

The Alfred Intensive Care Unit: a new combination



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In her introduction, Lynne Harrison, Co-editor of *CONNECT*, writes:

Nurses have an immense capacity to cope with challenge and change. This paper discusses the benefits resulting from what would seem a complex, and potentially overwhelming, change – the amalgamation of three specialist intensive care units into one to form a 35-bed unit. Despite the enormity of the task, the authors convey a sense of pride and achievement in discussing some of the strategies used to manage change and to develop the new unit. We feel the description, and implementation, of these strategies are of relevance to a wider audience beyond the Southern Hemisphere. This article updates a report first published in *Critical Times*.

It is clear that the contribution of each staff member is valued. Staff are actively encouraged to take advantage of educational opportunities and to participate in practice development activities. The support mechanisms ensure that individuals are guided in maximising their contribution as well as achieving personal goals. There is a strong emphasis on the promotion of an effective working and learning environment. It is also clear that the central focus of activity is the patient. Overall, the unit has developed a culture that fosters practice development and the provision of high quality care. In these times of difficulties in recruiting and retaining critical care nursing staff, lessons can be taken from the experiences of those at The Alfred Hospital in Melbourne, Victoria, Australia.

BACKGROUND

The Alfred Hospital is located in Prahran, an inner-city suburb of Melbourne, Victoria. The Alfred overlooks Fawkner Park and is a short walk to the cafes and shopping in Chapel Street, recreation facilities at Albert Park Lake and the spectacular Botanical Gardens. It is a 380-bed acute care teaching hospital that cares for over 250,000 patients annually, and has specialty services in organ transplantation, trauma, adult burns, hyperbaric medicine, neurosurgery, adult cystic fibrosis, respiratory medicine, infectious diseases and HIV.

September 2000 saw the opening of the final stage of the Tattersall's critical care complex which incorporates the intensive care unit (ICU), the emergency department/trauma centre (incorporating a helipad) and the hyperbaric chamber. The

Alfred Hospital amalgamated its three specialist ICUs to create the largest critical care complex in the southern hemisphere. The ICU has the capacity for 35 ICU patients, and is currently staffed for 26 ICU equivalents, which includes high-dependency patients.

By amalgamating the cardiothoracic, trauma and general ICUs, the State services of burns, heart–lung transplantation and trauma are now available for all nursing staff to gain experience in. This has allowed nursing staff to continue to not only focus on their desired specialty, but has also provided an opportunity to develop clinical skills and knowledge in other specialties.

The specialised nature of the unit means that it receives the most acute trauma, burns and cardiothoracic patients from all over the State. This ensures the unit is at the cutting edge of new technology and advances within the critical care environment.

PLANNING FOR THE FUTURE

The unit has been designed to ensure an environment that promotes patient privacy, recovery and well-being. There is a focus on ensuring that the new complex meets the needs of patients' families and staff's working needs. The incorporation of newly designed bedside stations, OE pendants (ceiling-mounted devices containing suction, oxygen, air and electricity, and which ensures 360-degree access to patients), natural light, communication and educational facilities have ensured the unit has met many of these needs.

A central courtyard and skylights provide the unit with natural light. Central access to stock, pharmacy, radiographs and blood gas machines ensures that staff are only a short walk from most items required for a shift. The design of each cubicle, measuring 20 m² on average, means that each nurse is able to set up the cubicle to suit their patient's needs, as well as according to how the nurse prefers to practise, ensuring easy, ergonomic access to the patient and equipment at all times. The layout of the cubicle means that the patient can be turned in their bed to look out the window, without this being a huge undertaking.

MANAGEMENT

Due to the large number of nursing staff, the unit is managed in two nursing units, the general unit (trauma and medical/surgical



Figure 1. An opportunity for nurses to develop clinical skills.

patients) and the surgical unit (cardiothoracic and trauma patients). However, both units get a mix of all these patients at varying times.

The nursing management has focused on the promotion and advancement of the professionalism and career opportunities for critical care nurses. This is shown in particular by the recent development of the Management Associate Nurse Manager position and the ICU Equipment Nurse, and the introduction of the Critical Care Liaison Nurse providing a vital link between the critical care unit and the general ward settings within the hospital.

Medical management provides daily coverage in the three specialties of trauma, cardiothoracics and general medicine. Each day, three ICU consultants, three senior registrars, two junior registrars and three residents provide collaborative care to the patients.

Each shift is managed by two Associate Charge Nurses, one on the general side and one on surgical, and two clinical resource nurses, also one on each side. These roles are supernumerary to direct patient care. The clinical resource person is available for staff support, education and as a general OE hands-on helper. A total of 4.6 equivalent full-times is allocated to clinical educators, which ensures seven-day support each week between 0800 and 1900. Each part of the complex has 13 ICU equivalents made up of ICU and high-dependency patients, with the breakdown of each varying on a shift-by-shift basis.

Morning and afternoon shifts are eight hours with a 10-hour night duty. Twelve-hour shifts will start in late August as an alternative to the eight-hour shift, with nursing staff able to choose which shift they would like to work on. The unit has a self-rostering system and uses unit-based staffing, similar to time in lieu, to promote flexible hours of work and rostering.

Staff are able to choose when they would like to do their night-duty rotation. As long as the nursing staff do their share of night duty, they are able to roster this to suit their lifestyle. For example, they may choose to do five to six weeks at a time followed by a long stretch of days, or to do a mixture of nights and days in a single week.

UNIT VALUES

The nursing staff are committed to advancing the practice of critical care nursing at The Alfred Hospital: developing unique

management processes which foster teamwork, challenging practice, promoting staff development, and most importantly, providing an environment which focuses and promotes excellence in patient and family care.

The unit has a strong foundation of teamwork. Each member of the nursing team belongs to a staff development group, facilitated by Associate Charge Nurses and Clinical Educators. These groups provide each individual with the opportunity to devise a career development plan and to receive regular feedback about their performance.

Teamwork focuses very strongly on the support and orientation of new staff members, as intensive care can be a very overwhelming environment.

Critical Care Preceptorship Program

The Critical Care Preceptorship Program has been developed to meet the needs of new staff members, LaTrobe University Critical Care students, and visiting, rural and international students. The preceptor and preceptee work together to assess learning needs and to provide support and socialisation during the first 12 weeks of the preceptee's experience within the unit.

Nurses Recognition Program

Nurses within the unit are also encouraged to nominate their peers for demonstrated exemplary contribution to delivering a high standard of nursing care to patients and their families. The ICU has devised the Nurses Recognition Program to highlight and reward individuals within the team for outstanding nursing practice. This award is given out four times a year and is worth \$500. This serves further to foster an efficient and successful team environment.

COMMITTEES

The unit has three main committees which are education, occupational health and safety and the practice committee.

The Education Committee

The Education Committee provides staff with a forum to introduce new ideas and suggestions for education. The nursing staff



Figure 2. There is easy, ergonomic access to the patient.

in the unit recognise a need to keep abreast of the many new developments within the critical care nursing arena. Professional and Continuing Education (PACE) workshops were developed to reinforce and broaden the knowledge of all staff, ranging from the beginning practitioner through to the experienced staff member. These two-hour workshops are held fortnightly and are co-ordinated primarily by the Education Committee. This initiative encourages staff to identify their own learning needs and ensures a team approach is applied to meeting the academic and practical demands of critical care nursing.

Occupational Health and Safety Committee

The Occupational Health and Safety Committee within the unit is well recognised throughout The Alfred's community as being the most progressive and advanced committee in its field. In fact, it regularly demonstrates and teaches occupational health and safety principles and developments throughout the hospital.

This committee has provided an important forum for nurses to recognise both actual and potential hazards within the critical care environment, and provides the opportunity to rectify these issues as a group. The committee conducts safety weeks within the ICU that educates and reinforces the importance of fire and evacuation, immunisation, handling of waste products and electrical safety.

This well-attended committee has been responsible for the introduction of safety glasses to all staff and collaboration about incident reporting of hazards throughout the hospital. Currently, the committee is providing leadership in the implementation of the OE 'no-lifting policy' trial, which is an initiative in combating the high incidence of nursing back injuries.

Practice Development Committee Critical Care Nurses

The Practice Development Committee Critical Care Nurses are expert in being able to question and challenge practice with an ambition of achieving OE best practice. The Practice Development Committee provides critical care nurses with a forum for presenting new ideas, questioning current practice and challenging traditional ideology. Through promotion of best practice, many nursing initiatives have been developed through this process.

For example, a member of our unit has recently questioned our practice of using anti-embolic therapy to prevent deep vein thrombosis. By questioning and researching this area of enquiry, she has been successful in changing the practice of anti-embolic therapy throughout the hospital.

The practice committee has also provided a forum for questioning the appropriateness of a sterile dressing technique for our burns patients. This has led to advance in the treatment of burn wounds.

ADVANCING THE PRACTICE AND SCIENCE OF HEALTHCARE

The nursing staff are committed to advancing the practice of healthcare by focusing on the development of new initiatives which benefit the patient, the critical care community and the hospital network.

In addition to the practice development undertaken by the Practice Committee, current nursing research being undertaken in the unit includes assessing outcome following the introduction



Figure 3. An environment that promotes patient privacy, recovery and well-being.

of in-line suction catheters, as well as following the introduction of a sedation score and sedation algorithm.

As already discussed, the formalised staff development groups, performance management and preceptorship program, are all enterprising initiatives developed to meet the professional and educational needs of the critical care nurses in intensive care. The unit, together with LaTrobe University, further advances the practice of healthcare by coordinating and facilitating the Graduate Diploma/Certificate in Critical Care Nursing.

The unit has recently introduced a skills programme, the Essential Elements Program, which will enable general nurses working in ICU to work towards credits for postgraduate qualifications through workbooks and educational sessions.

The ICU is also involved in:

- ▶ The OESAFE trial, an Australian multicentre randomised clinical study investigating the benefits of albumin versus saline for resuscitation. This will involve more than 7000 patients and is the world's largest randomised clinical study.
- ▶ A city-wide study into the use of hypertonic saline for pre-hospital resuscitation of head-injured patients.
- ▶ A national review of outcomes of major trauma patients with brain injuries; use of hyperbaric oxygen in trauma patients with lower limb trauma.
- ▶ A trial into the use of amiodarone and metoprolol in preventing atrial fibrillation post-cardiac surgery.

CONCLUSION

The Alfred Intensive Care Unit is a dynamic and innovative unit which is always looking to challenge and improve nursing practice. We promote and achieve a unit committed to advancing nursing practice, teamwork and exceptional patient care, through the active committees and the enthusiasm of the staff.

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