve

Ideal patient:

BMI over 50
Metabolic complications of obesity

Failure of previous sleeve gastrectomy
Weight regain after sleeve gastrectomy

Beacon Bariatric and Metabolic Surgery

- Criteria
- Team
- Assessment
- Surgery
- **Aftercare**
- Nutrition and Exercise
- Outcomes in 5 -10 years?

Timetable

	6 Weeks	3 Months	6 Months	9 Months	12 Months	18 Months	24 Months
Surgeon	✓		✓		✓		
Dietitian	✓	Phone Call / Virtual	✓		✓	Phone Call / Virtual	
Physician		✓		✓		✓	✓
Exercise Advice	✓						

GP role in pre- and post-operative care?

Pre-op: Recognise Obesity
Support referral, assess comorbidities and optimise medical conditions …
But recommend treatment.

Post-op: Lifelong follow-up is essential
Annual bloods & supplement checks
Adjust diabetes/hypertension meds as needed
Reinforce lifestyle and engagement

Key point: Structured follow-up; long-term partnership with GP is crucial.

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Beacon Bariatric and Metabolic Surgery

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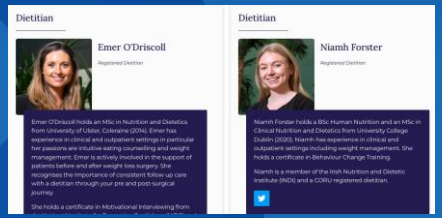
- **Nutrition and Exercise**
- Outcomes in 5 -10 years?



Dietitian care vital for success

Maintain Muscle mass

Avoid Sarcopenia

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Beacon Bariatric and Metabolic Surgery

- Criteria
- Team
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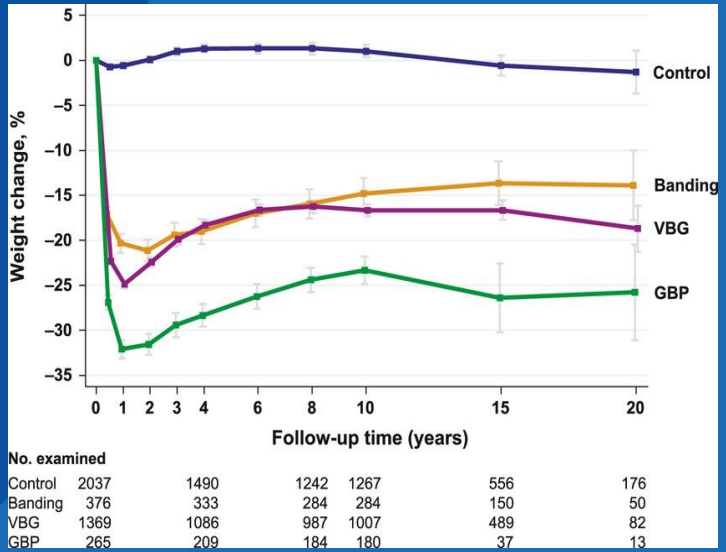
- Surgery
- Aftercare
- Nutrition and Exercise
- **Outcomes in 10 -20 years?**

Review of the key results from the Swedish Obese Subjects (SOS) trial – a prospective controlled intervention study of bariatric surgery

Journal of Internal Medicine, Volume: 273, Issue: 3, Pages: 219-234, First published: 19 November 2012, DOI: (10.1111/joim.12012)



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Surgery Myths

- ~~Risky~~ – Comparable to gallbladder surgery
- ~~Last resort~~ - First line treatment for many
- ~~Alternative to GLP1s~~ - Often complementary
- ~~Impossible~~ – Covered by insurance

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OUR CHALLENGE

Making Surgery Accessible to Patients in Every Village in Ireland

Treat obesity like any other disease

Don’t treat the consequences – Treat the Cause

REFERRALS

TO BEACON OBESITY AND BARIATRIC CENTRE

VIA HEALTHLINK

Beacon Hospital

Thank you

Beacon Hospital