INTRODUCTION

There is much written about nursing shortages and the challenges managers face, with keeping facilities operating safely and economically, or even working at all. The Queensland Health Systems Review of 2005 found there was a reasonable supply of nurses, however there were shortfalls in Queensland Health from high attrition rates (stated to be 40% in the first two years) and the organisation did not fund or recruit nursing numbers in line with demand (QH Systems Review, 2005).

Recruitment and retention issues impact on budgets, therefore strategies to limit turnover are necessary. In Australia, there have been a number of reviews conducted over the past ten years, either nationally or by states, to address this problem.

One such review, the Ministerial Taskforce, Nursing Recruitment and Retention report, commissioned by the Minister for Health in Queensland, and published in 1999, identified specialties such as mental health, oncology, critical care, renal, aged care, cardiac services, emergency medicine and perioperative nursing as areas with staffing shortfalls (Ministerial Taskforce – Nursing Recruitment and Retention 1999, p.5).

To address these deficits in staffing and education, one of the recommendations (Recommendation 7) was

*That consistent with the Queensland Health Training Plan, the Health Advisory Unit (Nursing) coordinates the development of a training and development framework for nursing.*

From this Framework, Transition to Practice Nurse Education Programs became available for Queensland Health nurses. (See Appendix 1)
The Perioperative program was one of the first initiated, therefore as time goes on there has been plenty of opportunity to measure its success (or failure). This paper discusses the implementation of the Transition to Practice Nurses Education Program (TPNEP) – Perioperative (P) at Ipswich Hospital, and how effective transition has been for recruitment to its Operating Suite.

THE PERIOPERATIVE NURSE

The perioperative nurse provides nursing care for the patient who is undergoing a surgical procedure. He or she works in collaboration with Surgeons, Anaesthetists and other health care providers to plan the best management for each patient.

The perioperative nurse is accountable to his/her patient. This is demonstrated by using standards, recommended and best practices, improvement activities and clinical guidelines. They are also committed to strengthening their professional skills through education (Rothrock 2003, pp.14-15).

The surgical experience is divided into three phases, preoperative, intraoperative and postoperative, with the word ‘perioperative’ encompassing all three.

The preoperative phase begins when the patient makes the decision, or someone acting on his behalf, to have surgery. This phase concludes with the transfer of the patient on to the operating table. During this phase, nurses give support, teach and prepare the patient for surgery.

The intraoperative phase begins when the patient is transferred to the operating table and ends when the patient is taken to the post anaesthesia recovery area. During this period, the patient is monitored, anaesthetised, prepped and draped and the surgical procedure performed. Nurses’ activities during this phase revolve around patient safety, assistance with the procedure, prevention of infection and achieving a satisfactory response to the anaesthetic and surgical intervention.
The third phase, postoperative phase, begins with the patient’s entry to the post anaesthesia recovery unit (PARU) and ends with the resolution of the surgical event. This period may be brief or prolonged and usually ends outside the facility in which the surgery was performed (Spry 2005, p.2).

Depending on the facility in which the nurse is employed, his or her work will involve looking after the patient in one or all of these phases.

The nursing roles identified by the Australian College of Operating Room Nurses (ACORN), are Preoperative Patient Assessment and Education Nurse, Holding Bay Nurse, Anaesthetic Nurse, Circulating Nurse, Instrument Nurse, Post anaesthetic Recovery Nurse and Perioperative Nurse Surgeon’s Assistant.

The Preoperative Patient Assessment and Education Nurse role covers the areas of patient assessment (providing information to the surgical team to ensure good patient outcomes) and patient education, regarding their surgery. This is beneficial to the patient, as it ensures they are better informed about their surgery.

The Holding Bay Nurse is responsible for the admission and identification of patients entering the Operating Suite. This role involves confirming the patient’s identity, fasting status, allergies, correct surgical site and ensuring radiological and pathological reports are available. On occasions, medications may need to be administered.

The Anaesthetic Nurse works under the direct supervision of the Anaesthetist and is qualified and educated to provide support for the patient, prior to and during the surgical procedure. They make sure anaesthetic equipment is available, checked and ready to use. They also assist the Anaesthetist in administering the anaesthetic and its maintenance, and monitoring patient status. As a nursing role, in some Operating
Suites, they may undertake some circulating activities as well. Anaesthetic technicians are employed in some facilities – their role is to assist the Anaesthetist only.

The Circulating Nurse provides support for the Instrument Nurse. He/she ensures supplies are delivered to the surgical field in an aseptic manner. They are also responsible for documentation of all accountable items used in the sterile field. They assist with patient positioning, documentation, collection of specimens, checking consent, ensuring intended surgery protocols, planning and preparation of equipment and the correct count of instrumentation and count procedure.

The Instrument Nurse is responsible and accountable for all items used during the procedure. They are required to make sure instrumentation is prepared in accordance with Standards, is available and functional. They also are alert to the patient’s changing condition by recognising intraoperative complication/s and responding to them in an appropriate manner.

The Post Anaesthetic Recovery Nurse cares for the patient immediately following an anaesthetic, procedure or surgery that has the potential to produce life-threatening complications. Their principle role is airway assessment and management. They also take observations and chart them, provide pain and nausea relief if required, identify and correct post operative complications and document care and medications administration.

The Perioperative Nurse Surgeon’s Assistant is an advanced practice perioperative nursing role. RNSA complete a Master’s level program, which qualifies them to perform the role of assistant to the Surgeon. They have a number of key duties, such as preoperative assessment of the patient, assisting with patient positioning, prepping and draping, assisting the Surgeon during surgery, writing perioperative orders according to agreed protocols (counter-signed by the Surgeon), patient education, and
undertakes postoperative care as required. There are a few Registered Nurses working in this role, however they appear to be employed predominantly in the private sector (ACORN standards 2006).

**IPSWICH HOSPITAL**

West Moreton Health Service District is made up of the Boonah, Esk, Laidley shires, the City of Ipswich, and part of the City of Brisbane south of the river which includes the Wacol Hospitals (The Park). The District’s population at 30 June 2004 was 172,703 (Health Information Centre).

The District is made up of four hospitals (Ipswich, Laidley, Boonah and Esk). Also within the District is a tertiary mental health facility, The Park – Centre for Mental Health, community services at Goodna and Ipswich, and dental services as Esk, Boonah, Laidley and Ipswich.

Ipswich Hospital is 310 bed acute facility, the largest in the District. The facility provides Anaesthetic and Intensive Care services, Emergency Medicine, Medicine, Obstetrics and Gynaecology, Palliative Care, Paediatrics, Acute Psychiatry, Rehabilitation, Oncology and Surgery. Surgical specialties offered are General, Urology, Ear, Nose and Throat, Gynaecology & Obstetrics, Orthopaedic, Ophthalmology, Plastics and Facio-Maxillary.

The Operating Suite has five funded operating rooms. Last financial year’s numbers were 6163 Elective cases and 1312 Emergency cases (total 7475) (by personal communication 2006). There are ten Elective surgery sessions provided daily, Monday to Friday. Emergency cases are done when required, depending on urgency, but mostly they are done in the evening, when the day’s elective lists are complete.

The majority of staff in the Operating Suite are Registered Nurses, with five Endorsed Enrolled Nurses. Currently there are two EENs working full time in Anaesthetics (one
is an Advanced Enrolled Nurse), one works as the Holding Bay Nurse/Receptionist (Advanced Enrolled Nurse), one works in Sterile Stores, and the remaining Enrolled Nurse does circulating duties, works as an Anaesthetic Nurse, relieves the Inventory Officer and also relieves in Bookings.

Assistants in Nursing are also employed – a full time AIN works as Instrument Cleaner – rinsing instruments and despatching to CSD for re-processing. Her role also involves routine maintenance (biological testing etc) of flash sterilisers and Steris machines, and specialised cleaning. (Some instrumentation is cleaned in the Operating Suite). In the afternoon, an AIN comes in for four hours and is responsible for OR cleaning.

Theatre Attendants transport patients and manage heavy equipment and positioning routines. They also are responsible for some cleaning duties (floors).

While we do have some designated Anaesthetic Nurses and Post Operative Recovery Nurses, these only cover morning and afternoon shifts, Monday to Friday, and not after hours work. A typical Perioperative Registered Nurse at Ipswich Hospital (Transition and otherwise) will be required to be competent as an Instrument Nurse, Circulating Nurse, Anaesthetic Nurse and Recovery Nurse, and work in any of these roles on Night Duty or weekends.

It goes without saying that much is expected of the Perioperative Nurse at Ipswich Hospital. No doubt there are arguments for and against this approach. It certainly makes for an interesting week, as allocations change daily. For example, a week may feature an afternoon in Anaesthetics, next day circulate for Urology, the following day Instrument Nurse for an ENT list, and if one is working the weekend, there will probably be a Recovery shift in there as well. This approach can be challenging for the learner Perioperative nurse, other staff and Surgeons (and Educator), although
anecdotally, the staff prefer the frequent changes, and this is good for morale. It may also instil in the beginner, resilience and determination to succeed, however this is an opinion only and has not been tested in this facility.

BACKGROUND TO TRANSITION

In 1996 the Queensland Government made a commitment to the people of Queensland to improve the provision of health care, especially in relation to elective Surgery waiting times, and waiting lists. It was realised that reducing waiting lists and times would not be achieved unless the numbers of highly qualified and educated perioperative nurses were increased to provide a more efficient and effective delivery of services. There were a number of strategies implemented, mostly dealing with Perioperative Nurse education programs with a statewide coordinated approach.

Through this Elective Surgery Project, Perioperative Nurse Educators were appointed to each of the participating hospitals. (Cairns, Gold Coast, Toowoomba, Nambour, Ipswich, Rockhampton, Townsville, Princess Alexandra, Royal Brisbane and Women’s and The Prince Charles Hospitals) An education program was developed and put in place (the purple series) and was the forerunner of the Perioperative Transition program (Ashton 1998, p.4).

TRANSITION

The aim of the Transition to Practice Nurse Education Program - Perioperative (TPNEP-P) is to provide the new graduate or newly transferred advanced beginner with ‘learning experiences, including support and guidance, to acquire the necessary knowledge, skills and attitudes to begin functioning effectively in the specialty practice area of perioperative nursing’. It is expected that the participant will function at the level of advanced beginner on the successful completion of the program, and be
able to demonstrate competence as described in the Australian College of Operating Room Nurses (ACORN) Competency Standards (1999) (2005, p.7).

The content of TPNEP-P is delivered through self-directed learning modules. Participants are able to pace their own learning in relation to their clinical rotation. The modules include designated readings, appropriate web links, module learning activities and clinical skills assessments. There are four modules – Introduction to Perioperative Nursing, Anaesthetic Nursing, Intraoperative Nursing and Post Anaesthetic Nursing Care. The program length is twelve months (2005, p.8).

The program is offered in Staff Development or Articulation mode, which counts towards a tertiary post registration qualification. At Ipswich Hospital it is only offered in Articulation mode (for full time participants), as it is expected that further education will be done at the tertiary level. Some universities give credits for TPNEP-P towards a Graduate Certificate (see Appendix 4). There are a number of compulsory assessments for Articulation mode which are Core Activities, (4) with a weighting of 25%, Case Study (25%) Intraoperative Clinical Assessment (OSCA) 25% and Anaesthetic OR Post-anaesthetic Recovery Clinical Assessment (OSCA) with a weighting of 25 %. (2005, p.15).

One key factor of the TPNP-P is that it is transportable between Queensland Health facilities.

DISCUSSION

Perioperative nursing is not for everyone and recruiting for this specialty has not been without its challenges. The impact of tertiary education and its limited clinical exposure to specialty areas as opposed to ‘the good old days’ with a compulsory rotation has led in part to fewer graduates working in specialty areas such as the perioperative unit. Research has indicated that graduates are less likely to pursue a
career in perioperative nursing because of this lack of exposure (Happel 2000, pp.600-5). Bull and Fitzgerald believe that isolation of the Operating Suite from the rest of the hospital, restrictions with traffic flow and attire, and the hidden nature of perioperative nurses’ work also contributes to the graduate’s reluctance to work in this area (Bull & Fitzgerald 2004, p.813).

The American Operating Room Nurses believe that factors causing shortages in the perioperative area are an ageing workforce and inevitable retirements, lack of surgical educational content and clinical experience for nursing students, demands for professional nurses in Day Surgery settings and difficulty in attracting and retaining perioperative nurses (Beyea 2002, p236). In Australia, the average age of nurses, including Perioperative nurses is in the mid 40s (Bull et al 2004, p.810). Of interest, in Ipswich Hospital Operating Suite, the current age profile is 30 staff members (Registered Nurses and Endorsed Enrolled Nurses) 40 years of age and over, and 27 staff members under 40 years of age.

Since the advent of Perioperative Nurse Educators in Queensland Health Surgical Hospitals ten years ago, Queensland Health have used education programs offered to Registered Nurses, through the tertiary sector, as well as the ‘purple’ series. Transition (TPNEP –P) however, has provided a valuable recruiting and retention tool, especially for Ipswich Hospital.

The Perioperative Transition Program was introduced into Ipswich Hospital in 2003. There have been nineteen (19) Registered Nurses undertake the TPNEP-P since 2003. Fourteen (14) have successfully completed the program and five participants are still to complete Articulation requirements. Of these fourteen (14), two (2) Registered Nurses have left, however they continue to work in Perioperative nursing.
There is always some discussion regarding the acceptance of Graduates into this program straight from their tertiary facility (some think they should have ward experience first), however in 2003 Executive decided to recruit Graduates directly into the Perioperative unit and the transition program. (This is called ‘not missing the bus’, or ‘growing your own’)! Ipswich Hospital has recruited eleven (11) graduates and nine (9) of these had clinical placement/s in Perioperative Units during their undergraduate years.

The strategy of recruiting straight from university has been very successful, as the Graduates are highly motivated to work in this environment. The only down-side is that a high number of staff are inexperienced within the department at any one time. However with good preceptorship, the philosophy of daily allocation changes, and support from staff and Educator, this has not been a major issue, and not led to any significant negative impact, such as increased absenteeism or turnover or low morale.

Both the Nurse Unit Manager and Perioperative Nurse Educator are in favour of undergraduate student nurses spending time in the unit and look upon it as a valuable recruiting strategy, for when they become Registered Nurses. Student placements include a full orientation to the Operating Suite, perioperative care of the patient, surgical procedures and anatomy, they learn to scrub, gown and glove, aseptic technique, personal protection and care of sharps, perioperative nurse roles, including pre-operative admission right through to post-anaesthetic recovery nursing. (See Appendix 3) They also spend a morning with the Acute Pain Service Clinical Nurse and Anaesthetic Registrar visiting patients (mostly post operative patients). Activities are planned to be of most benefit to the student, whether or not they choose to work in the perioperative environment. Evaluations are always positive regarding their learning experiences in this placement.
The hospital offers perioperative nursing as a third rotation for the Registered Nurse Graduate year, and the unit has recruited and retained two (2) to the TPNEP-P from this stream since 2003. Two returned to ward nursing and the third moved back to Brisbane (home) but remains a perioperative nurse.

Other avenues for recruitment (that is, for staff other than graduates) have been internal ‘Expressions of Interest’ submitted to the Nursing Director of the Surgical Business Unit and this strategy was successful in 2004 in recruiting for Post Anaesthetic Recovery Unit and Anaesthetics when we were facing a shortfall in these areas. Unfortunately, it meant taking experienced nurses from the Renal unit and Emergency department. Lifestyle issues were important to these recruits and these staff members have proved invaluable to the Operating Suite.

After the transition year, the focus is on retaining these nurses, therefore they are introduced to more advanced procedures/specialties. They are also given ‘portfolios’ and have responsibilities regarding restocking specialty equipment. Currently, one of last year’s transition students is the Gynaecology/Obstetrics Resource person and she has proved to be highly effective in this role. One of this year’s transition students (a graduate) who is a computer ‘whiz’, is looking after our sterilisation tracking system.

A 2004 student (highly competent) is shortly to work in a senior role as Clinical Nurse in the intraoperative area.

Giving staff opportunities to develop professionally, assist in decision-making, and be autonomous, whilst being rewarded fairly are significant factors in recruiting and retaining nurses (Buchan & Calman 2004, p.34).

There is no doubt that the TPNEP-P has been very successful in this facility. It certainly has been very rewarding as the Nurse Educator to be involved in the transformation of beginners to more advanced practitioners.
Transition

<table>
<thead>
<tr>
<th>Year</th>
<th>Number TPNEP-P</th>
<th>New Graduate</th>
<th>Attrition</th>
<th>Graduate Rotation</th>
<th>Attrition</th>
</tr>
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<tbody>
<tr>
<td>2003</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2004</td>
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<td>1</td>
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</tr>
<tr>
<td>2006</td>
<td>5</td>
<td>2</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
<td>11</td>
<td>2</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

Undergraduate Clinical Placements

<table>
<thead>
<tr>
<th>Year</th>
<th>Placement (2 weeks or more)</th>
<th>Patient follow through</th>
<th>Placement (4 days – UQ 2nd year)</th>
<th>Aseptic Technique Surgical Scrub</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>15</td>
<td>5</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>6</td>
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<td>8</td>
<td>19</td>
</tr>
<tr>
<td>2006</td>
<td>9</td>
<td>1</td>
<td>8</td>
<td>29</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>6</td>
<td>8</td>
<td>72</td>
</tr>
</tbody>
</table>

CONCLUSION

Retention of nurses is always going to be challenging as all areas face shortages. Such strategies as Transition to Nursing Education Programs have been very successful in developing nurses in specialty areas and the perioperative area is no exception to this.

Across Queensland this year, the Perioperative program has enrolled 56 Registered Nurses, (Minutes 2005) although from 2007, a modified Transition program will be available for Endorsed Enrolled Nurses as shortages of Registered Nurses are experienced in larger facilities. Educating EENs into the Instrument Nurse role gives a more flexible perioperative nurse. (Prior to this EENs were unable to scrub – they could work in Anaesthetics and circulate).

Recent recommendations from the Queensland Health Systems Review (2005) – Recommendation 10.5, and Queensland Health Strategic Plan 2006 – 2011, (*Building the next generation of health workers, ideas and health services*) (Appendix 2) will
ensure the program continues, however TPNEP requires time, energy (from State Co-
ordinators and Educators), funds and Corporate support for its continuing success.

At hospital level, conducting the program is not possible without Executive, Manager,
Educator, Nursing and Medical Staff support, and it is hoped this continues in the
future. It is an expensive commitment, as currently, for example, students are given
ten (10) weeks supernumerary time in this facility and that impacts on the staffing
budget. The Operating Suite’s Registered Nurse vacancy rates have reduced
considerably so it is expected that there will be fewer opportunities for participants to
be accepted from 2007.

Without a doubt, the Transition to Nursing Education Program – Perioperative has
been a great success for Ipswich Hospital, and recruiting Graduates directly into a
specialty has proved a worthwhile initiative.
REFERENCES


Parker, D., 2006, Surgical Procedures Annual figures (Operating Suite), personal communication.


Perioperative Nurses Video Conference Group Minutes, 12 Dec 2005.


Queensland Health Nursing Staff Development Framework

Career Development of Nursing staff based on Individual, Organizational and Professional Imperatives

Spheres of Learning:
- Clinical
- Organisational
- Professional

Orientation
Informing nursing staff of the relevant frameworks and policies for the:
- Organisation (QH and District/Facility)
- Nursing, and
- Work Unit levels.
Orientation is a starting point from which to launch Transition or Continuing and Ongoing Education Programs

Transition
Education during the transition period focuses on the acquisition of knowledge and skills needed to become confident and competent in a chosen area.
Transition can be facilitated by:
- QH Foundation to Practice Modules
- QH Transition to Practice Nurse Education Programs
Progress through Transition is supported by QH Preceptorship Framework and Succession Management principles.

Continuing and Ongoing Education
Education during this period facilitates the development of nurses beyond the scope of transition. Advanced clinical, leadership, management, education and research knowledge and skills are developed.
Continuing and Ongoing Education is facilitated and supported by:
- Formal Awards – Higher Education
- QH Leadership Development Framework
- Mentoring Principles
- Succession Management Principles
- Conferences
- Seminars and Workshops

Figure 1: QH Nursing Staff Development Framework
APPENDIX 2
Queensland Health Strategic Plan 2006 - 2011

Goals
➢ The education, training and development of staff is coordinated to provide the appropriate number of people and mix of skills
➢ Tasks are aligned with skills and knowledge in a multi-disciplinary team environment to increase the flexibility of service delivery
➢ Research activity and continuous quality improvement are embedded as core processes throughout the organisation to improve health services and health outcomes
➢ The system promotes innovation and uses technology to facilitate the delivery of safe health services.

Strategies
➢ Working with the education sector to demonstrate the range of opportunities in Health and attracting the best through scholarships, traineeships, cadetships, etc.
➢ Working with universities and TAFE to ensure that health courses develop the competencies needed in the current and future health workforce
➢ Better supported clinical education and training with clear statements of the desired competencies
➢ Developing clinical environments that foster and encourage research and innovation through reward systems, scholarships and better infrastructure
➢ Attracting professionals earlier into the public sector, for example through increasing the number of pre-registration and new entry positions in allied health
➢ Working with professional colleges to grow both the number and quality of specialist training posts
➢ Improved monitoring of workforce size, distribution and capabilities to more timely identify emerging workforce needs and trends.

Strategic Direction

Building the next generation of health workers, ideas and health services

Queensland Health must be responsive to the changing needs of health staff and customers to remain sustainable. To achieve this, the organisation aims to improve workforce capacity, including the use of innovative approaches to service delivery. There will be a focus on continuously improving the quality and efficiency of health services.
## PERIOPERATIVE PLACEMENT PROGRAM

Ipswich Hospital

**UNDERGRADUATE NURSES**

### 2 WEEK PLACEMENT

<table>
<thead>
<tr>
<th>Date</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WEEK ONE</strong></td>
<td></td>
</tr>
<tr>
<td>Mon 28 August</td>
<td><em>AM Orientation</em></td>
</tr>
<tr>
<td></td>
<td><em>PM Scout</em></td>
</tr>
<tr>
<td>Tues 29 August</td>
<td><em>AM Pre-op</em></td>
</tr>
<tr>
<td></td>
<td><em>PM Reception</em></td>
</tr>
<tr>
<td>Wed 30 August</td>
<td><em>AM Aseptic Technique/Instrumentation</em></td>
</tr>
<tr>
<td></td>
<td><em>PM Scrub/Scout</em></td>
</tr>
<tr>
<td>Thurs 31 August</td>
<td>Anaesthetics</td>
</tr>
<tr>
<td>Fri 1 Sep</td>
<td>Recovery</td>
</tr>
<tr>
<td><strong>WEEK TWO</strong></td>
<td></td>
</tr>
<tr>
<td>Mon 4 Sep</td>
<td>Scrub/Scout</td>
</tr>
<tr>
<td>Tues 5 Sep</td>
<td>Scrub/Scout</td>
</tr>
<tr>
<td>Wed 6 Sep</td>
<td><em>AM Pain round with Anthony</em></td>
</tr>
<tr>
<td></td>
<td>*PM Scrub/scout</td>
</tr>
<tr>
<td>Thur 7 Sep</td>
<td>Scrub/Scout</td>
</tr>
<tr>
<td>Fri 8 Sep</td>
<td>Scrub/scout Evaluation with Educator</td>
</tr>
</tbody>
</table>

*Meet 0800 in Tea room

Shifts – 0800 – 1630 hrs
Morning and afternoon tea – 10 minutes
Lunch – 30 minutes

(Subject to change)
APPENDIX 4

University Credits towards Graduate Certificate in Perioperative Nursing

Latrobe –
1 subject, clinical assessments in Intraoperative and Post anaesthetic Recovery.

James Cook University –
2 credits