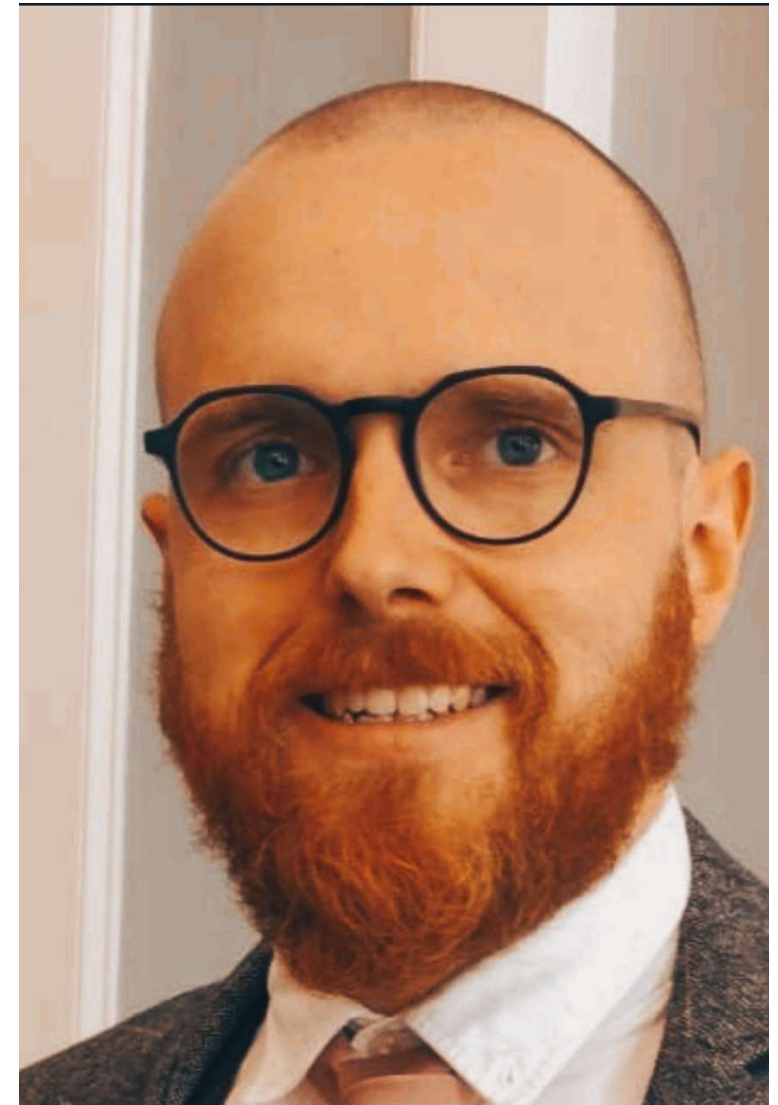


Complications of bariatric surgery on Critical Care

- Phill Johnston
- Dietetic Manager Salford Care Organisation
- Part of the Northern Care Alliance



Could you turn the feed
off?

He's been trying to lose
weight for a wedding

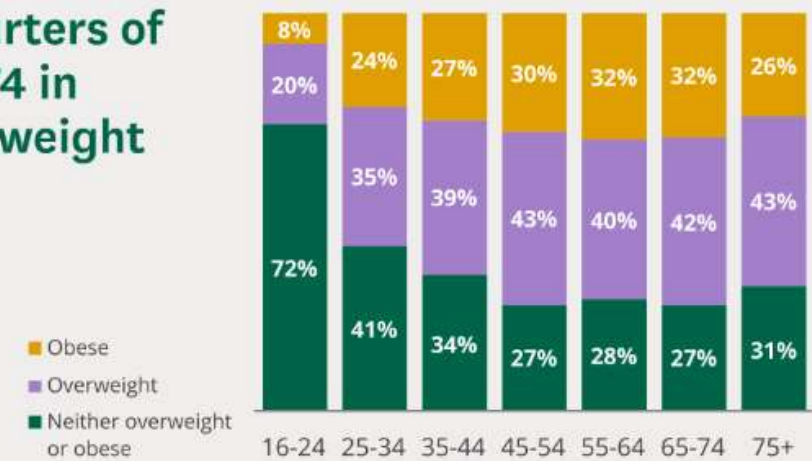
Obesity

- 2021-2022 – 63.8% Adults in England overweight or living with obesity
- Increase of 0.5% since 2020-2021
- 2021-2022 – 25.9% adults in England overweight or living with obesity
- Increase of 0.7%

- In CCU:
- Between 28-36% patient CCU admissions are obese
- Limited research (both ends of the BMI spectrum)
- “Obesity Paradox”

Almost three quarters of people aged 45-74 in England are overweight or obese

Data: NHS Digital
Chart: House of Commons Library



Critical Care

- Critical care is the immediate care of those with life-threatening illness or injuries
- It is a physiologically demanding treatment
- Admission is dependent if the risks of admission will benefit patient once immediate condition managed
- Dietitian works as part of the MDT to ensure nutritional needs are adapted to clinical condition

ICU-Acquired Weakness

- 33% ventilated patients
- 50% sepsis
- 50% patients in CCU for 1 week

Cognitive of brain dysfunction

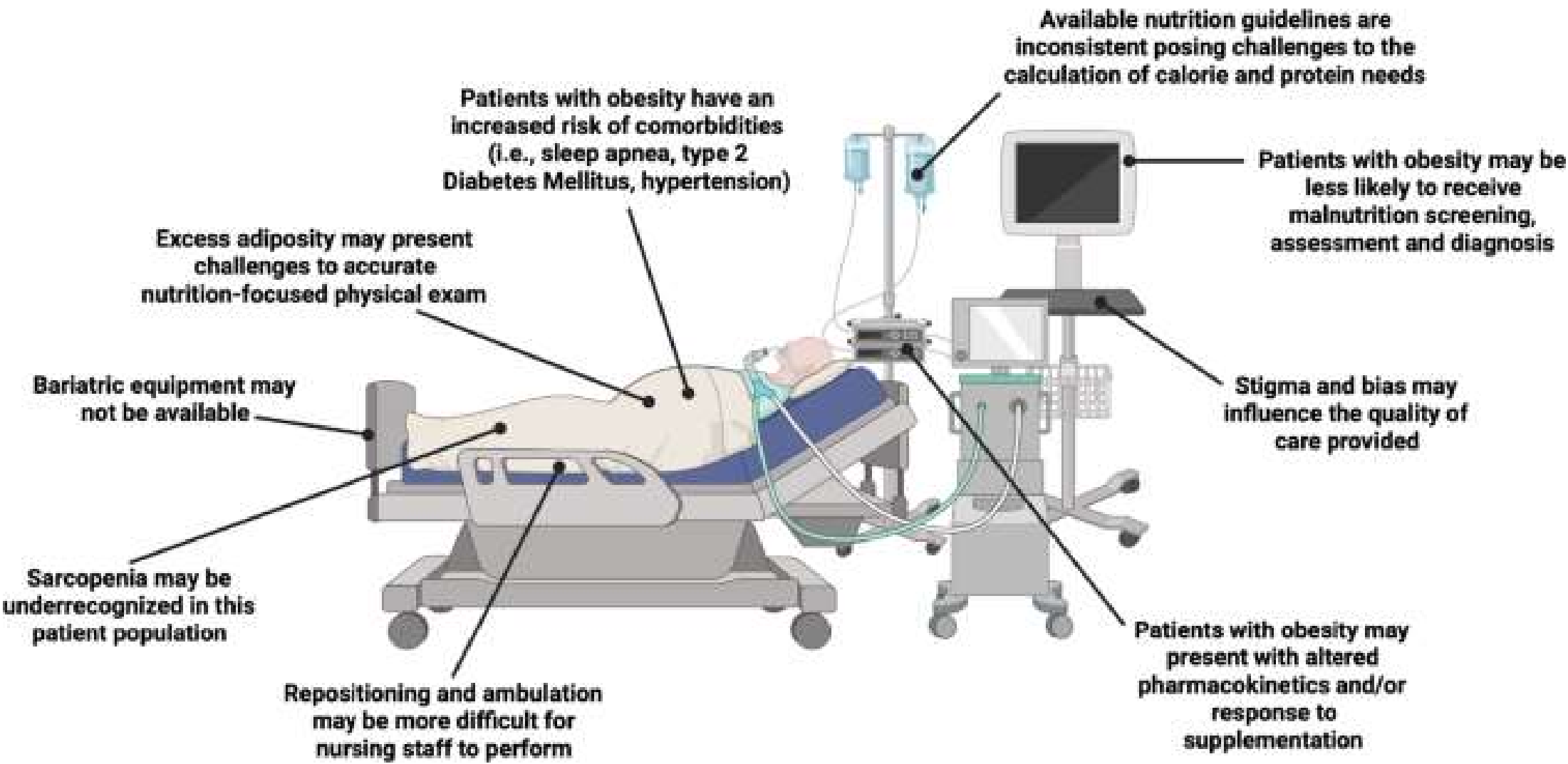
- 30-80% patients

Other mental issues

- Insomnia
- Depression
- PTSD
- Physical and emotional symptoms

Impact:

- Up to 50% of patients may return to work in one year
- Some may never or have reduced duties



In March 2024, the waiting list stood at **7,538,800**
consisting of around **6,288,564**
individual patients waiting for treatment in England.

Source: [BMA analysis of NHS Waiting times data](#). Includes estimates for missing data.



The latest Referral to Treatment (RTT) figures for March 2024 show:

- the waiting list stood at **7.54 million cases**, consisting of approximately 6.29 million individual patients waiting for treatment
- around **3.23 million** of these patients have been waiting over **18 weeks**;
- Over **309,000** of these patients have been waiting **over a year** for treatment, about the same as the previous month (February 2024).
- a median waiting time for treatment of **14.9 weeks** – more than double the pre-COVID median wait of 6.9 weeks in March 2019.

The target in the [elective backlog recovery plan](#) (February 2022) to eliminate waits longer than 65 weeks by March 2024 has been missed. The longer-running target that 92% of patients should receive treatment within 18 weeks of referral has not been met since September 2015.

What does this mean?



Bariatric tourism care costs NHS more than actual surgery - study

🕒 15 January

A Turkish doctor selling weight-loss "holidays" abroad told an undercover BBC reporter to gain weight so she could have gastric sleeve surgery.

The interventions at the five hospitals for the 35 patients cost the NHS a total of £560,234, or £16,006 per patient, in 2022.

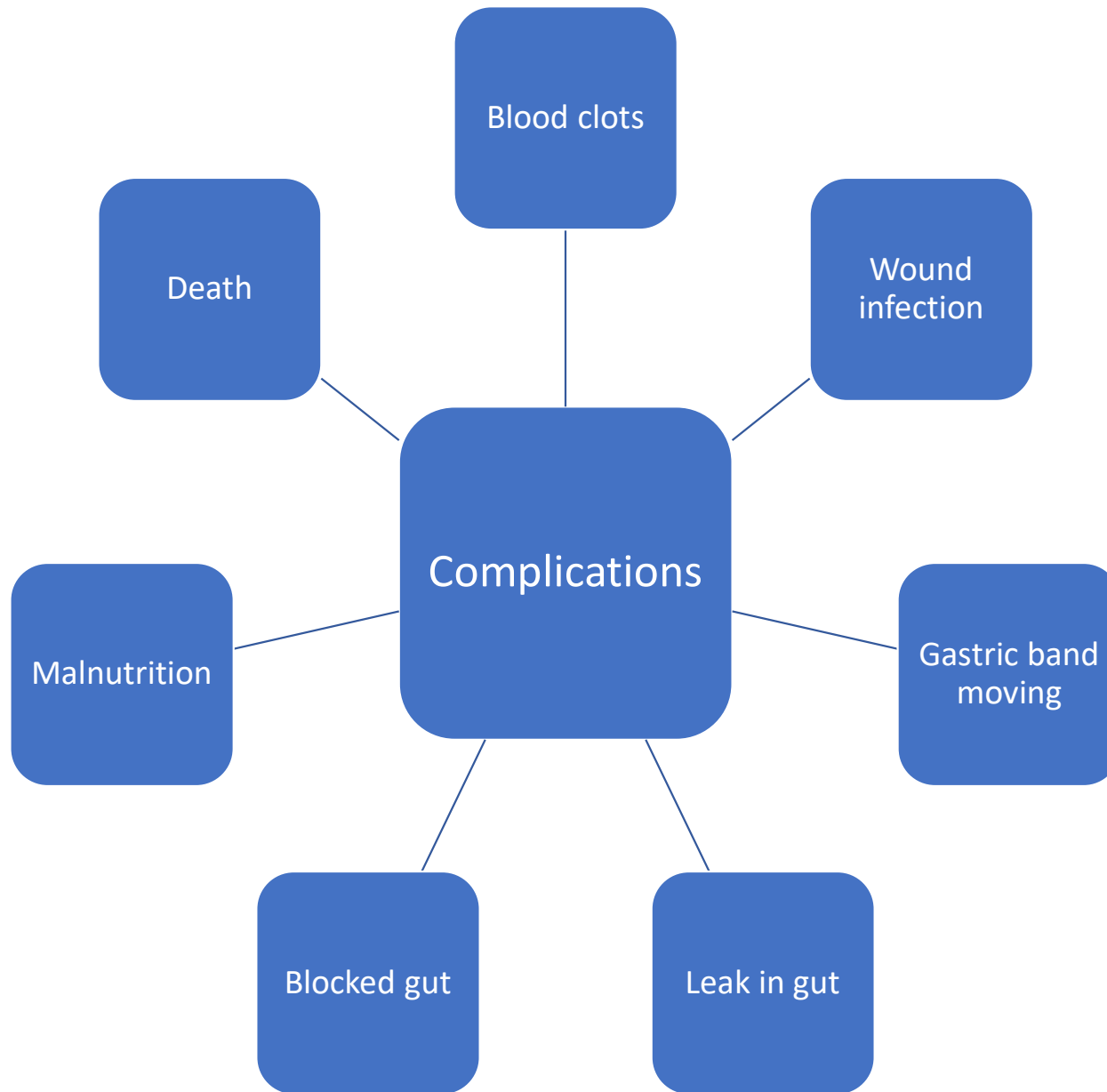
The equivalent amount would have covered the cost of about 110 bariatric surgeries in UK hospitals.

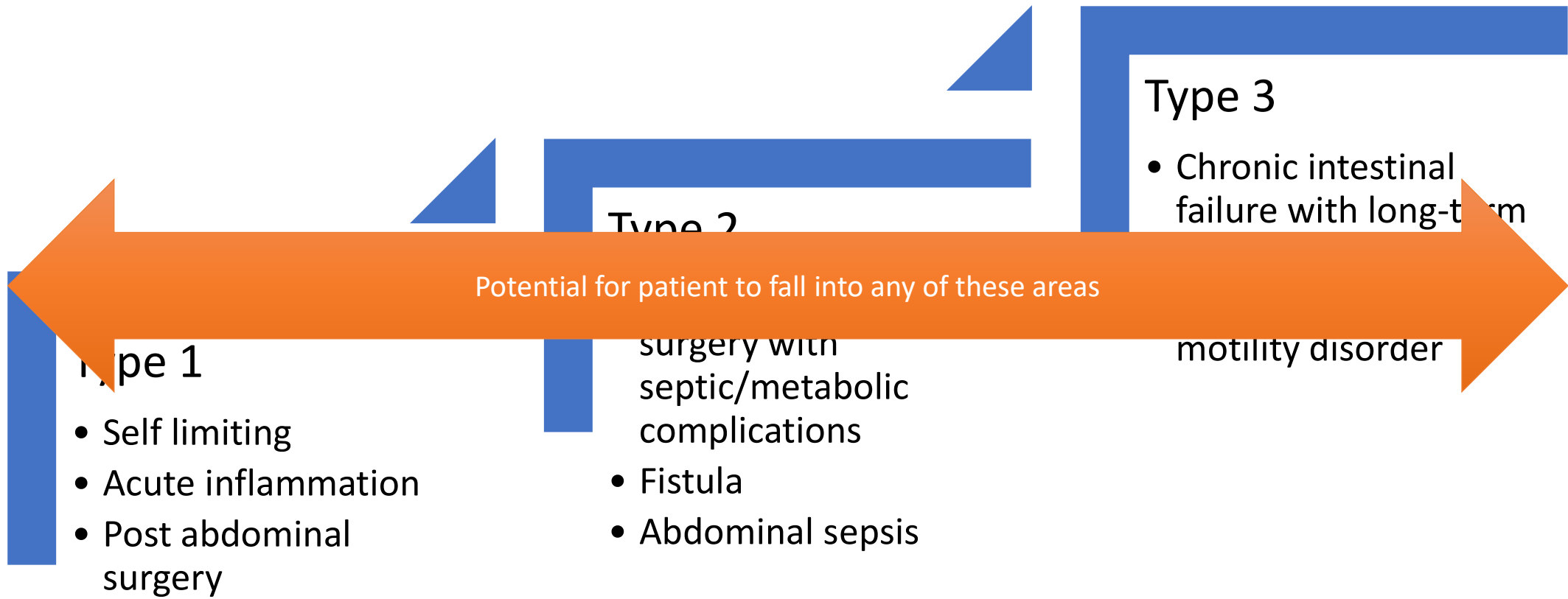
Obesity op health tourists suffering complications, medics warn

🕒 6 February

"Seven to eight years ago, I used to see one complication from Turkey every six weeks, now I am seeing one a week," said Mr Singhal.

He said the majority are leaks that become infected and over time cause significant difficulties.





Case Study

- Male, 57
- 31/07 – laparoscopic sleeve gastrectomy
- Discharged 10/08
- History:
 - High BMI, HTN, T2DM, OSA (no CPAP), prev DVT, B/L knee replacements, poor mobility
- Social
 - Exercise tolerance of 600m
 - Works with medical devices
- Known to bariatric team
- Readmitted 11/08 – infected intraabdominal haematoma with gas forming organism +/- leak
 - WCC 16, CRP 200
- 12/08 – Laproscopic washout and drainage with esosponge insertion
 - Sips for comfort
 - PN for nutrition
- Subsequent 53 day CCU admission
 - 47 days on PN
- 1.88m
- 170kg
- 48kg/m²

14/08

21/08

04/09

18/09

25/09

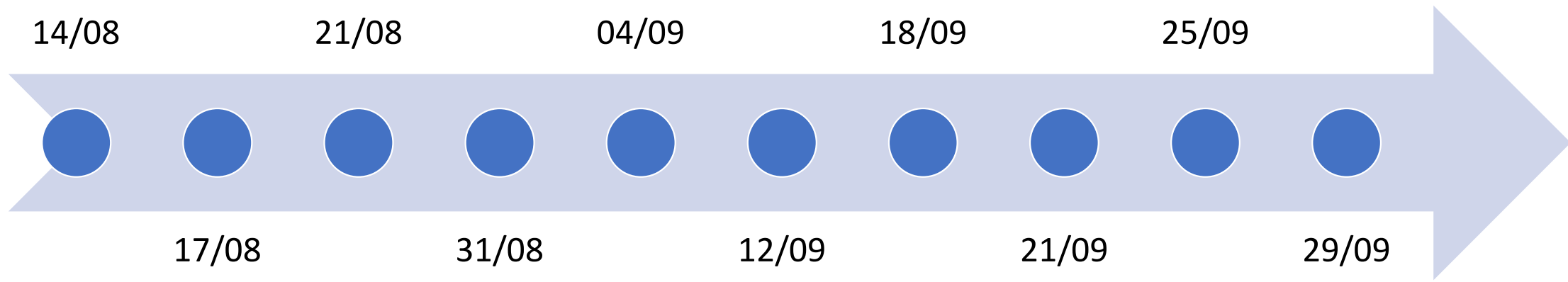
17/08

31/08

12/09

21/09

29/09



Pitfalls and Practicalities

- PN availability / formulation
- Outsourcing
- Monitoring and measuring
- Limited evidence base

Guidelines

Source	Energy	Protein
ASPEN 2022	<ul style="list-style-type: none"> - Indirect calorimetry (not to exceed 65-70% mREE) If no IC <ul style="list-style-type: none"> - BMI 30-50kg/m²: 11-14kcal/kg actual body weight - BMI >50kg/m²: 22-25kcal/kg ideal body weight 	<ul style="list-style-type: none"> BMI 30-40kg/m²: 2.0g/kg ideal body weight BMI >40kg/m²: 2.5g/kg IBW
ESPEN 2023	<ul style="list-style-type: none"> - Indirect calorimetry. <ul style="list-style-type: none"> 70% early acute phase 80-100% mREE after 72 hours If no IC: <ul style="list-style-type: none"> - 20-25kcal/kg adjusted body weight 	1.3 g/kg adjusted body weight
EFFORT Protein 2023	n/a	Nil benefit from higher protein

Patient	Medical summary	Anthropometry	Predictive equations	Indirect calorimetry	Outcome
Mr N	63-year-old male. Intubated and ventilated due to respiratory failure	<ul style="list-style-type: none"> Weight: 125.8 kg Height: 1.76 m BMI: 40.6 kg/m² IBW (BMI 23 kg/m²): 71 kg 	<ul style="list-style-type: none"> Modified Penn State [>60 yrs old + BMI >30 kg/m²] (Mifflin St Jeor: 2048 kcal/day; Ve: 7.9) 	<ul style="list-style-type: none"> REE: 1415 kcal/day RQ: 0.91 	<ul style="list-style-type: none"> Predictive equations would have overfed by -605-708 kcal/day Dietitian reduced the energy prescription to prevent overfeeding.



<ul style="list-style-type: none"> + BMI (Mifflin St Jeor: 2 kcal/day; Ve: 10.2) • 25 kcal/kg Adj BW = 1775 kcal/day 	<ul style="list-style-type: none"> • RQ: 0.86 	<ul style="list-style-type: none"> would have underfed by -590-631 kcal/day • Dietitian increased energy prescription to ensure aiming for adequate energy delivery
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In summary: These are all critically ill patients with obesity yet completely different mREE and different goals of nutrition therapy, further demonstrating that 'one size does not fit all'.

(\$14MILLION)

Ballpark Figure

[*'bɔːl-pɑːrk 'fi-gjər*]

A rough numerical estimate or approximation of the value of something.

Investopedia

Could you turn the feed
off?

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weight for a wedding

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