University Of Tasmania
School of Nursing & Midwifery

Simulation Clinical Education Centre

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In - Situ Simulation Team

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  RN/ Teaching Fellow Simulation

  Sim Instructor

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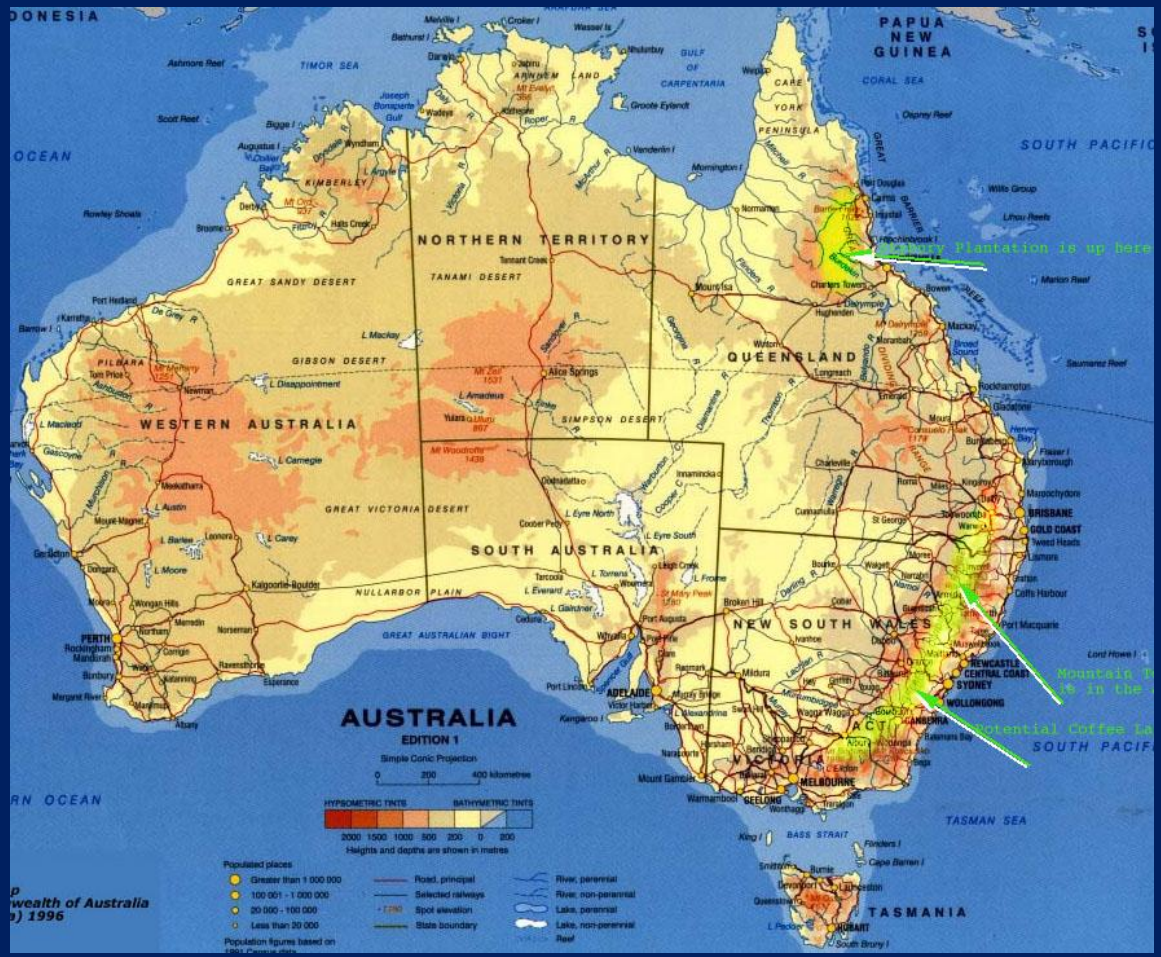
  RN/ Rotational Teaching Fellow Simulation

  Senior Facilitator

Where is Tasmania ?




TASMANIA
KING ISLAND
Currie
FLINDERS ISLAND
Whitemark
Lady Barron
Cape Barren I
BASS STRAIT
Circular Head
Stanley
Smithton
Cape Portland
West Point
Marrawah
Wynyard
Somerset
BURNIE
Yolla
Penguin
Ulverstone
DEVONPORT
George Town
Bridport
Gladstone
Eddystone Pt
Scottsdale
Derby
Beaconsfield
Exeter
Latrobe
Railton
Sheffield
St Helens
Sandy Cape
Waratah
LAUNCESTON
Scamander
Savage River
Deloraine
Hagley
Westbury
Perth
Evandale
Mole Creek
Longford
St Marys
Cradle Valley
Cressy
Fingal
Poatina
Avoca
Rosebery
Zeehan
Bicheno
Campbell Town
SOUTHERN
Queenstown
Miena
Ross
Bronte Park
Strahan
Swansea
Coles Bay
Cape Sorell
Derwent Bridge
Tarraleah
Oatlands
Bothwell
TASMAN
Ouse
Triabunna
Hamilton
Kempton
Colebrook
Orford
Maria Island
Campania
Buckland
Brighton
Bridgewater
OCEAN
Strathgordon
Richmond
Maydena
New Norfolk
Sorell
GLENORCHY
HOBART
Kingston
Lauderdale
Dunalley
SEA
Low Rocky Pt
Huonville
Margate
Franklin
Snug
Nubeena
Tasman Peninsula
Geeveston
Cygnet
Port Arthur
Dover
Alonnah
Adventure Bay
Bruny Island
Southport
metres
1200
600
400
200
sea level
South West Cape
South East Cape

Undergraduate & Post Graduate

- Bachelor of Nursing 3yr degree
- Bachelor of Nursing 2yr (Fast track) 6 semesters
- Bachelor of Nursing Enrolled Nurse transition Program 4 semesters
- NBT Re entry program 2 semesters
- MBBS
- Paramedic Degree
- Partners in Health
- Private Health Sector

Campuses

- Hobart (Tas)
- Darlinghurst (Sydney)
- Rozelle (Sydney)
- Launceston (Tas)

Student Cohort

- 1480 undergraduate BN students across 4 campuses.
- Approx. 1000 Postgraduate Students

Simulation Clinical Education Centre

- Undergraduate BN program Launceston simulation labs put through on average 800 students per week over 3 x 2hr sessions per day.
- High fidelity on average puts through 198 students per day divided between 2 labs at 12 sessions per day per lab over 9 weeks of a 13 week semester.

Utas Facilitated External Programs

- Calvary Healthcare “Mobile & In-situ” clinical simulation program including PERT and facilitator training.
- Ambulance Tasmania Northern - Clinical Support Officer Mobile Simulation Facilitators Program.
- Launceston Clinical School MBBS 4th to 6th years high fidelity simulation program.
- Launceston Clinical School MBBS simulation based pre internship program.
- General Practice Tasmania Practice Nurse Emergency Response Training.
- DHHS Specialist mobile & in- situ simulation based training eg: Theatres, rural remote multi purpose centres.

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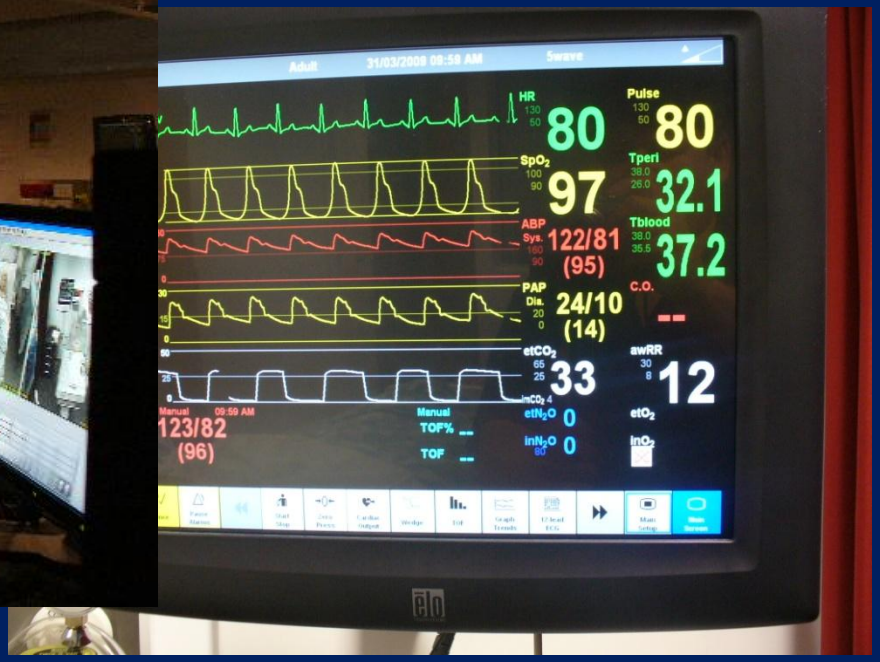

UTAS

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In-situ Simulation “Down Under”

The Need:

In 2008, ischaemic heart disease (IHD) was the leading cause of death in both males (12 444) and females (11 221). Overall in 2008, IHD claimed 23 665 lives in Australia, making it the number one cause of death, followed only by lung cancer, claiming 7 946 lives (Australian Bureau of Statistics, 2008).

In recent years, patient deterioration management has focused on teaching resuscitation skills. These courses include basic life support and advance life support for both the paediatric and adult patient. However, despite this extensive training which forms part of the health systems competence to practice, only 17% of patients who experience cardiac arrest survive to discharge (Lim, 2009).

National Focus:

Patient deterioration is at the forefront of the Australian Healthcare agenda, as highlighted by the Australian Commission in Safety and Quality in Healthcare Recognising and Responding to Clinical Deterioration (2008).

The background paper emphasised the importance of managing deterioration, by stating *“Ensuring that patients who deteriorate in hospitals receive appropriate and timely care is a key safety and quality challenge”*.

Benefit to the Health System

"If clinical deterioration is detected and managed early, complications associated with delayed diagnosis will be reduced, and affected patients will avoid the need for extended length of stay in hospitals. Effective identification and management of deterioration also has the potential to prevent ongoing morbidity associated with sequelae of delayed diagnosis such as cardiac or neurologic damage with the associated chronic disease implications" (Lim, 2009).

Where to Start

Key factors that contribute to this failure to recognise and respond to clinical deterioration are complex and overlap. The most highlighted issues include: knowledge and skill of staff, how care is delivered, organisational systems, attitudes and communication of information (ACSQHC, 2008).

UTas and Calvary Healthcare Tasmanian Program

- Calvary Health Care Tasmania – Launceston campuses, in collaboration with the University of Tasmania School of Nursing and Midwifery, are addressing these issues through the use of High Fidelity In- Situ Simulation.
- On average, 16 556 patients are admitted each year and, because medical coverage is reduced afterhours and weekends, patients who deteriorate and require higher levels of care are transferred to the local state-run hospital. In 2007, 4% of CHCL total admissions were transferred to another facility for higher level care (Calvary Health Care, 2008).

Trained to Respond to Deterioration

- Task training skill labs
- Didactic concept education
- Preparatory medium fidelity simulations
- High Fidelity Centre based simulations challenging the participant.
- Finally In- Situ Simulation scenarios in the healthcare facility.

Australia First

- **Workshops held at the UTas SNM simulation centre were followed by an Australia first, full day in-situ session in conjunction with the Tasmania Ambulance Service (TAS) witnessing the high fidelity simulation ‘in-situ and mobile’.**

A picture paints a thousand words
a movie is even better!

Program Objectives Achieved:

- **Provided staff with the ability to quickly identify clinical deterioration and implement the appropriate intervention to their patients.**
- **Resulted in a reduction in the need for more invasive treatment and the requirement for transfer to higher care.**
- Provision of a safe environment, exposure to rare and important events not normally seen, gives the ability to plan training opportunities and provide immediate feedback, promotes team building and provides unidirectional learning (Sakai & DeVita, 2009).
- Focused on the core principles of patient deterioration management, with special focus on ‘The Nursing Process', 'Crisis Resource Management’ and the ‘SBAR communication Tool’.

Further Outcomes for Calvary

- The rate of transfers due to deterioration reduced dramatically from 4% pre intervention in 2007 to 0.18% post intervention in 2009 (CHCL, 2010).
- Risk reporting processes were upgraded with Risk Man database.
- Changes were made to the emergency trolley system. An alternative system of emergency bags was introduced.
- Best practice 'Higher Care' policies and procedures were incorporated into the nursing policy and procedure manual.
- Emergency Calling Criteria were introduced to support the PERT system.
- Implementation of a memorandum of understanding, developed between the University of Tasmania (UTas) School of Nursing and Midwifery (SNM) and CHCL for the continuation of High Fidelity Simulated Training to the members of the PERT and clinical staff.

The Future

- The program has gained the interest of the Australian Commission on Quality & Safety in Healthcare.
- The program is adaptable to complement current non simulated based programs to educate in patient deterioration.
- The program is adaptable to a international agenda.
- The program can be specialised to the individual facility, clinicians or department needs.

Who Is Our Focus

The Patient

Simulation Clinical Education Centre

UTAS

UTAS

FACULTY OF
HEALTH SCIENCE

School of
Nursing & Midwifery

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