• HbA1c 109 mmol/mol (12.1%)
• Weight 136.9 kg
• BMI 44.7 kg/m²

• HbA1c 58 mmol/mol (7.5%)
• Weight 115.0 kg
• BMI 37.6 kg/m²

=Weight loss 21.9 kg (nearly 3.5 stone)
- HbA1c 77 mmol/mol (9.2%)
- Weight = 105.6 kg
- BMI = 35.3 kg/m²
- Insulin 100 units

Before

Research patient

After 12 months

- HbA1c 40 mmol/mol (5.8%)
- Weight 80.0 kg
  = Weight loss 25.6 kg (over 4 stone)
- BMI 26.7 kg/m²
- Insulin no longer required
• HbA1c 61 mmol/mol (7.7%)
• Weight = 86.6 kg
• BMI = 35.1 kg/m²
• Obstructive sleep apnoea requiring CPAP

Before

NHS service patient

• HbA1c 43 mmol/mol (6.1%)
• Weight = 65.6 kg
  = weight loss 21.0 kg (over 3 stone)
• BMI = 26.2 kg/m²
• CPAP no longer required

12 months After
• HbA1c 76 mmol/mol (9.1%)
• Weight = 116.4 kg
• BMI = 38.0 kg/m²
• Insulin 42 units daily
• Idiopathic interstitial pneumonitis requiring ambulatory oxygen therapy

Before

NHS service patient

12 months After

• HbA1c 49 mmol/mol (6.6%)
• Weight = 88 kg
• BMI = 28.8 kg/m²
• Insulin no longer required
• Ambulatory oxygen therapy no longer required
Before

- HbA1c 70 mmol/mol (8.6%)
- Weight = 82.9 kg
- BMI = 33.6 kg/m² (Obese BMI)

12 months After

- HbA1c 51 mmol/mol (6.8%)
- Weight = 62.2 kg
  = Weight loss 20.7 kg (over 3 stone)
- BMI = 24.7 kg/m² (Normal BMI)
• HbA1c = 69 mmol/mol (8.5 %)
• Wt = 92.4 kg
• BMI = 36 kg/m²
• Insulin 147 units daily
• Creatinine 153 umol/L
• eGFR 30 mL/min/1.73m²

Before

• HbA1c = 50 mmol/mol (6.7 %)
• Wt = 73 kg = weight loss 19.4 kg (3 stone)
• BMI = 27 kg/m²
• Insulin no longer required
• Creatinine 106 umol/L
• eGFR 46 mL/min/1.73m²

12 months After

NHS service patient
Before

- HbA1c = 64mmol/mol (8%)
- Wt = 98.2kg
- BMI = 31.3kg/m² (Obese BMI)
- Insulin 80 units daily
- Professional driver (Taxis, would like HGV)

12 months After

- HbA1c = 57mmol/mol (7.4%)
- Wt = 76.8kg
  =Weight loss 21.4 kg (well over 3 stone)
- BMI = 24.2kg/m² (Normal BMI)
- Insulin no longer required
- Now off insulin so can drive heavy goods vehicles without issue which was his ambition
• HbA1c 128 mmol/mol (13.9%)
• Weight = 102 kg
• BMI = 39.3 kg/m$^2$ (Obese BMI)
• Insulin 260 units

Before 

• HbA1c 49 mmol/mol (6.6%)
• Weight 64.2 kg
  = Weight loss 37.8 kg (nearly 6 stone)
• BMI 24.46 kg/m$^2$ (Normal BMI)
• Insulin no longer required

12 months After

NHS service patient
To maintain 260 units of insulin/day she required to use 316 insulin pens per year = at least £2553.44
• 1,095 blood glucose tests/year (at least £440 = cheapest)
• 1,460 pen needles/year (at least £89.25)
• 1,095 lancing devices/year (at least £71.06)
• 3 sharps bins for sharps disposal/year (at least £35)
• Insulin 260 units = cost at least £3188.75/year

• NO Insulin = Cost saving at least £3188.75/year
Three of the above patients have now reached one year after removal of Endobarrier:
**Before**
- Pre-endobarrier
- HbA1c = 70 mmol/mol (8.6%)
- Wt = 82.9 kg
- BMI = 33.6 kg/m²
- Obese BMI

**12 months**
- 12 months EndobARRIER
- HbA1c = 51 mmol/mol (6.8%)
- Wt = 62.2 kg
  - = Wt loss 20.7 kg (over 3 stone)
- BMI = 24.7 kg/m²
- Normal BMI

**24 months**
- 12 months after EndobARRIER
- HbA1c = 43 mmol/mol (6.1 %)
- Wt = 64.2 kg
- BMI = 26.4 kg/m²
- Improvement sustained
• Pre-endobarrier
  • HbA1c = 61 mmol/mol (7.7%)
  • Wt = 86.6 kg
  • BMI = 35.1 kg/m²
  • **Obstructive sleep apnoea requiring CPAP**

• 12 months Endobarrier
  • HbA1c = 43 mmol/mol (6.1%)
  • Wt = 65.6 kg
  • BMI = 26.2 kg/m²
  • CPAP no longer required

• 12 months after Endobarrier
  • HbA1c = 57 mmol/mol (7.4 %)
  • Wt = 66.2 kg
  • BMI = 27.2 kg/m²
  • Improvement sustained
• Pre-endobarrier
  HbA1c = 76 mmol/mol (9.1%)
  Wt = 116.4 kg

  BMI = 38.0 kg/m²
  Insulin 42units daily
  Idiopathic interstitial pneumonitis
  requiring ambulatory oxygen therapy

• 12 months Endobarrier
  HbA1c = 49 mmol/mol (6.6%)
  Wt = 88 kg
  – Wt loss 28.4 kg (4.5 stone)
  BMI = 28.8 kg/m²
  Insulin no longer required
  Ambulatory oxygen therapy no longer required

• 12 months after Endobarrier
  HbA1c = 47 mmol/mol (6.5 %)
  Wt = 92.2 kg
  BMI = 30 kg/m²
  Regular gym – muscles building up
  Improvement sustained