

SP2.2.1

Improving surgical training: core programme performance related to rotation theme, design, and trainee protocol engagement

Katie Mellor¹, David B Robinson¹, Osian P James¹, Arfon GMT Powell^{1,2}, Richard J Egan^{3,4}, Wyn G Lewis¹

¹Health Education and Improvement Wales' School of Surgery, Tŷ Dysgu, Cefn Coed, Nantgarw, UK, CF15 7QQ, ²Division of Cancer & Genetics, Cardiff University, UK, CF14 4XW, ³Department of Surgery, Morriston Hospital, Swansea, UK, SA6 6NL, ⁴Swansea University, Singleton Park, Swansea, UK, SA2 8PP

Aims: Core Surgical Training (CST) and Improving ST (IST) programmes are in flux and their design controversial. This study aimed to evaluate the relative performance of a single Statutory Education Board's (SEB) CST and IST programmes related to rotation design, theme, and protocol engagement.

Methods: Individual rotations numbering 181 were analysed prospectively over six-years (2014 to 2020). Primary outcome measures were MRCS pass and specialty National Training Number (NTN) appointment.

Results: Overall MRCS pass was 68.5% and NTN appointment 39.2%. NTN appointment related to rotation design varied from zero to 100% (median 40.0%). Conversion to NTN varied by specialty theme and ranged from: General surgery CST 35.6% to General surgery (IST pilot) 87.5% ($p=0.004$). Multivariable analysis revealed NTN appointment was associated with: operative logbook caseload >464 (OR 3.02, $p=0.068$), scientific article publication (OR 4.82, $p=0.006$), and universal ARCP Outcome 1 (OR 37.83, $p<0.001$), and IST (OR 55.54, $p=0.006$).

Conclusions: Focused rotational design allied to enhanced performance management, and protocol engagement, were associated with improved conversion to higher surgical specialty training.