Triage Nursing Practice in Australian Emergency Departments 2002-2004: An Ethnography

Submitted by

Margaret Mary Fry B.App Sc (Nursing) M.Ed (Adult Education)

A thesis process submitted in total fulfillment of the requirements for the degree of Doctor of Philosophy

Department of Family and Community Health Nursing

Faculty of Nursing

University of Sydney

November 2004

ABSTRACT

Introduction: This ethnographic study provides insight and understanding, which is needed to educate and support the Triage Nursing role in Australian Emergency Departments (EDs). The triage role has emerged to address issues in providing efficient emergency care. However, Triage Nurses and educators have found the role challenging and not well understood.

Method: Sampling was done first by developing a profile of 900 nurses who undertake the triage role in 50 NSW EDs through survey techniques. Purposive sampling was then done with data collected from participant observation in four metropolitan EDs (Level 4 and 6), observations and interviews with 10 Triage Nurses and the maintenance of a record of secondary data sources. Analysis used standard content and thematic analysis techniques.

Findings: An ED culture is reflected in a standard geography of care and embedded beliefs and rituals that sustain a cadence of care. Triage Nurses to accomplish their role and maintain this rhythm of care used three processes: gatekeeping, timekeeping and decision-making. When patient overcrowding occurred the three processes enabled Triage Nurses to implement a range of practices to restore the cadence of care to which they were culturally oriented.

Conclusion: The findings provide a framework that offers new ways of considering triage nursing practice, educational programs, policy development and future research.

ACKNOWLEDGEMENTS

The Triage Nurses who speak in this study helped me to view and come to understand the complexity of their practice. There can be no denying that this ethnographic text reflects my own cultural milieu and linguistic conventions to present a scholarly piece of work. Despite this, I believe the participants of the study would recognise this work as an accurate depiction of triage nursing practice. I remain responsible for the construction of the text, but am conscious of the debt owed to those who shared their world so openly and negotiated my understanding of the cultural environment within emergency department settings.

The richness and depth of this study was made possible through the guidance and support of my supervisor Professor Colleen Stainton. I also want to thank Dr Anna Holdgate, Dr Gayle Burr, Dr Caroline Homer, Janice Gullick and Dr Rhonda Hawley for their support and encouragement.

This study on triage nursing was made possible by a NSW Nurses Registration Board Category 5 Scholarship (2001) and the Vivian Bullwinkle Scholarship from the College of Nursing (2003). These scholarships supported the research process, through which I have come to value, learn and understand the richness and complexity of nursing practice. This research has had a profound impact on my own practice and the way I support and educate those undertaking the challenging role of triage nursing.

CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF PUBLICATIONS

Fry M & Burr G (2001) Using the Delphi Technique to design a triage survey tool, *Accident & Emergency Nursing*, 9 (4): 235-41

Fry M & Burr G (2001) Using a survey tool to explore the processes underpinning the triage role: A pilot study, *Australian Emergency Nursing Journal,* 4 (11): 27-31

Fry M & Burr G (2001) Current triage practice and influences affecting clinical decision making in emergency departments in NSW, Australia, *Accident & Emergency Nursing*, 9 (4): 227-34

Fry M & Burr G (2002) Review of the triage literature: past present and future?, *Australian Emergency Nursing Journal*, 5(2):33-8

GLOSSARY OF TERMS

ACEM	The Australasian College for Emergency Medicine
ATS	The Australasian Triage Scale guidelines
CDA	Central District Ambulance functions as the coordinating centre for local ambulance officers.
CNC	Clinical Nurse Consultant functions as a specialist nursing consultant
CNE	Clinical Nurse Educator functions as the key provider of educational programs
CNS	Clinical Nurse Specialist: functions as a specialist clinical expert
DNW	Patients who leave the ED prior to medical assessment
ED	Emergency Department
EDIS	Emergency Department Information System
ENA	Emergency Nurses' Association
GP	General Practitioner functions as a primary local care medical practitioner
NESB	Non-English speaking background
NSW	New South Wales – One of three east coast states of Australia
NUM	Nursing Unit Manager functions as overall departmental manager

CHAPTER 1: INTRODUCTION

Over the last three decades, growing community demand for a more accessible and efficient emergency service has seen the introduction of extended nursing practices, national standard guidelines and new nursing roles. One of the new nursing roles introduced to improve the efficiency of Australian Emergency Department (ED) service was triage. By the late 1980s people presenting to an ED for care were for the first time met by the Triage Nurse who assessed their clinical urgency. Since this time, decision-making and activity by Triage Nurses has been shown to significantly influence the patient's experience of emergency care, mortality, morbidity and satisfaction rates (Elder et al. 2004, Gerdtz & Bucknall 1999).

My interest in triage nursing developed while working as a Clinical Nurse Consultant (CNC) in an Australian inner city ED. Within the ED, it is the responsibility of the CNC to teach emergency nurses how to undertake triage and various other emergency nursing roles. I observed, that compared to the general emergency care, and trauma and resuscitation roles, the triage role is perceived to be more challenging. The reason for this perception is not understood.

The triage role is difficult to teach. While there are policies and guidelines available, they fail to provide an adequate understanding of the day-to-day practice of Triage Nurses. It remains unclear what influences Triage Nurse selection of urgency codes, investigations and bed allocations. The triage role, with its own structure and function, is positioned within a context of care that remains ambiguous in the prevailing literature. The inadequate understanding of the context

and processes, within which this clinical role is set, significantly limits the educational support that can be offered to Triage Nurses.

HISTORICAL DEVELOPMENT OF EMERGENCY TRIAGE SYSTEMS

The origin of the word "triage" is from the French verb "trier", a word used in the 18th century to sort farming and agricultural products (Llewellyn 1992). The application of this word to the sorting of casualties (medical triage) can be traced back to the Franco-Prussian military campaigns of the early 1800s. Prior to this soldiers were generally cared for according to their rank and often by their families or retainers. It was the surgeon, Baron Dominique Jean Larrey, who first prioritised the need for medical intervention and hospital transportation for wounded soldiers (Kennedy et al. 1996). The role of military triage at this time was to identify soldiers with non-fatal wounds (Williams 1996). This meant that soldiers with minor injuries were targeted for treatment while those mortally wounded were left to die. The key benefit of implementing a triage system was an accelerated return of soldiers to the battleground which in turn increased the number of frontline troops (Bond et al. 1997, Waeckerle 1991).

Triage remained a process confined to military campaigns in austere environments, undergoing extensive refinement during subsequent wars (World War I and II, Korean, Vietnam, Falkland and Gulf wars). It was clearly demonstrated that early assessment, prompt resuscitation and fast patient transfer significantly helped to reduce mortality rates in military hospital settings and battlefields. This is evident in the reduced mortality rate of soldiers from 5% during World War II to 1% by the

end of the Vietnam War (Kennedy et al. 1996). By the 1970s the patient outcome benefits evident in military triage had captured the interest of governments and hospital service providers with the result that formal triage systems were implemented in some civilian Emergency Departments (McKay-Ingalls & Canton 1999).

In Australia, before the introduction of triage into civilian Emergency Departments, medical and non-medical personnel such as clerks and ambulance officers performed initial patient assessment. The need to obtain patient and financial details saw the role more commonly performed by clerical staff (Brentnall 1997). Generally, patients were processed on a first come first served basis. While this was an efficient system when patient presentation numbers were low, it proved unsafe when large numbers of patients arrived at the same time (Brillman et al. 1995, Nuttall 1986, Schull et al. 2001).

EVOLUTION OF THE TRIAGE NURSE ROLE

Designated Australian Emergency Departments began in the early 1970s as single rooms at the back of hospitals and mainly functioned as an after-hours entry point. Patients gained entry to the ED by ringing the doorbell. A ward nurse would let them in and monitor their condition until the arrival of the doctor (McKay-Ingalls & Thayre McCray 1999). ED staffing was reliant on the willingness of ward nurses to accommodate this extra patient load and often to undertake overtime until the patient is either discharged or admitted as an inpatient (McKay-Ingalls & Canton 1999). However, the increasing number of patients presenting to EDs, demand for

more emergency care, advances in technology and improvements in resuscitation procedures led to the need to expand services and create a speciality area for the delivery of emergency care. By the late 1970s, these changes raised the expectation that both nursing and medical staff needed to become highly trained, specialised and permanently based in EDs.

To support nurses in this new specialty area, professional organisations such as the Emergency Nurses Association (ENA) were formally established in the USA (1970), UK (1972) and Australia (1983) (ENA 2004, Gaudry 1991, McKay-Ingalls & Canton 1999, McKay-Ingalls & Thayre McCray 1999, Royal College of Nursing 2004). These nursing associations promoted clinical, educational and professional development of emergency nurses by producing policy statements on levels of role performance and fostering specialty recognition. ENAs initially launched newsletters to keep nurses up to date with the latest ED developments. Emergency nursing journals later replaced ENA newsletters, with the USA journal established by 1975. The UK and the Australian journals were established in 1992 and 1996 respectively. In addition, these ENAs provided financial sponsorship for ED nurses to attend conferences and conduct research and provide introductory specialty education courses to update knowledge and skills (Cloughessy 1987, Eagar 1987).

SPECIALIST NURSE EDUCATION

The development of specialist nursing education courses were established to meet the increasing need for nurses to be highly trained in order to care for high acuity patients and manage increasingly complex technology. Nursing specialisation was

necessary because of the realisation that nurses could no longer master the volume of knowledge and skills required to work in all clinical areas (Russell et al. 1997). To assist emergency nurses in gaining in-depth knowledge and clinical expertise, specialty postgraduate courses were developed. By 1979 professional bodies, such as the New South Wales College of Nursing, extended their nursing education profile to include advanced emergency nursing programs. By 1995 the Emergency Nursing Graduate Certificate course had been established (The College of Nursing 2003)[1].

When hospital-based pre-registration nurse education was transferred to the tertiary sector in 1985 there was a corresponding demand for postgraduate tertiary qualifications (Bennett 1995, Whyte 2000b). To meet this demand, tertiary programs were designed to articulate with specialist certificate courses and extend nursing knowledge, attributes and clinical skills beyond mere technical competence. Today, universities and the College of Nursing provide postgraduate courses in specialty areas such as Emergency Nursing. Emergency Department registered nurses (RN) can now pursue graduate diploma, master or doctoral degrees in their area of specialisation (Whyte 2000b). While these degrees support distinctive clinical specialities, they also provide RNs with qualifications that are equitable with other health care disciplines such as medicine, physiotherapy and occupational therapy.

---

[1] By 2003 the College of Nursing incorporates the New South Wales College of Nursing.

SPECIALIST NURSE INDUSTRIAL AWARDS

To keep pace with nursing specialisation, the New South Wales (NSW) State Government and NSW Nurses Association introduced industrial nursing awards that recognised, supported and financially rewarded advanced clinical nurses. The award classification of Clinical Nurse Specialist (CNS) was introduced in 1986 (Appendix 1). Inherent in this classification is the recognition that advanced level practitioners deliver and coordinate care appropriate to the needs of the patient; act as clinical resource people; provide leadership; and support less experienced staff. However, the CNS award did not mandate an academic qualification for the position preferring instead to maintain the focus on clinical experience (Pratt 1994). By the 1990s other award classifications such as Clinical Nurse Consultant (CNC) and Nurse Practitioner (NP) had been introduced and have added to the clinical career pathways open for registered nurses (Whyte 2000a). However, little research has guided the rapid advancement of nursing roles.

These clinical award classifications meant that experienced nurses no longer had to move away from direct patient care to gain career advancement and financial incentives (Fairweather & Gardner 2000, Jamieson & Mosel-Williams 2002). In NSW, and in other Australian States, it would appear that local issues such as recruitment and retention have shaped industrial awards for nursing. As a result speciality definition, qualifications, levels of competency, accreditation processes, and extended practice roles have developed without consistency or national unification (Russell et al. 1997, Whyte & Sellick 2000). While the nursing

classifications of RN, CNS, CNC and NP are found in EDs across NSW, it is the RN and CNS who commonly undertake the triage role (Fry & Burr 2001a).

THE TRIAGE ROLE: SUB-SPECIALTY ED NURSING

While EDs gained the recognition as a specialty area and staff were specialising in the delivery of emergency care, a new sub-specialist role, the Triage Nurse, was emerging. This role was designed to ensure the safety of people, particularly those presenting to the ED with acute needs (Gilboy et al. 1999, Read et al. 1992, Shields 1976). The increasing number of ED patient presentations meant that many were being left unattended for longer periods of time in the waiting room resulting in more critical patients being placed in 'at risk' situations (Wuerz et al. 2001).

In the early 1980s a number of states in the United States of America (USA) sought to improve the safety of people presenting to EDs by introducing two pieces of legislation to mandate a triage role (Gilboy et al. 1999). In 1985 the Consolidated Omnibus Budget Reconciliation (COBRA) and Emergency Medical Treatment and Active Labor Act Law (EMTALA) were enacted (Acute Care Inc 2004). Essentially these laws decreed that a nurse must perform a triage role and that clinical assessment must take priority over the collection of patient details and financial information by clerical staff (Gilboy et al. 1999, McKay-Ingalls & Canton 1999).

In Australia, by the late 1980s, the triage role became a nursing responsibility, although it has not been enshrined in Australian legislation (Eagar 1987). Initially, the triage role only operated between the hours of 9am and 5pm (Beach 1981).

With increased community expectation that a Triage Nurse would be available to assess their condition on arrival, coverage was extended to twenty-four hours by the 1990s in most Australian EDs and this remains current practice today (Brentnall 1997). In Australia, the aims of the triage role are: 1) to decrease the risk for people waiting by prompt assessment of all patients as they present; 2) to determine the urgency of a patient's need for care by allocating the appropriate triage code; and 3) place the person in a designated area where care can be provided (Bentley 1995, Read et al. 1992).

During the same time and responding to similar ED conditions a dedicated Triage Nurse was being established throughout the United Kingdom (UK). Yates (1987) conducted one of the first studies related to this role by examining the acceptance of emergency nurses undertaking this position by the medical fraternity. A locally developed survey was used to elicit the views of 230 ED physicians. In the UK Yates found that there was general agreement amongst physicians that nurses were appropriately skilled to perform triage and the introduction of the role would be an efficient practice to deal with the increasing number of patients presenting to the ED. While this was a noteworthy study, Yates only included medical personnel and no information was available relating to how nurses perceived this addition to their emergency roles.

To support nurses in this new role, emergency doctors sought to establish policy guidelines that would assist in the identification of the urgency of a patient's need

for medical intervention. This initiative was the forerunner to the development of standardised guidelines.

DEVELOPMENT OF THE AUSTRALASIAN TRIAGE SCALE GUIDELINES

While the triage role had improved patient flow, many Australian, UK and USA Emergency Departments had developed their own triage scale guidelines. In common use were two-scale, three scale, or four-scale systems and a variety of symbols such as coloured stickers and balloons were often used to indicate the triage scale allocated (Brentnall 1997, Brillman et al. 1995, Rock & Pledge 1991, Williams 1996). While it was recognised by governments that there was a need for greater consistency and uniformity in the triage scales being implemented, national guidelines were not considered or developed until the introduction of Australian ED healthcare costing models in 1994 (Fitzgerald 1996).

By 1994, Australian State and Federal Governments were determined to gain some control over the escalating cost of health care. Financial models were constructed with the purpose of regulating and predicting the cost of specialty areas such as emergency services. Health care costing models made use of five variables; one of which is ED triage code data (Hindle 2002, Richardson 1994). Standen (1998) and others (Doherty 1996, Jelinek & Little 1996) raised concerns about linking triage codes with costing models and suggested that pressure could be placed on nurses to allocate a lower code during periods of patient overcrowding or to allocate a higher

code during quieter periods to meet funding benchmarks. Despite this concern, triage code incentive funding was introduced in 1996.

Another practice that State and Federal Governments implemented to contain costs in EDs, was the computer information system known as EDIS™ (Emergency Department Information System). The purpose of this information system, introduced in the 1990s into many EDs, was to standardise the collection of data (Ashby 1992). The data would be examined by State and Federal Governments to compare patient triage codes and waiting times. This would enable individual hospital performance and productivity to be evaluated. The outcome of standardised data being available is that EDs could now be examined on their service performance, efficiency and identified for improvement.

However, to create equity within these funding models there was a need to develop national triage guidelines. In 1994 the National Triage Scale guideline, that later in 2002 became known as the Australasian Triage Scale guideline (ATS), was introduced (ACEM 1994, ACEM 2002). The ATS consisted of five-scales that linked patient history, signs and symptoms, and diagnosis to clinical urgency (Appendix 2). The ATS also incorporates a hierarchy of medical and nursing response times for patients where: Code 1 (resuscitation) requires immediate intervention; Code 2 (emergency) requires intervention within ten minutes; Code 3 (urgent) within 30 minutes; Code 4 (semi-urgent) should be seen within one hour; and; Code 5 (non-urgent) should be seen within two hours. With the implementation of a national urgency scale and access to more standardised data,

governments could now apply formulae to calculate, regulate and predict current and future ED funding needs (Hindle 2002).

STATEMENT OF THE PROBLEM

To date, the complexity of triage practice and challenges experienced by nurses in this role are not well understood. While triage appears to be a simple process of allocating a code according to the ATS guidelines, the experiential practices of nurses may be embedded in a more complex reality. As an Emergency Department Clinical Nurse Consultant it is clear that more understanding of the Triage Nurse's experience of the role in everyday practice is needed in order to provide appropriate education and support for the role. As this study undertook to understand the experience of Triage Nurses and how they made sense of reality, an ethnographic approach offered the best way to develop new insights into the specialist nursing practice.

PURPOSE OF THE STUDY

The purpose of this study was to explore how skilled emergency nurses experience and manage the triage role in Australian Emergency Departments.

AIM

The aim was to provide insight and understanding needed to educate and support the Triage Nursing role in Australian Emergency Departments.

RESEARCH QUESTIONS

1. What are the behavioural patterns, actions and language of Triage Nurses within the context of the nursing practice?
2. What are the factors that influence the act of triage?
3. What are the processes that are unique to the triage role?

SIGNIFICANCE

This study was designed to fill a gap within prevailing triage literature. This gap is evident in the literature review presented in the next chapter. Measuring triage outcomes and improving the delivery of emergency care has been the focus of triage research. This has meant that the context of care, and triage processes and practices have remained concealed.

CHAPTER 2: LITERATURE REVIEW

This chapter reviews the literature specific to the role of triage and triage nursing in Emergency Departments. An extensive search of the literature revealed that the topic of triage, including its integration into contemporary emergency room practice, has attracted much attention over the past three decades, particularly in journals related to emergency practice. Much of the literature is related to the experience of the United States, United Kingdom and Australia.

Search strategies included the databases CINAHL, MEDLINE, PROQUEST, INGENTA, SCIENCEDIRECT and IDEAL were explored using the keywords "triage", "system", "guideline", "emergency nursing", "practice", "outcome", "decision-making" and "education". Given that the concept of military triage emerged during the late 19th century, the literature search started from the early 1900s. Hence, a manual search of past emergency journals, reference lists, emergency and triage conferences, government reports and daily newspapers was undertaken to identify relevant information.

The literature relating to triage nursing and the role fell into two main categories. The first category focuses on the need for, and development of, national triage guidelines. The second focuses on the introduction and outcomes of extended Triage Nurse practices.

THE NEED FOR STANDARDISED TRIAGE SCALE GUIDELINES

During the period 1985 to 1990, there was a significant increase reported in the number of patient presentations to Australian EDs (Brentnall 1997). Similar increases, up to 19 percent, were also noted in the USA (Brillman et al. 1995). These increases were attributed to an aging population, improved life expectancy for chronic conditions, and increased patient acuity and complexity. In addition, there was a decreased number of privately insured patients and increased hospital bed closures (Derlet et al. 2001, Schull et al. 2001). With the increase in the number of patient presentations to the ED, there was growing concern that the identification of patients with urgent conditions was haphazard. Consequently, in Australia, the first purpose of introducing national triage guidelines was to assist the nurse in the recognition of patient urgency. To aid this process the Commonwealth Government (2002) developed a triage education resource manual.

The second purpose of introducing national triage guidelines was to standardise the collection of data across Australia and thereby enable greater surveillance, regulation and prediction of cost for the specialty area of emergency (Erwich-Nijhout et al. 1997). The national standardisation of triage data enabled comparison and evaluation of individual hospital performance (Ashby 1992).

By the early 1990s, Australia, New Zealand and Canada had adopted a national approach to triage guidelines, while the UK and the USA operated from locally or regionally developed protocols (Beveridge et al. 1999, Fernandes et al. 1994, Wuerz et al. 2001). For example, in Manchester (UK), EDs developed a five-scale

model, but based their urgency codes primarily on the subjective signs and symptoms expressed by the patient. According to Robertson (1997) and Considine et al (2002) this algorithmic approach is less flexible due to the use of decision pathways that only accommodate one main presenting sign or symptom. Unlike the Australasian Triage Scale guidelines (ATS), the Manchester model has not been widely accepted as it is seen to have limited pathways, restricts the ability of the nurse to use clinical judgement and ignores many aspects of medical history, assessment and co-morbidities.

RELIABILITY AND VALIDITY OF THE AUSTRALASIAN TRIAGE SCALE GUIDELINE

Once the introduction of a nationally based triage scale guideline occurred in Australia, much of the research focused on establishing the reliability and validity of the tool to identify patient urgency and predict patient outcome. To this end, the majority of research studies adopted hypothetical patient scenarios as their basis for validation. In 1996, two Australian doctors conducted the first study that examined inter-rater reliability of the ATS. Jelinek and Little (1996) assessed the inter-rater reliability of the ATS in eight Western Australian EDs. One hundred and fifteen nurses allocated a triage code to 100 hypothetical patient scenarios. The findings from this original study demonstrated high concordance (95% within one category of the modal response) of triage code allocation between nurses. The study provided evidence that despite triage experience and hospital type, the ATS appropriately and consistently measured clinical urgency. The results are supported by other medical and nursing Australian researchers who used a similar approach

and found inter-rater reliability between 80 and 95% (Considine et al. 2000, Dilley & Standen 1998, Whitby et al. 1999). While these studies confirmed that the ATS was a reliable measure of patient urgency, they identified that some patients continued to be over or under triaged accounting for inter-rater disagreement rates of between 5-20% (Considine et al. 2000). These studies did not explain the disagreement rate and whether it would be present or different in clinical practice.

Doctors were interested in identifying the reliability of the ATS when measuring a range of patient outcomes such as admission rates. Hollis and Sprivulus (1996) conducted a six-month prospective chart audit study of patients presenting to one NSW ED to assess code distribution and admission rates. They identified that admission rates for codes 1, 2 and 3 were consistent with ATS guidelines and that Triage Nurses consistently applied the ATS despite ED activity. Other researchers, using a hypothetical patient profile method or retrospective analysis of triage code data, examined and demonstrated a strong association between specific triage codes and patient diagnoses, morbidity and mortality rate (Dent & Rofe 1999, Doherty et al. 2003, Whitby et al. 1999). Australian studies convincingly established the inter-rater reliability of the ATS and identified that greater consistency and recognition of clinical urgency were present when Triage Nurses used the guidelines.

Other Australian studies that have examined the ATS, found that the tool was reliable for recognising urgency needs for adults, but not as sensitive in identifying the urgency of acutely ill children (Browne et al. 1997, Durojaiye & O'Meara 2002). Browne et al (1997) conducted a prospective study in one Sydney children's

hospital and provided evidence that the national triage guidelines did not consistently identify children with urgent conditions. Similarly, Durojaiye and O'Meara's (2002) study, using a questionnaire method surveyed 11 EDs, confirmed inconsistent application of national guidelines for seriously ill children. This indicated that additional guidelines needed to be developed for this population group and perhaps other guidelines may be needed for other vulnerable populations such as people with mental health problems and older people. However, with the revision of the ATS in 2002, vulnerable populations such as people with mental health problems have been accommodated within the guidelines. Regardless of the limitations, the body of literature revealed the expertise of Triage Nurses and that there is Level II (Whitby et al. 1999, Wuerz et al. 2001), Level III (Dilley & Standen 1998, Jelinek & Little 1996) and Level IV (Considine et al. 2000, Hollis & Sprivulis 1996) evidence[2] to support the continued use and national acceptance of the five level ATS guidelines. These studies established objective forms of measurement that have provided valuable triage information.

The Australian biomedical triage literature has specifically focused on triage codes and their related outcomes (Doherty 1996, Gerdtz & Bucknall 1999). Within triage outcome studies, the context remains concealed and dimensions such as processes,

---

[2] Level 1 evidence obtained from a systematic review of relevant randomised control trial (RCT)
Level II evidence of one properly designed RCT
Level III evidence of one properly designed psuedo-RCT; comparative studies +/- arm studies; case control studies
Level IV evidence obtained from case series, either post test or pre-test and post test (Craig & Smyth 2002)

uncertainty, tension, risk or aggression are ignored. This limits the understanding of, and the factors that may influence, triage behaviour and activity. While the triage process is reduced to the measurement of numbers, the precise nature of the role and the fact that learning and behaviour are shaped by context remains undervalued and hidden.

EXTENDING THE PRACTICE OF EMERGENCY DEPARTMENT TRIAGE NURSES

By the 1990s the introduction of a dedicated Triage Nurse was making a positive contribution towards improving the delivery of ED services. Firstly, early patient assessment and skillful recognition of clinical urgency by Triage Nurses was showing improvement in health outcomes for higher acuity patients such as those with trauma and medical emergencies (Rock & Pledge 1991, Whitby et al. 1999, Wong et al. 1994). Secondly, the placement of the patient in an appropriate clinical area by the Triage Nurse shows service benefits in efficiency and effectiveness, resulting in recognition of the role as an essential component of emergency service (Geraci & Geraci 2001, Wong et al. 1994).

However, by the mid 1990s Triage Nurses were confronting new challenges due to the increase in the number of patients with non-urgent conditions presenting to the ED. The increase in non-urgent presentations resulted in many of these patients, despite an appropriate allocation of triage code 4 or 5, experiencing significant delays before being seen by a medical officer. A State Government report (NSW Health 1997b) and other reports (DosSantos et al. 1994) identified that waiting

times for non-urgent patients had increased from 1.6 to 4.2 hours. The increase in code 4 and 5 waiting times resulted in many patients experiencing pain for longer periods, some patients becoming aggressive, while others choose to leave the ED before being seen by a doctor (Ducharme 1996, Kelen et al. 2001, Stock et al. 1994).

Government and community expectations demanded that EDs improve waiting times for people presenting with non-urgent conditions. To deal with the increasing number of non-urgent patients presenting to the ED, nurses sought solutions that largely resulted in extending the practice of the triage role. Triage Nurses would now undertake some of the clinical practices previously performed only by medical staff. Three key extended practices incorporated into the triage role were: 1) nurse initiated distal limb x-rays; 2) nurse initiated Schedule 4 and Schedule 8[3] drugs administration; and 3) nurse initiated patient referrals.

EXTENDED PRACTICE 1: TRIAGE NURSE INITIATED DISTAL LIMB X-RAYS

In the USA, UK and Australia a common medical practice incorporated into the triage role to reduce patient waiting times has been nurse initiated distal limb x-rays. By 1995 Australian ED audits identified that for people with suspected isolated fractures, delays were experienced while waiting, not only for medical

[3] In NSW, nurses are required to have a written medical order prior to administration of Schedule 4 and Schedule 8 drugs. Schedule 4 drugs are defined as substances of potential abuse or dependence. Schedule 8 drugs are defined as substances, which produce or have the potential for addiction. Hospital approved Standing Orders, permit administration of Schedule 4 and Schedule 8, by nurses without a prior written order on a medication chart (NSW Health 1995).

assessment and the ordering of x-rays, but also for evaluation and definitive treatment (Kelly et al. 1995, Parris et al. 1997).

To reduce these delays and improve patient satisfaction, the responsibility for assessing the need for ordering distal limb x-rays was transferred from the medical officer to the qualified Triage Nurse in many Australian, USA and UK EDs (Kelly et al. 1995, Macleod & Freeland 1992, Tambimuttu et al. 2002). While early concerns that the practice of Triage Nurse initiated x-rays may delay the act of triage, there has been no evidence to support this view (Lee et al. 1996). The majority of research studies examined this new practice by comparing medical and nursing x-ray ordering outcomes.

Outcome on waiting time

Several prospective 'intention' to treat studies have compared ED waiting time and Triage Nurse initiated distal limb x-rays (Davies 1994, Kelly et al. 1995, Macleod & Freeland 1992). Davies (1994) conducted one of the first prospective nursing x-ray studies in which Triage Nurses hypothetically ordered 876 distal limb x-rays. This UK study demonstrates that significant waiting time reductions, of up to 26 minutes, could be achieved if x-rays were ordered at the point of triage. Later real-time randomised prospective studies supported this finding demonstrating favourable waiting time savings of between 8 and 89 minutes (Cheung et al. 2002, Lee et al. 1996, Lindley-Jones & Finlayson 2000). However, one Australian randomised prospective comparison study found no statistically significant difference in transit waiting times, although it did demonstrate an improvement in

patient and staff satisfaction (Parris et al. 1997). This study acknowledged that the failure to improve waiting times was not because the Triage Nurse initiated the x-ray, but rather the delay was due to inadequate staffing levels in the radiology department. With this exception, comparative studies of ED waiting times and nurse initiated x-rays have repeatedly demonstrated that significant improvement in waiting time for non-urgent patients can be achieved when x-rays are ordered by the Triage Nurse and carried out expeditiously in radiology.

Outcome of staff utilisation patterns

One Australian prospective comparative study examined Triage Nurse initiated x-rays and patient consultation patterns by medical staff. Kelly et al (1995) found that if nurses initiated an x-ray at the point of triage, patient consultations by medical staff could be reduced in number from three to two per patient. The availability of x-ray films prior to the first medical consultation also meant that medical decisions became faster which in turn improved patient satisfaction. This was a significant finding given that patient presentations to Australian EDs were increasing.

Outcome of detection abnormality rates

A number of Australian, UK and USA studies have compared the ordering patterns of Triage Nurses and medical staff with the rate of detected radiological abnormalities. McArthur and Thomas (1995) conducted a blinded prospective observational study that compared x-ray ordering patterns of Triage Nurses (x-rays ordered n=576) with medical officers (x-rays ordered n=516). The findings from

this study demonstrated Triage Nurse initiated x-rays had a positive predictive value of 0.78 (95% CI 0.75 to 0.82), a sensitivity of 0.87 (95% CI 0.85 to 0.90) and a Kappa of 0.81 (95% CI 0.78 to 0.84). These findings indicate a high statistical correlation of abnormality detection rate between Triage Nurses and medical officers. Several other prospective comparative studies demonstrated high abnormality detection rates of between 41-54% confirming the accuracy and appropriateness of Triage Nurses ordering x-rays (Fry 2001, Lindley-Jones & Finlayson 2000, Seaberg & Macleod 1998). Studies that have specifically used experienced Triage Nurses to assess the injury and order distal limb x-rays have consistently found a higher degree of ordering accuracy and abnormality detection rates when compared with the ordering patterns of doctors (Fry 2001, Kelly et al. 1995).

Rock and Pledge (1991), conducted a survey of 344 UK emergency departments and eight site visits, and concluded that Triage Nurses required at least two years of emergency experience before they developed the necessary knowledge, assessment and decision-making skills to undertake this particular practice role. This finding is supported by the results of a study by Lee et al (1996). They conducted a prospective comparative study in Hong Kong and identified a low x-ray abnormality detection rate (28%) among non-experienced Triage Nurses. A range of non-experienced Triage Nurses, which included enrolled nurses and nurse managers had carried out the x-ray ordering. These two studies would suggest that

if high accuracy and abnormality detection rates are to be maintained then only experienced Triage Nurses should initiate the x-ray request.

To maintain high accuracy and abnormality detection rates for distal limb injuries, and support Triage Nurses in this new role, educational programs and hospital protocols need to be established (Wong et al. 1997). There is evidence that having a dedicated Triage Nurse x-ray education program and policy will ensure that they order fewer x-rays than medical staff and maintain a higher abnormality detection rate (Kelly et al. 1995). Other studies have consistently supported the result and found that educational programs need to be ongoing and include such skills as history taking, physical assessment and pain management (Fry 2001, McArthur & Thomas 1995, Wong et al. 1997).

Medical concerns

While the evidence supports Triage Nurse initiated x-rays as a practice to reduce waiting times and improve patient satisfaction, there have been concerns raised by individual medical staff regarding patient radiation safety. For example, Nocera (1996) in a letter to the editor argued that if the Triage Nurse sent a patient for an x-ray unnecessarily or that the patient required more extensive radiological testing, for example different views, then this would result in an increased radiation exposure risk for patients. However, evidence does not support this viewpoint. Several Australian and international prospective comparative studies compared Triage Nurse x-ray ordering patterns with medical officers and identified high agreement rates between the two groups (Kelly et al. 1995, Lee et al. 1996,

Lindley-Jones & Finlayson 2000). The high correlation (greater than 92%) between medical officer and Triage Nurse x-ray ordering outcome patterns demonstrated by these studies provided evidence that patients would not be subjected to any additional radiation risk by inappropriate ordering patterns.

The final concern raised by medical staff is that nurses would over-order x-rays, which would result in an increase in radiology service costs (Nocera 1996). Lindley-Jones and Finlayson (2000) conducted a prospective randomised controlled trial and provided evidence that challenged this notion. They compared the ordering of 445 x-rays by Triage Nurses (n=208) and doctors (n=237) and found that nurses ordered 8% ($p=0.002$ χ^2 test) fewer x-rays. Two similar prospective comparison studies provided evidence suggesting that up to 15% fewer x-rays would be ordered if Triage Nurses initiated all distal limb x-rays (Fry 2001, Kelly et al. 1995). Interestingly, Kelly et al (1995) found that no fractures were present in the subsequent 24 x-rays ordered by medical officers. These findings argue that the concern is not evidence based, studies have consistently found that Triage Nurses do not over order x-rays.

The practice of Triage Nurses ordering x-rays can potentially contribute towards reducing ED costs associated with radiological services. The literature contains consistent evidence that Triage Nurse initiated distal limb x-rays have resulted in a range of benefits such as reduced waiting time, improved patient flow, more effective use of ED resources and increased patient satisfaction (Kelly et al. 1995, Tambimuttu et al. 2002). With a structured education program, experienced Triage

Nurses can safely and efficiently assess patients and order appropriately distal limb x-rays prior to medical assessment.

EXTENDED PRACTICE 2: TRIAGE NURSE INITIATED SCHEDULE 4 AND SCHEDULE 8 DRUGS

In Australia, the Poisons and Therapeutic Goods Act of 1966 regulates aspects of medication administration for registered nurses in New South Wales (NSW). Hence, Triage Nurses are able to initiate over-the-counter medications (preparations that are readily available in pharmacies and supermarkets) to relieve minor symptoms that patients may experience. One such medication in this group is Paracetamol, which is used for mild to moderate pain associated with headaches, arthritis, muscle aches and discomfort from surgery (Caswell 2004). This has been shown to be appropriate for patients experiencing mild to moderate discomfort or pain (MacIntyre & Ready 1996). However, lengthy ED waiting time delays can be experienced by patients in need of stronger pain relief that require a medical prescription prior to administration by nursing staff.

Several USA and Australian ED retrospective chart study audits have identified that patients in moderate to severe pain experience delay in receiving analgesia of between 60-104 minutes (Ducharme & Barber 1995, Fry et al. 1999, Tanabe & Buschmann 2000). Time delays for pain relief for lower acuity patients with moderate to severe pain are due to the fact that medical review is required for the administration of more effective medication such as compound or opioid analgesics (Schedule 8). Other reasons for time delays include the need for medical staff to

concentrate on the more life-threatening issues of resuscitation for higher acuity patients and the need to focus on reducing the error rate of diagnostic decision-making for more complex patient presentations (Pace & Burke 1996). According to Ducharme (1996), some of the problems that arise when pain is not relieved quickly are that patients become agitated and are more likely to express dissatisfaction with ED services. To improve pain management and to reduce time delays before necessary analgesia in one Australian ED, hospital standing medication orders have been extended to legally sanction the Triage Nurse to initiate and administer prescription only Schedule 4 and Schedule 8 analgesic medication (Fry et al. 2004).

In the UK, Williams and Sen (2000) undertook a retrospective patient medication audit of 87 charts where Triage Nurse initiated Schedule 4 medications had been employed. The commonly administered Schedule 4 analgesic in this study was Panadeine Forte: 500mg Paracetamol + 30 mg Codeine and showed that when this medication is administered within an appropriate time, the outcome is efficient pain relief as indicated by patients reporting lower post analgesic pain scores. Similarly, Fry et al (2004), using a prospective exploratory method, supported the earlier UK findings by reporting that Triage Nurse initiated Panadeine Forte significantly reduced median pain scores from 70 to 35mm ($p=<0.001$) and the median time to analgesia (71 to 6 minutes) and that no adverse events were experienced by patients. Another NSW prospective comparative study examined ED waiting times with Triage Nurse initiated Schedule 8 medication (morphine) and reported a 50% reduction in waiting time (52 to 26 minutes) and a 45mm ($p=<0.001$) reduction in

median pain score over one hour (Fry & Holdgate 2002). These positive patient outcomes strongly support the need for the Triage Nurse to prioritise pain management for lower acuity patients, and initiate and administer appropriate Schedule 4 and Schedule 8 analgesic medication. The evidence confirms that Triage Nurse initiated analgesia is safe, effective and efficient, and brings about quality differences in ED pain management.

EXTENDED PRACTICE 3: AUSTRALIAN TRIAGE NURSE INITIATED REFERRALS

One of the main factors that contribute to the increasing numbers of patients presenting to EDs is the reduction of health care services in the community, especially the availability of General Practitioners (GPs) after-hours and on weekends (Metherell 2004, NSWNA 2001). Another factor is that fewer GPs are directly billing the Health Insurance Commission that manages Medicare (the National Health Scheme), and instead are requesting up-front payments from patients. In addition, some fees charged by GPs exceed those stipulated in the Medical Benefits Schedule with the result that people on lower incomes feel unable to afford medical care (Metherell 2003). Consequently, a significant proportion of ED patients (10-86%) are presenting with non-urgent primary care conditions previously taken to their GP (Bolton & Thompson 2001, Derlet et al. 1995, Washington et al. 2000). To manage this identified patient group, referral options within the ED were being considered (Washington et al. 2000).

Currently in Australia, ED patients are required to be assessed by a medical officer. However, to meet the primary care needs of patients and reduce waiting times, the

triage role was extended to include referral options, which have become part of "fast tracking" systems in the ED (Breslin & Dennison 2002, Lancaster 1998, Poole et al. 1993). The dual purpose of fast tracking systems is to free up medical personnel to attend to urgent conditions and to provide an alternative clinical pathway that would enable nurses to manage and treat patients with minor conditions (Elder et al. 2004).

Fast-tracking pathways meant that the Triage Nurse could now refer patients who had been allocated a non-urgent code to a Nurse Practitioner[4] (NP) (Byrnes & West 2000, Christofis 2001, Parish 2000) and the more recently introduced NSW Clinical Initiative Nurse (CIN)[5] (Teutsch 2003, Totaro 2003a). A trial is currently underway in several NSW EDs, whereby Triage Nurses are referring patients to co-located GP practices, which have access to hospital services such as radiology. Preliminary findings suggest that significant patient numbers are referred by Triage Nurses to co-located GP practices, reducing ED work load (O'Malley 2004). These new referral pathways are contributing to a reduction in patient waiting time and length of stay as well as improved patient satisfaction (Barr et al. 2000, Buchanan & Powers 1997, Tye 1997).

---

[4] The first emergency Nurse Practitioner was authorised in Australia in 2000 after an eight-month trial conducted in NSW EDs (McKenzie 2001). Currently there are 40 NPs registered in NSW (Pollard 2004a).

[5] The CIN role was introduced into NSW EDs (level 5 and 6 hospitals) in August 2002 as part of a $Aud3.8 million initiative to improve waiting times for non-urgent patients (Teutsch 2003, Totaro 2003a).

SUMMARY

The development of the triage role in Australian Emergency Departments was assisted by two events. One was the need to have specialist nurses who could undertake accurate patient assessment in the triage area and the other was the introduction of national triage guidelines to assist the nurse's recognition of clinical urgency. Both contributed towards a reduction in higher acuity patient morbidity and mortality rates and increase in patient satisfaction. Medical research has mainly focused on comparing patient outcomes with triage code allocation. Studies demonstrated the reliability and accuracy of Triage Nurse decision-making compared with medical officers, especially in the area of triage code allocation. Nursing research is providing evidence that extended triage practices have a high level of accuracy and made a positive impact on the delivery of healthcare services especially in the areas of decreasing waiting times, pain management, reducing aggression and improving patient satisfaction.

Given the evidence of the value of the triage role and extended practice outcomes combined with guidelines, it is unclear why Triage Nurses find this role the most difficult and challenging of the emergency nursing roles to undertake. However, triage studies have ignored the context in which the nursing role operates, the processes implicit in practice, and how extended practices influence behaviour. Further, little is known about the texture, challenges and experiences of daily triage life, as research has disregarded the presence of interpretive and interactive processes. If educators are to adequately prepare and support nurses for the triage

role, now and into the future, the context and processes embedded and negotiated daily in practice need to be fully understood. By limiting research to specific elements within the role, studies to date have only provided a narrow understanding of the practice. Instead, a research approach is required from which the context, processes, knowledge domains and interactions can be examined. Such a description would provide a more detailed understanding of the triage role and enable triage nursing practice to be better taught and supported within the context of urban Emergency Departments in Australia.

CHAPTER 3: METHODOLOGY

This chapter is divided into three sections: the first provides the methodological framework for the study, the second describes the sampling technique in ethnography as a methodological process, and the third section describes the data collection and the analysis process for the ethnography.

To understand contemporary triage nursing practice within Australian Emergency Departments a research approach was needed that could capture embedded contextual dimensions within a clinical setting thereby making visible the contribution, challenges and complexity of the triage nursing role.

SECTION 1: ETHNOGRAPHY AS A MODE OF INQUIRY

Ethnography is a research approach that provides an alternative perspective for viewing and understanding the practice of triage nursing and the processes underpinning this clinical role within context. As a mode of inquiry, ethnography has a long history. Its development can be traced back to anthropology and the ethnographers who sought a systematic way of collecting, describing and analysing information about different cultural groups (Gurney 1997, Van Maanen 1988).

Early anthropologists had their roots in functionalism and believed that cultural factors shaped and determined how a group would think, feel and respond in a particular situation. Generally, functionalists regarded groups or communities as culturally homogenous because they shared similar characteristics and patterns of behaviour, knowledge and interactions (Munch 2001, Tham 2003). While the early

pioneers in anthropology such as Hanz Boas (1858-1942), Bronislaw Malinowski (1884-1942) and Margaret Mead (1901-78) were influenced by functionalism, they were the first to move away from seeing groups as homogenous or culturally whole. Instead, they focused on studying particular phenomenon within foreign cultures to learn how different groups behave and interpret experience. There is value in an ethnographic approach for researchers who continue to seek an understanding of how groups, such as Triage Nurses, experience and manage their daily lives and do what it is that they do in particular contexts of care.

While the application of ethnographic research methods had been applied to foreign groups, it was not until the 1920s that ethnographers began to look inward to more familiar contexts and make explicit the challenges encountered from phenomenon such as industrialisation and urbanisation (Savage & Worde 1993). Ethnographic accounts provided valuable knowledge about experiences of particular local groups (Giddens 2001, Savage & Worde 1993). Urban ethnographers identified that people shared systems of meaning and that these knowledge systems allow people to build conceptual maps and orientate activity and behaviour during interaction (Cote 1996, Joas 2001, Scott 2001). Without systems of meaning, society would lack cohesive patterns, and behaviour would be erratic, emotional and pointless, thus shared information contributes towards a level of stability and coherence (Fontana 2001, Geertz 2001, Snow 2001). Such a focus enabled researchers to compare how different groups made sense of their world. As the aim of this study was to understand the experience of Triage Nurses and how they made sense of reality, an

ethnographic approach offered the best way to develop new insights into specialist nursing practice.

Ethnographic fieldwork enables insight into the meaning and significance of the way the world appears for a particular group. This approach was relevant to the study of ED Triage Nurses because it provided the means to make visible the experiences and shared systems of knowledge that give shape to their cultural environment. Nurse scholars have found that ethnography protects the context within which nursing work is done and the implicit processes buried in practice (Buller & Butterworth 2001, Burwood et al. 1998). This is an important function given that nurses are now recognised and defined by the area of speciality practice such as emergency, intensive care and mental health. While nursing has similar characteristics, each specialty has a unique collection of individuals who share knowledge systems including values, beliefs, linguistic repertoires and ways of being that make them distinct from other communities of practice (Sbaih 1997a, Sbaih 1997b). Nursing is a practice discipline, situated around people, actions and interactions, and should not be separated from context (Edwards 2002, Groenkjaer 2002, Thompson & Gifford 2000). By grounding data in everyday situations, ethnography enables the world of specialist nursing to be understood from a particular position, such as the Triage Nurse, and learn how their view of the world makes nursing response, behaviour, talk and action appropriate in an ED.

The goal of learning how Triage Nurses constitute, maintain and stabilise systems of shared meaning required a research approach that would get inside the culture in

which the practice of triage nursing was situated. Ethnography was selected as the best method that has techniques which access meanings integrated and situated in every day talk, action, emotion and behaviour (Fine 1999, Wolcott 1999). The ethnographer as 'instrument' filters through the myriad of contextual processes and brings to the fore the elaborate and situationally responsive characteristics of human behaviour thereby capturing the distinctive cultural pattern in which triage nursing is set. Ethnography requires the researcher to get into the cultural environment through fieldwork.

ED TRIAGE NURSING PRACTICE: A CULTURAL CONTEXT

The practice of nursing is inevitably grounded in values, beliefs and attitudes that become organised into systems of meaning. These determine how practice is viewed, conducted and the notion of care perceived. Nurses who work in EDs share common sets of knowledge systems, distinct from other speciality nurses, that provide understanding and bring meaning to activities, shape the boundary of emergency work and make them recognisable to each other (Sbaih 1997b). During interactions, shared meaning systems provide the backdrop to emergency care, although they surface in action and talk to convey role identity, purpose and expectation. By making explicit the processes embedded in nursing practice and interactions, notions such as expectation, power, motivation and identity are accommodated and structural bias reduced (Adler & Adler 1999, Kivett & Warren 2002). The outcome of fieldwork, the ethnography, thus produces a more accurate, creditable, valid and reliable interpretation of cultural behaviour (Wolcott 1990).

Ethnography could be expected to provide plausible insights into triage processes, behaviour, activity and embedded systems of knowledge.

In contrast to research that is located in artificial settings or approaches that use hypothetical situations, ethnography does not distance itself from contextual processes or constrain understanding of human behaviour in the 'real world'. Wolcott (1999) uses the term 'situatedness' to describe the researcher's immersion into the field. Immersion into local scenes provides what is now termed as an 'emic' or insider view of the world and draws the ethnographer into the complexity of the real world where interactive processes convey meaning, bringing a more holistic interpretation of human behaviour (Chombart delauwe 1986, Hammersley 2002, Tham 2003). By immersion into the world of triage, ethnographers can learn about context and how nurses interpret and convey meaning thus strengthening research claims (Byrne 2001, Byrnes & West 2000, Snow 2001). This is an important difference given that the majority of triage studies to date used approaches that were distant from the context of practice.

To add depth to the understanding of contextual processes embedded within triage nursing, the importance of the cognitive domain and its influence on human behaviour was given consideration. Cognitive processes operate in most human interactions and activities, and assist individuals to assign meaning to their environment, and creatively negotiate rules, expectations and roles (Fararo 2001). Some ethnographers express the view that valuable knowledge and insight into human behaviour can be achieved by understanding the interrelatedness of context

and expert cognition (Ball & Ormerod 2000, Fine & Elsbach 2000, Langholtz et al. 1997). Broader sociological information helped to make explicit how people organise their knowledge and make decisions, within moments of human interaction (Ball & Ormerod 2000, VandeVusse 1999). By using participant observation and interview techniques, ethnographic research can accommodate interactions, networks and patterns of thinking within contextually rich and complex situations such as EDs. These insights and research techniques enable a contextualised understanding of triage nursing practice.

To understand how Triage Nurses are positioned within a cultural environment and construct the complex processes shaped by systems of meaning, routine nursing practice must be examined as an integrated whole and traced within a 'real' context. To this end, an ethnographic approach in which participant observation and interview techniques are used provides new insight into the practice of triage nursing.

THE WRITING OF ETHNOGRAPHY AS PRODUCT

The realist tale traditionally has been the writing style chosen by ethnographers to convey the plausibility of sociological claims and arguments. Realist tales use 'detailed' or 'thick' description to convince readers that participants in the study experienced these events in the way the narrative asserts (Miller et al. 1998, Sparkes 2001). Thick description enables human feelings, knowledge and ways of doing to be conveyed. This description provides artful clarity and vividness, and marks the distinctive character of realist tales. However, traditional realist tales

have been criticised for neglecting to provide a description of the researcher's influence on the construction of text – the ethnography.

In the past, realist tales were constructed in such a way that the author's voice dominated the narrative style. The representations of voices from the field were conveyed through the singular authoritive voice of the researcher, with the result that voices of participants were seldom heard. This traditional narrative style led to texts conveying implicit agreement on behalf of the "other". The lack of reflection concerning the act of writing led to the narrative style being viewed as highly stylised, objective, neutral and impersonal stirring ideological, methodological and representational debate (Atkinson 1994, Fine 1999). This resulted in critical reflection that challenged the authorial excesses of the past and sought to lessen the presence of the author by a growing resonance of voices within texts. In short, by communicating the social pattern of lives and combining voice testaments, textual representation of multiple voices can be achieved (Brunt 1999, Gubrium & Holstein 1999, Hallett & Fine 2000).

Ethnographers of the past gave minimal thought to how they used linguistic conventions and textual devices in realist tales to convey purpose and invest meaning. While ethnographers need not abandon or reduce their use of linguistic conventions or textual devices, critical awareness of the problematic nature and limitations of language is required during the construction of text. Unlike the researchers of the past, authors need to be sensitive, aware and acknowledge the

power of literary conventions and textual devices in order to achieve a more disciplined and principled approach to their usage within realist accounts.

Contemporary realist tales seek to convey understanding of social scenes and contribute towards the sharing of experience, knowledge and cultural interpretation through the processes of interaction, interpretation and reflection while not acknowledging overly self-presence as the focus (Snow 2001, Wolcott 1999). Contemporary realist accounts can more fully accommodate multiple voices, consideration of linguistic conventions and codes, something of the researcher's presence, the role they occupied in the event, and the researchers influence on the construction of text. With the boundaries of realist conventions broadened, through self-reflective practices and review, the narrative style maintains wide appeal and continues to be a valuable, sustainable and compelling way to convey social scenes and embedded meanings.

SECTION 2: SAMPLING TECHNIQUE FOR THE ETHNOGRAPHY

To understand the experience of Triage Nurses, and support and educate them in the clinical role, it was first necessary to identify those who undertake the triage role throughout NSW. Sampling required two phases. The first sampling phase involved gathering information on triage nursing throughout NSW in order to locate a sample group and to characterise the range of work related activities. The second phase involved establishing the field for fieldwork.

PHASE 1: LOCATING TRIAGE NURSES IN NSW

At the time this study began, there were no records or databases about triage nursing or nurses in NSW, where this study was to take place. Therefore, the first phase in the research process was to obtain information about the nurse classification groups undertaking the triage role and their current scope of practice in NSW EDs. Given that triage nursing is a situated practice, it was critical to develop a contextually based survey tool that would explore this area of specialised nursing practice. By gathering this information, it became possible to identify the group of nurses who would constitute a representative sample of informants for the ethnography.

Using the Delphi technique to design a self reporting triage survey tool

In the absence of existing empirical data, the strategy selected to develop a contextually based survey tool was the Delphi technique. This technique uses a collaborative and inclusive approach to information gathering and is in keeping with an ethnographic framework (McKenna 1994). In the present study, it was characterised by the establishment of a panel of experts and subsequent iterative review of questions to reach an agreed consensus level for inclusion as an item within the triage survey (Hasson et al. 2000).

According to Duffield (1989) when a panel is homogenous, that is, members hold similar educational, professional and clinical experience, then a group of 10-15 members is adequate. Consequently, in 1999, a panel of 12 emergency nurse experts was assembled from EDs throughout NSW. They were purposefully

selected from regional and metropolitan areas and were required to have greater than five years emergency nursing experience and be working in a leadership position. The panel ultimately consisted of five Clinical Nurse Consultants and seven Nurse Managers. Panel members selected an 83% consensus level, needing 10 out of 12 panel members to agree, which would determine whether a triage survey item would be retained, modified or deleted.

To establish the initial list of survey items for round one, individual sessions with panel members were conducted. Return rate of round one was 100% and consisted of a 47-item survey. In round one, 18 items achieved an 83% consensus and three items achieved 100% consensus. The remaining 29 items required modification. Round two comprised the 29 modified items and three new questions proposed by panel members. There was a 100% return rate for round two. Of the 32 items in round two, 24 reached the 83% consensus level and eight reached 100%. After two iterative rounds, the Delphi technique developed a 50-item self-reporting triage questionnaire (Appendix 3). It consisted of five sections: demographics, professional, education, practice, and policies and protocols.

Using the Delphi technique to develop a self-reporting survey tool, content, construct, face and concurrent validity were established. All panel members received (via mail) a copy of the final self-reporting questionnaire. The Delphi technique provided a useful method for producing a survey tool that specifically targeted Triage Nurses and the context in which they practiced (Fry & Burr 2001c).

Piloting the Triage Questionnaire

The questionnaire was designed to survey Triage Nurses and the scope of their practice in a variety of service providers across NSW. Consequently, the aim of the pilot study was to examine a representative sample of EDs to determine the robustness of the tool. In September 1999, a pilot study using the 50-item self-reporting Triage Questionnaire was undertaken. A convenience sample of 30 NSW emergency nurses who regularly undertook the role of triage were recruited from six hospitals in a rural (n=2), regional (n=2), and metropolitan (n=2) area (Table 1).

Table 1. Pilot survey Triage Nurses

Nurses	**n=30**
Registered nurse	15 (50%)
Clinical Nurse Specialist	12 (40%)
Nursing Unit Manager	2 (7%)
Clinical Nurse Consultant	1 (3%)

Triage Nurses were invited to complete the questionnaire and make comments on content, structure, flow and design. The return rate was 100% (n=30) with the average triage experience of between five and ten years. It became clear that some abbreviations were ambiguous and these were replaced by full text. Other changes included increasing the list of triage procedures in the practice section of the questionnaire and expanding the list of nursing groups in the demographic section. The comments provided by respondents confirmed overall appropriateness of the survey in terms of content, flow and structure. Some minor editorial changes were made to the questionnaire, such as increasing font size. The piloting of the Triage

Questionnaire produced minimal changes and established the survey as a robust instrument that consistently measured the scope of triage in NSW (Fry & Burr 2001b).

Exploring and locating triage nursing practice throughout NSW

The next step was a statewide survey to locate, identify and explore triage nursing practice in NSW. In 2000, the Triage Questionnaire was distributed across 17 Area Health Services to nurses in 50 hospitals (n=900) in NSW. Hospitals providing all levels of emergency care were included in the sample. The return rate by nurses was 46% (n=412) from 47 (94%) hospitals (Table 2).

Table 2. Triage Nurse survey return rates

Nurses n=412	%	Hospitals surveyed n=50	Hospitals returned n=47
120	29	Tertiary Referral	9
94	23	Rural	15
87	21	Urban Metropolitan District	5
52	13	Major Regional Base	5
40	9	Regional	9
19	5	Multipurpose Remote Centre	4

The survey data provided a profile of Triage Nurse demographics, role characteristics, range of practice, policies and influences on code allocation. The questionnaire identified the scope of current triage practice including patient assessment; extended practices; first aid; allied health referrals; investigations; and bed and triage code allocation. This range of practice was largely consistent throughout NSW. The study highlighted that emergency experience and different knowledge systems contributed to negotiating the role. In addition, the nurse's

decision to allocate a triage code was complex, based on patient and non-patient factors. The results showed that the Clinical Nurse Specialist (CNS) group regularly undertook the triage role, had more emergency experience, commonly performed extended practices and were located in greater numbers, compared with rural sites, in Sydney metropolitan hospitals (Fry & Burr 2001a).

The information obtained from the questionnaire added to the understanding of current triage practice in NSW. However, it did not provide insight into how the emergency nurse perceived their role or the challenges and processes that shaped triage practice. Instead, these data reaffirmed the need to develop a deeper understanding of how this contemporary role was experienced and negotiated in everyday practice. The information obtained from the survey led to the decision that a representative sample of informants for the ethnography would be experienced Triage Nurses, at CNSs level, undertaking the triage role in metropolitan Emergency Departments.

PHASE 2: ESTABLISHING THE FIELD FOR FIELDWORK

Selecting the setting

The setting for this ethnographic study was four metropolitan EDs. These EDs were purposely selected as they had a dedicated Triage Nurse, shared the computer system (EDIS™), onsite diagnostics and radiology services, used the ATS, and had a similar patient casemix (NSW Health 2001a). The Sydney metropolitan area has 32 public EDs designated as either Level 4, 5 or 6. The level of designation is dependent on the availability of on-site support services. In Sydney, there are nine

Level 6 Principal Referral Hospitals. Level 6 facilities provide all surgical specialities and intensive care support services. There are four, Level 5 hospitals which offer similar services to those designated Level 6 with the exception of no on-site neurology or cardiothoracic surgery. Given the similarities between Level 6 and 5 hospitals, Level 5 sites were excluded from the study.

In contrast, Level 4 hospitals, of which there are four, have limited intensive care support services or access to surgical specialities. Patients presenting in an acutely unwell state, are stabilised in the ED and then transferred to Level 6 hospitals (NSW Health 2001b).

While the selection of four ED sites was an arbitrary one, it was based on Hammersley and Atkinson's (1995) view that a single site reduced information and the representation of the group involved. Therefore, to maximise the range of observable triage phenomena, four metropolitan hospitals, one Level 4 and three Level 6 EDs[6] were selected as study sites (Table 3).

Table 3. Emergency service providers

Hospital (n=4)	Level	*Presentations/month	**Presentations/year
1:Tertiary Referral	Level 6	3523	39291
2:Tertiary Referral	Level 6	2872	32901
3:Tertiary Referral	Level 6	3301	37856
4:District Hospital	Level 4	1,625	20275

*NSW Health - Facts at a Glance 2003 www.health.nsw.gov.au/hospitalinfo/health.
**NSW Health ED Service Plan (NSW Health 2001b).

[6] The hospital where I am employed was not one of the participating research sites.

Selecting good informants

Within ethnographic sampling, good informants are those who are experienced in the scene, confident within their field and willing to discuss the experience (Gold 1997, Wolcott 1999). In NSW Clinical Nurse Specialists (CNSs) in the triage role are most likely to make the best informants as they have worked in a specialty area for a period of four years or have at least 12 months specialised clinical experience and hold a postgraduate qualification (NSW Health 1997a). CNSs hold a prominent role in their workplace and are confident in understanding systems of shared meaning – they have insider knowledge because of their experience and expertise. Specialised nurses, having completed all induction programs, are immersed in their own cultural milieu and understand the values, beliefs, norms and activities of the setting. Experienced specialist nurses having established their practices are more likely to have the confidence to offer their view and be able to reflect on nursing practice (Fairweather & Gardner 2000). Based on the characteristics required to make a good informant and the information gained from the Triage Questionnaire the emergency CNS was selected as the sample group. Thus, a purposeful sample of Triage Nurses at CNS level participated in the study.

Determining the appropriate sample size for the Triage Nurse group was guided by available literature. According to Stewart (1998), one participant cannot provide the diversity or range of a group's behaviour or language. A sample size of ten was selected to explore perceptions of triage reality and systems of shared meaning while maximising opportunity for comparisons and disconfirming findings. Fontana

(2001) suggested, a self-limiting sample size of 10-12 people studied in depth provide sufficient opportunity for collecting, refining and defining data. Hence, the sample of ten was thought to be sufficient to provide opportunity to learn the involutions of behaviour and gain insight into the meaning and significance of nursing practice or - why Triage Nurses do the things they do. Given that ethnographic studies can continue over a long period of time, a sample of ten Triage Nurses seemed prudent and manageable as hospitals were experiencing nursing recruitment and retention problems.

Accessing the field

After contacting each ED Nurse Unit Manager (NUM) and discussing the study outline, a meeting was arranged to which departmental Triage Nurses were invited. The NUMs did not attend this meeting. At Hospitals 1, 2 and 3 four Triage Nurses were present at the meeting and in Hospital 4, three attended. The meetings conducted in each ED, lasted one hour and provided an opportunity to discuss the purpose of the study and explain the research techniques of participant observation and interview, after which each nurse was provided with a study guideline (Appendix 4). All Triage Nurses verbalised their interest and enthusiasm for the study and offered their names for participation. These meetings took place four months before the study commenced and were to give staff the opportunity to offer their approval, disinterest, willingness or concerns about the study. While all nurses volunteered, ten Triage Nurses at CNS level were purposely selected to participate

in the study and were informed that contact would be made before the first observation shift.

The sample was two Triage Nurses from each of Hospitals 1, 2 and 4 and four from Hospital 3. The sample included seven female and three male nurses with an average age of 31 years. Of the ten Triage Nurses who agreed to participate, eight worked fulltime. The average CNS and triage experience was 3.5 and 5.4 years respectively. Triage Nurses had between four and twelve years emergency experience (Table 4). Pseudonyms have been used to protect the identity of the Triage Nurses participating in the study.

Table 4. Triage Nurse age and years of nursing and specialist experience

Nurse	Age	RN	ED	Triage	CNS
Andrew	30	6	4	2	1
Karen	42	20	12	10	5
Kylie	35	14	12	10	8
Mathew	27	7	5	2	2
Meg	35	5	4	2	1
Peter	41	20	10	9	1
Sally	30	10	8	6	5
Samantha	27	6	5	3	4
Tanya	30	10	8	6	3
Toni	34	12	5	4	1

Four Triage Nurses held a Masters Degree and the remaining six postgraduate nursing certificates (Table 5).

Table 5. Triage Nurse academic qualifications

Nurse (n=10)	Qualifications	Hospital (n=4)
Andrew	Master Critical Care	Tertiary
Karen	Emergency Certificate	Metropolitan
Kylie	Emergency Certificate	Tertiary
Mathew	Emergency Certificate	Tertiary
Meg	Emergency Certificate	Tertiary
Peter	Master Critical Care	Metropolitan
Sally	Postgrad cert Critical Care	Tertiary
Samantha	Master Critical Care	Tertiary
Tanya	Master Critical Care	Tertiary
Toni	Emergency Certificate	Tertiary

Ethical considerations

Ethical approval to undertake the study was obtained from the University of Sydney Human Ethics Committee (Appendix 5). The second phase of ethics approval required confirmation that selected hospitals were prepared to participate in the ethnographic study. Four Directors of Nursing were sent an information letter and study outline for the purposes of obtaining hospital approval. The Directors of Nursing responded favourably to the proposal and provided written agreement. Hospital letters of agreement were submitted with the ethics application.

Ethnographic studies raise ethical dimensions of confidentiality, privacy and trust in the process of collecting data within real life situations. All identifiable features of the hospital and participants were coded to maintain confidentiality and privacy. Each Director of Nursing directed that I contact the ED Nurse Unit Manager (NUM) to discuss the details of the study. I proceeded to contact the NUM, in each hospital, who assisted by arranging a meeting with Triage Nurses. This provided

the opportunity to discuss the research study in a voluntary and non-threatening environment. Participating Triage Nurses were assured that records of observations, interviews and discussions would be kept in a secure place and that they could withdraw from the study at any time. A consent form was obtained from each participating Triage Nurse (Appendix 6). As ethnographic studies involve immersion into a situated context for a prolonged period, I contacted and confirmed the Triage Nurses' willingness to continue in the study at the beginning of each observation session.

SECTION 3: DATA COLLECTION AND ANALYSIS PROCESSES

PARTICIPANT OBSERVATION

The main data collection technique for the study was participant observation. Participant observation was relied on to develop an understanding of how Triage Nurses experienced and made sense of practice, the environment and forms of knowledge that are revealed in interactions. This observation method is a basic data collection technique in ethnographic enquiry. This technique allowed the detailing of what Triage Nurses 'do and say' in the same manner as everyday participants do in their cultural environment. The participant observer immerses in a field of opportunities to observe how a Triage Nurse viewed and negotiated practice.

The type of participant observation used for the study focused on 'observing' Triage Nurses with 'participation' as peripheral. My 'participation' only ever included helping to push beds around the department or hand equipment to the Triage Nurse. On another occasion, I assisted in preventing a patient from falling

out of bed. During observation, my position as researcher was overt, I would introduce myself as a researcher and at all times wore an ID badge in the field.

Sampling of time

In relation to the temporal context of this ethnographic study, three key decisions were made. Firstly, a 12-month time frame was selected as this was considered sufficient to provide ample opportunity to observe a wide variety of triage events, activities, and participants in various contexts. Twelve months provided adequate time to be accepted within a sub-culture and come to learn and understand the way Triage Nurses view their world (Schwartz-Barcott et al. 2002). The time span from January 2001 to January 2002, accommodated for seasonal variation and its potential impact on emergency workload, casemix and activity. During the winter months, while ED presentation numbers remain unchanged, admission rates characteristically increase (NSW Health 2001b). Over the 12 months, there was opportunity for periods of reflection away from the field to develop and clarify themes, while repeated site visits offered an opportunity to discuss and confirm ideas and thoughts with participants.

Participant observation sessions were conducted on Fridays, weekends and public holidays and began at 7am with the start of the nurse's morning shift. The triage role, while required throughout the day and night, is determined by patient presentation and activity. Given the unpredictable nature of acute illness and traumatic events within society, emergency service delivery remains consistent temporally throughout the week. Therefore, the second decision, which confined

observations to Fridays, weekends and public holidays would not restrict exposure to the range of triage phenomena.

The third temporal decision involved the duration of each observation session and was influenced by the nurse's roster. As each Triage Nurse worked an eight-hour roster, I chose to observe for the duration of a shift to demonstrate a commitment and interest in the participant and their work activities. Observation sessions were confined to the participating nurse's triage shift and included the nurse handover. Two hundred hours of observation provided exposure to the range of dramas, events, activities and triage practices (Table 6).

Table 6. Hours observed in each hospital

Hospital	Visits	Hours
Hospital 1	6	42
Hospital 2	5	40
Hospital 3	8	64
Hospital 4	6	48
Total	**25**	**200**

Being in the field

Being in the field enabled close observation of Triage Nurses at work. The triaging of patients primarily occurred in the triage room. In the four hospital study sites, the triage room provided adequate space to stand unobtrusively behind the nurse who was undertaking the role. In the triage area, 1104 patient assessments were observed. Within the triage room, the range of activities observed included computer entry, telephone triage and answering enquiries, ordering patient investigations, referrals, management of pain and wounds, and nursing care. During

busy periods, Triage Nurses needed assistance and these episodes provided opportunities to observe another in action. I also accompanied Triage Nurses as they moved from the triage room to the clinical area during which time hundreds of interactions and daily conversations were observed.

Over the 12 months, 25 site visits took place in which Triage Nurses were observed. While observing Triage Nurses and their normal flow of activity, there were many opportunities to engage in informal discussions. Participant discussions took the form of 'normal' conversations and they were able to exercise a level of control over information flow and content. Discussions with Triage Nurses enabled systems of shared meaning, motivation, expectation and goals embedded within activities and interaction to be brought to the surface.

In the field, data collection took the form of continuous memo taking. Generally, field notes are the accepted means for recording observational data, although there is no consensus on a particular model or system (Hammersley & Atkinson 1995). Continuous memo taking was chosen as a strategy firstly, to desensitise the Triage Nurse to the research process, and secondly, to minimise the loss of primary data. Initially, each event was recorded broadly with documentation becoming more focused on the triage role. When possible the field notes were written in full text. Conversational language, along with intent, utterances, pauses and syntax were recorded, although capturing language verbatim was largely impossible and so invariably field notes capture only a portion of the language being spoken. Journal entries included 'speech in action', and by being familiar with the language, short

key words or phrases were able to be used for speed and accuracy. For example, words such as vital signs or resuscitation were shortened to ‘obs’ and ‘resus’.

During fieldwork, while the reliance was on recording speech, all senses were employed and the documentation included personal memos. All memos were kept separate from other data sources.

I was sensitive to the inappropriateness of writing in this busy and public environment where people are often under stress. On several occasions, it seemed insensitive to continue recording data and so a decision was made to stop. Later, I would relive and document field notes when the Triage Nurse needed to attend to a personal issue or immediately after the observational session. Consequently, some events recorded in my journal were verbatim while others are summaries of events, practice, interactions and behaviour.

The primary focus of data collection remained on Triage Nurse activity and interaction. It was impossible to observe or record everything in the environment. Despite, the multidirectional nature of events, the focus remained on triage, sending other stakeholders who may hold different viewpoints, emotions and thoughts into the background, for example patients, ambulance offices and medical staff (Appendix 7). However, at times, different players shared centre stage with Triage Nurses allowing glimpses of the multidirectional layers and networks present within the context of everyday practice. Information and voices brought to the fore are the result of the selection process.

During fieldwork, I was confronted by choice: - about what to observe and record, which events to follow, and what could be safely ignored. In part, decisions were determined by the theoretical underpinning of the research. By taking every opportunity to talk with members of this setting, valuable, privileged and accurate insight into the cultural environment, negotiated by Triage Nurses, was made visible.

Insider-Outsider: gaining entry into the field

As an emergency nurse consultant, I had a good theoretical base to draw on when in the field. I belonged to the world of emergency nursing, - an insider, and as such, I had experienced similar work activities, conventions, language and knowledge systems. While I was familiar with the context of the setting, I was largely unfamiliar with each study site and the staff that worked within them. I had minimal contact with the sites before commencing the study, although I had worked at one study site seven years prior to the study, but not in triage. However, the time lapse meant that I was no longer familiar to or with staff at this site, layout or their practice routines. As a result of this unfamiliarity, I was able to maintain a critical gaze, while immersed in the different ED sites. Unfamiliarity sustains critical distancing and enables an analytical gaze to be maintained throughout a study (Hanson 1994, Wolcott 1999).

Some ethnographers argue against researching a known setting because they believe that critical distancing is lost (Hammersley & Gomm 1997, Kleinman 1995). However, other researchers maintain that nursing research needs to be

conducted by insiders (Greenwood 2003, Hanson 1994, Schwartz-Barcott et al. 2002). Understanding nursing and the context in which it is practiced is best achieved by having some knowledge of the field. As an insider, I had an appreciation of the context when in the field, which opened up the nuances of practice to exploration. Familiarity with the language assisted to understand the jargon in everyday talk. For example, if the nurse is discussing the triage process and spoke about 'obs' I was aware that this meant they had obtained readings from the patient: a blood pressure, heart rate and temperature. I was then able to record this in short hand and concentrate on other dimensions such as emotions, language and posturing. Familiarity with the setting assisted to ease some of the anxiety experienced embarking on fieldwork, feeling voyeuristic, that I was in a world where I belonged, and yet, did not. Some support was garnered from reading the literature and in particular the works of other ethnographers (Atkinson 1995, Johnson 1998, Wicks 1999). Without knowledge of the research area, site recognition is limited, understanding constrained and misinterpretation likely (Evered & Louis Reis 1981, Sharp & Hope 2003). In this study, insider knowledge enabled richer, more relevant and perspicacious findings to be reached regarding the practice of triage nursing.

Non-key informants

While in the field I was able to observe and interact with others members of the ED environment. Informal discussions with these participants took place in the clinical area, triage and staff rooms and led to a more privileged understanding of the

cultural context. These informal interactions involved four main groups, which included clerical staff, senior emergency physicians, nurses and ambulance officers. Many informal interactions were observed amongst these members because of their working relationship with the Triage Nurse. Clerical staff undertook their work activities in an office area adjacent to the triage room and worked closely with the nurse. The senior emergency physicians provided clinical support for the Triage Nurse. Emergency nurses with triage abilities would often offer assistance to the Triage Nurse during busy periods enabling observation of another group. After the Triage Nurse assessed ambulance patients, the officers often completed their paperwork in the triage area. These regular working interactions by other members with Triage Nurses provided many opportunities for discussion and the observation of behaviour and informal talk.

Positive field relationship

The richness of participant observation data is dependent on the establishment of positive field relationships. To promote positive relations during fieldwork several strategies were used. Firstly, the decision to meet with Triage Nurses and become familiar with the physical setting provided a supportive base for fieldwork activities. Secondly, I was not there to impose personal views and assumptions on this context but to observe and therefore regularly considered my own body language and speech, keeping personal feelings and thoughts to myself. The third strategy used to promote a positive fieldwork relationship was to offer staff the opportunity to read extracts when asked what I was writing in my journal. On two

occasions, clerical staff reviewed the journal and the comments were either positive or neutral. Review of each journal entry proved to be a positive experience as conversations about the triage role followed. In maintaining a trusting relationship, whenever staff approached me I was always forthcoming about the details and purpose of the study. A senior doctor on one occasion asked what I was doing in the ED and if I had permission from the hospital to be there. After assuring him that I did and would bring evidence of this on my next visit, he then informed me that this was not necessary. I was reminded during the incident that I was a guest in this situation. Three further discussions were to take place with this particular doctor, which provided valuable insight into the medical view of the triage role and ED generally.

Another strategy employed in the field to maintain positive field relations was to provide transcripts to each nurse. This strategy embraced the importance of inclusiveness and a desire for negotiating understanding from the participant's view. Transcript feedback brought the realisation that participants moved in a time and space that was different from my own, and that I was imposing my presence on a world that operated with different priorities. Yet, in these moments I felt privileged to be in this world and realised that the fieldwork role negotiates a deeper understanding of how everyday routine was viewed from a particular position within it. Managing fieldwork was complex and required balancing a sensitive, open and honest approach with privacy, confidentiality and finally, research interests.

Positive field relations are supported by a collaborative approach. Collaboration was sought in determining the most appropriate place to be located in the triage room while the nurse was undertaking patient assessments. A position was determined in a non-threatening, collaborative way that enabled the Triage Nurse to undertake assessments and introduce me to patients. I was able to observe interactions between the Triage Nurse and patient, but the position did not appear to be intrusive. Once this position had been determined, I sustained this position for the duration of the study. While observing the Triage Nurse assessing patients, I chose never to engage the nurse or patient during the assessment process. While on one occasion, a Triage Nurse asked for an opinion they never appeared anxious or nervous when undertaking triage activities.

Repeated site visits provided opportunity to strengthen positive field relations by demonstrating commitment and genuine interest in triage work and a conscious attempt to understand data. On return visits, nurses were keen to discuss the study, negotiate new meaning, engage in light-hearted dialogue and provide unsolicited views about their role and meaning behind actions. By conveying openness, interest and enthusiasm during field work, a richer understanding of how emergency nurses understand and interpret triage work surfaced. Positive field relations were developed during the study as shown by remarks from Mathew, Sally and Peter: "*come back any time*"; "*when will you be back?*"; and "*any time is OK".*

Leaving the field

Realisation that it was time to leave the field slowly developed after ten months. During the last two months, no new patterns of understanding were observed and triage talk had become repetitive - characteristic signs of data saturation. Data saturation convincingly completes and anchors the thoroughness of a study, signifies stability within the research process, and enables a researcher to withdraw confidently from the field (Long & Johnson 2000, Whittemore et al. 2001). Leaving the field can be difficult if a researcher has selected to go "native", leading to over-identification (Groenkjaer 2002). However, by the maintenance of some distance in the field, an analytical eye can be sustained and the withdrawal process assisted (Mays & Pope 1995). Despite being comfortable and having positive field relationships, 'going native', was not a feature of this study and made exiting less traumatic.

When informing the participants I was leaving the field, I experienced mixed emotions. For example, of sadness, appreciation, and feelings of privilege after having been permitted to view the world of triage nursing practice. On my part, emotions were driven by the knowledge that work activities, lives and relationships in these places would continue as they did prior to my arrival. Since leaving the field, four participants have sought contact to establish the progress of the study and all conversations finished with the Triage Nurse offering continued support. Such interactions reinforced that my presence may have had a positive influence, leading participants to reflect on their triage nursing practice.

INTERVIEWS

To complement participant observation data, semi-structured interviews with the ten participating Triage Nurses were conducted. A semi-structured interview approach was selected as this produces a more positive exchange between the researcher and participant, is less threatening, and can empower those involved to provide their own interpretation and meaning (de Laine 1997). Interview questions guided by the literature sought to stimulate conversation and encourage rich detailed narratives about role function. Semi-structured questions were open ended, but provided the opportunity to direct the nurse's thoughts towards triage assessment processes (Appendix 8). The opening question "Please tell me what you were thinking about while triaging the patient with chest pain?" was conveyed in conversational form. Given the frequency of patients who presented to the ED with chest pain, the patient scenario remained the same for each interview.

Interviews were conducted after at least one participant observation session. Securing the willingness of Triage Nurses to participate by having signed consent forms for observation and using a more informal approach facilitated co-operation during interviews. One-on-one interviews were conducted at a time of the nurse's choosing in a private area away from competing distractions and the clinical area. Of the ten Triage Nurses, eight agreed to participate in the interview after completion of an observation shift. The remaining two nurses were relieved by the in-charge nurse to participate in the interview during the shift. The relieving of each

Triage Nurse occurred without any prompting and had been organised by the individual nurse on the shift.

An earlier decision to audiotape each interview minimised distraction and encouraged the free flow of thought. At the start of the interview, the audio-recorder was placed on the desk in front of the participant and I sat beside or opposite the nurse, depending on how the room was designed. Recording each interview permitted me to focus on the interaction and response of each nurse. During interviews, I would jot the occasional note in my journal, but these were mainly hunches or ideas. Unfortunately, staff interrupted two of the Triage Nurse interviews. While these interruptions were undesirable, they seemed to have little impact on the interview, as I was able to replay the tape back, and nurses indicated, by cues such as *"oh yeah that's right"*, that they had recalled their thoughts and were happy to continue. On two occasions, nurses asked me to stop the tape while gathering their thoughts and some interviews were momentarily stopped to turn the tape over. The interruptions did not appear to be unsettling for participants and the audiotape was turned off once the closure of the interview was recorded. Of the ten triage interviews conducted, six lasted forty-five minutes and four lasted one-hour.

SECONDARY DATA SOURCES

During fieldwork activities, the quality of primary data collection was augmented by secondary data sources, which broadened the lens through which the researcher gazed into the culture of Emergency Department care. Formal documents provided additional information of the context in which triage nursing is practiced. These

sources included: Triage Nurse assessment forms, ambulance reports, medical practitioner referral letters, departmental memos, policy and procedure manuals and government reports. A computerised triage assessment form was printed after the nurse entered the patient assessment details, triage code and designated clinical area. If the patient arrived by ambulance or was referred by a GP, the report or referral letter was attached to the printed triage sheet. The GP and ambulance information source provided additional background patient information. Other information sources that provided insight into the cultural environment were memos and policies on display throughout each department. Government reports and policies contained valuable information such as ED patient presentation numbers, resource availability, waiting times and hospital triage code allocations. These information sources provided a more detailed understanding of the context within which the triage role was practiced.

At the time of the study there were many newspaper articles profiling ED activity, triage role and patient safety (Cox 2002, Ferrari 2001, Kearney 2001, Robinson 2001). Newspaper articles, collected and collated chronologically starting from 2001 were largely of Sydney and local district newspapers such as 'The Sydney Morning Herald'. The popular media highlighted community concern and expectation for, and of, emergency care, and provided a different way to view triage nursing work.

DATA ANALYSIS

Data collection, analysis and interpretation were an interrelated and ongoing process. Three key strategies were used in preparing the data for analysis: 1) transcription; 2) theme building; and 3) data interpretation. Data analysis took a convoluted path that was shared with reflection, fieldwork, participant feedback and conventional literature sources.

Managing the data

Field notes and taped interviews were transcribed within one week of completing the session or interview. To strive for readability some editing of the text occurred, although the intended meaning remained. For example, small pauses and utterances were removed to provide flow to the dialogue. Indented italics were used to distinguish informant's speech marking a clear distinction between the author and participant(s)' voices. Another distinction was the use of 'I' in the text, that represents only my voice. Other editing strategies to ensure readability included: words inserted into parenthesis (word) indicate possible hearings; three dots … convey long pauses: emotions are conveyed in brackets (laughing); empty parenthesis ( ) indicated missing words or the inability to hear a word; capital letters suggest loudness relative to other words used. These editing strategies maximised transcription quality, reading and trustworthiness and maintained the intention of words (Poland 1995). While every participant observation and interview were coded separately (Nudist 5™) by name, line and session, for readability these identifying features will not be included.

Field notes contained some abbreviated words, although, during transcription these were converted to full text. Poland (1995) asserts that unfamiliarity with the topic area can produce transcription errors. To minimise transcription errors and because of my familiarity with the setting and language, I decided to personally transcribe field journals and interviews. Twelve spiral bound field note journals and ten interviews, recorded on one hour audiocassettes, were transcribed and coded and resulted in hundreds of typed pages.

The process of transcription provided the opportunity to be: immersed in the data; to learn about events and (in)consistencies; and to gain an understanding of practice conventions. Moving between data collection and transcription provided an opportunity for deeper reflection, new thoughts and valuable insights that assisted the analytical process. To negotiate deeper understanding and determine the accuracy of transcripts they were returned to participants after observational sessions. This process generated valuable insights and anecdotal stories on the next visit, providing opportunity for reorientation and (re)confirmation of data.

Theme building

Data analysis continued after transcription had been completed. This analytical process included the funnelling and focusing of research data through the systematic process of data indexing and theme development. This process of data indexing and theme development began with separating relevant sections of data from the context and defining the term de-contextualisation (Wolcott 1994). The second phase of analysis was theme development and was achieved by the

establishment of relationship patterns between indexed words and defining the term re-contextualisation (de Laine 1997). Wolcott (1994) asserts that de-contextualising and recontextualising ethnographic data provides a systematic and coherent approach to thematic data analysis and moves findings from simple description towards interpretation. While both processes occurred simultaneously, they will be discussed in a linear fashion.

Decontextualising data

Decontextualising data began with the application of key words manually placed at the side margin of transcribed notes. These indexed words enabled the "sifting" and "sorting" of data (Fetterman 1999, Hammersley & Atkinson 1995). The sub-categorisation of data formed a framework for recognition of relationships and pattern clusters that would assist theme development. Indexing of data was not mutually exclusive and words or sentences could have multiple meaning. For example, sentences or phrases spoken by participants could have indexed words that conveyed an emotion and a belief. Indexed words contained key characteristics that dealt with, for example, "medication administration" and enabled individual or group retrieval of data. De-contextualising data assisted the process of analytical thought by reducing the mass of triage information into manageable segments. These three units of analysis - words, sentences and phrases were placed into contexts of similarity (Stewart 1998). The mechanics of decontextualising data facilitated information probing with the intent of trying to understand "what was going on" This phase, while momentarily separating the context from data, restored contextual reality in the re-contextualising phase, reducing the risk of a biased view

(de Laine 1997). During the de-contextualisation phase, all personal research data were kept separate to prevent confusion between informant and researcher data.

Recontextualising data

The systematic exploration of indexed words marked the process of recontextualising data and provided new ways of understanding triage practice. Further it, enhanced cultural pattern recognition and introduced the element of speculation by examining relationships between indexed words (Adams St Pierre 1999, Wolcott 1999). By recontextualising data, relationship patterns identified the complexity of triage nursing and gave shape to the cultural environment embedded in emergency care situations. This enabled a coherent and focused analysis that wove a tapestry of routine triage nursing practice. At this point, it was useful to step back from the data. Reflection and participant feedback then enabled new questions to be posed from which patterns surfaced forming the foundation for progressing towards thematic analysis and interpretation.

The computer software program, Nudist 5™, assisted in the retrieval of indexed data, offered an alternate strategy to strengthen the thoroughness and creativity of the study and provided an additional back-up security measure. While aiding the retrieval and exploration of data, familiarity with hardcopy data sets was required before the software program benefited the analysis.

Data interpretation

Data interpretation required extended analysis and significant intellectual and moral deliberation, as both the emic (insider) and etic (outsider) views converged.

Decisions made throughout the research process influenced the interpretation of data. For example, the posing of research questions framed the way that events were viewed, negotiated and understood as recognised by Wolcott (1994). In this instance, the analytical eye viewed EDs and triage nursing practice through a lens that resulted in the construction of cultural patterns. To guard against misinterpretation of data, participant feedback and expert checking acted as a restraint against conjecture, helping to clarify meaning and confirm patterns as persuasive and plausible. For example, two emergency CNCs agreed to review components of data analysis and interpretation. They provided favourable comments on data plausibility and familiarity.

SUMMARY

In summary, an ethnographic method provided a way to obtain data needed to learn how triage nursing was practiced by those undertaking the role in Australian Emergency Departments. Twelve months of fieldwork in four metropolitan Emergency Departments offered the opportunity to study the world of triage nursing. The next three chapters describe the findings of this study of Triage Nurses that have been cultivated from participant observation, interviews and secondary data sources.

CHAPTER 4: FINDINGS

A CULTURE OF EMERGENCY DEPARTMENT CARE

In order to understand triage nursing, the role needed to be situated within the Emergency Department (ED). The data from this study made visible distinctive systems of shared knowledge, through which a framework of contemporary triage nursing practice is situated. The chapter describes a culture of care specific to the ED environment revealed by observing in the field of metropolitan EDs. Further, it describes how experienced Triage Nurses contextualise their care practices within that system of values and beliefs by bringing real care situations to the foreground.

The culture of Emergency Department care is reflected in 1) a standard geography of care that is oriented to notions of efficiency and timeliness shared and understood through patient movement; and 2) embedded beliefs and rituals of care, modulated by notions of equity that give expression to cultural expectations of patient conduct. Together these embedded cultural mores made explicit a particular cadence of care from which a culture of ED care emanates and within which the triage nursing role is enacted.

THE GEOGRAPHY OF CARE

During the 12-month study, over 4,800 people visited NSW EDs each day with a range of health conditions, illnesses and injuries (NSW Health 2001a). Data from this study demonstrated that the four study sites are archetypal providers of

emergency care. These four sites have been operating for decades and provide service seven days a week, 24 hours day.

Architectural commonalities between sites were apparent and made them recognisable and consistent with each other. Firstly, driving towards each ED there was a large sign located nearby. The sign visible for hundreds of metres has red writing 'Emergency' on a white background (Fig. 1). During the night the emergency sign lights up like a beacon to help people find the ED. ACEM[7] (2001) signage regulations allow only EDs dedicated to acute and urgent care to display these red and white, bona fide signs.

Figure 1. The street entrance and signage of a typical metropolitan NSW ED.

[7] ACEM is the abbreviation of The Australasian College for Emergency Medicine.

Secondly, each department is located in a residential part of Sydney on a main road. All EDs are attached to a large general hospital, but they have their own driveway beside the road enabling ambulance and private vehicles to drive up close to the entrance (Fig. 2). These structures facilitate multiple entry points. The organisation of ED work, purpose and function is shaped and ordered by architecture and vice versa.

Figure 2. A NSW ED showing ambulance and ambulant entrances.

ENTRY POINTS

Unlike many other hospital areas, EDs have a number of entry points for different groups of people.

- People can walk into the ED off the street at any time, day or night, to seek emergency care. Walking, from the paved public footpath, you enter

the ED waiting room through automated front doors into a large clean single room, which is light and airy.

- People can arrive by the dedicated ambulance entrance.
- People can enter the ED via the hospital foyer where they encounter numerous signs that compete for visual attention. You must search among the many signs in this space to find the ED, as different work areas and clinics are listed. Signs subdivide hospital buildings into different places of work, such as respiratory, neurological, medical, surgical or emergency areas.
- People can arrive by rescue helicopter.

In each site, the ambulance entrance required a security pass to enter. It was common to watch Triage Nurses and ambulance officers using their security key or code pass to enter through the dedicated ambulance entrance rather than the public entrances. Once inside, the geography of care is defined by 'outside' and 'inside' spaces. To develop an understanding of how nurses experienced triage practice it was necessary to explore the meanings that each workspace held. Through this process, a broader picture unfolded around me in relation to how a geography of care relates to the movement of patients within the ED.

OUTSIDE: WORKSPACES

Consistent in everyday conversations at each site was a culture of ED care that was motivated by beliefs about the value of efficiency and timeliness. Triage Nurses understood a pattern of patient movement that accommodated these values and was composed of 'inside' and 'outside' workspaces within the ED. For Triage Nurses, 'inside' and 'outside' held significant meaning and conveyed distinctive areas of

workspace that defined the appropriate movement of specific patients groups for specific aspects of care. It became clear that the workspace 'outside' constituted the waiting room and the workplaces of the Triage Nurse and clerical staff. Behind the 'outside' workspace was the nominated space known as 'inside' and comprised of different designated patient care areas and the staff room.

The Waiting Room

The ED waiting rooms were all similar to other spaces used to wait for the delivery of health care, such as waiting rooms for outpatient clinics. Field notes conveyed that each ED waiting room had a modern appearance, white walls and linoleum, well lit with natural light from the surrounding windows and glass doors. Plastic chairs, fixed together, are positioned neatly in rows in front of a television that is mounted high on the wall.

The view when sitting in the waiting room of each study site was similar. On one of the walls are cabinets with rows upon rows of reading material. Some sections contain magazines such as National Geographic and Readers Digest. Scanning other sections there are also rows of NSW Health pamphlets, that explain such conditions as diabetes and asthma. Looking over to the other side of the waiting room, drink and fast food vending machines rest against the wall. Ironically, each ED had a sign near the vending machines saying, 'Do not eat or drink before seeing the doctor'. Located on another side of the waiting room are wide double doors that remain closed for much of the Triage Nurse's shift. By following in the Triage Nurse's steps during their shift, it became evident that entry through the waiting

room door was dependent on a passkey or code. As you entered each waiting room, near the entrance were two signs in various languages with arrows that direct people towards glass windows. The two signs over the windows, read 'Reception' and 'Triage'.

The Reception Room

The reception room in each department shared many characteristics. In each site, the reception room is located at the front of the ED and the clerical staff who work in this area look out onto the waiting room. Sitting in the reception area they have a telephone and computer sitting on their bench and off to the side are large printers. The reception room in each unit had three wooden and one glass wall facing the waiting room. The glass wall extended from the ceiling to the desk separating the waiting room from this space. If you peer over the computer on the clerk's desk, you can see the waiting room entrance, rows of chairs and the television. People lined up waiting to speak to a clerk after having been directed to do so by the Triage Nurse. People approaching the reception's protective glass wall must talk through an opening cut into the glass. Observations of patient and clerk interactions highlighted that people regularly repeated their statements as they communicated through the glass opening.

The role of the clerk was similar across sites and consisted of gathering patient information, sometimes before and sometimes after the triage patient assessment. Clerical staff were overheard to ask people wanting to see a doctor for details such as address and date of birth, name of medical insurance fund and local GP. They

entered these details into the emergency and hospital patient information systems. Obtaining demographic information enabled a clerk to print out identity labels, which were required to be attached to patient forms by Triage Nurses. From all the observation data, I only recorded clerical staff entering the waiting room on two occasions, although they regularly left the reception room to access the clinical areas. The reception room in each department had an entrance that enabled staff to go straight through into the clinical areas avoiding having to go through the waiting room. Clerical staff needed to access clinical areas, as they were responsible for the completion of hospital admission paperwork necessary for the transfer of a patient to a ward bed.

The clerks work in close proximity to the Triage Nurses and interactions were frequent. In order to complete a patient assessment, Triage Nurses often asked the clerk for assistance by getting them to page staff or hospital medical teams. Clerical staff assistance was important to Triage Nurses particularly when they were undertaking assessments or escorting patients into the clinical areas. Kylie provided a characteristic response when probing into the working relationship between clerical and Triage Nurse. *"Depending who's on, clerical staff make or break the day"*. Triage Nurses often relied on the clerk to alert them of a patient arrival when they momentarily left the work area. In contrast, clerks appeared to have irregular and infrequent contact with the nursing and medical staff working 'inside'. One clerk explained:

We're closer now [to Triage Nurses] but we need to have a better understanding of medical language probably because we're now working so closely to understand their urgency or priority. You have to help more just little things like paging, calling sexual assault, or security. It kind of includes you, by them relying on us more, it makes you feel like you're included, you belong. Its pulled down the barriers it makes you willing to help later [Field note Hospital 3 Clerk 1]

This extract highlighted that for some clerks, being 'outside' and the close proximity of the triage room established a different sense of belonging with nurses. A belonging that was focused on ensuring efficiency, timeliness and patient safety. However, the sense of camaraderie, assistance offered and notions of belonging seemed confined to those emergency nurses working at triage. The same clerk went on to say:

We have noticed nurses, I didn't even know their names, they didn't acknowledge me and they come out here (triage) and it's different. They talk to us, they know that we can help, and then we like them. There is a definite difference in the relationship 'outside' [Field note Hospital 3 Clerk1]

The clerk and Triage Nurse are the only ED workers who occupy the space 'outside'. A new working relationship with the clerical staff needed to be established by nurses learning the triage role. Previously in Australia, only clerks were positioned 'outside', but the introduction of the triage role and room has meant that emergency nurses now also work in this space.

The Triage Room: Similarities

The triage room in each site shared similar characteristics. Similarities included: the availability of a triage room adjacent to the reception room, where the Triage Nurse assessed patients as they arrived in the ED and when standing in the room, people

could easily be viewed as they entered the ED or sat in the waiting room. In Hospitals 1, 3 and 4 there was a sign that labeled the purposely built room either 'Triage' or 'Triage Nurse'. In Hospital 2 the room was not purposely built and there were no signs to indicate where triage activities took place. Here, Triage Nurses conducted their assessments in an unmarked room previously used by medical staff.

The similarities between each site became more overt as the study progressed. Triage Nurses would enter patient assessment details into a computer. All sites used the same computer software program known as the Emergency Department Information System (EDIS™) to enter triage assessment information. The patient details entered by Triage Nurses were consistent and included: time; date and name of Triage Nurse; patient demographics; such as name and date of birth (sometimes obtained from clerks); the problem conveyed by the patient; the assessment by the nurse; and the allocated triage code and designated clinical area. Once the triage information had been entered, medical staff were able to view waiting patient details on the computers in the clinical areas[8]. Staff would then document the care of each patient on the printed out triage information sheet (Appendix 9).

On each desk, beside the telephone was positioned the triage computer and the nurses had access to automated machinery that measured the patient's blood pressure, heart rate, temperature and pulse oximetry. Each triage area had chairs for

[8] In the ED, computers were located in the triage and reception room, and in each clinical area. A network system and a main server linked all computers within the ED. This network system enabled ED staff to view data entered by Triage Nurses. The computer system enabled collection of data and monitoring of patients in the ED: those waiting, being assessed or ready for transfer to a ward bed.

the patient and nurse to sit on during the assessment. All nurses had first aid equipment available, such as bandages, gauze pads and slings. These were located in plastic bins in the assessment room. Around the walls were posters and a white board with staff page and telephone extension numbers written by hand. Hospital and emergency policy and protocols manuals were located on shelves or in cupboards. These manuals contained: policies for particular patients such as those with multi-trauma and chest pain; duty statements; and such documents as memorandums of understanding on relations between police and Emergency Departments.

Frequent opportunities to stand in the triage assessment room revealed that there was nothing quiet about this nursing space. 'Sounds of work' from other areas invaded, were noisy and provided a constant backdrop to triage activity. Sounds included: telephones ringing; people talking; the tapping of computer keys; the printing of triage sheets; and patient identification labels. In two study sites, adding to the cacophony of noise was an overhead departmental speaker that announced messages with urgent tones.

The Triage Room: Differences

Hospital 1

In this site, a corridor divided the clerical office and triage room and helped to define the physical boundary where triage activity occurred. The room was rectangular and workbenches cover three sides with a doorway to the waiting room on the fourth side. On the bench sat an overhead speaker. Both Triage Nurses in this

department referred regularly to the triage room as the 'Box'. For example, *"I got him into the box. I find it easier, it's quieter"[Toni].* The Triage Nurse usually sat on a chair facing a glass wall that looked out onto the waiting room. Nothing screened the nurse from those waiting. The chair in this triage room swiveled and was a necessary feature, as observations of patient assessments required the nurse to move around to face the patient assessment chair, which was located behind. In this triage room, there was another entrance that enabled the nurse to pass through to the acute area.

Hospital 2

The Triage Nurse shared workspace with clerical staff in this department. The room had defined workspaces for each group. The triage workspace was on the bench near the doorway. The room was rectangular and very large allowing three to four staff to work in the room. The Triage Nurses also had a room adjacent to the shared workspace in which they conducted patient assessments. This additional room contained a curtain that screened the entrance from the waiting patients and the shared workspace. There was only one entrance in and out of this assessment room.

Hospital 3

A doorway divided the clerical office and triage room and assisted to define the physical boundary where triage activity occurred. The triage room was screened from the waiting room by a door and the furniture occupied most of the space. There were two entrances in this room; one enabled the nurse to enter the acute area, the other, the waiting room.

Hospital 4

In this site, as in Hospital 1, a corridor divided the clerical office and triage room. The triage room was screened from the waiting room by a door and Venetian blinds. There were two doorways in this room; one enabled the nurse to enter the acute area, the other, the waiting room.

When exploring the experience of working 'outside', the majority of Triage Nurse talk conveyed feelings of isolation. A typical view was illustrated by Tanya *"You're physically isolated out here, no one comes out"*. Field notes confirmed that when standing at triage it was impossible to view the activities of staff 'inside' or for them to view the activities of the staff working 'outside'. Throughout the study, 'inside' staff irregularly and infrequently appeared 'outside'. The architecture in each site imposed a physical barrier that concealed the Triage Nurse, clerk and patients waiting to see a doctor from the workspace 'inside' where care activities took place. The physical organisation of triage workspace separated the nurse from other emergency nurses in the department.

INSIDE: WORKSPACES

All Triage Nurses referred to, and shared, an understanding of a workspace called 'inside'. Opportunity for informal discussions enabled the exploration of the notion of 'inside'. These discussions would often take place when I accompanied the nurse from a clinical area back to triage. It soon became apparent that 'inside' consisted of workspaces that held different meanings and purposes for Triage Nurses.

It was apparent that to understand the context within which the Triage Nurse allocated an urgency code and bed, a fuller understanding of the spatial settings of 'inside' was necessary. In each of the sites, 'inside' consisted of four clinical workspaces and the staff tearoom. While some departments called these workspaces different names, the meanings attached were the same throughout all four study sites. To maintain anonymity, between the sites, the clinical spaces have been labeled as the consultation rooms, acute room, resuscitation and trauma room, sub-acute room and hidden areas. The practices and meaning embedded within each space were consistent and familiar to Triage Nurses across sites.

The Consultation Room

In each site, the clinical workspaces closest to the waiting room were the medical consultation rooms. There were three to four small consultation rooms, much like a general interview room. The walls within each room were largely devoid of adornments except racks of different sized gloves and a mobile light. Each room contained an examination trolley, a desk, and two or more chairs. None of the Triage Nurses routinely escorted patients to the consultation room; instead, when they had finished their assessment and allocated them to the consultation area in their room they directed patients to the waiting room. The patient group allocated to the consultation rooms usually had non-urgent conditions, such as distal limb injuries and/or lacerations, and were commonly assigned a triage code 4 or 5. When allocated to these consultation rooms by the Triage Nurse, the patient sat in the waiting room until a doctor was ready to see them. Different doctors were seen to

call an assigned consultation room patient by standing at the waiting room door and calling out a name. Doctors became aware that a consultation room patient was waiting by watching the EDIS™ computer screen or viewing the patient assessment form that was placed in the write-up area by the Triage Nurse. This patient group, their movement and care activities were consistent and characteristically similar between sites.

The Acute Room

There were many opportunities to accompany the Triage Nurse as they took a patient through to the nominated workspace they called the acute room. At all sites Triage Nurses accompanied people to this room when they decided the patient required continuous haemodynamic monitoring (heart rate, blood pressure, oxygen saturation); close nursing observations (neurological or respiratory assessments); and/or complex interventions (continuous positive pressure ventilation). Acute room patients were routinely allocated a triage code 2, 3 or 4. Only in Hospital 1 would the nurse in-charge of the shift come to triage to escort patients to this room.

Following the Triage Nurse through the waiting room door, in Hospitals 1, 3 and 4, you enter into a wide-open plan area. In these sites, the acute room is much like any other open-space room characteristic of 20th Century ED architecture. It has a working station positioned in the middle and patient beds form an outer perimeter. Each bed space has a cardiac monitor that can display a patient's heart rhythm and rate, blood pressure and oxygen saturation. On walking through the area, cardiac alarms added to the noise that made up the sounds of work in this place. Standing at

the workstation and gazing out towards patient beds, many doctors and nurses appeared busy in this workspace. The majority of Triage Nurses liked the open plan room as it enabled greater surveillance of patient movement at a glance, whereby they could determine the number of vacant beds, patient acuity and the activity that was taking place.

The ED at Hospital 2, the oldest of the four sites, did not have an open plan design for the acute room, although the equipment remained consistent with the other sites. Instead, the acute area was a row of ten rooms separated individually by solid walls. A corridor allowed ready access for staff to enter each room but made surveillance of the area by the Triage Nurse difficult. Notwithstanding this architectural difference, patient group and care activities were consistent and similar between sites.

The Resuscitation and Trauma Room

Each site had a nominated workspace that Triage Nurses referred to as the resuscitation and trauma room. Hospitals 1, 2 and 3 had two of these rooms, each a mirror image of the other, while Hospital 4 had only one. Each resuscitation and trauma room was located beside or near the acute room. Triage Nurses escorted patients on arrival straight into these rooms. Discussion revealed that the people routinely allocated to this area had a life-threatening or potentially life-threatening condition such as multiple trauma or cardiac arrest and were given a triage code 1 or 2. ED Staff were often observed to be waiting in the room for the patient to arrive. Triage Nurses knew of the impending arrival of many of these patients and

would watch or wait in the ambulance bay to escort the patient swiftly through to the resuscitation or trauma room. The early warning of these patients arrival was made possible by the 'bat phone', a dedicated telephone located in each acute area. The ambulance controller, using this direct telephone link, would ring to convey the critical condition of an incoming patient with a life-threatening condition, explain treatment given by ambulance officers and provide an estimated time of arrival to ED staff.

On following the Triage Nurses as they escorted patients immediately into these rooms, one notices a highly visible and accessible array of equipment coating the walls. Each piece varies in size, shape and function. Numerous electrical leads plugged into different monitors and machines are purposefully placed around a bed. Squeezed on a sidewall are x-ray viewing boxes. Further along, positioned on the wall at the head of the bed is equipment to help with a patient's ventilation. Close by, on mobile trolleys are mechanical ventilators and capnography[9] machines. Lining the third wall are thick flat hard boards and collars that protect and immobilise a patient's spine. Plastic boxes, slotted around the room, contain equipment for life-saving procedures, such as surgical airway and thoracotomy trays that are opened and used by resuscitation and trauma teams. The resuscitation and trauma room patient group, movement and care activities were consistent and characteristically similar between sites.

---

[9] A capnography machine is attached to a patient, via an endotracheal tube, and monitors the expired carbon dioxide level.

The Subacute Room

Positioned off the acute room - is a space known as subacute. At each site, the subacute area is less spacious than the acute room. When the Triage Nurse escorted patients through to this area, there appeared just enough space between beds for staff to administer care. There are no monitors on the wall, only oxygen and air outlets, and a blood pressure manometer with one cuff between beds. A small desk or workbench is available for staff in this area. The equipment nearby consisted of a mobile blood pressure and pulse oximetry unit that is shared by nurses when attending patients. Triage assessments revealed patients in this area often had conditions such as long bone fractures requiring a person to be cared for on a bed. These patients are usually allocated a triage code 3 or 4. The 'hum' of work in this area is observed to be less frantic than the acute area, resuscitation and trauma rooms. The subacute room patient group, movement and care activities were consistent and characteristically similar between sites.

The Hidden Areas

All EDs contained a staff room that required a security pass to gain entry, although they varied in size. For example, during a shift in Hospital 3, I was invited to morning tea with the Triage Nurse and was meant to meet her at the staff tearoom. However, I had to wait until she arrived to let me into the room, as the door required a key code or security pass to enter. On entering this room, it was much like the other study sites. It contained a number of chairs positioned around a table. Mounted on the wall was a large television - the remote control sat on the table.

There was a microwave oven and refrigerator nearby. These facilities enabled staff to make hot meals and beverages. Staff lockers and toilets were located nearby.

In summary, cultural meanings embedded in each clinical area reflected varying levels of urgency, timeliness, efficiency and control, characterising workspaces into 'places' for Triage Nurses. Patients were 'sorted' into workspaces for specific care needs. Only by an understanding of 'place' could patient movement be regulated efficiently and appropriately by Triage Nurses.

EMBEDDED BELIEFS AND RITUALS OF CARE

Notions of equity, timeliness and efficiency were woven tightly into a culture of ED care. These notions stirred many casual conversations, which brought to the surface and made explicit ways of viewing patient conduct. By further probing into patient-nurse interaction, the ways of viewing patient conduct within this context of care emerged. Four months into fieldwork, it became evident that different knowledge domains co-exist. All Triage Nurses shared an understanding of a knowledge system that gave meaning to how patients were viewed and 'should' behave to ensure equity, timeliness and efficiency of practice within this context of care. These 'insider' ways of viewing patient behaviour gave rise to expectations, which vied for attention and influence in the triage assessment process.

While watching Triage Nurse-patient interactions, one knowledge system appeared made up of an elaborate set of beliefs that helped regulate personal expectation and sustain a shared understanding of patient conduct. The belief system operated as a backdrop to the more concrete and structured emergency knowledge realm and

appeared learnt from practical experience. These beliefs, embedded in talk and practice, were no less real for the nurses who spoke of them. After a time it became possible to articulate the complex belief system and how their meanings were infused into work practices and Triage Nurse-patient interaction.

When Triage Nurse-patient interaction was explored, a cohesive talk pattern surfaced that was composed of expectations for patient conduct to sustain equity of service. These beliefs, complex and unwritten, were familiar to, and shared by, Triage Nurses and gave shape to the organisation and timing of routine practice. In this context, beliefs provided conceptual schemes in which nurses were able to convey, respond and understand the meaning of work, interactions and patient behaviour during particular events. In this way, cultural beliefs shaped triage practices, interactions and processes. Seven key beliefs were identified that described the meanings behind the expectation of how patients should prepare their arrival, act in the ED, interact with the Triage Nurse and respond to the nurse's efforts and service.

BELIEF 1: RESPECTING TRIAGE SPACE

The first belief of 'respecting space' surfaced when exploring expectations and attitudes towards patient conduct as they approached the triage window. Mathew, Karen, and Toni commonly spoke of the need for patients to 'respect' space. These three nurses, each from different sites, expressed many instances of disappointment with patients who failed to comply with the notion of respecting space. By exploring this notion further, it became clear that these Triage Nurses viewed

physical distance as a means to securing privacy and confidentiality for all patients being assessed at triage. Tanya explained, "*sometimes the privacy issue is a problem. They line up and everyone hears what they have to say*".

A consistent and typical pattern of triage behaviour was highlighted during one particular interaction recorded in field notes between Karen and a patient arriving at the triage door. This exemplar highlights the belief of respecting space.

> *Hospital 4: It is 10.30am Monday (Public Holiday) morning. A young man walks through the entrance dressed in jeans and sandshoes. He is holding a t-shirt over his right outstretched arm and blood is dripping on the ground as he walks. Karen calls him into the triage room and with gloved hands stands over the man holding a sterile pad and viewing the 8cm laceration on his forearm. At this moment, a man walked through the triage door and leaned against the doorframe. Karen looked up while still holding the 'bloody' pad. The man explains he needs a dressing to his leg ulcer, as the community nurse can't come on a public holiday. Karen turned to him and said "you'll be waiting for hours there's lots of sick people. If you want to wait that's fine I'll give you a suggestion, if you have a GP or medical centre close by then they can do it. You can wait, but it will not be done before them (the sick patients). You can wait, but I'm not going to bring nurses looking after other sick patients away to do your dressing". She then turned to the first patient and said "I don't see the other patients when I'm treating someone else" [Field note Hospital 4]*

This example clearly illustrated the belief of 'respecting space'. While infringement of the belief 'respecting space' could be considered accidental, in this instance, it could not be ignored as the second patient chose to stay rather than leave. The second patient, with the leg ulcer, was (15 minutes later) triaged and allocated the waiting room and code 5.

During a similar incident Toni shared the meaning embedded in the belief, "*They [patients] don't respect space. They can see you're with someone in the room. I*

want them to move back and preserve the patient's privacy". This belief empowered Triage Nurses to justify action, judge and explain patient behaviour. Within the context of ED care, protecting a patient's privacy and confidentiality at triage was an important practice dimension woven by equity and sustained by the belief inherent in respecting space.

Patients could experience real consequences by failing to comply with the belief of respecting space. Mathew illustrated:

> *I have no respect for people who just hang around while you are trying to triage. It's one of my pet hates. I've a bad habit of throwing around a little bit of weight, because we're not a zoo, we're here to look after patients.*

In this example, failing to respect space could result in negative exchanges between patient and Triage Nurse. A negative Triage Nurse-patient interaction could potentially influence urgency code, clinical area allocation, and movement through the department. However, demanding that a patient provide some distance between themselves and the triage area was often sufficient management of a patient's infraction. Equity brought a desire to ensure the confidentiality and privacy of all patients and characterised the culture of ED care for Triage Nurses in the study.

BELIEF 2: PATIENTS SHOULD TAKE CONTROL

Within the daily practice of Triage Nurses, the second embedded belief was commonly observed during triage assessment. The Triage Nurse–patient interaction demonstrated that a patient was expected to act responsibly towards their condition. In this context, acting responsibly was understood by all Triage Nurses to mean the

taking control by individuals to ameliorate signs and symptoms before arriving in the ED. This belief applied to patients who presented with minor conditions such as pain or fever. In these cases, Triage Nurses shared an understanding that the use of antipyretics or mild analgesics prior to presentation was appropriate and efficient patient conduct.

The usual consequences of a patient failing to adhere to the belief, 'taking control', was to receive an explanation how 'next time' it would be worthwhile doing something to control the situation. Peter's comment to a patient illustrated this belief; "*You wouldn't feel so bad at the moment if you'd taken something for it. You should have taken some Paracetamol".* On learning that a patient has not taken steps towards controlling signs and symptoms the assessment was always momentarily stopped, while Triage Nurses tried to understand why patients had not taken steps to treat themselves. The interaction then moved towards 'educating' the patient on the benefit of taking medication such as Paracetamol for pain or fever conditions.

In contrast, taking control by self-medicating, suggested the appropriateness of a patient's presentation to the ED. Kylie provided a standard response when probing into the notion of self-medicating "*If they've taken something for it, I think it's better. I get annoyed if they don't. If I judge it [pain] to be legitimate then yes, this will influence decisions".* The belief threads expectation into practice, the patient having tried to take control to aid their condition before arriving is considered more service-worthy.

Another meaning surfaced in discussions with Mathew about the characteristics of this belief in taking control. Mathew summed up *"I like to empower patients to own their own treatment"*. A desire that patients 'take control' was an important aspect of the culture of care in the ED, although patients may not be aware of this dimension of triage practice. For Mathew, taking control was a means for the patient to be self-empowered in this setting.

BELIEF 3: PATIENTS SHOULD NOT ARRIVE WITH EXPECTATIONS

When patients arrived with expectations about care and service, the third belief – 'patients should not arrive with expectations' surfaced. The groups of patient likely to breach this belief were recognised the moment they entered the ED.

Some people were observed from the triage room, arriving with a suitcase whether by private transport or ambulance. Turning to me on many occasions, Triage Nurses would refer to this phenomenon as a 'positive bag sign'. In exploring this notion, Tanya helped to clarify "*You have a positive bag sign, when I see the ambulance pull up and the bag's on the trolley. I just immediately think, right, you're in the waiting room"*. Triage Nurses believed that these patients came with the expectation of being sick enough to go straight into an ED or hospital bed. In contrast, these patients were unlikely to be considered by many Triage Nurses as acutely unwell as they were well enough to pack a suitcase. While Tanya was discussing the 'positive' bag sign, an ambulance officer joined the discussion and added "*as well as the bag sign. If they've a full face of makeup on, they're not serious"* [Field note Hospital 1 ambulance1]. Shared understanding about acuity

meant Triage Nurses found it incongruous when patients had time to pack a bag or put on makeup. However, clinical judgement often buffeted embedded beliefs as Tanya later added "*and then I get the history and I think damn, she needs a bed"*. The influence of beliefs fluctuated in the presence of clinical knowledge, code guidelines and the desire to ensure patient safety and equity of service. Triage practices shaped patient movement and the timing of care.

BELIEF 4: DO NOT ASK FOR A BED

The fourth belief is that patients should not arrive asking for a bed. It is the role of triage to determine whether the patient's condition warrants the allocation of a bed. When the patient or relative asked the Triage Nurse for a bed, the fourth belief encroached on the role. The following field note provided an example of the belief operating in practice:

> *Hospital 4: Sunday 11.30am and most beds were occupied in the department. Karen is the Triage Nurse. A woman and a man walk slowly through the entrance. The woman came to the triage window, she explained she needed to see a doctor and that she has back pain. As she walked into the triage room, she asked for a bed to lie down on. She had been to her GP and was given an injection. Further along Karen asked about the injection. The woman was unsure; it was "something". The woman was triaged and assigned a code 5 and the waiting room. She was told it would be a four- to-five hour wait. After Karen directed her to the waiting room, she turned saying "She asked for a bed before I'd even triaged her" [Field note Hospital 4].*

The extract highlighted that if the patient was well enough to ask for a bed, then they were unlikely to need one. The notion was that a normal pattern of triage assessment needed to occur, and that decisions about bed allocation were part of the regulating of resources by Triage Nurses. This extract also demonstrated the

consequence for patients presenting to triage ignorant of the belief system in the culture of ED care. Implicit within the culture of ED care is that the Triage Nurse, not the patient's expectation of care, has the authority to determine the rhythm of movement, allocation of resources and timing of care in this place.

BELIEF 5: EXPECT A LEVEL PLAYING FIELD

A desire to ensure all patients undergo the same triage process and service was driven by a notion of equity. However, seven Triage Nurses commonly spoke of claims by privately insured patients for a 'different' service. This brought to the surface belief number 5 'expect a level playing field'. This belief emerged during interactions with people who explained at triage that they had private health insurance. Further probing into the characteristics of this belief identified a strong desire by Triage Nurses to treat every person arriving to the ED equally. Mathew illustrated, *"Everyone should be triaged in the same way"*.

When patients unknowingly infringed on this belief, this tested the belief of the Triage Nurse to ensure an equitable service for all. Meg described a typical response to infringements of the belief – 'expect a level playing field': "*Private patients are demanding and aggressive particularly if they've spoken to their physician. They expect immediate attention"*. In this culture of ED care, private patients were often viewed as making inappropriate and unreasonable requests. Another representative response was provided by Samantha, "*One of the problems private patients have is [that] they think their problem is urgent"*. It was observed that people with private health cover would ask the Triage Nurse to contact their

specialist. These conversations always followed the same pattern and ended with the same response -'*You'll be seen by our doctors first*'. Implicit within this ritual response was that Triage Nurses would regulate to ensure the same service for all patients.

Claims by privately insured people collided with equity beliefs, which were embedded in practice and the triage role. Mathew added, *"Private patients, because they've private cover, think their problems are urgent and it's difficult to explain [that] it doesn't matter in the ED"*. The observed Triage Nurse–private patient interaction was often tense because nurses wanted to do their job, which they believed was to conduct routine triage work for all patients entering the ED. In the ED, private medical cover was not legitimate currency to influence urgency code allocation, action or movement by the majority of Triage Nurses. Perceived breaches to beliefs provoked moments of tension, profiled service worthiness and added pressure to the role of triage for many nurses.

BELIEF 6: NO BENEFIT FROM HAVING A REFERRAL LETTER

Triage Nurses were observed to rely on gathering information from the patient and using their clinical judgement to make decisions. However, many people arrived with a referral letter from their GP and would then explain that they needed to see a doctor urgently. During these particular interactions, patients handed over sealed referral letters to Triage Nurses and revealed the sixth belief embedded in practice. The GP envelope was usually addressed to the ED Admitting Medical Officer. The Triage Nurse, on being handed the letter by the patient, would immediately open

and read the contents. Despite patients explaining that 'everything' is in the letter, the nurse on reading the letter would look up and ask "*what's the problem?*" In these cases, while the letter was used as a reference point, it failed to override normal triage practice, as nurses would begin their routine questioning. These experienced Triage Nurses had come to rely on their own clinical experience and judgment. In some instances, letters provided little additional information, due to illegibility, as nurses were commonly heard to say, *"I can't read the letter from the doctor"* [Andrew]. Nonetheless, in preference to relying solely on the information in the referral letter, Triage Nurses maintained their beliefs in the routine patterns of practice, preferring to gather sufficient information to make their own triage decisions and patient action plans.

BELIEF 7: DO NOT WASTE TIME

In this setting beliefs of equity, efficiency and timeliness construct the tapestry that gives shape to the cadence of the culture of ED care. Consequently, trivial conditions were believed to squander resources and place other patients at risk. All Triage Nurses shared a mutual understanding of, and the ability to, predict the types of conditions viewed as trivial. While observing Samantha, in Hospital 3, she illustrated a typical trivial patient condition:

> *An apprentice chef arrived with his mother after cutting his left index finger on a kitchen knife. His mother is concerned - he needs his hands for his work - he is very good. Samantha asked several questions including his tetanus status. She examined the cut saying it's sliced, there's nothing to suture. It is about 3mm. Putting on gloves she proceeded to dress the wound using gauze and tape from the plastic storage bins. The mother asked "I don't think he should drive, do you?". She explained that he*

could do anything he wanted to. If it's tender - just take some Paracetamol. Samantha directed them out of the triage room and proceeded to triage another four patients, but later reflected on this triage. She commented, "it's hard sometimes for trivial things. I'd like to say, I don't care what's wrong with you; you're not getting past me for that cut finger". I was generous to do the dressing, it only needed a band-aid. Only there was nothing to do. They shouldn't be here, that was a waste of space" [Field note Hospital 3]

Triage Nurses considered trivial conditions to be those that the patient could treat him or herself, needed no treatment, were minor or chronic and could be managed by a Medical Centre or GP. For example, Kylie shared a standard response *"I think [if] it's a chronic problem, it should be sorted out by the GP"*.

The triaging of patients considered to have a trivial condition generated a pattern of resentment in Triage Nurses. "*Sometimes I'd love to be able to say -Go- but I don't and we can't refuse care"* [Karen]. The experience of resentment surfaced because Triage Nurses believed the use of time and space by patients with trivial conditions as inappropriate. Kylie provided an average response for how this group of patient was viewed, *"the Emergency Department is abused, [we] shouldn't see these sorts of patients"*. Triage talk and behaviour was explored to gain better insight into the consequences of breaking the belief 'wasting time'.

Triage Nurses highlighted that breaching the seventh belief altered triage assessment and code allocation practices. Firstly, what unfolded were observable changes to the assessment process. For example, Triage Nurses tended to shorten the duration of the assessment process in that fewer questions were asked routinely of patients considered to be 'wasting ED time'. Some nurses would not seek any

further information once they had established the person had come for a dressing. The second practice consequence was usually to reduce the level of urgency. Toni provided a standard response. "*[if] I think they're wasting time; I'll give them a code 5"*. Similarly, after triaging a woman with a back pain Karen turned and said "*If I could give a [triage] code 10, I would. They deserve it"*. These exemplars conveyed a view that while some patients 'deserved' service, others were less 'deserving'. All nurses viewed patients with trivial conditions as denying services to others and squandering limited emergency resources, fuelling feelings of resentment. Nurses used cultural meanings of emergency care as reference points, to arbitrate between the service-worthy and less service-worthy in triage practice.

THE INFLUENCE OF EMBEDDED BELIEFS ON TRIAGE PRACTICE

Triage Nurses, as experienced members within this specific cultural environment, shared an understanding of the seven embedded beliefs. These beliefs conveyed between Triage Nurses and others the ways things should be done and thought about, giving shape to practice and action. Beliefs implicit within triage practice were shown to comprise of patient behaviour expectations by Triage Nurses. These expectations framed notions of service worthiness and constituted one local knowledge system. While Triage Nurses were aware of these beliefs, Karen believed that triage code allocation was not affected. "*You try not to be judgemental, assumptions don't change my opinion for triage, he should be a Code 5"*. However, extracts provided evidence that these informal beliefs do have the

capacity to intensify personal emotions, such as resentment and thus alter triage code allocation.

In each ED, when any belief surfaced during Triage Nurse-patient interactions, tension became evident, consistent and observable in practice. When patients, breached a belief, they often received advice on what to do next time, alteration in the triage code or modification of resource utilisation. The collective view of beliefs offered a means to manage and understand ED service and deemed what is considered ‘true’, ‘right’ and ‘good’. These beliefs, conveyed during the act of triage, provided a framework for making sense of reality, a means to understand action, and a way to view patient behaviour for Triage Nurses.

SUMMARY

This chapter has described a culture of ED care. Triage Nurses practice in a culture of ED care, framed and sustained by notions of efficiency, timeliness and equity. Efficiency and timeliness regulated by Triage Nurses gives rise to a cadence of care that is reflected in a standard geography of patient movement within ‘place’. Patient movement was normalised by architecture, embedded expectations, urgency codes and bed allocations and created a spatial web recognisable to Triage Nurses. The next chapter describes how experienced emergency nurses manage the culture of ED care in everyday triage activity.

CHAPTER 5: FINDINGS

BEING THE TRIAGE NURSE IN A CULTURE OF CARE

This chapter describes how ten experienced emergency nurses enacted the triage role within a culture of ED care. Triage Nurses help make sense of, and explain, everyday routine through shared knowledge and belief systems. These systems enabled Triage Nurses to align their practice to maintaining the cadence of emergency care to which they are culturally oriented. Triage Nurses used three processes: gatekeeping, timekeeping and decision-making to accomplish the role of triage and ensure appropriate patient movement, timing of care and equity of service.

The shared cultural meanings that emanated from the three processes helped to maintain consistent patterns of practice. In this way triage behaviour, activity and thinking was viewed as a complex web that derived from cultural knowledge. Triage activity and practices were interrelated with other workers in an ED environment laden with embedded meanings and emotions, and driven by urgency. Real care situations brought embedded meanings to the foreground through the voices of Triage Nurses, clerical staff, medical staff and ambulance officers.

A TYPICAL SHIFT

It is 7am on a typical Saturday morning. On entering the ED, I observed there was a crowd of people in the waiting room. I found the Triage Nurse (Andrew) with the other emergency nurses standing around the acute room workstation waiting to start

the shift. The in-charge nurse signaled the start of the acute room patient round and the nurses allocated to other areas began to leave. Emergency nurses allocated to work in clinical areas were confined largely to that area for the shift. As I followed Andrew, he went through each clinical area to get an overview before returning to triage:

> *7am Saturday. I followed Andrew as he moved through each clinical area on his way to triage. I asked about this behaviour. He explained, it's important to know the number of patients in each area and which beds are free. Arriving at triage, the night nurse was directing a patient to the waiting room. Andrew asked about the shift. Looking out into the waiting room, eight people sat on chairs. Some were watching the television, others rested with their eyes closed, of which two had draped around them hospital blankets. Andrew listened, mainly nodding, as the nurse discussed each patient: how long they had waited, why they came to the ED, if the Triage Nurse had done anything to speed up their care, and the rate that patients were seen. The Triage Nurses, turned back towards the computer and brought up a different screen that appeared labeled Patient Expect. Doctors entered the details and conditions of expected ED patient arrivals into this screen. Expected patients appeared listed on the computer screen. The information provided on this screen sometimes assisted Triage Nurse to determine their activities. [Field note Hospital 3]*

Each of the ten Triage Nurses were observed moving freely throughout EDs. This was done at a time of their choosing and for activities they selected. However, this type of movement was least common in Hospital 1 where both nurses remained, for the most part, at triage. Throughout the shift, in Hospitals 2, 3 and 4, nurses would leave the triage room and undertake a 'quick' surveillance round of the ED. Further discussions identified that the main purpose of this round was to gain an understanding of patient and staff activity, and bed occupancy and flow in the 'inside' areas. Additional activities that provided an opportunity to survey 'inside'

occurred when they 'dropped off' a triage assessment form, ambulance report sheet or delivered patient identification labels to staff.

On this particular Saturday morning, more people had walked through the ED entrance during the handover to Andrew. Standing in the triage room, the flow of people was unpredictable, uncontrolled and often punctuated by time critical activities. Unlike an outpatient area, ED visits were largely unscheduled with unpredictable peaks and troughs in the number of patients and acuity levels of illness and injuries presenting at any one moment throughout a typical shift. All Triage Nurses appeared ever vigilant, ready to shift their priorities of care to optimise safety and service delivery. On many occasions, they were simultaneously, assessing a patient, having to answer an enquiry, treating the previous patient's condition, and ordering an investigation. They undertook multiple activities regularly and this formed a part of the busy, but normal routine of work in this space. For example, "*I like it when it's busy – but only constant; a patient every 4 minutes, rather than a rush at once"* [Field note CNS3]. For the majority of nurses, undertaking a range of triage activities was appealing, although it was difficult to determine at what point the number of activities exceeded 'appeal'.

The Triage Nurse calls the first patient for the shift. This particular Saturday, while standing at the triage door, Andrew watched a man stand up out of a chair and proceed across the waiting room. By this time, Andrew had five people wanting to see a doctor, but the act of triage preceded all other activities. Andrew assessed the man in the triage room: allocated him a triage code 4 and the consultation room,

ordered a right lower limb x-ray, and told him to come back to the waiting room after his x-ray.

Observations and interviews revealed Triage Nurses determine patient movement, the timing of care and initiation of extended activities. To accomplish these role tasks, Triage Nurses used three processes: gatekeeping, timekeeping and decision-making.

TRIAGE NURSE AS GATEKEEPER

Triage Nurses in everyday practice were able to make sense of, and explain, role activities and interactions through a shared cultural understanding of appropriate patient movement, the timing of care and equity of service. A process of gatekeeping regulated these dimensions of practice and made a cadence of emergency care visible.

In further exploring the process of gatekeeping, it was evident that Triage Nurses shared an understanding of patient movement that was determined by matching specific patient groups, resources and need for care to clinical workspaces. This positioned the Triage nurse as a gatekeeper of movement and resource utilisation. For example, *"It's part of your assessment, gatekeeping is a good way of putting it"* [Field note CNC1]. This pattern of movement was maintained by the allocation of patients to specific workspaces, scripted nursing and medical activities, and ensured access to specific technological equipment. Samantha described the common meaning behind allocating patients to different clinical areas:

> *If a patient's afebrile, I might put them in the waiting room. Compared to if they're febrile they may need to go into a bed. For example, cellulitis if they're afebrile they can stay in the waiting room. The triage code will stay the same, but it would alter where I choose to put the patient….*

For Triage Nurses workspaces emanated different meanings that enabled a process of gatekeeping to occur. Triage Nurses knew that the clinical areas provided different levels of care appropriate for a patient's condition or injury and that this determined a normal pattern of patient movement and rhythm of care throughout the ED. The fragmentation of workspace to 'place' enabled a process of gatekeeping to take place.

Triage Nurses regulated patient movement from 'outside' to 'inside'. Peter shared a standard triage role purpose response "*At triage, we either let them know they can come in or not"*. The majority of Triage Nurses described clinical areas as highly purposeful in nature, producing an efficient system that economised the use of equipment and staffing resources, enabling the processing of hundreds of patients.

Specific activities and patient interventions were normalised by the Triage Nurse's regulation of movement - their gatekeeping of clinical areas. Peter went on to explain: *"You have to decide what they're here for, then decide what are the best investigations and then where they should go for treatment"*. The architecture helped to define a culture of ED care that constituted particular relationships between care practice activities, patient groups and workspaces. The culture of ED care woven into workspaces, conveyed an urgency scale used by Triage Nurses that had meaning for the appropriateness of service delivery. This was important to the

practice of triaging as the allocation of patients to workspaces was related to decisions of urgency.

Written ED guidelines supported gatekeeping processes, assisting and authorising Triage Nurses to regulate the distribution of emergency care. For example, the ATS allocates maximum resources to patients with life threatening conditions. While this is prudent in the face of such conditions, where minutes count in preserving life, it sustains the belief that some patients are more deserving of resources. ED policies and guidelines supported and authorised the Triage Nurse to be a gatekeeper within this culture of care.

ALLOCATING A BED

While triage superficially seemed focused on determining the patient's clinical urgency, the information collected by nurses needed to provide sufficient detail to determine the need for a bed. It became clear that the act of triage, including consideration of the need to allocate a bed in a particular area, occurred simultaneously with allocating a triage code. Six Triage Nurses regularly spoke of the need to allocate patients a bed. A standard response made this clearer, *"It's part of your assessment. You have to think how much do they deserve a bed, you know illness severity*" [Field note CNC1]. Sally illustrated the concurrent thinking processes in triage decision-making:

> *If I take their blood pressure, [and] they're really quite tachycardic, I'm thinking 'OK well that's a bit of a clinical indicator, they're probably going to need some fluids, and it's about matching your clinical data with what's going on in your mind. So I'm thinking, 'where's the most*

appropriate place in the department, where are they going to get their treatment expedited.

The majority of Triage Nurses considered that allocating a bed to a patient was warranted in two circumstances. The first was the clinical urgency of the patient's condition. A review of field notes confirmed that all Triage Nurses, when allocating a triage codes 1 2 or 3, would normally allocate a bed space. The second circumstance that influenced the allocation of a bed was the treatment and course of events that a patient's condition was likely to require. Mathew, like others, would weigh information during the triage process in order to predict treatment needs. For example, "*Triage is about trying to balance what will happen"* [Mathew]. Expected medical assessment needs were also considered as an appropriate reason for a patient to be allocated to a bed. A typical example is a woman presenting with vaginal bleeding would be in need of a vaginal and abdominal examination and therefore needs a bed space. The need for a medical assessment accounted for some patients regularly being allocated a bed despite having less urgent conditions.

When talking to Toni about the allocation of beds to patients, another factor emerged. She spoke of experiencing apprehension during periods of bed allocation. This notion became clearer when talking with CNS 1 who arrived for the lunch handover. He joined in with the discussion and explained his reason for feeling apprehensive during decisions of bed allocation. He noted: *"Often many ambulance patients aren't urgent and they take beds away from patients who are acutely ill walking in"* [Field note Hospital 3 CNS1]. Triage Nurses regularly talked of experiences where patients walking into the ED had a more urgent condition than

those arriving by ambulance. However, the limited number of beds in each ED restricted the nurse's opportunity to allocate one to everyone. In these instances, the inappropriate allocation of a bed to someone who was later found to be non-urgent invoked feelings of apprehension and goal failure for several Triage Nurses. Apprehension often appeared when the last bed was allocated because this could mean treatment delays for someone arriving with an urgent condition. In this situation the goal of balancing patient care need and safety can be compromised. This reinforced the importance of the gatekeeping process in relation to the allocation of ED beds for Triage Nurses.

Managing uncertainty in bed allocation

Indecision about whether to allocate a patient to a bed or not was a regular source of feelings of uncertainty, but most of the nurses had strategies to deal with it. For example, Peter had several ways to manage uncertainty when determining patient need, such as *"I'll cross reference things [information], if I can't [make a decision] I'll consult or do investigations to help"*. When seeking assistance to manage uncertainty, others would look for affirmation from fellow nurses in preference to doctors. Andrew expressed a typical view:

> *If I have an 'iffy' triage, I try to get more specific information. If I'm unsure, I'll [then] ask a nurse, more often than [I ask] a doctor. Doctors just [say], bring them in. Whereas nurses are better able to tell you,[that] they can stay in consultation rooms etc ….*

Samantha had a similar perspective:

I'm more inclined to ask a nurse instead of a doctor [for help]. Sometimes you feel with doctors that your assessment's an exam. The doctors want to know everything that's why, I choose some doctors over other [doctors].

Gatekeeping processes often occur in the presence of uncertainty, in an emotionally charged environment driven by urgency and relied on gathering the right information and availability of resources.

In summary, gatekeeping processes ensured that specific patient groups were allocated a bed within an appropriately resourced area. Triage Nurses through the process of gatekeeping weighed up patient information, knowledge and belief systems, available bed resources, the ability to predict patient treatment needs and the potential arrival of a patient with a more urgent condition.

TRIAGE NURSE AS A CULTURAL BROKER

Through a process of gatekeeping, Triage Nurses act as a cultural broker for staff and patients. Positioned as gatekeepers, they introduced patients to department staff and a specifically situated context of care. Triage Nurses converted patient language into an urgency code, a useable currency, providing understanding for emergency nurses and doctors to orientate their practice. The understanding by others enabled the ordering of practice and tuned the cadence of work between, and within, 'inside' and 'outside'.

All Triage Nurses determined, within a few minutes, the nature of the patient's clinical need in a way that other staff members could understand. When they finished entering patient assessment details into the computer system, the patient's

condition converted into a ‘problem’ to be solved in a ‘language’ that had meaning for staff. The conversion of patients’ talk into medical language had value and meaning for those who belonged in this place. Through the process of computer entry, Triage Nurses introduced patients to medical staff. Medical staff could read converted patient text on any computer screen located throughout the clinical areas. They would then select the next patient to be seen from the ‘waiting list’ screen based on the triage coding and assessment details. Discussion with a clerk provided insight into the importance of the triage role to the practice of others:

> *Treatment used to start, regardless of triage, whereas now triage is critical. Some doctors come out and ask where’s the triage sheet before they’ll start to see the patient [Clerk1].*

The triage assessment was central to the overall organisation and delivery of ED services. The ability of others to undertake clinical work was dependent on the gatekeeping skills, practices and activities of Triage Nurses. In particular, the allocation of a triage code determined the timing of activity and flow of movement in the different clinical areas. In this way, the allocation of a triage code appeared pivotal in the hierarchical ordering of practice and perceptions of movement and flow within the ED. Triage codes and the local knowledge of nurses made a shared understanding of urgency possible, ensuring the safety of the patient and the efficiency of the service.

Gatekeeping processes enabled Triage Nurses to act as the initial cultural broker for patients entering this setting. During patient assessment, the majority took the opportunity to explain to the patient about the world of emergency care. This

explanation usually included information of what was taking place in the triage room. For example, they regularly explained to patients the technology they used during the assessment and what it revealed about their condition. Then they usually provided their conclusions of the assessment process back to the patient. While Triage Nurses sought to grasp the needs of the patient, at the same time, they attempted to provide them with a deeper understanding of what it meant to be in this place. Mathew illustrates *"It helps if you explain what is happening and going to happen. It makes it easier"*. Once they conveyed triage conclusions to the patient, they often took the opportunity to comfort relatives and patients, and explain the procedures that would take place at the bedside. It was important to the majority of Triage Nurses that patients and relatives are prepared for entering the world of emergency care by having an introductory understanding of what was to happen beyond the waiting room doors. From the Triage Nurse's point of view, this brokering process provided people with the initial understandings of the reality of this place of care.

Gatekeeping processes are deeply embedded within these settings. Triage Nurses expended minimal energy on understanding gatekeeping processes. Instead, they shared understanding of, and belief in, the value of this process through the appropriate movement of patient groups. The effort to 'do' is sustained by cultural beliefs of 'why' it must be done reflected in a particular cadence of work. Gatekeeping processes are elaborate and dynamic and made possible by Triage Nurse positioning and their movement of patients; and use of guidelines,

knowledge and belief systems. Triage Nurses saw gatekeeping processes, as ensuring safety, timely care through the appropriate allocation of urgency code, and matching patient need with clinical areas. Fundamental to the process of gatekeeping, was this shared cultural understanding of how urgency and efficiency were implicit in clinical areas, and thereby defined an appropriate rhythm of patient movement.

Gatekeeping processes are required to maintain order, consistency and ensure a cadence of care to which all were culturally oriented. Triage Nurses skillfully use a process of gatekeeping to accomplish the appropriate allocation of service resources to patient need thereby securing patient care and safety.

TRIAGE NURSE AS TIMEKEEPER

A collective notion of efficiency underpinned a 'normal' timing of care within these EDs. Efficiency shaped order and control, motivated everyday routine, was central to the organisation of triage nursing practice, and engendered a sense of 'timekeeping'. The nurse's allocation of triage code and a designated clinical area modulated the timing of care. Embedded in the notion of 'normal' time were triage expectations of role identity, responsibility and purpose. For example, Peter shared a characteristic view of triage role identity "*Triage Nurses need to keep order and control, you need fairness and equity that's what we have to do"*. The pattern of 'normal' work time brought to the world of triage nursing a sense of order and control and defined routine practice. By allocating a code, managing workspace

boundary alignments and controlling patient movement, Triage Nurses sustained the ‘normal’ timing of care.

When allocated to an area by Triage Nurses, patients were obliged to follow the timing pattern of duration and pace that was separately woven into each place. The architecture, expected practices and activities of each clinical area had the effect of linking time in specific ways that shaped staff activities, goals and expectations of the service. Consequently, patients allocated to the resuscitation room were seen more quickly than those allocated to consultation rooms.

In this setting, a ‘normal’ cadence of care was part of cultural thinking about time. A strong awareness of time within work practices highlighted routine patterns of triage behaviour and interaction. The rhythm of everyday work was supported by fragments of time accorded to ‘place’. Different meanings of time punctuated clinical areas, which were fractured by critical events that hierarchically ordered practice and staff activities. Chronology had its own form of currency, legitimised through critical time guidelines such as the Australasian Triage Scale guideline (ATS). Triage code guidelines reflected the dispensation and fragmentation of urgent time, whereby specific patient groups, events and activities gave meaning to the rush of time. Temporal reality had important value within these EDs and together they constituted a ‘normal’ or routine cadence pattern and positioned Triage Nurses to regulate time through the allocation of an appropriate urgency code. This led to patients who were allocated code 3 being seen sooner than those assigned code 5.

Triage Nurses held expectations and a shared understanding of a timing system that conveyed how long it should take a patient to be seen, treated, discharged or transferred from the ED. Kylie noted that *"People shouldn't have to wait that long (hours)"*. Inappropriate movement within time concerned all the Triage Nurses. However, for those patients with less acute conditions, the slower timing of care was viewed as more appropriate across all sites. A collective view of allocated timing provided the rational basis for triage decision-making and the gatekeeping of resources by Triage Nurses. The continual movement of patients through the department generated a 'normal' timing rhythm that created a sense of achievement, defined behaviour as appropriate and reinforced a notion of 'belonging' for the majority of Triage Nurses.

Time was profoundly important to this context of care, a cultural touchstone by which triage nursing work, behaviour and talk was measured and evaluated. Achievement and goal fulfillment was characterised by timeliness and efficiency and laid the foundation for expectation. Peter noted *" there's a time element in triage"* and Sally clarifies *"things change all the time at triage. There's always possibilities. You know that's what triage is (about), weighing up where you're going to get the time"*. Valuing efficiency and timeliness fused time with its own cultural rhythm that linked Triage Nurses to practice and made them feel accountable for the cadence of work. In this way, nurses in the study believed themselves responsible for the timing of care in order to accomplish a normal rhythm of ED work. Time represented, defined and compromised the

accomplishment of care practices within the triage role. The harmonising of the rhythm of work, orchestrated by a process of timekeeping, positioned Triage Nurses as temporal workers, mediators of cultural timing.

ALLOCATING THE CODE

Triage Nurses are positioned to make value judgements that one person is more or less healthy relative to someone else, rendering explicit timekeeping choices between different patients groups. The Triage Nurse determines the appropriate triage code to meet the patient's clinical urgency. The Australasian Triage Scale guideline (ATS) provided nurses with a uniform method to allocate a triage code for a range of patient conditions. The experience of allocating a triage code revealed a process of timekeeping embedded within the triage role. For example, Mathew considered "*…can this patient wait 30 minutes (code3) before being seen, or 10 minutes (code 2) before being seen or do they need to be seen now (code 1)".* Triage Nurses' talked about how use of policies caused conflict within their practice. While many spoke of guidelines and policies assisting in timekeeping processes, nurses could elect to adhere or break with them. Further discussions into policy usage highlighted that written rules were more influential in guiding the practice of novice Triage Nurses. Andrew, with two years triage experience reflected on his early career and explained how his practice was assisted by the guidelines, "*I was helped a lot by knowing the triage scale. If it's a five, it's a five".* With six years triage experience, Tanya summed up "*when you're a junior you go*

to the rules first". While, policies such as the ATS appeared useful when starting in the triage role, these experienced Triage Nurses held a critical approach to rules.

As experience increased and confidence in clinical judgement grew, polices, such as the ATS, appeared to exert less influence on triage code allocation. Half the Triage Nurses viewed policies, such as the ATS as undermining clinical judgement and impeding timekeeping processes. These nurses, with triage experience ranging from 2 to 10 years, preferred to trust their own clinical judgement rather than rely on rules. They perceived that written rules were restrictive, created practical dilemmas and led to an inappropriate cadence of care throughout the ED. Two standard examples illustrated the point. Peter, with nine years triage experience, reflected on using written rules: *"I don't think it's my role just to follow protocols"*, and Tanya, with six years triage experience: "*If we can't make a clinical decision, we may as well just be like a delicatessen and give everyone a number"*. These nurses, in particular, felt that triage decisions based on guidelines, undermined professional expertise, personal knowledge and autonomy. Rigid adherence to the rules could result in inappropriate movement of patients, which undermined beliefs embedded within this culture of care. According to the ATS, all patients with chest pain should be allocated a code 2. However, Tanya experienced practice difficulties with this saying that whenever she "*triaged all the chest pains as a code 2. It was chaos. The next time, I used my clinical judgement and gave my own triage code and then it was OK"*. Her adhering to guidelines, impacted negatively on patient movement, the rhythm of work and resource utilisation.

Kylie, also largely chose to ignore the rule, which indicated that patients with chest pain should be allocated a code 2, although her reason was different. She normally allocated a code 3 for patients with chest pain because: *"By the time they get [by nurse] an echocardiograph; oxygen, and a cannula done ten minutes is up. But if they look terrible then I give them a code 2.* Kylie explained that in her opinion, allocating a code 2 (ten minutes), did not give nursing staff adequate time to complete their admission paper work and activity before a doctor came to assess the patient. Consequently, the activities of others influenced Triage Nurses' decision-making. Clinical judgement was chosen over written rules. In this way, it accommodated the reality and goals of Kylie's practice and secured for her a desirable rhythm of care.

Across sites, when comparing the ATS guidelines with triage behaviour, some of the Triage Nurses allocated a lower urgency code than indicated by guidelines. Equally, there were accounts of assigning a higher urgency code than indicated. For example, Karen, after triaging a man with abdominal cancer, stopped typing and said: "*Technically, he should be a 4. But I want to give him a 3, I wonder how stoic he is?"* She felt that this man was in pain despite the fact when asked, he said "not really". The majority of Triage Nurses often relied on their clinical judgement to increase or decrease the triage code. Andrew provided further insight: *"you always think, when you know something is wrong, like the woman with the fractured elbow and like the old woman who could not speak English, intuition helps you look for other things"*. Clinical judgement was viewed as more in tune with patient need

and the context of practice and could act as a buffer to guidelines during decision-making processes.

Not withstanding individual interpretation of triage guidelines, one particular patient group consistently received the same triage code by nurses. Across sites allocating a non-urgent code 5 for patients who required a wound dressing change was common practice. For example, "*I give all dressing changes a code 5"* [Andrew]. These patients arrived at the ED because a medical officer had instructed them to attend for wound review and dressing. The usual circumstances for this event to occur, were either the injury happened the night before and the patient was told to come back to the ED the next day for review or, with hospital outpatient clinics closed on weekends patients needed to return to the ED for care. As Peter pointed out, "*We do lots of dressings here, the ED runs a dressing clinic. All patients for dressings get a code 5"*. Triage Nurses considered this patient group as non-urgent, because they did not need to come to the ED. They could have gone to an outpatient clinic or GP service for their care.

Triage Nurses appeared largely consistent in the allocation of most triage codes to patient groups. Many found that written rules often failed to accommodate the context in which triage was practiced, and led to inappropriate cadence of care to which they were oriented. The context of practice, including triage policies and patient information was measured against personal knowledge systems, which were embedded with beliefs of efficiency, timeliness and equity. The timing of care

reflected in the allocation of a triage code was measured against a cadence of care whereby consistent and safe patterns of practice were observed.

INITIATING EXTENDED TRIAGE ACTIVITIES

Triage Nurses initiated many clinical activities to regulate the cadence of emergency care within everyday triage practice. The range of extended activities observed reflected those found within the literature. Triage Nurses viewed initiating these activities contributed towards timely, efficient and equitable service.

All Triage Nurses administered first aid; ordered distal limb x-rays; provided minor analgesia; such as, Paracetamol and non-steroidal anti-inflammatory drugs; reviewed and dressed injuries; and made allied health referrals. However, at the time of the observations (2002), Triage Nurses from Hospital 1 were not officially allowed to order x-rays, although implementing the practice was being explored[10]. Tanya explained, *"I don't usually order x-rays. Here we're not officially allowed do it"*. Despite this, on occasions, both nurses from this hospital initiated distal limb x-rays. All Triage Nurses saw radiological investigations as part of routine triage practice. For example, "*routine things like x-rays help to streamline*" [Samantha]. Different patient conditions, conduct and perceptions of an appropriate timing of care usually resulted in a predictable pattern of extended activities undertaken at triage. For example, the arrival of a patient with a suspected isolated limb injury: "*For a simple fracture: that has well localised pain; [they] heard a crack; not*

[10] In 2003, Triage Nurses were officially permitted to order distal limb x-rays in Hospital 1.

actually distressed or sobbing; and not verbally complaining of pain. I treat with ice, analgesia and an x-ray" [Mathew]. However, undertaking such activities by Triage Nurses was inconsistent. For example, there were shifts in which people arrived with similar limb injuries, and some would have an x-ray ordered by a Triage Nurse and others would not. Sally provided some insight, into the inconsistent application of extended activities, when she said, *"It depends on the day how much I investigate, mood, state of the department, [and] the shift before"*. Time pressures were the most common factors to emerge in discussions about consistency of initiating these activities at triage, as exemplified by Tanya: *"I'll order an x-ray if I have time"*. Triage Nurses often made arbitrary decisions about which patients received extended care practices within a specific context of care.

Undertaking extended activities took time and so they were prioritised by Triage Nurses within the role. Triage consistently involved: firstly determining clinical urgency, followed by the determination of the need for a patient bed and then finally the need to undertake nurse initiated extended triage activities. Peter best summed up the triage role:

> *Triage is first, about assessing the degree of urgency and then thinking about inside and what's happening there and the resources that are now needed when you put this patient inside. You know last week I was doing cardio-pulmonary resuscitation on the floor [triage], but 'inside' was civilised. But when it's horrendous 'inside' as well, it's difficult. I had to think, what's happening 'inside' to the rest of the patients if you have everyone helping here [triage].*

Initiating extended practices were completed at a time of the nurse's choosing and weighed against time pressures. The majority of Triage Nurses, as part of the initial

patient assessment process, largely selected and completed additional activities. A range of clinical and non-clinical factors influenced whether Triage Nurses made a decision to undertake extended activities for patients in the study.

Initiating extended activities was part of being the Triage Nurse. These activities assisted in a process of timekeeping thereby enabling Triage Nurses to maintain and regulate a cadence of emergency care for patient groups.

TRIAGE NURSE AS DECISION-MAKER

As is already apparent - after watching the assessment of hundreds of patients by the ten Triage Nurses, a common pattern of assessment emerged. It usually took several minutes and centred on gathering information in order to make quick decisions. Cultural knowledge intertwined with triage decision-making processes to provide nurses with the ways of doing, understanding of what is known and what is to be believed particular to patient groups. Having learnt the meanings applied to patient groups, nurses were able to make effective choices and plans. Cultural dimensions made sense of decision-making and secured, justified and motivated beliefs of urgency. Triage Nurses blended knowledge systems, past experiences, collated patterns of knowing and ways of doing with a patient's physiological, interpersonal and communicative signs. Convergence of knowledge systems enabled greater accuracy and speed for clinical decision-making. Yet, the positioning of these systems appeared relative, dependent and balanced in a specific context.

The decision to allocate an urgency code, determine a patient's need for a bed and undertake extended activities was part of being the Triage Nurse. The accomplishment of these activities was dependent on gathering selective information. For example, Peter describes the value of specific information; "*If the right information's given, then we can speed up the process of patients seeing doctors"*. Within the pattern of decision-maker was woven a combination of information gathering processes and knowledge systems that enabled the swift collection of relevant data, patient needs to be anticipated and action plans to be built.

COLLECTING OBSERVATIONAL INFORMATION

All the Triage Nurses in this study typically 'trawled' for information; beginning with an initial visual observation of the patient. They regularly talked about the importance of 'just looking at the patient' before asking a question. When probing information gathering practices a normal response included; *"Observation's probably the main thing. I think, observation's definitely number one. If the story and the observation don't fit then you just keep fishing for information"* [Karen]. The collection of observational information began as patients entered the ED. For example:

> *10.30 Saturday morning. Gazing through the triage window Meg watches as a man limped on his right ankle and cradling his wrist entered the ED. Meg, standing at the entrance anticipated the need for x-rays. [Field note Hospital 3].*

Watching the way a patient entered the door gave Triage Nurses the opportunity to gather clues for working suppositions. These suppositions framed impressions about urgency, bed allocation and the need for investigational activities. They also used this skill when approaching an ambulance trolley. Kylie clarified the details of observational information gathering. "*The first thing I look [at] is their general appearance; if they look uncomfortable or distressed; or, if they look pale or sweaty"*. Observation provided Triage Nurses with information on which to build hunches. The use of other information gathering processes provided opportunities to solidify these decision-making choices.

TARGET QUESTIONING: IDENTIFYING THE PROBLEM

All nurses stated that the most efficient way to make decisions was by focused questioning. Triage Nurse questioning focused on targeting the main reason for patients coming to the ED. Triage Nurses were commonly observed to use questioning practices that enabled information to 'funnel down' from a broad complaint to specific signs and symptoms. They always began the assessment with a broad question, which was used to tease out the main complaint for this presentation. For example, "*what brings you to hospital today?"* [Meg]. After they asked a broad question, the focus shifted to the patient's specific signs and symptoms. This funnelling down enabled Triage Nurses to quickly gain insight into the patient's immediate complaint and determine patient urgency. The following extract highlighted Meg's questioning technique after having established that the

man had pain in his chest. She began by asking a standard set of questions related to his health problem:

> *How long have you had the pain? Did it go any where else? Have you had the pain before? Do you have any shortness of breath? Do you have any sweating? Do you have a chest infection? Do you have any other problems? Are your ankles more puffy than usual? Are you on any medication? Do you have any allergies?*

Each time the patient was given time to answer. At the conclusion of this questioning, Meg had obtained sufficient information to allocate a bed in the acute room (code 3) and immediately got a wheelchair. While the order of focused questions varied between Triage Nurses, the funnelling practice was a consistent triage assessment pattern. However, Meg's questioning technique was the most methodical and predictable of the Triage Nurses. This questioning practice ensured that the immediate concerns of the patient were identified. However, field notes highlighted barriers to information gathering processes, which made the triaging of patients more difficult or slower and decision-making processes more risky for Triage Nurses.

Barriers to questioning

The majority of nurses discussed delays in information gathering as difficult triage situations. During difficult triage assessments the beliefs central to patient conduct were commonly evident within interactions stirring emotions and intensifying expectations. When barriers to questioning surfaced during the act of triage, the ability to make decisions slowed the assessment process and introduced uncertainty. Across sites, examples of difficult triage situations described by nurses included

people from Non-English speaking backgrounds (NESB), vague patient related histories, patients with chronic illnesses, and patients with relatives who intervened. Peter explains:

> *The triages that are easy are straight forward - like a fracture. With others you're hunting for something, the patient is vague, it's difficult to grab what they're saying or the picture and the story's different. Chronic patients are difficult. You need to filter the 'baggage' and try to work out what's the problem. Patients with NESB can lead to delays - you can't get the telephone interpreter and then you need to rely on assessment, external cues, behaviour. Languishing patients make it hard to get a history and if they've a lot of history they start " back in 1986" and you can't dismiss them.*

The practice of funnelling information was not possible with all patients. Delays in appropriating sufficient information made identification of the patient's problem difficult, decision-making harder, and allocating the patient in the appropriate space and time challenging.

A common situation viewed as slowing the triage process down involved the presence of relatives with patients. The normal triage pattern for gathering information was to direct questions to the patient. Consequently, when a relative chose to answer a triage assessment question, a similar pattern of behaviour unfolded. It involved the nurse redirecting the question to the patient or seeking confirmation from the patient. On these occasions, if the accompanying person continued to speak for the patient, the Triage Nurse was observed to ask the relative to let the patient speak for themselves. There were several opportunities to explore this practice pattern. Tanya spoke of her preference for gathering information from the patient. "*I hate it when the relatives talk when I'm triaging. I like to hear them*

[the patient] speak". On further sifting, Tanya reflected on her reason for redirecting questions to the patient "*you need to know whether they're talking, OK, gasping, you want to know what they're like"*. Exploring this aspect of triage behaviour more fully, it was found that the majority of Triage Nurses preferred not to have relatives present. They clearly would prefer to gather information from the patient themselves. However, in the triaging of NESB patients the practice changed. Meg shared a standard view "*I often don't bring relatives into the triage office unless they're NESB and then they help to interpret. But often they interrupt when in the room making it difficult"*. Triage Nurses saw the relative's intervention as delaying information gathering and decision-making processes and believed that this could compromise patient safety and department flow.

During decision-making processes, tension surfaced when nurses saw relatives as attempting to exert influence over their practice of information gathering. These events were seen as challenging the power and authority embedded in the role. In these situations, the Triage Nurse's understandings of occupational jurisdiction led to the experience of tension. Many viewed these events as compromising belief systems that were framed by equity, control and order. Decision-making processes sustained the moral order of emergency care and powerfully defended work boundaries and practices, replacing tension with the authority to act.

The language of questioning

While still needing to funnel down from the broad complaint to specific signs and symptoms, two nurses described it is also important to frame questions in order to

avoid inappropriate decision-making and allocation of resources. For Peter and Karen, they needed to make sure 'key' words were not prompts for the patient such as 'crushing' chest pain. They believed that patient's might use a key word as a means of receiving services that were later considered as inappropriate for their condition. Both nurses perceived that giving patients 'key' words increased the risk of making an incorrect urgency triage decision. Peter illustrates:

> *You're not supposed to lead the patient. What I was told about triage is that if you [patient] learn the magic words then you can get into hospital, so you don't want to give them the words.*

Inappropriate decision-making could result in resources being directed away from someone considered more worthy of the service.

By using the funnel approach to question patients Triage Nurses demonstrated blocking techniques with relatives. Consideration for how questions were framed enabled them to collect relevant information swiftly. By collecting information rapidly, the goal and expectation of care were met by Triage Nurses.

Asking about regular medications

A common practice amongst Triage Nurses was to investigate the use of medications. Meg, the most methodical of the Triage Nurses asked a range of questions, but always included the same four during triage assessments. The questions involved: medical and surgical history, allergies and medications. The importance of asking about patient medications was highlighted during fieldwork with Meg:

Sunday 1.30pm Meg called a man into the triage room. After asking what the problem was she asked the man if he had any medical conditions. She then asked about surgical conditions. To both questions, he answered no. Meg continued to ask focused questions related to his complaint of vomiting. However, three questions later Meg asked if he took any regular medications and he proceeded to list four (Field note Hospital 3).

The extract provided evidence that once a patient's condition was controlled by medication, they often did not view it as a 'condition'. Consequently, when Meg asked early in the assessment process about medical and surgical conditions the patient's response was 'no'. This was a commonly observed behaviour pattern of patients. Further discussion led Meg's insight into the phenomena, *"They [patients] seem to think [that] when they're on medication, the problem's fixed and they don't tell you. They don't say they've diabetes or hypertension unless you list it"*. The experience of not collecting valuable information about medical and surgical history explained Meg's consistency in asking patients about medications; "*It's hard. They say they have no medical or surgical problems and you ask them about medications and then they say I'm on Losec*[11]*, which means an ulcer, Prozac*[12] *that means depression"*.

These experienced Triage Nurses had learned that gathering relevant information was critical for making accurate decisions and yet, unless patients were specifically asked about medications, important information would not surface. By gathering information about medication patterns, Triage Nurses gained valuable insight into

[11] Losec is the trade name for Omeprazole and used to treat reflux and gastric ulcers.
[12] Prozac is the trade name for Fluoxetine and used to treat depression (Caswell 2004).

patient conditions that sustained their confidence in, and accuracy of, decision-making.

DETERMINING A PATIENT'S NEED FOR URGENT MEDICAL INTERVENTION

To accomplish the role of triage, nurses identified first the reason for a patient's presentation to the ED. Then Triage Nurses sought to determine the urgency of a patient's condition.

Obtaining haemodynamic observations

Triage Nurses regularly chose to collect haemodynamic observations on patients allocated triage code 3 or 4. Sally from Hospital 2 confirmed this observed pattern of practice; "*It's generally between the 3's and 4's that I do that [observations]. All my 1's and 2's and majority of my 3's, I don't bother. Only because I don't think it's necessary".* The common practice of obtaining observations, a patient's blood pressure, heart rate, oximetry and temperature (vital signs); appeared to assist in discriminating between urgency code 3 and code 4 patients. Andrew provided evidence of this observation by an average response: "*[triage] 3 and 4 are particularly difficult".* In other words vital signs, rather than just being a routine part of practice, provided Triage Nurses with information that assisted in selecting between triage codes or deciding to increase or decrease a code as Samantha suggests, "*The patient's [oxygen] saturation might make me change my triage code from a 3 to a 4".*

In some instances, Triage Nurses had been surprised by abnormal or unexpected vital sign findings as Samantha describes: *"I use equipment for different*

observations. Sometimes observations cast a new light on their appearance". The opportunity to see this experience first hand presented itself when observing Mathew. He had finished triaging a young man with flank pain and haematuria and was entering his triage code 4 into the computer. However, five minutes later he decided to go back to the man and obtain vital signs. Based on the new information, Mathew re-evaluated his triage assessment, changing the triage code to a 3 and allocating a bed. Probing into this event Mathew explained:

> *I shouldn't have bothered to do his observations, (temperature 39.4^{0}C, heart rate is 94 beats /minute). Now [that] I know his temperature's so high, I'll have to do something about it. Otherwise, he didn't look too bad. I was just going to put him into the waiting room.*

In Mathew's experience, the practice of gathering haemodynamic observations provided sufficient evidence to alter the allocated triage code and clinical area. Similarly, other Triage Nurses gained valuable information about the need to allocate a bed from collecting haemodynamic observations. Toni provided understanding of how such information was included in triage decision-making processes:

> *If a patient's haemodynamically normal they can go in the waiting room. If they are abnormal then they may need to go into a bed. But if they're just febrile, I still might put them in the waiting room.*

Observations only would give the impression that obtaining patient vital signs to be an ad hoc process at triage. However, interviews with Triage Nurses revealed that the allocation of a triage code and clinical area was more confidently and accurately determined with access to haemodynamic information for code 3 and 4 patients.

Be suspicious

Being the Triage Nurse required a level of suspicion to be present within decision-making processes. Two Triage Nurses spoke about being suspicious during the assessment process. This was to avoid inappropriate triage decision-making and allocation of resources, "*A Triage Nurse needs to have an element of suspicion [about the patient's condition], but you can be still caught out"* [Mathew]. In many instances, Triage Nurses experienced the need to be suspicious, as patients would often view their condition more seriously than the Triage Nurse. Toni described the meaning embedded in being suspicious:

> *In a sense, they have to prove to me that they're sick. They'll come up to you and they'll say they're dying of pain. They're not. The more they whinge the harder I get.*

In later discussion with Mathew and Toni, they revealed how failing to be suspicious had led both to allocate resources to patients that were not appropriate. Toni provided an example by explaining that she had put a patient in acute (code 2), but later the patient was discharged home. To avoid the inappropriate allocation of limited resources some Triage Nurses remained skeptical of patient claims and preferred to weigh the gathered information against their own clinical judgement, rather than the patient's view of their condition. For these nurses, being suspicious worked well and improved prudent decision-making about urgency and resource allocation.

Pattern recognition

Across sites, pattern recognition by all nurses contributed towards rapid triage decision-making. When gathering patient information, they used pattern recognition by measuring patient talk and ambulance officer behaviour against personal templates stored from practical experience and theoretical knowledge. For example, Mathew explains the thinking behind the behaviour of the ambulance officers *"If they're [patient] sick, they [ambulance officers] don't move. If they're [patient] fine, they're [ambulance officers] quite happy to have a wander"*. Similarly, Samantha demonstrated how comparisons of patient information were measured against a typical cardiac infarction template for the common presentation of a patient with chest pain. Samantha reflected, *"He's well perfused, pulses are regular, no typical pain - sharp or dull, there's no dizziness. I don't think it's cardiac"*. The man was allocated a triage code 4 and sent back to the waiting room. Measuring patient signs and symptoms against medical templates of urgency assists discrimination and refinement in decision-making processes at triage.

Triage Nurses skillfully aimed to rule out standard case templates that denoted life-threatening conditions such as myocardial infarction. They showed their expertise in determining and discriminating in a lack of fit with particular diagnoses. Mathew provided a common example:

> *First impression, I didn't think he had chest pain, Powers of deduction, he had an arm in a sling. He didn't look acutely distressed, but I wasn't aware of his history. He seemed non-acute, no diaphoresis. I wanted to examine the pain. Was it [pain] sharp, dull or crushing. I needed to know about the treatment. Looking at his appearance, I wanted to know what*

treatment had been instigated [by CDA[13]]. He didn't look unwell, CDA had not been concerned – code 3.

Samantha provided another example of the recognition of a lack of fit to clinical templates:

I think it sounds really atypical [chest pain]. I want to exclude any ongoing ischaemia, but I'm not convinced that there is [any], it doesn't sound very much at all like it is to me – code 4.

Toni reflected on this process:

I was trying to work out in my head, whether it was a cardiac or respiratory type problem. Whether it was more to do with, another heart attack, or whether it's to do with perhaps pneumonia or pleurisy or something like that ….

While Triage Nurses seemed to accommodate for patients presenting with atypical patterns, on occasions these presentations led some to perceive that they had made a wrong triage code decision. When they talked about wrong decisions, these moments were experienced negatively as potential compromises of patient safety. For example, during fieldwork with Toni a Clinical Nurse Specialist came to assist at triage and reflected on an atypical case and her wrong triage code decision.

Wrong decisions make it hard. I gave a patient a code 3 once. She seemed well at triage. Shortly after, she collapsed in the bed. The patient needed to have a code 2 in hindsight. Patients can change really quickly. Sometimes you feel like you have a day of wrong decisions, but she ended

[13] The term CDA is used by Triage Nurses to refer to ambulance officers. The NSW Central District Ambulance (CDA) coordinates the transfer of people to hospital. Ambulance officers are either general duty (basic life support) or paramedic (advanced life support) trained.

up going home. It makes you feel stupid and this will go around the ED [Field note Hospital 3 CNS 2].

Recognition of the urgency of a patient's presentation involved ruling in, or out, the likelihood of different conditions such as cardiac infarction or renal colic. In the absence of 'classical' signs and symptoms, the common practice of allocating a lower triage code made for challenging decision-making. Nonetheless, when gathering information, Triage Nurses relied on pattern recognition to direct choice, accelerate decision-making processes and build confidence to act.

Having a 'working diagnosis'

Five Triage Nurses discussed the importance of a working medical diagnosis for triage practice and decision-making. Sally summed up the sentiments of others "*You know to me when I'm triaging, I'm always thinking in my mind, 'What's their underlying diagnosis?' because that's what you're doing, putting it altogether*". And Karen *"At triage you need to try and think of the different diagnoses"*. By developing a working diagnosis, nurses were able to predict likely care situations.

However, according to Andrew having a diagnosis exceeded role boundaries. *"We shouldn't diagnose, but we do. You have to [diagnose] to be able prioritise"*. While acknowledging that they should not be diagnosing, the process of developing a working medical diagnosis enabled the prioritisation of a patient's need for care. Karen offered deeper insight into how the process of diagnosing operated during triage:

Unfortunately, as much as I know we're not supposed to be doing it [diagnosing], you do. You've got your clinical knowledge and you're

sound in your own knowledge, and in your own judgement, you'll actually be diagnosing the patient as you go along. And you'll say, right. I know it's a medical diagnosis and I know we're not supposed to, but your clinical judgement tells you something.

Despite how others view the appropriateness of formulating a diagnosis, it appeared crucial to being the Triage Nurse. Some Triage Nurses claimed the right to formulate a diagnosis through knowledge and clinical expertise. The Triage Nurse extracts and integrates these pieces of information into knowledge systems that have been gained through experience and specialised education.

In some situations, Triage Nurses perceived that having a working diagnosis reduced a patient's anxiety. For example, Peter explained that people often arrived at triage suspecting that they had a life-threatening condition, which brought to the surface anxiety and fear. However, a triage diagnosis that suggested a different or less urgent condition could be conveyed thereby helping to reduce their level of anxiety and accept the code allocation and the wait.

Triage Nurses perceived another benefit of a working diagnosis at triage. This was that it framed a patient's condition in a way that made sense to medical staff and therefore they were able to achieve desired actions. According to Peter, "*You need to learn the medical lingo, so that they'll [doctors] react the way you want them to*". All Triage Nurses were skillful in conveying information in a specific way when seeking to have activities undertaking by medical staff.

Professional and personal satisfaction was another benefit of establishing a diagnosis at triage for two Triage Nurses. Karen illustrated this observation with the following story:

> *I triaged a guy last night that I gave a code 2. He came in diaphoretic and pale. He was just absolutely dreadful. I thought he was some sort of renal colic or ischaemic gut. He was really quite tense and rigid on one side [abdomen], but not on the other. I thought, he is guarding that side. The story sounded like renal colic. Well regardless, he was in severe pain. It makes you feel so much better, when a doctor comes in and he's going, ischaemic gut - maybe renal colic. And I am like, Gee, I thought that. It's great knowing you've got the diagnosis right.*

Karen was surprised by her reaction and pleased at reaching the same diagnosis as the medical registrar.

While diagnosing was not seen as appropriate to the triage role, most Triage Nurses used it as a strategy to evaluate patient need, predict care required and determine urgency decisions. These factors contributed to sustaining the rhythm of work and accomplishing the role of triage. They did not see it as a replacement for a medical diagnosis. Rather, it was a way of helping to make sense of the act of triage, assist decision-making processes, reduce patient anxiety, expand professional confidence and add an element of personal satisfaction to the role.

SUMMARY

This chapter described being the Triage Nurse, which was characterised by three processes: gatekeeping, timekeeping and decision-making. These processes assisted, refined and enabled Triage Nurses to accomplish and manage their role. Triage Nurses used these processes to identify the right problem, urgency code,

clinical area and need for interventions. In practice these processes emanated a cadence of care, which gave shape to ‘normal’ patient movement, timing of care and goal fulfillment.

The next chapter describes a common event within the lives of Triage Nurses - patient over-crowding. In moments of overcrowding, Triage Nurses are motivated to restore the cadence of care to which they are culturally oriented.

CHAPTER 6: FINDINGS

RESTORING THE CADENCE OF CARE

Chapter 5 described being the Triage Nurse and the use of three processes, which enabled routine work to be managed and accomplished. The processes of gatekeeping, timekeeping and decision-making characterised triage practice and contributed to the cadence of emergency care to which emergency nurses were culturally oriented. However, incidents of patient overcrowding, by changing the cadence of care, interrupt the harmony of practice resulting in a different pattern of triage experiences. This chapter describes how Triage Nurses recognise and experience disruption to the cadence of emergency care, and the practices they implement to deal with patient overcrowding.

PATIENT OVERCROWDING: DE-SYNCHRONISING THE CADENCE OF CARE

Across all study sites, a perception of the 'normal' cadence of care being altered was most evident during incidents of patient overcrowding. Overcrowding constituted a real and regular part of the triage experience and one that threatened goal fulfillment for Triage Nurses. Patient overcrowding changed the context of triage practice and challenged the sense of order, control and goal fulfillment for many nurses in the study. In these instances, the processes of gatekeeping, timekeeping and decision-making were exaggerated as Triage Nurses focused on restoring patient care and the rhythm of work. Samantha echoed the view of the

majority "*It's difficult when the EDs full. You need to put patients in the waiting room, who you'd like to give a bed"*. Triage Nurses perceived incidents of overcrowding, as changing the cadence of care, whereby routine practices were not sufficient to accommodate the context. 'Normal' ED time had become desynchronised with the goals, beliefs and expectations of this setting. This led to triage processes (gatekeeping, timekeeping and decision-making) being saturated with, and complicated by, emotions and tension.

During field observation, secondary data sources demonstrated that between January 2001 and January 2002, a variety of factors were contributing to incidents of patient overcrowding in the ED. The first factor identified in reports was a 5.1% (70,000) increase in the number of patients who were presenting, along with a 0.4% increase in condition-complexity from the previous year (NSW Health 2001a). At the same time, peripheral data sources, such as newspapers, were reporting changes in hospital bed numbers, bed occupancy, private health insurance membership and GP bulk billing services[14] as other factors that fuelled incidents of ED overcrowding. Hospital bed numbers across Australia declined by 8.3% between 1996-97 and 2001-2002, while bed occupancy rates increased to over 90% (Pirani 2004). Australian private health insurance membership rates, in the first three months of 2001, dropped by 7551 and by 78,000 the previous 12 months. In

[14] Under the Medicare Levy Act of 1986, doctors are able to obtain a rebate of $24.45 from the Commonwealth Government of Australia, for each medical consultation visit. This defines the term 'bulk billing', whereby a doctor charges the patient the cost of the Medicare rebate for the consultation. However, in 2004 a government survey identified only 40% of NSW doctors are now offering 'bulk billing' services to the community (NSW Health 2004c).

addition, the decline in bulk billing services meant the consultation fee charged by many GPs was now higher than the National Medical Health Scheme rebate (NSWNA 2001). Triage Nurses were observing people coming to the ED to avoid the fees of GPs. For example, Karen notes, *"some people come to the ED, it's free. It's hard, they shouldn't come*". Andrew had a similar perspective "*People use us like a GP service"*.

Throughout NSW, inpatient bed closures, increased bed occupancy rates, decreased private health membership rates, and reduction in bulk billing were viewed as contributing towards increased patient presentations and delay in ED bed transfer time. Many patients (33%) waited an average of eight hours before being transferred to a ward bed. The transfer time delay of ED patients to a ward bed had come to define the term 'Access Block' and posed a significant increase in the workload of EDs (ACEM 2004, NSW Health 2001a, Pollard 2004b).

At the time of the study incidents of patient overcrowding in EDs was becoming a pandemic problem as newspapers around the world were citing similar events. For example, Irish, UK, and USA newspapers were reporting increased incidents of ED overcrowding (Fig. 3).

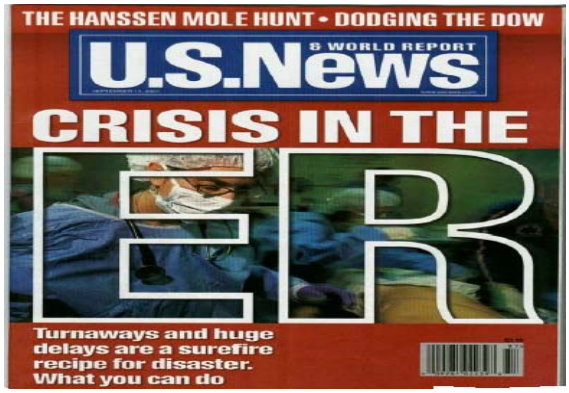


Figure 3. Newspaper headlines from Ireland, UK and USA[15].

[15] Written permission was obtained from BBC News and U.S News to use these newspaper cover story headlines. Available online 4 April 2004.

THE OUTCOMES OF PATIENT OVERCROWDING ON TRIAGE NURSES

Triage Nurses perceived events of patient overcrowding as a change in the context of routine practice. Incidents of overcrowding occurred on nine (36%) days of fieldwork. This led to an overloading of 'normal' time and produced experiences many nurses viewed as undesirable in the context of triage practice as described in previous chapters. Triage Nurses believed emergency practice was about episodic care, moving patients in and out, and considered the organisation and division of urgency time by the ATS[16] to be reasonable. On days of overcrowding, triage codes did not ensure a 'normal' timing of care, patient movement slowed, beds were restricted and tension surfaced during Triage Nurse interactions. They perceived that events of overcrowding interfered with triage beliefs, goal fulfillment, service responsibility and the cadence of emergency care. During overcrowding, Triage Nurses experienced time as 'overloaded' and initiated triage processes to restore the cadence of care and maintain patient safety. Incidents of overcrowding wove two undesirable outcome patterns that needed to be managed: aggression and negative emotions. In the overcrowded ED, the processes of gatekeeping, timekeeping and decision-making elicited new behavioural practices to manage this context of care.

EXPERIENCING AGGRESSION AT TRIAGE

The risk of aggression posed an undesirable challenge for all the nurses working at triage. When the timing of care was overloaded, as occurred in incidents of patient

---

[16] The Australasian Triage Scale Guideline was introduced into EDs in 1994.

overcrowding, Triage Nurses were more likely to experience aggression. Incidents of verbal aggression were seen to be directed towards the Triage Nurse and/or clerical staff by patients and/or relatives. On three occasions, physical abuse involved items being thrown at the triage window or nurse. Peter defined aggression as *"someone coming up and violating your personal space or violating your own freedom and things like that. That's what it basically feels like".* Many of these events led to the Triage Nurse contacting hospital security for assistance. At the time of the study, incidences of aggression were being recognised as a general problem in EDs.

A broader picture of aggression

At the time of the study, NSW Health was responding to the increased aggression towards emergency nurses (McDonald 2001). Aggression was documented as one of the main consequences of overcrowding due to the exaggerated waiting times and loss of patient movement throughout the ED (Jones & Cheek 2003, Jones & Lyneham 2000, Lyneham 2000). NSW Health began to develop a Zero Tolerance Policy in 2001, for managing aggression in health care settings (Moait 2001). The policy was subsequently released in 2003 (NSW Health 2003). As part of this policy, NSW Health launched a statewide media campaign that publicly condemned acts of aggression toward ED staff.

The NSW Health media campaign sought to discourage verbal or physical abuse aimed at emergency staff, and in particular, the Triage Nurse. The campaign included an anti-abuse poster for EDs (Fig. 4). Across sites, the poster was located

in different areas such as the waiting room, triage room, corridors or consultation room workspace.

Figure 4. NSW Health anti-aggression poster launched 2001.

During the NSW Government's anti-abuse campaign, the popular media regularly reported on violent incidents towards health workers (Cox 2002, Ferrari 2001) (Fig. 5). These leading Sydney newspapers, when citing incidents of aggression, particularly mentioned the risk to Triage Nurses throughout NSW.

Figure 5. Newspaper reports on aggression in Australian EDs[17].

Aggression during triage

The majority of Triage Nurses perceived that they were more at risk of experiencing incidents of aggression while undertaking the triage role compared with other emergency roles. Kylie provided a common view, *"I think people, verbally attack [you], more than physically, at triage, compared to inside"*.

[17] Written permission was granted to use these newspapers from FairFax Ltd and News Ltd. © This work is copyright and is reproduced under license from News Limited and FairFax Ltd.

Exaggerated waiting times were perceived by most of the Triage Nurses, to precipitate acts of aggression. People arriving in the ED did not always accept waiting time patterns allocated by Triage Nurses, instead preferring to give voice to their preferred known pattern of time. When Triage Nurses allocated codes according to the normal time-frame, overcrowding exaggerated the wait, delaying the processing of patients. Toni experienced these moments as challenging she explained, "*It's very difficult for, you know, people coming in with a miscarriage, for us to say you've got to wait 3 hours. And they think that we're withholding treatment from them*". Consequently, when informed of the waiting time, a patient or relative could view the timing of care allocated as inappropriate. The following field note exemplifies an aggressive incident over the timing of care:

> *Sunday morning Toni is at triage. A young man and woman walked over to the triage window. He was holding a bloodstained cloth to his nose. He explained to Toni that he hit a door and has broken his nose and can't breathe. He is spitting blood into a cloth. Toni assessed him, allocated the waiting room and a triage code 4. About 15 minutes later, the woman accompanying the man, came back to the triage window and asked for a bowl. She explained that he needed the bowl to spit into, he's choking on the blood. At this time, she asked how much longer he needed to wait. About thirty minutes later, the man, with the nose injury, came to triage complaining of difficulty breathing and asked how much longer would he have to wait. Toni explained, "look it's not a medical emergency, just breathe through your mouth, you'll see a doctor. I'm not denying you that, but it'll take a while". An hour later, the man came again to the triage window, started yelling, threw the container at the glass window and then walked out [Field note Hospital 1].*

This patient clearly saw the waiting time as undesirable and the Triage Nurse withholding care. While the Triage Nurse considered all patients in a total context of care, the patient views only their own position. While observing many of these

conversations, it was apparent that, from the patient's point of view, it was difficult to identify the appropriate timing of care. Instead, Triage Nurses believed the patient's perceptions of the timing of care was determined at an arbitrary and unpredictable level, as Kylie noted, "*Sometimes they can wait hours and it's then they get abusive, unreasonable".* The rhythm of care appeared to be a relative judgement with some patients observed as coming to the Triage Nurse minutes after being triaged to ask about the wait while others sat in the waiting room for hours. Nonetheless, patient exchanges involving exaggerated waiting times constituted a negative experience for most Triage Nurses with the majority of them seeing the interaction as insensitive, critical, rude or aggressive.

For those working at triage the risk of aggression brought feelings of vulnerability that posed a significant work challenge to the surface. Male and female Triage Nurses talked about residual feelings of vulnerability during extended waiting times. A few examples follow. "*Triage is difficult. You can easily get intimidated"* [Kylie]. And *"Triage can be quite confronting at times"* [Meg]. The risk of aggression during periods of overcrowding wove a negative thread into triage experience that was in contrast to routine practice patterns.

During desynchronised rhythms of care, Kylie reflected the female view, "I often feel, being female, you get more verbally and physically attacked. You can see as soon as you change your tone, you see people react to your voice". The experience of the three male Triage Nurses was similar, although they appeared less concerned by verbal abuse. Andrew clarified the difference, "it's a boy thing. If a female nurse

tells them to stop they just get worse, but if I go out or another male nurse goes out and you tell them to stop, they do it, it's just a cultural thing". In contrast, male nurses had a sense of being more at risk of physical abuse than female nurses. Peter, elaborated on the risk of physical violence at triage:

> *I think a man would probably find it difficult to actually swing a punch if a female was sitting here. But for a male to be sitting there, those barriers are gone. It wouldn't be hard at all. My perception of it would be for a really frustrated angry male to assault a male Triage Nurse.*

Both male and female Triage Nurses talked of incidents in which they had experienced verbal or physical abuse. For many, the exposure to insensitive comments, verbal and or physical abuse, changed the context of triage practice into an intensely negative emotional experience.

Aggressive patients compromising the safety of other patients

The experience of dealing with aggressive patients at triage held another challenge for one participant. Karen's experience of dealing with aggression included the risk to other people waiting for triage assessment. She relived an incident at triage in which she explained how the care of a patient was jeopardised in the time it took her to manage an aggressive patient:

> *Hospital 4. A person was just taking up time and energy in the waiting room and I needed to see other people. By the time I sorted it [out] and got myself [back] to triaging. I realised there was something really wrong with someone there. I felt so sick that not knowingly and not consciously, I mean it was quite some time ago. I found by the time I was finished with the aggressive patient, the person who has been waiting the longest was actually the sickest.*

For Karen, the time taken to manage an incident of aggression introduced into her practice and personal knowledge a perceived sense of pressure. By giving her time away to manage the aggressive patient, less was available to other patients. This delay could place them at risk. Her desire to maintain patient safety largely motivated how much time she felt prepared to allocate to managing aggressive interactions.

The use of aggression to speed up care

Some Triage Nurses perceived that people being insensitive, critical or rude were in fact trying to change the timing of care allocated to them as observed by Karen, *"Their aggression doesn't make them get seen any quicker, which is what a lot of them think"*. Toni and Peter supported the view that acts of aggression were commonly initiated as a strategy by patients to be seen more quickly. For example, *"this is the whole thing, it [aggression] doesn't save them [patients] anymore time"* [Peter].

For many Triage Nurses, the overloading of time was saturated by experiences of aggression and conflict, which challenged their beliefs and goals of care, and sense of control and balance. Triage Nurses spoke of a need to restore the cadence of care, regain control and avert incidents of aggression by using a range of practices. The tension that aggression stirred was described by Kylie, "*these events are not upsetting as in crying upsetting. It just upsets the balance; I think it is just unfair"*. Aggression changed the context of care, stimulating intense feelings by the majority

of nurses. Acts of aggression were undesirable experiences and highlighted triage as challenging.

PRACTICES FOR MANAGING, MEDIATING AND/OR PREVENTING AGGRESSION

These Triage Nurses used nine practices some of which were specifically individual and others widely shared, to manage or avert incidents of troubling or aggressive behaviour. The majority viewed these practices for managing or averting aggression as a salve for restoring a sense of control, personal safety and well-being.

Practice 1: Keeping the door open

The first practice shared by the majority of female Triage Nurses involved a change to the routine patient assessment pattern. Closing the triage door, to maintain patient privacy, was standard assessment behaviour. However, when Triage Nurses perceived the risk of aggression their practice changed. Five female Triage Nurses would alter their assessment pattern and deliberately leave the triage door open. Toni explained the meaning behind this practice behaviour, "*I don't like closing the door, I feel it's too dangerous. A patient can easily hurt you. A nurse last week got hit"*. Within a specific context, these nurses chose to leave the triage door open to sustain some sense of personal safety and control. Meg illustrated *"with some patients, I keep the doors open. Firstly, so I can get out or to the buzzer behind the desk"*. Samantha's method of looking at the patient to decide whether or not to leave the door open or closed was commonly used. *"I open or close the door. I just have a look at them and see what they're like"*. A relative judgement made by these

nurses against rich templates of experience, gave shape to the type of patient that may present a risk to personal safety.

Concern for personal safety had other nurses opting to assess some patients through the triage window rather than bringing them into the room. Tanya from Hospital 1 was observed to bring patients into the triage room, although she explained during one discussion that she would prefer to assess some patients through the window. She explained "*I don't like bringing patients into the box. People can turn on you in minutes given the clientele we have"*. Episodes of overcrowding often stimulated a heightened sense of risk to personal safety and brought to the surface this visible change in the practice of triage assessment. The risk of aggression and the subsequent change in triage behaviour was observed to be present mainly during interactions particularly with young and adult male patients. In making a decision to leave the triage door open, a desire for personal safety over-rode the normal beliefs of respecting space, patient privacy and confidentiality.

Practice 2: Focusing on clinical urgency

Another practice used by some Triage Nurses to deal with aggression was to consider that the behaviour was driven by the urgent nature of the patient's condition and therefore was not viewed as an intentional act. Sally presented the challenge in having to deal with troubling behaviour, *"I care enough that I want to be sure it's not because of some head injury or [that they are] mentally unstable"*. By focusing on clinical urgency and patient safety, the nurse was able to ignore patient abuse infringements. This provided a strategy to preserve self and acted to

consider the multiple meanings of patient aggression. The more pressing the concern for patient safety the more likely these nurses were to overlook transgressions. In this case, the value of ensuring patient safety out-weighed the personal risk for, or experiences of, aggression.

Practice 3: Explaining the wait

A third practice, used more as a means for preventing troubling or abusive behaviour, was to explain waiting times to patients. All Triage Nurses commonly spoke of the importance of explaining to patients the likely waiting time in order to reduce or contain troubling behaviour. Toni shared the typical preventative measure of explaining the wait. *"I find if I update patients they don't get annoyed"*. Similarly, Kylie reflected, *"If you don't talk about waiting time to the patients they end up harassing you"*. The practice was aimed to invoke tolerance of the wait on the part of the patient and those accompanying them. Some Triage Nurses believed that aggressive incidents resulted from a lack of understanding about the reality of ED work and the timing of care. In the interest of maintaining control, up-dating patients was seen as a means of de-escalating troubling behaviour and thereby kept order in the waiting room.

While all Triage Nurses recognised the importance of 'explaining the wait', some modified their explanations to avoid using a specific timeframe. Tanya and Toni, both said that providing patients with a waiting time, for example five hours, was problematic, because *"Often they [patients] try to keep you to that time"* [Tanya]. For these two nurses, providing patients a timeframe was problematic if ED

conditions changed and then the patient may wait longer. This longer time frame may bring about troubling behaviour. Instead, they modified the practice, preferring to indicate the waiting time by explaining how long other patients had been waiting. Tanya illustrated, *"sometimes if someone is harassing about how long they have to wait. I go and check the last patient [on the computer waiting list] and then [I] tell them that's how long it'll be"*. Similarly, Toni added, "*I don't give patients a waiting time. I will just tell them how long the last patient has been waiting for"*. While all nurses valued, the importance of explaining to patients the timing of care, Tanya and Toni's modified practice was perceived to accommodate for changes in the context of care during incidents of overcrowding.

Practice 4: Lowering the triage code

A less common way to deal with aggression was the lowering of the triage code. This practice was revealed by four of the Triage Nurses. Motivation to adjust the triage code down during incidents of aggression was given emotional intensity by feeling a lack of personal well-being and the need to restore a sense of control. Sally illustrated, "*I refuse to reward inappropriate behaviour, I change the triage codes"*. She, and others, spoke often about professional responsibilities, but recognised that on occasions, a lower triage code was allocated to patients because of the presence of aggression or abuse in the interaction. The lowering of a triage code resulted in an increase in the waiting time for these patients. For Sally, events in which she had altered the triage code brought episodes of mental discomfort to the surface, "…*but I still have a duty of care and I think that's always something to*

be really aware of…". Her words echoed the view of the others in which a desirable view of self and security collided with professional values of duty of care and patient safety.

Practice 5: Removing the patient

To contain aggressive behaviour and restore a sense of control, three Triage Nurses talked about making patients leave the ED. Although an uncommon practice, both male and female nurses spoke of removing patients. While the triage experience of these three nurses varied significantly, Mathew's reflection on managing aggressive patients was an average response. For example:

> *I used to cop verbal abuse a lot of the time, cop it sweet and say very polite things, I think I'm more of a biter back, you know I think everyone just goes you're a nurse, it's your job to cop abuse, physical or threatened. I just don't cop it any more, but if they give a continuous tirade you know I'll just go, right you're out. I throw them out.*

In earlier discussions with Mathew, he saw the Triage Nurse as a mediator, saying, "*I think you've got to be a little bit of a mediator, a peace maker"*. Yet, his practice for managing aggressive patients, 'throwing them out', was in contrast to a mediator role. He justified removing a patient from the ED as a valid course of action when the experience of abuse exceeded personal safety levels. Sally, used the same method for dealing with aggressive patients, *"I throw them out. I'm not here to be abused"*. Discussing this issue, the three nurses admitted to having a low tolerance level for verbal and physical abuse as Karen exemplifies, *"for aggressive patients, I have ZERO tolerance, I don't like it"*. The experience of aggression and the intensity of emotions made for a challenging situation in which the removal of

patients from the ED became a legitimate and personal practice of choice for several Triage Nurses.

Practice 6: Putting on a neutral face

During incidents of aggression, most Triage Nurses talked about a particular 'face' practice, which managed to distance feelings of vulnerability and sustain feelings of control, role behaviour and expectation. Seven Triage Nurses, selected a different practice to de-escalate troubling behaviour by adopting a neutral face and voice during interactions featuring aggression. It was standard for these nurses to discuss how changes in voice or face demonstrated weakness and accompanied experiences of losing control. Mathew provided a classical response, "*once you show them you're intimidated by them, then that's a weakness it's to your detriment"*. These particular nurses perceived the practice of keeping your face and voice neutral as a way of maintaining a level of control and de-escalating undesirable behaviour. Putting on a neutral face helped control emotions, reduce vulnerability and the risk of aggression. For example, during one incident after a woman had been yelling at Samantha for several minutes, she turned and replied in a neutral voice, *"I'm not going to argue with you"*. This interaction halted the conversation. At times, a neutral face suggesting institutional authority was able to ward off troubling behaviour and tense moments. The particular face practice enabled these nurses to distance themselves from feelings of vulnerability, sustain a sense of control and adhere to expectations for role behaviour.

Practice 7: Getting eye to eye

One nurse found that troubling behaviour could be de-escalated or averted by establishing eye-to-eye contact. The following field note highlighted Tanya's experience:

> *Sunday 2pm Tanya arrived back after lunch. Taking over from Paul, she started to adjust the triage chair up higher. She explained, "I like it up high. If someone's yelling at me, if it was low, I'd have to get up. This way I'm eye to eye with them. It's a lot harder for them to be angry, when you're eye to eye" [Field note Hospital 1].*

By adjusting the height of the triage chair, Tanya achieved eye-to-eye contact with those standing on the other side of the window. This height provided her with a sense of control during troubling interactions.

Practice 8: Swapping the triage shift

The experience of aggression and overcrowding made for challenging triage shifts and appeared to limit positive experiences. The result was that some nurses choose to avoid working at triage. By choosing to avoid working at triage, nurses could avert exposure to incidents of troubling behaviour or aggression. The ED nurse managers allocated nurses to the clinical areas, although they could swap their shift with another appropriately experienced and skilled nurse. Of the Triage Nurses, Kylie appeared to enjoy the triage role least: *"It's possibly my worst nightmare (laughs). No, mornings aren't too bad. The after-hours are the worst shifts"*. She would try to avoid after hour triage shifts by swapping her roster with other nurses. In contrast, while experiencing overcrowding, Karen and Tanya spoke of a desire to swap out of triage shifts, although only after having worked three in a row. The

increased risk of aggression at triage was sufficient for nurses to avoid working in the role at times.

Practice 9: Calling security and/or police

Another common practice used by Triage Nurses to contain aggressive behaviour was to contact hospital security officers. However, individual perception of the efficacy of this practice proved diverse in different hospitals. While all Triage Nurses alerted security officers to attend incidents of aggression in the ED, many felt that the officers did not bring a sense of urgency or safety to the situation as Peter points out, "*the problem with security is that they're powerless to do anything with them [patient]. It's not as if they have custodial powers. They're not like the police"*. For Kylie, the experience of calling security was a challenging decision as she commonly had to justify why she needed them to come. She pointed out, "*if you have a real problem you get security, but you usually have to justify why you want them there"*. Toni described a similar experience, *"they [security] make you feel like you are overreacting"*. While the practice of having security officers attend incidents in the ED was common, the appraisal by those who called them appeared equivocal. Triage Nurses in Hospitals 1, 2 and 3 spoke of incidents in which safety was considered compromised, despite the presence of security, and police would then be called. At other times, the choice of whether to alert security or police appeared an arbitrary one for nurses. On looking into these incidents, nurses in Hospital 2 spoke of calling either security or police depending on which group would respond more quickly. During one observation session, police were called

for an incident involving a young woman who was escorted off the premises. She returned about three hours later seeking treatment and she was re-triaged and placed in a bed in subacute.

In summary, the majority of Triage Nurses used nine practices to manage and/or prevent aggressive behaviour. The different practices that were implemented were used to restore reality and the nurse's sense of control, safety and well being in the practice of triage nursing.

EXPERIENCING NEGATIVE EMOTIONS AT TRIAGE

During incidents of patient overcrowding, negative emotions regularly defined the experiences of Triage Nurses. This was in contrast to earlier enthusiastic talk of working in the role. While most enjoyed the role, talk patterns became negative when reflecting on or during periods of overcrowding (Fig.6). Karen provided a standard response, *"…most of us don't enjoy the role in this climate, or at least we find it extremely challenging"*. Samantha's experience involved frustration, *"When people keep coming through the doors, it's frustrating that you can't get them into a bed"*. Walking onto such a shift during overcrowding, could provoke negative experiences as highlighted by Karen, *"On these shifts finding out where you're allocated can make your heart sink"*. Toni described her experience of overcrowding: *"I get a bit humiliated with the [full] waiting room out there"*. As other Triage Nurses reflected on incidents of patient overcrowding and having to place patients, deserving of a bed, into the waiting room they gave voice to a common experience of dissatisfaction.

1 

2 

3 

Figure 6. A typical pictorial incident of overcrowding in Australian ED[18].

[18] Written permission to reprint photos was authorised by the Australasian College for Emergency Medicine (ACEM). These photos were from the ACEM Access block report Australia (2004).

Feeling dissatisfied

During incidents of overcrowding, feelings of dissatisfaction with being the Triage Nurse, was a regular experience. The dissatisfaction originated from the inability to achieve goals of role and service. In particular, dissatisfaction was experienced by an inability to place the patient on a bed or in the appropriate area. Instead, patients in need of a bed would be sent back into an already overcrowded waiting room.

Dissatisfaction intensified as goals and expectations of triage role performance were thought to be compromised. Overcrowding compromised the Triage Nurse's expectations of practice and timing of care. Situations of conflict were created for the practice of triage nursing. "*It's horrible making people wait*" [Field note CNS1]. Also, as Andrew explained, *"Some of these patients have been here for days. You can't give good nursing care"*. For some Triage Nurses, reconciling the reality of practice with role goals and expectations fuelled the experience of dissatisfaction. During incidents of overcrowding Triage Nurses continued to undertake role activities, although often in the presence of negative emotions. These emotions surfaced more often during periods of overcrowding when disappointment framed the triage experience for many nurses. For most Triage Nurses, overcrowding added stress to the triage role by altering the cadence of care and creating tension within the routine processes of practice.

Feeling blame

For the majority of Triage Nurses, overcrowding led to personal experiences that elicited negative emotions such as blame. Undesirable negative experiences and

tension occurred within practice as goals and expectations of being a team player went unmet as Peter states, "*I feel like I'm letting the team down".* During the overloading of time, Triage Nurses felt that by taking patients 'inside' they were failing the team because they were increasing the workload of nurses in the clinical areas. Kylie and Mathew in particular spoke of the association between 'letting down the team' and 'blame'. For example, "*Triage is difficult. Often you feel staff inside blame you for bringing a patient in"* [Mathew]. In support Kylie added, "*It often makes me want to say, it's not my fault. I have to bring the patient in"*.

During days of normal movement Triage Nurses, escorted patients through to a clinical area, used the opportunity to catch up with staff, and saw the experience as positive. Overcrowding produced circumstances in which Triage Nurses experienced unpleasant interactions with other nursing staff, heightening the sense of blame and failure to be a team player. Andrew acknowledged the changing context of practice; *"the role's much harder when it's busy [you get] more negative comments"*. Samantha reflected on her experience, "s*ometimes, when you take a patient in, they just growl at you".* Overcrowding brings to the experience of triage a practice tension between 'inside' and 'outside', disrupting the cadence of work. While faced with the desire to avoid increasing the workload of staff inside, nurses needed to deal with the outside pressure of patients queuing at triage or ambulance bays in need of beds. Balancing competing 'inside' and 'outside' needs and the negative emotions that surfaced during overcrowding complicated the practice of gatekeeping, timekeeping and decision-making that needed to take place.

Feeling bad

The experience of overcrowding intensified the negative emotion of feeling bad in response to perceived loss of patient safety. In the everyday talk of nurses', patient safety, described in Chapter 4, was a core practice value. However, during incidents of overcrowding Triage Nurses increasingly experienced patients leaving before they had a medical assessment. They described these events as risking patient safety. Incidents of overcrowding exaggerated waiting times and while some patients endured the overloaded time, others were unable or unwilling to wait. All Triage Nurses classified this group of patients in the ED computer system, as Did Not Wait (DNW).

The experience of patients who DNW often brought to the surface negative talk patterns from Triage Nurses. For example, one particular day of patient overcrowding in Hospital 1 led to Tanya asking for assistance from the nurse in-charge. A CNS came to help at triage from another clinical area. The CNS later noted that one of the triaged patients had left the ED unassessed by medical staff. Turning she echoed a common response, "*Patients who choose to leave make me feel bad. I worry about them"* [Field note CNS3]. At the same time, newspapers were reporting on serious outcomes of patients leaving before medical assessment. For example, a woman left a Sydney hospital without being seen and died less than 24 hours later of Meningococcal disease (Totaro 2003b). Notions of appropriate care resonated strongly in the talk of Triage Nurses. When patients left before a

medical assessment, personal beliefs of service, patient safety and nursing practice were challenged leading to a negative experience of feeling bad.

Feeling the need to justify practice

In the EDs patients presented with conditions that varied in degree of clinical urgency. Therefore, in the execution of the triage role, the allocation of space and timing of care was seen as 'queue jumping' by patients. Patients held different views about 'queue jumping', particularly, during overcrowding, despite the Triage Nurse's perception of doing the right thing. Toni explained, "*They see someone else go through before them. You have to reason with everyone"*. When patients in the waiting room saw others arriving later, but receiving attention before themselves, they failed to understand the allocation of care in this setting. In these instances, patients sought understanding of the 'queue jumping' from the Triage Nurse as the following excerpt demonstrates:

> *Clerical staff come up to you and say, 'this person has come up to the counter x number of times. They want to know how much longer and how come this person is going in [first]. So you've got to go out and rationalise with these people and say: 'these people coming in after you, but who are going in before you, are going through for these reasons' [Peter].*

In relation to 'queue jumping', nurses experienced having to justify the rhythm of practice and help patients to understand. The patient needed to understand that some conditions were more urgent than others. However, there were no signs or pamphlets in the waiting room that explained how a person was positioned in the timing system. From the Triage Nurse's point of view, patients were more likely to

tolerate ‘queue jumping’ if there was visual evidence of clinical urgency. Andrew shared an example of a scene in which waiting patients will tolerate queue jumping:

> *Sunday morning 11.30am the waiting room was full. A man came into the waiting room holding his hand in a tea towel. Blood was dripping off his hand as he walked. Andrew wanted to bring him straight through and went to find a doctor to see him. After explaining about the patient, the doctor asked ‘will we cause a riot if we bring him inside?’ Andrew explained ‘I don’t think so, he was dripping blood everywhere’.*

Visual signs of urgency such as ‘dripping blood’ were considered by Triage Nurses as an adequate reason to justify a patient jumping the queue during periods of overcrowding. Triage Nurses explained that the absence of physical signs did not always mean low acuity and during overcrowding people jumped the queue with no such obvious signs. When the rhythm of care was perceived as desynchronised, ‘queue jumping’ could negatively affect the waiting room patient and usually required the nurses to provide repeated explanation about the allocation of care. Overcrowding resulted in exaggerated waiting times, which required the Triage Nurses to justify routine patterns of practice, bounded in a context without shape, order or control.

To avoid negative emotions, unmet goals and failed expectations, Triage Nurses changed their routine patterns of practice to manage the problems that overcrowding created.

PRACTICES FOR MANAGING THE WAIT

Overcrowding increased negative practice experiences because of constrained decision-making, limited assessment times, unmet beliefs and goals, loss of patient

movement and safety, and the untimeliness of care. The majority of Triage Nurses rejected this context of practice and the negative emotions that overcrowding created seeking instead, to restore the rhythm of care by adjusting practice patterns: expanding the role to compensate. As Mathew said, "*I just want to get the patients out"*. Triage Nurses described ways to organise activities and think about practice to maintain the rhythm of care. They garnered their vast repertoire of skills and personal knowledge and implemented timekeeping practices to better manage the wait, restore patient movement and reclaim the cadence of emergency care.

Triage Nurses were willing recruits to reclaiming the rhythm of care as this was in keeping with beliefs. Peter describes the need to improve the timing of care, "*We're [a] gap fillers. You think - what can I do about this – you try and hold this together"*. Demonstrating flexibility, innovation, expertise and adaptability in a context of care that was desynchronised with expectation and goals, Triage Nurses would try to improve the timing of care for patients. The motivation to be a gap filler surfaced as Triage Nurses' sensed the compromising of patient care. *"I don't think [patients] are getting the optimal care that they should be getting"* [Sally]. At this point, highly motivated Triage Nurses would draw from a range of knowledge systems and cultural resources to restore the timing of care and better manage the wait. Triage expectations and goals acted as an important motivator for making them do what they do.

Triage Nurses strived to restore the cadence of care, a time system in keeping with their beliefs, by implementing a variety of practices. In some instances, these

practices exceeded the recognised boundaries that they themselves had set. Consequently, for Peter and others the implication for practice of restoring the timing of care was that, "*I'm prepared to take more risks – it's all a risk, things change all the time. I take more chances"*. In order to restore the timing of care, and thereby better manage the wait, Triage Nurses implemented timekeeping practices, shared and individual, which enabled work boundaries to blur, rules to be broken, policies to be bent and risks to be taken.

Seven practices have been identified that are oriented to alleviating the experiences of overcrowding and loss of the cadence of care for Triage Nurses. The first was a practice regularly implemented across the sites.

Practice 1: Going Code Red

In NSW the key practice to manage ED overcrowding, restore the rhythm of care and reduce workload was to use a colour code system to indicate ED activity workload levels to ambulance services. To describe current ED activity and the ability to receive ambulance patients, three code levels are used Red, Orange and Green. Overcrowding in the waiting room and the inability to allocate a patient bed gave the Triage Nurses the power to advocate activation of Code Red (Table 7).

Table 7. The ambulance diversion overcrowding code guidelines

Code Red	EDs having reached capacity are unable to manage any further patients. To go "red" hospital executives are contacted to approve notification to ambulance controller to divert non-life threatening ambulance patients
Code Orange	EDs are approaching capacity just able to manage current patient load, consideration is given to the need to divert ambulance patients
Code Green	ED workload manageable and in control ready to accept ambulance patients

*(Pollard 2004b)

The purpose of going Code Red was to redirect ambulance patients to other local hospitals, until overcrowding resolved. Code Red lasts for a nominated period usually two or four hours depending on the level of overcrowding and complexity of patient. While ambulance patients are directed away from the overcrowded ED, people remain free to walk through the door for treatment.

The need to go Code Red was recognised by ED staff at the point where patient care was jeopardised and numbers exceeded physical spaces (NSW Health 2004a). The following exemplar highlighted an average scene for going Code Red and the shared characteristics of overcrowding.

> *7am Saturday morning. Andrew is at triage. I walked into the waiting room, it was like hitting a wall, stress was palpable - there were patients everywhere. In the acute room, there were patients in chairs, in corridors and doubled up in single patient bed spaces. Three ambulance trolley patients waited to be unloaded. Yet, the telephone rings - a hospital wanting to send a patient across. The department had 23 patients waiting to be assessed by doctors. Two people had been waiting eleven hours to be seen - and were still waiting. Thirteen patients were admitted, waiting for a ward bed, and 14 were still being worked up, in this 30 bed ED. The in-charge nurse wanted the transit lounge opened so that admitted patients could be transferred somewhere. The triage and incharge nurse discuss*

options, "we need to go Code Red", but are annoyed that the senior on call emergency doctor is not answering his page as they require medical approval (Field note Hospital 3)

For the activation of Code Red Triage Nurses needed to contact the ambulance coordinator to explain that current patient activity load was unmanageable and that the department needed to escalate to Code Red. EDs would regularly alert the ambulance coordinator of code level changes. The ambulance coordinator, when informed by EDs of Code Red, would contact local officers to have them transport all patients with a non-life threatening condition to a nearby hospital. Examples of non-life threatening conditions identified by Triage Nurses were minor trauma, suspected fractures or mild to moderate illness. However, ambulance officers determine whether a condition was life threatening or not and make choices whether to redirect or not.

All local hospitals were Code Red on a few occasions and in these situations, ambulance officers selected the hospital they routinely attended. During observations, newspapers presented regular reports of hospitals going Code Red (Fig. 7).

Emergency: hospitals turn patients away

Figure 7. Community perception of Code Red practice: The Sydney Morning Herald[19] (Peatling 2002).

Discussions with Triage Nurses however, presented a view of Code Red different from the newspaper reports. Instead of 'turning patients away', Triage Nurses saw Code Red as a way to maintain patient safety and a relief valve for the intense workload pressures experienced both at triage and by the nurses 'inside'. For example, the emergency nurse's workload 'inside' incorporated both the admitted and non-admitted patients, while emergency doctors were often only responsible for non-admitted patients. Specialist teams would take over medical responsibility for admitted patients who were waiting transfer to a ward bed. During overcrowding, all Triage Nurses felt the increased workload and loss of patient movement.

[19] Written permission was obtained to use this newspaper headline from FairFax Ltd. © This work is copyright and is reproduced under license from FairFax Limited.

Consequently, they experienced a stronger desire to go Code Red than medical staff. As Andrew illustrated this:

> *When we go Red, he [director] tends to listen to us. We usually have a good relationship with the doctors, but they don't go RED. They'd never do it. They'd leave it. It's only because the nurses say, do they do it.*

It appeared from Andrew's statement, that nurses initiate and activate Code Red and meet with little resistance from medical staff in Hospital 3. In contrast, Mathew and Sally, from Hospital 2, explained that ED staff members were often pressured not to go Code Red by hospital management, medical staff and Area Health Services.

While people continue to walk through the ED doors and patients with life threatening conditions, such as chest pain and trauma continue to arrive by ambulance, the impact on overcrowding by going Code Red was often slow to take effect. However, for nursing staff, and in particular the Triage Nurse, the activation of the Code Red tended to cause a swift collective sigh of relief as it was announced in the ED and in two sites, over the departmental speaker system. The majority of Triage Nurses viewed Code Red as a valuable practice for reclaiming the cadence of care.

Practice 2: Increasing the triage code

The common practice response during incidents of overloaded time was to increase a patient's urgency code as a commitment to patient safety. While Triage Nurses spoke of guidelines that defined the boundaries of code allocation, the disruption to patient movement and alteration to the rhythm of care led many to weigh the

guidelines against their high value of patient safety and the need of the context. At some arbitrary point, the nurse would become acutely aware that the scheduling of an urgency code was failing to ensure the 'normal' timing of care, but despite this, they continued to allocate codes. However, they believed that patients should not have to wait too long. According to Andrew, "*The way I see it even a 5 should be seen. It's a public service and he has waited 2 hours. He should be seen".* One timekeeping practice used to reduce the wait, in the case of someone having already waited some time, was to reallocate a higher triage code.

Alternatively, if aware of the presence of exaggerated waiting times, many Triage Nurses often decided to increase the code at the time of the assessment. The following extract supported this notion. Samantha explained, "*the busyness of the ED makes it hard. I'll give them a higher code".* And, "*You'll up the codes if they're not going to be seen. It's quicker on a bad day"* [Field note CNC1]. Once Triage Nurses realised waiting times were beyond triage code guidelines they felt compelled to alter the triage code. During overcrowding and exaggerated waits, Triage Nurses in Hospitals 1, 2 and 4 were more likely to allocate a higher triage code to some patients in order to ensure patient safety. In contrast, Triage Nurses in Hospital 3 had a modified version of the practice for waiting room patients. The modified practice observed to be particularly relevant to patients allocated a triage code 5. Rather than directly increasing the triage code on the computer as other Triage Nurses were observed to do, all nurses at this site physically rearranged the order of triage sheets in the consultation area. At this site, printed triage assessment

forms were placed in a box in the consultation area and when a doctor was ready to see the next patient the top assessment form would be taken. However, Andrew reflected that when patients had been waiting too long he changed this routine practice. "*I'll shuffle the pile and [re-arrange] how they're to be seen"*. Similarly, Kylie was observed to reposition some patients over others in an attempt to manage the flow in the waiting room, "*I like to get them out of the waiting room"*. In this ED, re-shuffling the order of patients seen as having waited too long, while less visible than changing the code on the computer, achieved work goals by speeding up care and thereby restoring a better cadence of care.

In other situations, Triage Nurses were likely to allocate a higher triage code when patients considered appropriate for a bed had to be allocated to the waiting room. In these cases, assigning the waiting room was seen as placing this group of patients at risk and was in conflict with their beliefs about good care. To resolve the conflict and get the patient a bed a higher triage code was often allocated. Another situation involved the assessment time limits imposed by incidents of overcrowding. During overcrowding, as people queued for assessment, pressure was experienced by nurses to make triage decisions more swiftly. Mathew illustrates:

> *Unfortunately, you need to be quick. That's when you base decisions on their presentation. They don't look distressed. But later on I've found out they've had something quite horribly nasty and wrong with them.*

The restraining of triage assessment time brought to the surface the element of uncertainty. This uncertainty was managed by increasing the triage code. For some,

the allocation of a higher urgency code enabled better management of the wait, improved the sense of patient safety and countered feelings of uncertainty.

Practice 3: Fast tracking

In managing the wait, Triage Nurses targeted the poor rhythm of care by another timekeeping practice they referred to as 'fast tracking'. For example, when patients required an investigation that was outside of the nurse's scope of practice, 'fast tracking' enabled the nurse to obtain medical authority to have it undertaken. Across sites, fast tracking actions included radiological investigations (other than distal limbs) and the administration of medications. For example, after triaging a man hit in the jaw, Andrew sent him back into the waiting room saying, "*just wait outside, after I type this, I'll get someone to order the x-ray. I need someone to order an OPG"*. An OPG is an x-ray of the mandible and outside the scope of Andrew's extended practice. However, he resolved the wait for the patient by choosing to obtain a medical signature on a form after which he could then send the patient for the x-ray. In later discussions, Andrew extended the notion of fast tracking while reflecting on another busy and overcrowded shift. *"I'd run it by the staff specialist or registrar. When they [patient] come in and you're querying a DVT they get sent to the clinic, as they [doctors] say as long as I don't order a MRI or a CT it is OK"*. In hospitals, MRI (Magnetic Resonance Imaging) and CT (Computed Tomography) scanner investigations require a doctor to arrange.

To improve the care for patients in pain, Triage Nurses swiftly sought out medical staff to obtain a medication order when escorting patients through to clinical areas.

For example, Karen walking a patient through to the acute area spoke with a senior doctor and said, *"I'm stingy with narcotics, but he needs the lot: Pethidine; Maxalon; and Buscopan*[20]*"*. The doctor had written the order by the time the man had been placed on a bed.

In order to succeed at 'fast tracking' and thereby improve the timing of care, Triage Nurses sought out known medical officers to undertake the action they could not initiate. The medical officers selected by Triage Nurses to fast track patient care were based on existing trust relationships. From the Triage Nurses perspective, when an established relationship with a doctor was present, the fast tracking of patients was more rapidly achieved as Andrew illustrated:

> *It depends on who's on, the ones I know who'll believe me. I can ask him (the one on today) anything. For the ones who I don't know as well, I have to convince them more.*

Or as described by Karen:

> *If [you're] not experienced they don't listen to you, but when you're well established with the doctors you don't have to argue to get an order. You don't have to wait for them to come. They come straight away.*

Frequently, Triage Nurses demonstrated the ability to work with, and through, known emergency doctors to improve the cadence of patient care. During challenging periods such as overcrowding, they were able to mobilise resources and

---

[20] Pethidine is a potent opioid analgesic for severe pain; Maxalon is the trade name for Metoclopramide and is used as an anti-emetic, and Buscopan is the trade name for Hyoscine - used as an anti-spasmodic smooth muscle drug (Caswell 2004).

skillfully conscript medical staff to undertake activities at the time of their choosing.

While triage activities were restricted during a normal pattern movement, overcrowding brought tacit agreement by medical staff for Triage Nurses to blur the normal boundaries of practice in order to restore the timing of care for patients. During these events trust in each other's expertise surfaced. Talking with Triage Nurses, fast tracking restored patient flow, despite patients being in the phase of waiting to see a doctor. For example, Kylie explained the time delay and added *"it'll be at least 2 hours, but I'll organise a x-ray for you"*. The fast tracking practice enabled a broader range of patient investigations and treatment to be arranged. The practice was seen by all Triage Nurses as a means of restoring the timing of care and maintaining a sense of patient flow during incidents of overcrowding.

Practice 4: Breaking the rules

Expectations of efficiency and timeliness motivated an intense desire in many nurses to break the rules that routinely shaped practice. Peter illustrated the point *"I often overstep the bounds to try and get the patients seen"*. Breaking formal rules was evident most commonly in the ordering of radiological tests (other than distal limbs), which were outside of the nurse's scope of practice. Generally, for radiological investigations, other than distal limb x-rays, patients were required to see a doctor before the x-ray would be ordered. In these cases, while some Triage Nurses took the time to obtain an x-ray form signed by medical staff (fast tracking),

others believed that this action was inefficient and wasted time. On these occasions even those nurses who spoke of the importance of adhering to rules, such as Andrew shared, the desire to break some, "*I sign it because it takes too long to try and get a doctor's signature"*. The majority of Triage Nurses perceived rules at times to be counterproductive to personal expectations of efficiency and timeliness: the goals of practice. Peter summarised his views of policies, "*Legal rules only let you work in one direction and [sometimes] you need to go in another"*. The notion of wasting time, in a context where time was overloaded, brought to the surface justification for the contradictory behaviour of breaking rules. However, many were aware of stepping outside their scope of practice as Karen and Meg pointed out, "*I know we're not supposed to be doing it, but you do"* [Karen].

> *We're not supposed to order x-rays, but it helps to diffuse the waiting room. If you get them done, if you give them some Paracetamol or if there is something bad you get them something, it all helps to control the waiting room [Meg]*

It was obvious that breaking the rules in the context of overcrowding were motivated by beliefs which drove a desire to provide needed care that reclaimed the rhythm of work and managed the wait. Their experience enabled the majority of Triage Nurses to predict investigations that would be needed by the patient. Despite the test being outside the scope of the nurse's practice, most considered the ordering appropriate because the patient would need it anyway. For example, *"I know they'll have it done"* [Andrew]. So for Triage Nurses, breaking rules such as the initiation of investigations was justifiable when the purpose was to restore the

cadence of care. The incident of patient overcrowding motivated Triage Nurses to restore the cadence of care by accessing their resources and knowledge to ensure timely patient care and intervention.

Practice 5: Moving care outside routine practice

As mentioned earlier, patient safety, efficiency and timeliness were presented as touchstones to the practice of triage. Consequently, in an effort to reclaim time and speed up care, when overcrowded, many Triage Nurses undertook activities normally confined to the 'inside' clinical areas. Five Triage Nurses spoke about, and were observed moving care to the triage room during periods of overcrowding. Probing further into this practice, Andrew elaborated on bringing care outside, *"I just get the doctor to quickly see if this is a stitch job and if not I fix them up and off they go – I try to fix them up"*. Toni also brought inside activities to triage, "*when it's like this, I take bloods in the waiting room*". The rhythm of work was restored when Triage Nurses responded to the overloaded context and broadened their range of care practices. Mathew summed up:

> *You instigate a lot more stuff [during overcrowding], you might have treated a small laceration, you may have glued it then given them an ADT (Tetanus/Diphtheria injection), given them a simple bit of analgesia and they're out the door, they're gone.*

To reclaim the cadence of care and better manage the wait, some nurses instituted a broader range of medications at triage than the observed normal medication pattern. While they routinely provided mild analgesics such as Paracetamol, a wider range of medications was considered appropriate during incidents of overcrowding as

illustrated by Kylie: *"I'm not keen on giving Buscopan and Maxalon, unless I know it's a long wait. I think if they have a fracture, I try to give them analgesia early"*. Similarly, Andrew also said that he would *"give some Brufen*[21]*"*. Some Triage Nurses considered a broader range of medications appropriate, when the wait exceeded their expectation of patient care. For example:

> *11.30 Friday morning. Mathew is at triage. Mathew just allocated the last bed. He goes to see the next patient. He took a man into the assessment room and asked 'what's the problem?' The man explained he had run out of Ventolin tablets that he got from home (India). Mathew confirmed a history of asthma, and asked if he needed more medication than usual. He provided confirming comments 'sure', 'right'. Mathew asked, 'How do you feel now?' Mathew took his blood pressure (BP). He asked about any other medical history, while checking his temperature (38.3 degrees Celsius). He asked: 'have you had a cough?', ' about allergies' and explained how they can sometimes make asthma worse. His BP was 137/90mmHg and heart rate was 94 beats /minute. He explained that he heard a wheeze on auscultation. He asked him to blow into a peak flow and then repeat the action. He explained there're no beds and that he was going to give him a nebuliser. Mathew got Ventolin 5mg and Atrovent 500mcg*[22] *placed it in a nebuliser and said he will come back and see how he feels. He explained when placing the mask on the patient to take deep breaths while on the nebuliser. He goes back to triage and types in the assessment. He says he is "able to speak in sentences, but he has an inspiratory and expiratory wheeze". He documented the peak flow result and administered the nebuliser. Ten minutes later, he went back to see the man and gave him another nebuliser. Once the second nebuliser had finished, he went back and asked how he was feeling. After 10mg of Ventolin, he turned and said, "he seems much better. I gave him a 3, but I'm going to change it to a 4" [Field note Hospital 2].*

---

[21] Brufen is the trade name for nonsteroidal anti-inflammatory agents, which are used as an analgesic and antipyretic drug (Caswell 2004).

[22] Ventolin is the trade name for Salbutamol and is used as a β2- adrenoreceptor stimulant. Atrovent is the trade name for Ipratropium and is used synergistically with Salbutamol as an anticholinergic bronchodilator (Caswell 2004).

Mathew administered respiratory medication at triage to reduce patient distress and restore the timing of care. For Triage Nurses, achieving flow and restoring the cadence of care created a sense of goal fulfillment and satisfaction within the triage role. For example, "*To me those days are far more satisfying. You are a lot more autonomous. I think that is what sets you apart"* [Mathew].

If a Triage Nurse provides treatment to a patient and then they decide to leave without seeing a doctor, they are discharged from the ED computer system by using one of three methods. The most common method used to remove patients from the waiting list screen by Triage Nurses was to classify them as a DNW patient as Andrew points out: "*most patients are signed out as Did Not Wait"*. The second method used less frequently was to discharge the patient from the computer system using the label "registered nurse". The third method used by Sally was to use the label 'registrar other' to discharge the patient. In this way, patients treated and discharged at triage were removed from the ED waiting list.

However, on days of normal flow, some of these same nurses spoke against the practice of bringing the clinical activities undertaken inside to the triage room. For example, Andrew illustrated "s*ome nurses go overboard, by doing bloods at triage"*. In contrast, faced with the situation of overloaded time, Triage Nurses including Andrew brought 'inside' care activities to the triage room.

Some Triage Nurses also discussed that on occasions medical staff did not see the practice of bringing care activities to triage positively. Sally from Hospital 2 recalled:

> *A lot of the medical staff here, have problems with the fact that we're doing more [at triage], you know, maybe even putting in a cannula and giving fluids out here they [doctors] thought that was inappropriate. And in some of the instances, I think yes, maybe that is [inappropriate], but by the same token, I think that's a decision that triage can make.*

The scope of activities that were undertaken by Triage Nurses, generated resistance or conflict, amongst themselves and some medical staff. However, the need to restore the cadence of care was more important for Triage Nurses than the risk of conflict. This meant that Triage Nurses chose to undertake timekeeping intervention and care activities at triage during busy times.

Practice 6: Helping inside

All Triage Nurses perceived that the 'inside' nurses had a heavier workload during overcrowding, as they had to care for both admitted and non-admitted patients. Consequently, to speed up the timing of care and patient flow Triage Nurses helped to reduce the workload of the 'inside' nurses. When Triage Nurses escorted patients to a clinical area or needed to drop off a triage sheet, they were vigilant to opportunities to reclaim time. Andrew described it thus, "*If I help inside, especially in the consultation rooms, I can speed things up. For example, if someone just needs crutches or a sling, I do it, then they [nurses] are free for my next triage"*. By helping 'inside' Triage Nurses could improve the overall rhythm of emergency care to which they were culturally oriented.

The practice of helping 'inside' altered the normal pattern of escorting a patient through to the clinical area and leaving after providing a handover to 'inside' nurses. When busy, Triage Nurses would often stay to assist the patient undress,

attach them to the cardiac monitor or get intravenous fluids ready to speed up care and save nurses' time. Peter illustrated:

> *Sunday 11am. A man arrived at triage looking pale and holding his abdomen. Peter triages him after investigating a three-day history of vomiting and diarrhoea. He took the patient to the bed, explained the history to the nurse, and says, "I want to put a cannulae in and give him some fluids" he goes off and gets the intravenous trolley and a one litre bag of normal saline and closed the curtain. A doctor passed by and Peter explained the need for fluids and showed the doctor a one-litre flask of normal saline she said, "fine". While giving the handover to the nurse, he finished the cannula, hung the fluid and then headed back to triage [Field note Hospital 4].*

Triage Nurses were also observed to reduce the workload of ED medical staff by redirecting activities to outsiders. Toni's exchange with an oncology registrar highlighted protecting medical workload:

> *Saturday 11.30am: A medical officer is off sick on this busy day. The waiting room was full, there were no empty beds and movement had stopped. Toni had contacted the oncology registrar to let them know that one of their patient's had arrived. She had cellulitis of her right arm. The Triage Nurse and oncology registrar began talking about the patient with cellulitis. The exchange continued over several minutes with the oncology registrar saying 'I want someone to take blood cultures, put a cannulae in and start IV antibiotics on her'. Toni standing beside the doctor turned as he finished and said, "You can do all that and write up the orders and then we'll organise her transfer". The doctor walked away to the consultation area [Field note Hospital 1].*

In this extract, by redirecting activities to the specialist medical team, Toni was successful in relieving some of the workload pressure on ED medical staff as well as improving the timeliness of treatment for the patient.

Alternatively, to help staff 'inside' during overcrowding, three Triage Nurses (Hospitals 3 and 4) chose to stay and have their meal breaks sitting in the acute

area. During this time, they reduced the workload by answering staff enquiries, managing telephone calls and paging specialist teams to speed up decision-making. In this way, the Triage Nurses perceived that they relieved the pressure on nursing staff by helping 'inside'.

However, most Triage Nurses recognised that helping 'inside' required balancing 'outside' demands as Peter explained, "*Triage is often delayed because you are caught up inside – leads to delay in getting back".* 'Inside' activities were balanced by relative judgements against triage role activity, goals and expectations, the timing of care, and patient and staff needs, producing a complex and challenging practice situation.

Practice 7: Referring away

Overcrowding exaggerated patient waiting times and compromised efficiency and timeliness within the ED. Consequently, when exaggerated patient waiting times were present, six Triage Nurses implemented a practice of referring patients to a GP or Medical Centre to reduce the number of patients in the waiting room. Mathew described a standard meaning behind making referrals, *"When there's, like, an 8 hour waiting time you can refer people onto a GP"*. The practice was directed at patients allocated a code 4 or 5, with minor injuries or illnesses that could be safely treated at a Medical Centre or GP practice, such as earache, sprains, tetanus, antibiotic scripts, vaccines or the 'morning after pill'.

Triage Nurses spoke of departmental policies against nurses referring patients away as they could be heard to say for example, *"I don't refer out, not nursing"*

[Andrew]. Despite many of the nurses saying they did not refer patients away, a referral pattern was observed. Overcrowding led many Triage Nurses, despite knowing the policy and earlier stating that they did not refer patients away, to do so. Further discussion identified that the practice had been modified enabling the policies and rules to be bent rather than broken by most Triage Nurses. This meant that the nurses, 'suggested' to patients that they might like to go elsewhere given the long waiting time. For example, "*I'll often suggest if they want to go to a Medical Centre, but we can't make them go we only suggest"* [Tanya]. A further example included, *"If you want to go there [Medical Centre] I'll give you the address, it'll have less of a wait than us"* [Andrew]. Another typical exchange 'suggesting' a patient go to a GP was couched in the following way:

> *Listen you are going to wait 6 hours to be told exactly what I'm telling you now, that a GP can see you in 30 minutes or an hour in a Medical Centre that has exactly the same devices and tools that we have and probably better and newer. So why not whip past your local GP and get seen in 30 minutes [Mathew].*

Once the Triage Nurse 'suggested' that the patient might prefer to go to a Medical Centre, the exchange concluded in a similar way. Samantha illustrated *"it's up to you, if you want to stay'*. Similarly, Meg noted, *"I never tell patients 'GO to a Medical Centre', I think they're adults and that they should be able to make a decision"*. By suggesting that the waiting times at a GP or medical centre might be less, patients could choose where they most preferred to wait. Two of the nurses would often contact the GP or Medical Centre to confirm the waiting time for

patients. Triage Nurses believed that they helped to restore the cadence of care by better overall patient movement and the timing of care for those who chose to leave. Triage Nurses would sometimes access other hospital services to reduce the wait for patients. For example:

> *Saturday morning Tanya is at triage. A woman 4 months pregnant who had been traveling overseas wanted to book into the hospital for care. Tanya explained "you'll wait for hours, and the best thing to do is call the hospital on Monday and book into the antenatal clinic. They'll sort everything out – that's all the doctor is going to do if you wait". Tanya gave her the telephone number, the woman left and appeared grateful [Field note Hospital 1].*

In these instances, Triage Nurses would provide information to the patient and then refer them on to the appropriate hospital service to save time. As Tanya pointed out, "*I'll often suggest [clinics], like the antenatal woman -she would have waited hours to be seen, and told to go to the antenatal clinic*". All Triage Nurses utilised hospital services and allied health resources, although these patients were not entered into the ED computer system. Consequently, no documentation of these exchanges or activities were preserved.

The exaggerated waiting times, provided sufficient justification for all Triage Nurses to suggest to patients, with minor conditions that they might avoid the wait by going to a GP or Medical Centre. Triage Nurses live with the vagaries and difficulties of a changing context of care. In times of overcrowding, timekeeping practice patterns emerged such as referring patients away, to accommodate desynchronised care rhythms. The practice of referring patients away was achieved by balancing knowledge of the patient's condition, the likely course of treatment

and waiting times with available resources in the ED, hospital and medical centre. Shared knowledge and belief systems help to explain the similarities and patterns of practice in desynchronised care rhythms.

LEARNING TO BECOME A TRIAGE NURSE

It became clear that before being orientated into the triage role a new member needed to learn, understand and share in the beliefs, goals and expectations that are embedded in patient movement, the timing of care and equity of service in order to be a provider of emergency care. This learning experience pattern was compulsory to become a Triage Nurse. In three of the EDs (Hospitals 1, 2, 3) eighteen months emergency nursing experience was required before a nurse could be orientated to the triage role. In Hospital 4, they required four years. All Triage Nurses shared the view that nurses required emergency experience before becoming a Triage Nurse, although Peter (Hospital 4) believed four years was too long. During fieldwork, the nurses discussed how triage was difficult without the experience of 'inside' work. Sally emphasised the point "*You need to have knowledge of inside and outside, the role's different, inside it's decided for you, outside are new circumstances*". Within this culture of ED care, nurses perceived triage as an advanced nursing practice role. It required extensive emergency experience, advanced clinical skills, and specific decision-making and problem solving skills. Karen reflected "*triage is different, the ability to make decisions, be competent and confident*".

Toni added her voice:

It's different work, it's rapid assessment, rapid decisions, you need to provide enough detail on the computer to justify it. It's mentally draining. You can sort things out and send them off. You can change some things, it's different. You interact with different people.

Triage Nurses located 'outside' away from team members manage a different context of care and undertake advanced nursing practices and activities that are distinctly different to other emergency nursing roles.

LEARNING ABOUT 'PLACE' AND PATIENT MOVEMENT

All Triage Nurses gained experience and skill of 'inside' care practices by working in each of the clinical areas before being orientated to triage. In this way, they came to understand each clinical area as a specialised 'place', learning and making sense of nursing activities, patient groups and work practices. Being in each clinical area, nurses were exposed to different dimensions of routine work that later assisted them in undertaking the triage role. Toni was typical in describing the benefit to triage of learning 'inside' work:

Being a Triage Nurse obviously you need to have some experience, because it's the last area you do in the department. When you first start here you have obviously worked here for a while you have got a bit of a feel of what goes on, what patients are presenting with and how they should be categorised when they get here.

This practice pattern throughout departments was consistent and valued by the nurses in the study. Tanya added her view. *"Experience is the best, it helps if you have seen things before"*. Triage Nurses confirmed that the orientation program involved firstly, working in each clinical area on a rotating roster. The pattern of

practice appeared formalised, highly ritualised and largely predetermined across sites. Sally highlighted:

> *You work your way through the department, you work your way through consults, resuscitation and trauma rooms, learning to problem solve, developing your skills first and then you go to triage.*

Several Triage Nurses explained that by working through the clinical areas you learn problem-solving skills and to manage the events and procedures that defined and unfolded in each workspace. From the clinical experience gained in each area, rich templates of emergency work and patient conditions were generated which gave depth to personal knowledge and built a repertoire of skill for using at triage. The process of experiencing clinical areas enabled nurses to understand how patient groups varied in clinical urgency and positioned them within the context of ED care. The nurse learned the overall care patterns relevant to each area and developed an understanding of different patient groups, acuity and procedures according to 'place'. Location in the ED shaped care activities and movement giving rise to a timing of care familiar to the members of this setting.

All Triage Nurses were beyond 'learning the ropes'. Their experience marked them as knowledgeable in the activities and ways of the ED culture. While observing them at work, they appeared not to expend much effort in understanding the nature of patient groups, acuity or the appropriate clinical area to which they should be allocated. The nurses appeared to have a sense of appropriate timing and movement that was required to sustain beliefs, and meet role goals and patient care needs.

By maneuvering through the different clinical areas 'inside' nurses learnt the moral order applied to 'place'. Fundamental to triage processes was this shared cultural understanding of how urgency and efficiency were implicit in clinical areas, and thereby defined an appropriate rhythm of patient movement. Cultural meaning of 'place' privileged Triage Nurses with local knowledge, which built security in service, allowed a sense of belonging and the beliefs about emergency care to emerge.

BEING DIFFERENT

Triage Nurses brought to the surface other value dimensions that wove into and made up everyday talk, thus framing a culture of ED care. While talking of the importance and meanings attached to workspaces, they conveyed a sense of 'being different' from other nursing specialities. Probing into this everyday talk, a view of the personality type desired, encouraged, fostered and allowed to flourish in the ED unfolded. When Triage Nurses talked about their work, they spoke with great enthusiasm about being different. *"it's a different nurse in the ED. They're verbal, more outgoing, and confident [and] they are quick decision-makers…. I love it; you are on the go and the sickies, you make them better" [Karen].*

All the Triage Nurses in the study wanted to work in the ED. They had come from areas such as the general wards, the army and intensive care. Triage Nurses viewed emergency as different from other specialties offering distinct nursing roles, skills and work activities. Being different from other nursing specialities punctuated much of the talk when listening to Triage Nurses and observing conversations. The

opportunity to understand the notion occurred while observing Sally, one Saturday morning when an empty waiting room made conversation possible. Sally explained:

> *The nurses that come here are different. They're keen to run around push the boundaries of nursing roles. Here you keep increasing your education, increased fitness, it's the nature of the work, it predisposes autonomous educated nurses. There's no pressure to keep up your skills there [ward areas], here you have to ….*

Karen and Sally shared a typical view about a specific personality type and way of viewing work that helped to solidify an identity of ED nurses. Nurses echoed the need to learn more than clinical skills; they must learn what it means to be different. The impact of being different became clearer during the interview with Peter who decided after 12 years to transfer from intensive care to emergency. He explained:

> *When I started working down here, because you're not an emergency nurse, I had some problems with staff. So therefore, there was a validation [time] before staff saw me as knowing what I'm talking about, and any information that I offered you is to help you make a decision about how you are going to manage this person. That's it, bottom line. OK. I'm a [now] worthwhile member of this team.*

Later in the year, Peter talked about a new staff member and how they became a member of the ED culture. "*You can't use the same techniques you use on the ward. Here if they use the same ones it doesn't work".* Providing nursing care in the ED appeared to demand different skills, nurses cannot expect to know how to be an emergency, and in particular, a Triage Nurse on arrival.

BEING A TEAM PLAYER

The value of being a team player in the ED needed to be learned before becoming a Triage Nurse. The majority of Triage Nurses invested significant time in talking of the importance of being a team player. For example, during conversations with Peter, Sally, Mathew and Karen a strong sense of teamwork regularly surfaced. According to Peter, *"There's an obligation to do it. There's a commitment. Everyone relies on everyone, you can't let your colleagues down".* Many Triage Nurses, 'inside' nurses, clerical staff and doctors spoke of the importance of being a team players in this context of care.

More specifically, Triage Nurses conveyed a strong sense of team commitment. Woven into Karen's talk were the consequences for failing to adhere to the notion of being a team player. Echoing the views of other Triage Nurses, Karen illustrated the sort of pressure that was evident if members were not team players "*No choice but to work as a team. If you want to work as an individual then you leave. Those who stay love it".* Triage Nurses valued this characteristic in each other and shared a belief of what it meant and did not mean to be a team player. Nurses who did not adhere to the notion could have their commitment to the setting questioned. For the majority of Triage Nurses, what it is to be an emergency nurse was defined by the attribute of being team player.

On exploring the intense feelings invested in being a team player, other emotions began to surface. For Peter and Karen, buried in the notion of teamwork was a sense of trust. For example, "*I trust the people behind the door"* Peter. Karen

imposed responsibility on her own work practices. She explained "*They know when they ask me for it [medical staff] they get it done, but it's hard when you're tired*". Embedded in the notion of being a team player were elements of trust, responsibility and expectation for team members. Sally supported Peter and Karen's view: "*We have a job to do, it's a team effort*". Teamwork brings feelings of intense trust and responsibility, which motivated some individuals to ensure they get the job done despite the cost to self.

Other members of the ED valued the notion of teamwork. Informal discussions with clerical and medical staff supported the notion that ED work was achieved by teamwork. For example, a conversation with a senior emergency doctor explained:

> *By the time, the (inside) nurses see the patient they have done a lot of the work. The bloods, put in the cannula and ECG. The thirty minutes is up by the time we (doctors) see them. Nursing has done a lot of the work and the time to intervention has commenced before we see them [Hospital 4 CMO[23]]*

In this extract, the doctor viewed the practices undertaken by nurses as signifying the beginning of treatment for many patients. Hence, the 'time' to patient intervention entered into the EDIS computer by the treating doctor should reflect the activities undertaken by the nurses. The value of being a team player and of sharing care activities appeared regularly in everyday talk from a variety of members within the different EDs.

---

[23] A non-specialist medical officer working in a public hospital. The medical group do not participate in vocational training.

The notion of teamwork contributed towards positive experiences and added joy to the dimension of everyday work for some Triage Nurses. For those staying and working in the ED, the notion of being a team player appeared to lack negative connotations and enabled patient movement and care activities to take place. Being a team player was a cultural touchstone by which triage nursing work, behaviour and talk was measured. Embracing an identity of team player provided cohesion in talk patterns, reinforced a sense of belonging and cemented loyalty for many of the Triage Nurses in the study.

BEING RESPONSIBLE

As Triage nurses' valued patient safety, they willingly accepted responsibility for maintaining it. The ownership by nurses of patient safety was central to triage purpose and the culture of ED care. Karen highlighted a representative view of the personal ownership of patient responsibility. "*At the end of the day I'm responsible for them"*. During observations there were occasions when it was quiet, although you are not to mention the "Q"[24] word, these moments provided an opportunity to explore the notion of being responsible. For example, Peter went on to explain:

> *When you first start and I see it in X who has just started here, you're out of your comfort zone. You want everything to be perfect, you question yourself, should you go up or down [triage code]. The important thing is patient safety.*

[24] Within ED culture, the nurses explained you could never say the word – Quiet, or risk the activity of the department increasing. Hence, nurses could be heard to say 'never mention the 'Q' word'.

Responsibility provided a common thread that characterised much of the everyday talk of Triage Nurses.

For some of them, the notion of failing to keep the patient safe was a constant pressure. It cast a shadow that stretched beyond a single triage shift. Andrew summarised:

> *It's difficult triage. It's scary. The worst is people dying, the thing that scares me most is people dying in the waiting room and sort of doing the wrong triage. I've heard a few stories and it has happened to one or two staff here, but not to me.*

Across sites, nurses explained that placing the patient at risk was to fail triage responsibilities and goals, and that the consequences to patients were greater when undertaking the triage role. For example:

> *A wrong decision makes it hard. I gave a patient a code 3. [They] seemed well at triage, and shortly after they collapsed in the bed. In hindsight, the patient needed a code 2. Patients can change really quickly and sometimes you feel, you have a day of wrong decisions [Samantha]*

Most Triage Nurses explained that a wrong triage decision, or the inability to know what the problem was could place a patient at risk. This had real consequences for patient and Triage Nurse and highlights the skill and knowledge required to become the Triage Nurse. During a triage shift with Andrew, one of the doctors disagreed with his allocation of a patient to the waiting room believing the patient should have been assigned a bed. The following field note conveyed the triage incident:

> *Friday 10am: Andrew is triaging a woman complaining of lower abdominal pain. He asked questions about her medical history and medications. He later asked questions about burning and stinging on*

passing urine. He typed into the computer: patient details; assessment; and triage code. He explained, when giving her a small yellow jar that a urine sample was needed and where the toilets were in the waiting room. He allocated a triage code 4 and sent her to the waiting room. One hour later, I am with Andrew in the Acute Room. He was rushing through the area on his way back from the consultation rooms. A female doctor grabbed his attention by calling out his name. The doctor had begun assessing the woman with abdominal pain. She began questioning Andrew about why he had allocated the woman to the waiting room and gave a code 4. Doctor X says, "She's not like the other fours, like the other fractured limbs". Having brought the woman into Acute, she appeared annoyed, as she needed to take bloods. Andrew replied "I'm happy to put her where you want, but it's more like a urinary tract infection". Andrew walked back to triage annoyed [Field note Hospital 3]

This field note is an incident of disagreement between doctors and Triage Nurses. During the study, across sites, there were only five observed incidents that occurred in which a doctor disagreed with a triage decision. On these occasions, doctors either disagreed with the allocation of a triage code or designated clinical area. From discussions, (while not observed) emergency nurses would also comment on triage decisions. The visibility of the triage assessment including the codes, actions and allocation of clinical areas, seen on computer screens throughout the clinical areas, made it possible for others to comment on the activity of Triage Nurses. There was also shared understanding about the activities that shape particular patient movements.

The majority of Triage Nurses were acutely aware of the visibility and ramifications of making a wrong decision. Equally, all knew that an inappropriate triage decision could jeopardise a patient's life, and for some, this raised medico-legal concerns. Mathew provided evidence, "*for my peace of mind you need to consider medico-legal issues"*. Or Meg "*it's hard [the] "duty of care" I err on the*

side of caution if anything goes wrong [as] it could go to court". The weight of patient responsibility, for some, was intensified on occasions when they perceived they had made a wrong triage decision. The medico-legal consequence of wrong decisions was highlighted by secondary data sources during the study. For example, the following newspaper article illustrated the legal system's perception of the NSW Health Care system and the allocation of triage code 4 to a mental health patient.

> *Family sues over suicide: A man believed to be suffering a psychotic episode was left unattended for three hours in Hospital X before he walked out and killed himself, a court heard yesterday. The article continues: A Triage Nurse placed him in a category 4 and noted he was hearing voices, he was anxious, hyperventilating and under stress…* <u>*The Sydney Morning Herald April 2004 pg5*</u> *(Wallace 2004a)*

In this particular case, there was criticism of the allocation of a triage code 4 believing that the hospital had failed in its duty of care. The family were awarded $Aud700,000 (Wallace 2004b, Wallace 2004c). Medico-legal dimensions create real pressure within practice for most of the Triage Nurses, which needs to be managed.

While responsibility for patient safety was a central belief woven into the triage role, further discussions with Andrew, Mathew, Karen and Samantha highlighted that the notion of responsibility extended beyond patient safety to include the department generally. Peter provided insight into the level of responsibility accepted by Triage Nurses to maintain department safety:

If something happens, then you're responsible. It may not be the fault of the Triage Nurse- what the patient tells you can sometimes be unhelpful. Someone goes through all that information and you can't explain what's happening….

To the majority of Triage Nurses, the safety of the department meant maintaining normal patient movement and cadence of care. The sense of having responsibility for maintaining department 'safety' was a desirable and a strong motivator for triage action. Having the least amount of triage experience, Andrew verbalised more readily his feelings of responsibility. He shared his perception of department responsibility and the personal impact of adhering to the value "*the scary thing is, I think, is that the whole department is based on you".* Andrew's words highlight that the triage role is loaded with responsibility related to patient safety and the smooth flow of the department. Becoming a Triage Nurse requires handling this responsibility.

Triage Nurses seemed willing to accept responsibility for patient and department safety, but by doing so were exposed to pressure that was in part driven by appraisal and expectation by self and other members. Emergency work includes beliefs embedded in practice and particular ideologies that sustained notions of being different, being team players, and having a role and service responsibility woven by efficiency and timeliness. Beliefs assisted the Triage Nurses to make sense of their world, and to navigate and orientate individual behaviour. These shaped the desired image of a team member working in the ED. The culture of ED care needed to be learned and membership acquired in order to become and function as the Triage Nurse.

SUMMARY

This chapter described the Triage Nurse's role when restoring the cadence of care when EDs are overcrowded. One of the most challenging situations negotiated in the triage role involved incidents of overcrowding as it changed the rhythm of emergency care. The timing of care was no longer harmonised as urgency codes exceeded guidelines and occupied beds in clinical areas constrained triage gatekeeping, timekeeping and decision-making processes. Overcrowding brought to the surface two distinct undesirable patterns that constituted a real part of the triage experience: aggression and negative emotions. Triage Nurses implemented a range of timekeeping practices, individual and shared, to accommodate the change in the cadence of care thereby restoring normal work patterns. However, before emergency nurses can become the Triage Nurse they must experience particular patterns of practice and come to know the ways of being in the ED. Through these experience patterns and ways of being, nurses come to learn and understand about: patient groups; notions of place; and being a team player, different and responsible. In this way, rich templates of knowing are cultivated for the challenging role of triage and managing, restoring and negotiating the cadence of emergency care.

The next chapter presents the strengths and limitations of the ethnographic approach and a broad conceptual framework that offers emergency educators, hospital administrators and policy makers with a way to support, educate, review and resource the role of triage.

CHAPTER 7: DISCUSSION

The aim of the study was to provide insight into, and understanding of, the triage role in order to better educate and support nurses within the practice environment. The findings have demonstrated the complexity of the triage role by making explicit cultural meanings, practices and processes. These new insights have addressed a knowledge gap within primary triage literature and thus have informed emergency nursing practice. This chapter examines the strengths and limitations of the study and presents a conceptual framework not previously evident in the body of knowledge known as triage nursing.

THE ETHNOGRAPHIC APPROACH: STRENGTHS AND LIMITATIONS

When this study commenced, triage nursing was conceptualised, explained and understood within a quantitative perspective. This approach explored and explained the practice of Triage Nurses largely by measuring outcomes. However, this perspective failed to assist emergency nurse educators to support and prepare nurses for undertaking the role.

STRENGTHS OF THE STUDY

Ethnography has made it possible to uncover cultural knowledge, processes, expectations and concerns implicit in the behaviour of Triage Nurses, as they set about their everyday work in Emergency Departments. This had not been achieved by the prevailing quantitative perspectives used to examine triage practice (Fry & Burr 2002, Gerdtz & Bucknall 1999). Ethnography as the methodological approach

provided an effective mode of inquiry to view contemporary triage practice by making explicit embedded daily activities, actions and practical dilemmas. In this way, the study demonstrates attentiveness to context that would be familiar to those who know the setting. The information derived from this study has expanded and directly contributed to the body of knowledge known as triage nursing and, more broadly, advanced nursing practice.

The ethnographic research technique of participant observation provided an opportunity to get close to the real context of care, while interviews generated insight into triage code allocation and how Triage Nurses used particular processes within this practice. These complementary techniques provided insight into the different knowledge systems, processes and cultural ways of being the Triage Nurses.

The 12-month study provided the opportunity to maximise exposure to, and understanding of, triage nursing phenomena thereby achieving data saturation. During this time, providing Triage Nurses with transcripts sustained an analytical stance, while the establishment of positive field relationships improved the veracity of findings. These processes validated the plausibility and relevancy of findings to triage nursing practice. Researching in an already familiar setting also added a depth to data analysis by providing for a richer and more complex understanding of the practice of triage nursing. As an emergency nurse, my knowledge of the context and language enabled the nuances and meanings within the triage field to be better observed than might otherwise have occurred.

The contemporary realist tale was chosen to convey the cultural environment of triage nursing practice. Thick description enabled Triage Nurse knowledge and belief systems, emotions, ways of doing and a culturally appropriate practice to be conveyed. In this way, a compelling and complex description of triage nursing was constructed. In recognition of the borders imposed by a researcher's own cultural milieu multiple voices were used within this text so that no single voice dominated (Fine 1999, Giddens 1993, Rubinstein 2001, Wolcott 1999). In this way the voices from the field give the contextual shape to triage role characteristics, processes and nursing practice.

The findings of this ethnographic study have made visible and available triage processes not previously understood. This has enabled a broad conceptual framework to be developed. Emergency educators can use this framework to support those who must manage the contours of contemporary nursing and accomplish the challenging role of triage. The framework also provides insight for other stakeholders that could strengthen the support structures and resources for the triage role.

LIMITATIONS OF THE STUDY

There are a number of limitations when considering these findings in light of other triage nursing research. The study focused on Triage Nurses at Clinical Nurse Specialist level who may have different views and behaviours when compared with those of less experience. The findings convey only their story and cannot be situated any more broadly within the context of triage nursing. The sample group

was representative but not inclusive of all Triage Nurses throughout NSW. However, inferences can be made as the context of care is similar to most EDs nationally and internationally.

While contextual similarities are evident, this study did not capture the context of care provided in Level 5, rural and regional EDs. Further, the study was conducted primarily in adult hospitals, so little inference can be extrapolated to these sites and triage nursing in dedicated hospitals for children.

Given the unpredictable nature of emergency department work, the time selected for observational visits should have accommodated the range of observable triage phenomena. However, the reduction in after-hour resources may have resulted in different triage experiences and behaviour being observed. This presents as an area for further research.

The study has sent to the background other voices that belonged to this setting such as the clerk, the patient and the doctor. These groups may hold a similar or different view to those expressed by experienced Triage Nurses. This is an area for further research given the voice of the Triage Nurse has been privileged over others as the focus of this study.

The continual movement of time, thought and place make it impossible to learn everything there is to learn in a particular context of care. Consequently, choices were made to describe particular events, activities and interactions over others. While another researcher may have chosen to record different information at different times, the findings and presentation of this study would remain familiar to

the researcher and those who undertake triage in NSW EDs. A comparison to findings of other studies is not possible as there are no published ethnographic studies of experienced Triage Nurses.

TEACHING AND SUPPORTING TRIAGE NURSES

The triage processes of gatekeeping, timekeeping and decision-making are central to the smooth running of emergency departments, patient safety and utilisation of resources. Through these processes, the considerable contribution of experienced Triage Nurses towards sustaining the cadence of Emergency Department care has been uncovered. Knowledge of these under-theorised and rarely acknowledged processes form the foundation of a conceptual framework (Fig. 8). This framework provides emergency educators with a different way to understand, teach, define and support triage nursing practice and augments triage code guidelines. This gives further credence to the research method and findings, and complements existing work on triage nursing practice.

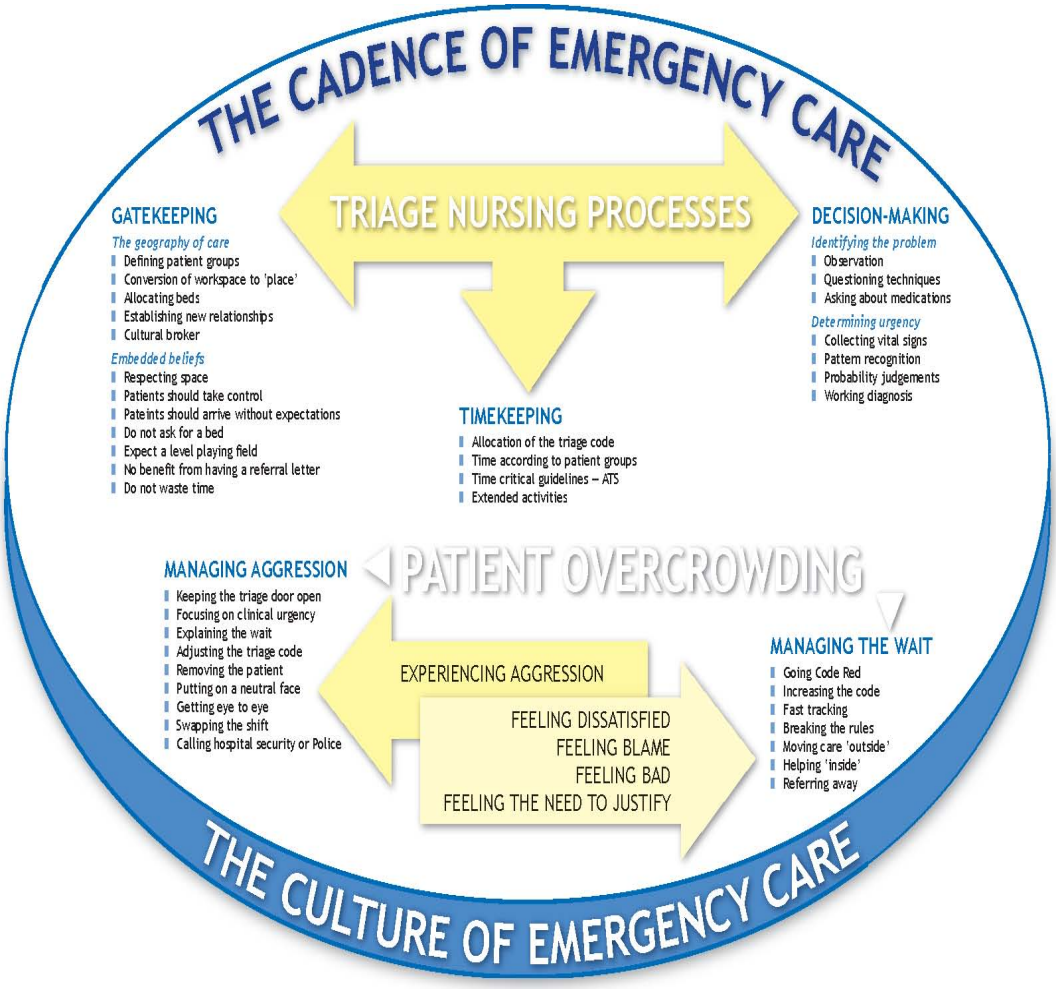


Figure 8. A conceptual framework for triage nursing practice

The framework provides: 1) specific skills and knowledge criteria essential for becoming the Triage Nurse; 2) knowledge of cultural implications within triage nursing that uncover the qualitative aspects of the nursing practice of experienced Triage Nurses; 3) identification of the importance of triage relationships to practice; 4) specific skills and knowledge criteria essential for accomplishing triage assessments; 5) structure for planning educational programs to manage tension in triage practice; 6) structure for planning educational programs to accommodate different contexts of care such as patient overcrowding; 7) structure for planning educational programs to address dimensions of power; and 8) structure for planning educational programs to enhance policy adherence.

AN EDUCATIONAL FRAMEWORK BASED ON TRIAGE PROCESSES

Educational resources have ignored the triage processes found to be used in managing and negotiating the triage role. For example, The Commonwealth Triage Education Resource Manual (2002) does not value triage processes, therefore does not consider that they may shape activities and mentation. More specifically, the manual does not address the expertise necessary for being the Triage Nurse or the practices for determining the allocation of a bed, managing overcrowding or constraints on decision-making. While this manual remains a useful resource for emergency nurse educators, the triage educational framework provides a more comprehensive approach that can better guide and direct educators in their role of teaching emergency nurses.

1. Becoming the Triage Nurse

In line with the work of Benner (2001) and Brykczynski (1989) on experienced practitioners, this study has similarly identified advanced level practitioner characteristics. These practice levels evident in experienced Triage Nurses are similar to Benner's (2001) findings on the expert practitioner, whereby practical experiences aid in the acquisition of different knowledge systems that remain largely invisible and undervalued. For the experienced Triage Nurse, personal knowledge had developed as they moved through the different clinical areas, gaining and building patterns of knowing. It is apparent that preparation for the triage role requires an educational program, which provides emergency nurses with the opportunity to become familiar with the different workspaces and their associated patient groups, activities, practice roles and functions. Orientation to each clinical area can provide emergency nurses with the information to build patterns of 'knowing' central to being the Triage Nurse. This orientation process would assist future Triage Nurses in their recognition of patient urgency. Further, it would secure their sense of belonging, develop their understanding of the cadence of emergency care, and build confidence in their clinical skills and cognitive abilities. The study provided evidence that these advanced skills and patterns of 'knowing' are necessary for undertaking the triage role.

The study highlights that only emergency nurses operating at an advanced practice level should be inducted into the triage role if patient safety, appropriate utilisation of emergency resources, and the overall management of the cadence of emergency

care is to be achieved. Emergency educators can use this knowledge to determine the appropriate experience and skill required to be a Triage Nurse, thus smoothing a nurse's transition into the role. These insights provide further support for the research method and complement existing work on uncovering the practices of experienced practitioners (Benner 2001, Brykczynski 1998).

2. Cultural implications

Cultural dimensions are deeply internalised in triage nursing practice and frame understanding, define purpose and motivate actions and emotions. Consequently, the development of educational programs based on the three processes can, for the first time, provide novice and expert Triage Nurses with an opportunity to consider and reflect on the impact of cultural meanings on nursing practice.

Emergency educators can develop case studies that illustrate how and when cultural meanings are used as reference points to arbitrate meaning within triage practice and patient interaction. While some meanings sustain understanding of levels of clinical urgency, timeliness, efficiency, equity and control, thus characterising workspaces into 'places', the reference point for triage decision-making was not always patient centred. Education sessions need to increase a Triage Nurse's awareness of when they are making value judgements thereby rendering explicit their choices between different patient groups. Several studies have explored the cultural notion of service worthiness in Emergency Departments (Dingwall & Murray 1983, Marvasti 2002, Roger 1979, Vassy 2001). However, the findings of this study showed that profiles of service worthiness are more complex, in that they

emerged during incidents in which triage resources and the cadence of care were constrained. This bolsters Sbaih's (1997b) findings in which UK emergency nurses characterised patient service worthiness in response to overcrowded situations rather than as a simplistic value judgment. By using this framework emergency educators, responsible for triage orientation, can raise the awareness of how service worthy beliefs can intrude on clinical judgement and create practices that may need to be considered within ethical or moral aspects of duty of care.

Cultural meanings interrelated with personal emotions. Emotions were a barometer for gauging the importance of cultural meanings in this clinical situation. The intensity of emotions in triage nursing practice was labile and often dependent on ED activity levels and availability of resources. Cultural expectations and assumptions provided Triage Nurses with emotional response profiles for care situations. A lack of understanding of our own cultural milieu and emotions can prejudice thinking and result in assumptions and expectations that strangle the very principles which drive nursing action. Emergency educators, by making apparent the interrelatedness of belief systems and emotions, can reduce the potential influence of a labile response to a particular triage situation or event.

By providing educational forums, emergency educators can create opportunity to discuss and consider how cultural knowledge influences triage role behaviour. By looking into our own belief structures, prejudices and expectations embedded in practice can surface and give rise to more disciplined and thoughtful action. This educational approach can support Triage Nurses to better manage the context within

which the role is practiced. In this way Triage Nurses can be better informed and positioned to critique their own practice. Given the complexity of triage practice, only emergency nurses operating at an advanced practice level should be oriented to the role to achieve thoughtful, tolerant and caring triage practice responses.

3. Establishing new relationships at triage

Clerical – Triage Nurse relationship

Triage Nurses spoke regularly of the impact of clerical staff and activities on their practice. However, there has been no consideration within the prevailing literature of developing and preparing nurses to engage and work with clerical staff 'outside'. The study provides sufficient evidence to substantiate the need for emergency educators to incorporate clerical roles and functions into triage education programs. More specifically, it is hoped that the research findings will stimulate emergency nurse educators to involve clerical staff directly in triage educational programs.

Emergency Doctor – Triage Nurse relationship

Triage Nurses skillfully work with senior emergency doctors in order to optimise ED efficiency and timely patient care. The positive relationship perceived by Triage Nurses proved to be most valuable for accommodating changes in the context of practice, where patient safety and care may otherwise have been compromised. Positive trust relationships enable Triage Nurses to better manage the cadence of ED care and thereby meet patient need. A number of studies have similarly identified the ability of experienced nurses to exert influence over medical staff activity (Coombs 2003, Hughes 2001, Wicks 1999). Emergency educators can assist in the development of these relationships by instituting programs that provide

for practical experiences, whereby nurses have the opportunity to work beside medical staff in the different workspaces and come to learn about being a team player, develop confidence in their abilities and the boundaries of cooperation in emergency care. Within this educational framework, emergency nurses should not be positioned in the triage role until they have established trust relationships with medical staff.

4. Teaching triage assessment

Triage Nurses demonstrated that information gathering, pattern recognition, probability judgement and a working diagnosis were central to triage assessment and activities. Emergency nurses need to be educated and provided with the opportunity to develop these decision-making skills before becoming the Triage Nurse. Triage Nurses spoke of the importance of gathering information by observing the patient. This study lends support to the body of knowledge that has established the value of observational information in advanced nursing practice and patient management (Gerdtz & Bucknall 2001, Hankey 1994, Salk et al. 1998). This way of 'knowing' can be promoted through ongoing educational programs for emergency nurses, but must form the basis of triage role preparation.

To assist and support the Triage Nurses' ability to determine patient urgency, gathering haemodynamic observation information can provide a valuable reference point. While Triage Nurses did not routinely obtain vital signs, when they did it appeared that patterns of knowing were triggered and different decisions were made. Similarly, Cooper et al (2002) found that haemodynamic information altered

7.9% of triage decisions in 24 USA EDs. Australian triage studies have identified an ad hoc approach to obtaining patient vital signs (Fry & Burr 2001a, Gerdtz & Bucknall 2001, Whitby et al. 1999). This study provides evidence that haemodynamic information adds a level of certainty to triage assessment. Gerdtz and Bucknall (2001) identified that obtaining haemodynamic information provided a valuable reference point for triage decision-making processes and incurred minimal time cost. On the basis of this study and other evidence, emergency educators should encourage Triage Nurses to obtain haemodynamic observation information to reduce uncertainty and risk in triage code and bed allocation.

Pattern recognition was important in expediting triage decision-making regarding urgency of patient clinical need. This supports the extensive nursing research conducted on pattern recognition (Benner 2001, Cioffi 1997, Jenks 1993, Offredy 1998, Sweeney 1994, Thiele et al. 1986). Triage Nurses used medical case templates to gauge patient urgency. These templates, reinforced by practical experience, can be incorporated into educational curricula for triage role preparation. For Triage Nurses to be alert to a variety of patient conditions, and discriminate between more or less urgent cases, pattern recognition must be developed.

The study made apparent the valuable contribution that a working diagnosis has towards accomplishing the goals of triage. The Triage Nurse's determination of a patient's likely diagnosis enabled decisions about urgency, resource allocation and extended activities to be planned. Diagnosing by inductive reasoning is a common

practice used by experienced nurses in a variety of contexts (Hughes 2001, Jones 1997, Offredy 1998). However, emergency educators can now appreciate that to develop skills in diagnosing, Triage Nurses require extensive practical experience and skills in information gathering and pattern recognition. The importance of complex patterns of knowing have been supported by many researchers (Benner 2001, Polanyi 1962, Sbaih 2002, Sweeney 1994). In this way, emergency educators can better secure the safety of patients through the rapid identification of life-threatening conditions and problems.

Probability judgement helped Triage Nurses to predict a patient's need for a bed, intervention and treatment. The ability of the Triage Nurse to make decisions and allocate clinical areas to patients would be severely limited without the skill of predicting a patient's care need. Probability judgements bring a sense of control and order to the triage role. Through educational techniques such as case studies, emergency educators can assist in developing the skill of predicting patient needs before orientation to the triage role begins.

The findings of the study provide emergency educators with criteria that more accurately informs the complexity of triage assessment and the skills and knowledge required to be the Triage Nurse. This information can guide emergency educators in their identification and determination of the readiness of an emergency nurse to begin triage orientation.

5. Planning learning experiences to manage tension in triage practice

Using these findings emergency educators can prepare Triage Nurses for experiencing tension in the role. Within the educational framework, tension can be addressed first by preparing Triage Nurses to work 'outside'. The location of the Triage Nurse, 'outside' elicited feelings of detachment from nursing skills and practice and stirred feelings of vulnerability, conflict and isolation. While emergency educators need to teach Triage Nurses to go 'inside' to survey clinical areas they can now also understand that this practice serves to resolve negative feelings and sustain a sense of belonging.

Triage Nurses need to be prepared to anticipate moments of tension when patient goals and expectations go unmet. Within individualistic cultures, such as that found in Australia, patients often arrive with their own expectations, seeking greater autonomy, access and control in their own health care service (Palo 2001). However, in the exercising of triage processes, patients' needs are often sidelined for other considerations. These situations often elicit troubling and/or aggressive patient and relative behaviour. The extent of aggression in Australian Emergency Departments has been well documented (Jones & Cheek 2003, Jones & Lyneham 2000, Lyneham 2000). The pervasiveness of broader social values creates adversarial situations within triage practice. Emergency educators need to create opportunities to discuss these broader dimensions operating within health care delivery when inducting nurses into the triage role.

Triage Nurses experienced tension between the ideals of nursing identity and the imperfect realities of practice. Nursing principally aims to assist patients through a holistic and interpersonal approach (Ball & McElligot 2003, Rutty 1998). However, the constraints of the triage practice environment pose a major obstacle to fully realising this approach. It has been recognised that time pressures reduce a nurse's opportunity for intimacy and such a model of care is constrained at triage by beliefs in efficiency and timeliness (Byrnes & West 2000, Elder et al. 2004, Jones & Cheek 2003). Temporal constraints at triage elicited tension as nurses were limited in developing trust relationships or responding to all patient cues and needs. Malone (2003) and Liaschenko (1997) recognised this increasing phenomenon in nursing practice and termed it 'distal nursing'. Using this framework, Triage Nurses can be prepared to understand that the role modifies the normal ways of coming to 'know' patients. This dimension within the role has implications for those nurses who view this as fundamental to their nursing identity. Because of this, some emergency nurses may be better suited to the role than others. However, Triage Nurses can be taught to view activities such as escorting a patient to a bed, providing education, treating minor conditions or ordering investigations as opportunities to engage with patients.

Using educational sessions to discuss situations that elicit tension within the triage role could improve nurse preparation and lessen the intensity of these practice experiences. For the first time, an educational framework provides emergency

educators with a structure to understand, explain, anticipate and teach ways to reduce the tension experienced within the triage role.

6. Planning learning experiences to manage patient overcrowding at triage

Incidents of patient overcrowding restricted triage processes and departmental flow and motivated Triage Nurses to increase their range of activities. According to Bargaiela-Chaippini (2003) attempts by nurses to restore a more equilibrated sense of practice results from the influence of embedded values. Correspondingly, timekeeping practices have been identified in several studies (Allen 2000, Sbaih 1995, Sbaih 2002). Sbaih (2001) later identified that emergency nurses were particularly attuned to the changing 'shape' of work, initiating strategies to improve patient movement. To accommodate the changing contexts of care but support the boundaries of professional practice, emergency educators can use real care situations to examine patient overcrowding events on triage practices. By using this framework, Triage Nurses can be taught a range of practices to assist in restoring the cadence of emergency care, reduce the frequency and intensity of negative emotions and yet remain within their scope of practice.

The frequent incidence of patient overcrowding resulted in activities, investigations and interventions having to be prioritised to ensure patient safety. While time pressures lead to extended nursing practices being inconsistently undertaken, it seems prudent to consider the range of nurse-initiated activities appropriate for the triage role. While inconsistencies may be unavoidable, given the vagaries of human nature, it raises concern about additional extended practices and the need for

accountability and consistency within work activities. Nurse educators and other stakeholders need to carefully consider any further development of extended triage roles given the current complexity and regular temporal constraints.

7. Planning education sessions to address dimensions of power

The visibility of micro-power was evident by the way Triage Nurses exerted influence over the corridors of these departments. Triage Nurses exercised power within the three processes in a way that regulated patient movement, patient care needs and allocation of resources. For the first time this abstract dimension that sets Triage Nurses apart from other emergency nurses can be examined, considered and understood within an educational framework.

Emergency educators can assist Triage Nurses to examine positive and negative power structures and the way control is exerted over others within each process. Triage Nurses can be made more aware of how power dimensions interact with belief systems, patient expectations and challenges to role authority. Educators can now discuss the ways that triage processes sustain a moral order specific to emergency care. In this way, Triage Nurses can be aware of displacing normal structures of power during patient interactions and reduce the risk of being viewed as antagonist towards patient needs and desires.

The framework enables Triage Nurses to ethically examine, consider and manage the power structures embedded within triage processes. As there are no comparative studies, the authorised asymmetrical power embedded in triage processes and its interrelatedness with knowledge and belief systems needs to be explored further.

8. Planning education sessions to enhance policy adherence.

Triage Nurses exceeded their formally circumscribed scope of practice in order to restore the cadence of care. Cultural competence provided justification for this behaviour and enabled timekeeping practices to emerge. The importance allocated to efficiency and timely care enabled Triage Nurses to extend the scope of their practice in ways which were acceptable to doctors. This meant reshaping nursing practice, albeit sometimes momentarily, ignoring professional boundaries and the need for a doctor to achieve more timely patient care. Emergency educators and others need to develop policies relevant to, and consistent with, innovative practice, and thereby cultivate in nurses the desire to adhere to professional boundaries. It is hoped that this research will encourage emergency educators to develop policies for those practices that operate outside of existing guidelines.

Triage Nurses were confronted by situations in which policies should determine actions or decisions, but were perceived as compromising belief systems centred on efficiency, equity and timeliness. For many Triage Nurses when the desired triage action or decision conflicted with a policy this raised a practical dilemma. A lack of understanding by policy makers of the context in which policies are to be implemented may account for inconsistent application and relevance. Emergency educators must endeavour to inform policy direction, development and implementation to secure greater integration and practical accomplishment of policy imperatives. In this way, policies might ensure greater relevance within practice and be more flexible within changing contexts of care.

FURTHER CONSIDERATIONS IN TRIAGE PRACTICE

The study identified that the Triage Nurse's perceived duty of care pressured them to go beyond the bounds of conventional practice in order to restore the timing of care. Triage Nurses have consistently demonstrated their ability to step out of the groove of tradition and embrace innovation to meet the needs of patients. Nonetheless, when extending the scope of nursing it may be necessary to consider the complexity of the role, cost to professional identity, policies and practice. For example, in preference to adding any further extended activities to the triage role the implementation of 24 hour Emergency Nurse Practitioner clinics would better accommodate increasing ED patient presentations and waiting times. This is in view of the evidence of Nurse Practitioner effectiveness in reducing ED workload (Brebner et al. 1996, Buchanan & Powers 1997, Tye 1997) and improving patient satisfaction (Byrne et al. 2000).

The extent to which the Triage Nurse role extends to accommodate health care demands must be weighed against the cost to other aspects within that role which makes nursing distinctly nursing. The relative nature of health care often leads to rapid change in nursing practice, whereby deliberations of the impact of rapid change on nurses and nursing are often omitted in the haste and moment of 'gap filling'. Emergency nursing practice and in particular triage must not be reduced to a commodity, whereby technicalising of activity defines the nature of our occupation.

The role of the emergency educator and others is to support and prepare nurses to manage and negotiate triage practice. By making explicit the knowledge and belief systems, processes, and practices embedded in practice this framework can assist Triage Nurses to confront and mediate the ethical issues, contradictions, conflicts, misconceptions and practical dilemmas that pervade health care settings.

IMPLICATIONS FOR FUTURE TRIAGE RESEARCH

To promote responsible triage nursing practice, it must be anchored through the eyes of the patient. Emergency educators and other stakeholders need to explore how the patient can inform emergency triage practice. While research is evident in the area of patient satisfaction and emergency nurses, there is minimal academic work on patient satisfaction and triage nursing (Elder et al. 2004, Raper et al. 1999, Raper 1996). Exploring and understanding the patterns linking patient satisfaction with triage behaviour, may better inform and prepare nurses to manage the variety of care situations. Greater insight into patient expectations may present new ways of viewing work, which could bring about a deeper and innovative care partnership within the practice of triage nursing. Through learning what it is that patients consider important about nursing, nurses can learn new ways of being modern.

SUMMARY

This study has provided a more sensitive and sophisticated understanding of triage nursing and of the context in which this role is practiced. By using ethnography to explore the context and processes embedded in this setting, an understanding of how Triage Nurses experience, make sense of, manage and define their practice and

themselves has unfolded. The study offers emergency educators and other stakeholders the opportunity to consider triage practice in a way that to date had not been considered.

More specifically the broad conceptual framework provides for planning triage education programs that could lead to more disciplined practice, responsible decision-making and tolerant work practices. The concluding chapter provides recommendations for the education and support of triage nursing practice in Australian Emergency Departments. The findings also support recommendations for other stakeholders that can strengthen the relevance and consistency of policy to practice and better resource busy emergency departments in which the triage role is positioned.

CHAPTER 8: RECOMMENDATIONS

This study has identified that triage nursing processes and practices are embedded in the culture of emergency care. The findings not only provide a framework for education of Triage Nurses but also generate a basis for policies to support and resource the role of triage in busy Emergency Departments. This chapter provides recommendations for triage nursing education, practice, research and health policy that have arisen from the study.

RECOMMENDATIONS FOR TRIAGE NURSING EDUCATION

Recommendation 1: The Commonwealth Triage Education Manual accommodates Gatekeeping, Timekeeping and Decision-Making processes.

Recommendation 2: The Commonwealth Triage Education Manual incorporates the practices of allocating patient beds, extended activities and managing incidents, such as patient overcrowding.

Recommendation 3: Emergency educators ensure nurse competency within all areas of Emergency Departments before orientation to the triage role.

Recommendation 4: Emergency educators develop triage education programs that make explicit the triage processes and practices, cultural milieu, biases, assumptions and expectations embedded in practice.

Recommendation 5: Emergency educators develop triage education programs that include mentoring practices for novice Triage Nurses.

Recommendation 6: Emergency educators provide educational forums that explore the conditions and expectations that precipitate troubling or aggressive behaviour.

Recommendation 7: Emergency educators develop case scenarios to promote critical and ethical thinking within the triage role.

Recommendation 8: Emergency educators assist Triage Nurses to be prepared to confront and mediate ethical issues and practical dilemmas that pervade health care delivery.

RECOMMENDATIONS FOR TRIAGE NURSING PRACTICE

Recommendation 1: NSW Health endorses radiological investigations and pain management as the primary extended triage role activities to be undertaken across Australian EDs.

Recommendation 2: Emergency educators incorporate regular audit feedback of triage code allocation by Triage Nurses.

Recommendation 3: Emergency educators incorporate preceptor practices for Triage Nurses and stagger the introduction of extended activities.

Recommendation 4: Emergency educators and other stakeholders extend practice roles for the emergency Nurse Practitioner and Clinical Initiative Nurse in preference to the Triage Nurse.

Recommendation 5: Emergency educators make explicit the positive attributes of decision-making, confidence and autonomy for triage nursing promotion, recruitment and retention opportunities.

Recommendation 6: Emergency educators raise awareness of the embedded meanings in patient groups and 'place' to clinical judgement and choice selection.

RECOMMENDATIONS FOR TRIAGE NURSING RESEARCH

Recommendation 1: A minimum level of emergency experience be determined as a prerequisite before becoming the Triage Nurse

Recommendation 2: Comparative studies be undertaken on how the triage role is positioned within other emergency settings such as rural and regional Emergency Departments and Paediatric Hospitals.

Recommendation 3: Comparative studies be undertaken to determine how the triage role compares with other emergency nursing roles.

Recommendation 4: Ethnographic exploration of the experiences of expert Triage Nurses compared with those with less experience.

Recommendation 5: Ethnographic exploration of the experiences of other staff members and their roles compared with Triage Nurses.

Recommendation 6: Ethnographic exploration of how consumers of emergency services experience triage practice.

RECOMMENDATIONS FOR TRIAGE NURSING POLICY

Recommendation 1: NSW Health considers increasing funding to hospitals for acute beds to ensure a safer work practice environment in EDs in addition to the Sustainable Access Plan[25].

Recommendation 2: NSW Health develops statewide policies that detail the extent of Triage Nurse radiological investigations within metropolitan EDs.

Recommendation 3: NSW Health develops statewide policies that detail the extent of Triage Nurse initiated analgesic medication within metropolitan EDs.

Recommendation 4: NSW Health develops statewide policies for the treatment and discharge of specific patent groups or conditions by Triage Nurses.

Recommendation 5: Emergency educators and administrators support all extended Triage Nurse activities by relevant policies.

Recommendation 6: NSW Health develops the ED Nurse Practitioner role to reduce triage workload.

Recommendation 7: NSW Health considers a statewide telephone triage service similar to Kidsnet™[26] to relieve triage workload.

Recommendation 8: NSW Health instigates a media campaign to educate the community on Code Red practices, waiting times and triage processes such as gatekeeping to improve tolerance and reduce service expectations.

Recommendation 9: NSW Health requires security officers to be based in Emergency Departments.

Recommendation 10: Hospital administrators ensure all ED personnel and security officers participate in aggression management workshops.

Recommendation 11: Triage policies accommodate security features for the triage and waiting room such as personal duress alarms, camera surveillance and metal detectors.

---

[25] The Sustainable Access Plan was launched in June 2004 to better manage Access Block in NSW Hospitals (NSW Health 2004b). In 2004-2005 the NSW Government, will reopen 962 public hospital beds (Holmes 2004).

[26] The telephone advice service, Kidsnet, was established in 1977 at Westmead Children's Hospital NSW. Nurses provide information on: child and acute paediatric health issues; and, paediatric services available within the Health Service Area. An average of 1,669 enquires per month are made to the Kidsnet (Hanson et al. 2004).

CONCLUSION

The ethnographic study has contributed to the body of knowledge known as triage nursing. This research approach has demonstrated the complexity of the triage role by privileging a deeper understanding of nursing practice not presented in the primary literature. More importantly, by making explicit cultural meanings, practices and the processes of gatekeeping, timekeeping and decision-making a framework has been generated of how Triage Nurses experience and accomplish the challenging role of triage in Australian Emergency Departments.

REFERENCES

ACEM (1994) National triage scale, *Emergency Medicine*, 6(1): 145-6

ACEM (2001) *Guidelines for emergency departments*, Australasian College for Emergency Medicine, Melbourne

ACEM (2002) The Australasian triage scale, *Emergency Medicine*, 14(3): 335-6

ACEM (2004) *Access block and overcrowding in emergency departments*, Australasian College for Emergency Medicine, Melbourne

Acute Care Inc. (2004) *Emergency medical treatment and active labor law,* COBRA statute 42 USC 1395 dd 1-4. EMTALA, Acute Care Inc. USA.

Adams St Pierre E (1999) The work of response in ethnography, *Journal of Contemporary Ethnography*, 28(3): 266-87

Adler PA & Adler P (1999) Participant observation in the era of ethnography, *Journal of Contemporary Ethnography*, 28(5): 442-50

Allen D (2000) Doing occupational demarcation, *Journal of Contemporary Ethnography*, 29(3): 326-56

Ashby RH (1992) Technology in emergency departments, *Emergency Medicine*, 4(4):201-2

Atkinson P (1994) *The ethnographic imagination textual constructions of reality* 3, Routledge, New York

Atkinson P (1995) *Medical talk and medical work,* SAGE Publications, London

Ball C & McElligot M (2003) 'Realising the potential of critical care nurses': an exploratory study of the factors that affect and comprise the nursing contribution to the recovery of critically ill patients, *Intensive and Critical Care Nursing*, 19(4): 226-38

Ball L & Ormerod T (2000) Putting ethnography to work: the case for a cognitive ethnography of design, *International Journal of Human-Computer Studies*, 53(1): 147-68

Bargiela-Chiappini F (2003) Face and politeness: new (insights) for old (concepts), *Journal of Pragmatics*, 35(10-11): 1453-69

Barr M, Johnston D & McConnell D (2000) Patient satisfaction with a new nurse practitioner service, *Accident & Emergency Nursing*, 8(3): 144-7

Beach L (1981) Pediatric emergency services triage, *Journal of Emergency Nursing*, 7(2): 50-5

Benner P (2001) *From novice to expert excellence and power in clinical nursing practice* 2, Prentice Hall, New Jersey

Bennett M (1995) Nursing education in Australian universities: report of the national review of nurse education in the higher education sector 1994 and beyond, *Collegian: Journal of the Royal College of Nursing*, 2(2): 18-20

Bentley J (1995) Triage of children in A&E: research shortfall addressed, *Nursing Times*, 91(51): 38-39

Beveridge R, Clarke B, Janes L, Savage N Thompson J, Dodd GM, Nijssen-Jordan C, Warren D & Vadeboncoeur A (1999) Canadian emergency department triage and acuity scale, *Canadian Journal of Emergency Medicine*, 1(3): 2-20

Bolton P & Thompson L (2001) The reasons for, and lessons learned from, the closure of the Canterbury GP after-hours service, *Australian Health Review*, 24(3): 66-73

Bond RJ, Kortbeek JB & Preshaw RM (1997) Field trauma triage: combining mechanism of Injury with the prehospital index for an improved trauma triage tool, *The Journal of Trauma: Injury, Infection and Critical Care*, 43(2): 283-7

Brebner JA, Ruddick-Bracken H, Norman JN & Page JG (1996) The nurse practitioner: management of minor trauma, *Accident & Emergency Nursing*, 4(1): 43-6

Brentnall E (1997) A history of triage in civilian hospitals in Australia, *Emergency Medicine*, 9(1): 50-4

Breslin E & Dennison J (2002) The development of telephone triage:historical, professional and personal perspectives, *Journal of Orthopaedic Nursing*, 6(4): 191-7

Brillman JC, Dozema D, Tandberg D, Skalar DP, Davis KD, Simms S & Skipper B (1995) Triage: limitations in predicting the need for emergency care and hospital admission, *Annals of Emergency Medicine*, 27(4): 493-500

Browne G, Gaudry P & Lam L (1997) A triage observation scale improves the reliability of the National Triage Scale in children, *Emergency Medicine*, 9(4): 283-8

Brunt L (1999) Thinking about ethnography, *Journal of Contemporary Ethnography*, 28(5): 500-9

Brykczynski KA (1989) An interpretive study describing the clinical judgment of nurse practitioners, *Scholarly Inquiry for Nursing Practice*, 13(2): 141-73

Brykczynski KA (1998) Clinical exemplars describing expert staff nursing practices, *Journal of Nursing Management*, 6(6): 351-9

Buchanan L & Powers RD (1997) Establishing an NP staffed minor emergency area, *The Nurse Practitioner*, 22(4): 175-87

Buller S & Butterworth T (2001) Skilled nursing practice - a qualitative study of the elements of nursing, *International Journal of Nursing Studies*, 38(4): 405-17

Burwood S, Gilbert P & Lennon K (1998) *Philosophy of Mind,* University College London Press, London

Byrne G, Richardson M, Brunsdon J & Patel A (2000) Patient satisfaction with emergency nurse practitioners in A&E, *Journal of Clinical Nursing*, 9(1): 83-93

Byrne M (2001) Ethnography as a qualitative research method, *AORN journal*, 74(1): 82-4

Byrnes M & West S (2000) Registered nurses' clinical reasoning abilities: A study of self perception, *Australian Journal of Advanced Nursing*, 17(3): 18-22

Caswell A (2004) *MIMS Annual 2004* 28, IMS Publishing drug manual, Sydney

Cheung WW, Heeney L & Pound JL (2002) An advanced triage system, *Accident & Emergency Nursing*, 10(1): 10-6

Chombart-DeLauwe PH (1986) Technological domination and cultural dynamism, *International Social Science Journal*, 38(1):105-9

Christofis L (2001) Nurse practitioners: an exploration of the issues surrounding their role in Australian emergency departments, *Australian Emergency Nursing Journal*, 1(2): 15-20

Cioffi J (1997) Heuristics, servants to intuition, in clinical decision-making, *Journal of Advanced Nursing*, 26(1): 203-8

Cloughessy L (1987) Conference feedback, *Accidentals: Emergency Nurses Association*, 1(2): 16-17

Commonwealth Department of Health and Aging (2002) *Triage Education Resource Book*, Commonwealth of Australia, Canberra

Considine J, LeVasseur SA & Charles A (2002) Development of physiological discriminators for the Australian Triage Scale, *Accident & Emergency Nursing*, 10(4): 221-34

Considine J, Ung S & Thomas S (2000) Triage nurses' decisions using the National Triage Scale for Australian emergency departments, *Accident & Emergency Nursing*, 8(4): 201-19

Coombs M (2003) Power and conflict in intensive care clinical decision making, *Intensive and Critical Care Nursing*, 19(3): 125-35

Cooper RJ, Schriger D, Flaherty HL, Lin EJ & Hubbell K (2002) Effects of vital signs on triage decisions, *Annals of Emergency Medicine*, 39(3): 223-32

Cote JE (1996) Sociological perspectives on identity formation: the culture-identity link and identity capital, *Journal of Adolescence*, 19(5): 417-28

Cox K (2002) Emergency-ward violence on the rise, The Sun-Herald, 15 December: 37

Craig J & Smyth RL (2002) *The evidence-based practice manual for nurses,* Churchill Livingstone, London

Davies J (1994) X-ray vision of shorter queues... nurse requested X-rays in A&E departments, *Nursing Times*, 90(21): 52-4

de Laine M (1997) *Ethnography theory and applications in health research,* MacLennan and Petty, Sydney

Dent A & Rofe G (1999) Which triage category patients die in hospital after being admitted through emergency departments? A study in one teaching hospital, *Emergency Medicine*, 11(2): 68-71

Derlet R, Kinser D, Ray L, Hamilton B & McKenzie J (1995) Prospective identification and triage of non-emergency patients out of an emergency department: a five year study, *Annals of Emergency Medicine*, 25(2): 215-23

Derlet R, Richards JR & Kravitz RL (2001) Frequent overcrowding in U.S. emergency departments, *Academic Emergency Medicine*, 8(2): 151-5

Dilley S & Standen P (1998) Victorian nurses demonstrate concordance in the application of the National Triage Scale, *Annals of Emergency Medicine*, 10(1):12-18

Dingwall R & Murray T (1983) Categorization in accident departments: "good patients, "bad" patients and "children", *Sociology of Health & Illness*, 5(12): 127-48

Doherty S (1996) Application of the national triage scale is not uniform, *Australian Emergency Nursing Journal*, 1(1): 26

Doherty S, Hore C & Curran SW (2003) Inpatient mortality as related to triage category in three New South Wales regional base hospitals, *Emergency Medicine*, 15(4):334-40

DosSantos L, Stewart G & Rosenbery N (1994) Pediatric emergency department walk-outs, *Pediatric Emergency Care*, 10(2): 76-8

Ducharme J (1996) Proceedings from the first international symposium on pain research in emergency medicine: foreword, *Annals of Emergency Medicine*, 27(4): 399-403

Ducharme J & Barber C (1995) A prospective blinded study on emergency pain assessment and therapy, *Journal of Emergency Medicine*, 13(4): 571-5

Duffield C (1989) The Delphi Technique, *Australian Journal of Advanced Nursing*, 6(2): 41-5

Durojaiye L & O'Meara M (2002) A study of triage of paediatric patients in Australia, *Emergency Medicine*, 14(1): 67-76

Eagar S (1987) Triage dilemmas, *Accidentals: Emergency Nurses Association*, 1(3): 9-10

Edwards S (2002) Nursing knowledge: defining new boundaries, *Nurse Researcher*, 17(2): 40-4

Elder R Neal C Davis B & Almes E (2004) Patient satisfaction with triage nursing in a rural hospital emergency department, *Journal of Nursing Care Quality*, 19(3): 263-7

ENA (2004) *ENA history*, [online], Available: http://www.icn.ch/echistory [4 April 2004]

Erwich-Nijhout MA, Bond MJ, Phillips DG & Baggoley C (1997) The identification of costs associated with emergency department attendances, *Emergency Medicine*, 9(3): 181-7

Evered R & Louis-Reis M (1981) Alternative perspective in the organizational sciences: "inquiry from the inside" and "inquiry from the outside", *Academy of Management Review*, 6(3): 385-95

Fairweather C & Gardner G (2000) Specialist nurse: an investigation of common and distinct aspects of practice, *Collegian: Journal of the Royal College of Nursing*, 7(2): 26-33

Fararo TJ (2001) Theory: sociological, in *International Encyclopedia of the Social & Behavioral Sciences*, Elsevier, Sydney, pp. 15656-62

Fernandes C, Daya M, Barry S & Palmer N (1994) Emergency department patients who leave without seeing a physician: the Toronto Hospital experience, *Annals of Emergency Medicine*, 26(6): 1092-6

Ferrari J (2001) Critical time to act to protect our nurses, The Sunday Telegraph, 15 July:3

Fetterman D (1999) *Ethnography step by step* 2, SAGE Publications, London

Fine G & Elsbach K (2000) Ethnography and experiment in social psychological theory building: tactics for Integrating qualitative field data with quantitative lab data, *Journal of Experimental Social Psychology*, 36(1): 51-76

Fine GA (1999) Field labor and ethnographic reality, *Journal of Contemporary Ethnography*, 28(5): 532-9

Fitzgerald G (1996) The national triage scale, *Emergency Medicine*, 8(4): 205-6

Fontana A (2001) Symbolic Interaction: methodology, in *International Encyclopedia of the Social & Behavioral Sciences*, Elsevier, Sydney, pp. 15347-50

Fry M (2001) Triage nurses order x-rays for patients with isolated distal limb injuries: a 12 month ED study, *Journal of Emergency Nursing*, 27(1): 17-22

Fry M & Burr G (2001a) Current triage practice and influences affecting clinical decision making in emergency departments in NSW Australia, *Accident & Emergency Nursing*, 9(4): 227-34

Fry M & Burr G (2001b) Using a survey tool to explore the processes underpinning the triage role: a pilot study, *Australian Emergency Nursing Journal*, 4(11): 27-31

Fry M & Burr G (2001c) Using the Delphi technique to design a triage survey tool, *Accident & Emergency Nursing*, 9(4): 235-41

Fry M & Burr G (2002) Review of the triage literature: past, present, future?, *Australian Emergency Nursing Journal*, 5(2): 33-8

Fry M & Holdgate A (2002) Nurse initiated intravenous morphine in the emergency department: efficacy, rate of adverse events and impact on time to analgesia, *Emergency Medicine*, 14(3): 249-54

Fry M, Holdgate A, Baird L, Silk J & Ahern M (1999) An emergency department's analysis of pain management patterns, *Australian Emergency Nursing Journal*, 2(1): 31-6

Fry M, Ryan J & Alexander N (2004) A prospective study of nurse initiated Panadeine Forte: expanding pain management in the ED, *Accident & Emergency Nursing*, 12(3): 136-40

Gaudry P (1991) Recognition of emergency medicine as a specialty in Australia, *Emergency Medicine*, 4(3): 149-236

Geertz C (2001) *Available light anthropological reflections on philosophical topics* 3, Princeton University Press, New Jersey

Geraci EB & Geraci TA (2001) An observational study of the emergency triage nursing role in a managed care facility, *Journal of Emergency Nursing*, 20(3): 189-203

Gerdtz M & Bucknall T (1999) Why we do the things we do: applying clinical decision-making frameworks to triage practice, *Accident & Emergency Nursing*, 7(1): 50-7

Gerdtz M & Bucknall T (2001) Triage nurses' clinical decision making. An observational study of urgency assessment, *Journal of Advanced Nursing*, 35(4): 550-61

Giddens A (1993) *New rules of sociological method* 2, Blackwell Publishers, Cambridge

Giddens A (2001) *The constitution of society 9*, Polity Press, Cambridge

Gilboy N, Travers D & Wuerz R (1999) Emergency nursing in the millennium re-evaluating triage in the new millennium: a comprehensive look at the need for standardization and quality, *Journal of Emergency Nursing*, 25(6): 468-73

Gold R (1997) The ethnographic method in sociology, *Qualitative Inquiry*, 3(4): 388-402

Greenwood J (2003) Nursing research: a position paper, *Journal of Advanced Nursing*, 9(1): 77-82

Groenkjaer M (2002) Critical ethnographic methodology in nursing research: issues and solutions, *Contemporary Nurse*, 14(1): 49-55

Gubrium JF & Holstein JA (1999) At the border of narrative and ethnography, *Journal of Contemporary Ethnography*, 28(5): 561-73

Gurney CM (1997) "...Half of me was satisfied": Making sense of home through episodic ethnographies, *Women's Studies International Forum*, 20(3): 373-86

Hallett T & Fine GA (2000) Ethnography 1900, *Journal of Contemporary Ethnography*, 29(5): 593-617

Hammersley M (2002) *Social research philosophy, politics and practice,* SAGE Publications, London

Hammersley M & Atkinson P (1995) *Ethnography: principles in practice* 2, Anchor, Routledge

Hammersley M & Gomm R (1997) Bias in social research, *Sociological Research Online*, 2(1): 1-17

Hankey L (1994) Development of a training programme for triage nursing, *British Journal of Nursing*, 3(1): 19-22

Hanson EJ (1994) Issues concerning the familiarity of researchers with the research setting, *Journal of Advanced Nursing*, 20(5): 940-2

Hanson RM, Exley BJ, Ngo P, Fitzpatrick MP, Petering EL, Matthews SJ, Lechner D & Daniels CJ (2004) Paediatric telephone triage and advice: the demand continues, *Medical Journal of Australia*, 180(7): 333-5

Hasson F Keeney S & McKenna HP (2000) Research guidelines for the Delphi survey technique, *Journal of Advanced Nursing*, 32(4): 1008-15

Hindle D (2002) Health care funding in New South Wales: from health care needs to hospital outputs, *Australian Health Review* , 25(1): 40-71

Hollis G & Sprivulis P (1996) Reliability of the national triage scale with changes in emergency department activity level, *Emergency Medicine*, 8(4): 231-4

Holmes B (2004) More hospital beds- but not without nurses, *The Lamp*, 61(5): 5

Hughes J (2001) Occupational therapy in community mental health teams: a continuing dilemma? role theory offers an explanation, *British Journal of Occupational Therapy*, 64(1): 34-40

Jamieson L & Mosel-Williams L (2002) Confusion prevails in defining advanced nursing practice, *Collegian: Journal of the Royal College of Nursing*, 9(4): 29-33

Jelinek GA & Little M (1996) Inter-rater reliability of the national triage scale over 11,500 simulated occasions of triage, *Annals of Emergency Medicine*, 8(4): 226-30

Jenks J (1993) The pattern of personal knowing in nurse clinical decision making, *Journal of Nursing Education*, 32(9): 399-405

Joas H (2001) Mead, George Herbert (1863-1931), in *International Encyclopedia of the Social & Behavioral Sciences*, Elsevier, Sydney, pp. 9424-8

Johnson K (1998) *Deinstitutionalising women an ethnographic study of institutional closure,* Cambridge University Press, Melbourne

Jones A (1997) A longitudinal framework for fostering critical thinking and diagnostic reasoning, *Journal of Advanced Nursing*, 26(5): 1028-35

Jones J & Cheek J (2003) The scope of nursing in Australia: a snapshot of the challenges and skills needed, *Journal of Nursing Management*, 11(2): 121-9

Jones J & Lyneham J (2000) Violence: part of the job for Australian nurses?, *Australian Journal of Advanced Nursing*, 18(2): 27-32

Kearney S (2001)Ward rage nurses in daily danger, The Sunday Telegraph 27 May:3

Kelen GD, Scheulen JJ & Hill PM (2001) Effect of an emergency department managed acute care unit on ED overcrowding and emergency medical services diversion, *Academic Emergency Medicine*, 8(11): 1095-101

Kelly A, McCarthy S, Richardson S, Parris W & Kerr A (1995) Triage nurse-initiated x-rays for limb injuries are accurate and efficient, *Emergency Medicine*, 7(2): 81-4

Kennedy K, Aghababian R, Gans L & Lewis CP (1996) Triage: technique and applications in decision making, *Annals of Emergency Medicine*, 28(2): 136-44

Kivett DD & Warren CA (2002) Social control in a group home for delinquent boys, *Journal of Contemporary Ethnography*, 31(1): 3-32

Kleinman A (1995) *Writing at the margin discourse between anthropology and medicine,* University of California Press, Berkeley

Lancaster L (1998) Fast tracking of non-urgent emergency department presentations utilising a CNS advanced practitioner position, *Australian Emergency Nursing Journal*, 4(1): 4-11

Langholtz H, Ball C, Sopchak B & Auble J (1997) Resource - allocation behavior in complex but commonplace tasks, *Organizational Behavior and Human Decision Processes*, 70(3): 249-66

Lee KM, Wong TW, Chan R, Lau CC, Fu YK & Fung KH (1996) Accuracy and efficiency of x-ray requests initiated by triage nurses in an accident and emergency department, *Accident & Emergency Nursing*, 4(4): 179-81

Liaschenko J (1997) Ethics and the geography of the nurse-patient relationship, *Scholarly Inquiry for Nursing Practice*, 11(1): 45-59

Lindley-Jones M & Finlayson BJ (2000) Triage nurse requested xrays - are they worthwhile?, *Journal of Accident and Emergency Medicine*, 17(2): 103-7

Llewellyn CH (1992) Triage: in austere environments and echeloned medical systems, *World Journal of Surgery*, 16 (5): 904-9

Long T & Johnson M (2000) Rigour, reliability and validity in qualitative research, *Clinical Effectiveness in Nursing*, 4(1): 30-7

Lyneham J (2000) Violence in New South Wales emergency departments, *Australian Journal of Advanced Nursing*, 18(2): 8-17

MacIntyre PE & Ready LB (1996) *Acute pain management: a practical guide* 1, Saunders, London

Macleod AJ & Freeland P (1992) Should nurses be allowed to request x-rays in an accident & emergency department?, *Archives of Emergency Medicine*, 9(1): 19-22

Malone R (2003) Distal nursing, *Social Science & Medicine*, 56(11): 2317-26

Marvasti AB (2002) Constructing the service-worthy homeless through narrative editing, *Journal of Contemporary Ethnography*, 31(5): 615-51

Mays N & Pope C (1995) Qualitative research: Rigor and qualitative research, *British Medical Journal*, 311(6997): 109-12

McArthur CL & Thomas M (1995) Comparison of triage nurse versus emergency physician ordering of extremity radiographs, *American Journal of Emergency Medicine*, 13(2): 248-50

McDonald T (2001) Zero tolerance for harassment and attacks on nurses, *The Lamp*, 58(5): 13

McKay-Ingalls J & Canton M (1999) The emergency department of the future - the challenge is in changing how we operate!, *Journal of Emergency Nursing*, 25(6): 480-8

McKay-Ingalls J & Thayre McCray K (1999) A global perspective on emergency nursing and the new millennium, *Journal of Emergency Nursing*, 25(6): 489-91

McKenna HP (1994) The Delphi technique: a worthwhile research approach for nursing?, *Journal of Advanced Nursing*, 19(1): 1221-5

McKenzie K (2001) First Nurse Practitioners appointed in NSW, *The Lamp*, 58(2): 10-1

Metherell M (2003) GP fees soar when bulk-billing scrapped, The Sydney Morning Herald, 13 June:8

Metherell M (2004) The safety net Labor has a second opinion on government's specialist operation, The Sydney Morning Herald, 11 March: 9

Miller D, Creswell JW & Olander LS (1998) Writing and retelling multiple ethnographic tales of a soup kitchen for the homeless, *Qualitative Inquiry*, 4(4): 469-91

Moait S (2001) Violence against nurses, *Lamp*, 58(7): 5

Munch R (2001) Functionalism, history of, in *International Encyclopedia of the Social & Behavioral Sciences*, Elsevier, Sydney, pp. 5838-44

Nocera A (1996) Triage nurse initiated x-rays for limb injuries are accurate and efficient, *Emergency Medicine*, 8(1): 47-9

NSW Health (1995) *Guidelines for the handling of medication in NSW Public Hospitals*, NSW Health Department, Sydney

NSW Health (1997a) *Public hospital nurses (state) award clinical nurse specialist*, NSW Health Department, Sydney

NSW Health (1997b) Workforce planning for emergency departments and mental health nurses, *Australian Emergency Nursing Journal*, 1(2): 6-13

NSW Health (2001a) *Annual report NSW Health Department 2000/01*, NSW Health, Sydney

NSW Health (2001b) *Emergency department service plan*, NSW Health, Sydney

NSW Health (2003) *Zero tolerance response to violence in the NSW health workplace*, NSW Health, Sydney

NSW Health (2004a) *NSW Department of Health annual report 2002-2003*, NSW Health, Sydney

NSW Health (2004b) *Sustainable access plan 2004*, NSW Health Department, Sydney

NSW Health (2004c) *The bulk billing decline*, NSW Health, Sydney

NSWNA (2001) It's time to heal the public health system, *The Lamp*, 58(6): 18-20

Nuttall M (1986) The chaos controller, *Nursing Times*, 82(20): 66-8

O'Malley N (2004) Crunching the numbers, The Sydney Morning Herald, 30 March:10

Offredy M (1998) The application of decision making concepts by nurse practitioners in general practice, *Journal of Advanced Nursing*, 28(5): 988-1000

Pace S & Burke TF (1996) Intravenous morphine for early pain relief in patients with acute abdominal pain, *Academic Emergency Medicine*, 3(12): 1086-92

Palo A (2001) What is consumerism and has it had an impact on health visiting provision? A literature review, *Journal of Advanced Nursing*, 35(6): 893-901

Parish C (2000) Nurse-led triage will help streamline A&E services, *Nurse Researcher*, 14(39): 6

Parris W, McCarthy S, Kelly A & Richardson S (1997) Management: do triage nurse-initiated xrays for limb injuries reduce patient transit time?, *Accident & Emergency Nursing*, 5(1): 14-5

Peatling S (2002) Emergency: Hospitals turn patients away, The Sydney Morning Herald, 2 July: 3

Pirani C (2004) State of Emergency, The Weekend Australian, 24-25 April: 21

Poland BD (1995) Transcription quality as an aspect in qualitative research, *Qualitative Inquiry*, 1(3): 290-310

Polanyi M (1962) *Personal knowledge towards a post-critical philosophy* 2, The University of Chicago Press, Chicago

Pollard R (2004a) No longer just beds and bedpans, The Sydney Morning Herald, 12-13 June: 28

Pollard R (2004b) Seeing red on health, The Sydney Morning Herald, 10-11 January: 21

Poole SR Schmitt BD Carruth T Peterson-Smith A & Slusarski M (1993) After-Hours telephone coverage: the application of an area-wide telephone triage and advice system for pediatric practices, *American Academy of Pediatrics*, 92(5): 670-9

Pratt R (1994) The challenge of specialisation: the Australian experience, *Collegian: Journal of the Royal College of Nursing*, 1(1): 6-13

Raper J, Davis BA & Scott L (1999) Patient satisfaction with emergency department triage nursing care: a multicenter study, *Journal of Nursing Care Quality*, 13(6): 11-24

Raper JL (1996) A cognitive approach to patient satisfaction with emergency department nursing care, *Journal of Nursing Care Quality*, 10(4): 48-58

Read S, George S, Westlake L, Williams B, Glasgow J & Potter T (1992) Piloting an evaluation of triage, *International Journal of Nursing Studies*, 29(3): 275-88

Richardson D (1994) President's message, *Emergency Medicine*, 6(2): 151-2

Robertson C (1997) Emergency triage, *British Medical Journal*, 314(7086): 1056

Robinson M (2001) Capsicum spray plan to improve nurses safety, The Sydney Morning Herald, 5 July: 5

Rock D & Pledge M (1991) Triage in Accident and Emergency Departments, *Professional Nurse*, 6(8): 463-5

Roger J (1979) Normal rubbish: deviant patients in casualty departments, *Sociology of Health & Illness*, 1(1): 90-107

Royal College of Nursing (2004) *History of the Royal College of Nursing & Emergency Nursing Association*, RCN, United Kingdom

Rubinstein D (2001) *Culture structure and agency,* SAGE Publications, London

Russell L, Gething L & Convery P (1997) *National review of specialist nurse education*, University of Sydney, Sydney

Rutty JE (1998) The nature of philosophy of science, theory and knowledge relating to nursing and professionalism, *Journal of Advanced Nursing*, 28(2): 243-50

Salk ED, Schriger DL, Hubbell KA & Schwartz BL (1998) Effects of visual cues, vital signs, and protocols on triage: a prospective randomized crossover trial, *Annals of Emergency Medicine*, 32(6): 655-64

Savage M & Worde A (1993) *Urban Sociology, Capitalism and Modernity,* MacMillan, London

Sbaih L (1995) To do or not to do: use of the scope of professional practice in accident and emergency work, *Accident & Emergency Nursing*, 3(1): 7-13

Sbaih L (1997a) Education the work of accident and emergency nurses: part 1. an introduction to the rules, *Accident & Emergency Nursing*, 5(1): 28-33

Sbaih L (1997b) Education the work of accident and emergency nurses: part 2. A & E maxims: making A & E work unique and special, *Accident & Emergency Nursing*, 5(2): 81-7

Sbaih L (2001) Shaping the future: reforming routine emergency nursing work, *Accident & Emergency Nursing*, 9(2): 266-73

Sbaih L (2002) Meanings of immediate: the practical use of the Patients Charter in the accident and emergency department, *Social Science & Medicine*, 54(1): 1345-55

Schull MJ, Szalai J, Schwartz B & Redelmeir DA (2001) The endangered safety net: establishing a measure of control, *Academic Emergency Medicine*, 8(11): 1037-43

Schwartz-Barcott D, Patterson BJ, Lusardi P & Farmer BC (2002) From practice to theory: tightening the link via three fieldwork strategies, *Journal of Advanced Nursing*, 39(3): 281-9

Scott J (2001) Status and role: structural aspects, in *International Encyclopedia of the Social & Behavioral Sciences*, Elsevier, Sydney, pp. 15095-8

Seaberg DC & Macleod BA (1998) Correlation between triage nurse and physician ordering of ED tests, *Journal of Emergency Nursing*, 16(1): 8-11

Sharp SF & Hope TL (2003) The professional ex-revisited cessation or continuation of a deviant career?, *Journal of Contemporary Ethnography*, 30(6): 678-703

Shields JE (1976) Making triage work: the experience of an urban emergency department, *Journal of Emergency Nursing*, 2 (4):37-41

Snow DA (2001) Interactionism: symbolic, in *International Encyclopedia of the Social & Behavioral Sciences*, Elsevier, Sydney, pp. 7695-7

Sparkes A (2001) Myth 94: qualitative health research will agree about validity, *Qualitative Health Research*, 11(4): 538-52

Standen P (1998) Managing triage with uniformity and individualised care - is it possible?, *Australian Emergency Nursing Journal*, 1(5): 8-10

Stewart A (1998) *The ethnographer's method,* SAGE Publications, London

Stock L, Bradley G, Lewis R, Baker D, Sipsey J & Stevens C (1994) Patients who leave emergency departments without being seen by a physician: magnitude of the problem in Los Angeles County, *Annals of Emergency Medicine*, 23(2): 294-8

Sweeney NM (1994) A concept analysis of personal knowledge: application to nursing education, *Journal of Advanced Nursing*, 20(5): 917-24

Tambimuttu T, Hawley R & Marshall A (2002) Nurse-initiated x-ray of isolated limb fractures in the emergency department: research outcomes and future directions, *Australian Critical Care*, 15(3): 119-22

Tanabe P & Buschmann M (2000) Emergency nurses' knowledge of pain management principles, *Journal of Emergency Nursing*, 26(4): 299-305

Teutsch D (2003) New-style nurses ease pressure in packed hospitals, The Sun-Herald, 19 January: 37

Tham G (2003) Ethnography, in Schneider Z, Elliot D, Lobiondo-Wood & Haber (eds.) *Nursing Research methods, critical appraisal and utilisation 2*, Elsevier Australia, Sydney

The College of Nursing (2003) *Student Guide and General Course Regulation 8,* The College of Nursing, Sydney

Thiele JE, Baldwin JH, Hyde RS, Sloan B & Strandquist GA (1986) An investigation of decision theory: what are the effects of teaching cue recognition?, *Journal of Nursing Education*, 25(8): 319-25

Thompson SJ & Gifford SM (2000) Trying to keep a balance: the meaning of health and diabetes in an urban Aboriginal community, *Social Science & Medicine*, 51(10): 1457-72

Totaro P (2003a) Carr hospital plan promises instant care, The Sydney Morning Herald, 8-9 March: 10

Totaro P (2003b) Seven months to fix a fatal error, note reveals, The Sydney Morning Herald, 17 December: 2

Tye C (1997) The emergency nurse practitioner in major accident and emergency departments: professional issues and the research agenda, *Journal of Advanced Nursing*, 26(2): 364-70

Van Maanen J (1988) *Tales of the field,* The University of Chicago Press, Chicago

VandeVusse L (1999) Decision making in analyses of women's birth stories, *Birth*, 26(1): 43-9

Vassy C (2001) Categorisation and micro-rationing: access to care in a French emergency department, *Sociology of Health & Illness*, 23(5): 615-32

Waeckerle JR (1991) Disaster planning and response, *New England Journal of Medicine*, 324(12): 815-21

Wallace N (2004a) Family sues over suicide, The Sydney Morning Herald, 7 April: 5

Wallace N (2004b) Hospitals on notice after payout for suicide, The Sydney Morning Herald, 29 April: 5

Wallace N (2004c) Suicide victim left to wait for three hours was failed by hospital system, court told, The Sydney Morning Herald, 14 April: 6

Washington D, Stevens C, Shekelle P, Baker D, Fink A & Brook R (2000) Safely directing patients to appropriate levels of care: guidelines-driven triage in the emergency service, *Annals of Emergency Medicine*, 36(1): 15-22

Whitby S, Ieraci S, Johnson D & Monhsin M (1999) *Analysis of the process of triage: the use and outcomes of the National Triage Scale*, Commonwealth Ambulatory Care Reform, Sydney

Whittemore R, Chase S & Mandle CL (2001) Validity in qualitative research, *Qualitative Health Research*, 11(4): 522-37

Whyte S (2000a) Specialist nurses in Australia: the ICN and international regulation, *Journal of Professional Nursing*, 16(4): 210-18

Whyte S (2000b) The specialist nurse: a classification system, *Contemporary Nurse*, 9(1): 6-15

Whyte S & Sellick K (2000) Specialisation in nursing, *Collegian: Journal of the Royal College of Nursing*, 7(1): 23-31

Wicks D (1999) *Nurses and doctors at work: rethinking professional boundaries,* Allen and Unwin, Sydney

Williams J & Sen A (2000) Transcribing in triage: the Wrexham experience, *Accident & Emergency Nursing*, 8(4): 241-8

Williams RM (1996) Triage and emergency department Services, *Annals of Emergency Medicine*, 27(4): 506-8

Wolcott HF (1990) Making a study "more ethnographic", *Journal of Contemporary Ethnography*, 19(1): 44-72

Wolcott HF (1994) *Transforming qualitative data,* SAGE Publications, USA

Wolcott HF (1999) *Ethnography a way of seeing,* SAGE Publications, London

Wong T, Lee K, Lau C, Fu Y & Fung K (1997) A protocol helps emergency triage nurses to request x-rays, *Emergency Medicine*, 9(4): 307-10

Wong TW, Tseng G & Lee LW (1994) Report of an audit of nurse triage in an accident and emergency department, *Journal of Accident and Emergency Medicine*, 11(2): 91-5

Wuerz R, Travers D, Gilboy N, Eitel DR, Rosenau A & Yazhari R (2001) Implementation and refinement of the Emergency Severity Index, *Academic Emergency Medicine*, 8(2): 170-5

Yates DW (1987) Nurse triage in the accident and emergency department, *Journal of the Royal Society of Health*, 107(4): 153-4

APPENDICES

APPENDIX 1: CNS AWARD CLASSIFICATION

NSW HEALTH DEPARTMENT

CIRCULAR

File No	A16092
Circular No	97/20
Issued	28th FEBRUARY 1997
Contact	SIM MEAD 9391 9375

PUBLIC HOSPITAL NURSES' (STATE) AWARD
CLINICAL NURSE SPECIALIST CLASSIFICATION

INTRODUCTION

As part of the negotiations relating to the Public Hospital Nurses' (State) Award the Health Department and the NSW Nurses' Association have undertaken a joint review of the clinical nurse specialist classification. This review encompassed both the role of the clinical nurse specialist and the level of remuneration.

Input into the review process was sought from both clinical nurse specialists and health service administrators.

Overall there was a high level of support for the classification and a recognition of the valuable input of clinical nurse specialists in the delivery of quality health services throughout New South Wales.

The review found that while the proportion of clinical nurse specialists in the registered nurse workforce remained quite consistent between 1988 and 1996 there was not a consistent spread of the classification throughout all speciality areas or between rural health services.

The outcome of the review has been a decision to maintain the classification essentially as determined in 1986 as a classification personal to the individual which is determined at the local health service level but to update and clarify the role description to reflect contemporary practice.

Distributed in accordance with circular list(s):

A	18	B	C	17	D	E			
F	5	G	H		I	J	16		
K		L	M		N	7	P	Q	3

73 Miller St North Sydney NSW 2060
Locked Mail Bag 961 North Sydney NSW 2059
Telephone (02) 9391 9000 Facsimile (02) 9391 9101

1 AWARD DEFINITION

The Award definition has been modified to provide more flexibility to meet the current requirements of the health system and to ensure equitable access to the classification.

"Clinical nurse specialist means:

A registered nurse with relevant post-basic qualifications and twelve months experience working in the clinical area of his/her specified post-basic qualification;

or

a minimum of four years post-basic registration experience including three years experience in the relevant specialist field;

and

who satisfies the local criteria".

2. ROLE OF THE CLINICAL NURSE SPECIALIST

2.1 The focus of the clinical nurse specialist role is the delivery of proficient nursing care. The clinical nurse specialist acts as a clinical resource and leader in the clinical speciality. The classification is unit/ward/clinical service based and the clinical nurse specialist is identified as a 'core person' in the specialty area of practice. Whilst an experienced registered nurse may also perform the same functions, the clinical nurse specialist is identified as performing them at an advanced level competently and consistently.

2.2 The clinical nurse specialist demonstrates a commitment to continuing education and professional development, where necessary in the employees' own time.

2.3 In fulfilling the role, the clinical nurse specialist performs the following functions:

- Delivers competent nursing care in complex situations;
- Acts as a resource person in the clinical specialty and within the ward/unit/clinical service;
- Provides leadership in the clinical situation and in professional relationships;
- Co-ordinates clinical care;
- Acts as a role model and contributes to the development of self and colleagues;
- Supports less experienced staff and acts as preceptor for new staff;
- Contributes to the on-going review of clinical practice/protocols/policies;
- Contributes to the ongoing development of the specialty.

2.4 These functions are underpinned by the following knowledge, skills and attributes:

- Sound and contemporary knowledge of clinical specialty;
- Reflective practice;
- Ability to contribute to and utilise research;
- Well developed clinical skills relevant to the specialty;
- Ability to make complex and informed decisions in the clinical setting

- Ability to assess own professional competence, identify limitations and practice within same;
- Consult colleagues and other health care professionals appropriately;
- Comprehensive knowledge of legislation and common law affecting nursing practice;
- Effective communication skills;
- Leadership skills;
- Ability to respond to changing situations;
- Ability to share knowledge and skills;
- Engages in activities to enhance own practice and that of colleagues.

3. LOCAL IMPLEMENTATION

3.1 Any clinical nurse specialist criteria developed locally should be consistent with the role statements set out above.

3.2 In general, the clinical nurse specialist will be working within a discrete nursing specialty. However, this does not preclude registered nurses working in slowstream, general areas, community health, remote and rural Areas from achieving clinical nurse specialist status, based on performance of the functions of the role at an advanced level.

3.3 Usually, the nurse must be permanently rostered to a nursing specialty area to qualify for clinical nurse specialist status. An exception is a registered nurse who is part of a staffing system requiring clinical nurses to rotate through units on a regular basis and who demonstrates performance of broad general clinical skills together with generic clinical nurse specialist functions competently and consistently at an advanced level.

3.4 The overriding principle is that the nurse functions as and is seen by the nursing management of the hospital or health service as a clinical resource for the nursing service and is a source of expert nursing knowledge. This means that, when considering the nurses who may be clinical nurse specialists, the following should be borne in mind:-

(a) The clinical nurse specialist must be demonstrably fulfilling a higher skilled and more demanding role than would generally be expected of a registered nurse with 8 years experience in a diversity of areas.

(b) The fact that a nurse practices his or her profession in a narrow so called "specialised" field does not necessarily make him/her a clinical nurse specialist.

(c) The fact that a nurse practices "new" skills or highly technical skills does not necessarily make that nurse a clinical nurse specialist. Care needs to be taken to ensure that the practise of new skills or the performance of any other particular task or a class of tasks may merely reflect changes occurring generally to all levels of nursing care and treatment which is a general change in the overall standard of nursing. These general changes to nursing care and standards do not qualify an employee to be paid as a clinical nurse specialist.

(d) The fact that a nurse may be able to undertake and perform some tasks better than other nurses or that they may be considered to be "all rounders" and therefore able to undertake all tasks competently does not necessarily justify the specialist status.

MANAGEMENT OF CLINICAL NURSE SPECIALIST CLASSIFICATIONS

In the development of local policies for the management of clinical nurse specialist classification the following should be considered:-

(a) Where a registered nurse demonstrates that she/he meets the Award criteria and fulfills the local guidelines, she/he is entitled to clinical nurse specialist grading.

(b) Clinical nurse specialist status should not be automatically affected by periods of paid or unpaid leave.

(c) Where a registered nurse with clinical nurse specialist status transfers from an "equivalent" service prior performance should be given reasonable consideration when evaluating for clinical nurse specialist classification rather than applying a mandatory qualifying period.

(d) Where a service develops assessment criteria which involves performance of mandatory functions those functions should be capable of being performed in normal working hours.

(e) The methodology of evaluation and ongoing management of performance of clinical nurse specialists should be consistent with that used for other clinical classifications. e.g. type of assessment tools, management of unsatisfactory performance.

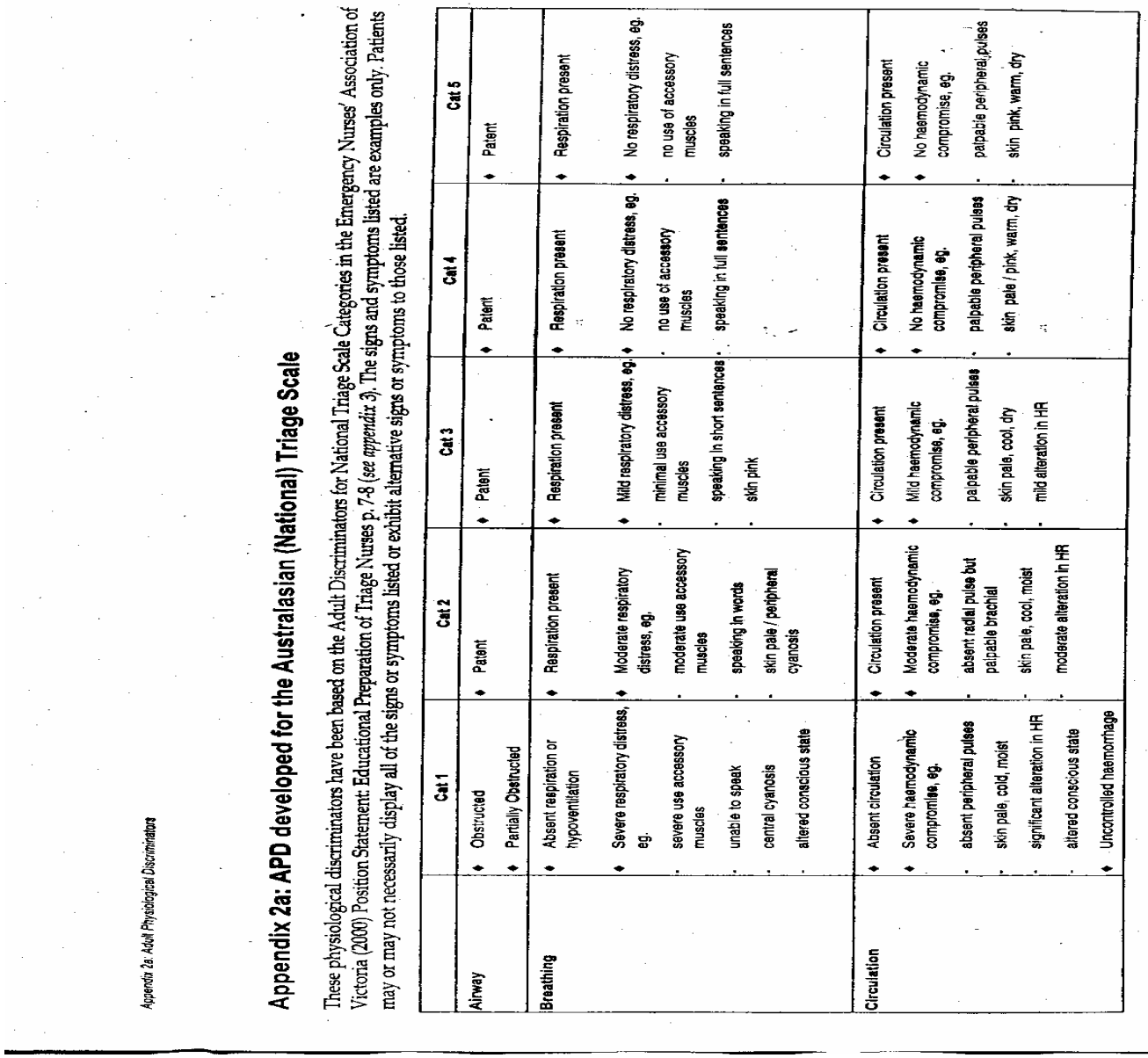
(f) Any disputes relating to grading as a clinical nurse specialist should be dealt with in accordance with policies in place for grievances and/or dispute resolution.

5. FINANCIAL IMPLICATIONS

Any costs arising from the implementation of this Circular are to be met from existing budgets without recourse to the Department for supplementation.

Michael Reid
Acting Director-General

APPENDIX 2: AN EXAMPLE OF AN ATS GUIDELINE



Appendix 2a: Adult Physiological Discriminators

Appendix 2a: APD developed for the Australasian (National) Triage Scale

These physiological discriminators have been based on the Adult Discriminators for National Triage Scale Categories in the Emergency Nurses' Association of Victoria (2000) Position Statement: Educational Preparation of Triage Nurses p. 7-8 (*see appendix 3*). The signs and symptoms listed are examples only. Patients may or may not necessarily display all of the signs or symptoms listed or exhibit alternative signs or symptoms to those listed.

	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Airway	♦ Obstructed ♦ Partially Obstructed	♦ Patent	♦ Patent	♦ Patent	♦ Patent
Breathing	♦ Absent respiration or hypoventilation ♦ Severe respiratory distress, eg. - severe use accessory muscles - unable to speak - central cyanosis - altered conscious state	♦ Respiration present ♦ Moderate respiratory distress, eg. - moderate use accessory muscles - speaking in words - skin pale / peripheral cyanosis	♦ Respiration present ♦ Mild respiratory distress, eg. - minimal use accessory muscles - speaking in short sentences - skin pink	♦ Respiration present ♦ No respiratory distress, eg. - no use of accessory muscles - speaking in full sentences	♦ Respiration present ♦ No respiratory distress, eg. - no use of accessory muscles - speaking in full sentences
Circulation	♦ Absent circulation ♦ Severe haemodynamic compromise, eg. - absent peripheral pulses - skin pale, cold, moist - significant alteration in HR - altered conscious state ♦ Uncontrolled haemorrhage	♦ Circulation present ♦ Moderate haemodynamic compromise, eg. - absent radial pulse but palpable brachial - skin pale, cool, moist - moderate alteration in HR	♦ Circulation present ♦ Mild haemodynamic compromise, eg. - palpable peripheral pulses - skin pale, cool, dry - mild alteration in HR	♦ Circulation present ♦ No haemodynamic compromise, eg. - palpable peripheral pulses - skin pale / pink, warm, dry	♦ Circulation present ♦ No haemodynamic compromise, eg. - palpable peripheral pulses - skin pink, warm, dry

An example from the Guidelines for Triage Education and Practice (Victorian Department of Health 2001).

APPENDIX 3: THE NSW TRIAGE QUESTIONNAIRE

TRIAGE NURSE QUESTIONNAIRE

DEMOGRAPHICS: Please circle or tick answers as appropriate

Do not write in this column

1. ☐ Female ☐ Male 1_____

2. Age_____ 2_____

3. What is your position?
☐ RN ☐ CNS ☐ CNC ☐ NUM ☐ Assistant in nursing
☐ Enrolled Nurse ☐ Nurse Educator / Clinical nurse educator 3_____

4. How many years have you been an emergency nurse?

☐ < 1 year ☐ 1-2 years ☐ 2-3 years ☐ 3-4 years ☐ 4-5 years
☐ 5-10 years ☐ 11-19 years ☐ 20 years ☐ >20 years 4_____

5. What qualifications applicable to emergency nursing do you have?

☐ none ☐ emergency certificate ☐ postgraduate degree
☐ acute care certificate ☐ intensive care certificate 5_____
☐ critical care certificate ☐ TNCC certificate
☐ other_____

6. How long have you been working in the role of triage?

☐ < 1 year ☐ 1-2 years ☐ 2-3 years ☐ 4-5 years ☐ 6-10 year ☐ >10years 6_____

7. How much emergency experience did you have before commencing the triage role?

☐ <3 months ☐ 3-6 months ☐ 7-12 months ☐ 13-18 months 7_____
☐ >19mths -2 years ☐ >2 years ☐ other_____

8. Please circle the level of anxiety that you experienced when you first started to practice as the triage nurse in your department.

None | mildly anxious | moderately anxious | very anxious | extremely anxious 8_____

9. Which of the following would best describe your working environment?

☐ Rural hospital ☐ Major regional hospital ☐ Major regional Base hospital
☐ Major Tertiary Referral hospital ☐ Urban district hospital ☐ Primary care/ remote 9_____

10. Which of the following constitutes your emergency department (ED) patient population?

☐ adults ☐ children ☐ both ☐ occasionally children 10_____

11. How many nursing staff do you have per shift in your department?

a Morning shift	☐ 1-2	☐ 3-4	☐ 5-7	☐ 8-10	☐ 11-13	11a____
b Evening shift	☐ 1-2	☐ 3-4	☐ 5-7	☐ 8-10	☐ 11-13	11b____
c Night shift	☐ 1-2	☐ 3-4	☐ 5-7	☐ 8-10	☐ 11-13	11c____

12. How many medical staff do you have per shift in your department?

a Morning shift	☐ none	☐ 1-2	☐ 3-4	☐ 5-7	☐ 8-10	☐ >10	12a____
b Evening shift	☐ none	☐ 1-2	☐ 3-4	☐ 5-7	☐ 8-10	☐ >10	12b____
c Night shift	☐ none	☐ 1-2	☐ 3-4	☐ 5-7	☐ 8-10	☐ >10	12c____

12d____

d On call medical staff only ☐ morning shift ☐ Evening shift ☐ Night shift

13. Is a nurse allocated to the triage position each shift?

☐ Yes ☐ No 13____

PROFESSIONAL

14. Triage should only be performed by a registered nurse with appropriate emergency qualifications.

☐ strongly agree ☐ agree ☐ disagree ☐ strongly disagree 14____

15. Should the triage role encompass more than a brief assessment and the allocation of a triage code? For example diagnostic tests :X-rays.

☐ Yes ☐ No 15____

16. If you answered yes to Q15 what should the role encompass? **Please tick one or more answers as appropriate.**

☐ ordering x-rays ☐ pain relief ☐ venipuncture ☐ minor wound repair / review 16____
☐ patient education ☐ occasional observations ☐ plaster review
☐ other_____

17. Do you believe the triage nurse, should ask a minimum set of predetermined questions, other than personal patient details?

☐ Yes ☐ No 17____

18. If you answered yes to **Q17** what do you consider to be the most important questions to be asked?

_____
_____
_____ 18____

19. Triage should be a compulsory role for all nurses working in the emergency department.

☐ strongly agree ☐ agree ☐ disagree ☐ strongly disagree 19____

20. How much emergency experience should be acquired before commencing the triage role?

☐ none ☐ <3 months ☐ 3-6 months ☐ 7-12 months ☐ 13-18 months 20____
☐ >19mths -2 years ☐ >2 years ☐ other_____

EDUCATION

21. How important is an education / orientation program for nurses undertaking the triage role?

☐ Not important ☐ Of some importance ☐ Important ☐ Very important 21____

22. Did you participate in a formal education program related to triage in your ED?

☐ Yes ☐ No 22____

23. If you answered yes to Q22 how long was this program?

☐ 1/2 day ☐ 1 day ☐ 2 days ☐ 3 days ☐ 4 days
☐ 5 days ☐ 2 weeks ☐ 3-4 weeks ☐ other_____ 23____

24. What were the major components of the program?

_____ 24____
_____
_____

25. Who orientated you to the triage role? **Please tick one or more answers as appropriate.**

☐ RN ☐ CNS ☐ CNC ☐ Enrolled nurse ☐ Clerical staff ☐ NUM
☐ NE ☐ Medical officer ☐ Ambulance staff ☐ other_____ 25____

26. Have you attended other courses related to triage?

☐ Yes ☐ No specify _____ 26_____

27. Do you consider you were adequately prepared for the triage role?

☐ Yes ☐ No 27____

PRACTICE

28a____
28b____
28c____
28d____
28e____
28f____
28g____
28h____
28i____
28J____
28k____
28l____

28. Number the factors that influence your decision-making concerning the allocation of triage codes. Please rank **1 most important to 11 least important.**

☐ history ☐ mechanism of injury ☐ pain ☐ age
☐ vital signs ☐ duration of event ☐ National Triage Scale ☐ presenting problem
☐ gender ☐ behavior ☐ appearance
☐ other_____

29. Please indicate which of the following, if any, results in an adjustment of your triage code? **Please tick one or more of the following answers as appropriate.**

☐ department activity ☐ nursing mix ☐ bench marks ☐ risk to staff
☐ risk to patient ☐ age of patient ☐ workload ☐ staff mix
☐ medical cover ☐ funding 29____
☐ other _____

30. Which of the following clinical equipment or resources do you have available at triage for making your decisions ? **Please tick one or more answers as appropriate.**

☐ sphygmomanometer ☐ pulse oximetry ☐ thermometer ☐ spirometry / peakflow
☐ BSL ☐ urinalysis ☐ ECG ☐ PC / electronic media
☐ policy manuals ☐ none ☐ other_____ 30____

31. Does the triage nurse initiate treatment at triage within your ED?

☐ Yes ☐ No 31____

32. If you answered yes to **Q31** please indicate the type/s of treatment or investigations you initiate.

☐ first aid ☐ referrals ☐ pain relief ☐ urinalysis ☐ Doppler
☐ ECG ☐ suturing ☐ plastering ☐ ordering x-rays ☐ BSL
☐ DOCS referrals ☐ MSU ☐ BHCG ☐ venipuncture/ pathology
☐ dressings ☐ wound management ☐ basic life support
☐ specimen collection 32____
☐ other_____

33. Does the triage nurse in your ED have other responsibilities in addition to triage? **If yes, please tick one or more of the following answers as appropriate.**

☐ bed management ☐ patient management ☐ shift in charge
☐ N/A ☐ other_____ 33____

34. What do you believe should be the major components of the triage role?

_____
_____
_____ 34____

35. What creates delays at triage? **Please tick one or more answers as appropriate**

☐ ESL patient ☐ patient load ☐ inquiries
☐ lack hospital resources ☐ lack of medical staff ☐ lack of nursing Staff
☐ on call MO response ☐ lack of / faulty equipment ☐ assessment
☐ patient age- elderly ☐ patient age-young ☐ poor historian
☐ computer entry ☐ diagnostic tests ☐ no delays 35____
☐ other_____

36. As the triage nurse do you complete patient's treatment and discharge patients from triage?

☐ never ☐ sometimes (1-2/week) ☐ frequently (3-5/week) ☐ every shift 36____

37. If applicable list the types of patients you discharge from triage For example: first aid

_____
_____
_____ 37____

38. What should the triage nurse document? **Please tick one or more answers as appropriate.**

☐ history ☐ physical assessment ☐ vital signs (Bp HR Temp)
☐ neurological assessment ☐ limb assessment ☐ pain assessment 38____
☐ other_____

39. If EDIS or another computer information system has been implemented within your department, has it impacted on the triage process?

☐ Yes ☐ No ☐ Not applicable 39____

40. If you answered yes to **Q39** Please explain how the computer information system has impacted on the triage process?

40____

41. Do you have criteria in place for measuring triage-nursing outcomes?

☐ Yes ☐ No 41____

If yes please explain

POLICY & PROTOCOLS

42. Have the National Triage Scale Guidelines (NTS) been implemented in your ED? **If no please go to Q50.**

☐ Yes ☐ No 42____

43. Please circle the response that best represents the NTS impact on your decision making process.

not at all	rarely	sometimes	most decisions	all triage decisions

43____

44. Do you have any problems with the NTS?

☐ Yes ☐ No 44____

45. If you answered yes to **Q 44** please outline the problems.

45____

46. Does your department have triage protocols in addition to the NTS?

☐ Yes ☐ No ☐ Unknown 46____

47. If you answered yes to **Q46 please explain.**

47____

48. Does your department have any fast tracking policies to accelerate patient management other than the NTS?

☐ Yes ☐ No ☐ Unknown 48____

49. If you answered yes to **Q48** please list or attach the type of fast tracking policies in your ED. 49____

50. If your department does not use the NTS Guidelines what do you use? 50____

If you have any additional comments they would be welcome.

Thank you for your time and effort in completing this questionnaire.

Margaret Fry RN CITN BaSc M.Ed Ph.D candidate USYD
Emergency and Trauma Services Clinical Nurse Consultant
St George Hospital 2217Gray Street Kogarah

APPENDIX 4: STUDY GUIDELINE PROVIDED TO TRIAGE NURSES

The University of Sydney

Faculty of Nursing
DEPARTMENT OF CLINICAL NURSING

Postal Address: **Faculty of Nursing, MO2**
University of Sydney NSW 2006

Phone: (02) 9351 0627
Fax: (02) 9351 0654

RESEARCH STUDY INTO THE PROCESS OF TRIAGE NURSING IN NSW PUBLIC HOSPITAL EMERGENCY DEPARTMENTS

INFORMATION FOR PARTICIPANTS

You are invited to take part in a research study into the process of triage nursing in NSW Public Hospital emergency departments. The objectives are to investigate triage processes and to identify how the role may vary in different types of emergency departments, to examine the influences which may impact on triage decision-making and how this may contribute to the allocation of patient triage codes. The study is being conducted by Margaret Fry, Clinical Nurse Consultant, St George Hospital as part of her doctoral program and is being supervised by Dr Gayle Burr, Senior Lecturer University of Sydney.

If you agree to participate in the study, you may be asked to complete and return the Triage Questionnaire or be involved in a focus group interview. If you participate in the focus group interview this will involve between 5 and 8 triage nurses. These interviews will be conducted over a period of one hour at a time convenient to the participants. They will involve talking to you about aspects of the triage process and clinical decision-making at triage and the sessions will be audiotaped. Participant observation will involve an unobtrusive presence during the process of triage in the emergency department and discussion of the outcomes with the nurse involved.

All aspects of the study, including the results, will be strictly confidential and only the investigators named above will have access to the information on participants. A report of the study may be submitted for publication, but individual participants and / or institutions will not be identifiable in such a report.

While we intend that this research study is to further medical and nursing knowledge and may improve the understanding of the triage process and clinical decision-making in the future, it may not be of direct benefit to you.

Participation in this study is entirely voluntary: you are in no way obliged to participate and if you do participate – you can withdraw at any time. Whatever your decision, please be assured that it will not affect your relationship with the hospital or staff.

When you read this information Margaret Fry will, if you wish, discuss this further with you and answer any questions you may have. If you would like to know more at this stage, please feel free to contact Margaret Fry Clinical Nurse Consultant on telephone (02) 93501650 or by Email frym@sesahs.nsw.gov.au or Dr Gayle Burr, Senior Lecturer, Department of Clinical Nursing, Sydney University telephone number is (02) 9351 0631. This information sheet is yours to keep.

The Ethics Committee of the University of Sydney has approved this study. Any person with concerns or complaints about the conduct of a research study can contact the Manager of Ethics and Biosafety Administration, University of Sydney on (02) 9351 4811.

1 of 1

APPENDIX 5: ETHICAL APPROVAL LETTERS

HUMAN ETHICS COMMITTEE
The University of Sydney
Room K4.01 Main Quad A14
Sydney 2006
Tel: (02) 9351.4474 Fax: (02) 9351.4812 E-mail:human.ethics@reschols.usyd.edu.au

COPY

Dr G Burr
Department of Clinical Nursing
M02

30 November 1999

Dear Dr Burr

Title: *An analysis of the triage process as it relates to emergency nursing practice in NSW (Stage 1)*

Ref No: *99/12/11*

I am pleased to inform you that the Human Ethics Committee at its meeting on 30 November 1999 approved Stage 1 of your protocol on the above study. Stage 2 would be considered when the focus group questions had been developed and submitted for review, and approval was obtained from the hospitals involved in this phase of the study. Please note that the approved protocol is in accordance with the original protocol submission.

In order to comply with the National Health and Medical Research Council guidelines, and in line with the Human Ethics Committee requirements the Chief Investigator's responsibility is to ensure that:

(1) The individual researcher's protocol complies with the final and Committee approved protocol.
(2) Modifications to the protocol cannot proceed until such approval is obtained in writing.
(3) The confidentiality and anonymity of all research subjects is maintained at all times, except as required by law.
(4) All research subjects are provided with a Subject Information Sheet and Consent Form.
(5) The Subject Information Sheet and Consent Form be on University of Sydney letterhead and include the full title of the research project and telephone contacts for the researchers.
(6) The following statement appears on the Subject Information Sheet:
Any person with concerns or complaints about the conduct of a research study can contact the Manager of Ethics and Biosafety Administration, University of Sydney, on (02) 9351 4811.
(7) The standard University policy concerning storage of data should be followed. While temporary storage of audiotapes at the researcher's home or an off-campus site is acceptable during the active transcription phase of the project, permanent storage should be at a secure, University controlled site for a minimum of five years.
(8) A progress report is provided by the end of each year. Failure to do so will lead to withdrawal of the approval of the research protocol and re-application to the Committee must occur before recommencing.
(9) A report and a copy of the published material is provided at the end of the project.

Yours sincerely

Professor Barry Baker
Chairman
Human Ethics Committee

cc. *Ms M Fry, 34 Mary St, Leichardt 2040*

HUMAN ETHICS COMMITTEE
The University of Sydney
Room K4.01 Main Quad A14
Sydney 2006
Tel: (02) 9351.4474 Fax: (02) 9351.4812 E-mail: human.ethics@reschols.usyd.edu.au

Dr G Burr
Department of Clinical Nursing
M02

23 November 2000

Dear Dr Burr

Title: ***An analysis of the triage process as it relates to emergency nursing practice in NSW (Stage 2)***

Ref No: ***99/12/11***

Thank you for your undated correspondence which was considered at the University of Sydney Ethics Committee meeting held on 31 October 2000. After considering your request to conduct additional procedures/ minor variations relating to the above protocol, it was the Committee's opinion that there were no ethical objections to this work being carried out, and therefore recommends approval to proceed.

The following variation was approved:

- Commencement of Stage 2 of the study, that is focus groups and participant observation involving triage nurses.

This additional information will be filed with your original application.

In order to comply with the National Health and Medical Research Council guidelines, and in line with the Human Ethics Committee requirements the Chief Investigator's responsibility is to ensure that:

(1) The individual researcher's protocol complies with the final and Committee approved protocol.
(2) Modifications to the protocol cannot proceed until such approval is obtained in writing.
(3) The confidentiality and anonymity of all research subjects is maintained at all times, except as required by law.
(4) All research subjects are provided with a Subject Information Sheet and Consent Form.
(5) The Subject Information Sheet and Consent Form be on University of Sydney letterhead and include the full title of the research project and telephone contacts for the researchers.
(6) The following statement appears on the Subject Information Sheet:
Any person with concerns or complaints about the conduct of a research study can contact the Manager of Ethics and Biosafety Administration, University of Sydney, on (02) 9351 4811.
(7) The standard University policy concerning storage of data should be followed. While temporary storage of audiotapes at the researcher's home or an off-campus site is acceptable during the active transcription phase of the project, permanent storage should be at a secure, University controlled site for a minimum of five years.
(8) A progress report is provided by the end of each year. Failure to do so will lead to withdrawal of the approval of the research protocol and re-application to the Committee must occur before recommencing.
(9) A report and a copy of the published material is provided at the end of the project.

Yours sincerely

Professor Barry Baker
Chairman
Human Ethics Committee

cc. *Ms M Fry, Clinical Nurse Consultant, Emergency Department, St George Hospital, Gray St, Kogarah NSW 2217*

The University of Sydney

NSW 2006 Australia

Human Research Ethics Committee
www.usyd.edu.au/ethics/human/
Manager:
Mrs Gail Briody
Telephone: (02) 9351 4811
(02) 9351 4474
Facsimile (02) 9351 6706
Email: gbriody@mail.usyd.edu.au
Rooms L4.14 & L4.13 Main Quadrangle A14

Human Secretariat
Telephone: (02) 9036 9309
(02) 9036 9308
Facsimile: (02) 9036 9310
Email: t.todd@reschols.usyd.edu.au

23 February 2004

Professor M C Stainton
Department of Family and Community Nursing
Building M02
The University of Sydney

Dear Professor Stainton

Title: ***An analysis of the triage process as it relates to emergency nursing practice in NSW***

Ref No. ***99/12/11***

The Executive Sub-Committee at its meeting on 18 February 2004 considered your correspondence of 06 February 2004 concerning your modification. After considering your request to modify your application, it was the Executive Sub-Committee's opinion that there were no ethical objections to this work being carried out and therefore recommends approval to proceed.

The following variations were approved:

- The change of Supervisor to Professor M Colleen Stainton
- Addition of Phase 3 in the study

In order to comply with the *National Statement on Ethical Conduct In Research Involving Humans*, and in line with the Human Research Ethics Committee requirements the Chief Investigator's responsibility is to ensure that:

(1) The individual researcher's protocol complies with the final and Committee approved protocol.
(2) Modifications to the protocol cannot proceed until such approval is obtained in writing.
(3) The confidentiality and anonymity of all research subjects is maintained at all times, except as required by law.
(4) All research subjects are provided with a Participant Information Sheet and Consent Form, unless otherwise agreed by the Committee.
(5) The Participant Information Sheet and Consent Form are to be on University of Sydney letterhead and include the full title of the research project and telephone contacts for the researchers, unless otherwise agreed by the Committee.
(6) The following statement must appear on the bottom of the Participant Information Sheet. ***Any person with concerns or complaints about the conduct of a research study can contact the Manager of Ethics Administration, University of Sydney, on (02) 9351 4811.***
(7) The standard University policy concerning storage of data and tapes should be followed. While temporary storage of data or tapes at the researcher's home or an off-campus site is acceptable during the active transcription phase of the project, permanent storage should be at a secure, University controlled site for a minimum of five years.
(8) A progress report should be provided by the end of each year. Failure to do so will lead to withdrawal of the approval of the research protocol and re-application to the Committee must occur before recommencing.
(9) A report and a copy of any published material should be provided at the completion of the Project.

Yours sincerely

Associate Professor Stewart Kellie
Chairman, Human Research Ethics Committee

cc: *Ms M Fry, 34 Mary St, LEICHARDT NSW 2040*

APPENDIX 6: PARTICIPANT CONSENT FORM

RESEARCH STUDY INTO THE PROCESS OF TRIAGE NURSING IN NSW EMERGENCY DEPARTMENTS

PARTICIPANT CONSENT FORM

I
… (name) of

… (address) have read

and understood the Information for Participants on the above named research

study and have discussed the study with… … … … … … … … … … … … … … …

I am aware of the procedures involved and I freely choose to participate in this study. I understand that I can withdraw at any time.

I also understand that the research study is strictly confidential.

I hereby agree to participate in this research study.

NAME: ………………………………………………..

SIGNATURE: ………………………………………………..

DATE: ………………………………………………..

NAME OF WITNESS: ……………………………………………….

SIGNATURE OF WITNESS: ……………………………………………….

APPENDIX 7: A SAMPLE OF ANOTHER'S VOICE

Field note where a decision had been made to leave the view of another out. This field note was written after an informal discussion with a senior emergency doctor.

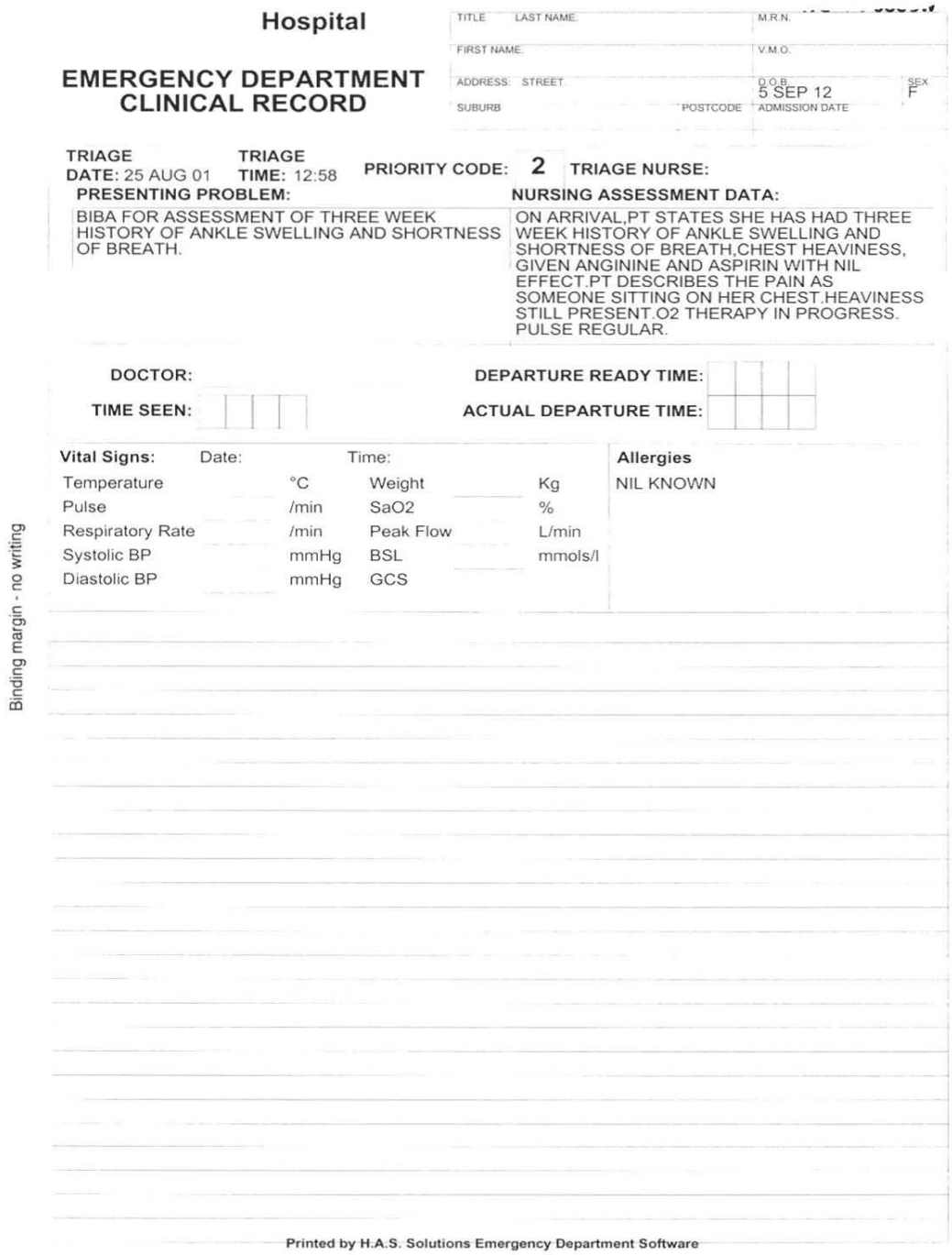
Hospital 4 Saturday 10am He tried to examine triage at his previous Hospital. He believed medical staff were the end consumers of the triage and that they should have the right to give feedback. I was told that it couldn't happen, it was a nursing role and we couldn't do it. Nurses have done a lot of the work and the time to intervention has commenced before we see them. This needs to change. We discuss the current computer system if you enter in the nurse field the patient drops off the waiting screen which means they can be lost in the system. The computer system and the benchmarks with the Department of Health need to change. He explains there isn't a problem with nurse's ones or twos. But lots of code 4 patients could be code 5. When he tried to give feedback to the triage nurses the nursing staff complained. He went on to explain giving feedback caused people to get upset and that the nursing unit manager told him if there were any issues to see her. I was told that the nurses control the role but I thought it was a fair thing to do. So I stopped saying anything. We went on to discuss about the different codes and he finished by saying that the doctors need to change the Department of Health benchmark system (Field note Hospital 4).

APPENDIX 8: INTERVIEW QUESTION GUIDELINE

1. Please tell me what you were thinking about while triaging the patient with chest pain?
2. What helps you to reach clinical decisions at triage?
3. What assisted you in making decisions at triage?
4. What patient factors influenced decision-making for you?
5. What non-clinical cue's most influenced the triage decisions for you?
6. Can you think of other factors, which assist you in clinical decision?
7. What makes triage hard?
8. Does the Australian Triage Scale impact on your decision making at triage?
9. How did you feel when you first commenced the role of triage?
10. Has your practice changed over time?

Ethics Approval
The University of Sydney
Human Ethics Committee
Ref No : 99/12/11

APPENDIX 9: AN EXAMPLE OF A TRIAGE ASSESSMENT FORM



Hospital

EMERGENCY DEPARTMENT CLINICAL RECORD

TITLE LAST NAME: M.R.N.
FIRST NAME: V.M.O.
ADDRESS: STREET: D.O.B. 5 SEP 12 SEX F
SUBURB POSTCODE ADMISSION DATE

TRIAGE DATE: 25 AUG 01 TRIAGE TIME: 12:58 PRIORITY CODE: 2 TRIAGE NURSE:

PRESENTING PROBLEM:
BIBA FOR ASSESSMENT OF THREE WEEK HISTORY OF ANKLE SWELLING AND SHORTNESS OF BREATH.

NURSING ASSESSMENT DATA:
ON ARRIVAL,PT STATES SHE HAS HAD THREE WEEK HISTORY OF ANKLE SWELLING AND SHORTNESS OF BREATH,CHEST HEAVINESS, GIVEN ANGININE AND ASPIRIN WITH NIL EFFECT.PT DESCRIBES THE PAIN AS SOMEONE SITTING ON HER CHEST.HEAVINESS STILL PRESENT.O2 THERAPY IN PROGRESS. PULSE REGULAR.

DOCTOR: DEPARTURE READY TIME:
TIME SEEN: ACTUAL DEPARTURE TIME:

Vital Signs:	Date:		Time:		Allergies
Temperature		°C	Weight	Kg	NIL KNOWN
Pulse		/min	SaO2	%	
Respiratory Rate		/min	Peak Flow	L/min	
Systolic BP		mmHg	BSL	mmols/l	
Diastolic BP		mmHg	GCS		

Printed by H.A.S. Solutions Emergency Department Software

Binding margin - no writing

Emergency Department triage/progress notes