



MORSim
Multidisciplinary
Operating Room Simulation



**MEDICAL AND
HEALTH SCIENCES**

Team training makes for smoother, safer surgery

We would like to announce a new simulation course for all NZ anaesthetic technicians and their operating room colleagues. MORSim (Multidisciplinary Operating Room Simulation) is a national team training program for full surgical teams. The goal is to improve the safety and efficiency of care for patients. The program is funded by ACC, delivered by the University of Auckland, and supported by the Health Quality and Safety Commission.

Adverse events during hospitalisation damage individuals and waste resources on additional treatment (1,2). There are however opportunities for improvement through safer practices, and systemic and cultural change (1,3). Team training is a specific intervention that is supported by international patient safety bodies (4) and can benefit team processes, clinical processes, and patient outcomes (5).

MORSim (Multidisciplinary Operating Room Simulation) is a team training program involving realistic simulated surgical cases that challenge communication and co-ordination between members of operating room teams. It is multidisciplinary, and trains surgeons, anaesthetists, nurses and anaesthetic technicians to work more effectively together. Surgical models have been integrated with full body computerised manikins. When placed in a realistic surgical environment this promotes active engagement in decision making and clinical tasks relevant to each of the four professional groups. MORSim involves around eight hours of face-to-face training, including simulations, debriefs, and communication skills stations.



MORSim was developed by the Patient Safety Group in the School of Medicine at the University of Auckland. The multidisciplinary project team includes A/Prof Jennifer Weller (Anaesthetist), Prof Alan Merry (Anaesthetist), Prof Ian Civil (Surgeon), Dr Jane Torrie (Anaesthetist), Ms Kaylene Henderson (Anaesthetic Tech), Ms Penny Johnstone (SimTech, Clinical Nurse Educator). It has been extensively piloted and tested. During 2012/13 we trained 120 general surgical staff at the University of Auckland Simulation Centre for Patient Safety. Evaluations showed consistently positive gains in teamwork and communication (6,7), and the potential for a 14% reduction in the risk of patient morbidity and mortality (8). Further in situ testing at North Shore Hospital, supported the feasibility of local delivery.

Funding from the Accident Compensation Corporation will enable us to deliver MORSim to all DHBs, making NZ the first country to implement nationwide team training in healthcare. The program will proceed stepwise through four cohorts (five DHBs in each). (Table 1) Training for Cohort 1 will begin in February 2017. Other cohorts will follow at nine month intervals. ACC have guaranteed funding for Cohorts 1 and 2, but funding for Cohorts 3 and 4 depends upon successful implementation in Cohorts 1 and 2.

Table 1. Cohort distribution for staged MORSim roll-out.

Cohort 1	Cohort 2	Cohort 3	Cohort 4
Feb 2017	November 2017	August 2018	April 2019
Waitemata	Auckland	Counties Manukau	Canterbury
Capital and Coast	Waikato	Bay of Plenty	Southern
Nelson - Marlborough	Hawkes Bay	Mid Central	Northern
Wanganui	Taranaki	Hutt	Lakes
Tairāwhiti	Wairarapa	South Canterbury	West Coast



ACC is funding simulators and simulation models, instructor training and delivery of MORSim courses at each DHB by the University of Auckland Project Team. As local instructors are trained, staff at the DHBs will take over the training program for ongoing delivery, with central co-ordination and support from the University team. Instructor training those interested in becoming MORSim instructors will commence 3 months prior to commencement of MORSim at each DHB.

In summary, MORSim aims for safer surgery for patients through improved team communication, optimal care co-ordination and fewer preventable complications. Resources saved treating preventable harm can be reinvested in more healthcare. This is an international first - simulation-based team training is known to be effective, but has not been attempted on this scale. This represents an opportunity for

New Zealand to lead the way in patient safety.

References

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