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EMERGENCY NURSE NEW ZEALAND

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EMERGENCY NURSE NZ

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A WORD FROM THE EDITOR:

Happy New Year. Happy New Rooster.

Welcome to 2017 and I trust you have had some time off to enjoy the sun (rain, winds, snow even). You may have seen an article in the newspaper in January advocating changing the school holidays till later in the year as the summer seems to be better in Feb / March time. Bad idea I think, the sooner the kids are back at school and the beaches, roads are clear the better in my view!

2017 is election year and coincides with MECA negotiations as well – I think it is essential that grass roots members and their colleagues keep abreast of what is happening with the MECA negotiations and keep active, aware, alert and vote!

The NZNO Board of Directors election are in March / April this year and again I would encourage you to find out who is standing and vote – the BOD is responsible for the governance and overall supervision of the management and control of NZNO business. There are two general positions up for grabs and five candidates – again find out who these people are, and vote.

Here's to a 95% target of peace and tranquility in ED"s up and down the country in 2017

MICHAEL GERAGHTY
EDITOR | EMERGENCY NURSE NZ
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Letters to the Editor are welcome. Letters should be no more than 500 words, with no more than 5 references and no tables or figures.

EMERGENCY NURSE NZ

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SUBMISSION OF ARTICLES FOR PUBLICATION IN EMERGENCY NURSE NEW ZEALAND.

All articles submitted for publication should be presented electronically in Microsoft Word, and e-mailed to cennzjournal@gmail.com. Guidelines for the submission of articles to Emergency Nurse New Zealand were published in the March 2007 issue of the journal, or are available from the Journal Editor Michael Geraghty at: cennzjournal@gmail.com. Articles are peer reviewed, and we aim to advise authors of the outcome of the peer review process within six weeks of our receipt of the article

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Chairperson's Report

As this is my first report I thought a short introduction of myself may be useful.

Having grown up just outside of Whangarei I completed training as a Registered Comprehensive Nurse in the early 90's at the Te Tai Tokerau/ Northland Polytechnic. As one of the earlier Polytech Nurses we were affectionately sometimes known as Smurfs due to our lovely blue uniforms.

In my 20's I enjoyed the freedom to travel that a career in nursing can bring. This included a period in the old Auckland City Adult Emergency Department.

One of the great benefits of belonging to CENNZ is that it supports maintaining contacts around the country. Since the early 2000's I have been based in the Tauranga Hospital Emergency Department. During this time I have undertaken various roles within our E.D and am currently looking towards a future in advanced clinical practice.

I believe it takes a special person to be a nurse and a special type of nurse to be an emergency nurse. To work in our environment requires a unique blend of skill, stamina, compassion and teamwork. We are given the opportunity

"I believe it takes a special person to be a nurse and a special type of nurse to be an emergency nurse."

every day to make a difference for people across all spectrums of life presenting with some variation of health need.

There is a personal satisfaction when you know you have made a positive impact. However, I acknowledge that the realities of our practice environments can make our work lives a bumpy ride, where a good sense of humour often can help. Personally I have found emergency nursing a challenging yet very rewarding career pathway with an opportunity to learn new things every day.

Coming onto the CENNZ committee has really opened my eyes to the complex world of health related organisations outside our immediate workplaces. One of our key objectives is to engage and maintain relationships with key stakeholder groups that can influence our practice areas. Historically CENNZ developed a position statement on nursing staff requirements in ED's. CENNZ recognises that this is an important and difficult question to answer and is currently engaging with the national Safe Staffing Healthy Workplace Unit to see if combined project is possible.

It has been very exciting to see this year's conference team working through the early planning stages of the 26th CENNZ Conference. This year it will be in Queenstown hosted by a fantastic team of Emergency Nurses from across the Southern DHB. The website is not too far away and I am certain that October will come around very quickly, so start planning early if you are attending or thinking about submitting an abstract. This year will be another brilliant opportunity to hear about contemporary developments within our speciality as with developing professional networks, all within the fabulous Queenstown lakes district.

I would also like to thank Amanda Biggs-Hume who is leaving the CENNZ committee after 3 years. She has represented the Mid-Central region, effectively managed the busy membership portfolio and contributed to many other projects. We wish her well and look forward to working with the next Mid-Central representative.

Best Regards

RICK FORSTER

Chairperson

College of Emergency Nurses New Zealand

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A SOBERING READ:

THE PUBLIC HEALTH BURDEN OF ALCOHOL AND THE EFFECTIVENESS AND COST-EFFECTIVENESS OF ALCOHOL CONTROL POLICIES: AN EVIDENCE REVIEW.

"Reflecting three key influencers of alcohol consumption – price (affordability), ease of purchase (availability) and the social norms around its consumption (acceptability) – an extensive array of policies have been developed with the primary aim of reducing the public health burden of alcohol. The present review evaluates the effectiveness and cost-effectiveness of each of these policy approaches." *Source: Public Health England*.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/583047/alcohol_public_health_burden_evidence_review.pdf

ALCOHOL USE AND MOTIVATIONS FOR DRINKING AMONG TYPES OF YOUNG ADULT ILLICIT STIMULANT USERS

"Drinking among young adult users of amphetamine-type stimulants (ATS) during episodes of ecstasy and methamphetamine use is reported to have a number of possible functions, such as mitigating the unwanted effects of the drugs, enhancing intoxication and pleasure, and increasing drinking capacity.While there is evidence to suggest a high prevalence of risky drinking among users of ATS in Australia, little is known about how they combine their use of ATS with the consumption of alcohol or why they do so. This paper considers how ATS users consume alcohol during ecstasy and methamphetamine use, and also addresses alcohol abuse and dependence among low-risk and at-risk ATS users." *Source: Australian Institute of Criminology*.

http://aic.gov.au/media_library/publications/tandi_pdf/tandi515.pdf

THE FRONTLINE BATTLE: AN INQUIRY INTO THE IMPACT OF ALCOHOL ON EMERGENCY SERVICES BY THE ALL-PARTY PARLIAMENTARY GROUP ON ALCOHOL HARM

"The Frontline Battle is an inquiry by the All-Party Parliamentary Group on Alcohol Harm into the impact of alcohol on Emergency Services. The report reveals the full extent of the pressures and dangers of alcohol related problems placed on our Emergency Services discussing the impact on staff, the impact on service provisions and the effect on time and resources." *Source: Alcohol Concern*.

https://www.alcoholconcern.org.uk/Handlers/Download.ashx?IDMF=1ba9e142-7fa9-4dbf-a052-91de000813c5

LITERATURE REVIEW

CT SCANNING FOR SUSPECTED SCAPHOID FRACTURES IN THE EMERGENCY DEPARTMENT

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ABSTRACT

Wrist injuries and particularly suspected scaphoid fractures are a common presentation to the ED. Management is reliant on appropriate imaging and diagnosis and it is widely accepted that x-rays do not provide the necessary information to definitively treat the injury. This article reviews the contemporary literature on this topic.

KEY WORDS:

Scaphoid fracture, CT, MRI, X-ray.

INTRODUCTION

When patients present to the emergency department (ED) with a clinical exam that suggests a likely scaphoid fracture although subsequent x-rays show no fracture, they are diagnosed and treated as a suspected scaphoid fracture (SSF) (1). Treatment for a SSF usually involves immobilisation of the wrist in a cast (1-4) and review with follow-up x-rays in 10-14 days although treatment and protocols vary between facilities (2, 3, 5). Second-line imaging such as computed tomography (CT), magnetic resonance imaging (MRI) and bone scintigraphy (BS) have all shown to be useful in the diagnosis of scaphoid fractures. The purpose of this review is to ascertain if CT scanning is useful in the ED to help gain a definitive diagnosis for a SSF and to reduce unnecessary wrist immobilisation.

LITERATURE

The scaphoid is the most commonly fractured carpal bone and results predominantly from a 'fall onto an outstretched hand' (1, 6, 7). They are most likely to occur in the young active population with increased prevalence in males (6, 7). Between 82-89% of carpal fractures are scaphoid related (8) although it is difficult to estimate this figure due to the high diagnosis of SSFs versus confirmed fractures (6, 9).

Scaphoid fractures can be difficult to diagnose formally in the ED as x-rays have a low sensitivity with 15-25% of scaphoid fractures being missed on initial x-rays (9-11). Follow-up x-rays remain unsuitable for diagnosing scaphoid fractures even at six weeks post trauma with their sensitivity ranging between 42-79%, specificity 53-59% and accuracy 53-58% (12). Patients can therefore be either undertreated on the basis of these x-rays or over treated on the basis of clinical suspicion.

When scaphoid fractures are left untreated it can cause fracture displacement, delayed union, non-union or avascular necrosis (1, 7). The consequence of this can result in dysfunction, chronic pain and early degeneration of the wrist (7). Over-treating a SSF is also a concern as cast immobilisation can cause loss of temporary function, loss of productivity and earnings, and loss of recreational activity (9). Complications of cast immobilisation also include joint stiffness, muscle wasting, pressure sores and compartment syndrome (13). With a reasonable index of suspicion for a SSF, the longer term more debilitating risks if under treating this injury clearly outweigh the potential risks of immobilising the wrist.

Prevalence of true fractures among SSFs is 5-10% (6) indicating a large number of patients having unnecessary wrist immobilisation. Some studies discuss other fracture

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diagnoses seen on second-line imaging in patients with SSFs such as other carpal bone or distal radius fractures (10, 14-18). Unnecessary casting is documented to be as much as 50-70% in some studies (17-20). By making a definite fracture diagnosis early using second-line imaging, it would reduce the rate of fracture non-union as well as reducing unnecessary wrist immobilisation (21).

MRI is the gold standard imaging modality for SSFs although CT is more widely available and less costly (3, 22, 23). MRI takes approximately 30-40 minutes to perform and does not involve any radiation whereas a CT takes between 6-12 seconds to perform and involves some radiation (7). BS for imaging scaphoid fractures is expensive, more invasive, has a much higher radiation risk, and cannot be performed until 72 hours post injury (8, 24) and therefore is not an option for ED clinicians. Radiation is measured in millisievert (mSv) with background radiation ranging between 1.5 to 3.5 mSv per year depending on where you live, with an average of 2.5 mSv (World Nuclear Assocation, 2012). The radiation exposure for a CT wrist is 0.03 mSv which is less than half the radiation exposure when compared to a chest x-ray or a return flight from New York to London (26). Therefore, radiation from a CT of the wrist is negligible.

The American college of Radiology (2013) recommend MRI for second-line imaging for SSFs although suggest CT scanning if MRI is unavailable. The College of Emergency Medicine in the United Kingdom have similar recommendations although note that CT is more available in hospitals and that few EDs offer MRI facilities (28).

Many studies internationally have shown obvious inconsistencies between hospital protocols when managing SSFs, with many hospitals not having any protocols to follow (2, 3, 5). There is again inconsistency with second-line imaging between hospitals and this has some dependence on imaging available in each facility, if any at all (2, 3, 5). An international survey indicated CT as being the most common second-line imaging used in European hospitals for SSFs, BS was most commonly used in Australasia and MRI in American and Asia (5).

Second-line imaging can aid diagnosis and has shown good patient outcomes with less time in cast immobilisation and reduced loss of earnings (20, 29, 30). Yin et al. (30) found the most cost-effective imaging was immediate CT and immediate MRI versus follow-up x-rays or follow-up second-line imaging.

EVIDENCE

Twelve studies looking at CT scanning in patients with SSFs include eight prospective studies, two retrospective and two systematic reviews. The eight prospective studies had small sample sizes with varying study lengths (10, 11, 14-16, 18-20). Three of these studies solely focused on CT scanning (18-20), one used MRI to confirm results of CT (10), two compared CT and BS (11, 15), and two compared CT and MRI (14, 16).

The two retrospective studies did not compare CT to any other imaging such as MRI or follow-up x-rays (17, 31) and one study was of poor quality as it stated only positive outcomes without evidence to support findings (31). The other two were systematic reviews looking at CT, MRI and BS as imaging modalities for SSFs and the results of these have some overlapping of studies already mentioned (21, 32). The following is a list of recommendations and conclusions made from the 12 studies

- Six studies recommend early CT as being useful in the diagnosis of SSFs (10, 15, 17, 18, 20, 31).
- Two conclude that CT may be a useful imaging tool in the diagnosis of SSFs although state more study is needed to assess its diagnostic competency compared to MRI (19, 32).
- One compared BS to CT and could not confirm CT as being useful in the diagnosis of scaphoid fractures (11).
- Three strong pieces of evidence including a systematic review by Cochrane database all agree that CT and MRI have comparable diagnostic capabilities (14, 16, 21).

Timing of CT scanning varied between studies and was performed anywhere between day one and day 10 of the injury. The majority of the scanning was done in an outpatient clinic with the exception of a few studies where scanning was performed in EDs (11, 16, 19, 20). In three of these studies CT was taken within two days of injury and showed strong evidence for CT being useful to diagnose scaphoid fractures (11, 19, 20). These findings should therefore be transferable to the ED setting.

CT can show false positives due to vascular foramina having a similar appearance as a fracture line (22), although specificity in all studies ranged between 96-100% with most studies showing 100% specificity (10, 15, 16, 19, 31). Sensitivity of CT varied between studies ranging from 64% - 100%. Interestingly,

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in the study by Memarsadeghi et al. CT was more useful in depicting scaphoid fractures with cortical involvement whereas MRI missed 2 cortical fractures (16). In the same study MRI was described as being most useful in depicting purely trabecular fractures with all 11 purely trabecular fractures being missed on CT (16). Yin et al. say trabecular fractures are misleading as they represent bone marrow oedema and may increase the sensitivity values of MRI in studies that attribute this as a fracture (33). Purely trabecular fractures and bone bruising are terms used for bone marrow oedema seen on MRI. The significance of this finding has been investigated and researchers conclude that a fracture has to involve the overlying cortex of the bone otherwise only bone bruising is evident (34, 35). Therefore, if CT missed all purely trabecular fractures and was 100% sensitive to all cortical fractures this study could make strong evidence in using CT scanning for SSFs.

SENSITIVITY & SPECIFICITY OF CT SCANNING FOR SSF'S

	Sensitivity %	Specificity %
Breederveld et al. 2004 (15)	100	100
Cruickshank et al. 2007 (19)	94.4	100
Iliaca et al. 2011 (10)	86	100
Mallee et al. 2011 (14)	67	96
Memarsadeghi et al. 2006 (16)	73	100
Memarsadeghi et al. 2006 (16) (results excluding trabecular fractures / bone bruising noted on MRI)	100	100
Nguyen et al. 2008 (31)	100	100
Pincus et al. 2009 (20)	100	100
Rhemrev et al. 2010 (11)	64	99

CONCLUSION:

By gaining a definitive diagnosis in ED for SSFs it can prevent complications of undiagnosed fractures and reduce unnecessary cast immobilisation. Whilst MRI is the most preferred imaging modality for SSF management, it is the most expensive and least available (9, 21, 23, 27, 28, 32). CT is comparable with less cost and more availability (9, 21, 32). It is recommended that ED clinicians should consider second-line imaging with either MRI or CT where resource is available to gain a definite diagnosis and treatment plan in the management of SSFs (9, 20, 23).

CONCLUSION:

The implementation of the management guidelines has had a positive impact on the Southland Hospital ED and Fracture Clinic. In today's fiscal environment, it is essential to be able to assess processes and adapt practice where able with support of evidence based practice and the literature. In the future, the authors are working towards implementing management guidelines for the Mallet finger tendon injury / Mallet finger avulsion fracture and Radial Head fracture. While some management guidelines such as the Mallet finger may not alter clinical practice considerably, the ability to have clear, consistent guidelines and structured referral process is important.

Networking, collaboration and the ability to implement change successfully are positive outcomes of the work undertaken by the authors. However, the ability to implement management guidelines that have the patient at the centre of care has been the most important aspect of this project. Patient focused care, evidenced based practice and nurse led initiatives are key components to have emerged through the development of the fracture management guidelines.

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The levy can be paid via the CENNZ website.

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LITERATURE REVIEW

DOES A RAPID ASSESSMENT TEAM AT TRIAGE VERSUS A STANDARD NURSE APPROACH IMPROVE EMERGENCY DEPARTMENT QUALITY PERFORMANCE INDICATORS?

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ABSTRACT

Does a Rapid Assessment Team at triage versus a standard nurse approach improve Emergency Department quality performance indicators?

KEY WORDS:

Doctor, Nurse, Rapid Assessment Team, performance indicators & Emergency Department, overcrowding.

BACKGROUND:

Overcrowding has reached epidemic levels in many Emergency Departments (ED) worldwide. There is a clear relationship between ED overcrowding and an increase in patient mortality, making process to improve patient flow essential. This literature review aims to assess the effect a Rapid Assessment Team (RAT) might have on quality performance indicators.

METHOD:

A systematic search of data bases was used to identify relevant literature published between 2006 and 2016. This literature search included published peer-reviewed articles, research studies, grey literature that included papers and recommendations from reputable sources. The papers had to include at least one or more of key ED quality performance indicators and had to be published in English.

RESULTS:

Eighteen eligible articles/papers were found in this review. Fifteen of these reported length of stay, eight reported on waiting times and seven reported patients leaving without being seen. Two articles included patient satisfaction surveys, one included a cost analysis associated with RAT teams and three included adverse effects (mortality).

DISCUSSION:

The majority of papers reported that the length of stay was reduced by at least 30 minutes when the RAT model of care was introduced into practice. Waiting times were also reduced. This saving in time improved patient flow, reduced the left without being seen numbers, improved patient safety, reduced mortality and impacted positively on patient satisfaction. The RAT model of care was only cost effective in time periods of high patient volumes. There is a need for more standardised trials to further assess the effectiveness of the RAT team.

INTRODUCTION:

Emergency Department (ED) overcrowding is a multifaceted problem that causes multiple issues for effective care delivery. This difficult issue confronts healthcare workers worldwide (Rowe et al., 2011). It occurs when demand for emergency services exceeds the ability of ED to provide care within a reasonable time frame. This problem is global in scope and effects most developed nations. It affects many aspects of health care. This includes governments, hospitals, service

DOES A RAPID ASSESSMENT TEAM AT TRIAGE VERSUS A STANDARD NURSE APPROACH IMPROVE EMERGENCY DEPARTMENT QUALITY PERFORMANCE INDICATORS?

providers and service users. ED overcrowding is a significant issue as it is associated with long waiting times and increased length of stay of patients in ED. Increases in length of stay negatively affects patient safety and is known to reduces patient satisfaction (Boyle A, Higginson I, Smith S, & Henderson K, 2014).

There is a clear relationship between ED overcrowding and an increase in patient mortality. The incidence of critical events also escalates while the length of stay for non-elective admissions rises. Overcrowding can lead to the cancellation of elective hospital procedures. Patient's dignity and privacy is often compromised with the sickest and vulnerable patients often being the most affected (Boyle A et al., 2014).

Nursing care can often be rushed and unfinished because of this high demand. Increased staff burn out has also been related to overcrowding. This can lead to experienced staff leaving and in turn this can lead to skill mix deprecation and further inefficiency. The quality of patient care is again further reduced (Boyle A et al., 2014).

Several interventions have been trialled to improve throughput or patient flow through ED. One intervention was to look at the process of triage (Boyle A et al., 2014). Triage is a rapid assessment of patients and occurs when the patient first arrives in the ED. Triage is used to decide how urgent a patient's illness or injury is, and how soon treatment is required (Ministry of Health New Zealand, 2011). The standard triage model used in the majority of hospitals in the developed world involves nurse triage. However, there seems to be an increasing concern within health care as to whether or not this older model is able to effectively deal with increased ED crowding (Boyle A et al., 2014).

Among their recommendations to help reduce overcrowding, the Royal College of Emergency Medicine in the United Kingdom (UK) has proposed the use of rapid senior doctor and nurse assessment (RAT) of patients. (Boyle A et al., 2014). RAT involves placing a senior emergency doctor at triage to implement point of care testing for patients prior to being seen in ED, and to earlier identify potential emergencies (Abdulwahid, Booth, Kuczawski, & Mason, 2015).

A Rapid Assessment Team (RAT) comprises of a senior nurse and senior doctor working from the triage area. They are able to rapidly assess patients who present to ED after they have been triaged. This team implements clinical assessment, starts point of care testing such as: phlebotomy, insertion of intravenous cannulas, X-rays, ultrasounds or CT scans, and also provide basic treatment such as intravenous fluids, analgesia, and early referrals to appropriate specialists (Edwards & Lewington, 2010)Using the RAT approach intentionally removes triage and junior medical assessment from the pathway. The first health care professional to assess the patient is a senior doctor. This senior doctor is able to make a more competent rapid careplan, decide if the patient requires admission into hospital, or referral to the appropriate specialist team. Nurses and junior doctors in the RAT team then implement the first stages of the careplan (National Health Service Emergency Care Intensive Support Team, 2012).

The purpose of this review is to find current and relevant published peer-reviewed literature that explores the impact of RAT versus the standard single nurse triage approach on the following ED quality performance indicators: ED length of stay (ED LOS), wait time (WT), left without been seen (LWBS), patient satisfaction, cost associated with RAT, and adverse events/mortality (table 1.1).

Table 1.1 Definitions of ED quality performance indicators:

ED LOS (min)	The time from when the patient presents to the ED, whether it is to the triage nurse or reception staff, to the time the when patient is either admitted as an inpatient , discharged from ED or transferred to another health care facility (Ministry of Health, 2016).
WT (min)	Triage time to start of emergency doctor assessment (Cheng et al. 2013).
LWBS (%)	Patients who had been triaged but who decided to leave the department before they had been assessed by a doctor (Jin H Han et al., 2010).
Patient satisfaction	Measured by different survey tools
Cost effectiveness	Cost of RAT is, the salary of the RAT team. Cost effectiveness is the ratio on the RAT cost verses three following assessments: Additional patients seen, Dr initial assessment hours saved and ED LOS hour saved (Cheng et al., 2016).
Adverse effects (%) (Mortality)	The adverse effect used in this literature review is the mortality rate of patients attending ED associated with RAT model.

DOES A RAPID ASSESSMENT TEAM AT TRIAGE VERSUS A STANDARD NURSE APPROACH IMPROVE EMERGENCY DEPARTMENT QUALITY PERFORMANCE INDICATORS?

METHOD:

A systematic search was used to identify literature on this topic using the data bases PubMed, Scopus and CINAHL. The citations within the resulting literature search were also used to evaluate and to identify further relevant studies. One of the authors from a key article was also contacted. These articles included clinical guidelines, papers and research studies. They were limited to the period between 2006 and 2016 so as to keep the information as relevant as possible.

The following eligibility criteria was applied to all the literature found in this search:

- Published peer-reviewed articles that used research studies, clinical guidelines and papers.
- Research studies. These included comparative design, randomised and non-randomised control trials, prospective and retrospective studies, and cohort studies.
- The population used in the article or research were adults.
- A senior doctor at triage working either individually or within a team of other healthcare professionals.
- Included at least one or more of the key ED quality performance indicators.
- Published in English.

Articles and studies were selected by application of the inclusion and exclusion criteria. All duplicate studies were then removed. Abstracts and full texts articles were screened and assessed for eligibility.

There was no statistical analysis done in this literature review. Validity was maintained by using peer reviewed articles only. Grey literature such as papers or clinical guidelines were only considered from reputable sources.

RESULTS

The initial search identified 56 articles (n=56), one other article was identified through a review of citations. Five systematic reviews were also found. Many of the studies used in these reviews were duplicated in the previous search. Three new articles were identified when examining systematic reviews. The total number of articles found was 60 (n=60).

The duplicates were removed (n=46). The abstracts were then screened for eligibility (n=26). Full articles were assessed for eligibility (n=18). These 18 articles were included in the literature review (table 1.2).

Author	Yr.	Type	ED LOS	WT	LWBS	Pt Satis	Cost Effec	Mortality
Burström, L. et al	2016	Cohort	Y	Y	N	N	N	N
Cheng, I., et al	2016	RCT	N	N	N	N	Y	N
Mann, C	2016	Report	Y	N	N	N	N	Y
Traub et al	2015	Retro	Y	N	Y	N	N	N
Davis, et al.	2014	RTC	Y	N	N	N	N	N
French, et al	2014	Pros	Y	N	N	Y	N	N
Jarvis et al	2014	Pros	Y	Y	N	N	N	N
Asha et al	2013	Cohort	Y	N	Y	N	N	N
Cheng, I., et al	2013	RTC	Y	Y	Y	N	N	Y
Rogg et al.	2013	Retro	Y	N	N	N	N	N
Crane et al.	2012	Pros	N	Y	N	Y	N	N
Imperato et al.	2012	Retro	Y	Y	Y	N	N	N
NHS	2012	Paper	N	Y	N	N	N	Y
Shetty et al.	2012	Pros	Y	Y	Y	N	N	N
White et al.	2012	Retro	Y	N	N	N	N	N
Hun et al.	2010	Retro	Y	N	Y	N	N	N
Holroyd et al.	2007	RTC	Y	N	Y	N	N	N
Choi et al.	2006	Pros	Y	Y	N	N	N	N

ED LOS = ED Length of stay; WT = Waiting time until seen; LWBS = Left without being seen; Pt Satis = Patient Satisfaction; Cost Effec = Cost effectiveness; Pros = Prospective Retro = Retrospective; RCT = Randomise control trial

DOES A RAPID ASSESSMENT TEAM AT TRIAGE VERSUS A STANDARD NURSE APPROACH IMPROVE EMERGENCY DEPARTMENT QUALITY PERFORMANCE INDICATORS?

LENGTH OF STAY

The literature search found 14 research studies and one paper in which ED LOS was one of the quality performance indicators used when the RAT model was assessed. Three of these were randomised controlled trials (RCT). Nine research studies were either prospective/retrospective designs and two were cohort studies.

Two RCTs by Cheng et al. (2013) and Holroyd et al. (2007) showed a significant reduction in ED LOS when combined with RAT, (24 min less and 36min less respectively). The RTC by Davis, Dinh, Bein, Veillard, and Green (2014) on the other hand showed a six minute increase in ED LOS. 10 of the non RCT studies showed a significant reduction on ED LOS when used with RAT. The remaining two non RCT studies by French, Lindo, Jean, and Williams-Johnson (2014) and Asha and Ajami (2013) did not find any significant change in ED LOS.

A report from the Collage of Emergency Medicine, Royal College of Physicians, the Royal College of Surgeons, the Royal Collage of Paediatrics, Child Health and the NHS Confederation was also discovered in the literature search. One of the report's recommendations was that senior assessment in the early stages of the patients' visit to the ED should be the norm not the exception. It has also suggested that the RAT model has considerable benefits, including a decreased ED LOS (Mann, 2016) (table 1.3).

WAITING TIME

Seven studies and one report were identified in the literature search. There was one RCT, one cohort study, and five prospective or retrospective studies. The RCT by Cheng et al. (2013) showed a significant reduction in wait times with the RAT approach. The non RCT studies also showed a significant reduction.

It was also reported by the National Health Sector (NHS) that wait times were significantly reduced when the use of the RAT model was in place (National Health Service Emergency Care Intensive Support Team, 2012) (table 1.3).

LEFT WITHOUT BEING SEEN

Seven studies were identified. Two were RCT, one cohort and four were prospective/retrospective. All reported an improvement in LWBS (table 1.3).

PATIENT'S SATISFACTION

Two studies were found in this literature review to use patient satisfaction as a quality performance indicator. They were all non RCTs. One of studies compared patient satisfaction on intervention and control days. The other study evaluated patient satisfaction on intervention days only (table1.3).

COST EFFECTIVENESS

Only one study was found to evaluate the cost effectiveness used in the RAT model. This was a RCT which compared the cost of nurse only triage with the use of the RAT model. It was found that it was only cost effective in time periods of high patient volumes i.e. late morning to evening (Cheng et al., 2016) (table 1.3). The over cost effectiveness of the RAT model in comparison to nurse only triage was not found in any of the literature.

ADVERSE EFFECTS

The adverse effect used in this literature review is the mortality rate of patients attending ED associated with the RAT model. Only three articles were found using this quality performance indicator. The RTC by Cheng et al (2013) found that no patients were adversely effected or harmed when the RAT model was used. The Acute and Emergency Care Report recommended that early review by a senior physician reduces mortality rates (Mann, 2016). It was also reported that the use of the RAT model improved safety (National Health Service Emergency Care Intensive Support Team, 2012) (table 1.3).

DISCUSSION:

This review demonstrated that RAT had positive effects on all the key ED quality performance indicators. 15 of the 18 articles and papers either mentioned or used ED LOS as a quality performance measure or outcome. The majority of these found that RAT reduced the total ED LOS by at least 30 minutes. The RTC by Davis et al (2015) found no significant difference with ED LOS with the RAT model. However a sub group of discharge patients had a significant reduction in ED LOS associated with the RAT model: ED LOS reduced 28 minutes $p=0.01$.

The RAT approach is different from nurse only triage as it allows a more meaningful and detailed risk stratification of a patient's condition on arrival to the ED. It has the capability for faster medical intervention and escalation of care. The RAT has also demonstrated the potential to reduce ED congestion by decreasing ED LOS and thus improving patient flow.

DOES A RAPID ASSESSMENT TEAM AT TRIAGE VERSUS A STANDARD NURSE APPROACH IMPROVE EMERGENCY DEPARTMENT QUALITY PERFORMANCE INDICATORS?

Time to laboratory and diagnostic imaging and time to consultation are also reduced. This has a positive effect particularly for triage category four and five patients (Elder, Johnston, & Crilly, 2015).

When putting this into perspective the RAT model could save approximately 30 minutes per patient. In an moderately sized ED of 50,000 patients per year, this saving in ED LOS could equate a saving up to 75 hours of additional space per day for seeing other patients (Rowe et al., 2011).

Another key finding is that the implementation of RAT could reduce WT. This could be explained that by the fact that a senior doctor reviewed the patient earlier in the patients' presentation. Any significant time savings early in the patients' presentation to the ED could improve patient flow and reduce the proportion of LWBS patients (Abdulwahid et al., 2015).

The majority of the articles which used LWBS reported a reduction in this key outcome. This could be related to the presence of a senior doctor at triage with a resulting increase in patient satisfaction and compliance to treatment in ED (Abdulwahid et al., 2015).

Finally, only two studies reported on patient satisfaction, one study measured cost effectiveness, while three other articles addressed the safety profile of the RAT in terms of mortality. The majority of studies failed to report on these essential quality performance indicators.

The studies found in this literature review showed a wide diversity in their methodology. The majority of these were prospective/retrospective or cohort studies. Only three RCTs were found. Studies that use designs that are prospective or retrospective can be vulnerable to bias (Rowe et al., 2011).

These studies also differed in their population sizes and interventions. Patient selection in each study appeared to vary due to different selection criteria and study settings. All study interventions occurred at different times of the day. Application times were selected to address traditional periods of high patient volume. No data about the validity of time selection was provided by any of the studies (Wiler et al., 2010).

The quality and quantity of care provided by triage doctors has yet to be researched. There are no worldwide guidelines for the RAT function or intervention (Wiler et al., 2010). A reduction in ED LOS could be linked to factors such as ED volumes and the geographic region of a particular hospital. Therefore study findings conducted by large single centre academic hospitals may not be compatible to non-academic or rural hospitals (J. H. Han et al., 2010).

RAT models have been used in the UK for over ten years. Other countries such as Singapore, USA, Canada and Australasia have used them for variable time lengths (Elder et al., 2015) This could account for the two pieces of grey literature being found in this search as coming from the UK.

The majority of studies were prospective or retrospective in design. There has not been any gold standard research conducted such as international standardised RTC to study the efficacy of RAT on ED overcrowding. Although there is a lot of observational evidence that is unpublished, The Royal College of Emergency Medicine (2016) advice on initial assessment/ triage in ED states that RAT is one process amongst others that should be considered (E. Russell, personal communication, April 27, 2016).

Finally the majority of the literature found in this search was from single centre studies with lack of randomisation. This can impact the internal validity of the articles and their conclusions. The indications from this research are not sufficiently strong enough to support this transition. More research needs to be undertaken to study the benefits, costs and sustainability of RAT at triage through multi-centre RCTs and qualitative research. There were no qualitative studies found in this review.

CONCLUSION:

Despite the many differences between the studies, the majority of the literature in this review found that the RAT reduces ED LOS, WT, and LWBS and also improves patient satisfaction. ED throughput is improved thus reducing overcrowding, patient risk and mortality. There is an obvious need for large stronger multicentre studies using RCTs and qualitative research to determine if RAT provides safe maintainable and cost effective improvements. RAT may provide part of the solution to solving the issue of ED overcrowding in New Zealand hospitals.

Acknowledgements: The author would like to thanks Russell Emeny, Director Emergency Care Intensive Support Team, Emergency Care Improvement Programme, NHS, for kindly providing information on RAT and answering many of my questions.

DOES A RAPID ASSESSMENT TEAM AT TRIAGE VERSUS A STANDARD NURSE APPROACH IMPROVE EMERGENCY DEPARTMENT QUALITY PERFORMANCE INDICATORS?

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Let food be thy medicine and medicine be thy food." Hippocrates:

SNIPPETS:

WARFARIN AND ACETAMINOPHEN INTERACTION: A SUMMARY OF THE EVIDENCE AND BIOLOGIC PLAUSIBILITY.

It is well known that there is an increased risk of bleeding when taking NSAIDs/Aspirin/Clopidogrel in conjunction with Warfarin. There is strong evidence that patients on stable doses of Warfarin have an increased INR when taking Paracetamol. This is a dose dependent effect and likely to be seen after 4 days of Paracetamol use. Anyone who you prescribe a course of Paracetamol and is on Warfarin should have close monitoring of their INR. It is likely the effect of Paracetamol is mediated by NAPQI (metabolite of Paracetamol) and its effects on Vit K dependent clotting factors.

An INR should be obtained after 3-5 days of Paracetamol therapy. INR monitoring is not required for occasional doses of Paracetamol (ie headches).

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AN INTERVIEW WITH SHARYN MCGARRY:

AN INTERVIEW WITH RETIRING ED NURSE SHARYN MCGARRY – Interview by Michael Geraghty.

SHARYN MCGARRY

1. Tell us when and where you started your nursing career and about your time in ED and CENNZ?

SHARYN: I commenced my nursing training in Dunedin along wth 50 other 17 year olds in 1965, one of four intakes for that year. There was a high drop out rate, the six day working week coping with shift work and study was challenging with many adjustments to be made, new city, living in the nurses home with others, curfews, many, many rules... Following registration there was no new grad programme, no choice of placement and consequently if lucky enough to obtain a position became a generalist rotating around the various wards to meet demand. If you intended marrying you resigned! No married nurses, no male nurses!

2. What would be the biggest changes you have seen in emergency care in the years you worked there?

SHARYN: In 1996 I began working in the Emergency Department following a restructuring and redundancy. Over the following 20 years I experienced many changes in the delivery of emergency care.

The development of emergency nursing as a specialty, with the opportunity to undertake ongoing education with the introduction of the Triage Course, adult and paediatric Trauma courses, APLS, Certificate in Emergency Nursing etc. was most significant.

The gradual increase in much higher volume of patients presenting to ED for a variety of reasons.

The complexity of conditions with much more intervention taking place in the department before transferring to a ward.

The opening of a short stay unit which takes the pressure off the bed state and reducing the need for the unsafe practice of patients in corridors.

The introduction of the 6 hour target which changed the way the whole hospital operated and always fiscal constraints.

3. Are there any specific memories (good / bad) that you have in respect to your time in the Emergency Department?

SHARYN: Each day working in the emergency department was different, with not only the patients, but also nursing, medical and clerical teams changing with each shift, as is the nature of shift work, but whoever the team was on a given day there was a sense of collegiality and the obligation to do the best for the patient. Usually shifts ended with a feeling of intense satisfaction for a job well done despite the odds, others with a great sadness which lingered for sometime usually as the result of an unexpected outcome and often frustration at the inability to give optimum care and attention to those deserving of it due to the number of patients being cared for and the rationing of time.

4. What advice would you give a person considering nursing as a career?

SHARYN: I believe Embarking on a nursing career in 2017 is much like starting as I did in 1965 with a great many unknowns but now there are many more opportunities to research what is required in relation to the stressors involved in study, clinical placements, shift work often while working to pay bills etc. My advice would be to talk to other nurses, both newly graduated and those with experience, develop relationships with tutors and fellow students and allow others to help in stressful situations. Remember to take time out for family and enjoyment and share achievements and milestones both big and small.

5. What did you enjoy the most about being a nurse?

SHARYN: My journey through nursing was totally unplanned with many and varied roles during which time I worked with incredible, dedicated and passionate colleagues who were at all times willing to share their knowledge and mentor me.

Most enjoyable was my involvement with CENNZ representing the Southern region at the the time of transitioning from a section to a College and also being involved in the redevelopment of the Triage course offered by CENNZ today.

Involvement in NZNO at a national, regional and workplace level was a huge influence and from which I learned a great deal about fairness and social justice and the need to be considerate of others.

6. What are your thoughts about the expanded nursing roles such as CNS's ? NP's?

SHARYN: Expanded nursing roles are essential in the development of nursing allowing those who have achieved Clinical Nurse Specialist or Nurse Practitioner not only the opportunity to treat the patient while also educating, counselling, preventing and therefore embracing a holistic approach to nursing care which can only improve outcomes.

REGIONAL REPORTS

NORTHLAND/TE TAITOKERAU REGION

CHRIS THOMAS (CENNZ TREASURER)

Registered Nurse / CNS

Whangarei Hospital Emergency Department

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Greetings from a sweltering and dry Northland (at time of writing), great weather for the holiday makers not so great for the farmers and communities with diminishing water supplies.

The hospital's air conditioning seems to be attracting customers as we are well into our busiest summer ever. Presentations for January numbered 3446 up from 3162 for the same period last year. Our 6 hr ED LOS target shows only slight improvement as bed block for those patients being admitted to hospital continues to plague ED and slows the availability of department beds to see other patients.

At Whangarei ED we are grateful to have had a coping contingency in place with the timely trialling of an extra 1300-2130 nursing shift to cover the 3 bed 3chair low acuity/fast track area. Although the acuity of presentations to ED continues to rise there are many triage 4s and 5s that can be dealt with by the midshaft doctor and nurse working almost exclusively in this area and minimising wait times for these patients.

We are also trialling new monitors at present in Whangarei ED and other acute areas. We are trialling monitors from two different companies for a month each and when the purchase finally happens the same monitors will roll out in all the acute areas ie. ED, ICU, CCU and Theatres. This will be a huge advantage in patient handovers where the units can stay with the patient therefore retaining all the patient information. Consumables are also compatible, which they are not at present, so this will make sound economic sense. The new monitors in ED will be replacing the greatly outdated ones we are currently using which are often needing repair.

Recent quality initiatives for Whangarei ED include:

- The roll out of a Nurse Initiated x-ray teaching package to improve the effectiveness of x-ray ordering and as a tool for nurses progressing to the triage role and more advanced nursing roles within ED.
- Moving documentation auditing away from the current self- audit nurses do as part of their performance appraisal to a formal audit process with targeted compliance consequences around earning the right to supported study leave. This is in response to the identified need within the department to improve documentation.
- Our children's play area has had an overhaul and some new equipment added which has been an enormous success with the little ones (and their parents).

Our new NP is up and running and proving to be a huge asset to the Whangarei ED. Now that the position has been established there is renewed interest by other nurses to follow a similar pathway and post grad study is underway for many again this semester.

Overall the team is functioning well and morale is positive as we strive to continue to improve patient care through ED.

CHRIS

REGIONAL REPORTS

AUCKLAND REGION

MATT COMESKEY

Clinical Nurse Specialist

Auckland District Health Board

Auckland City Hospital,
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ADULT EMERGENCY DEPARTMENT, AUCKLAND CITY HOSPITAL

Greetings from Tamaki Makarau.

The summer season to date has been busy - public holiday hours and restricted GP access has meant the department has been dealing with a greater volume of lower triage presentations. This has been in keeping with recent years.

Outdoor activity, holiday pursuits and resulting trauma have also kept the resus bays busy. Consequently, the trauma season is well and truly upon us. Bed blockage is now a summer reality - the old days of the summer season being a quiet time - an opportunity for staff training, building maintenance and a general catch-up are all largely a thing of the past. This is likely a recurring theme in the regional reports of the other DHBs. The issue of year-round departmental stress is now a reality – it just varies in intensity.

Within the wider DHB, perhaps the biggest change to occur is that ADHB Chairman Lester Levy is now the chair for the three DHBs serving the wider Auckland region. While this has not been presented as a move towards amalgamation it does signal a move towards greater and closer co-operation between the three DHBs with more focus applied to finding efficiencies and quality improvement in the services provided. How this will play-out between the emergency departments is yet to be seen. Watch this space.

We have had some significant changes amongst our staff. one of our charge nurses, Kaidee Hesford, is moving to Rotorua to take up the nurse manager position.

We wish her well but will miss her leadership and sense of humour on the floor.

Four new graduates have been employed – two placed in ED and two in the Admissions Planning Unit. We welcome them and the energy they bring to the team.

On a sad note, one of our doctors Justine Cooper, who was known in the wider Auckland ED family, unexpectedly passed away in early February. Her memorial service held at the hospital served as a celebration and recognition of her contribution to the team and her patients.

It was also a timely reminder to cherish our colleagues, to be kind to each other and support each other in the day-to-day struggles out there on the sharp end.

We extend our condolences to her family. We will miss her.

MATT

REGIONAL REPORTS

AUCKLAND REGION

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Counties Manukau District Health Board

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AUCKLAND REGIONAL UPDATE

CHILDREN'S EMERGENCY DEPARTMENT, STARSHIP CHILDREN'S HEALTH

Kia ora from te Tari Rongoa Ohorere, which means the "Department of Emergency Medicine" at Counties Manukau.

This is the new Maaori name that was gifted to us by the hospital Kaumatua. The meaning of our new name is: Te tari = the department, Rongoa = medicine / healing practices, Ohorere = literally shock or surprise, in this context can mean any sudden change to physical, emotional on mental wellbeing.

I hope everyone has had a great Christmas and New Year and spent some quality time with friends and family.

We have had an interesting start to the summer months with some big changes in staff. Our venerable manager Alex Boersma left us after 8 years and has now taken up a position as GM of Med and ED at Waitemata; while her replacement Debbie Minton has comes to us from the Intensive Care Unit at Counties.

We also saw the end of a momentous career in ED with the retirement of June Kilgour who had worked in ED for an incredible 40 years. We have been incredibly lucky to bring into the NP/CNS team Carol Dewes and Helen Hogan. We are looking forward to hosting the next Advanced Emergency Nurses Network National Training day on the 22nd of March held at Ko Awatea and seeing many of you then.

The Doctors strikes have given us probably the only hiatus over a very busy Christmas and New Year period with record numbers of patients coming through the department.

There is consultation between staff and designers at the moment looking at ways to improve the paediatric area in ED with changes to patient flow and assessment areas. Staff have been fund raising through social events such as fun runs and supporting the Middlemore Foundation during the recent Family Fun Day at Manukau. While working around the renovations will be challenging we look forward to working in a more streamlined area that meets our needs as our patient numbers and acuity continue to grow.

We are currently involved in a number of clinical research groups, the newer ones being the; Oxygen in Acute Coronary Syndromes Study, the Rheumatic Fever Risk Factors Study, the PATCH Trial-pre-hospital TXA in trauma and the STAND Study - Antibiotics in Acute Diverticulitis Study.

Annie Fogarty Clinical Nurse Director of Acute Care has been working on

'SETPACE' a framework to looking projects to improve patient care in the emergency department

- Succession and retention
- Engagement
- Technology
- Patient centred care
- Accountability
- Critical thinking
- Economic nursing value

The two projects to come out of the framework so far are:

A pilot scheme for nursing students who had passed their finals and were not yet registered with the NZNC. Applications were invited for 6 weeks of work experience in the ED with 1 day a week in class with Sandy Oster, a University of Auckland Nursing Tutor and Nurse Practitioner. We had 30 applications for scholarship placements with 4 applicants taking part. Part of their education was coaching and mentoring, consultation work with Ko Awatea, looking at patient safety and the patient's ED journey and working alongside the ED project co-ordinator Debbie Hailstone on documentation and the deteriorating patient. So far the feedback has been very positive and we are hoping to run the scholarship placements again this year.

The other pilot project was the Acute Care Coaches-Senior RNs from the ED who were with employed to work across the acute care service to support staff after hours working in the wards.

This project has been so successful that the wards have continued to fund the scheme since the pilot finished.

MICHELLE

REGIONAL REPORTS

MIDLAND REGION

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Greetings from the Midland Region

HAMILTON/WAIKATO EMERGENCY DEPARTMENT

I hope you all have had a taste of the sun here and there.

Waikato ED has had it's fair share of holidaymakers coming in to visit and making the most of what we have to offer. As we spring into the New Year, we have many projects and initiatives that are about to roll out.

Wellness Group – I mentioned this in the last update for CENNZ. A group of us have collaborated and put together a bunch of information to help ED staff manage a work/life balance when working in amongst the chaos. This includes safety at work, managing shift leave, managing stress, building resilience and our social group.

Peer Support – A group of staff within the emergency department has identified the need for on the floor support within this clinical setting. This is not to replace the counselling service the DHB provides through EAP but is a group of people who understand the environment that we work in. The idea is that staff may prefer to talk to someone who understand's what they are going through and has the first-hand experience and knowledge.

With the summer days being numbered, staff within the department are making the most of the daylight saving hours. Activities such as walking groups around the Hamilton Lake and surrounding trails are a few things that have popped up.

I encourage you to get out and about and soak in some of that vitamin D.

BILL RATHSAMY

TAURANGA EMERGENCY DEPARTMENT

With the departure of thousands of extra peak holiday makers, Mount Manganui begins to settle back into it's laid-back groove. As this happens.

the Tauranga ED settles back into more routine presentation numbers.

In recent times on new year's eve the city council hosted a free concert and events around the Mount Manganui beach. Fed-up with ongoing issues of intoxication and violence surrounding this event, city planners decided not to provide this service. It was unclear if this would reduce these problems and the impact on emergency services. Would revellers continue to party elsewhere with similar results? From an Emergency Department perspective it was very successful with a relatively quiet news year eve without the usual high number of drunk and damaged attenders

Currently our Emergency Department is working with an external consultation group, - Francis Health to improve our systems of care delivery. The Francis Group's project goals are hospital wide and include; Optimising the Emergency Department; Enhancing the Acute Surgery Pathway; Initiating Ambulatory Emergency Care; Identifying and Supporting our Frail Elderly. Their team looks to support clinicians and service leadership to find local solutions. However, they come with models of care that have been proven to work in other departments.

We have been busy with many rapid cycle tests of change including use of a Senior Medial Officer to preform rapid assessments, additional nursing staff in the waiting room and staff reconfiguration into zones. The Francis group has developed a set of quality

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indicators and provides data to see what works and what doesn't. Undertaking so many changes does not come without its challenges, every time you return to work from days off you need to catch up on what's different. One trial of change that has continued and has made a notable impact is the increased transfer of Emergency Department patients referred for medical admission to an inpatient assessment ward without Medical Registrar review in the E.D. Historically at times a queue would form in the ED with patients waiting for hours to be seen by the Medical Registrar thereby creating bed blocks.

Another trial of change that has been well supported by nurses is the reconfiguration of our front of house nursing team. An additional nurse joins the two triage nurses with the primary responsibility of managing the waiting room. One of the two triage nurses also takes a lead role for the group and manages inward flow into the department. Anecdotally these changes have improved patient care. Hopefully the data backs this up.

It is hoped that at the end of this process our systems will be much more efficient supporting us to meet our increasing workloads. The Francis Group project has created increased impetus to try new things whilst providing change management support and am sure by the end of the year many newly embedded processes will seem normal.

It will be interesting to see if these activities lead to the allocation of more staffing resources for the E.D. as some of these trials involve additional staffing beyond normal levels.

RICK

ADVANCED EMERGENCY NURSES NETWORK (AENN) TRAINING DAYS 2017

Advanced Emergency Nurses Network (AENN) is a sub section supported by CENNZ for CENNZ members who are in advance practice roles, or nurses who are looking at transitioning into advanced practice roles via a nurse specialist position or the Nursing Council Nurse Practitioner pathway.

Regional study days, with a predominantly clinical focus are hosted by AENN members with the support of the hosting DHB.

Topics or a theme are announced beforehand via email to AENN members.

- **Middlemore Hospital, Auckland Wednesday 22nd March**
- **Taranaki Base Hospital, Tuesday 20th June**
- **Queenstown, October. Date and venue to be announced but in conjunction with the CENNZ 2017 Conference**

The Queenstown day is open to any CENNZ member irrespective of their scope of practice, or membership of the AENN. It is a great opportunity to network with others across the country and to discuss the development of the advanced role in settings where a widened scope of nursing practice whether in an emergency department or A&M setting, is new.

Additional dates may be added and will be advertised in subsequent journals.

For more information contact: **Kathryn Johnson AENN Co-ordinator kjohnson@adhb.govt.nz.**

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HAWKES BAY / TARAWHITI REGION

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Hello Everyone from the beautiful sunny Hawke's Bay and East Coast Region. We hope you have had lovely summer.

We are once again preparing to welcome the world to join us for Art Deco 2017. This is always a popular event with plenty of activities for young and old and a good excuse for dressing up in some very stylish clothes! Our Hard-working ED staff might well be seen sporting some spiffing head bands and maybe a string of pearls!

Our presentations our continuing to increase both in volume and acuity. The staff increases that were put in place last year have made a difference, but there are still areas of risk.

The Primary Care/ED Co-operative is a project that aims to reduce the number of patients who utilise the ED instead of their GP more than 7 times a year. 200 patients have been identified as frequent presenters, and are having care plans completed and attached to their electronic notes. This project is still in its very early stages.

Our Fast Track Team continue to treat approximately 20% of our daily presentations, as well as undertaking rapid assessments of patients in times of surge and over-capacity.

Sadly, this summer has seen a vast amount of serious trauma in our region, with Waitangi weekend alone resulting in 12 stat one patients. This has been tragic and difficult for everyone concerned, with alcohol, drugs and speed being significant factors.

On a happier note, we have also had a few surprise births in the department! There is nothing like a new baby in the department to put a smile on everyone's face, even it was a shock for the new parents!

The ED Front of House redesign has now been completed. There have been quite a few teething difficulties with everyone who works in Triage and Fast Track needing time to determine best working practices, and understanding of each other's roles. However, with our growing number of attendances, there are frequent times of 'standing room only' in the waiting room.

We are now also capturing our 'pre-triage' times which surprised everyone as being on average 6 minutes. With the lengths of the Triage queues some days, we felt it would be much higher.

We welcome some new staff to our departing including our Nurse Educator Melissa, our new NETP nurses Ashleigh and Laurie, as well as Tom and Izzy, our new consultants.

Our in-house education programme has been extended in order for more staff to be able to attend some excellent teaching sessions, as well as being encouraged to present sessions.

And Finally, a big well done to one of our CNCs Sue, for obtaining her Nurse Practitioner scope of practice!

PAULA

MID CENTRAL REGION

POSITION VACANT

REGIONAL REPORTS

TOP OF THE SOUTH REGION

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Greetings from the Top of the South and a very happy new year to all our emergency nursing colleagues around the country.

It certainly feels like we have been working at a frenetic pace throughout the summer period and so far the demands on our service have not abated. The last few months have been characterised by record high daily presentations, significant acuity and high hospital occupancy. This of course has resulted in constant bed block hampering ED flow. Daily challenges continue to be lack of beds and waiting on in-patient teams to round and review patients. These are significant issues which will be high on the 2017 agenda.

Over the Christmas / New Year period both Nelson and Wairau hospital had dedicated security employed for their departments. The sharp reduction this made to violent and abusive behaviour and security incidents was incredible. This certainly reinforces the findings of the literature, which suggest the presence of security alone is a significant deterrent.

Thanks to the hard work of one of our nursing staff we have 'Health TV' up and running in our waiting room. This is proving to be a great resource for the department. We have also welcomed our first ever new graduate nurse to the team.

The Kaikoura earthquake has impacted heavily in this region with alterations in roading and traffic flow over the peak holiday period.

However Wairau ED experienced the immediate effects of the earthquake and Sharon North (Wairau CNL) has provided some insight to their experiences.

JO

WAIRAU ED

The night of the Kaikoura earthquake had a significant and immediate impact on Wairau ED and this gave us a small glimpse of what our colleagues in CHCH had gone through.

On the night, the ED was already very busy and with complex cases and for the nursing and medical teams working it was some time before they were able to check if their own families were safe. Immediately injuries to the public were apparent. These were mainly the result of falls and objects falling onto people. Some of the stories from our rural areas, such as Ward and Seddon, described intrepid journeys in the dark across farmland, streams and a changed landscaped to get to hospital. Many staff volunteered to assist as the night progressed and the senior management team opened the emergency operational centre and were great in their support. As the days progressed we saw a spike in acute chest pain and several patients took 2-3 days to be able to get to hospital from Clarence, Ward and Kaikoura. All were uncomplaining despite some people having significant injuries. Many people showed us pictures of their families living in tents due to their homes being destroyed but still working and looking after their farms.

We also heard of the amazing job the doctors and nurses of Kaikoura had done and continue to do. There may be some interesting nursing stories to be heard. The PHO continues to support these damaged towns by taking a GP into these communities. There remain changed traffic patterns and the new use of roads that aren't accustomed to such heavy traffic. This at times has influenced mail and deliveries.

Marlborough also hosted a major Scout Jamboree with approximately 3000 Scouts and 1200 others over Xmas. It was an amazing event which was well organised and thanks to a great medical team o- site there were limited presentations to our ED. The largest cruise ship also visited Picton at this time adding to the population.

From all of us in the Top of The south we would like to send our thoughts to our colleagues in Wanganui ED and acknowledge the tragic loss of their highly respected clinical director.

SHARON NORTH

REGIONAL REPORTS

GREATER WELLINGTON REGION

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WELLINGTON ED

Presentation rates consistent compared with 2016 however acuity continues to rise shown in the increase if Triage 2 and 3.

- Admission rate 35%
- 20% - 22% patients seen through Green Zone - Minor Injury . Illness (CNS / RMO)
- SSiED 90% for December 2016 and 93% January, hoping to reach 95% for February 2017

CCDHB

- Recruitment went well to new positions funded middle of 2016 and now fully staffed
- Changed nursing model of care to ensure safer nurse: patient ratios
- Occupancy continues to have an effect on how we perform in the SSiED ED staffing.

We are currently working closely with Francis Health looking at ways in which we manage acute flow through out department and well as how we interact as a team. Francis health came to CCDHB in December 2016 and we have been in discussions and planning stages to date. We have trialled a few Rapid Cycle Tests of Change to see what areas or issues we should be addressing to ensure progress is made. We are looking forward to testing some of our modelling in more depth over the next few months pre-winter. The exciting part is that the whole team is on board from junior Dr and nurse to our SMO and ACNM / CNS team. Importantly, the work is not solely based in the ED and similar projects RCTCs will occur throughout our Medical and Surgical service as well

3DHB and inter-agency liaison (Police, MH, Wellington Free Ambulance) continues to meet on a regular basis. The agreed Police – ED handover form is working incredibly well and we are now focussing our work on how we can better train ED staff / orderlies in staff safety and patient de-escalation, demystify section 109 of the mental health act, the need for Police presence and improved relations with Police and mental health services. This work is across our 3DHBs (CCDHB, HVDHB, WDHB).

HUTT ED (MIKE JOHNSON - CNM)

1. Two x fixed staff nurse positions which came out of 2015 external review along with one SMO position are now permanent
2. Hutt ED are recruiting volunteers this is a combined effort between St Johns (FEDS) and Hutt Hospital. Expected to be up and running in 2 to 3 months
3. ED target continues to trend well, 15/16 first quarter 88.4, quarter 4 95%
4. Fixed term ACNM in position for one year November 2016 to 17, support project work in ED. E.eg standing orders, new Ed medication chart, assessment nurse role (manage waiting room) Trial
5. Busy 2016 with 18 nurses orientated in ED
6. New graduate this year with FTE available to take one on each year

WAIRARAPA ED (FROM STEVEN DOWNIE-FRIBBENS):

SSiED continues to track really well with 98.5 for the last quarter. Staffing and recruitments has gone well with few vacancies. We have recruited to our Nurse Practitioner role last year and plan to have another NP position in March 2017 – we already have a senior RN working in this role as a candidacy position. We have recently recruited 2 new SMOs.

As well as the work with Wellington and Hutt with the interagency teams (Police, MH, Ambulance) we are excited to be involved in some great community based work whereby our staff, especially our NP are working with local community sports teams and schools providing basic health and first aid / self-management education.

The initiative has been really well received.

BEN

REGIONAL REPORTS

CANTERBURY / WESTLAND REGION

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CANTERBURY/WESTLAND

The Canterbury/Westland Region has seen a number of challenges since the last update, which have seen a particular focus on the emergency response and preparedness aspect of our roles coming to the fore.

In particular, the impact of the earthquakes and continuing aftershocks have been felt widely across the upper South Island and into the lower North Island, but with particular and devastating impact in the Kaikoura area. More recently, we have seen the development of extensive wild fires along the Port Hills bordering and encroaching the city of Christchurch and the shoreline communities and bays around the Lyttelton harbour basin. While neither of these events has resulted in the levels of mortality seen in previous disasters, it highlights the importance of continued vigilance and preparation within the health systems, communities and our personal lives.

CHRISTCHURCH HOSPITAL

In particular I'd like to thank CENNZ members for their feedback on the Knowledge and Skills Framework which will be presented at the AGM for ratification and if successful will be presented to NZNO and then the National Nursing Consortium for endorsement.

Sandy Richardson from Christchurch ED will take over as the Canterbury/Westland region representative on the national committee. Sandy has been an ED nurse for most of her nursing career and currently works in a joint appointment role between the University of Otago where she is a senior lecturer and Christchurch ED where she is a nurse researcher. Sandy's research includes ED overcrowding, cultural safety, disaster response and violence and aggression.

Christchurch ED celebrated International Emergency Nurses Day on October 12th by holding its annual open day in conjunction with the presentation of the 'Excellence in Emergency Nursing' award. For the second time in the 7 year history of this award we had a joint winner. Congratulations to Vera Fortune and Rachel Burt who were presented with the 2016 'Excellence in Emergency Nursing' award (albeit Vera 'attended' from Germany via Skype).

The common theme that was apparent through their nominations was their willingness to share their knowledge and help their colleagues. The Open Day saw around 30 people taking up the offer of seeing ED 'behind the scenes' with tours being held throughout the day.

The winter has been challenging at times, not so much in relation to volume but associated with acuity and complexity. Our practice of using triage codes as a surrogate acuity/complexity measure doesn't enable us to see the real picture, - for although volumes are not rising greatly, patients are staying in ED for longer. We failed to meet the Shorter Stays in ED target for the first time in two years, the reasons being in-patient bed block, complexity and admission avoidance activity. Fortunately, the predictions of an average of 300 admissions per day over August did not become a reality.

While January is traditionally a quiet period, we have been seeing an average of 260 patient presentations per day, an increase of approximately 5.6% on last year's figures which raises concerns as we are yet to head into the winter period. There has been an increase in the number of patients waiting in corridors of around 10% compared to last year's quarter 2, and we are seeing the expected growth rate across patient groups, with the greatest increase evident in the 25-29 year age group in relation to ACC category injuries, so likely linked to re-build related activities. Christchurch ED has also sent six staff members at different times to assist Kaikoura over a two month period. The recent fires have further added to the distress of patients, family and whanau but also to staff who are similarly affected.

Staffing has improved with only 2FTE vacancies at present and over 100 applications received in response to the last advertisement for RNs. There are

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changes in the Senior Nursing Team, as moves towards embedding Advanced Practice roles continues. Recruiting is underway for a further 2 ACNM position in response to increased complexity within the workload and to facilitate the forthcoming move to a new facility and associated increase in capacity. We are very pleased to be able to announce the appointment of our first NP, as Paddy Holbrook has successfully transitioned from her role as CNS and completed her NP candidature, being awarded NP status on 20th Dec 2016. We have a second CNS working toward this role at present, and there is the potential to continue to develop the advanced practice focus with a mix of CNS and NP positions in the new ED.

Work continues towards the facilities development and associated model of care that will underpin the establishment of the new ED. New processes and relationships are developing as child health and orthopaedic streams will merge into the existing ED service. The RT2C programme is continuing, with the well organised workplace module underway and we are about to commence the admission and discharge focus. Other positive aspects that have developed include our continuing work around violence and aggression, through the WAVE group, and the focus on mental health and the management of the aggressive patient. This has seen an increased education component in team days, with the development of new pathways and policy documents and further focus on understanding, recognition and response to the non-consenting adult patient.

Positive support of staff is evident in the return of the EDGE and its corresponding RAGE programme. EDGE (ED get Exercising) was first introduced last year, and proved a huge success amongst staff. It is joined by RAGE (radiology get exercising) and these team challenges have the following joint aims:

1. To get people moving - we are the front-line of health care and can set a great example for our colleagues and patients.
2. To develop the team spirit in our departments - We have shown that the EDGE Challenge helps us to work better as a team, and therefore improves our ability to look after our patients.
3. The programme was developed by ED staff, with the intention of increasing team work and helping people to get to know each other. Staff have engaged in a range of activities, from lunch time 30 minute walks to paddle boarding, boxfit and poweryoga. Additional 'points' can be gained through including multiple people, from multiple disciplines, exercising with children and also with pets, as well as a few extra fun activities such as adding in jumps, silly hats and other creative options!

SANDRA

ASHBURTON UPDATE

As I sit here, our thoughts are with the CHCH team and the effect from the fires on the Port Hills. As if CHCH hasn't had enough to deal with in past few years.

Ashburton AAU shifted into the new building on 7th December 2016, integrating with the Operating Theatre. This has been a change for all the staff and a new process and for patients. Nursing staff have managed well with change, incorporating Releasing Time 2 Care modules with our move. We will continue to work with the principals of RT2C and engaging staff in the concepts this promotes.

We have seen an approx. 30% increase in patient presentations for December and January, which has put extra

REGIONAL REPORTS

pressure on our system. Well done to the multi-disciplinary team that have worked their way through this.

I also have a staff member helping Kaikoura Hospital for two weeks in their time of need.

We have completed a full year of NetP nurse preceptoring for AAU, a new concept for us. Well done to the preceptors and to Ade George our NetP nurse. This year we will be having a NetP in the second 6 month period, sharing with Ward 1.

Our thanks go out to ECCT Upper South Island for sponsoring staff to attend TNCC last year, and ENPC this year.

MARG ANDERSON

CHARGE NURSE MANAGER, AAU, ASHBURTON HOSPITAL

SOUTHERN REGION

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DUNEDIN HOSPITAL EMERGENCY DEPARTMENT

PATIENT PRESENTATIONS

The December to February period saw an average of 120 patients presented with some daily fluctuation and a large increase over Waitangi weekend.

The students have returned to Dunedin with orientation week from the 20th of February showing increased numbers of presentations

Due to a flash flood and hailstone storm in Dunedin the local Urgent Doctors and accident centre was closed for 36 hrs, increasing the pressure on ED.

STAFFING

Justin has moved to a community Quality Review position officially resigning in December from the ED CNM position. The new CNM is Janet Andrews one of the former ACM. The ACM post will be a secondment for 1 year allowing 2-3 others to gain experience in the role and allow for succession planning. Currently Cheryl Jellone is filling the Acting ACNM role. We also welcome three Netp staff to ED this year.

EDUCATION & RESEARCH

Senior nursing staff, the educator and CNM are reviewing the education plan for the coming year, and hope to achieve more education hours for nursing staff. There has also been some discussion around models of care to allow flexibility and time for further education.

Ed staff in Dunedin, as in other centres, are involved in the second phase of the St John Ambulance study where ACS patients are given O2 only when Spo2 is below 90% to ensure that SPo2 is maintained at 94%.

Conference committee delegates Erica and Shona have produced a prospectus and are currently seeking financial sponsors for the 2017 conference in Queenstown

INVERCARGILL

PRESENTATIONS

ED at the moment is still seeing consistent numbers but we have had some days where the numbers are down. The acuity has remained quite high including several traumas with significant injuries.

Currently, data is being gathered around whether people are trying their GP first and if not, what is the reason given for ED as their choice of health provider.

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STAFFING

Leanne Shallish was confirmed in the position of CNM for southland ED and a new Nurse Educator within the dept – Olivia. She is currently planning the education for the department for the next year.

Southland ED is currently recruiting for staff. 2 Netp graduates have already started a fixed term contract in February.

Kirsty Lewis is almost at the end of her training as a Nurse Practitioner and will graduate in March. This is a huge achievement for her and also a new role within the dept.

STRATEGIC PLANNING DAY

We had a ED planning day in January which looked at all aspects of the department. Some great ideas have come out of this and we look forward to progressing with these within the department.

RESEARCH

We are involved with the Australasian wide bronchiolitis study which has come from Star Ship. A huge amount of work has begun and an exciting opportunity to be involved with this along with the paediatric ward.

OAMARU

PRESENTATIONS

Christmas and New Year has been very busy due to both acuity and presentation numbers. Although the weather has not been a true summer, the town has been fairly busy with overseas and New Zealander visitors in town.

STAFFING

Staffing has been difficult due to annual leave and sickness. In February we welcomed a new Director of Nursing as Colleen Moore is retiring.

We also have had a number of locum doctors who have managed very well within their new surroundings.

However there is still only one doctor and one nurse on duty at any given time making lunch breaks sometimes difficult.

VISIT OF CENNZ SDHB REPRESENTATIVE.

We look forward to catching up in March and discussing issues that have arisen since the representatives last visit.

QUEENSTOWN LAKES

PRESENTATIONS

A steady holiday season at Lakes with a small increase in the number of presentations on last year but perhaps not as busy as expected. RTCs and local events have kept the acuity and presentations steady. Lower acuity patients have been offered alternative care options where appropriate, to ensure people receive the care they need in the most medically appropriate setting. A high number of visitors have sought medical assistance in EDE throughout the new year and January. All we need now is for summer to finally arrive rather than winter continuing. There was snow on the hills in January!

STAFFING

We had extra nursing and medical staffing over this period which improved the waiting time, patient flow through the department and standard of care which could be delivered more quickly, and reduced staff stress. Hence overtime and staff sickness rates are lower and staff morale remains high.

CONFERENCE

The staffare excited – and a little overwhelmed – to be hosting the CENNZ conference in Queenstown in October this year, in conjunction with Dunedin and Invercargill staff. Planning is well underway with a fabulous venue, interesting and varied guest speakers being organised, with topics reflecting the local setting and the practice challenges we face.

We look forward to hosting many of you in this amazing setting and giving you an interesting, challenging and fun conference experience.

ERICA

NEW ZEALAND EMERGENCY DEPARTMENTS CONFERENCE

TAUPO | 19th - 20th October 2017

REJUVENATE

Definition: make (someone or something) look or feel better, younger, or more vital

After a break in 2016 to make way for the ACEM ASM in Queenstown - the Taupo ED Conference is back and rejuvenated

SAVE THE DATE FOR THE 2017 NATIONAL ED CONFERENCE NOW IN ITS 8TH YEAR.

This is YOUR conference, an opportunity to get together with like-minded individuals, share ideas and be rejuvenated.

This conference is dedicated to administrative issues which affect NZ Emergency Departments, suitable for anybody in formal or informal leadership roles in an Emergency Department.

Registration will be open in August 2017

For more information please go to:
Kiri.Bramley@healthshare.co.nz

Or contact any of the organizing committee:
Ruth Large, Matt Valentine, Peter Freeman, John Bonning, Stephanie Watson

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