Biography

Stuart is a practicing anaesthetist, simulation educator and researcher with interests in Patient Safety and Human Factors / Ergonomics. His research includes investigation of the effects of cognitive aids (checklists and algorithms) on team functioning during emergencies and on simulation as an educational technique to teach patient safety and improve patient and health worker outcomes. He has been involved in the development of several innovative patient safety courses for both undergraduate and postgraduate students and has been closely associated with the Masters of Perioperative Medicine for which he co-supervises a unit on Human Factors and Patient Safety (POM5005). Stuart is also the convener of the 8th International Clinical Skills Conference in Prato, Italy in 2019 and Founding director of the charity that runs the conference: The International Clinical Skills Foundation Inc.

He is a member of the International Advisory Panel for ‘Anaesthesia’ Journal editorial board and Associate editor for the European Society for Simulation ’Advances in Simulation’ journal.

Qualifications

Human Factors, PhD, The University of Queensland
Psychology, Masters of Human Factors, The University of Queensland
25 Feb 2006 → … Fellow of the Australian and New Zealand College of Anaesthetists, FANZCA
May 2002 → … Member of the Royal College of Anaesthetists, MRCA

Employment

Senior Research Fellow
Anaesthesia Teaching & Research
Central Clinical Sch
1 Jan 2017 → present

Honorary Clinical Associate Professor
The University of Melbourne
Parkville, Australia
1 Apr 2016 → 1 Apr 2021

Research output

The MacGyver bias and attraction of homemade devices in healthcare

Use of simulation to improve management of perioperative anaphylaxis: a narrative review

Decision-centred design in healthcare: the process of identifying a decision support tool for airway management

Multifaceted approaches and PONV: A critical appraisal
Leadership sharing in maternity emergency teams: a retrospective cohort study in simulation

Anaphylaxis to intravenous gelatin-based solutions: a case series examining clinical features and severity

Anaphylaxis Clinical Care Standard: Improving how we manage adults with anaphylaxis in Victoria

Medication handling: towards a practical, human-centred approach

User centred development of a smartphone application for wayfinding in a complex hospital environment

The co-design process of a decision support tool for airway management

Attempt XYZ: airway management at the opposite end of the alphabet

Decision making in a ‘cannot-intubate, cannot-oxygenate’ scenario. A reply

Human factors enablers and barriers for successful airway management - an in-depth interview study

Shared leadership in healthcare action teams: a systematic review

Asking key questions in the consent process – a reply

The illusion of informed consent

Exploring Decision Pathways in Challenging Airway Management Episodes

Lost in translation? Comparing the effectiveness of electronic-based and paper-based cognitive AIDS
Failed Vocalis Muscle Monitoring During Thyroid Surgery Resulting From Residual Muscle Relaxation: A Response

Helping experts and expert teams perform under duress: an agenda for cognitive aid research

ANZAAG/ANZCA Perioperative Anaphylaxis Management Guidelines.

Simulation and mental health outcomes: a scoping review

Coffee, checklists and self-flagellation.

Strategies for managing adverse events in healthcare simulations.

The cognitive aids in medicine assessment tool (CMAT) applied to five neonatal resuscitation algorithms

Time for a breath of fresh air: Rethinking training in airway management

Evidence Is Important: Safety Considerations for Emergency Catheter Cricothyroidotomy

Junior doctors and nurses' views and experiences of medical error: Moving toward shared learning and responsibility

An Electronic Task Management (ETM) system for after hours hospital work and subsequent socially mediated effects of task completion

Examination of anesthetic practitioners' decisions for the design of a cognitive tool for airway management


The effect of two cognitive aid designs on team functioning during intra-operative anaphylaxis emergencies: A multi-centre simulation study

A radical evolution: the 2015 Difficult Airway Society Guidelines for managing unanticipated difficult or failed intubation
The effect of routine reversal of neuromuscular blockade on adequacy of recurrent laryngeal nerve stimulation during thyroid surgery

Appendix B: Basic airway management and basic and advanced cardiac life support algorithms

Getting more efficient Rapid Response System (RRS) utilization by the use of a general ward based deteriorating patient contract

Quality Improvement and patient safety

Rapid response systems and collective (in)competence: an exploratory analysis of intraprofessional and interprofessional activation factors

Safe anaesthetic care: Further improvements require a focus on resilience


Sink or swim? the difficulty of finding the correct level of independence and support for trainees

Transition from supraglottic to infraglottic rescue in the "can't intubate can't oxygenate"(CICO) scenario

A national research agenda for healthcare simulation: Preliminary report

In: Response

The effects of a displayed cognitive aid on non-technical skills in a simulated 'can't intubate, can't oxygenate' crisis

The use of cognitive aids during emergencies in anesthesia: a review of the literature
Simulation in clinical teaching and learning

Telephone referral education, and evidence of retention and transfer after six-months

The use of medical simulation to improve patient safety

What stops hospital clinical staff from following protocols? An analysis of the incidence and factors behind the failure of bedside clinical staff to activate the rapid response system in a multi-campus Australian metropolitan healthcare service

Examining the challenges of intra-professional communication for international medical graduates using simulation

Why don't hospital staff activate the rapid response system (RRS)? How frequently is it needed and can the process be improved?

ISBAR for clear communication: One hospital's experience spreading the message

Measurement of jugular venous pressure

Simulation-based education for building clinical teams

The teaching of a structured tool improves the clarity and content of interprofessional clinical communication

The evaluation of structured communication tools in healthcare

Development of team coordination and performance measures in a trauma setting

Cognitive aids in a simulated anesthetic crisis [2]

Attitudes to safety and teamwork in the operating theatre, and the effects of a program of simulation-based team training
Anaesthetists’ knowledge of the QT interval in a teaching hospital

Awards
Crisis management cognitive aid to improve team coordination: A multi-centre simulation study
Marshall, S., Burian, B. K. & Clebone, A.
Australian and New Zealand College of Anaesthetists: AUD61,891.00
1/01/19 → 31/12/19

Projects
Effective cognitive aids for clinical emergencies
Marshall, S.
National Health & Medical Research Council (NHMRC), Australian and New Zealand College of Anaesthetists
1/01/17 → 31/12/20

Investigation and prevention of fixation errors during airway management
Marshall, S. & Lenne, M.
Australian and New Zealand College of Anaesthetists
1/01/15 → 31/12/16