Abstract of parallel session: 11
Title: Variation in the Adoption of Index Laparoscopic Cholecystectomy for Acute Cholecystitis and Gallstone Pancreatitis in the UK
Presenting Author(s): Humza Malik, Jonathan Clarke, Joachim Martii
Institutes: 1) Imperial College London (London)
Authors (s): Humza Malik 1, Jonathan Clarke 1, Joachim Martii 1, Ara Darzi 1, Elias Mossialos 1
Abstract no: 70
Presentation language: English

Abstract

Background
It is assumed that the wealth of high-level evidence in favour of index cholecystectomy (gall bladder removal in the acute phase of illness) for both cholecystitis and gallstone pancreatitis (GSP) has increased the de-adoption of interval cholecystectomy. Despite this many providers have not adjusted to best evidence based practice and concerns over variation in adoption have arisen. This may result in inequity and inefficient care with poor patient outcomes.

Methods
A retrospective analysis of English administrative hospital data was performed. All patients who had a cholecystectomy following an emergency admission for cholecystitis or GSP between 2007 and 2015 were included. The proportion of index (performed within 2 weeks of admission) as opposed to interval (between 2 and 52 weeks) cholecystectomy was calculated for each trust and year. Variation in the rate of adoption of the index procedure over time and between providers was then investigated. Different characteristics that are common to providers whom are adopters and non-adopters were then outlined.

Results
The total number of cholecystectomies included in the study was n=132 743 (n=55,094 for acute cholecystitis and n=77,649 for GSP). There is significant variation in rates of adoption of index cholecystectomy between trusts. Compared to the period from 2007-2010, in the period from 2010-2015 provider adoption of index cholecystectomy ranged from -37% and 37% (range [-1]=75, interquartile range [IQR]=18, standard deviation [SD]=13.2) for cholecystitis and -39 and 28% (R = 67, IQR = 11, SD=9.4) and for GSP. The mean rate of Index Cholecystectomy for Cholecystitis fell from 39.7% in the period before 2010 and 35.9% post 2010. With GSP the rate of Index Cholecystectomy was relatively stable within the two time periods (19.3% pre 2010, and 21.6% post 2010). Importantly, more than half of the providers showed trends of de-adoption of index operation, therefore, not adhering to latest evidence and guidance.

Conclusions
Current UK practice is far from best practice with notable variation amongst providers, furthermore a significant proportion of providers have regressed from best practice. There has been an improved response for the treatment of GSP which may be a result of more instructive guidance. Policy measure in the form of financial incentives, didactic leadership and infrastructural support may address this imbalance.