each specialty used ultrasound guidance, most using it in real-time (p<0.0001).

Conclusions: Fewer 2011 trainees had inserted over 50 CVCs, a number associated with reduced complications. Low annual and total numbers of CVC insertion by non-anaesthetists may expose patients to greater risks, despite the use of ultrasound guidance. If CVC insertion is to remain a key skill in surgical training, changes in training structure are required.

0109: EARLY GOAL DIRECTED THERAPY: WHO SHOULD PROVIDE IT?
Eugene Tang, Marion Mackinnon, Stephen McNally. Royal Infirmary of Edinburgh, Edinburgh, UK

Aim: Early Goal Directed Therapy (EGDT) is a key component in managing sepsis and a cornerstone of the Surviving Sepsis Campaign (SSC). Previously we demonstrated that non-anaesthetic registrars lack the knowledge/skills to provide EGDT. This five year follow-up determines whether current trainees have had greater training in this area.

Methods: A questionnaire was designed for online access. Invitations were sent to registrars (SpRs/ST3+) in Anaesthetics, General Surgery and Medicine throughout Scotland in 2006 and 2011.

Results: In 2011, 233 registrars replied with 175 responses in 2006. There had been an increase in the awareness of EGDT over the 5 year period (physicians 51.3% vs. 87.5%, surgeons 70.2% vs. 88.5%). 62% of surgeons and 76% could provide EGDT. However, the number of non-anaesthetists able to provide EGDT remains low (physicians 32%, surgeons 9%). This compares with anaesthetists where 76% could provide EGDT.

Conclusions: There is now a greater awareness of EGDT/SSC in non-anaesthetic trainees. Although over half of non-anaesthetists possessed skills to initiate EGDT, few are able to provide EGDT in its entirety. As non-anaesthetists lack the full complement of skills/knowledge to implement EGDT, these patients require referral to anaesthetic colleagues for optimal management.

0186: INDEXED PUBLICATION PRACTICES OF CONSULTANT PLASTIC SURGEONS IN THE UK
Nigel Malvoure 1, Michelle Griffin 2, Sandip Hindocha 3, 1 Brighton and Sussex Medical School, Brighton, UK; 2 Manchester Interdisciplinary Biocentre, University of Manchester, Manchester, UK; 3 Whiston Hospital, Liverpool, UK

Aim: To characterise the publication practices of consultant surgeons, who are full members of the British Association of Plastic, Reconstructive and Aesthetic Surgeons (BAPRAS), over a 2-year period.

Methods: Surgeons were identified from www.bapras.org.uk/page.asp?id=34; gender and highest academic degrees were recorded. PubMed was searched for each surgeon between 2009/11/29 and 2011/11/28 e.g. Joe Alfred Burns FRCS/Plast’s search would be: “Burns, Joe+A OR Burns+Joe+A”, “Burns,JA AND Burns+JA” and “Burns+JA AND Burns+jf” or “Burns” if no results returned. The article type, whether clinical or scientific and the surgeon’s author rank were recorded. All searches were repeated on 3 occasions.

Results: Out of 741 articles, 46.4% were research and outcome analysis articles; 26.2% case reports/series; 19.6% letters/comment/technique articles; 6.9% reviews; 0.7% audits and 0.3% editorials. The ratio of clinical to science studies was 15:1. Consultant surgeons were first author on 62.2% of publications and last author on 62.2%. Males and females published equally (P=0.859). Surgeons with higher academic degrees had a higher number of indexed peer-reviewed publications (P=0.001).

Conclusions: Outcome analyses, case reviews and letters on technique or commentaries remain popular methods of communicating and disseminating knowledge. There appears to be a greater requirement for basic science research within plastic surgery in the UK. In addition more published audits may provide improved healthcare economics and standards in practice.

0234: A SYSTEMATIC REVIEW OF MOTION ANALYSIS AS A VALID TOOL FOR LAPAROSCOPIC SKILL ASSESSMENT IN GENERAL SURGERY
John Mason, James Ansell, Neil Warren, Jared Torkington. Welsh Institute of Minimal Access Therapy (WIMAT), Cardiff, UK

Aims: To provide an overview of the different motion analysis technologies available for the assessment of laparoscopic skill, and to assess the evidence for their validity.

Methods: A systematic review was performed using Embase, MEDLINE and PubMed for studies investigating motion analysis as a valid tool for laparoscopic skills assessment. Studies were assessed according to a modified form of the Oxford Centre for Evidence Based Medicine levels of evidence and recommendation.

Results: Thirteen studies were included. Twelve (92.3%) evaluated construct validity, which was demonstrated for various endpoints across a range of laparoscopic tasks for the Advanced Dundee Endoscopic Psychomotor Tester (ADEPT), the Hiroshima University Endoscopic Surgical Assessment Device (HUESAD), the Imperial College Surgical Assessment Device (ICSAD), the ProMIS Augmented Reality Simulator and the Robotic and Video Motion Analysis Software (ROVIMAS). Face validity was reported by 1 study each for ADEPT and ICSAD. Concurrent validity was reported by 1 study each for ADEPT, ICSAD and ProMIS. There were no studies investigating predictive validity.

Conclusions: This study confirms the construct validity of motion analysis in laparoscopic skills assessment. The most useful metrics appear to be time, path length and number of hand movements. Future work should concentrate on predictive validity.

0241: COMPARING THE ATTITUDES TOWARD AND KNOWLEDGE OF INCIDENT REPORTING BETWEEN JUNIOR DOCTORS AND NURSES IN A DISTRICT GENERAL HOSPITAL
Jessamy Bagena 1, Kapil Sahnan 1, Saran Shantikumar 2, 1 Severn Surgical Deanery, Bristol, UK; 2 Bristol Heart Institute, Bristol, UK

Aim: Open reporting improves a system’s ability to deal with risky processes. We compared the attitudes and knowledge of incident reporting between junior doctors and nurses in a district general hospital.

Methods: A questionnaire examined healthcare workers’ attitudes towards reporting and errors. It also assessed knowledge of incident reporting and attitudes towards training in patient safety. Nurses (band 5-7, n=50) and junior doctors (FY1-CT2, n=50) completed the survey online and anonymously.

Results: Whilst similar proportions of each group knew a safety organisation (78% nurses vs. 58% doctors, p=0.21), significantly more nurses had filled out an incident report (96% nurses vs. 52% doctors, p<0.001). Doctors felt they did not have sufficient training in patient safety (96% doctors vs. 24% nurses, p<0.001) and fewer felt confident with patient safety issues (38% vs. 72%, p<0.001) The majority of respondents agreed that incident reporting was beneficial (69%, p=0.001) although a large proportion also felt they would be blamed for errors (61%, p=0.03).

Conclusions: Junior doctors need more training in patient safety issues and reporting. Nurses generally have a more positive and confident view towards patient safety issues. Healthcare institutions should focus on training their staff in patient safety and fostering a blame-free culture.

0301: IMPROVING THE QUALITY OF OPERATION NOTES IN AN ORTHOPAEDIC ONCOLOGY DEPARTMENT THROUGH EDUCATION AND IMPLEMENTATION OF A MNEMONIC DEVICE
Robert Grimer, Natasha Bauer, Anna Wilson. University of Birmingham, Birmingham, UK

Aim: To ascertain the quality of operation notes of patients undergoing a surgical procedure in the department of Orthopaedic Oncology.

Method: A retrospective audit involving 100 operation notes, competed by 6 consultants and 12 trainees, of patients undergoing elective procedures from January 2011 to December 2011. The quality of documentation was determined by the adherence to the guidelines published by the Royal College of Surgeons of England (Good Surgical Practice, 2008). Our findings were presented, highlighting areas requiring improvement. In addition to educating surgeons, we implemented a mnemonic device and have conducted a re-audit.

Results: A quarter (25%) of all operation notes were considered illegible with instructions about DVT and antibiotic prophylaxis missing in 67% and 37%. The indication and post-operative management was absent in 13% and 3% of notes, respectively. The re-audit showed a significant improvement in several areas of documentation.

Conclusions: Clear and accurate documentation can inherently improve the subsequent quality and effectiveness of patient care. One way of doing so is by introducing a mnemonic device to ensure that important information is not routinely missed out.