



Kenneth Walker

Professor of Innovation in Surgical
Education (supported by NHS England)

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Kenneth Walker MBChB MD FRCS FFSTEd FFRRHHed

Professor of Innovation in Surgical Education, Royal College of Surgeons of Edinburgh (RCSEd)
Director of SERI Lab, RCSEd & NHS Highland
Consultant Colorectal & Pelvic Floor Surgeon, NHS Highland



Prof Kenneth Walker has been based in Inverness in the North of Scotland since 2004, having previously trained and served in Aberdeen, Glasgow, Sydney and Nepal. He was a colorectal and general surgeon until 2018, then subspecialised in Pelvic Floor functional surgery, especially continence, and endoscopy.

As a trainee, trainer and Associate Dean, Kenneth found inconsistencies and gaps in surgical education that were not being met by “apprenticeship” alone. He and his colleagues have spent 15 years working with health boards, deanery and Royal Colleges to develop adjuvant training interventions, often using simulation, integrating technical and non-technical training, and building communities of practice.

He co-led the design and delivery of the award-winning Scottish Surgical Boot Camps, then of Scotland’s comprehensive Core Surgical Simulation Strategy. Further projects include the Incentivised Laparoscopy Practice programme, and iView Expert (understanding experts’ performance through video-cued recall and debrief). Most recently, he has been leading development of RCSEd’s COSMOS programme (Consultation Skills that Matter for Surgeons). This has been a team game.

Themes include integrating technical and non-technical skills coaching, simulation strategies, cognitive bandwidth, getting it right first time, Safety 1 and Safety 2 thinking (learning from successes and failures), compassionate care, Deliberate Practice, systems change management, safe debriefing, burn-out, and “when it all goes wrong”.

Together with Prof Jennifer Cleland, Prof Walker has co-supervised a series of PhD fellows studying these interventions amongst others using mixed qualitative and quantitative methods. Kenneth has also supervised Specialty Trainees, Rural Surgical Fellows and International Surgical Fellows.

Ken’s group has published each of these studies. He regularly speaks and gives workshops at national and international meetings and occasionally in podcasts and webinars.

Overseas, he volunteers annually with training projects in Nepal (where he worked for 2 years) and the Occupied Palestinian Territories. He co-leads RCSEd’s Non-Technical Skills for Surgeons (NOTSS) international group, which partners with faculty in 25 countries and with UNITAR.

Ken’s wife is a professional artist and they have 3 grown-up children. He loves being outdoors in the Highlands on foot, bike, skis or sea kayak, playing in a (very) amateur band, community church, Indian food and Liquorice Allsorts.

Contd./...

SELECTED PUBLICATIONS

Integrated Surgical Simulation

Shah AP, Cleland JA, Walker KA, Hawick L, Walker KG. Integrating simulation into surgical training. A qualitative case study of a national programme. *Advances in Simulation* 2023; 8: 20.

Shah AP, Walker KA, Walker KG, Cleland JA. Context matters in curriculum reform: a story of national level change in surgical training. *Medical Education* 2023; 57(8): 741- 752.

Shah AP, Walker KA, Hawick L, Walker KG, Cleland JA. Scratching beneath the surface: how organisational culture(s) influences curricular reform. *Medical Education* 2023; 57(7): 668- 678.

Shah AP, Walker KA, Walker KG, Hawick L, Cleland JA. It's making me think outside the box at times: a qualitative study of dynamic capabilities in surgical training. *Advances in Health Sciences Education* 2022; 26: 1-20.

Walker KG, Shah AP. Simulation for early years surgical training. *Surgery* 2021; 39(12): 771-7.

Deliberate Practice

Walker KG, Shah AP, Brennan P, Blackhall VI, Nicol LG, Yalamarathi S, Vella M, Cleland JA. Scotland's "Incentivised Laparoscopy Practice" programme: engaging trainees with take-home laparoscopic simulation. *The Surgeon* 2023; 21(3): 190-7.

Blackhall VI, Cleland JA, Moug S, Wilson P, Walker KG. Barriers and facilitators to deliberate practice using take-home laparoscopic simulators. *Surgical Endoscopy* 2019; 33(9): 2951-9.

Falconer R, Cleland JA, Semple C, Walker KG, Watson AJM. Development and delivery of a national pilot programme of home-based simulation for vascular anastomosis training. *Journal of Surgical Simulation* 2022; 9: 99-106

Falconer R, Semple CM, Walker KG, Cleland J, Watson AJM. Simulation for technical skill acquisition in open vascular surgery. *Journal of vascular Surgery* 2021; 73(5): 1821-1827.

Surgical Boot Camps

Walker KG, Blackhall VI, Hogg ME, Watson AJM. Eight years of Scottish surgical boot camps – how we do it now. *Journal of Surgical Education* 2020; 77(2): 235-241.

Cleland JA, Walker KG, Gale M, Nicol LG. Understanding the sociocultural complexity of a surgical simulation "Boot Camp". *Medical Education* 2016; 50(8): 829-41. (CAMES 1 award for Innovation in Simulation 2016.)

Cleland JA, Patey R, Thomas IM, Walker KG, O'Connor P, Russ S. Supporting transitions in medical career pathways: the role of simulation-based education. *Advances in Simulation* 2016; 1: 14.

Thomas IM, Nicol LG, Regan L, Cleland JA, Maliepaard D, Clark L, Walker KG, Duncan JL. Medical students driven to distraction. Improving patient safety teaching through the use of a simulated ward round experience: a prospective controlled study. *BMJ of Quality & Safety* 2015; 24: 154-161.

Understanding expertise

Walker KG, Whiteley I. iView Expert: lessons from space on seeing inside the heads of experts. *Bulletin of the Royal College of Surgeons of England*, 40th anniversary edition June 2023.

Blackhall VI, Walker KG, Whiteley I, Wilson P, Cleland JA. iView Expert: a tool to uncover expertise and support surgical skills training. *Medical Education* 2021; 55(5): 658.

SELECTED PRESENTATIONS

Lectures & keynote addresses

Non-technical skills for surgeons: to err is human. Indian Association of Surgical Gastroenterology, Hyderabad 2023.

Sacral neuromodulation: growing a patient-centred service. Scottish Pelvic Floor Network, Aberdeen 2023.

To err is still human, even with robotic arms; Non-Technical Skills for Surgeons. Keynote, European Society of Coloproctology, Dublin 2022.

Surgical simulation and eLearning: essentials in a post-COVID world. Royal College of Surgeons of Edinburgh COVID webinar series 2020.

It's not about the simulation, it's about the learning. International Conference on Surgical Education and Training, Edinburgh 2019.

Buzz, burn-out and rebuilding. The Balancing Act - North of Scotland Wellbeing Conference, NHS Grampian, Aberdeen 2019.

Surgical simulation: what will it take? The RCSEd Sir Robert Shields lecture, Association of Surgeons of GB&I, Belfast 2016.

The role of simulation in training for non-technical skills. Surgical Crises and Never Events. RCSEd, Royal Society of Medicine & Clinical Human Factors Group conference, Edinburgh 2014.

Delivering good rectal cancer treatment to hard-to-reach populations. 18th Surgeons' Conference of Myanmar, Yangon, 2011.

What are the essentials for managing rectal cancer? BP Koirala Memorial Cancer Hospital, Bharatpur, Nepal 2009.

Modern rectal cancer management using appropriate technology. "Perspectives on Colorectal Cancer" National Meeting, Institute of Oncology, Kiev, Ukraine 2008.

Podcast series

"The Performance Project" for mid-career surgeons: Steve Yule & Ken Walker talking with thought leaders about enhancing performance. Royal College of Surgeons of Edinburgh 2021-2. (Guests: Iya Whiteley, Michael Money Penny, Carole-Anne Moulton, Roger Kneebone, Lorraine Hope, Ken Catchpole)

Selected workshops

Stewart B, Walker KG, Geraghty A, Pringle J. Developing a national simulation strategy in postgraduate specialty training. NHS Education for Scotland Annual Virtual Conference 2022.

Geraghty A, Walker KG, Blackhall VI, Watson AJM. Developing internal motivation in trainees; moving beyond a transactional curriculum. Lessons from the Scottish IST programme. NHS Education for Scotland Scottish Medical Education Conference, Edinburgh 2019.

Walker KG. Non-Technical Skills for Surgeons: how to debrief. 14th International Skills Lab Symposium, Neuruppin, Germany 2019.

Walker KG. Training surgeons in non-technical skills. Quality Improvement Collaborative, Palestine Medical Council & Juzoor Foundation, Ramallah, Palestine 2017.

Thomas I, Walker KG. Developing ward round skills through simulation. NES Scottish Medical Education Conference, Edinburgh 2014.

EXPERT PANELS

Surgical Royal Colleges

RCSEd NOTSS committee & co-lead of Intnl subgrp since 2021

RCSEd Education Advisory Network since 2019

RCSEd Faculty of Surgical Trainers Advisory Board 2018-21 & since 2024

RCSEd SLWG "Standards informing Delivery of Care in Rural Surgery" 2015-16

Scottish Surgical Simulation Collaborative 2012-20 (chair 12-16)

JCST SLWG on Surgical Simulation 2012-16

NHS Education for Scotland

Medical Simulation Collaborative 2016-23

Surgical Specialties Training Board 2012-23

University of Edinburgh

Surgical Coaching Delphi group 2022-23

Surgical crisis training Delphi group 2011-12

Global Surgery

Juzoor Foundation for Health & Social Dev^t, Palestine, since 2017

Health Exchange Nepal since 2009

NASA / Harvard Medical School

Mixed reality care-guidance system to support medical event management on long duration exploration missions 2020-21