

**NUTRITIONAL ENHANCED RECOVERY:  
post-pyloric feeding after discharge  
following oesophagectomy**

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# Background

- Oesophagectomy is associated with:
  - Pre- and postoperative nutritional difficulties
  - Protein-energy malnutrition (defined as >10% weight loss)

Postoperative nutritional enhanced recovery:

Post-pyloric feeding (PPF) inserted at surgery: Surgical Jejunostomy

Early introduction of enteral feeding:  
all patients

Discontinued prior to discharge  
(Low risk of FTT)

Overnight feeding following discharge  
(High risk for FTT\*)

\*Considerations to continue PPF after discharge: unable to maintain >50% of required caloric intake, preoperative weight loss >10%, oral route compromised, low preoperative body weight, clinically significant postoperative weight loss prior to discharge

# Methods

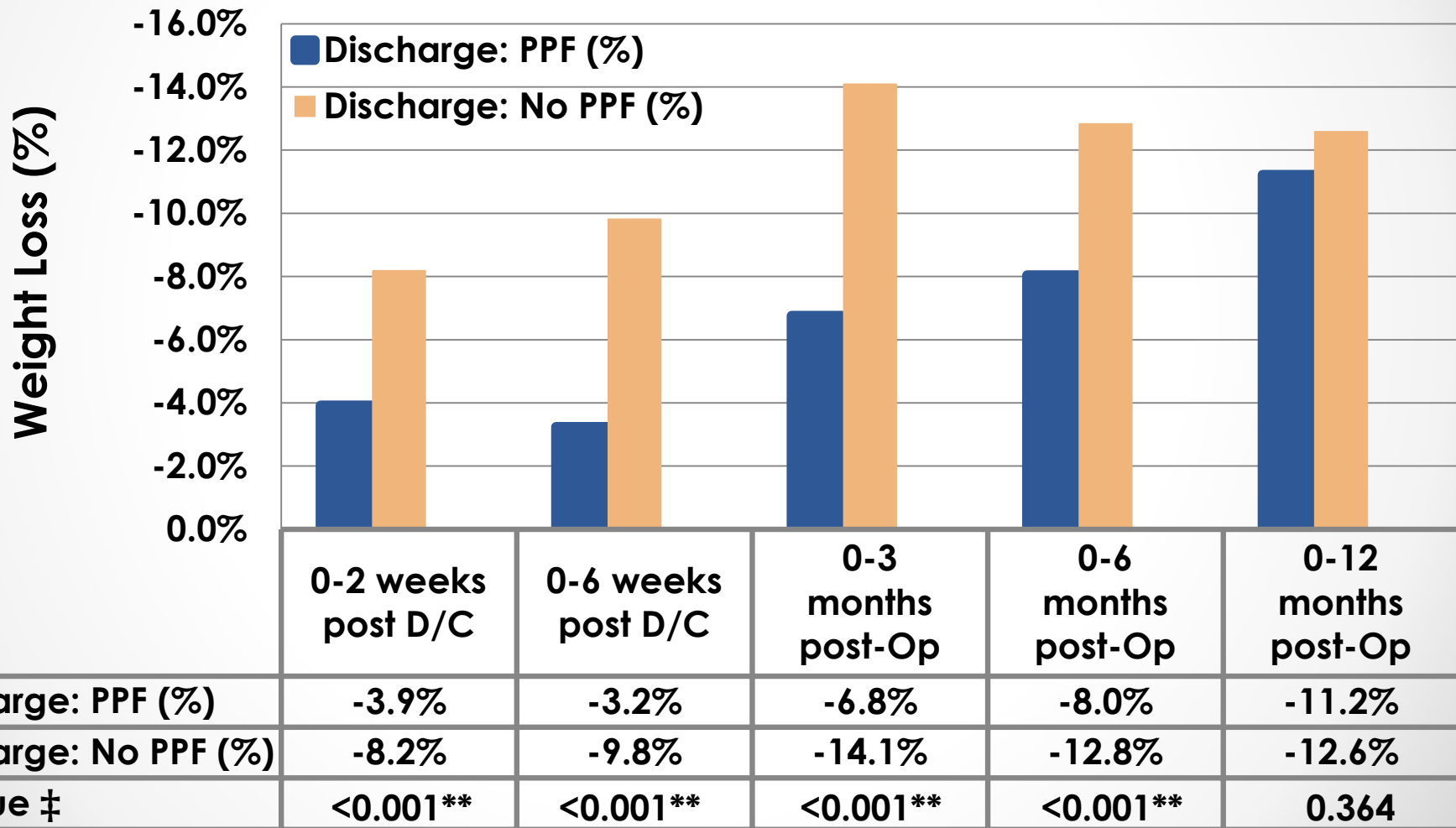
- **This retrospective audit aimed to:**
  1. **Describe weight changes following oesophagectomy**
  2. **Investigate the influence of PPF following discharge on postoperative weight changes and readmissions**
- **Reviewed notes 210 patients who underwent oesophagectomy 1/1/12 – 30/4/14**

# Results

**37 patients (17.6%) discharged home with post-pyloric feeding**

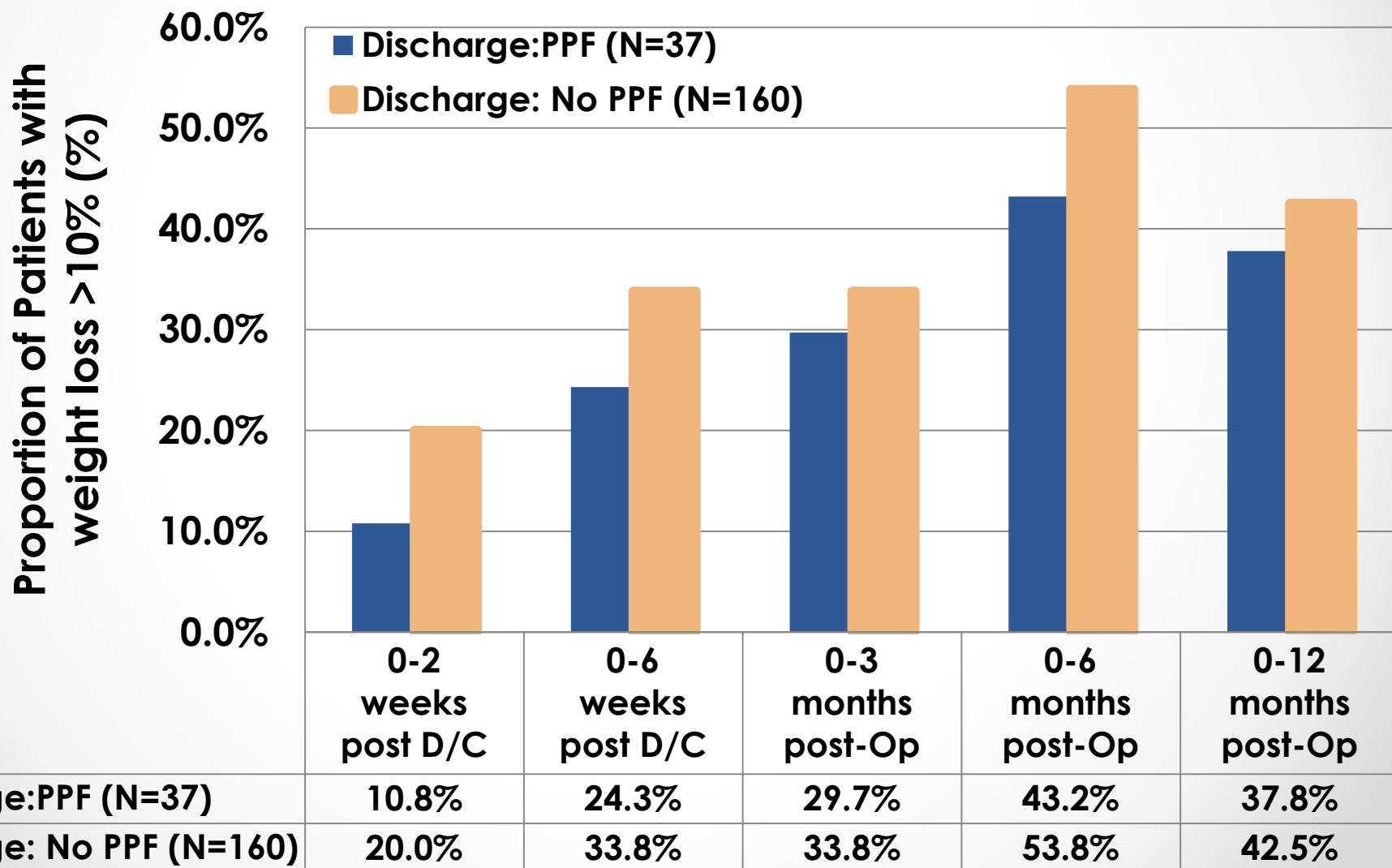
<b>Median</b>	<b>Post-pyloric Feeding (N=37)</b>	<b>No feeding (N=173)</b>
<b>Duration after discharge</b>	<b>78 days</b>	
<b>Age</b>	<b>67 years</b>	<b>65 years</b>
<b>Postoperative LoS</b>	<b>15 days</b>	<b>14 days</b>
<b>Gender (male)</b>	<b>62.1%</b>	<b>73.8%</b>
<b>Preoperative BMI (kg/m<sup>2</sup>)</b>	<b>24.6</b>	<b>26.0 (p=0.016*)</b>

# Change in weight: median weight loss vs. preoperative



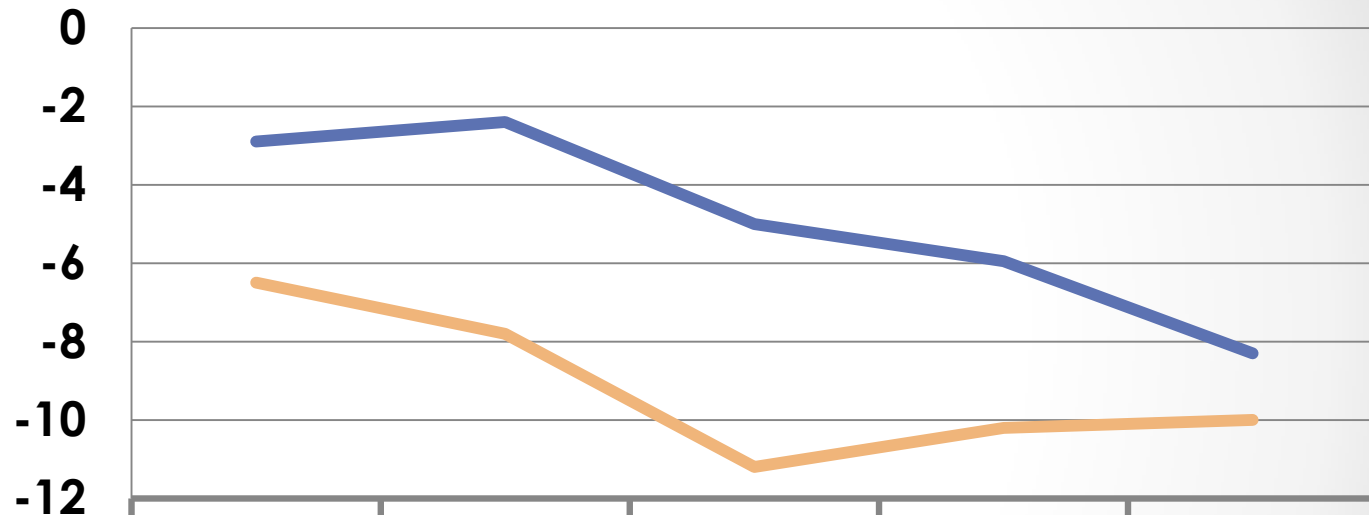
‡ KW & post-hoc MW analyses with Holm's correction

# Change in weight: weight loss >10% vs. preoperative



# Change in weight: median weight loss

Change in Weight (kg)



	0-2 weeks	0-6 weeks	0-3 months	0-6 months	0-12 months
Discharge: PPF (Kg)	-2.9	-2.4	-5	-5.95	-8.3
Discharge: PPF (%)	-3.9%	-3.2%	-6.8%	-8.0%	-11.2%
Discharge: No PPF (Kg)	-6.5	-7.8	-11.2	-10.2	-10
Discharge: No PPF (%)	-8.2%	-9.8%	-14.1%	-12.8%	-12.6%
p-value	<0.001**	<0.001**	<0.001**	<0.001**	0.364

— Discharge: PPF (Kg)

Discharge: PPF (%)

— Discharge: No PPF (Kg)

Discharge: No PPF (%)

p-value

0-2 weeks

0-6 weeks

0-3 months

0-6 months

0-12 months

-2.9

-2.4

-5

-5.95

-8.3

-3.9%

-3.2%

-6.8%

-8.0%

-11.2%

-6.5

-7.8

-11.2

-10.2

-10

-8.2%

-9.8%

-14.1%

-12.8%

-12.6%

<0.001\*\*

<0.001\*\*

<0.001\*\*

<0.001\*\*

0.364

# Readmissions: Failure to Thrive

	Post-pyloric feeding	No Post-pyloric Feeding	p-Value
Readmissions	18	64	0.359
Failure to Thrive	7 (38.9%)	42 (65.6%)	0.021*



# Conclusions

- **Oesophagectomy is associated with substantial weight loss over a short period of time**
- **Post-pyloric feeding after discharge associated with:**
  - **Significantly less weight loss**
  - **Significantly fewer readmissions with failure to thrive**
- **This audit supports the implementation of PPF at discharge in patients at risk of FTT**