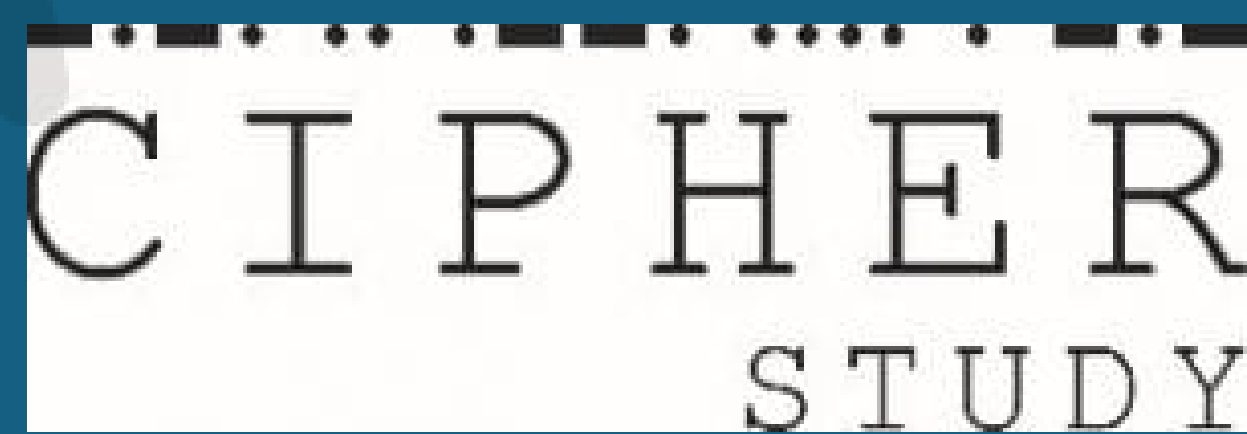


# The impact of parastomal hernia on quality of life using data from the CIPHER prospective cohort study.

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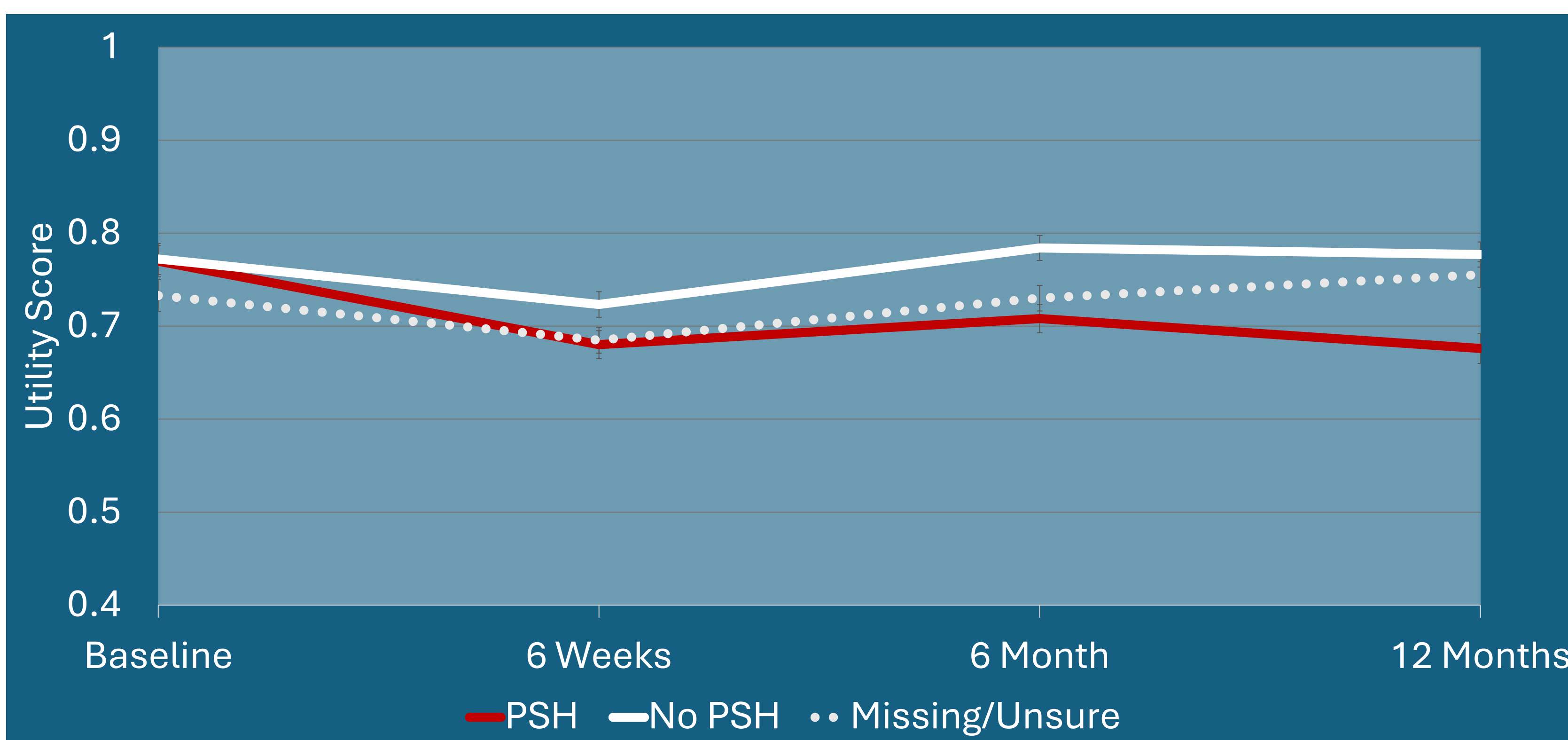


## KEY FINDINGS

- Developing a Parastomal Hernia (PSH) significantly reduces health-related quality of life amounting to 21.5 Quality Adjusted Life Days (QALD) lost per patient per year.
- We present utility scores for use in models evaluating surgical and other methods to reduce PSH prevalence.
- PSH increased the odds of having worse scores across all dimensions of EQ-5D-5L. >2x as likely in the pain/discomfort, usual activities, self-care, anxiety/depression dimensions.

## Background:

Despite Parastomal Hernia (PSA) being a common side effect of **Stoma surgery** (a surgically created opening in the abdomen) very little is known about its **impact on quality of life**.



## Interpretation:

Therapies to prevent PSH have the potential to significantly improve patient health and reduce the cost associated with stoma care. The estimates of HRQoL presented here can be used in cost-effectiveness studies evaluating these therapies

EQ-5D-5L Domain	Odds ratios for reporting worse scores (95% CI)	p-value
Mobility	1.61 (1.23-2.10)	0.001
Self-Care	2.50 (1.80-3.47)	>0.001
Usual Activities	2.03 (1.57-2.61)	>0.001
Pain/Discomfort	2.80 (2.17-3.62)	>0.001
Anxiety/ Depression	2.38 (1.82-3.10)	>0.001

## Methods:

- Over **12 months** EQ-5D-5L was collected up to **4 times for 2,341 people** with stomas across **78 Hospitals in the UK**.
- A repeated measures regression was used to analyse the association between EQ-5D-5L scores and PSH development.
- An ordinal regression was used to estimate the likelihood of reporting worse scores across the 5 health domains
- Individual level QALYs were calculated to estimate QALY loss due to PSH

## Results:

- Health-related quality of life was similar between groups at baseline (stoma formation). Differences were then apparent at 6 weeks, 6 and 12 months. (see figure)
- Developing a PSH was associated with a ~ -0.1 (95% CI: -0.126 to -0.071) lower utility score at 12 months post-surgery, compared to those who did not.
- The odds of reporting worse scores were higher in each of the 5 dimensions of EQ-5D-5L for those experiencing PSH compared to those who did not. >2x as likely for four of the five.