

00390 **Outcomes From the Implementation of an Acute Care Surgical Service at SGH**

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Aims: Acute care surgery (ACS) is an established surgical sub-specialty incorporating trauma, emergency surgery and critical care particularly in North America. In Singapore, delivery of quality care to emergency general surgical (EGS) patients competes with the traditional models of healthcare delivery and also increasing elective workloads. Singapore General Hospital (SGH) commenced an ACS service in October 2016.

Methodology: The ACS service is a consultant led team with dedicated junior staff that manages all EGS and trauma patients 24/7 with overnight and weekend patients handed over each morning. A retrospective review compared two 12-month cohorts before (Financial year 15) and after (Financial year 17) the implementation of ACS. All EGS and trauma patients were included in the analysis. Demographic and key performance indicators were assessed.

Result: There were 11,462 (5701 post-ACS) patients seen in total between the two cohorts. Improvements were noted in the FY17 period. These included a reduction in overall mean length of stay (LOS) by 0.4 days ($P < 0.05$) with significant reductions in LOS for appendicitis (0.3d), gallbladder disease (1.0d), intestinal obstruction (0.3d) and diverticulosis (0.8d) patients. There was a reduction in LOS for ICU patients (1.0d, NS). During FY17 the time from ED admission to operation and operation to discharge for common surgical conditions improved (appendicitis gallbladder, intestinal obstruction and skin infections). Reductions in time to OT for urgent A and B chit cases during the ACS timeframe were also noted. Consultant presence in OT for major cases increased from 82 to 98% under ACS. No significant changes were noted in 30-day re-admission rates post discharge. The overall mortality rate decreased 0.5% (1.6-1.1%, $P < 0.05$) in the ACS period FY17.

Conclusion: A major change to the traditional model of care, the ACS service at SGH has led to improvements in the efficiency and efficacy of healthcare delivery with no compromise to patient safety.