

Can a perioperative physician improve care and reduce length of stay in a surgical emergency admission unit?

Authors: Margaret Hammersley,^A Hywel Jones,^A Sudhir Singh,^A Irene Stratton,^B Michael Silva^A

Aims

To report care processes in a surgical emergency admissions unit (SEU) at a major teaching hospital before and after the appointment of a full-time consultant general physician to work collaboratively with the surgical team.

Methods

Anonymised patient-level data for admissions to SEU between 1 January 2012 and 30 June 2014 were extracted from Hospital Episode Statistics. Data are reported during three time periods. During the first, standard surgical care was in place (no physician). During the second time period, there was a pilot of limited medical input delivered by an SpR in geriatrics. In the third period, a full-time experienced general physician was appointed in SEU and a weekly multidisciplinary meeting was introduced. Admissions increased from January 2013 because a local hospital closed to emergency surgery. Numbers of patients, mean length of stay (LOS) and change in LOS were calculated during each time period by age group.

Results

There were 15,362 patients admitted to the unit.

The reduction in LOS was greatest in those aged 60–79 (1.6 days) and those aged 40–59 years (1.1 days). Median LOS was unchanged at all ages and the reduction was seen in longer stays, with the 90th centile reducing from 11 days to 8 days, and the 95th centile from 17 to 14 days.

Conclusion

Input from a consultant-level physician can ameliorate increase in patient numbers and reduce LOS. Multidisciplinary team meetings should be held at 7 and 14 days to further reduce LOS and facilitate discharge.

Conflict of interest statement

Nil. ■

Table 1. Patient data.

Parameter	1 January 2012 to 31 December 2012	1 January 2013 to 30 June 2013	1 July 2013 to 30 June 2014
n	4,685	3,384	7,293
Increase from baseline admission rate		44%	56%
Age, median (interquartile range)	48 (31–67)	50 (32–68)	49 (31–69)
Died, n (%)	99 (2.1%)	62 (1.8%)	122 (1.7%)
Discharged to home, n (%)	95.7%	96.1%	96.1%
LOS in days, mean (standard deviation)	4.7(10.9)	4.2(8.4)	3.8 (7.7)
Reduction in LOS in days, mean (95% confidence interval)		0.5 (0.1–1.0)	0.8 (0.5–1.2)
16–39 years		0.1 (–0.4 to 0.6)	0.4 (0.1 to 0.7)
40–59 years		0.7 (–0.2 to 1.6)	1.1 (0.5 to 1.8)
60–79 years		1.3 (0.2 to 2.4)	1.6 (0.6 to 2.5)
80 years and above		0.5 (–0.7 to 1.8)	0.6 (–0.6 to 1.7)

Authors: ^AOxford University Hospitals, Oxfordshire, UK; ^BGloucester NHS Foundation Trust, Cheltenham, UK