

Commission on the Future of Surgery

With the developments of technology influencing advancements in surgery this affects not the operating surgeon but the team around them.

There are a number of key factors which will change with these developments;

- The theatre and the wider surgical settings can be a high pressure environment which is already highly technical, with the introduction of more complex equipment. In order to ensure patient safety the training needs of nurses who work in a scrub and circulating capacity need to be reviewed. This includes having specific training for new equipment and maintaining competency for the set-up, use and problem solving of the new technology. There is also a potential learning deficit for scrub and circulating practitioners as well as surgeons if there is an on the table complication which requires conversion and subsequent different instrumentation and consumables often with short notice and in urgent circumstances. For example if there is a major haemorrhage during a laparoscopic or robotic assisted cholecystectomy the staff involved may never have scrubbed for an open cholecystectomy and therefore may be inexperienced with the equipment at critical time. In order to overcome these potential patient safety issues it may be necessary to have multi professional, simulated training incorporating human factors to ensure there are no gaps in training and knowledge (Ballangrud et al. 2017; Dunn et al. 2016). An increase in multi professional education, competency and assessment will help with the appreciation of different roles, reduce the traditional and hierarchical culture within theatre (Turrentine et al. 2016). Another consideration is with the existing assistant practitioners and nursing associates there will need to be consideration of the appropriateness of them in a scrubbing capacity for these increasing complex procedures specifically in respect of accountability.
- Due to workforce challenges there are already a need for new structures within teams and non-traditional ways of working. The surgical team within the operating theatre which once would of comprised wholly of doctors now may have a mixture of enhanced (Surgical First Assistants) and Advanced (Surgical Care Practitioners) to undertake assisting or surgical interventions, depending on the individuals role (RCS 2014). In instances such as robotic the SCP may be the only member of the surgical team scrubbed as the surgeon sits at a console (Luck and Gillespie 2017). The SCP may also be the person undertaking independent surgery whilst supervised peripherally. Both these examples mean that the role of the consultant surgeon is changing with the supervision of non-medical staff. This education needs funding and alternative career pathways developing which can provide opportunities for the nursing workforce to develop in alternative ways helping with recruitment and retention as they may appeal to prospective applicants to nursing and existing nurses looking for career development (Pearce 2017). The non-traditional roles can enhance the training of junior doctors (RCS 2016).
- Pre and post operative nursing care is also changing, there are differences with postoperative care due to enhanced recovery protocols which aim to return the patient to their normal activities of living earlier with management of their surgical stay and length of stay in hospital reduced (Burch et al. 2017).

Ballangrud R, Husebo S, Aase K, Aaberg O, Vifladt A, Berg G, Hall-Lord M (2017) Teamwork in hospitals: a quasi-experimental study protocol applying a human factors approach BMC Nursing ; London Vol. 16

Burch J, Fecher-Jones I, Balfour A, Fitt I, Carter F (2017) What is an enhanced recovery nurse: a literature review and audit Gastrointestinal Nursing Vol. 15, Iss. 6, 43-50.

Dunn L, Tyas M, Garside J (2016) Preregistration students' reactions to simulation as an education approach within an operating department practitioner curriculum - a qualitative review Clinical Simulation in Nursing Vol. 12, Iss. 5: 147-151.

Luck E and Gillespie B (2017) Technological Advancements in the OR: Do We Need to Redefine Intraoperative Nursing Roles? Association of Operating Room Nurses. AORN Journal ; Denver Vol. 106, Iss. 4: 280-282

Pearce L (2017) How robots are opening up surgical opportunities Nursing Standard Vol. 32, Iss. 3, 38-39.

Royal College of Surgeons (2016) A Question of Balance; The Wider Surgical Team
<https://www.rcseng.ac.uk/library-and-publications/rcs-publications/docs/question-of-balance/>

Royal College of Surgeons (2014) The Curriculum Framework for the Surgical Care Practitioner
<http://accreditation.rcseng.ac.uk/pdf/SCP%20Curriculum%20Framework%202014.pdf>

Turrentine F, Rose K, Hanks J, Lorntz B, Owen J, Brashers V, Ramsdale, E (2016) Interprofessional training enhances collaboration between nursing and medical students: A pilot study Nurse Education Today Vol. 40: 33-38