Effect of adherence to a national post-operative bundle of care for patients undergoing right hemi-colectomy surgery: National Enhanced Recovery Colorectal Initiative (NERCI)

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Introduction
Enhanced Recovery After Surgery (ERAS) is an evidence based methodology to improve patients return to normal function as soon as possible after surgery1.

Whilst standardisation of patient pathways improves patient care by reducing clinical variation and improving communication, adherence to the planned pathway remains challenging. A number of studies have demonstrated that the post-operative components of the pathway remain low with regards to adherence and consistency of application2,3.

Aim
To investigate the effect of adherence with the national standardised pathway for right hemi-colectomy surgery across NHS Scotland on time spent in hospital and resultant complications.

Methods
A National Enhanced Recovery Colorectal Initiative was launched in February 2016, with the aim to standardise care provided to all patients. All sites (n=15) utilised a standard post-operative bundle of care elements as demonstrated below. Data was collected for two years for all elective colorectal procedures performed across NHS Scotland and made available through a national dashboard. For the purpose of this study a subset analysis of a homogeneous group undergoing right hemi-colectomy surgery within the dataset were analysed (n= 732).

Results
As adherence to the post-operative bundle improved from 0 to 4 elements by the first day post-surgery, the median length of stay fell from 8 days to 4 days (p<0.001). There is no difference between the groups for each complication even though 50% of patients are going home earlier (p>0.05). Overall adherence with the bundle has risen from 38% to 75% across the two year period.

Conclusions
Implementation of a national standardised pathway of care and focusing on adherence to the post-operative bundle has significantly reduced the time spent in hospital across NHS Scotland with no detrimental effect on complications.

References
1 Kehlet, H., 1997. Multimodal approach to control postoperative pathophysiology and rehabilitation. BJA 78.: 606-617