North Shore Hospital

March to October 2007

A Report by the

Health and Disability Commissioner

(Case 07HDC21742)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

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EXECUTIVE SUMMARY

The patients
This inquiry focuses on the plight of sick, elderly patients in a major metropolitan hospital. It examines complaints involving five patients whose reported experiences mirrored numerous complaints received by the Health and Disability Commissioner (HDC) about North Shore Hospital in 2007.

1. Ms A was 82 when she was admitted to North Shore Hospital ECC (Emergency Care Centre) from her rest home on 1 April 2007, with gastric bleeding. She spent 36 hours in ECC. The complaint from her partner was about her care, the lack of communication and support when she was discharged, and that two days after her discharge, it was discovered that she had a fractured right hip. Ms A was readmitted to North Shore Hospital on 6 April for surgery to repair the fracture. She died eight days later.
2. Mrs B (81 years) was admitted to the ECC on 6 July 2007 after being airlifted from the United States where she had spent a month in hospital after a severe stroke. She had also suffered a heart attack. Mrs B was transferred to ward 11 with breathing difficulties and in heart failure on the afternoon of 6 July, and died there on 14 July 2007. Her son, a doctor, complained that his mother's deteriorating condition and his requests for medical assessment were not given the necessary priority.
3. Mrs C (85 years) was referred to North Shore Hospital on 25 September 2007 by her GP for assessment and treatment of heart problems. After four hours in ECC she was transferred to ward 10. Two days later her condition deteriorated. Her family raised concerns that this was caused by the codeine she had been given. She died on the ward on 28 September 2007.
4. Mr D was 73 when he was admitted as a self-referral to the ECC on 20 September 2007, with hyperventilation, anxiety and a heart condition. He had been diagnosed and treated for lymphoma earlier in the year. Mr D was transferred to ward 11 after six hours in ECC. His family were anxious about his breathing problems and reluctance to eat, and the lack of care. They thought he was dying and were frustrated by a lack of communication about his condition and that the doctors believed he could be rehabilitated. On 18 October, Mr D was discharged to a private hospital at the family's request, but stayed there only hours before being transferred back to North Shore Hospital with an exacerbation of his heart condition. He died in the ECC on 19 October 2007.
5. Mrs E (79 years) was referred to North Shore Hospital on 17 October 2007 by her GP, with possible pneumonia. She spent about 12 hours in ECC where she experienced delays in calls for assistance to get to the toilet. Mrs E was transferred to ward 10. She experienced delays in nursing responses to her calls for assistance, and a lack of hygiene in the ward. Mrs E was discharged home on 19 October 2007 and made a good recovery.

Summary of findings
Although four of the five patients died, there is no evidence that treatment injuries or lapses in care caused their death. But in significant ways Waitemata DHB's care for all five patients breached the Code of Health and Disability Services Consumers'

Rights (the Code). They suffered delays in care and deficiencies in communication with them and their families.[1] The failings were not the fault of individual staff but the result of systemic issues, overcrowding, and pressures on staff. In such an environment, non-urgent care is often given low priority as staff focus on the bare essentials in an effort to keep patients safe. That happened at North Shore Hospital. Although the standard of medical care was largely reasonable, the nursing care was not. The nurses did not have time to care.

Waitemata DHB breached the following Code provisions:

- Rights 4(1) and 4(3) by deficiencies in the care provided to Ms A, Mrs B and Mrs E in ECC.
- Right 4(5) by poor co-ordination of Mrs B's care in ECC.
- Rights 1(1) and 3 by the disrespectful and undignified manner in which Ms A, Mrs B and Mrs E were treated in ECC.
- Rights 4(1), 5(1) and 6(1)(a) by Ms A's deficient discharge, with inadequate information.
- Rights 4(1) and 4(3) by omissions in the care for Mrs B and Mr D on ward 11, and for Mrs C and Mrs E on ward 10.
- Rights 5(1) and 6(1)(a) by poor communication and lack of information in the cases of Mrs B and Mr D (and their families).
- Rights 1(1), 3 and 4(1) by the substandard hygiene and lack of basic amenities during Mrs E's stay on ward 10.

DHB accountability

These cases vividly demonstrate how overcrowding and staff shortages can translate to substandard care for patients. What emerges is a picture of an overcrowded hospital, staff who were stretched and stressed, and patients and families who were left in the dark about the patient's condition, prognosis, and plan of care. The ECC and medical wards 10 and 11 were ill equipped to cater for the flood of patients in the winter of 2007. North Shore Hospital's acute care services were overwhelmed.

It was not news to Waitemata DHB that its acute care services were frequently over-subscribed and that staff were struggling to cope, particularly in the ECC and especially in winter. For several years clinical leaders had consistently raised concerns, which led to numerous reviews and reports. There had been a lot of talk but not enough action at Board level. Despite valiant efforts there was inadequate planning and insufficient action to fix current problems at North Shore Hospital and to plan for anticipated population growth. It was not until the overload of winter 2007 was bearing down on the hospital that the Board took decisive action to approve more beds and future development. By then it was too late for sick patients and their families.

Waitemata DHB failed to fulfil its duty to provide sufficient staff and robust systems to withstand fluctuating demands, and to ensure good communication between staff

[1] Their experience is not unique. See Opinion 07HDC01804 (26 May 2008) for another example (from early 2006) of delays in ECC, an unhygienic ward, poor nursing care, and communication difficulties at North Shore Hospital.

and with patients and their families. The Board and its senior management must accept accountability for the failings set out in this report. It is not enough for a Board simply to "toll the bell of scarce resources"[2] to excuse itself from liability under the Code.

Overcrowding — a national problem

Waitemata DHB is not the only district health board with pressure on its acute services and an overcrowded hospital causing problems in the emergency department. Similar issues have been highlighted in four other recent HDC investigations.[3] Nor is Waitemata alone in being critically short of Resident Medical Officers (junior doctors) and nurses — though its recruitment problems have doubtless been exacerbated by the well known difficulties at North Shore Hospital. These challenges are not unique to Waitemata DHB, nor to New Zealand.[4]

The public accepts that at busy times hospital services will be stretched and that patients must be prioritised according to their needs. What is harder to accept is that crowded, uncomfortable, and unsanitary conditions should be commonplace in a modern hospital.[5] All hospital patients, especially acutely unwell senior citizens, deserve clean facilities, comfortable waiting areas, and responsive services. A lack of hygiene and long waits in uncomfortable conditions are an affront to patient dignity and a breach of legal rights.[6]

Overcrowding has been described as the most serious problem and most avoidable cause of harm facing hospital systems.[7] It largely results from hospital access block ("bed block"), when patients remain in the emergency department awaiting suitable inpatient beds.[8] The causes of overcrowding, and the primary solutions, lie outside the ED. A whole-of-hospital approach is needed. Concerted action to tackle this endemic problem is essential both at Waitemata DHB and nationally.[9]

The way forward

Since these events, Waitemata DHB has made significant changes at North Shore Hospital. Various initiatives have been introduced to boost capacity and improve

[2] Law J in *R v Cambridge HA, ex parte B* (1995) 25 BMLR 5, p 17.

[3] Opinions 07HDC17769 (28 November 2008), 07HDC10767 (25 September 2008), 07HDC14539 (12 December 2008), 08HDC00248 (26 September 2008).

[4] For a graphic overview of similar problems in New South Wales, see Garling P, *Final Report of the Special Commission of Inquiry: Acute Care Services in NSW Public Hospital* (November 2008).

[5] These problems are not unique to New Zealand. Similar concerns have been noted by the Healthcare Commission in the United Kingdom (see Annual Report, 2007/08, page 16) and have led to a campaign by the consumer group "Which?", entitled "Impatient for Change, seeking 'cleaner, friendlier, happier hospitals'" (http://www.which.co.uk/campaigns/health-care-standards/index.jsp).

[6] Right 3 of the Code states that "[e]very consumer has the right to have services provided in a manner that respects the dignity and independence of the individual".

[7] Institute of Medicine, Committee on the Future of Emergency Care in the United States Health System, *Hospital-based Emergency Care: At the Breaking Point* (Washington DC, National Academy Press, 2006).

[8] See Richardson D, Mountain D, "Myths versus facts in emergency department overcrowding and hospital access block", *Medical Journal of Australia* 2009, 190: 364–68.

[9] See the Report of the Working Group for Achieving Quality in Emergency Departments, *Recommendations to Improve Quality and the Measurement of Quality in New Zealand Emergency Departments* (Ministry of Health, January 2009).

systems. These include the provision of additional beds and staff; the appointment of some key senior staff; changes to the way ECC operates (including the reintroduction of an acute assessment unit); and changes to nursing structure. A major new development (the Lakeview expansion, for which central government capital funding has recently been approved) is planned.

This report makes specific recommendations that the DHB apologise to Mrs E and the families of the other four patients. Waitemata DHB is required to report on an overall bed management programme at North Shore Hospital, and improvements in ECC and nursing care, by 31 October 2009. The Minister and Ministry of Health are asked to progress national initiatives to improve the quality of emergency department care. And all nursing schools are recommended to consider the report's implications for nursing education.

Boards, Chief Executives and senior management of all district health boards need to read and reflect upon the lessons from this inquiry — recognising that "there but for the grace of God go [we]". Equally, district health boards should not be left to solve intractable funding and delivery problems on their own. They need support from central government.[10] Otherwise, Boards will flounder, management and staff will become demoralised, and failings in care will follow, leading to a loss of community confidence in local hospitals and in the health system.

The public scrutiny of independent inquiries, and the attendant media publicity, can be very demoralising for public hospitals. I do not doubt the skills, competence and goodwill of the staff of North Shore Hospital, nor their capacity to rise to the challenges they face. I encourage the Board and senior management to fully involve clinical staff in future changes — and to listen carefully to their concerns. I specifically endorse the call of my nursing expert "to give a voice and heart to the largest key asset of the organisation, the nurses".

Waitemata DHB must continue to work with its clinical leaders, staff, health officials, and the wider community to urgently improve the functioning of the ECC and the way patients flow through North Shore Hospital, not only for the future but also while the longer term capacity issues are resolved.

In the words of Mr D's wife:

> "We can only hope that something really positive comes out of this investigation … so other families can feel confident knowing that their loved ones are being cared for in a safe hospital environment."

[10] For a penetrating analysis of the "perpetual tensions between government and the DHBs", see Gauld R, "Revolving Doors: New Zealand's health reforms: the saga continues" (forthcoming, Institute of Policy Studies, Wellington, 2009), ch 11.

INTRODUCTION

This Commissioner-initiated inquiry was commenced on 18 January 2008. It was prompted by concern about the number of complaints HDC had received about North Shore Hospital, and the apparently widespread community concern being expressed in various media. Four complaints were initially identified as raising very similar issues about the functioning of the acute care services over the same recent time period. A fifth complaint was subsequently added to the inquiry.

The terms of reference for the inquiry and details of the process are attached as **Appendix 1**.

Nurse specialist Sue Wood, emergency medicine specialist Dr Mike Ardagh, and consultant physician Dr John Henley provided independent expert advice, which is attached as **Appendices 2, 3 and 4** respectively. I am grateful to them for their time and expertise.

CONTEXT

Waitemata District Health Board

Waitemata DHB provides public hospital care for people living in the North Shore, Waitakere, and Rodney areas of greater Auckland. North Shore Hospital, beside Lake Pupuke in Milford, is the larger of its two hospitals. It offers a full range of public hospital secondary care services, including (from 2003 to 2007) 169 medical and 138 surgical beds, an intensive care and coronary care unit, and an Emergency Care Centre.

Waitakere Hospital, in Henderson, is supposed to ease pressure on North Shore Hospital, but it is much smaller with a limited range of services. In 2007, its ECC had only 18 beds and was open to “walk-in” patients only from 8.00am to 6.30pm. However, patients brought in by ambulance or referred by a GP were accepted up to 10pm.

Growth in patient numbers

Since 2003/04, Waitemata DHB patient numbers have grown by 77%,[11] easily the largest rate of growth in the country. Its catchment population is the largest of the 21 district health boards. The population has grown by nearly 17% in the last decade, a rate of growth second only to Counties Manukau District Health Board in South Auckland.

Hospitals operate most efficiently when they are, on average, at 85% occupancy[12] but in practice this is seldom (if ever) achieved, particularly in winter when demand for hospital services is traditionally high. In the Auckland region, hospitals are typically at between 95% and 110% occupancy in winter.[13] When a hospital is full, there is a

[11] Ministry of Health data, 2008.

[12] Bagust et al, “Dynamics of bed use in accommodating emergency admissions: stochastic simulation model”, *British Medical Journal* 1999, 319;155–58.

[13] It seems that lip-service is paid to the 85% mark, but little is done to encourage DHBs to reach this level.

backlog effect, creating overcrowding in the emergency department. This increases risk to patients.[14] Decreasing the occupancy rate is also important for infection control, to prevent cross-infection and multi-drug-resistant organisms.[15] There is evidence that when emergency departments are more than 90% full, it can result in unnecessary harm to patients and reduced staff morale and retention. Patients have a greater risk of dying within 30 days of attending an adult emergency department if it is overcrowded. The patients most at risk are older patients discharged during winter peak periods.[16]

Inpatient occupancy at Waitemata DHB was consistently higher than 90% in 2005 and 2006. In the winter of 2006, North Shore Hospital's average occupancy was about 94%.[17]

Total bed numbers across Waitemata DHB's two hospitals increased from 256 medical/surgical beds in 1999 to 508 in 2009, a 50% increase.[18] However, the number of medical and ECC beds at North Shore Hospital did not increase between 2001 and 2007, and the number of surgical beds remained static between 2003 and 2007.

Waitemata DHB has acknowledged that, with hindsight, more beds should have been provided at North Shore Hospital in the period up to 2007.

Funding

Funding for district health boards takes into account the size, age and wealth of their population and is apportioned using the Population Based Funding Formula (PBFF).[19]

Waitemata DHB has long believed that this formula is inequitable because it gives too much emphasis to the relative wealth of its North Shore population and insufficient recognition to unmet need in Waitakere and the additional costs of serving the rural population in Rodney. It believes it has been (and continues to be) underfunded for the size and demographic make-up of its population and that this is getting worse.

The Waitemata DHB Chief Executive since 6 November 2006, has been publicly quoted as stating that their community is seen as "healthy and wealthy" and that age

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[14] See, for example, recent cases 07HDC17769, 07HDC10767, 07HDC14539, 08HDC00248.

[15] Clements A et al. "Overcrowding and understaffing in modern health-care systems: key determinants in methicillin-resistant *Staphylococcus aureus* transmission", *Lancet Infectious Diseases* 2008, 8:427–34.

[16] Sprirulis, PC, et al, "The association between hospital overcrowding and mortality among patients admitted via Western Australia emergency departments", *Medical Journal of Australia* 184:5, 6 March 2006.

[17] [General Manager for Adult Services]. Business Case for PBMA. Adult Medical Services Patient Safety and Inpatient Capacity, January 2007.

[18] All but 80 beds (added as a result of transfers from Auckland and Counties Manukau DHBs of acute orthopaedic service, in 2003, and Special Care Baby Unit cots, in 2004) were true "new" beds.

[19] PBFF applies costs per person based on the person's age, sex, ethnicity and a deprivation measure based on the area in which they live. Introduced in 2002, it is used by central government to allocate funds from Vote Health to DHBs. It is being reviewed every five years. The last review in 2007/08 resulted in little change, with Waitemata DHB being the only member of the advisory group to oppose the continued use of deprivation and ethnicity factors.

has not been given sufficient weighting in the funding formula.[20] His predecessor voiced similar concerns during his tenure as CEO (1998–2006).

The DHB advised that its Chief Executive, Chair, and Board have made “extensive efforts” to secure additional funding. They have lobbied “long and hard” over many years; “engaged extensively” with the Ministry of Health (the Ministry) about the detail of the formula; and argued for changes to make the formula fairer to the Waitemata population.

It maintains that there has been a failure by the Ministry to acknowledge the need for additional funding. Waitemata’s population growth pressures have been highlighted to officials through every District Annual Planning round but the clear message from the Ministry has been that the DHB must live within its funding.

The DHB argues that increases in the formula for projected population growth have nowhere matched the actual increase in its population. Although most DHBs receive a share of funding that is very close to their actual population share, Waitemata calculates that it is at the “extreme end” of the redistribution effect of the formula, and it has the biggest gap between population size and share of the PBFF.

During the 2006/07 period Waitemata DHB believed it was significantly under-funded compared to other DHBs. Based on the 2005–2007 financial years, the funding allocation using both the PBFF, and the significant level of funding that sat outside of it, resulted in Waitemata DHB being (in its view) “clearly disadvantaged”.[21]

In contrast, the Ministry does not accept that Waitemata DHB has been disadvantaged by the formula and the funding it has received. It states that Waitemata DHB has received higher than average funding increases for several years.

The Ministry explains that Waitemata DHB’s population is younger and statistically healthier than the average population, has fewer people living in areas of high need, and smaller Māori and Pacific populations. Its population is therefore expected to have lower costs than that of a DHB whose population is older, poorer, and less healthy.

Nonetheless, Waitemata’s higher than average population growth means its funding for population change has averaged 3.1% per annum from 2002/03 to 2008/09 inclusive compared to the national average of 1.8% for all DHBs. Over the same period, Waitemata DHB received total increases of 7.3% per annum (covering both population change and cost growth) when compared to the national average of 6.4% for all DHBs.

[20] *Metro*, April 2008, page 12.
[21] The DHB calculates that the gap between its funding and population share (1.38%) will be $135 million for the coming 2009/10 year.

Emergency Care Centre
Like all public hospitals, North Shore Hospital's ECC is the gateway through which the majority of acute (urgent) patients are admitted to the hospital. Its efficiency relies on many different professional groups working cooperatively while competing for limited resources. It is located in the main hospital, built in 1984.

The ECC is an amalgamation of two previously separate facilities — the Emergency Department for emergency patients, and the Assessment and Diagnostic Unit for acutely ill patients referred by their GPs.

This means that the way patients arrive determines the path they follow to the wards or to discharge from ECC. There are two different "pathways" depending on whether the patients arrive (on their own or by ambulance) without a doctor's referral, or whether they have been referred by their doctor.

Regardless of how they arrive, all patients are assessed on arrival by a "triage" nurse, who allocates a code that reflects how urgently they need to be seen by the ECC medical team. The timeframes are specified in an Australasian Triage scoring tool.[22] This process also determines where they will be placed in ECC, ie, which monitoring zone.

There are four zones in North Shore Hospital's ECC: the Resus Zone for patients requiring resuscitation or immediate assessment and treatment; the Monitored Zone for those requiring urgent medical attention and/or close nursing monitoring; the Acute Zone where all acute presentations are initially assessed and treated; and the Observation Zone for patients needing short-term, continual care. Patients assessed as needing a hospital bed for 18 hours or less are kept in the Observation Zone.

ECC nurses deliver a significant portion of patients' initial management, including the recording of vital signs, the insertion of intravenous cannulae, and the taking of diagnostic tests.

Patients without a referral are examined by an emergency medicine (ECC) doctor. If the patient needs to be admitted to hospital, the ECC doctor cannot order a bed until the patient has been reviewed by a member of the relevant specialist team, such as general medicine. Therefore the patient waits in ECC to be seen by a member of that team (who may be a less experienced doctor than the one in ECC). If the need for admission is confirmed, a ward bed is ordered and the patient then waits for transfer once a bed becomes available.

If patients arrive with a referral, usually their doctor has spoken to a specialist team at the hospital and sent a letter with them. In these cases, if the patients are not triaged as needing urgent attention, they are not assessed by emergency medicine doctors but wait to be seen in ECC by a doctor from the specialist medical or surgical teams, based in other parts of the hospital.

[22] Triage 1 to be seen immediately; triage 2 to be seen within 10 minutes; triage 3 to be seen within 30 minutes; triage 4 to be seen within one hour; triage 5 to be seen within two hours.

All patients in ECC who are waiting to be seen are listed on an electronic whiteboard as "To Be Seen", under their allocated specialty. Each specialty can electronically view their waiting patients in order of triage category.

The New Zealand Faculty of the Australasian College of Emergency Medicine (ACEM) recommends that 80% of patients be seen by a specialist within two hours of referral to a specialist, 80% should be admitted within one hour of being seen by a specialist, and 90% of all ECC patients admitted to hospital should have been in ECC for less than six hours. At North Shore ECC, patients who have not yet been seen, and have been waiting for longer than these guidelines, appear in red at the top of the electronic list.

Although the number of ECC beds at North Shore Hospital has not changed since 2001, the number of staff rose from, on average, 156.6 FTEs (full-time equivalents) in 2005 to 187 FTEs in 2007, and total ECC personnel costs rose from just over $12 million to almost $19 million over the same period.

Medical wards
North Shore Hospital had five medical wards in 2007. This included wards 10 and 11. Ward 11 is situated in a single storey building on the main hospital campus, and ward 10 is located within the tower block.

General medicine
There are 15 medical teams at North Shore Hospital, each comprised of one consultant, a registrar and a house officer. Their duties include a daily ward round of all patients under their care. There is also a set roster for the admission of acute patients. These admissions are usually seen each morning at a post-acute round, which is consultant led, in either ECC or the wards.

According to the Clinical Director of General Internal Medicine the admitting teams admit an average of 15 to 20 patients a day during the week and about 30 in the weekend. About 20% of these patients go home the next day, 30% go home within three to four days, and the remainder stay longer. The average length of stay is just over four days.[23]

When beds are at a premium, patients are admitted to the first available bed in the hospital rather than waiting for a bed on a ward for the particular specialty. Patients admitted to another service's ward are referred to as "outliers", for example, a general medical patient who is admitted to a surgical ward.[24]

The house officer is responsible for monitoring the progress of the patients, and their treatment and discharge. The registrar oversees the house officers and provides clinical advice. When there is no house officer for a team, a trainee intern or fifth-year medical student covers the house officer duties. The house officers may cover for other teams if they are a doctor short.

[23] This is very low by international standards.
[24] Such patients are likely to receive poorer quality care and to stay longer.

Typical duties for the after-hours on-call medical house officer is that he or she is responsible for admitting some patients, and for patients on two medical wards, two geriatric wards, and one psychogeriatric ward from 4pm to 10pm during the week, and 8am to 10pm in the weekends. The wards have between 34 and 36 beds, which can mean that the on-call house officer is responsible for the welfare of 140 patients. Weekend workloads are more difficult to manage than the late shifts during the week, because the patients have not been seen by the teams on routine ward rounds and therefore the normal management of diagnostic test requests, such as blood tests, have not been completed.

Nursing service
Nursing position numbers are reviewed every year. The number of established positions, particularly in the adult health service, is said by the DHB to be similar to that of other hospitals in the region and nationally.

According to the Associate Director of Nursing, in the latter half of 2007 (and into 2008) North Shore Hospital had 340 budgeted nursing positions but 59 vacancies, representing a 17% vacancy in the inpatient wards of the Adult Health Services.

Occupancy at North Shore Hospital was at 100% over much of this period. During the winter months and at other peak times in 2006/2007, it was common for average staffing levels in the wards to be one nurse to six to seven patients (or more) during the day and 12 patients at night.

Waitemata DHB said the high volume of patients, the impact on the budget of late replacement when staff left, the removal of some support roles in late 2005/06, and the slow filling of vacancies owing to a regional shortage of nurses, all impacted on North Shore Hospital during the period examined in this inquiry.

Nursing leadership and supervision
The DHB submitted that for some years it has had a robust nursing structure which supports nurses to fulfil their professional responsibilities. However, it also acknowledged that some “tweaking” may be needed.

In 2007 (as now), Waitemata DHB’s Director of Nursing and Midwifery had overall responsibility for professional leadership, workforce planning and professional systems, and reported to the Chief Executive. Additionally, each service, such as Adult Health services, had its own Associate Director of Nursing (or Midwifery) responsible for professional leadership, workforce planning and professional systems within their service.

There are, in total, seven nurse/midwife professional leaders. They do not have line authority, but are part of the service management teams and can influence and lead professional issues. Their key responsibility is overseeing nursing practice.

There are also a number of Nurse Consultants at the corporate and service level, providing professional support and development, and there are Charge Nurse/Midwife Managers on each ward who are responsible for managing the systems, processes and workforce in the ward or unit. They report to Unit Managers for operational issues.

Areas such as ECC also have an Associate Clinical Charge Nurse to support shift management in acute, changeable situations.

There are a number of nursing positions with responsibility for the training, support and professional development of nurses. These include 11 Clinical Nurse Educators and 33 Clinical Nurse Specialists in North Shore Hospital's Adult Health Service, and Clinical Coaches who, since 2006, have particularly supported new graduate nurses in ECC and other departments.

Experienced enrolled nurses known as Accomplished Enrolled Nurses work in association with the registered nurses rather than under their direct supervision. Bureau nurses are usually DHB employed casual staff rather than agency nurses and therefore their supervision and accountability is the same as for permanent nursing staff.

Team nursing
In 2007, only ECC formally used team nursing.[25] This involves nurses with different levels of experience and seniority working as a team instead of being individually responsible for specific patients. Under this model, a nominated team leader has overall responsibility for all the patients in the area and prioritises and directs the care provided by the various nurses. Waitemata DHB explains that this means care is provided "by the right nurse so that care is done by the right person at the right time to achieve the right outcome for the patients".

In ECC the model applies primarily to the 25 cubicle Acute Zone where the nurses are divided into two areas — north and south — with one of the nurses in each group identified as team leader for each shift. They are expected to communicate to ensure that care is provided as required, especially when there are less experienced nurses working. In other areas in ECC the nursing teams have a senior nurse as team leader.

ECC patients' care needs are tracked on whiteboards. During a shift, regular case conferencing with all the team members is the means by which the delivery of care is co-ordinated and re-prioritised, and plans of care reviewed.

In 2007, medical wards 10 and 11 did not have team nursing and instead used the individual patient allocation model.

North Shore Early Warning System (NEWS)
In April 2006 Waitemata DHB introduced a scoring system (rolled out at North Shore Hospital over six months) to help staff to more quickly recognise when a patient is deteriorating on the wards and to reduce delays in referring these patients to ICU. Known as NEWS, it relies on the accurate recording of simple physiological variables, such as heart rate, blood pressure, respiratory rate, neurological status, oxygen saturation, and urine output. There are various triggers that signal the need for further action. For instance, all patients with a score equal to, or greater than, 1 must

[25] It is now used more widely across North Shore Hospital.

be referred to the nurse in charge of the ward, and the frequency of observations must be increased to two hourly. Waitemata was the first district health board in New Zealand to introduce such a "track and trigger" system.

All acute services nursing staff are introduced to the system at orientation and attend training as part of various learning modules. A one-day training course was initiated in late 2007, and 504 nurses, including some from ward 10, have attended the course to date. In 2007 ICU staff offered a six-week programme to give other nurses some high-dependency nursing skills to take back to their ward. Waitemata DHB stated that some nurses from wards 10 and 11 have undertaken this programme. However, it is unclear when this occurred.

Nursing compliance with NEWS is audited quarterly. If poor compliance is found, the audits are repeated more frequently. No audit results have been provided for 2007, but the results for the autumn, winter and spring of 2008 show that in ward 11 there was 100% compliance with recording NEWS scores, and a high level of accurate recording. In ward 10 there was 66–87% compliance, with a high level of accuracy. Most patients were referred to the medical teams as required.

FIVE PATIENTS

Introduction

In 2007, HDC received a spate of complaints about recent patient care in the ECC and on medical wards at North Shore Hospital, well in excess of the usual number of complaints about a metropolitan public hospital. Public concern was also documented in the local media, notably *The New Zealand Herald* and *The North Shore Times*, over the winter of 2007. HDC selected five representative complaints to form the basis of this inquiry and provide a window into the operation of North Shore Hospital. The following is a summary of what happened to five patients.

Ms A (31 March to 2 April 2007)

Background

Ms A (82 years) had been in rest home care since late January 2007. She suffered from dementia and a variety of medical conditions, including chronic duodenal ulceration. On 30 March 2007, Ms A had an episode of "coffee grounds" vomiting[26] and the following day she was transferred to Waitakere Hospital by ambulance for treatment of apparent gastrointestinal bleeding.

Waitakere Hospital

On 31 March 2007, Ms A was examined by a medical officer at Waitakere Hospital ECC, who found that she had a tender epigastrium and melaena.[27] Intravenous fluids were commenced for hydration, and blood tests requested. Her care was then transferred to the Waitakere Hospital medical team. She was reviewed by a medical registrar and a house surgeon, who confirmed that she had suffered a gastrointestinal

[26] Vomiting of digested blood ("coffee grounds"), usually from bleeding in the upper gastrointestinal tract.

[27] Black tarry stools indicative of bleeding in the upper gastrointestinal tract.

bleed. Waitakere Hospital staff did not undertake a mobility assessment as there were no concerns about her ability to walk. Arrangements were made to transfer her to North Shore Hospital for ongoing management. The Waitakere clinical charge nurse telephoned the clinical charge nurse at North Shore to ensure she was aware of Ms A's history of dementia.

North Shore Hospital ECC

Ms A arrived at North Shore Hospital ECC shortly after midnight on 1 April 2007. She was noted by nursing staff to be comfortable, and reviewed by the night medical registrar at 12.35am. Ms A was stable and not complaining of any pain. She was alert and her observations remained stable. There were no particular concerns about her safety.[28]

Review by medical consultant

Ms A was reviewed at around 9am by the medical consultant, who found that she was no longer bleeding and noted his plan to discharge her if she remained stable. There was no indication that a mobility assessment was required.

The medical registrar who accompanied the medical consultant when he saw Ms A, recalls that she received a "comprehensive" physical examination and there were no concerns about her mobility. Ms A remained stable and, at 4pm, a note in her medical records shows that the order for a bed for her on the ward was cancelled, because the plan was to discharge her the next day and there were a limited number of inpatient beds available. Her partner, Mr A, was asked to collect Ms A at 9am the following day. He said he would be in about 10am.

Staffing

Mr A visited Ms A on 1 April. He recalls:

> "[T]he place was deserted and the patients here, there, the place was deserted, there was nobody at the desk … and it was just, an extremely hopeless situation in my opinion."

The ECC Service Manager stated that overcrowding and high patient volumes may have contributed to the lack of staff available to talk to Ms A's partner. The Waitemata DHB CEO confirmed that staff levels and mix were an issue at this time, with a high number of bureau staff. There were three nurses for 18 beds (with one of these nurses working a short shift), and up to six corridor beds in the Observation Zone (where patients can be put if they are expected to go home within 18 hours). While Ms A was in the Observation Zone the ratio was eight patients per nurse.

Discharge

Around 6am on 2 April, a nurse recorded that Ms A appeared to be "scared of mobilising" and required two nurses to "transfer". However, there are no further

[28] Patients with dementia in ECC are placed in front of the nurses' station for ease of monitoring. Bed rails may be used. Alternatively, a watch is arranged if there are particular concerns about patient safety.

documented concerns about her mobilisation. At around 11.30am, Ms A was seen by the medical registrar and cleared for discharge.

Mr A collected her around lunchtime. Ms A had been moved and Mr A had to approach the main desk to find her. He was surprised that she was not dressed and there was a wheelchair beside her bed. Mr A had difficulty in locating a nurse to assist him to get Ms A ready to go home. A nurse reluctantly helped him put his partner in a wheelchair after he "demanded" help. Mr A noticed that when they sat Ms A in the wheelchair she was in a lot of pain, pointing in the general area of her abdomen.

The nurse told him that the discharge papers would be sent by mail, then "disappeared". Mr A believes that he should have been given the discharge papers. The medical registrar commented that, on occasions, routine discharge summaries are not completed at the time of discharge because of workload and other priorities. In this case, there was no need for follow-up as Ms A was stable.

Aftermath
Mr A transferred Ms A into his vehicle with "some difficulty", helped by two ambulance officers. On arrival at the rest home, Mr A required assistance from caregiver staff to transfer her, as she appeared to be in pain and was "very shaky and unable to walk more than a step or two". The rest home manager contacted North Shore Hospital to ascertain whether a fall had occurred. However, the hospital was not able to provide any information about Ms A's mobility.

Two days later, on 4 April, Ms A was seen by her medical practitioner. She did not appear to be distressed, but had pain when the doctor tested the flexion of her hip. A portable X-ray taken at the rest home confirmed that she had a compound hip fracture. The medical practitioner commented that he saw no evidence of bruising to suggest a prior injury, and noted that it is possible for a person of Ms A's age to sustain a pathological fracture without any significant force or injury.

Ms A was readmitted to North Shore Hospital. On 6 April, she had surgery to repair the fracture, but her condition deteriorated and she died on 14 April.

Mrs B (6 July to 14 July 2007)

Background
Mrs B (81 years) suffered a severe stroke while on holiday overseas and was hospitalised. She was flown back to New Zealand by her family, accompanied by a medical transfer team (two nurses).

North Shore Hospital ECC
Mrs B was admitted to North Shore Hospital ECC at 8.20am on 6 July 2007. North Shore Hospital's general medical team had been alerted to her arrival. The medical transfer nurses gave the ECC triage nurse a 10-minute verbal handover about Mrs B's condition. On arrival at North Shore Hospital, Mrs B was spontaneously opening her eyes and acknowledging her family, who had met her at the ECC. She was transferred to an isolation room in the Monitored Zone of ECC because of her recent admission to

a hospital [overseas], and the need for her to be screened for MRSA.[29] Mrs B's son, a general practitioner, stated: "On each occasion, when a new medical personnel arrived in the room, they seemed to know very little about her, and it appeared as if the notes had not been read or that they had not familiarised themselves with her case. The history was recapitulated to several providers."

The admission notes record that Mrs B was suffering congestive heart failure (CHF) being treated with frusemide,[30] that she had a fever and raised white cell count, and that she had possibly developed aspiration pneumonia. Mrs B was being fed via a PEG[31] feeding tube. The ECC nurse working in Monitored Zone 2 performed an electrocardiograph on Mrs B and took blood samples. These tests indicated that Mrs B had suffered an acute myocardial infarction (heart attack) some time in the previous week, but not within hours of arriving at the ECC. There was no information passed on by the transfer team to indicate that this diagnosis had been made [overseas].

Mrs B's recordings were taken routinely. At 12.30pm, Mrs B's son observed that his mother "appeared stable and resting". He had been told that there were no beds available in the hospital and the medical on-call team's ward was full, so he and his wife left the ECC to return home to collect a "few essentials". However, at 12.30pm ECC nursing staff noted that Mrs B's breathlessness had increased from 22 to 33 breaths per minute and her oxygen saturation had declined and was 89% on room air. The deterioration in Mrs B's condition was reported to the medical team. The nursing note at that time also records that Mrs B was "elevated". At 1.30pm Mrs B was medically assessed by a medical house officer. Her intravenous fluids were stopped, she was started on intravenous frusemide, and a chest X-ray was ordered.

After the medical assessment, Mrs B's son was contacted by the ECC registrar and advised that his mother had developed heart failure. The registrar suggested that he return to the hospital. When he returned to ECC, he was concerned that the positioning of his mother (lying flat) would adversely affect her already compromised breathing. Although she was resting on a pillow, he felt that she was insufficiently raised. Assisted by his wife, he raised his mother to a better position.

Medical ward 11

At 4.30pm, Mrs B was transferred to medical ward 11 at North Shore Hospital. Her son was concerned that she was having chest pain because she was pointing to her chest. The on-call house officer was called but found no acute changes in Mrs B's condition. She was placed in isolation[32] because she had transferred from another hospital. Waitemata DHB policy dictated that she needed to be swabbed for MRSA.

[29] Methicillin (or multiple) resistant *Staphylococcus aureus*: an increasingly common dangerous bacterium that is resistant to many antibiotics and responsible for outbreaks of infection in hospital.

[30] A diuretic to reduce fluid in the body.

[31] Percutaneous endoscopic gastrostomy.

[32] See WDHB infection control policy "MRSA Patient Management" (November 2005). WDHB has isolation policies relating to a variety of antibiotic-resistant organisms. Any patient who is admitted and meets the criteria for possible exposure to these organisms is placed in isolation until cleared.

The following day, a general medicine consultant reviewed Mrs B on the post-acute ward round and documented a treatment plan. Mrs B's son was present. Later that day, Mrs B was seen by the on-call house officer because her urinary output had decreased, but he made no change to her treatment plan.

The clinical notes indicate that Mrs B was provided with full nursing care, including regular turns, and pressure area and mouth care. Mrs B's vital recordings of temperature, pulse and respiration rate, blood pressure and oxygen saturation on air, resulted in a NEWS score[33] of 1. Mrs B responded only to pain. The PEG feeding continued. She remained short of breath, which was thought to be related to her pain levels, and she was given morphine elixir via her PEG tube. A subcutaneous needle, for the administration of fluids and medication, was sited in her abdomen.

Between 8 July and 13 July, Mrs B continued to be monitored, and she was given pain relief when required. Her NEWS score varied between 1 and 0. She was reviewed by the Stroke Team and the Nutrition Service dietician. It was noted that her urinary catheter was draining blood-stained urine, and a urine specimen was requested for laboratory analysis. The laboratory report noted that she might need to start antibiotics. The result of her MRSA swab was returned and showed that Mrs B was MRSA positive, the organism being resistant to penicillin, flucloxicillin and erythromycin. Mrs B was kept in isolation.

On the morning of 14 July, Mrs B was reviewed by a medical registrar who noted that her recordings and NEWS score were stable. At about 2pm, Mrs B's son visited and noticed that his mother was in respiratory distress. She was taking rapid shallow breaths through her mouth, with nasal flaring and the use of accessory muscles in her neck and upper chest. He observed her until 3pm and, seeing no improvement, asked his mother's assigned nurse to call the doctor, to "at least" put a stethoscope on her chest to check her for heart failure. He recalls that the nurse replied, "You are a GP, you should know that she is breathing through her mouth and that is the reason for her looking like that." He stated that he remained neutral when the nurse said this, because he felt that if he challenged her comment his mother's care would suffer as a consequence.

The nurse recalls the conversation differently. She believes that she expressed her sympathy about his concerns for his mother and his distress at seeing his mother so unwell, especially as he was a GP and understood the significance of her symptoms. She thought the discussion was amicable, and apologises if her communication and sympathetic intent was misunderstood, and for any resulting distress.

The nurse paged the on-call house officer and advised him that Mrs B's son would like her reviewed, even though she had been seen by the registrar that morning. He was told that the on-call doctor had been paged.

Mrs B's deterioration

The ward 11 registered nurse on duty on the afternoon of 14 July, a bureau nurse, recalls that she asked the registered nurse clinical coach to review Mrs B, because she

[33] North Shore Early Warning System, discussed at pages 13–14 above.

appeared to be in pain. The clinical coach was employed to work after hours coaching the ward nurses, with a view to improving their practice. The clinical coach was concerned about Mrs B's increased respiration and heart rate.

At 4.30pm, Mrs B's NEWS score had increased from 1 to 2. The NEWS protocol states that when the score is 3 or more, the nurse co-ordinator must be informed, the patient reviewed by a house surgeon, and a minimum of one-hourly observations taken. If the score remains at 3 or above over the next hour, it is mandatory for the patient to be reviewed by a registrar within 30 minutes.

The clinical coach discussed with Mrs B's son his concern that his mother was developing heart failure. They talked about using the morphine Mrs B had been prescribed, to decrease her respiratory rate and effort. He agreed and Mrs B was given 1mg of morphine. The clinical coach then paged the house officer again to ask him to review Mrs B and speak to the family. Mrs B was given a further 1mg of morphine 15 minutes later. At 5.30pm, the bureau nurse noted that she was more comfortable.

At 6pm, Mrs B's NEWS score was 0.

At 7pm, Mrs B's son went to the nurses' station to enquire when the doctor would see his mother, and was told that the weekend on-call doctor had been paged. He said he left the hospital at 7.15pm, "somewhat disgusted, helpless and confused as what to do". He asked the nurse to keep him "posted". The bureau nurse agreed to call him if there was any change in his mother's condition.

The house officer, who had started work at 8am[34] and was covering all the medical wards for the weekend, talked by telephone to the bureau nurse more than once to ask about Mrs B's condition. His usual practice is to tell the nursing staff when he thinks he might be able to see a patient and ask them to let him know immediately if there is any deterioration. He was not aware that Mrs B was deteriorating. If he had been, he would have seen her earlier, but he had other patients whom he thought it more important to see first.

At 8.30pm, Mrs B's NEWS score was 2.

At 9.15pm the house officer arrived to assess Mrs B. His impression was that she was "definitely" in heart failure. The notes showed that her respiration rate had been between 24 and 26 respirations per minute throughout the day, but when he saw her she was breathing more rapidly at 44 respirations per minute.

The bureau nurse recalls that when Mrs B was sat up for the house officer to assess her, the effort increased her respiratory rate to 42 respirations per minute. Prior to that time, she had been resting and her respiration rate was 24 per minute.

The house officer noted that Mrs B had been given a dose of frusemide, but he considered that she might have developed aspiration pneumonia. He believed that her heart condition had worsened. He ordered a chest X-ray and planned to re-assess her response to the frusemide. As Mrs B's oxygen saturation was satisfactory at 95%, the

[34] The house officer did not finish work until around 10.30pm that night.

house officer did not believe that she needed urgent intervention, but he expected that the X-ray would be done in one to two hours. The house officer planned to repeat Mrs B's blood tests the next day. He handed over her care to the night on-call doctor and asked him to review the chest X-rays when they were completed.

According to the bureau nurse, it was agreed that Mrs B should be given a small dose of morphine subcutaneously to settle her before she was taken to Radiology. Mrs B was given a further dose of morphine at 9.30pm. At around 10pm, the bureau nurse telephoned Mrs B's son to advise him that his mother had been seen by the on-call doctor, and that blood tests and a chest X-ray had been ordered.

At 10.15pm, the bureau nurse returned to Mrs B's room and discovered that she was not breathing. She rang the emergency bell but, because there was a "Not for Resuscitation" order in place for Mrs B, she was not resuscitated. The on-call doctor was notified and arrived on the ward at 10.30pm to record her death. Mrs B's son said he was notified of her death at 10.15pm. The family arrived at the hospital at 10.30pm and left at 12.30am.

Mrs C (25 to 27 September 2007)

Background

Mrs C, a retired nurse aged 85, was usually fit and well, despite a medical history of essential hypertension, osteoarthritis and paroxysmal supraventricular tachycardia (SVT).[35] After feeling unwell for three weeks and seeing a doctor in general practice (not her usual doctor), her condition worsened. Her usual doctor visited her at home on Tuesday 25 September and transferred her immediately by ambulance to North Shore Hospital, for assessment and treatment of fluid retention and an erratic pulse.

North Shore Hospital ECC

Mrs C was admitted to North Shore Hospital ECC at 6.45pm on 25 September 2007. She remained in the ECC for four hours, where she had an electrocardiograph and chest X-ray, and blood specimens were taken for biochemistry. Mrs C was prescribed oxygen to improve her oxygen saturation levels, and intravenous frusemide.[36] An indwelling urinary catheter was introduced to enable measurement of urinary output. The medical registrar advised Mrs C and her daughter that her anti-inflammatory medication naproxen, which she was taking to control her osteoarthritic pain, would need to be stopped as it could worsen or precipitate her CHF. Mrs C was then transferred to medical ward 10 at 11.04pm.

Medical ward 10

During her first night on ward 10, Mrs C complained of pain all over her body, and was given paracetamol. On the morning of 26 September, Mrs C was seen by the general medicine consultant on the ward round. A decision was made to change the frusemide from intravenous administration to oral, and to start her on an ACE inhibitor (medication to manage her heart function). The nursing notes record that Mrs C was able to mobilise with assistance, but she needed oxygen through nasal prongs to maintain adequate oxygen saturation levels.

[35] Intermittent fast heartbeat.

[36] A diuretic to reduce fluid in the body.

Mrs C's other daughter recalls that she spoke to her mother by telephone on the afternoon of 26 September. Her mother was completely lucid and looking forward to going home, and to her daughter's forthcoming visit.

Mrs C was seen by a medical registrar on the ward round on 27 September. She reported feeling "lousy". The medical registrar recalls that he talked to Mrs C about prescribing her codeine for her pain. Mrs C was lucid and articulate and was able to tell him the medications she had been on, the problems each medication had caused in the past, and what other possible side effects there might be. She had had a mild reaction to morphine in the past, when the drug caused her to be nauseated. Codeine had made her constipated. Mrs C agreed to try codeine as well as regular paracetamol.[37] He prescribed codeine 30mg, three times daily. Further laboratory tests were ordered and a referral was made for a physiotherapy assessment. He noted that Mrs C might be ready for discharge on Saturday 29 September.

Mrs C's daughter was present when an enrolled nurse[38] brought Mrs C her medication at 12.30pm. She heard the enrolled nurse tell Mrs C that she had brought her morphine. Mrs C became upset, thinking that she was being given morphine contrary to her wishes. Mrs C's daughter recalls that the enrolled nurse assured her mother that this was a "game" and the medication was codeine, not morphine. Mrs C's daughter asked the enrolled nurse to step outside the room and told her that she felt her "game" of intentionally misleading her mother was inappropriate. However, the enrolled nurse denies that she made this comment to Mrs C.

Mrs C's deterioration

When Mrs C was seen by the physiotherapist on 27 September, she was only given exercises that she could do on the bed, because she was dizzy and lethargic. The nursing notes record that Mrs C was not mobilised because of dizziness, and the doctors were informed. However, she was eating and drinking well and the catheter was draining well.

The nursing note at 1.15pm records that Mrs C was very dizzy and not able to get out of bed to have her lying and standing blood pressure recordings taken. She was also too dizzy to be weighed. The doctors were informed that Mrs C had not been weighed. At 4pm, Mrs C's NEWS score was 1.

Mrs C's son visited his mother on the afternoon of 27 September. He stayed with his mother for some hours and knew that she was "desperately ill". At about 5pm, he discussed his mother's condition with a nurse at the nurses' station and was told that

[37] According to Mrs C's other daughter, her mother was hypersensitive to codeine. Mrs C had told her daughter that she was unable to take codeine because it "knocked [her] out cold for hours on end and made [her] feel very sick, disorientated and, eventually, constipated". Her daughter believes that the reason her mother did not inform the medical registrar about her hypersensitivity to codeine may be that her mother knew that she needed pain relief when coming off the anti-inflammatory and decided to try codeine again under "theoretically safe conditions". Mrs C's daughter said that her sister and brother (who were visiting regularly) would not have known about their mother's hypersensitivity to codeine.

[38] The enrolled nurse stated that the role of enrolled nurse is similar to that of a registered nurse, but enrolled nurses are not generally allocated critically unwell patients. She is aware of the scope of her practice and that she must work under the direction of a registered nurse.

she was sleeping and in “no apparent danger”. When he left at about 6.30pm, he passed his sister as she was arriving. They chatted briefly and he related what he had been told about their mother’s condition.

Mrs C’s daughter stayed from 6.30pm to 8pm. She noted that her mother was moved to a room at the far end of the ward, well away from the nurses’ station. She was concerned that her mother appeared to be going “downhill” and, although reassured about her mother’s condition by the doctor, Mrs C’s daughter felt that no one was listening to her concerns.

At 9.15pm the nursing notes record that Mrs C was “feeling drowsy and not well”. The codeine was stopped at Mrs C’s request.

Three registered nurses were rostered for the night shift on 27/28 September. It was a busy night with 32 patients on the ward. However, one of the nurses was sent to another ward that was short-staffed. According to one of the nurses on duty that night, when there are fewer than three nurses on duty, it can become stressful, especially if one or more of the nurses are from a bureau and not authorised to give intravenous antibiotics and medication.

The registered nurse was advised at handover that there were no concerns about Mrs C, who was for discharge the following day. Because of the need to reorganise the patient allocations in light of being one nurse short, the nurse did not do her initial round of the patients straight after handover as she would normally. At 12.30am on 28 September she checked on Mrs C and found that she was not breathing. She telephoned Mrs C’s daughter to notify her that her mother had died. Mrs C’s daughter stated that the call she received about her mother’s death was an “awful way to find out and was completely unexpected”.

Mrs C’s son stated, “Mum simply wanted to die and she did — in her own way in her own time.” Mrs C’s other daughter said “… [N]o special attention by NSH staff was paid to my mother in the late afternoon and evening of 27 September. Given the notes in the [HDC] report about short-staffing of another ward this is understandable … and unforgivable! To lose your mother to an illness is sad enough. To lose her to a balance sheet is quite soul destroying.”

After Mrs C died, the case was referred to the Coroner. The cause of death was recorded as ischaemic heart disease.

Mr D (20 September to 18 October 2007)

Background

Mr D (73 years old) had complex medical needs, including a heart condition (for which he received a pacemaker and had valve repair surgery in February 2007) and lymphoma (diagnosed in February 2007). He had had three cycles of chemotherapy, which had been successful in treating his ascites.[39]

[39] The accumulation of fluid in the peritoneal cavity, causing abdominal swelling. There are a number of causes of ascites including heart failure and various cancers.

North Shore Hospital ECC
Mr D was admitted to North Shore Hospital ECC at about 9.46pm on 20 September 2007 suffering from hyperventilation and anxiety. He was not referred by his doctor but was a "self-referral", arriving in an ambulance called by his family. He said that he could not breathe and had a feeling of impending doom.

Mr D was assessed in the ECC by nursing staff. He had presented at ECC a number of times during 2007. He was noted to be drowsy with slurred speech, and not orientated to time, place or person. His breathing was laboured, and he had pitting oedema in his feet and lower legs; one toe was purple. The triage nurse noted that Mr D had self-administered 7mg of lorazepam[40] that day to control his anxiety. He had also been given 1.5mg of morphine by the ambulance crew en route to the hospital.

A medical registrar assessed Mr D and noted that he had had multiple admissions for shortness of breath. The medical registrar established that Mr D had not been taking his diuretic (frusemide) as directed, and that he had been seen a week prior to this admission by his own doctor, who had prescribed prednisone for a possible chest infection. The medical registrar documented Mr D's presenting problem as left and right heart failure, possibly complicated by a chest infection. Mr D was started on intravenous frusemide and the antibiotic cefaclor, and orders were given to restrict his fluid intake to 1.5 litres daily and for him to be weighed daily. The medical registrar also recorded in the notes that Mr D was "Not for Resuscitation" as this was not medically indicated, and that this decision had not been discussed with the family.

Medical ward 11
Mr D was admitted under the medical team of a consultant physician and transferred to ward 11 at 4am on 21 September. He was reviewed on the consultant ward round later that morning. The cefaclor was discontinued and the frusemide, daily weighs and fluid restriction continued.

Over the next two days, Mr D was noted to be anxious and refusing to eat the food offered. Staff suggested to his wife that she bring in food that her husband would prefer. Mr D was seen again the next day by the consultant. Mr D reported that he was feeling better, but had a sore throat. A throat swab was taken and the team planned to discuss his medication requirements with the psychiatric team, and organise physiotherapy and occupational therapist involvement in his care.

Mr D was given saline nebulisers to ease his breathlessness. He requested Ventolin inhalers, but nursing staff explained that this would increase his heart rate. He was given lorazepam regularly for his anxiety. On 22 September, the family expressed concern that Mr D had a chest infection and were worried about the colour of his feet. They asked for a hospital chaplain to visit Mr D. On Sunday 23 September, the hospital chaplain recorded in the notes that she observed that Mr D's anxiety increased when his family visited. She suggested to the family that they visit for shorter periods. They agreed to this plan. Later that day, Mr D's condition activated the NEWS protocol. He looked pale and was found to be cold and peripherally

[40] Recommended dose: adults: 1mg two to three times daily, increased if necessary up to 10mg daily; elderly or debilitated patients: 2mg daily in divided doses (*New Ethicals Catalogue*, May–Nov 2001).

cyanosed. His vital signs were recorded, and he was found to be tachycardic,[41] at 104 beats per minute (bpm) and irregular. The on-call house officer was notified and reviewed Mr D. There were no new treatment orders.

On Tuesday 25 September, the medical registrar spoke with the psychiatric team about alternative anti-anxiety medication for Mr D. It was decided to trial him on citalopram. A nurse told Mr D's daughter about this change to her father's medication. His daughter knew that when Mr D had previously taken citalopram he had developed urinary retention. She asked the nurse to tell the doctor this, and reminded her twice during the shift to relay this information to the doctor. She telephoned the next day to ensure that the message had been relayed. The records show that Mr D had two doses of citalopram 10mg, at 10.30am on 25 September and 9.30am the next day. It was then discontinued.

On 26 September, Mr D was seen by the dietician, who started him on Fortisip, a high energy and protein diet, because his weight loss and reluctance to take fluid was causing concern. A chest X-ray, taken that day, showed that he had cardiomegaly (heart enlargement) and some moderate pleural effusions.[42] A throat swab grew *Candida albicans* (thrush) but no Streptococcus. The medical registrar advised that the frusemide could be continued if Mr D was comfortable and not distressed, and the hypnosedative (zopiclone) and nystatin (for the thrush infection) started.

On 28 September, nursing staff noted that Mr D had a red, broken area of skin on his sacrum. A dressing was applied, and he was encouraged to move about. The dressing came off on 29 September. As the skin was intact, a further dressing was not applied.

On 1 October, the consultant physician examined Mr D during a routine ward round. Mr D was experiencing difficulty breathing and asked the consultant physician for a nebuliser or an injection to help him breathe. The consultant physician told Mr D that he was hyperventilating and that a nebuliser would not assist him with this. Mr D's anxiety levels fluctuated, as did his food and fluid intake and his willingness to mobilise and comply with physiotherapy.

On 5 October, a social worker assessed Mr D with a view to discharging him to a private hospital or his home. Mr D did not want to speak to the social worker, who then telephoned Mr D's wife. She was aware of her husband's reluctance to mobilise. She told the social worker that she would like him to receive further therapy to build his strength before discharge, and asked her to speak to her daughter. Her daughter expressed concern about her mother's ability to manage Mr D at home. The social worker spoke with the psychiatric team about the family's concerns.

On Sunday 7 October, Mr D's condition again activated the NEWS protocol when his blood pressure dropped. The house officer was notified and ordered blood pressure monitoring and further medical review if his condition remained unchanged or worsened. Mr D was reviewed the following day. The medical team considered that

[41] Increase in heart rate above normal.

[42] Introduction of fluid or gas which separates the two coverings of the lungs, the visceral and parietal layers, and increases the volume of the pleural space.

his anxiety and low blood pressure was due to dehydration or the antidepressant medication doxepin. Subcutaneous fluids and physiotherapy were ordered, and he was to be encouraged with food and fluids.

Three days later, on 10 October, the family advised the clinicians that they wanted to take Mr D home. However, the medical team had reservations about the family's ability to cope. Mr D was reviewed by an Assessment, Treatment and Rehabilitation (AT&R) physician, who noted that Mr D's overall condition had deteriorated and was not expected to improve, "though the medical team consider his condition is not yet palliative". The physician advised that a respiratory/cardiology opinion "may have been beneficial" and that a short stay of three weeks in the rehabilitation unit would be advisable. The clinical records note that the family and Mr D would need to consent to this option.

Chest aspiration

The medical registrar examined Mr D on 11 October and noted that although he had "crackles" at the base of both lungs, he was "looking brighter" and was "keen to go home". The following day the family told the medical registrar they were concerned that Mr D was "puffy". The medical registrar examined him and noted that his lung capacity was reduced. The family were advised that he had a large pleural effusion that needed to be drained. He also had a large amount of ascites, which the medical team planned to drain.

On the morning of 15 October, Mr D was examined by the medical house officer, who noted that he had bilateral pleural effusion and required a pleural tap to drain his chest and abdomen. The doctor recorded that Mr D's wife and daughter were present at the time of the examination. His daughter later assisted her father to sit up so that a pre-procedure ultrasound scan could be performed. She and her mother left before the pleural tap. They recall that they were "neither asked for or consented to permission for this procedure". His daughter alleges that when the procedure was performed (by the consultant physician), he did not have a nurse assisting him, and he punctured Mr D's lung.

The records show that the medical registrar performed the chest aspiration, and he confirmed this in his statement. He did not need the consent of Mr D's wife and daughter to perform this procedure, as Mr D was able to consent, and it appears he did so as the procedure was invasive and could not have gone ahead without his participation. The medical registrar advised that it is not standard procedure to have a nurse assist with chest aspirations, and that he had sufficient assistance from the house officer. The clinical records show that the medical registrar attempted the pleural aspiration using ultrasound scan tracking, but was unable to obtain a fluid sample for laboratory analysis. Mr D was anxious and unable to sit upright, and the procedure was abandoned after three attempts.

Mr D had a post-procedure chest X-ray at 5pm, which showed no complications such as pneumothorax[43] or haemothorax.[44] The medical registrar discussed Mr D's

[43] Air in the pleural cavity from a breach in the lung surface or chest wall, causing the lung to collapse.

[44] Blood in the pleural cavity.

situation with the infectious diseases specialist, in particular that his sputum had cultured the organisms Pseudomonas and *H. influenzae*, as well as Pneumococci that were resistant to penicillin. The medical registrar was advised to start Mr D on the antibiotic ciprofloxacin.

At 10pm, the family were notified that their father's condition had deteriorated. He was moved to a side room and reviewed by the on-call house surgeon, but no change was made to the treatment plan.

Mr D's second daughter, (who lives in another region), visited her father for the first time on 16 October after being phoned by her sister, who said their father had had a "turn". When she arrived she was upset at his condition.

Transfer to private care

On 16 October, Mr D's second daughter and her husband insisted that the doctors meet the family because they had received "mixed messages" from different staff members. The daughter believes that her mother had not been given all the facts about Mr D's condition at this time. The daughter asked the medical registrar at the meeting what her father's "full diagnosis" was. He provided information (eg, about Mr D's enlarged heart) about which the family were unaware. The daughter said that when he told her and her family that Mr D needed to be in the hospital to be built up and rehabilitated, he did not realise that he was talking to a person "who had years of experience in palliative care and the dying". The daughter alleges that the family was misled about the rationale for the prescription of the hypnosedative zopiclone for their father. Mr D's wife was told that the drug would keep him comfortable and not distressed, but was not told that it would "knock him out" and cause him to have "psychotic dreams and fuzziness".

Mr D's daughter stated that she, not the medical registrar, suggested Mr D be transferred to a rest home or private hospital. She said, "I had to get him out of there, when I witnessed the lack of cares and integrity [of the staff]."

A social worker met with the family later that day and noted their anxiety about how to manage Mr D at home if he improved sufficiently to be discharged, and wanted to "explore the options" for supporting his wife.

Mr D's daughter stated that it was discovered, at this time, that her father had a large, painful pressure sore on his sacrum, which was only attended to when she brought it to the attention of the nursing staff. However, the only pressure sore recorded in the clinical records is the one noted on 28 September, which was relatively minor and managed.

On 17 October, following discussion with the AT&R physician and the medical registrar, Mr D was seen by the AT&R Clinical Nurse Specialist. She noted that Mr D's condition had deteriorated and was not expected to improve, although the medical team did not consider him, at that time, to be palliative. Mr D's family were advised of his condition and that, as his care needs were very high, private hospital care was the preferred option for ongoing care. Mr D's daughters made enquiries that day about a suitable placement for their father, and met with the manager of a private hospital. They were advised that a bed was available.

Mr D was discharged to the private hospital at 2pm on 18 October, but returned to North Shore Hospital ECC at 11pm that evening because the family were concerned about his increasing shortness of breath.

Mr D's deterioration

The ECC registrar examined Mr D on his return to North Shore Hospital, and found that his heart condition was very serious and potentially fatal. Mr D's family were advised of his condition. They agreed to a trial of chemical cardioversion,[45] but stated that if their father had a cardiac arrest he was not to be resuscitated. A chest X-ray in ECC showed that Mr D had a pneumothorax, but the medical staff decided not treat this condition because he had poor quality of life, was not able to sit up, and inserting a chest drain would be traumatic. Mr D was given morphine to keep him comfortable, and he died at 3.30am on 19 October 2007.

Mrs E (17 to 19 October 2007)

Background

Mrs E (79 years) suffers from asthma. After caring for her husband during his recovery from bowel cancer surgery and radiotherapy, Mrs E became generally unwell, with fever, coughing and difficulty swallowing and breathing. After a bout of vomiting and diarrhoea, she was referred to North Shore Hospital by her medical practitioner for assessment and treatment of possible pneumonia.

North Shore Hospital ECC

The North Shore Hospital records show that Mrs E was admitted to ECC at 2.53pm[46] on 17 October 2007 and triaged in the Acute Zone. Mrs E was assessed by a registered nurse who found that she was breathing rapidly and experiencing some difficulty taking a breath. Mrs E was pale and her skin was cool and clammy, but her vital signs of temperature, pulse and blood pressure were not concerning. The nurse performed an electrocardiograph (ECG), introduced an intravenous cannula, took blood for laboratory analysis, and designated Mrs E as triage category 3 (ie, to be seen within 30 minutes).

The North Shore Hospital computerised patient tracking system (PiMS) records that Mrs E was assessed by the medical team house officer at 4.30pm, although Mrs E recalls it was 6.30pm.

The medical team house officer decided that she was suffering from an exacerbation of chronic obstructive pulmonary disease (COPD) and asthma with probable right lower lobe pneumonia. Mrs E also had diarrhoea and was vomiting. His treatment plan was to admit her to a medical ward, and start her on courses of prednisone and

[45] A method of restoring the normal rhythm of the heart of patients with increased heart rate due to arrhythmia, using medications. Controlled direct-current shock or medication is used.

[46] Mrs E believes that this is incorrect, as she left her GP's rooms at 1.46pm. However, the St John Ambulance records indicate that Mrs E was uplifted from the GP's rooms at 2.30pm and arrived at North Shore Hospital at 2.50pm.

antibiotics, oxygen, intravenous fluids and nebulisers. He ordered her regular medications, a sputum specimen, chest X-ray and a mid-stream urine specimen.

The records show that Mrs E's intravenous fluids started at 7pm, although Mrs E believes that this occurred much later (after the call-bell episode described below).

About five hours after Mrs E arrived in ECC she urgently needed to go to the toilet because of diarrhoea. Mrs E tried unsuccessfully to move the bed-rails to go to the toilet unaided but was unable to do so.

Mrs E activated the nurse-call button and kept it depressed. She could see nurses at the nurses' station, hear the call-bell buzzing, and see the call-bell light flashing, but no one came to assist her. She recalls that 30 minutes after activating the call-bell a nurse attended and was "very brusque". Mrs E is clear about the time because she was in the cubicle opposite the clock.

Mrs E was taken to Radiology for a chest X-ray at 9pm. Her recordings were taken at 7pm and 9.20pm and remained stable. She received no further care until she was transferred to the ward.

Medical ward 10
Mrs E was admitted to the isolation room of ward 10 at 1am on 18 October. She was unable to go to the toilet unaided because her intravenous fluid line was attached to the bed, and there were long delays whenever she activated her call-bell for help to go to the toilet. Each time Mrs E went to the toilet her intravenous line was disconnected because there was no mobile IV pole. She invariably had to wait to have her intravenous fluid line reconnected after going to the toilet.

At 3am, Mrs E's recordings were taken again. The recordings remained stable and her NEWS score was 0.

Mrs E rang the call-bell around this time because she needed to go to the bathroom. She recalls that her sheets and nightdress were soaked with perspiration. After she washed and dried herself with paper towels she sat on the chair as the sheets were too wet to get back into bed. She rang the bell repeatedly because she was cold and still wet but the orderly did not come to change the sheet until 6.45am.

The nursing notes for 6.45am record that Mrs E reported feeling sweaty overnight, her bed linen was changed, and intravenous antibiotics given. Mrs E recalls that this occured closer to 8am, when the shift change meeting finished, and at that stage her intravenous line had been disconnected since she went to the bathroom five hours earlier.

At 8am, Mrs E was seen by the Clinical Director of General Internal Medicine on the consultant ward round. She was tearful and wanted to go home. The Clinical Director noted that Mrs E had a sore throat and difficulty swallowing, but her diarrhoea and vomiting had stopped. He ordered that her intravenous antibiotics be stopped, but intravenous fluids continued for a further 24 hours. He noted that Mrs E was to be reviewed by a Needs Assessment Service Co-ordinator with a view to being discharged the following day.

At 1.45pm a nurse and orderly arrived to shift Mrs E to another room in the ward. They suggested that she walk to the new room, carrying her intravenous fluid bag, oxygen mask and a paper bag with her belongings. However, when she was in the corridor, another nurse said that her room was not ready. Mrs E said, “Everyone disappeared and I stood there waiting. After 5 minutes they happily pushed my empty bed and I followed.”

The nursing notes indicate that Mrs E was offered a nebuliser and pain relief at 2pm, but declined this. Mrs E told the nurse that she preferred to use her own inhalers rather than a nebuliser. Referrals to a social worker and the needs assessment team were made in preparation for Mrs E to leave the following day.

Mrs E experienced considerable delay in reattaching her intravenous fluids after she changed rooms. An hour after she moved, she found that her intravenous site was swollen and leaking and her bed linen soaked. Her call-bell went unanswered. When a nurse noticed the problem she told Mrs E that the charge nurse would reinsert the cannula. A social worker arrived to talk to Mrs E, noted the leaking intravenous site and reminded the nursing staff about it. She was told that all the staff were too busy to re-site it at that time. The cannula was eventually re-sited by the charge nurse and the intravenous fluids restarted at about 5pm.

The afternoon shift registered nurse recorded that Mrs E was concerned about her home situation. The night staff recorded that Mrs E “appeared to be comfortable overnight” and that her intravenous fluids finished during the shift. However, Mrs E recalls that she coughed as badly during the night as she had when first admitted. She was sweating, and needed to sit up all night because she was having trouble breathing.

At 8am on Friday 19 October, Mrs E’s vital signs were again assessed and noted to be satisfactory, and her intravenous fluids finished. The laboratory technician who took her blood sample that morning told her that there were no patient labels in her file and that this was “par for the course”.

Around this time a nurse arrived to give Mrs E her medication. The nurse noted that she was coughing and breathless, and asked why she was not using her nebuliser. Mrs E explained that she had not been given a nebuliser. The nurse fetched a saline nebuliser and mask, which eased her breathlessness and cough. Mrs E asked if she could have a saline nebuliser to take home, but was told that she would have to buy one.[47]

When Mrs E was seen later that day by a needs assessor about discharge arrangements, she described her home situation, which was stressful because her husband was unwell and receiving radiotherapy. The needs assessor gave Mrs E a

[47] The DHB subsequently clarified that it does not lend nebuliser machines, and it was correct for the nursing staff to suggest to Mrs E that she access one privately. As a result of these events, an information sheet about the supply of these machines is being prepared for staff to give to patients on discharge.

carer support booklet before she was discharged at 4.30pm and taken home by her granddaughter.

General concerns
During her time in ward 10, Mrs E was dismayed by the “distinct” lack of cleanliness. Her concerns were:

- rubbish was left on the floor under beds and lockers
- the top of her locker was sticky from spillage
- bathrooms and toilets had signs instructing patients to use antiseptic wipes before using the toilet, and to spray the toilet seat, basins and taps with disinfectant and wipe dry after use, but the antiseptic wipes ran out and were not replaced
- rubbish containers were not emptied and blood splatters not cleaned up
- there were no toilet roll holders, so toilet rolls were left on the floor in the toilets
- wet towels were left on the bathroom floor when there was no soiled laundry bag.

BOARD AND MANAGEMENT RESPONSE TO ECC OVERCROWDING

The Board and senior management of Waitemata DHB have taken steps over many years to address problems and anticipate growing demand in the North Shore Hospital ECC.

In 2002, the Inpatient Services Manager was asked by the General Manager and Surgical Services Manager to review the operation of North Shore Hospital’s ECC. The Inpatient Services Manager noted that the ECC was the point of access for all medical admissions and emergency surgical admissions into North Shore Hospital. From June 2001 to June 2002 North Shore Hospital processed 45,000 ECC attendances, of which 18,456 were medical admissions. The Inpatient Services Manager concluded her report with key recommendations for the future: that the Board provide clear Clinical Director leadership and General Manager/Service Manager direction, develop further ECC business rules, and provide further in-depth analysis on the benefits of a short-stay ward.

The DHB states that, at the time, it was unaware of any “insurmountable” concerns about the ECC. It understood that managers and clinicians were working on improving a range of systems and processes. The DHB was confident that with good process redesign, a newly commissioned ECC at Waitakere Hospital (opened in 2003) and an upgrade of information systems, any problems at North Shore Hospital ECC were “likely to be short lived”.

In 2003/04, the Ministry of Health reviewed the DHB’s overall operating performance to identify improvements that would assist the DHB to meet its financial and service performance targets. The DHB submitted that the review looked only at costs and the Ministry refused to look at funding. A few cost savings were identified and funding improved in 2004/05.

The Ministry said that the terms of reference for the review were jointly agreed between Waitemata DHB and the Ministry. The focus of the review was to consider the operating performance of Waitemata DHB and to identify improvements that would enable the DHB to better meet its financial and service performance targets. The draft review report was confidential. However, it indicated that there were "extensive recommendations" relevant to improving the DHB's financial performance. The reviewers indicated that the fiscal outlook was not good and stated that the Board must identify and address options to produce a more sustainable future for the DHB. The DHB advised the Ministry that it was "taking the recommendations forward".

In June 2004, Waitemata DHB asked its General Manager for Adult Services to again review the North Shore Hospital ECC. Her report, "Dealing with Pressure on NSH ECC", highlighted problems with staff vacancies and higher than 100% occupancy levels. It was suggested that the recent opening of acute orthopaedic services at North Shore Hospital and an influenza outbreak that winter had largely contributed to the problems. The DHB approved measures to ease the situation until extra beds at Waitakere Hospital were available in 2005. These measures were:

- approval of seven additional nurse positions per day
- purchase of additional equipment, including beds and reclining chairs, for use of patients staying in ECC for longer periods
- providing additional bed spaces by turning eight large single rooms into double rooms
- opening a winter ward
- providing five additional Assessment, Treatment & Rehabilitation beds
- commissioning six ortho-geriatric beds.

In October 2004, the General Manager for Adult Services presented a further paper to the Board on an initiative to support Waitakere Hospital ECC by using after-hours primary care services, such as Accident & Medical clinics. As a result, the West Auckland White Cross Accident and Medical Centre was contracted to provide an after-hours service.

Later in October 2004, the General Manager for Adult Services proposed that the North Shore Hospital Critical Care Service be expanded, and that a business case for the development of a High Dependency Unit (HDU) be approved. It was felt that these initiatives would reduce pressure on ECC. In July 2005 these proposals were approved and the first two HDU beds were in place in 2005/06. The Board also discussed the provision of a full HDU at North Shore Hospital, to commence in April 2007, and requested that a full business case be developed. In June 2007, the Board approved capital expenditure of $3.684m for an HDU.

In December 2004/January 2005 a range of projects were established to review and improve patient flow and efficiency within North Shore Hospital. One of these projects, led by the Commissioning Project Manager, looked at the ECC team structures and patient flow. The Waitemata DHB Chief Executive at the time,[48] was the project sponsor, and he kept the Board Chair informed of progress on this and other projects to improve hospital efficiency. The Chair advised that "small gains"

[48] The CEO resigned in September 2006. The new CEO took office in November 2006.

were achieved, but the projects did not reduce the need for additional beds or have a significant impact on overcrowding.

In 2005 a paper was presented to the Board on the impact on North Shore Hospital of the overnight closure of Waitakere Hospital ECC. The paper proposed that Waitakere Hospital ECC's opening hours be extended from 8am to 10pm to a 24-hour service. This was intended to improve emergency care for people in West Auckland while reducing pressure on North Shore Hospital ECC and medical beds, but it never eventuated.

In 2005, the DHB also began working with the North Shore City Council to have the district plan amended to allow for further development of North Shore Hospital, including changes to ECC.

In 2006, the DHB Project Manager reviewed ECC governance at North Shore and Waitakere hospitals. Clinical staff believed a lack of governance at both ECCs hindered communication and collaboration and meant that the ECCs did not have adequate systems to address their interface, clinical risks, and other problems. The resulting paper highlighted:

- overcrowding in North Shore Hospital ECC
- the lack of a Clinical Director
- difficulty attracting senior doctors who were Fellows of the Australasian College of Emergency Medicine (FACEMs).

In June 2006, the Chair and the CEO presented modelling to the Ministry of Health's National Capital Committee and Treasury officials, which showed the need for around 20 additional beds a year to meet a shortfall and demand. The response was that the Board "must live within [its] means". The Chair stated that they engaged in "ongoing discussions … in relationship to this significant funding gap to no avail". This meant that for the 2006/07 financial year there was less money available to invest in all the areas that urgently required funding and for that year alone no new acute medical beds were approved. The Board considered that bed growth needed to be in the vicinity of 17 to 20 beds per annum. This was raised with the Ministry at the time in a presentation by the Chair, Regional Deputy Chair, and the CEO to the National Capital Committee, but it "[took] a while to be understood by MOH and Treasury".

However, the DHB's only submission to central government for capital funding to increase bed capacity was in 2000 when Waitemata proposed redeveloping its two sites at North Shore and Waitakere. During 2006/07, the DHB made no capital submissions for redevelopments to increase bed capacity.[49]

In January 2007 the General Manager for Adult Services and Service Manager (Medicine) presented a business case on patient safety and inpatient capacity in adult medical services, stating:

[49] The Ministry described the June 2006 presentation as a general one "outlining predicted growth in the Auckland metro region", rather than a capital bid. The DHB has confirmed that "between 2000 and 2008 Waitemata made no submissions for capital funding other than for mental health services".

> "Over the winter months comparing 2005 and 2006 there was a 32% increase in the number of patients in Emergency Care Centre at midnight. There is an increasing length of stay in the ECC at NSH waiting for an inpatient bed. Although there are 11% more attendances there are 30% more patients in the department at any time of day compared to last year. These are increasing symptoms of bed block."

In March 2007, the General Manager for Adult Services presented a business case for programme budgeting and marginal analysis (PBMA)[50] to the Board for approval. The Board Chair stated that the Board recognised the importance of this and urgently responded by allocating $4.861 million for additional beds and $2.048 million for the expansion of the HDU. This funded:

- 20 additional beds at Waitakere Hospital (opened in July 2008)
- investment in key ECC staffing roles
- implementation of a Bed Capacity Management programme
- a feasibility study for a 40-bed Acute Assessment Unit at North Shore Hospital
- projects to minimise inappropriate use of inpatient beds
- six additional HDU beds.

On 11 July 2007, the Board convened a special meeting to urgently consider a capital request for additional beds at North Shore Hospital, to resolve the worsening overcrowding in the ECC. Managers were asked to prepare and present business cases as quickly as possible. They were instructed to be "bold and innovative" in considering short-term solutions and to bring an options paper to the Board the following week for endorsement.

On 17 July, the General Manager for Adult Services' options paper, "Strategies for managing a shortage of acute inpatient beds at NSH", was presented to the Board. The paper acknowledged the commitments already made by the Board to improve services, but indicated that "things were not adequate" to deal with the significant acute inpatient demand, which was clearly resulting in ongoing delays in ECC. The paper recommended a number of options, including a proposal that a 50-bed short-stay unit be commissioned, and a business case be developed for a tower block at North Shore Hospital for use from 2011.

When the Board met again on 29 August 2007, the Chief Executive and Finance Officer provided an update on progress of the proposed measures. The Board stressed the importance of management having specific plans in place to deal with the regular and predictable winter pressures on ECC and medical beds. Although there were some plans in place, the Board recognised that further planning was needed to manage pressures over the next two to three years, prior to the completion of the Lakeview extension (the Acute Assessment Unit). The Board indicated that this "might require a stronger focus on clinical planning and work design, which might require some external expertise".

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[50] PBMA is a process that helps decision-makers maximise the impact of healthcare resources on the health needs of a local population.

The General Manager for Adult Services resigned in mid-December 2007, and the Acting General Manager, was asked by the Board and Chief Executive to review Adult Health Services. In December 2007, the Acting General Manager presented a paper to the Audit and Finance Committee identifying the following core areas of concern:

- significant staff recruitment/retention issues
- lack of clarity from management and staff about Adult Health Service direction
- poor information
- patient flows not working adequately
- inadequate bed capacity for population needs.

The Acting General Manager was asked to commence urgent planning to address some of the issues identified.

As a result, by February 2008 the Board had approved a new short-stay ward at North Shore Hospital with 24 beds to be functioning by winter 2008, in addition to the 20 medical beds at Waitakere Hospital and eight HDU beds at North Shore previously approved. Additionally, 15 existing beds that had been unfunded were made available for use from winter 2008 onwards. This meant that an additional 67 beds had been approved and funded between 2007 and 2008. Work started on a targeted staff recruitment campaign.

A new General Manager for Adult Health Services was appointed in April 2008 and began working with the Acting General Manager to resolve the issues identified in the December 2007 paper.

In November 2008 the DHB submitted a case to central government for capital funding to expand North Shore Hospital. It asked for funds to build a new, redesigned Emergency Department, a 50-bed Acute Assessment Unit, and a 30-bed ward in the area known as the Lakeview extension.

In April 2009, the Minister of Health approved $48 million funding for the Lakeview extension. This will fund an additional 26 emergency department cubicles, another 19 beds in a reintroduced Admissions Planning Unit, and an extra 48 medical inpatient beds. The Lakeview extension is expected to open in 2011.

According to the Ministry, business cases for redevelopment submitted by Waitemata DHB have been, and continue to be, supported. A number of the business cases over the years have been made to the DHB Board but not to the Ministry.

The Director-General of Health stated:

> "Given the level of funding that the DHB has attracted in recent years, it would seem that the DHB may not have maximised opportunities to develop services that reflect their growing population's need for acute health services.
>
> … As a district health board, it is responsible for deciding where to allocate its funding eg, primary care, health of older people, or hospital services."

STAFF CONCERNS

When the HDC inquiry team visited North Shore Hospital and interviewed staff in April and May 2008 there were still concerns expressed about the ECC, medical wards and nursing care. Although some of the concerns relate to the period subsequent to the winter of 2007, they are recorded for their relevance to the underlying issues in the inquiry.

Governance of ECC

In recent years, Waitemata DHB has had difficulty retaining a permanent Clinical Director for Emergency Medicine to oversee its two ECCs. The Clinical Director was in the position from April 2000 until January 2006, and continues to work as an emergency medicine specialist at North Shore Hospital. Another emergency medicine specialist was the Acting Clinical Director from March 2007 until mid-2008.[51] Both of these emergency medicine specialists believe that governance of ECC is the most important issue in the effective running of the department.

The ECC Unit Manager found that without a Clinical Director or a facility leader she had to take on more responsibility but did not have the ability to change or alter individual practice or behaviour.

The ECC Charge Nurse Manager found governance of ECC difficult "from day one" because each specialty team uses it as they want and no one is responsible for the overall operation. Nurses find that very difficult because each team wants things done differently. She believes that governance should be by the emergency medicine team as they "live" in ECC while other medical specialties just use it.

ECC systems

Staff in ECC continue to experience inefficiencies. For example, non-referred patients triaged at the front desk of ECC are allocated to the emergency medicine team and logged on a computerised patient tracking system (PiMS) as "waiting to be seen". However, because there is no centralised list of patients "waiting to be seen", these patients are not seen in a systematic order of triage category and wait times. This allows medical staff to "cherry pick" the patients they would like to see. The Clinical Charge Nurse does not have the authority or mandate to co-ordinate the process.

The Acting Clinical Director said that there is tension between the different specialists and emergency medicine regarding triage times. Compliance times for patients assessed as triage category 2 is "not fantastic" at around 65% compliance for emergency medicine, but it is "a lot lower" for other specialities. Only the emergency medicine figures are formally reported.[52]

He believes that ECC throughput would be improved if they could improve the time it takes for tests and investigations, such as stress tests, to be done after hours. This

[51] The new Clinical Director of ECC was appointed in September 2008.

[52] WDHB responded, "The triage categorisation referred to is an Emergency Medicine concept which does not apply to other specialties." The DHB said it is incorrect to imply that because other specialties do not apply Emergency Medicine triage times, ECC's compliance rate is in fact lower than the 65% reported.

would mean that patients waiting in ECC for these tests could have decisions made about their care more quickly and be moved on or discharged. Throughput would also be improved if they could get hospital occupancy below 90%. However, there is a sense of “business case inertia” at North Shore Hospital.

The ECC Charge Nurse Manager stated that the discharge process starts too late and is very slow. The organisation knows, in general terms, the busiest days and times and when patients are due to be sent home. If these days and times were identified and planned for in advance, using predictive models, the discharge process would be more proactive and efficient.

The ECC Unit Manager advised that the relationship between ECC and the wards is critical, especially when there is an urgent need for beds. It is unsatisfactory that this relationship is frequently “personality dependent”.

ECC staffing

The Acting Clinical Director believes that more staff are needed in ECC until the processes are fixed. In December 2007, he presented a case to management for more staff, but was told there was no money for further staff and she was to find efficiencies.[53]

The ECC Charge Nurse Manager noted that there have been a number of submissions over the years for more staff and more beds in ECC, but there was no response until 2007 when an increase in nursing hours of 11.6 FTE was allocated. In her view, this was the first time that the Board really acknowledged staff shortages.[54] It has been impossible to recruit enough nurses to fill this allocation. Negative publicity about the problems at the hospital has made recruitment more difficult.

An ECC registered nurse explained that nursing performance is limited by staffing levels. When the department is overcrowded, the nurses become task focused. There is limited opportunity for an in-depth overview of patients and no time to read the clinical notes. Team Nursing is “fine” if the workload is reasonable, but the model fails when there are too many patients and not enough nurses. In these circumstances, it is impossible to know the patients well enough to cover for other nurses, and unsafe. The ECC registered nurse said it is also “awful” for patients to constantly have different nurses caring for them.

The ECC registered nurse advised that the Monitoring Zone of ECC has only eight beds with monitoring equipment for patients who are acutely unwell. They try to keep one or two spaces free in case other emergencies come in. Sending a patient through to the Acute Zone, when stabilised, frees up a bed. However, there are occasions

[53] WDHB responded, “[The Acting Clinical Director] submitted a proposal to the then [General Manager of Adult Health Services] in December 2007, for possible inclusion in the Adult Health Services’ bid for funding through Waitemata’s PBMA process. It was agreed that [the Acting Clinical Director’s] proposal did not meet the criteria for funding under the PBMA as it sought investment in infrastructure. Funding for additional staff was instead to be considered as part of the general budgeting process for Adult Health Services. As a result [his] submission was not put to the Board.”

[54] WDHB stated that the ECC Charge Nurse Manager’s impression that there have been no staffing increases in ECC does not tally with the clear increases in staffing since 2005.

when both zones are backlogged, resulting in "corridor" patients.[55] In theory all patients should be monitored, but some are monitored by mobile monitoring units (called micro-paqs), which is not an ideal situation. There should be experienced nurses in the Monitoring Zone, but there can be a large number of new graduates working in ECC. This places pressure on the experienced staff.

There were no beds in the corridors of ECC when the HDC team visited in April 2008, and no associated signage. However, some staff showed expert nursing advisor Sue Wood the area of the ECC where corridor beds were usually located and where they are located on the computer system. They advised that patients were, at times, moved from an ED designated bed to a corridor bed to keep space available for new patients who needed to be in one of the more closely monitored zones. Nurses reported that although corridor beds were routinely open, they were not routinely staffed.

Clinical governance

The Associate Director of Nursing described the infrastructure at North Shore Hospital in 2006/07 as "immature and scarce". Doctors and nurses made their decisions in isolation. The clinical governance[56] structures were very weak, and the nursing voice at management level and in decision-making processes was also weak.

The nursing service was reviewed in 2007 and the ward management structure was united under a Unit Manager who supported the nurses' professional leaders. The Associate Director of Nursing stated that a "desired state" would be that clinical groups such as the Charge Nurse, Senior Medical Officer and Unit Manager would make decisions about patient flow and ward business, but this is not happening. The hospital is a "chaotic world" where "people have to continually work at relationships to keep the system on the road".

Efficiencies

The General Internal Medicine Clinical Director believes that increasing capacity at Waitakere Hospital ECC will not reduce the patient load at North Shore because Waitakere ECC usually reaches its quota of 18 acute admissions by 3pm. To be more effective, Waitakere Hospital would need a correct ratio of physicians to beds, and it is not feasible to have two fully resourced hospitals in one catchment area.

He believes that the primary emphasis should be on improving North Shore Hospital, with Waitakere Hospital acting as an effective satellite. Currently, the distribution of staff means that placing more beds in Waitakere Hospital will just create a bigger problem.

[55] When beds are placed in the corridors of ECC.

[56] Waitemata DHB's September 2007 Quality and Safety Plan defines Clinical Governance as "a framework through which an organisation is accountable for continuously improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish. It requires staff to work in partnerships, breaking down boundaries by providing integrated care within health and social care teams, between practitioners and managers and between the organisation, patients and the public."

The Duty Nurse Managers reported that they have few tools to assist them to oversee the DHB's workload and patient flow. The Charge Nurse Managers stated that even if they could produce evidence of staffing requirements, it made no difference to staffing levels. There were no projections of workload and no ability to match resources to predicted workload. There is a paper-based system, instead of an electronic system, to monitor patient demand and nursing supply, and it has limited utility. Day-to-day decisions regarding bed availability and patient placement are made by "feelings" rather than being based on hard data. Meetings help, but they need to get to a position where decisions are based on information.[57]

On an individual basis, professional development recognition programmes are well established, but the nurse managers indicated that they find the programmes not particularly useful in defining and measuring competence for the actual care being delivered.[58]

Quality systems and culture

Waitemata DHB has an established culture, and a reporting system, for measuring and reporting patient outcome indicators such as falls and medication errors. However, some staff feel the organisation misses the learning from such information. The patient outcome indicators are logged annually into a computer programme called Risk Pro, but are not routinely accessed and used for reflection.[59] There is no system to collect information relating to nursing hours, and to indicate how many hours nurses spend on non-nursing (administrative) work.

The DHB has had an acuity system (a system for assessing severity of patients' needs) called Nightingale since 1998, but the system has not been maintained and is not seen as a priority by the Information Systems Manager at North Shore Hospital.

The current and Quality and Risk Manager for Waitemata DHB, (who is the Waitakere Hospital Associate Director of Nursing (ADON)) was, in 2007, the ADON and Quality Manager for Waitakere Hospital. In 2007, there were two Quality Managers at North Shore Hospital. One manager focused on surgical services and the other on medical services, but the roles were interchangeable.

At that time, the Waitakere Hospital Quality Manager was part of the DHB's senior management team, but North Shore Hospital's Quality Managers were not. Despite this, she believes that quality of care issues were a priority for the Board. She felt senior management were responsive to the issues. She always felt "listened to" and information was passed on to the relevant Board committee.

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[57] In March 2009 Waitemata DHB advised that a new roster-timesheet project (RiTA) was under way. It is being developed with the other DHBs in the Auckland region to enable them to roster staff to meet predicted workloads.

[58] The DHB responded that this is inaccurate as its Professional Development and Recognition Programme (PDRP) has been in place since 1989 and has a range of tools to assess competence. It applies across all services and divisions, and is used extensively to assess competence and address problems in nursing practice. It is reviewed and improved every two years, and is approved by the Nursing Council.

[59] The DHB acknowledged that the system is not "intuitive" but said that work is being done to improve it.

In relation to the five patients in this report, she acknowledged that it was fair to conclude that in these cases in 2007, the caring parts of nursing, “the acts of kindness that make the difference”, were missing.

Staffing

The Service Manager (Medicine) reported that staff vacancies at North Shore Hospital continued to be significant. In the third quarter of 2007, there was a 50% vacancy in the Resident Medical Officer service. This led to teams being “patched” on a day-to-day basis, with house officers filling in for other teams.

Duty Nurse Managers advised that the workload pressure on the nursing service was compounded not just by a shortage of nurses, but also by the skill mix of experienced, junior, and casual staff. With team nursing, experienced nurses are expected to have their own caseload, support and monitor junior and casual staff, and take responsibility for all the patients in their zone or ward. There continues to be a high number of casual, part-time staff, which leads to lack of continuity. This means nursing staff have to prioritise and be task-focused to keep their patients safe. Nurses then have no time to build therapeutic relationships with their patients, which leads to lack of job satisfaction and disillusionment.

RELEVANT CODE PROVISIONS

The following Rights in the Code of Health and Disability Services Consumers' Rights (the Code) are relevant to this inquiry:

RIGHT 1

Right to be Treated with Respect

(1) Every consumer has the right to be treated with respect.

RIGHT 3

Right to Dignity and Independence

Every consumer has the right to have services provided in a manner that respects the dignity and independence of the individual.

RIGHT 4

Right to Services of an Appropriate Standard

(1) Every consumer has the right to have services provided with reasonable care and skill.

(3) Every consumer has the right to have services provided in a manner consistent with his or her needs.

(5) Every consumer has the right to co-operation among providers to ensure quality and continuity of services.

RIGHT 5

Right to Effective Communication

(1) Every consumer has the right to effective communication in a form, language, and manner that enables the consumer to understand the information provided. …

RIGHT 6

Right to be Fully Informed

(1) Every consumer has the right to the information that a reasonable consumer, in that consumer's circumstances, would expect to receive, including —
(a) an explanation of his or her condition; …

COMMISSIONER'S OPINION

Introduction

In my opinion, Waitemata DHB did not provide adequate systems and staffing to enable services of an appropriate standard to be provided to Ms A, Mrs B, Mrs C, Mr D and Mrs E between April and October 2007.

My expert advisors are senior clinicians and leaders in their field from other large public hospitals. They have identified various aspects of care that could have been significantly better. They have advised that the failings resulted from systemic issues and longstanding problems, and were not the fault of individual staff. My consideration of the expert advice, and the information gathered, is set out below. I discuss the key points in each case, before addressing the wider issues and making findings.

Discussion

Ms A — March/April 2007

Ms A had dementia and multiple medical conditions when she was transferred to North Shore Hospital from Waitakere ECC after it closed on the night of 3 March. She had gastrointestinal bleeding and arrived with a referral to the general medical team. This meant that throughout her stay in North Shore's ECC she was managed by the general medical team, not the emergency medicine doctors. ECC nurses provided nursing care.

Ms A's records indicate that a ward bed was ordered for her at North Shore Hospital but there was a shortage of beds and, on review, she was thought to be stable and likely to be discharged the next day. As a result, the bed order was cancelled and it was decided to discharge her back to the rest home. She was treated as a short-stay patient and remained in ECC. This is a system used for patients expected to be discharged within 18 hours. Ms A was there for 36 hours.

ECC was crowded at the time, with one nurse for every eight patients, and six "corridor" beds in the Observation Zone where Ms A was placed.

ECC nursing care

Independent nurse specialist Sue Wood noted that no systematic nursing assessment was completed to provide a plan of care for Ms A. As a result, it is not possible to determine what care problems and treatment plans the ECC nursing staff identified for her. For patients admitted to North Shore Hospital, the DHB requires such assessment and care planning be completed within 24 hours.[60]

The team nursing model used in some parts of the ECC, with small teams of different levels of nurses and assistants, requires high levels of communication and regular case conferencing between the team leader and the nursing team. Ms Wood commented that this approach focuses individual nurses on tasks, not necessarily on the person

[60] WDHB policy on "Clinical documentation" (November 2005).

and problems being treated. She also advised that it is only appropriate when nursing supply and patient demand match.[61]

The nursing documentation of Ms A's care did not demonstrate the systematic approach required by the DHB's own guidelines or the New Zealand Nurses Organisation (NZNO) Standards for Practice 2.6 and 3.4.[62] Ms A and her partner left the hospital with no information about her admission or discharge instructions for the rest home for care planning, or for her GP for follow-up. Discharge sections on an Assessment and Discharge Planning form were not completed.

Ms Wood advised that there was a lack of continuity, co-ordination, and systematic review of Ms A, which would be regarded with severe disapproval by the nursing profession.

ECC medical care

Independent emergency medicine specialist Dr Mike Ardagh noted that Ms A did not have a musculoskeletal examination at the time of her admission. However, this was not inappropriate, because it had no relevance to her presenting condition and at the time she was not complaining of hip pain.

Dr Ardagh advised that there is no evidence that ECC medical staff missed the fractured hip (which was found after her discharge and led to her readmission and surgery). It is likely the fracture occurred on the morning of Ms A's discharge (2 April 2007), after the final doctor's assessment at 11.30am. Fracturing a hip in hospital can happen, as it can at home, and does not necessarily represent poor care. However, sending an elderly patient home with a known fracture would suggest a deficiency of care.

Like Ms Wood, Dr Ardagh was critical of the way in which Ms A was discharged. Keeping her in ECC as a "short stay patient" because of bed shortages compromised the quality of her discharge. Dr Ardagh commented: "Her remaining in ECC was a consequence of deficiencies of process and capacity — processes that demand ECC is used for patients who do not need to be in an Emergency Department, and insufficient bed capacity."

There was poor communication in relation to Ms A's discharge. When Ms A's partner arrived to pick her up that morning, she was not ready and there was a lack of clarity about what should happen next. Dr Ardagh advised that it is expected that patients are discharged with adequate information, such as follow-up instructions that include any medication to be given. Staff should ensure that the patient can manage at home, and elderly patients should be assessed for mobility and daily living capability. There is no evidence that this was done in Ms A's case. There is no record that she was able to walk prior to her discharge.

[61] Having the nurses work as one big team is the approach adopted when there are staff shortages, and when other models cannot be used because there is an imbalance of inexperienced and experienced staff.

[62] 2.6 "Apply current nursing knowledge using a documented systematic approach to meet the stated and implied needs of clients/family." 3.4 "Use an appropriate nursing framework to assess and determine client health status and the outcomes of nursing intervention and document appropriately."

Dr Ardagh noted the mitigating issues of ECC overcrowding and that poor discharge information is a common problem. However, he advised that the failure to provide discharge information and to establish Ms A's ability to manage after discharge represent care below an acceptable standard.

DHB response
Waitemata DHB confirmed that during the winter of 2007, there were high patient volumes and a chronic shortage of staff, which created difficulties with the nurse/patient ratio. When these circumstances occur, patients who are waiting to go home and do not require monitoring become the "last priority". The DHB acknowledged that this may have impacted on Ms A's care.

The DHB explained that the inadequacy of Ms A's discharge was the result of two factors: first, how busy the department was at that time, and second, there was no clear discharge process for patients with a degree of dependency. The DHB noted that sometimes there is an assumption that patients leaving the ECC are able to do so without assistance.

The Charge Nurse who was on duty when Ms A was discharged, commented that ideally every patient is fully reviewed by nursing staff before discharge. However, a comprehensive nursing review does not always occur prior to discharge.

Mrs B — July 2007

ECC care
Mrs B was transferred to North Shore Hospital ECC following a severe stroke overseas. She was handed over to North Shore staff on the morning of 6 July, and then triaged and managed by ECC nurses. It is unclear when she developed CHF and breathlessness. However, when the medical house officer saw her (about four hours after she arrived) interventions were ordered to help with her shortness of breath. Subsequent tests revealed she had also suffered a recent heart attack.

Mrs B's GP son was concerned about the quality of the handover, particularly the number of times information had to be repeated to various hospital staff during the handover and admission.

He also complained that when he returned to the hospital in the early afternoon, after being notified by the medical registrar that his mother had deteriorated, he found that she had not been correctly positioned by nursing staff, and he and his wife raised her to a more appropriate position. In contrast, the DHB stated that when it was realised that Mrs B was short of breath the nurses changed her to a more elevated position and administered oxygen. Mrs B's notes record that she was "elevated" when her deterioration was noted. These notes are timed as having been made before the medical team was notified and before her son returned.

Dr Ardagh advised that it was right to suggest that Mrs B would be more comfortable and breathe easier if she was propped up rather than lying flat once she developed CHF.

Dr Ardagh noted that Mrs B was given frusemide for her breathlessness five hours after her arrival in ECC. It is not clear just how bad her breathlessness was, or whether it represented a significant deterioration; if she was significantly breathless or worsening, then a wait of five hours for definitive care represents a deficiency in care.

Dr Ardagh said the delay may have been the result of overcrowding in ECC, or having to wait for an assessment by a specialist registrar. He acknowledged the conflicting information about the quality of handover and Mrs B's positioning. However, he did not regard these issues, or the delay in providing definitive care for her CHF, as concerning. He advised that the assessment and management of Mrs B in ECC were appropriate.

Ms Wood noted that the recorded observations indicated that, if the ECC nurses had used the DHB's NEWS system to assess Mrs B, she would have scored a "1" on arrival and required two-hourly observations.[63] At 12.30pm the observations suggest her score would have been a "2", requiring hourly observations. Mrs B's recordings were not taken after 1.45pm.

There is no evidence that the effectiveness of Mrs B's frusemide therapy was being monitored in ECC while she was in transit. Ms Wood advised that, given the degree of Mrs B's breathlessness, this would not meet NZNO Standards for Practice,[64] and would meet with severe disapproval from the nursing profession.

Ward 11 — nursing care

Mrs B was transferred to a medical ward at 4.30pm on 6 July 2007, after eight hours in ECC.

Her son complained that nurses on ward 11 took too long to respond when he activated the call bell, and there was a lack of continuity of nursing care. The DHB stated that every attempt is made to provide patients with continuity of care, but for various reasons this is not always possible. While Mrs B did have a succession of nurses in ward 11, there were a number of shifts when she was cared for by nurses who had previously looked after her.

The DHB advised that call bells are often answered by health care assistants, who go to find the nurse responsible for the patient if it is a nursing concern. It acknowledged that a patient may wait 15 minutes. The ward 11 Charge Nurse explained that it is considered important to promptly answer bells, assess the situation and prioritise patients' needs with the workload on the ward. She apologised for the distress the delays caused Mrs B's son.

Ms Wood noted that issues with call bells not being answered are common to many hospitals. However, there are systemic solutions that would have addressed his concern in this case.

[63] Ms Wood acknowledged that the NEWS scoring system was not routinely used in ECC.

[64] NZNO Standards for Practice 2.6.

Ms Wood also noted that there was no care plan for Mrs B despite the DHB's own requirement for a comprehensive assessment and care plan within 24 hours of her admission.

Although she considered that the ward 11 progress notes for Mrs B adequately described her care, Ms Wood again noted a failure by nursing staff to have a structured approach to documentation as required by the DHB's procedures and the nurses' professional organisation.[65]

Further, Ms Wood advised that it appears from the notes that ward 11 nurses did not correctly follow the NEWS process. Mrs B's NEWS score was completed three to four times a day. It fluctuated between 0 and 1. When the recordings triggered a score of 1, her observations should have been increased to two hourly, and the nurse co-ordinator should have been informed, but this is only documented once. The frequency of Mrs B's observation recordings varied between four hourly and twice daily and did not appear to comply with the NEWS guidelines.

Additionally, the DHB had a facility for patients who regularly triggered the NEWS process with high scores to be reviewed. This was not used for Mrs B. Ms Wood advised that the failure to use NEWS systematically would be met with severe disapproval within the nursing profession and would not meet Nursing Council of New Zealand competencies.

On the morning of 14 July 2007, Mrs B's son was concerned that his mother's condition was deteriorating. He asked both the morning and afternoon nurses to contact the doctor, even though his mother had been reviewed that morning. On both occasions the doctor was paged, but Mrs B was not seen until 9.15 that night.

The nurse caring for Mrs B on the afternoon of 14 July was a bureau nurse. She sought review by a Clinical Nurse Specialist (who worked with nurses in a coaching role), who expressed some concerns about Mrs B's condition.

Two-hourly observations were carried out by the bureau nurse, who also assisted with the eventual doctor's examination, and carried out the subsequent care.

Ms Wood advised that there were alternative care options that could have been taken by the nurse as Mrs B deteriorated. Given the Clinical Coach's concerns and the need for medical input, the nurse in charge should have been observing Mrs B and overseeing the care provided by the bureau nurse.

Ms Wood also advised that when the doctor reviewed Mrs B that night the nurses should have recognised the acuity of her condition from the doctor's findings, and informed her family. There was delay in contacting her son because the nurse did not prioritise communication with him, even though he had already clearly indicated that he wanted to be with his mother if her condition worsened. He had left the hospital at 7.15pm disappointed that the doctor had not seen his mother. He was rung at 10pm

[65] NZNO Standards for Practice 2.6 and 3.4.

and told of the tests to be done, but half an hour later he was contacted again and told that his mother had died.

Ward 11 — medical care

The house officer, who saw Mrs B on 14 July, was on call on the afternoon/evening (and had been working more than 13 hours when he saw Mrs B). It is usual practice in these circumstances for the on-call house officer to discuss the patient with nursing staff, to find out more detail and prioritise the patients to be seen. The house officer had ascertained that Mrs B had been seen earlier by the medical registrar and he understood from nursing staff that there was little or no change in her condition since that review. The house officer was aware of the need to review Mrs B but she was prioritised along with all the patients he was asked to assess and review that day.

My independent expert physician, Dr Henley, advised that overall the care provided to Mrs B leading up to the last evening was appropriate. The only aspect that could be criticised was the long delay (more than six hours) before the house officer actually saw Mrs B. However, this was mitigated by the fact that the doctor had kept in close contact with the ward and was unaware of any significant deterioration. Dr Henley commented that whether such deterioration was not appreciated by the nursing staff and not communicated to the house officer is difficult to assess.

Mrs C — September 2007

Mrs C arrived at North Shore Hospital on 25 September with a GP referral. She spent four hours in ECC and was then transferred to a medical ward (ward 10). The complaint from her family was primarily about her care on the ward. In particular, Mrs C's family raised concerns about the response to her deteriorating condition and communication regarding her condition and subsequent death.

Ward 10 medical care

The general medicine consultant saw Mrs C on 26 September during the general ward round. As a result, changes were made to her medication to manage her fluid retention and heart function. Mrs C also needed oxygen administered through nasal prongs and she was troubled by arthritic pain as the medication she had been taking to control this pain had been stopped because it was aggravating her heart condition.

When the medical registrar saw Mrs C the following day, she was articulate and discussed the problems that different medications had caused her in the past. He talked to her about medication options and, with her agreement, started her on codeine for her osteoarthritic pain. He said that at no time did Mrs C inform him of a reaction to codeine other than constipation.

My physician expert, Dr Henley, advised that it is unlikely that Mrs C's subsequent rapid clinical deterioration, and death, was a result of the administration of codeine. It was first prescribed on 27 September and stopped the same day, after Mrs C's daughter intervened. Only a small dose, 30mg, was taken and it was only given once. Dr Henley also noted that there was no documentation about codeine sensitivity, either from Mrs C, her doctor, or family (other than what was later written by her daughter overseas).

Dr Henley considered the family's comments about not being adequately informed about the seriousness of Mrs C's condition. He stated that the medical records indicate that Mrs C's death was unexpected, and all the documentation suggested a possible discharge in three days. Dr Henley stated that the communication between the medical registrar and the family appears exemplary and is thoroughly documented.

Dr Henley advised that sudden death is always possible with an 85-year-old woman with CHF and chronic heart disease.

Nursing care
My expert advisor, Ms Wood, noted that Mrs C was initially prescribed Panadol for pain. It was to be given four hourly as required, and was given irregularly to Mrs C. Ms Wood considered the way the prescription was expressed to be confusing. She would have expected the nurses to clarify this. She also considered that because osteoarthritis causes persistent pain and the other medication was being withdrawn, the nurses should have given the Panadol more regularly.

The DHB has a pain management practice that was followed by the medical staff in prescribing the Panadol, but it was not followed by the nurses in their administration of the analgesia. Ms Wood stated, "Appropriate pain management is a fundamental human right and under-management is a worldwide problem."

Ms Wood criticised the approach to assessment and documentation by nurses and indicated it did not comply with the systematic approach required of nurses by their professional bodies and promoted by the DHB's own workbook. As with Ms A and Mrs B, there was no nursing care plan. There was no list of patient needs and nursing problems to indicate what the nurses were observing, managing and monitoring. Nowhere in Mrs C's progress notes did the nurses record the data they collected relating to her heart failure symptoms, to make it explicit that they were monitoring the impact of therapy.

While the progress notes adequately described the care given to Mrs C on 26 September and the following morning, this was not the case for the afternoon of 27 September. Ms Wood stated that it is extremely difficult to assess Mrs C's condition at that time given the lack of physical findings and observations in the notes.

Mrs C's family are particularly concerned that she was not adequately monitored by nursing staff on the day she died. Ms Wood noted that when the family reported their concerns that their mother was deteriorating, the nurse did not document an assessment of Mrs C's level of consciousness, the presence of or any improvement in the oedema in her legs, her lung sounds or her JVP (jugular venous pressure). Routine observations were not made after 4pm. She was reported as "comfortable" at 8pm.

Waitemata DHB acknowledged that standard nursing protocols regarding monitoring were not followed on the evening of 27 September. It advised that the registered nurse responsible for Mrs C's care that evening has been spoken to about these omissions.

Ms Wood also noted that Mrs C's respiratory rate had triggered a NEWS score of 1 on eight occasions when her observations were taken. However, only once did this result in her observations being taken two hourly as required by the system. In an interview, the nurse who cared for Mrs C on the afternoon of 27 September advised that NEWS was a guide for when to call a doctor and that four-hourly observations were appropriate following a score of 1. The nurse stated that this was fairly standard for her ward. Ms Wood believes this statement demonstrates a systemic problem with the NEWS system, how it is used and its purpose. She advised that the way the system was applied (incorrectly) in relation to Mrs C did not meet Nursing Council competencies. The lack of systematic use of NEWS would meet with severe disapproval. As in Mrs B's case, the DHB protocol for patients who regularly trigger a high NEWS score was not used for Mrs C.

Ms Wood stated that the shift co-ordinator was responsible for overseeing the quality of Mrs C's nursing care. However, the co-ordinator had patients to care for as well as supervising casual staff and new graduates, while working short staffed. The Charge Nurse Manager was responsible for the overall quality of care in the ward, including the systems and processes and the adherence to policy. There was no acuity system to determine if the nursing staffing was adequate for the workload, no audit processes, shared governance or time for quality improvement activities on the ward.

On the night Mrs C died, one of the three evening shift nurses had been reassigned to another ward that was short staffed. This meant Mrs C was not seen soon after the evening handover as she would normally have been. It was not until 12.30am that a nurse checked on Mrs C and found that she was not breathing. Waitemata DHB advised that the nurse caring for Mrs C had been spoken to regarding the lapse in monitoring and was apologetic for the oversight. I note that although this nurse was censured, the situation was created by the staffing reassignment.

Mrs C's son stated, "It was never my intention to cause a comeback for the nurses. ... I believe that if anyone is to blame at all, it is the NSH [North Shore Hospital] system and in particular the fact that they do not have enough funds to hire enough nurses at effective payscales for the work to be properly done." Mrs C's other daughter stated, "It is with regret that we have to highlight the NSH nurses' plight in such a way. However, there are consequences when procedures and policies are not adhered to."

Communication issues

Two communication issues arose between nursing staff and Mrs C's family: the nurse's "game" when she allegedly informed Mrs C that she was prescribed morphine for pain relief instead of codeine; and the way in which her daughter was informed of their mother's death. The nurse has denied the "game" incident and there is no independent evidence that it occurred. Certainly, if it did happen, it was inappropriate. The way in which the family was told of Mrs C's sudden death was also insensitive and distressing for the family.

In relation to the second issue, Ms Wood noted that staff said they had not been prepared for giving bad news to families. Many hospitals do not provide training in this area of communication.

The DHB stated that it was regrettable that the nursing staff who may have been aware that there was another family member (the daughter who lived overseas), did not advise the medical staff and thus ensure that all family members were communicated with regarding Mrs C's condition. When the medical registrar became aware of the second daughter and that she had arrived in New Zealand, he arranged a family meeting to discuss Mrs C's admission and the care that had been provided, and explain the medications prescribed.

The DHB advised that it is looking at communication issues throughout the hospital, including communication between medical and nursing staff. It has a large number of staff for whom English is a second language, who sometimes miss cultural aspects of communication. A focus group is being set up to assist with this problem.

Mr D — September and October 2007

Mr D arrived at North Shore Hospital's ECC by ambulance at 9.46pm on 20 September 2007, anxious and hyperventilating. He had heart failure. He also had lymphoma that had been treated with chemotherapy. His care needs were considered to be palliative with regard to his cancer. After assessment in ECC by the medical registrar for the consultant physician, Mr D was transferred to ward 11 at 4am on 21 September. The complaint from Mr D's family was about his care on the ward.

Medical care
When Mr D was admitted, it was noted that he had been taking excessive doses of lorazepam for anxiety, and he was referred to the psychiatric team for a review of his benzodiazepine requirements. He was seen by the psychiatric registrar, who talked to the consultant psychiatrist who had previously been involved in Mr D's care. The consultant psychiatrist recommended that Mr D start on the anti-anxiety drug citalopram.

The family questioned this because when Mr D had previously been prescribed citalopram, he had developed urinary retention and incontinence. The medical registrar stopped the citalopram and started him on Buspirone. These changes were made to his medications with the aim of weaning him off his usual anti-anxiety medication (lorazepam) and they were discussed with Mr D's daughter. Waitemata DHB advised that while the medications were being adjusted, Mr D experienced a range of side effects that included hypotension, drowsiness and urinary retention.

My expert advisor, Dr Henley, noted that throughout Mr D's admission to North Shore Hospital, there were constant concerns about his anxiety and benzodiazepine (lorazepam) dependence. The medical team sought help from the liaison psychiatric team, who tried to find alternative medications that might help Mr D. Although this was not successful, Dr Henley advised that it was medically appropriate treatment.

Mr D's family were concerned that their father did not receive adequate medication to assist him with his breathing problems. The records show that Mr D repeatedly refused his nebulisers because he felt they did not assist his breathing. On 1 October Mr D was having trouble breathing while he was being examined by a consultant physician. He asked him for "a nebuliser or an injection". The physician found that Mr D was hyperventilating, and advised him that a nebuliser would not assist him.

Mr D’s family complained that his lung was punctured when an attempt was made to drain fluid from his lungs on 15 October. Waitemata DHB advised that a pneumothorax is a known risk associated with a pleural tap, and this was the reason that the post-procedure X-ray was taken to rule out any complications. The chest X-ray indicated only “small bilateral pleural effusions and bibasal atelectasis”.[66] However, the X-ray taken when Mr D was subsequently readmitted to North Shore Hospital ECC (following his transfer and eight-hour stay in a private hospital) on 18 October, showed a right pneumothorax measuring 9.2cm from the apex.

Dr Henley advised that the pleural aspirate (chest drain) was attempted in light of the increasing size of Mr D’s pleural effusions. The family were informed about the need for this procedure. There were two difficulties with the procedure: first, despite three attempts using an ultrasound marked spot, no adequate samples were obtained; and secondly, Mr D was unable to maintain an upright sitting position. Dr Henley also noted that after the procedure was abandoned, an X-ray was performed and reported initially as normal but later amended to show a small atypical pneumothorax. There was nothing to suggest that the aspirate procedure was not appropriately performed.

Dr Henley also commented that although Mr D’s family complained about the lack of information provided to them about his condition, there were many notations in the clinical records about conversations between the medical team and the family.

The DHB advised that Mr D could have been described as “palliative”, but that does not necessarily describe a patient whose death is imminent.[67] The DHB acknowledged that the term “rehab” was not the most appropriate term to use with the family. The medical team was trying to provide Mr D with a more optimal lifestyle by symptom management when the AT&R physician advised that a three-week stay in the rehabilitation ward might be “beneficial”.

In Dr Henley’s opinion, the medical care provided to Mr D was appropriate. There were obvious difficulties in managing an elderly patient with multi-system disease, but there is no evidence of lack of care. The decision to discharge Mr D involved the family, and there was strong input from other services. Although there were medical concerns about Mr D, it was agreed that it was a reasonable alternative to transfer him to a private hospital. That he returned suddenly because of rapid deterioration does not mean that the plan was inappropriate.

Dr Henley was unable to judge whether the care was effectively co-ordinated. He noted that a large number of medical and allied staff were involved in Mr D’s care. Dr Henley noted that the DHB has acknowledged that the “great work and effort” by the multi-disciplinary team does not appear to have been well executed and this left Mr D and his family frustrated and dissatisfied with the care.

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[66] The base of both lungs failed to expand.

[67] Dr Henley advised that the definition of “palliative” could be discussed at length. However, he confirmed that it does include long-term management of seriously ill patients, not just those who are dying.

Nursing care
The family's concerns were primarily about his medical care. However, they also commented on issues such as poor communication and a slow response by some nurses at times, including their father being left in a wet bed. He was not assisted with his meals, and his food trays were left where he could not access them. The family highlighted the need for compassion and patient nurturing in nursing care.

In response, Waitemata DHB noted daily documentation that the nurses assisted Mr D with all cares and helped him up to the toilet when needed, and that his bed was changed when wet. The DHB outlined the actions taken to ensure that Mr D had a sufficient food and fluid intake, including referral to the Nutrition Service, and that he was given assistance and encouragement with meals when his family were not there to assist him. It was noted that his intake was limited by his anxiety levels, and this was addressed by medication and nursing staff spending time to calm him.

The DHB offered an apology to the family:

> "We unreservedly apologise for the family's distress and perception that [Mr D] received poor nursing care and can only seek to assure the family that their complaint has been received with great concern by the Director of Nursing (DON). We reiterate that the DON is working collaboratively with the Associate DON and the Charge Nurse Managers as a group to inform all nursing staff and raise awareness [of] the fact that care delivery and the way we deliver it combined with what we say and how we say it can have such a profound impact on both the patients' and the families' experience."

Mrs E — October 2007

ECC nursing care
Mrs E arrived at North Shore Hospital's ECC on 17 October by ambulance, with a GP referral. An asthmatic, she was having increased problems with breathlessness and her GP had queried pneumonia. She was assessed and an electrocardiograph and blood tests were conducted by the ECC nurses while she waited to see the medical team house officer.

Mrs E was particularly concerned about difficulties in getting care and delays in treatment in ECC. She was left on her own with her call-bell after initial assessments were done, but it took up to 30 minutes for her call-bell to be answered. A luer was inserted but intravenous fluids were not started for some time.

Ms Wood was critical of the monitoring of Mrs E. Although she could be seen from the nursing station and she could see the nurses, this could not be described as regular monitoring of her health status.

Once again, Ms Wood noted that the DHB orientation document for ECC nurses specifies that they should record observations half hourly until patients are seen by the doctor, and then use professional judgement regarding the frequency of further recordings. Mrs E's observations were recorded at 7pm (two and a half hours after the doctor saw her) and 9.20pm. Notes were made about her progress when she was taken for her X-ray and while she waited for a ward bed. She was recorded as stable.

Ms Wood advised that if ECC staff had assessed Mrs E according to NEWS, her observations would have been taken two hourly from her arrival.

Although the admitting house officer recorded that Mrs E had "tachypnoea" (rapid breathing) on admission, her respiratory rate was not recorded. The house officer's observations were available to the nurses in the clinical record but they were not transcribed onto the observation chart to assist in monitoring any trend. Ms Wood advised that it would be expected that regular, systematic observation of Mrs E's vital signs would be done until her respiratory rate returned to normal and was stable for a period of time.

The North Shore Hospital ECC is staffed to try to provide one nurse to four patients. The DHB advised that at the time that Mrs E was in ECC, 206 patients were processed in 24 hours. She was in the Acute Zone (where all patients are initially received). An ECC nurse reported that staffing in this zone was usually three nurses for anywhere from 12 to more than 20 patients. Ms Wood commented that this exceeds the nursing workload that would be expected for similar patients on the wards.

Ms Wood advised that the staffing was not based on predictable patient numbers. It was based on orthodox bed spaces in ECC and did not include corridor beds routinely being used for patients who were ready for transfer to wards but "blocked" because the hospital was full. Additional nurses had been budgeted for but there had been recruitment difficulties.

The DHB had only one nursing vacancy in ECC when Mrs E was there, and it was not in the Acute Zone. However, Ms Wood considered that there had not been sufficient planning to ensure the number of nurses on each shift was enough to meet demand. Additional cover was not built in during the recruiting period to manage the workload. Ms Wood advised that this would not meet the sector standard requiring that consumers "receive timely, appropriate and safe service from suitably qualified/skilled and/or experienced service providers".[68]

Waitemata DHB stated that staff make every effort to respond in a timely manner to a patient's request for assistance, and apologised if this was not the case for Mrs E.

Waitemata DHB submitted that it is unclear whether there was undue delay in Mrs E receiving the intravenous fluids because, although the time the fluids were commenced is recorded as 7pm, the time the doctor ordered the fluids is not recorded. Her intravenous fluids were not initiated earlier because she did not display any clinical signs of an urgent need for replacement fluid.

ECC medical care

The DHB advised that the total number of patients seen at North Shore ECC on 17 October 2007 was higher than average. Mrs E was one of 118 triaged as category 3. This meant she should have been seen by a doctor within 30 minutes. She was seen

[68] Health and Disability Sector Standards (NZS 8134:2001), Standard 2.7.

by the medical team doctor one hour and 30 minutes after presenting at ECC, which was considered reasonable given the volume of patients that day.

Dr Ardagh advised that although Mrs E had prompt initial nursing care in ECC, definitive care for her condition was delayed. IV fluids and antibiotics were not started until four hours after her arrival at ECC, the chest X-ray was done six hours after her arrival, and prednisone was given nearly seven hours after she arrived. She spent 10 hours in ECC.

Like the other patients in this inquiry (except Mr D), she had arrived with a direct referral to the general medical team for assessment by that team. After they saw her and she was treated, a ward bed was able to be ordered.

Dr Ardagh commented that the process for referred, acute general medical admissions was followed and this meant that Mrs E "waited in a busy, overcrowded ECC for assessment by the team". She would have been distressed waiting in that environment with acute exacerbation of shortness of breath, feeling that she had been abandoned or was being ignored, and knowing she needed treatment of a certain type but having to wait before it was delivered.

Ward 10 nursing care

Mrs E also raised concerns about delays in her care, the responsiveness of nursing staff, and hygiene on ward 10.

Ms Wood noted that when Mrs E was transferred to ward 10 (in the early hours of 18 October), the care plan was only completed for one shift (the morning shift on 18 October). The plan focused on her respiratory issues, but did not reflect her problems of vomiting and diarrhoea or her concerns about her husband and home situation. Referrals were made to a needs assessor and a social worker, which indicated that the nurses were aware of these issues, but Ms Wood advised that the plan would not meet the required standard.

Ms Wood advised that the DHB's Clinical Documentation Procedure states that progress notes are to be documented in a logical format starting with general appearance, observations, treatments, pain, and the various systems such as cardiovascular and psychology. None of the nurses involved in Mrs E's care used this structured approach.

Ms Wood advised that it was appropriate for Mrs E to be cared for by an enrolled nurse because she was stable, but it is not recorded which registered nurse was supervising the enrolled nurse, and there is no evidence of discussion about the care, or that a supervising nurse was consulted about the refusal of treatment (the nebuliser). Nursing Council competencies require registered nurses to supervise and evaluate care provided by enrolled nurses, and provide clear direction. Ms Wood advised that the care provided did not accord with this requirement.

Mrs E's intravenous (IV) line was disconnected each time she needed to go to the toilet, because there was not enough equipment, such as a mobile pole, to keep the line intact when she was out of bed. It was also disconnected when she was moved to another room at 1.45pm, and it was not reconnected until about 5pm. Ms Wood advised that disconnecting lines for toileting and showering, then reconnecting, is poor practice because it increases the risk of infection.

The DHB responded that a needleless intravenous system is used in all the clinical areas, to allow disconnection. It is used where patients require intermittent infusion of antibiotics, but not fluid replacement. Once an infusion has been administered, the nurse disconnects the line and places the end of the intravenous tubing into a sealed connection. When reconnection is required, the rubber bung is swabbed with an alcohol swab and the connection made through the bung. This is standard practice where a needleless system is used.

Ms Wood advised that regardless of the intravenous system used to administer fluids and drugs to a patient, there needs to be regular review of the practice and the product guidelines. Ms Wood stated that before reconnection the bung must be cleaned and swabbed and left for 60 seconds, but this is often not done, which exposes the patient to the risk of infection.

The DHB also advised that some patients are moved a few times because ward rooms are set aside for patients who need to be isolated in accordance with infection control. When Mrs E was moved, staff should have been courteous and offered her transportation. Bed moves are usually done by health care assistants, who are not qualified to re-establish intravenous lines. It appears that Mrs E was moved to a different room around changeover time, which is a busy time. This may have accounted for the disorganised move and delay in re-establishing her intravenous fluids. The DHB accepts that the delay in completing the administration of the intravenous fluids did not meet the expected standard of care. This has been discussed with the staff involved.

The DHB made enquiries about delays in Mrs E's call-bell being answered on the ward. Patients sometimes think there is a long delay when a health care assistant answers a bell and relays the request to the nurse, especially when there are 35 patients to three registered nurses. Delays are not intentional, but registered nurses must, in circumstances when the ward is busy, prioritise their workload according to need.

Mrs E was concerned because the laboratory technician taking her blood reported that the absence of patient identification stickers on request forms was not unusual. The DHB commented that it is possible that Mrs E had her identification bracelet removed when her intravenous luer was re-sited on 18 October. It also stated that the comment made by the laboratory technician relating to the apparent lack of patient identification stickers was inappropriate and unprofessional. The wards hold folders that contain a quantity of patient identification labels. When the labels run out, as they do occasionally, staff ask the ward clerk to order a fresh set. The laboratory technician should have brought this matter to the attention of the ward staff.

Mrs E is certain that no identification bracelet was removed because of the luer "as there never was one there".

Ward 10 medical care

Dr Henley advised that Mrs E received standard treatment for an upper respiratory tract infection. The clinical records do not indicate any major medical mismanagement, except for the long delay in ECC before intravenous fluids (which were especially important as Mrs E still had diarrhoea) were started.

Dr Henley noted that although nebulisers were not specifically charted, the nursing notes indicate that she was offered a nebuliser in ward 10 on 18 October, which she refused, preferring to continue with her own inhalers. However, when she was offered a nebuliser the following morning and accepted the offer, she had some relief from her respiratory problems. Dr Henley advised that this treatment "may well have been included in her therapeutic regime earlier, but is not universal standard treatment".

Mrs E does not recall being offered a nebuliser on either 17 or 18 October and said she did not refuse one. She confirmed that she was offered one on the morning of 19 October when a nurse noticed the asthma inhalers on the cabinet, asked where her nebuliser was, and went to get one. Mrs E said she found it "enormously beneficial".

The DHB acknowledged that it may have been better practice for the house officer to have prescribed Mrs E's Ventolin and Atrovent inhalers as "as required" medication when it was clear that she was able to manage the inhalers.

Cleaning

Mrs E also raised concerns about the standard of hygiene in ward 10, including that patients were expected to swab toilets and handbasins after use, and that there were no plugs in the wash hand basins. Ms Wood advised that removing hand plugs from basins is infection control practice as plugs have been found to harbour infection. However, expecting patients with an IV line to clean their own toilet seat is a breach of infection control standards.

The DHB responded that patients on all wards are recommended to spray with the disinfectant provided or to wipe the seat with paper provided. This is for their own protection, and is a practice used by other DHBs for infection control.

The level of ward disorder, rubbish on the floor and clutter described by Mrs E was acknowledged by the nursing staff. The cleaner worked two wards and did not attend to cleaning ward 10 until after lunch.

Ms Wood observed that the standard of cleaning at this time was not routinely monitored by the Charge Nurse or the DHB, and that the DHB has acknowledged there was a lack of ward support. There were no health care assistants on the ward on the afternoon, night and morning of Mrs E's admission. Ms Wood advised that the level of cleaning services provided by the DHB did not meet the Health and Disability Sector Standards relating to cleaning and infection control.[69]

In response, Waitemata DHB accepted that the cleaning in 2007 could have been improved, but stated that it was being routinely monitored. There was (and continues to be) a formal process of auditing the cleaning of all areas of the hospital, which is

[69] Health and Disability Sector Standards (NZS 8134:2001), Standards 5.5 and 5.6.

undertaken daily by the Cleaning Supervisor. The Charge Nurse is required to monitor this and address issues, "which they do".

The DHB has followed up the cleaning concerns with the contractor who provided cleaning services and staff at the time. The DHB's Infection Control team has also undertaken routine audits. Further, the Adult Health Services Quality, Safety and Risk team is developing a more extensive audit plan for each ward, including random weekly/monthly audits. The lack of hand-wipes on meal trays and of used-linen bags has been followed up by the ward 10 Charge Nurse.

FINDINGS

Overview

Public hospital inquiries often result from allegations of preventable patient deaths. The Canterbury Health inquiry undertaken by Health and Disability Commissioner Robyn Stent,[70] following a report from senior doctors entitled "Patients are dying at Christchurch Hospital", is a classic example. Numerous HDC inquiries into the care delivered in public hospitals, particularly cases of misdiagnosis in emergency departments, have followed over the past decade.

This inquiry focuses on the plight of sick, elderly patients in a major metropolitan hospital. Although four of the patients died, there is no evidence that treatment injuries or lapses in care caused their death. What emerges is a picture of an overcrowded hospital, staff who were stretched and stressed, nurses who did not have time to care, and patients and families who were left in the dark about the patient's condition, prognosis, and plan of care. The Emergency Care Centre and medical wards 10 and 11 were ill equipped to cater for the flood of patients in the winter of 2007. North Shore Hospital's acute care services were overwhelmed.

As noted in an HDC investigation of a patient's care at North Shore Hospital in early 2006:[71]

> "When an elderly patient is becoming progressively unwell, it is important that there is also good communication with family members who are acting as advocates and support for the patient and may be called upon to help make decisions. Family members often play a key role in helping a patient understand what is happening. …
>
> It is always troubling to hear that patients and/or their families feel that those caring for them do not actually 'care'. This perception almost certainly contributed to the family's concerns about [the] care and the communication difficulties."

It is no answer that the medical management of these patients was generally appropriate. Patients deserve better than this — in particular, respect, dignity, effective communication, and care that is sensitive to their special needs. The Code

[70] *Canterbury Health Ltd: A Report by the Health and Disability Commissioner* (1998).
[71] Opinion 07HDC01804 (16 May 2008), pages 29–30.

affirms that patients are legally entitled to this standard of care.[72] But the experience of these five patients demonstrates the gulf between the rhetoric and the reality of patients' rights.

The patients' and families' experience
Patients and families do not complain lightly about hospital care.[73] The multiple patients and families who complained to HDC about ECC and medical wards at North Shore Hospital in 2007 painted a consistently unhappy picture. Some of the families and patients whose cases gave rise to this inquiry described their experience in vivid terms:

> "People deserve better treatment in our hospitals. [My partner] and I have worked in hospitals for the best part of our lives. … I have never seen an admission department in such a messy and overcrowded state as that at North Shore Hospital. I would never wish what happened to [my partner] upon anyone."[74]

> "There was a constant need to repeat [my mother's] history which became quite frustrating. … No one was reading the notes before seeing [her]. Staff didn't have knowledge of individual patients due to time constraints … leading to piecemeal care, unnecessary suffering to patients and poor use of resources."[75]

> "I lay awake at night and worry about other elderly sick folk who suffer this inhumane, uncaring and unprofessional behaviour. … No one communicates or does what they say they will, they just disappear, shifts end, changeover meetings take place, but still no one knows what is next or who is still waiting for help or a job to be finished." [76]

Nursing care
A key feature of this inquiry is the degree to which the nursing care for all five patients was compromised by workload. This occurred in ECC and on the medical wards.

At the time of these events, nurses were endeavouring to prioritise and deliver care in what has been described as a "chaotic, understaffed environment". There was "a sense of disempowerment", with no feedback or mentoring of ward standards of practice, and a lack of "voice" for nurses.[77] Despite the many senior nurses at the DHB in 2007, the professional leadership structure was not effective to give nurses authority over daily practice or enable meaningful partnership with Clinical Directors and

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[72] Rights 1(1), 3, 5 and 4(3) of the Code of Health and Disability Services Consumers' Rights.
[73] Research indicates that approximately 1 in 200 patients who suffer an adverse event in hospital make a complaint: Bismark M et al, Relationship between complaints and quality of care in New Zealand: a descriptive analysis of complainants and non-complainants following adverse events. *Quality and Safety in Health Care* (2006) 15:17–22.
[74] Mrs B's son.
[75] Ms A's partner.
[76] Mrs E.
[77] These concerns are an echo of the situation at Gisborne Hospital in 1999–2000. See *Gisborne Hospital 1999–2000: A Report of the Health and Disability Commissioner* (2001). See also Opinion 03HDC14692, page 76, for an example of nurses exhibiting "a mechanistic approach to their role" at Palmerston North Hospital in 2002.

managers. The result was predictable: an unsystematic approach to nursing care; poor planning, assessment and monitoring; inadequate supervision; failings in communication and documentation; and a general lack of patient focus. Nurses had no time to care.

Waitemata DHB had inadequate planning and systems for nursing staffing, particularly in relation to the need to match staffing levels with patient numbers. There was a lack of tools to oversee the organisation's workload and patient flow, with no ability to predict workload and match nursing resources. The information system support for the Duty Nurse Managers, who are responsible for after-hours operational management, was very limited. The DHB has had an acuity system called Nightingale since 1998, but it has not been maintained.

The DHB has acknowledged that in 2007 the earlier removal of some support roles (in 2005/06), the high volume of patients, concern about the budget with late replacement when staff left and slow filling of nursing vacancies all had an impact. Even in May 2008, when the inquiry team visited, nurses described their inability to deliver consistent care to the required standard because of the sheer volume of work.

Planning for population growth
I have considerable sympathy for the difficulties Waitemata DHB has faced in trying to meet the needs of a rapidly growing population. DHB staff and senior managers have tried valiantly to anticipate and resolve problems, and have continued to try to provide the best care possible in extremely difficult conditions. Some of the care in the five cases examined was very good. That is to the credit of staff, particularly given the circumstances.

However, not enough attention was paid, soon enough, by the Board to the concerns of staff and the solutions they proposed. Nor was enough action taken to plan and provide good systems for patient care in the short term or to plan ahead for predicted population growth. I do not consider that the Board has established that it took "reasonable actions in the circumstances" — specifically, the circumstance of the "resource constraints" that it faced — to comply with its duties as a provider of health services.[78] It is not enough for a Board simply to "toll the bell of scarce resources" to excuse itself from liability under the Code.

By the time of these events, the Board had been presented with considerable information about the worsening pressures on the ECC and acute services. The concerns dated as far back as 2002.

Initially, the Board's response focused on looking for greater efficiencies — although little evidence was presented to my inquiry of significant efficiency gains.[79] In 2002, the Board was confident that upgrading of information systems and the building of Waitakere Hospital ECC would mean that the pressures on North Shore Hospital ECC

[78] See the defence in clause 3 of the Code. Compare *Canterbury Health Ltd: A Report by the Health and Disability Commissioner* (1998), page 4.
[79] Waste is estimated to comprise up to 17% of hospital budgets. There are real dollar gains to be made from addressing wasteful processes, as DHBs such as Canterbury are demonstrating.

would be "short lived". The anticipated reduction in pressure on acute services at North Shore Hospital did not eventuate.

Only recently has the Board recognised that greater capacity (staff and inpatient beds) is needed at North Shore Hospital. After no change for the five years between 2003 and 2007, the number of beds in the hospital's medical and surgical wards increased in 2008. However, it was not until November 2008 that the Board put the case to central government for increased capital funding to expand acute services at North Shore Hospital. On the funding side, much of the Board's attention has focused on arguing (largely unsuccessfully) against the funding formula, year after year.

Some senior staff spoken to during this inquiry stated that the Board had taken too long to accept that greater capacity was necessary. The chronology of reports and reviews certainly gives weight to this view. It is also not surprising that the former Acting Clinical Director for ECC commented that there was a sense of "business case inertia" at North Shore Hospital.

My expert advisors were of a similar opinion. Dr Ardagh advised that the debate about whether more beds or better processes were the solution enabled "inefficiencies of process to be an excuse to avoid investment in capacity". A combination of both increased capacity *and* better processes was needed.

Dr Ardagh commented:

> "The concerns raised about the standard of care delivered by ECC have legitimacy but it is an injustice that the staff of ECC must defend themselves when they appear to have worked well and hard against overwhelming odds. It must be particularly frustrating for ECC staff that they find themselves under this scrutiny after submissions to those who might have been able to improve matters were not embraced."

Dr Henley commented:

> "It is interesting to note that as long as four years ago the clinical leaders were constantly outlining to the Board the need for more beds to cope with the predicted increase in patient workloads. This concern seems to have been ignored up until recently, perhaps motivated by some unfavourable clinical events.
>
> This delay in forward planning has left the clinical staff in an intolerable situation, hoping to cope as best they can in a facility not capable of sustaining such volumes. Medical and nursing staff continue to work under extreme pressure.
>
> Of all aspects of performance that has most impinged on ability to provide appropriate standards of care the Board should perhaps be held the most accountable."

It is troubling that nurses, doctors and hospital management can predict problems and identify solutions, but that Chief Executives and Boards can be so slow to respond. It confirms the need to strengthen clinical governance in the New Zealand health system.[80]

The various papers presented to the Board of Waitemata DHB from 2002 to 2006 highlighted very clearly the chronic problems in acute medical services at North Shore Hospital, particularly in ECC. Yet it was not until the overload of winter 2007 was bearing down on the hospital that the Board took decisive action. By then it was too late for sick patients and their families.

Accountability
Where does accountability lie for the planning failures that led to the crisis in care at North Shore Hospital? I note Dr Ardagh's view that "the Ministry and Ministers must bear some responsibility for the deficiencies identified in this investigation". My initial view was that Waitemata DHB's requests for funding fell upon deaf ears in Wellington. But that view is not sustainable on the evidence. The DHB has expended a lot of energy litigating the Population Based Formula and arguing that it does not fairly compensate Waitemata for its population growth. Many DHBs argue that the PBFF is inequitable. However, the 2007/08 five-yearly review endorsed the PBFF, notwithstanding the dissenting voice of Waitemata DHB.

I am left with the impression that the DHB focused so strongly on arguing over the funding formula for so many years, that it failed to plan for growth by prioritising the funding of North Shore Hospital services and seeking capital for additional beds and site expansion — a point the DHB has partly acknowledged by admitting that in hindsight it should have recognised the need for more beds earlier. Unpalatable though it may be to Waitemata, there is force in the Director-General's submission that the DHB "may not have maximised opportunities to develop services that reflect their growing population's need for acute health services".

If a district health board has exhausted all reasonable possibilities to fund its acute services and pay for any related capital development (to redevelop or expand its facilities) from its existing budget, and the Board itself cannot produce a solution, it must put a detailed case to central government for additional funding. Inevitably, such budget bids take time to yield results, and short-term or even medium-term contingency planning will be necessary. But it is the responsibility of a DHB's Chair and Chief Executive to press the case to the Director-General of Health, the Ministry of Health, and Treasury for additional funding where a public hospital cannot meet demand for its acute services.

Equally, central government has a responsibility to carefully consider such requests in the allocation of funds from Vote Health. District health boards are often placed under intensive monitoring if their budgets remain in deficit. Equal attention needs to be given to assessing substantiated excess demand on a DHB's acute services, particularly where demographics indicate that a current problem is only going to get worse. Resources are inevitably limited, and there are many calls on Treasury's coffers, but the safety net of additional funding from the centre must be considered in

[80] See Ministerial Task Group on Clinical Leadership (Brown J et al), "In Good Hands: Transforming Clinical Governance in New Zealand" (March 2009).

compelling, exceptional circumstances. A DHB having difficulty maintaining services within current funding can receive additional deficit funding, as well as non-financial support such as reviews, information and personnel via the Ministry of Health.

The care of the five patients in 2007 was compromised by inadequate systems and the failure of Waitemata DHB to resolve overcrowding and staff shortages. While I accept that the DHB had tried for a number of years to address the problems, I do not consider that it acted with sufficient urgency early enough, or demonstrated the innovation that has marked some of its services.[81] Regardless of the problems facing the DHB, Ms A, Mrs B, Mrs C, Mr D and Mrs E were entitled to an appropriate standard of care. They were let down by the Waitemata District Health Board. For that failure, the Board and its senior management is accountable.

BREACH — WAITEMATA DHB — ECC CARE

Four of the patients arrived at the emergency department with referrals from their doctor.[82] This meant that although they were in the ECC, their medical care was managed by the general medical team and not the ECC-based emergency doctors.

To a lay person, having parallel systems within one emergency department is a recipe for problems. It is a relic of hospitals designed in a much earlier era, and cries out for reform and fundamental redesign.

Dr Ardagh advised that having multiple different patients, multiple different staff, and multiple different tasks all in one clinical space, results in errors and inefficiencies. Dr Ardagh and Dr Henley highlighted that North Shore Hospital ECC staff are unable to govern their own department and therefore improve processes. Dr Henley stated: "As far as I am aware, the Emergency Department at WDHB is the only department in New Zealand that does not have absolute leadership of the Emergency Department facility. … This has left an enormous leadership vacuum."

Both my medical experts commented on the need to reduce the number of non-emergency patients admitted and held in the ECC at North Shore Hospital. I agree. I accept that patients sometimes need to be held in emergency departments for observation before decisions can be made about admission or discharge, and it is not always possible to find a bed immediately elsewhere in the hospital. However, ECC is not the appropriate place to hold elderly patients with multiple chronic health problems. ECC should not be treated as another "ward". One option is for GP referrals not to enter ECC at all, but to be "decanted" to an Acute Admitting Unit or Assessment and Diagnostic Unit (ADU).

In response, Waitemata DHB commented that Dr Ardagh and Dr Henley may not have recognised the implications of the fact that North Shore Hospital's ECC provides

[81] For example, the nationally recognised innovations in Waitemata's hospital pharmacy, forensic mental health and public health services.

[82] Mr D was self-referred. However, he had presented at North Shore Hospital ECC a number of times during 2007, and his admission process in September 2007 was similar to the other four patients; they could not be moved to a ward without being seen by one of the general medical team.

both an ED and an Assessment and Diagnostic Unit (ADU) function for acutely referred patients.

The DHB stated that this distinction is important. An emergency department cares for patients who typically present without having first been seen and referred by a medical practitioner and, although some are critically ill, most patients presenting to an emergency department do not require admission. The ADU cares for patients referred acutely by a GP or other medical practitioners who require specialist assessment. These patients are generally admitted. Waitemata DHB advised that the models Dr Ardagh described and his recommendations are relevant only to the ED function of North Shore Hospital's ECC.

Dr Ardagh does not accept this. He responded:

> "These comments cause me some disquiet. First they are wrong in every respect but worse, they suggest a persisting mindset that contributed to the ED Clinical Director being unable to influence how referred patients in the ECC were managed. The artificial separation of 'emergency medicine patients' (over which the Clinical Director had influence) and the 'non-emergency patients' (over which the Clinical Director had no influence) was a significant contributor to the problem."

Dr Ardagh added that "streaming" referred patients (such as those referred to general medicine) to a separate unit dedicated to this task is good for patients and is an important part of the solution to emergency department overcrowding. However, at the time of these events both referred and non-referred patients were cared for in the same space by the same nurses. If patients are in the same space they become part of the workload and it does not matter if it is called an ED or an ECC. I agree with this view.

The evidence suggests that "bed block" has been a regular occurrence at North Shore Hospital, with the ECC, and acute services more generally, overwhelmed. I note that while there were no beds in the corridors of ECC when my team visited in April 2008, and no associated signage, nurses reported that corridor beds were not routinely staffed, but were routinely "open" for use. It is not acceptable for patients to be treated and kept in ED corridors or other informal ED places because of overcrowding.

Nursing systems within ECC in 2007 were also problematic. Waitemata DHB submitted that the team nursing used in ECC was, and is, an appropriate model of care because it means there are more people monitoring what is happening over the shift. In response, Ms Wood advised that they have "missed the point", which is that team nursing does not work well when nursing supply and patient demand do not match, as was the case in 2007.

During this inquiry the nurses in ECC have clearly indicated that team nursing did not work "given their workload". The DHB has not explained how nurses are supposed to work when they are short-staffed and unable to maintain the communication and oversight processes necessary for the team nursing model to be effective.

Specific findings
In my view, the failings in Ms A, Mrs B, and Mrs E's care in ECC were as follows:

- There was no immediate bed on the ward for Ms A and, as she was thought to be soon for discharge, the request was cancelled and she was kept in ECC. She was an elderly lady with chronic health problems. For her to spend 36 hours in ECC was unacceptable.

- In the case of Ms A, there was a lack of continuity, co-ordination, and systematic review, which Ms Wood advised would be regarded with severe disapproval by the nursing profession. Although there is a DHB policy requiring assessment and care planning be completed within 24 hours of admission,[83] no such planning was documented for Ms A.

- Ms A's discharge was also inadequate. Patients should leave hospital with information and follow-up instructions to assist with continuity of care. It is particularly important in the case of elderly patients, as is an assessment of their ability to mobilise and self-care. Staff need to establish that there are sufficient support systems available for the patient after discharge. None of these things were done for Ms A.

  The DHB attributed the deficiencies in the discharge process to workload and an inadequate process. That is not good enough. DHBs have an obligation to ensure that patients are discharged with appropriate information and advice. As noted in a recent case,[84] good discharge advice is a vital aspect of emergency department care. Sending an electronic discharge summary to other providers is sensible practice,[85] but providing a printed copy to the patient is also important.

- There is no clear evidence to support the complaint that Ms A's hip fracture occurred while she was in ECC; however, I note that her mobility was not assessed before she left hospital. The fracture may have occurred around the time of discharge.

- Mrs E experienced long delays in receiving definitive care during her 10 hours in ECC. She was under considerable stress with increased shortness of breath, knew the type of treatment she required, yet had a distressing wait in the overcrowded department. Again, this was unacceptable. Mrs B also appears to have had to wait too long for definitive care, with a five-hour wait for frusemide treatment for her breathlessness.

- There was poor co-ordination of Mrs B's care. Her son described the need to "recapitulate" his mother's history to several providers in ECC, and noted that whenever a new doctor arrived "they seemed to know very little about her, and it appeared as if the notes had not been read or that they had not familiarised themselves with her case".

- There were failings in the nursing care provided to Ms A, Mrs E and Mrs B in ECC. Nurses failed to take the required systematic approach to assessment, care

[83] DHB guidelines on documentation.

[84] Opinion 07HDC14539 (12 December 2008).

[85] See Opinion 08HDC00248 (26 September 2008).

planning and documentation for Ms A. Neither Mrs B nor Mrs E received sufficient monitoring and documentation of care. Both women were experiencing breathlessness, yet Mrs E's respiratory rate was not recorded and tracked and there is no indication that the effectiveness of the therapy for Mrs B's respiratory distress was monitored.

- ECC nursing staff also paid insufficient attention to Mrs B's positioning as she became increasingly breathless. There is conflicting information about this matter. The notes record that she was "elevated" by the nurses prior to medical review. About an hour later when her son returned he found his mother on a pillow, but still lying too flat given her breathlessness. It appears that Mrs B was either not positioned well enough to begin with, or she subsequently slipped or moved and the nurses were too busy to notice and reposition her. This was poor care.
- Mrs E also reported waiting up to 30 minutes for her call-bell to be answered. ECC was particularly busy the day that Mrs E was admitted, with 206 presentations in 24 hours. The nurses were responsible for 12 to 20 patients in some zones. Clearly they had to prioritise tasks. However, I do not accept that the DHB had taken adequate steps to plan and provide for days like this, which were to be expected over the winter period. Although there was only one nursing vacancy in ECC at this time, not enough attention had been paid to ensuring that there were sufficient staff to cope with actual demand.

Summary

Ms A, Mrs B and Mrs E did not receive services of an appropriate standard, or consistent with their needs, at North Shore Hospital ECC. All three patients experienced care that was, at times, poorly co-ordinated, delayed and focused on the task rather than the patient. I accept the advice of my expert emergency medicine specialist, Dr Ardagh, that these deficiencies in care were largely the result of inefficient processes for medical admissions, and the workload of ECC staff.

Waitemata DHB was aware that North Shore Hospital ECC was suffering from overcrowding, bed-block, inefficient systems and staffing issues. Despite these concerns being consistently raised by staff, the DHB failed to take sufficient action to plan and provide adequate resources and systems for patient care. There were serious omissions, in light of the evidence that overcrowding in emergency departments is directly related to poorer patient outcomes.[86] In relation to the services provided to Ms A, Mrs B and Mrs E in North Shore Hospital ECC, Waitemata DHB breached Rights 4(1) and 4(3) of the Code. In Mrs B's case, the DHB breached Right 4(5) by poor co-ordination of her care.

There were not simply failings in care. All these patients were, by virtue of the long delays they experienced in an overcrowded emergency department, treated without

[86] Studies from Australia and the United States report an approximately 30% increase in overall mortality if patients are admitted through overcrowded emergency departments to overcrowded hospitals: Institute of Medicine, Committee on the Future of Emergency Care in the United States Health System, *Hospital-based Emergency Care: At the Breaking Point* (Washington DC, National Academy Press, 2006).

respect. Care was not provided in a manner that respected their dignity as acutely unwell senior citizens. By these omissions, Waitemata DHB breached Rights 1(1) and 3 of the Code.

Specific discharge advice is an important aspect of ensuring appropriate care, and the DHB had an obligation to ensure that the discharge process from ECC included such advice. Ms A's experience reveals deficiencies in the discharge system, particularly the lack of an assessment of her mobility and self-care, and the failure to provide information and follow-up instructions to assist with continuity of care. Accordingly, in relation to the manner in which Ms A was discharged and the inadequate information provided on discharge, Waitemata DHB breached Rights 4(1), 5(1) and 6(1)(a) of the Code.

BREACH — WAITEMATA DHB — WARD CARE

Waitemata DHB also failed to provide appropriate services to Mrs B, Mrs C, Mr D and Mrs E on the medical wards (wards 10 and 11) at North Shore Hospital between July and October 2007.

My findings are as follows:

Medical care

- The medical care provided to Mrs B on ward 11 of North Shore Hospital between 6 and 14 July 2007 was generally appropriate. However, there was one notable failing — the six-and-a-quarter-hour delay before Mrs B was reviewed by the on-call house officer. In my view, responsibility for this delay should be borne by the DHB and not by the individual doctor.
- The care provided by the house officer was reasonable given his workload, which was largely the reason for the unacceptable delay. He had to prioritise his patients according to information provided by nursing staff. He kept in touch with the ward regarding Mrs B's condition and understood her to be relatively stable.
- In the winter of 2007, the hospital staff were under considerable pressure, with on-call weekend house officers commonly working 14-hour shifts and responsible for up to 140 patients.[87] There was an ongoing shortage of RMO staff. This directly impacted on the care of Mrs B on ward 11 on the night of 14 July 2007.
- The medical management of Mrs C was appropriate and her deterioration on the afternoon of 27 September 2007 is unlikely to have been caused by the codeine given at 12.30pm.
- Mr D's medical care was appropriate. He was an elderly patient with multi-system disease. He had heart failure, anxiety, benzodiazepine dependency and had been receiving chemotherapy for lymphoma. His multiple co-morbidities presented obvious management difficulties. The co-ordination of his care does not appear to have been well executed and clearly left the family frustrated and dissatisfied.

[87] Although a single shift of 14 hours on a weekend would not be excessive, a patient load of 140 may be.

Nursing care

- Mrs B and Mrs C were not consistently closely monitored, and appropriately reviewed, after the nursing observations triggered high NEWS scores. In both cases the system was not correctly used by the nurses. Mrs C's nurse on the evening before her death did not understand the system's purpose or how it should be used. Her comments indicate that this may be a systemic problem. Systems to detect and respond to deteriorating ("physiologically unstable") patients are an excellent innovation, but they need to be supported by staff training and checked by regular audits if they are to be effective.[88] Despite Waitemata DHB's training and auditing processes, these cases show that in 2007 there were gaps in the system.

- In all four cases, there was a failure by nursing staff on the wards to take a systematic approach to assessment, planning, evaluation and documentation, contrary to nursing standards.[89]

- When Mrs B was transferred to ward 11 she continued to be short of breath. She was monitored by the nursing staff and given morphine as required. The progress notes were good but no assessment or care plan was done, despite requirements to do so.[90]

- The assessment and care planning for Mrs E also failed to meet required standards; the progress notes were adequate but there was inadequate documentation regarding her medication and treatment.

- There was no systematic nursing assessment completed for Mrs C, and no nursing care plan or list of her needs, problems and planned interventions. There was no record of any monitoring of her therapy. There was no documented assessment of Mrs C's level of consciousness or other signs that might have given an indication of the cause of her worrying symptoms on the afternoon of 27 September. Remarkably, no observations were recorded after 4pm on that shift. Her case is a reminder of the critical importance of vital sign recording by nurses.

- The busyness of the ward on 27 September, and the decision to send one of the nurses to another ward that was short-staffed, clearly impacted on Mrs C's care. Signals were missed. Mrs C's family had voiced their concerns when they visited that afternoon. Nursing staff noted that Mrs C was too unwell to get up for blood pressure recordings and a weight check. The physiotherapist was also unable to take Mrs C through her exercises. As noted above, her NEWS score consistently indicated that she required close monitoring. Despite this, the nurses did not increase the frequency of the recordings, or request a review by more experienced nursing staff. After the evening handover, the nurse did not review Mrs C because of pressures of other work.

- Mrs B, Mr D and Mrs E all experienced delays in having call-bells answered and, more generally, a lack of responsiveness by nursing staff to their needs. Mrs E described delays in being attended to when she rang for assistance in ward 10. She

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[88] See, generally, Seddon M, "Safety of Patients in New Zealand Hospitals: A Progress Report" (October 2007), page 7 (www.hdc.org.nz/files/hdc/publications/seddon-review.pdf).
[89] New Zealand Nurses Organisation Standards for Practice 2.6.
[90] WDHB Clinical Practice procedure "Care Planning" (November 2005).

waited to be taken to the toilet, and then waited to have her IV reconnected when she returned to her bed.

- There is evidence of a lack of adequate nursing supervision. In Mrs E's case there is no evidence that the enrolled nurse caring for her was appropriately supervised and was consulting the registered nurse. In Mrs B's case, the bureau nurse appears to have been working largely unsupervised. Her comments indicate that this was not unusual and the evidence suggests it was largely related to staffing and workload.
- Communication was a significant issue in the cases of Mrs B, Mrs C and Mr D. Nursing staff should have accorded more urgency to communicating with Mrs B's son after the doctor's review on the night she died. They knew that her son wanted to be closely involved in his mother's care. He was denied the opportunity to see her again before she died.
- The information provided to Mr D and his family about his condition and treatment plan was not clear or consistent. The family believed he was dying and were angry that medical staff appeared to want to rehabilitate him. The DHB has acknowledged that the term "rehab" was not a helpful one to use given Mr D's condition.
- There was some poor communication between nursing staff and Mrs C's family, particularly in relation to her death. These are difficult conversations and great care and compassion is needed. Staff need good training in how to communicate "bad news" sensitively and empathetically.

Hygiene and amenities

- Cleaning in ward 10 was inadequate. The infection control systems, such as replacing antiseptic and disinfectant in the toilets, and providing hand-wipes in the meal trays, broke down. The ward was not cleaned until after lunch, allowing rubbish and dirty, wet linen to accumulate. Good hygiene is fundamental to the care of patients in hospital. It is an issue of safety, comfort and respect for patients.
- Because of a lack of towels and nurses, Mrs E had to sponge herself in the toilet using paper hand towels after her night sweats on 18 October. Cold and wet, she waited a long time in the early hours of the morning before her bed linen was changed.

Summary

Mrs B, Mrs C, Mr D and Mrs E did not receive an appropriate standard of nursing care, consistent with their needs, while they were on the medical wards at North Shore Hospital. Nursing staff failed to take a systematic approach to assessment, planning, evaluation, and documenting care; did not use the NEWS process appropriately; and failed to communicate appropriately with the patients and their family. In Mrs E's case the hygiene standards were not up to scratch. This was disrespectful to her and other patients on ward 10. Mrs E should not have suffered the indignity of having to clean herself in the toilet with paper hand towels.

Similarly, but to a lesser extent, staffing and workload issues, and outdated systems, clearly impacted on some of the medical care in these cases. There were delays in medical review and definitive treatment, and poor co-ordination of care.

I find that in relation to the services provided to Mrs B and Mr D on ward 11, and Mrs C and Mrs E on ward 10, Waitemata DHB breached Rights 4(1) and 4(3) of the Code. In relation to the communication with, and information provided to, Mrs B and Mr D (and their families) the DHB breached Rights 5(1) and 6(1)(a) of the Code. In relation to the standard of hygiene and lack of basic amenities on ward 10 during Mrs E's stay, the DHB breached Rights 1(1), 3 and 4(1) of the Code.

IMPROVEMENTS

Waitemata DHB accepts that "a number of its systems did not support North Shore Hospital's staff to provide the level of service it would wish to deliver to the community and that the care provided to the five patients was not of an appropriate standard [and] sincerely regret[s] this".

Since 2007, many changes have occurred at Waitemata DHB to better support staff, improve systems and processes for the delivery of good quality patient care, and provide necessary facilities and resources. Many of the changes, such as the boost in staff numbers and beds, and plans for capital expansion, have already been acknowledged in this report.

The DHB has advised that other changes include the following:

- Acute and emergency care processes will be completely reformed when the Lakeview extension opens in 2011. In the meantime, the ED and assessment and diagnostic functions are being developed as distinct organisational entities with their own leadership, but sharing responsibility for the governance of the ECC. An ECC governance committee is proposed. The Clinical Director of Emergency Medicine has responsibility for all clinical activity within the emergency department function of the ECC. A clinical director is being given explicit responsibility for the activities of the acute admitting specialties in ECC.

- A quality improvement programme, "Whai Manaaki", has been introduced in ECC to improve the patient journey. Additionally, three discharge co-ordinators have been appointed to make arrangements for patients with complex care needs. Nursing support has been enhanced with additional healthcare assistants recruited.

- The DHB is evaluating the Primary Care Options programme established in 2004 to assist GPs to provide care in the community rather than referring patients to ECC. It is also planning to increase the opening hours of selected General Practices in high needs areas.

- The need for a formal clinical governance structure across the DHB has been recognised and is being progressed.

- Since March 2009 North Shore Hospital managers have been implementing a programme called "Hardwiring Excellence", which is intended to develop a culture of accountability, improve leadership, enhance communication, and reward good work by staff.

- Ward 11 is the lead ward in the "Releasing Time to Care" programme, designed to increase patient satisfaction and safety and improve work satisfaction and efficiency. Ward 11 has a new charge nurse and a full complement of nursing staff. The programme is also being introduced on ward 10 and other wards.

- There has been a successful drive to recruit nurses to North Shore Hospital from within the region, other parts of New Zealand, and overseas. A dedicated recruitment nurse was appointed in 2008. [91]

- Team nursing has been progressively implemented on the wards, with enrolled nurses and additional health care assistants to support the nurses. By October 2008 there were almost 21 FTE healthcare assistants compared with 12 FTE in October 2007.

- There has been renewed emphasis on measuring patient satisfaction, co-ordinating complaints, recording incidents, and following up issues identified.

RECOMMENDATIONS

I recommend that Waitemata District Health Board provide a written apology for its breaches of the Code to Mrs E and Mr A (Ms A's partner), and to the families of Mrs B, Mrs C and Mr D.

I recommend that the DHB give urgent consideration to my experts' comments and recommendations about the services provided at North Shore Hospital ECC and on the medical wards, in particular:

1. Implementing a programme to improve management of acute services at North Shore Hospital, including a bed management programme that takes a whole-of-hospital approach.

2. Initiatives to reduce non-emergency admissions to ECC by enhancing primary care options and developing an acute admission ward.

3. Initiatives to improve nursing care, in particular to better predict workload and match nursing resources, to release nurses' time to care, to emphasise the importance of caring and compassion, and to ensure a more systematic approach to nursing care.

I recommend that the DHB advise HDC and the Director-General of Health on its progress in responding to these recommendations by 31 October 2009.

[91] In March 2009 North Shore Hospital ECC and Waitakere Hospital's nursing positions were fully staffed for the first time in many years. The DHB attributed its increased ability to attract and retain nursing staff to the recession.

I recommend that the Boards, Chief Executives, and senior management of all district health boards read and reflect on the lessons from this report.

I recommend that the Minister and Ministry of Health:

1. Note the implications of this report for acute care services throughout New Zealand.

2. Develop and implement a national plan of action based on the “Recommendations to Improve Quality and the Measurement of Quality in New Zealand Emergency Departments” of the Working Group for Achieving Quality in Emergency Departments (January 2009).

I recommend that all nursing schools in New Zealand and the Nursing Council consider the implications of this report for nursing education, training and competence.

FOLLOW-UP ACTIONS

- A copy of this report will be sent to the Minister of Health, the Director-General of Health, and the Chief Coroner.

- A copy of this report with details identifying the parties removed (except the experts who advised on this case, Waitemata District Health Board, North Shore Hospital and Waitakere Hospital, and incidental references to other DHBs) will be sent to the Quality Improvement Committee, the Australasian College of Emergency Medicine, the Royal Australasian College of Physicians, the New Zealand Nursing Council, the New Zealand Nurses Organisation, the Aotearoa (NZ) College of Nurses Inc, the New Zealand Medical Association, the Association of Salaried Medical Specialists, the New Zealand Resident Doctors’ Association, and all district health boards, and will be placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

APPENDIX 1 — INQUIRY TERMS OF REFERENCE AND PROCESS

Terms of reference

1. *The appropriateness of the services provided by Waitemata District Health Board at North Shore and Waitakere Hospitals between 31 March and 31 October 2007 to patients attending the Emergency Care Centre or in wards 10 and 11, including the services provided to:*

   a) *Ms A from 31 March to 2 April 2007;*
   b) *Mrs B from 6 July to 14 July 2007;*
   c) *Mrs C from 25 to 27 September 2007;*
   d) *Mr D from 20 September to 18 October 2007; and*
   e) *Mrs E from 17 to 19 October 2007.*

2. *The adequacy of the information provided by Waitemata District Health Board at North Shore Hospital between 31 March and 31 October 2007 to patients attending the Emergency Care Centres or in wards 10 and 11 and the effectiveness of communication with those patients including:*

   a) *Ms A from 31 March to 2 April 2007;*
   b) *Mrs B from 6 July to 14 July 2007;*
   c) *Mrs C from 25 to 27 September 2007;*
   d) *Mr D from 20 September to 18 October 2007; and*
   e) *Mrs E from 17 to 19 October 2007.*

Process

This investigation was led by Senior Investigator Jeane Mackay, assisted by Senior Legal Advisor Sarah Parker and overseen by Deputy Commissioner Rae Lamb. I am grateful for their capable and diligent work. I also record my thanks for the full co-operation extended to my inquiry team by the CEO and staff of Waitemata DHB.

Each complainant was spoken to, and 34 Waitemata DHB/North Shore Hospital staff were interviewed, including:

- General Manager Adult Services (appointed April 2008)
- Clinical Director of General Internal Medicine
- Emergency Medicine Specialist/former Acting Clinical Director Emergency Medicine
- Associate Director of Nursing (North Shore)
- Associate Director of Nursing (Waitakere)/Quality Manager for Adult Health Service
- Service Manager (Medicine)
- Unit Managers, ECC, Medicine and Daily Operations
- Charge Nurse Managers, ECC, wards 10 and 11
- Doctors and nurses working in ECC and wards 10 and 11.

Independent advisors nurse specialist Sue Wood, emergency medicine specialist Dr Mike Ardagh and consultant physician Dr John Henley reviewed transcripts of staff interviews, information provided by Waitemata District Health Board (including internal reviews and reports into the ECC and general medical services provided at North Shore Hospital), and the clinical records for the five patients whose cases were investigated. Ms Wood, Dr Ardagh and Dr Henley visited North Shore Hospital ECC and wards 10 and 11 with my inquiry team and spoke to staff. I am grateful to my advisors for their time and expertise.

APPENDIX 2 — EXPERT ADVICE — NURSING CARE, SUE WOOD

Initial advice
I have read and agree to follow the Commissioner's Guidelines for Independent Advisors.

I am a registered nurse with 30 years' experience in nursing. My qualifications are:

1. Registered General and Obstetric Nurse, NZ 1981
2. Coronary Care Cardiothoracic Certificate, Wellington 1982
3. Coronary Care Certificate, Royal Melbourne Hospital 1986
4. Bachelor Applied Science Advanced Nursing (Administration) 1991, La Trobe University
5. Master of Nursing Studies 1996, La Trobe University.

I worked in Coronary Care, Cardiothoracics and Intensive Care for 10 years in New Zealand (5) and Melbourne (5) and taught the Coronary Care Course in Melbourne for 3 of the 5 years. I was Quality Improvement Co-ordinator for the Royal Melbourne Hospital for 7 years and have been a Director of Nursing in New Zealand for 11 years.

My relevant professional activity is:

1. Member Standards New Zealand MoH Nursing Council group that developed the telenursing nursing standards
2. Chair Standards New Zealand group that developed the Aged and Dementia Care Clinical Indicators and Staffing Standards Guideline
3. Project Manager, Lead Hospital Australian National Demonstration Hospitals Programme
4. Project Leader New Zealand Nursing Workload Measurement Pilot Project completed for the MoH via DHBNZ and Nurse Executives of New Zealand in 2001
5. DHB Member on NZNO DHBs Committee of Inquiry into Safe Staffing
6. Co-chair Safe Staffing Advisory Group New Zealand, DHB representative on DHBs and NZNO joint governance group (current)
7. One of two industry representatives that developed the consultation documents with Nursing Council on Nurse Practitioner title and registration process requirements
8. Member Nurse Practitioners Advisory Committee of New Zealand (current)
9. Interim Chair Lead Nurses New Zealand (DHBs DON group) (current).

I have been asked to provide independent nursing advice about whether Waitemata District Health Board provided an appropriate standard of care to [Ms A], [Mrs B], [Mrs C] and [Mrs E] during their admissions in the winter of 2007.[92]

For each case I will lay out the complaint, the supporting information used, the expert advice required, the summary of facts as they pertain to my advice, and the expert advice requested. I will then address the questions about systems and policies in place between April and October 2007 to ensure patients received appropriate and timely care, comment on the Waitemata District Health Board's initiatives designed to improve patient flow and hospital capacity, and make recommendations for further improvement.

[Ms A]

[Ms A] was admitted to Waitakere Hospital ECC on 31 March 2007, having suffered an episode of gastrointestinal bleeding. In the early hours of 1 April, she was transferred to North Shore Hospital ECC, where she remained in ECC under the care of the medical team until her

[92] Ms Wood was not asked to review the nursing care provided to Mr D, since the issues of concern in his case related primarily to medical management and communication with staff.

discharge the next day. No concerns about her mobility were detected during her admission although her partner states that she was in pain and had difficulty mobilising when he collected her. However, a hip fracture was subsequently diagnosed. She was readmitted and died after her condition deteriorated.

My instructions were to comment on the standard of care provided to [Ms A] by North Shore Hospital ECC and explain what standards apply and whether they were complied with. I was asked [to comment on]:

a) the appropriateness of the nursing observations
b) the adequacy of the nursing documentation
c) the adequacy of the discharge process.

<u>Supporting information assisting in the provision of this report</u>

St John's form
Rest Home Referral
Waitakere Hospital ECC form
Waitakere Hospital clinical notes
ECC transfer WTK TO NSH form
Patient Registration Form
Admission and Discharge Planner pages 1–12
Medicines chart pages 1–5
Clinical Notes
Fluid Balance (1 chart)
Discharge Summary
[Ms A's] partner's letter of complaint to HDC dated 15 August 2007
Interview notes, [ECC RN]
Interview notes, [ECC Nurse]
Interview notes, [Medical Registrar]
Acting Chief Executive Officer, Letter to HDC dated 22 November 2007

[Ms A] was admitted to Waitakere Hospital following vomiting coffee grounds. She is reported by her partner to have walked to the St John's ambulance from the rest home prior to transfer. She was cared for at Waitakere Hospital where she was monitored until 11.35pm when she was transferred to North Shore Hospital. A transfer report was provided from Charge Nurse to Charge Nurse.

The doctors recorded a brief assessment and review of the referral note. The nursing notes were continued on the ECC transfer form and indicate care delivered, vital signs were monitored and were stable. The notes report bed-block, and the decision to move to an inpatient area was reviewed and the inpatient bed was cancelled as [Ms A] was being discharged the next day. The night staff of the NSH ECC 2 April wrote two entries in the Waitakere notes, at 1.30am the patient was assisted to the commode and at 5.50am the nurse reported "Pt appears scared of mobilising requiring 2 nurses for transfer." [Ms A's] partner noted at interview on 24 January 2008 that [Ms A] had recently been "walking a bit slow you know. And not so sure of herself". [The medical registrar] at North Shore reported at interview he was unaware of the ECC nurse entries in the Waitakere progress notes overnight [on] 1 April 2007.

It was not possible to know from the notes, what areas of the ECC [Ms A] was nursed in. This was on the computer system. The letter from Acting Chief Executive to HDC dated 22 November 2007 reported [Ms A] was moved three times in the time she was in the ECC.

North Shore observations were recorded on the Waitakere ECC Assessment form 2 to 4 at 1.20am, 5.50am and 11am. The respiratory rate was not recorded. At 7.30am the nurse reported there were no complaints and she was waiting for review. At 11am the nurse contacted the doctor as the patient had not been seen. The doctor saw [Ms A] at 11.30am and said the plan was for discharge. [Ms A's] partner was contacted and he came to pick up [Ms A] at 1pm. In his letter [Ms A's] partner said he was rung at 9am and "told to bring her home" (letter May 30 2007). He came in at lunch time and found [Ms A] in her night attire. He found a nurse to help dress her, put her in a wheelchair and 2 ambulance officers helped him put [Ms A] in the car. He said it took 3 people to get her out of the car at the rest home.

The discharge summary was completed at 2.06pm on 2 April 2007 which said to see your GP if symptoms re-occur. At interview [Ms A's] partner had requested the discharge papers but he was told by the nurse they would send them to them. They left with no information about the admission or discharge for the rest home for care planning, and for the GP should he be required. The discharge sections on the Assessment and Discharge Planning form were blank. [An ECC RN] reported at interview that many patients left without discharge summaries. This was confirmed by the Chief Executive in his letter to HDC. This does not meet the Nursing Council competency 4.1 "Collaborates and participates with colleagues and members of the health care team to facilitate and coordinate care" with the relevant indicators being; "Develops a discharge plan and follow-up care in consultation with the client and other members of the health care team. Makes appropriate formal referrals to other health care team members and other health related sectors for clients who require consultation."

There was no systematic nursing assessment in the notes provided at North Shore ECC for the 36 hours she was nursed in the ECC. Comprehensive assessment including physical examination skills have been taught in some undergraduate nursing schools since 1990 and all schools since 2001. In 2001, the KPMG report "Reach further" to Nursing Council recommended the "development of nursing assessment skills be a critical area for emphasis within the undergraduate curriculum" (Nursing Council website, p.11). Physical examination, which is part of the undergraduate curriculum, is now a practice requirement for registration and has been part of the RN standards since 2004 (Lesa and Dixon, 2007). It is in competencies within Domain Two Management of Nursing Care.

Lesa and Dixon (2007) in writing about physical assessment in nursing practice, note "However, it is not without its tensions as there is a large nursing workforce who did not learn physical assessment as part of their RN preparation, resulting in nursing students and new graduate nurses practicing in an environment that does not yet promote nurses using physical assessment (Milligan & Neville 2001). This gap has been acknowledged by the profession and courses are available for RNs to bring their physical assessment skills up to the standard of a present RN graduate." (p.166). The lack of ongoing documented systematic review by the nurse in this case does not meet the New Zealand Nurses Organisation Standards for Practice 2.6 "Apply current nursing knowledge using a documented systematic approach to meet the stated and implied needs of clients/family" (p.8), 3.4 "Use an appropriate nursing framework to assess and determine client health status and the outcomes of nursing intervention and document appropriately" (p.12), 4.9 "Be a role model to colleagues, students, health professionals and others" (p.17) and the registered nurse competency 2.2 (Nursing Council of New Zealand 2005).

There were routine admission processes or risk assessments required with inpatient admission processes. There is no nursing care plan or a list of nursing problems in the progress notes. It was not possible to determine what care the nurses thought [Ms A] required or what problems the nurses were treating. The documentation of all the nurses was without a systematic approach as required in the New Zealand Nurses Organisation Standards for Practice 2.6 "Apply current nursing knowledge using a documented systematic approach to meet the stated and implied needs of clients/family" (p.8), 3.4 "Use an appropriate nursing framework to assess and determine client health status and the outcomes of nursing intervention and document appropriately" (p.12), 4.9 "Be a role model to colleagues, students, health professionals and others" (p.17) and the registered nurse competency 2.2 (Nursing Council of

New Zealand 2005). The lack of continuity, co-ordination and systematic review would meet with severe disapproval from the nursing profession.

[Ms A's] partner reported at interview the area was short staffed. In the letter to HDC dated 12 May 2008, [the Chief Executive] confirmed the staffing levels and noted the high level of bureau staff in the skills mix. There were two to two and a half nurses (one staff member working a short shift) for 18 beds and up to six corridor beds in the observation area from which patients are expected to be discharged home, after up to 18 hours of observation. At the time [Ms A] was in the observation area the ratio of nurses to patients was eight patients per nurse. [The ECC RN] who worked in the observation area described it as "diabolical" with overflow from the acute area in the winter.

Nurses reported the need to prioritise and to treat the most acute or at risk. This meant patients who were stable had to wait for care. All nurses and patients described the task orientation of the nurses which results from the level of workload that they were juggling. Further, this is a known developmental level of nurses entering practice (Benner, 1984) as well as a key safety mechanism when work levels are exceeding capacity, which should be and is the basis of safe staffing policies (Safe Staffing Healthy Workplaces Inquiry report). The Evidence Based Staffing Effectiveness Standards (2004) identify that staffing should be sufficient to account for rapidly changing conditions so that all key interventions are completed (p.4). They also note that nurses make more mistakes above 85% nurse utilisation. These standards also recommend unit utilisation should be kept below 80% for efficiency. This is in line with recommendations from Baugust et al to keep unit utilisation below 85% to avoid regular bed crises, with the associated risks to patients.

High occupancy increases inefficiency and risk of adverse events to patients.

At interview, [the] ECC Associate Clinical Charge Nurse noted the high patient-to-nurse ratio in the observations area where [Ms A] was nursed. There was no continuity of care.[93] She said that the nurses would not necessarily have time to go through the notes, that there was a verbal shift handover that the person with the most knowledge would hand over, and there was highlighted information on the board. They would team nurse to get the work done. This does not meet the Health and Disability Sector Standard (NZS 8134: 2001) 2.7. "Requires consumers/kiritaki to receive timely, appropriate and safe service from sufficient suitably qualified/skilled and/or experienced service providers."

[The ECC nurse] also believed Team Nursing worked well for the skills mix as new nurses were not always able to assess patients quickly. "Experienced nurses learn to organise, plan, and co-ordinate multiple patient needs and requests and to reshuffle their priorities in the midst of constant change" (Benner, p.149). [The ECC registered nurse] reported Team Nursing worked well when there was enough staff.

The nurses reported that Team Nursing is used in the ECC which means the Team Leader takes the overview of care of the patients. This nurse allocates the patients, oversees the care of patients, uses the whiteboard to track care (observations are noted as being recorded), and directs care; the Team Leader also has patients. The nurses report back if they have concerns. [The ECC nurse] had worked as Team Leader and reported it was very difficult to know about all the patients; you had to check on the patients yourself because of skills mix and staffing

[93] The Associate Clinical Charge Nurse does not recall stating that there was "no continuity of care", or that "nurses would not necessarily have time to go through the notes". Nurses in the Observation Zone were allocated the care of patients in the area and, although they would have been stretched with the number of the patients in the area at that time, provided continuity over the shift. Although nurses do not have time to go through the notes when receiving a patient transferring to the Observation Zone from Acute Zone, they are expected to read the clinical record to confirm the plan of care as soon as the patient is settled.

issues, and had to cover the one and half hour meal breaks which left the area with one or two nurses.

The modular (geographic limited) form of Team Nursing described at Waitemata ECC requires the nominated Team Leader to have and communicate the holistic view of all the patients in the area to prioritise and direct care. Team Nursing requires high levels of communication and regular case conferencing to review all the plans of care and progress with all team members (Sullivan and Decker, 2001, p.32). This functional approach to nursing care focuses individual nurses on tasks, not necessarily on the problems being treated. It is always adopted when there is short staffing and is the basis of safe staffing escalation processes (MidCentral Health Safe Staffing Procedure 2003). It is also adopted when traditional preceptorship models cannot be used to provide adequate direction, coaching, monitoring of care and ensure evaluation of interventions because of an imbalance of experienced staff in the specialty in comparison to the casual, agency and first year of practice nurses. [The ECC RN] stated at interview the team model "was absolutely shocking", she believed it was unsafe, there was no continuity, and you were unable to get to know your patient. It did not work when there were too many patients in the department.

The principles of direction and delegation, as laid down by the Nursing Council of New Zealand (Guideline: direction and delegation June 2008), apply in this model of care:

> "(a) The registered nurse must complete a comprehensive assessment of the client and develop a plan of care prior to delegation….(c) The registered nurse must be more directly involved with the client when the client's responses are less predictable or changing, and/or the client needs frequent assessment, care planning and evaluation….3 (a) The registered nurse retains accountability for evaluating whether the person carrying out the delegated activities maintains the relevant standards and outcomes." (p.9)

The registered nurse being delegated the care retains professional responsibility for their own practice. The Nursing Council of New Zealand competency 1.1 "Accepts responsibility for ensuring that his/her nursing practice and conduct meet the standards of the professional, ethical and relevant legislated requirements." The indicators are: "Practises nursing in accord with relevant legislation/codes/policies and upholds client rights derived from that legislation; Accepts responsibility for actions and decision making within scope of practice; Demonstrates knowledge of, and accesses, policies and procedural guidelines that have implications for practice; Uses professional standards of practice."

The registered nurse registration competency 2.8 states "Reflects upon, and evaluates with peers and experienced nurses, the effectiveness of nursing care." The indicators are: "Identifies one's own level of competence and seeks assistance and knowledge as necessary; Determines the level of care required by individual clients; Accesses advice, assistance, debriefing and direction as necessary."

The Council guideline goes on to say "Factors influencing a registered nurse's ability to delegate are: his/her level of experience, staffing levels, the acuity of patients, the number of staff, the workload, the policy, quality and risk management frameworks and access to other health professionals to support delegation and direction. Workload calculations need to include time factored to safely delegate." (p.15)

It is not an unusual expectation for an experienced nurse to have a patient load at the same time as being required to manage the system, oversee the overall quality of care and support/guide all the nursing staff, as per the Safe Staffing Inquiry Report 2005 which says "There is an assigned role to co-ordinate and manage workflow and provide clinical support for each ward, unit or service 24 hours a day, seven days a week. Generally, for most acute areas, this role would involve a reduced or no assigned case-load." It is context dependent. Given the unpredictable nature of client conditions in Emergency Departments, the level of dealing with the unknown in the ECC and establishing baseline assessments, promptly initiating protocol treatments, keeping patients safe until they are examined, and implementing treatment plans promptly, requires a level of staffing to ensure responsiveness, taking into account the variable skills mix of some experienced, junior or casual staff.

Given the RN skill mixes in the ECC, the other factor to take into account is Waitemata District Health Board's responsibilities in its contract with the Clinical Training Agency for the Nursing Entry to Practice Programme. The requirements to be met are laid out in the Nursing Council Standards for the Nurse Entry to Practice Programme. In particular Standard Four states the "Appropriate resources are available to support the programme….Criterion 4.3. The programme is appropriately supported in terms of time allowance for preceptors working with the new graduates" (p.5).

It is not unusual for the nurse in charge who is providing the care plan direction to registered nurses in any setting, not to document their direction. This is generally because they allocate patients to specific registered nurses who then take the care forward, reporting in changes or when they need guidance. However, in Team Nursing the nurse is taking responsibility for directing rather than allocating care. As described by the nurses, the ECC whiteboard holds significant nursing care planning by the Team Leader that needs to be captured in the patients' notes. This lack of documentation of care does not meet the New Zealand Nurses Organisation (2003) standard which states "provide documentation that meets legal requirements, is consistent, effective, timely accurate and appropriate" (Standard 1.10), nor the Nursing Council of New Zealand (2005) competency 2.3 which says "maintains clear, concise, timely, accurate and current client records within a legal and ethical framework".

None of the nurses used a structured approach to document their progress notes. Waitemata DHB Clinical Documentation Procedure states progress notes are expected to be documented in a logical format and an example is provided "e.g. SOAP". The Waitemata District Health Board Orientation Workbook for the Acute Medical Wards promotes a systems approach to progress notes starting with "General appearance; observations; treatments, Pain, Cardiovascular; Respiratory; Genito-urinary; Gastro-intestinal; Neurological; Skin; Mental Health; Musculoskeletal; Psychological". The content of the note should include: "AIR (assessment/intervention/response) or DAR (data/action/response)". This procedure was not followed in any report during [Ms A's] stay.

The documentation of all the nurses was without a systematic approach related to the patient's needs as required in the New Zealand Nurses Organisation Standards for Practice 2.6 "Apply current nursing knowledge using a documented systematic approach to meet the stated and implied needs of clients/family" (p.8), 3.4 "Use an appropriate nursing framework to assess and determine client health status and the outcomes of nursing intervention, and document appropriately" (p.12), 4.9 "Be a role model to colleagues, students, health professionals and others" (p.17) and the registered nurse competency 2.2 (Nursing Council of New Zealand 2005).

[Mrs B]

[Mrs B] was admitted to North Shore Hospital Emergency care centre (ECC) on 6 July 2007 via Auckland airport after suffering a severe stroke (with complete right sided flaccid paralysis) while on holiday [overseas]. This left her unable to speak. At some point in the transfer to New Zealand, [Mrs B] suffered an acute myocardial infarction. She was assessed in the ECC, and while waiting for an inpatient bed, experienced an acute episode of heart failure which required intervention with IV frusemide. [Mrs B] was admitted to a medical ward, ward 11.

On 14 July [Mrs B] went into respiratory distress. The complaint alleges that there were delays in [Mrs B] receiving care and obtaining review by on-call medical staff, despite requests from her son. [Mrs B] was found dead at 10.15pm on the evening of 14 July 2007.

<u>Supporting information assisting in the provision of this report</u>

National Air Ambulance Flight Face Sheet, initial assessment, narrative notes
NSH Fax Handover Form
Patient Registration Form
ECC Assessment pages 1–6
Admission and Discharge Planner pages 1–12
Observation Chart and North Shore Early Warning System (NEWS) pages 1–4
Medicines chart pages 1–5
Fluid Balance (10 charts)
Individualised Falls Intervention Care Plan
Pressure Risk Assessment Form
Patient Handling Profile
Bowel Chart
Enteral Feeding Summary
Continuous Feeding — Starting Instruction
Clinical Notes
Stroke Service Assessments in Acute Wards
Support Needs Assessment
[Mrs B's] son's letter of complaint to HDC dated 25 November 2007
Interview notes [Registered nurse clinical coach]
Interview notes [Bureau nurse]
Interview notes [House officer]
Chief Executive Officer, Letter to HDC dated 26 February 2008.

<u>Specific Instructions:</u>

My instructions were to comment on the standard of nursing care provided to [Mrs B] by North Shore Hospital ECC and ward 11, to explain what standards apply and whether they were complied with, and to include comment on:

a) the appropriateness of the nursing assessment and follow-up on the afternoon of 14 July 2007
b) the adequacy of the information sharing and communication with [Mrs B's] family
c) the adequacy of communication between nursing and medical staff.

Standard of nursing care provided to [Mrs B] by North Shore Hospital ECC

In summary, initial observations for [Mrs B] in the ECC were recorded on arrival at 8.20am with the documented pulse of 91 per minute, BP 156/82 and respiratory rate of 22 per minute. [Mrs B] was reported as spontaneously opening her eyes and nodding her head to her son's questions. [Mrs B] spoke little English prior to her stroke. [Mrs B] was reported to be comfortable. At 9am [ ] Nurse noted she took over [Mrs B's] care from the monitored area of ECC. [Mrs B] was in an isolation room, given her recent admission [overseas] and the need to screen for MRSA. Activities such as being sponged at 9am and the reinsertion of an indwelling urinary catheter at 9.30am was reported to have occurred. [Mrs B's] son, a general practitioner, was present until 12.30pm and stated in his letter dated 25 November 2007, that he was informed they were waiting for an inpatient bed. His mother "appeared stable and resting so we decided to go home and pick up a few essentials".

At interview [the ECC registered nurse] said she saw [Mrs B] a few hours after arrival and she was in respiratory distress. The set of observations were recorded at 12.30pm with a pulse at 106, BP 180/104, respiratory rate approx 38 per minute, with an oxygen saturation of 89% on room air. It was not noted why the nurse came to enter the room at this time, and the time of onset of this acute shortness of breath was not documented. The medical team was reported as notified at 12.30pm, the patient was reviewed by 1.30pm, with IV frusemide and an X-ray ordered. Intravenous fluids were ceased. At interview [the ECC registered nurse] said she gave the frusemide, put on oxygen at 8 L/min and sat [Mrs B] up. The effect of therapy was monitored by the nurse.

[Mrs B's] son was rung by the registrar and informed of the acute event. The ECC nurse wrote the family were aware of the seriousness of [Mrs B's] condition. A "Not for Resuscitation" (NFR) order was completed by medical registrar. It would appear this was at 1.30pm but the note is not dated or timed. The form does not structurally require the time to be recorded, and could prove to be problematic in the future.

Similar observation was recorded at 1.30pm but with an improved oxygen saturation of 95%. The registrar note at 1.30pm indicated there was pitting oedema to the lower legs and arms. Daily weighs and fluid balance charts were requested. The faxed handover form to Ward 11 had observations for 1.45pm on it with the pulse increased to 132, BP 150/95, and the respiratory rate at 36, and [Mrs B] was reported as using her accessory muscles. There are no standards in New Zealand defining how often a patient should have observations taken when recently presenting to the Emergency Department. The Waitemata District Health Board orientation programme for nurses to the ECC requires nurses to complete observations half hourly until seen by the registrar. This was complied with at admission. There was no specific guidance regarding how often observations are to be recorded after being seen by the registrar. The clinical condition was to determine the frequency (Waitemata District Health Board observation procedure) and making such decisions is within the realms of registered nurses' practice. If the Waitemata District Health Board early warning scoring system had been used as a guide and applied in the ECC in this situation, [Mrs B] would have scored a 1 on arrival and required two hourly observations. At 12.30pm she would have scored a 2 and required repeat observations in an hour. If [Mrs B's] score was maintained at 3 over an hour after registrar assessment, she would have needed to be seen again. [Mrs B] was again reviewed by the registrar at 2.40pm and the symptoms were still present. The NEWS scoring was not routinely used in the ECC.

No further observations were recorded during [Mrs B's] transit to X-ray and to the ward. It is not possible to comment on the level of surveillance provided for [Mrs B] between 2.40pm and 4.30pm, at which time observations were recorded on arrival in the ward. [Mrs B] will have been observed but there was no note or evidence provided to indicate if her therapy was being monitored and that it was deemed effective. Given the acute dyspnoea, this would not meet the New Zealand Nurses Organisation Standards for Practice 2.6 "Apply current nursing knowledge using a documented systematic approach to meet the stated and implied needs of clients/family" (p.8) and the registered nurse competency 2.2 "Undertakes a comprehensive and accurate nursing assessment of clients in a variety of settings" (Nursing Council of New Zealand 2005). This level of care of an acutely unwell patient would meet with severe disapproval from the nursing profession.

Standard of nursing care provided to [Mrs B] by North Shore Hospital ward 11

Admission Assessment and Care Planning
Waitemata District Health Board Care Planning procedure requires a comprehensive assessment and care plan with a list of problems and interventions completed within 24 hours of admission. The requirement for a nursing assessment and care plan within 24 hours is also in the Waitemata District Health Board Admission Process for Hospital Patients. The admission and discharge planner initial assessment was not completed during [Mrs B's] hospital stay.

There was no list of nursing problems and goals or expected outcomes, nor was there a nursing care plan in the documents provided for my review. The risk screens which were to be completed within 2 hours of admission according to the Admission Process for Hospital Patients procedure were completed, but in the time frames:

1 Falls risk assessment at 9.30pm on 6 July 2007. The fall intervention care plan that accompanied it was not documented. Waitemata DHB requires the falls risk to be completed each day when a finding of high fall risk was established. Ongoing assessments were not included in the record provided, nor are they mentioned in the progress notes.

2 Pressure risk assessment on 7 July 2007 with a score of 25 established. Waitemata Nursing Policy requires all patients be assessed within two hours of admission and then at least daily. The Nurses' progress notes pressure area care was completed i.e. turns, skin inspection and an air mattress was commented on 13 July as being in place.

The bowel chart ordered, if not the needs, was maintained during the stay.

The care delivered was well described in the progress from 6 July to 14 July.

Most of the nurses did not use a structured approach to document their progress notes. Waitemata DHB Clinical Documentation Procedure states progress notes are expected to be documented in a logical format and an example is provided "e.g. SOAP". The Waitemata District Health Board Orientation Workbook for the Acute Medical Wards promotes a systems approach to progress notes starting with "General appearance; observations; treatments, Pain, Cardiovascular; Respiratory; Genito-urinary; Gastro-intestinal; Neurological; Skin; Mental Health; Musculoskeletal; Psychological". The content of the note should include: "AIR (assessment/intervention/response) or DAR (data/action/response)". This was not followed in any report during [Mrs B's] stay.

The documentation of all the nurses was without a systematic approach related to the patients needs as required in the New Zealand Nurses Organisation Standards for Practice 2.6 "Apply current nursing knowledge using a documented systematic approach to meet the stated and implied needs of clients/family" (p.8), 3.4 "Use an appropriate nursing framework to assess and determine client health status and the outcomes of nursing intervention and document appropriately" (p.12), 4.9 "Be a role model to colleagues, students, health professionals and others" (p.17) and the registered nurse competency 2.2 (Nursing Council of New Zealand 2005).

Ongoing Observations
The standard of content in the progress notes was adequate to describe the care delivered to [Mrs B] on the shifts. On arrival in the ward all [Mrs B's] observations were recorded except the respiratory rate. She was noted to be in respiratory distress. The respiratory rate was not recorded until 10pm when the respiratory rate was 14–18 (approximate as graphical). Saturations were recorded and were satisfactory but they did not indicate the level of respiratory effort required to achieve the saturation levels. The time the acute shortness of breath resolved was not documented. Other than this, the nurse wrote a comprehensive note. She recorded she "kept close observation of [Mrs B] and recorded the "draining good +++ urine" and she administered the second dose of frusemide.

Ongoing observations of vital signs were completed. The NEWS score was completed three to four times a day from 7 July 2008. The Waitemata NEWS guideline process directs that a score of 1 requires the nurse to "inform nurse co-ordinator" and "Increase frequency of observations to two hourly" to establish a trend. It was not possible to tell from the notes if both steps of the score 1 process were followed during the stay except once, on 13 July, when the procedure was followed and documented.

In this case the frequency of observation for a NEWS score of 1 was four to 11.5 hours instead of the required two hourly. There was a facility through the Critical Care Outreach Service for patients who trigger the NEWS system regularly, or have high scores, to be reviewed. This facility was not used in [Mrs B's] case.

The Waitemata DHB policy document on the North Shore Early Warning System states quite clearly the purpose of the "track and trigger system is to identify the acutely ill adult at risk of deteriorating and relies on accurate recording of simple physiological variable." The rationale for its introduction was the increased acuity of patients in wards and "to improve recognition and quality of care acutely ill patients receive." The policy goes on to say "The total NEWS score and subsequent trending of this, through the regular recording of observations, provides a clear overview of the patient's physiological condition…Employees of the Waitemata District Health Board who breach the Policy may be subject to performance review, disciplinary action or compulsory retraining."

The performance level in regards to the NEWS procedure does not meet the New Zealand Nursing Council of New Zealand 2005 competencies:

"1.1 Accepts responsibility for ensuring that his/her nursing practice and conduct meet the standards of the professional, ethical and relevant legislated requirements

2.2 Undertakes a comprehensive and accurate nursing assessment of clients in a variety of settings.

4.1 Collaborates and participates with colleagues and members of the health care team to facilitate and coordinate care."

Given the reason for implementing the NEWS score was to aid nurses' decision-making, its lack of systematic use would meet with severe disapproval within the nursing profession.

It was not possible to establish the fluid balance each day for [Mrs B], given the way the PEG feeding was documented. You can retrospectively calculate this, given the quality of the progress notes, and establish the fluid balance. The PEG feed volume when it was hung was noted on the chart but the amount given through the day was not recorded except once on 9 July 2007. The input component of the fluid balance chart was not summed. The progress notes indicate that once the PEG feeding was introduced following the protocol, it was running at 60mls per hour except on 11 July when it was stopped for six and half hours because of noted abdominal distension. Urine output was summed with the running totals.

The Waitemata District Health Board PEG (Percutaneous Endoscopic Gastrosomy) Tube Care Clinical Practices document (May 2006) does not describe how to record PEG fluids.

Daily weighs were not recorded as [Mrs B] remained in bed.

The nurses noted there was slight haematuria on the 13 July, one observation of a temperature of 37.5°C. Investigations were carried out, and treatment was ordered and given.

The appropriateness of the nursing assessment and follow-up on the afternoon of 14 July 2007

Reading the notes the description of [Mrs B's] health on the AM shift was very similar to previous shifts. Her observations were reported as stable. She was examined by the registrar in the morning and no signs of heart failure were detected. In the afternoon, [Mrs B's] son arrived at 2pm and noted his mother was in respiratory distress, with shallow breathing, and using her accessory muscles. [He] observed his mother for an hour and saw no improvement. He requested the nurse contact the doctor. The nurse "power paged" the on-call house surgeon.

[A bureau nurse] was allocated to care for [Mrs B] in the PM. [The] Clinical Coach saw [Mrs B] at 4.30pm. [The Clinical Coach] said at interview, she saw [Mrs B] and she recalled having been concerned about [Mrs B's] pulse and respiratory rate. She noted they had risen but "not hugely". (Pulse 100, RR 24 Saturation 91% (2 L/min[94]) NEWS score 2). She

[94] Two litres of oxygen per minute.

documented in the notes that she discussed with [Mrs B's son] giving morphine subcutaneously to assist with breathing, and called the on-call house surgeon to see [Mrs B]. [Mrs B] had her routine frusemide 80mg at 5pm via her PEG. At 5.30pm [Mrs B] was reported to be "a little more settled less effort breathing sats 90% — 2 L/min oxygen. [The oxygen flow rate could have been increased at this stage.] HR still 110, Urine output 80mls+/hr."

The progress notes report [Mrs B's] respiratory rate remained high, 2-hourly observations were completed with respiratory rate 19 at 6pm (Pulse 94) and 8.30pm (pulse 100). The doctor completed a set at 9.15pm (HR 106, BP 140/80, respiratory rate 42/min, O_2 saturation 95%, using her accessory muscles) meeting the NEWS score of 2 and a requirement for one hourly observation. At interview [the bureau nurse] said [Mrs B] was more settled later and was dozing with occasional fast breathing. She said that she was in the area all the time and was constantly checking on [Mrs B]. The observations were completed.

[The bureau nurse] said that at 5.30pm she discussed her findings and the registrar's note with the on-call house surgeon. He said he would come and see [Mrs B] and the family later. According to [Mrs B's son], he and his wife went home at 7.15pm and asked to be kept informed.

When the on-call house surgeon came to see [Mrs B] at 9.15pm the nurse assisted with the examination. The House Surgeon recorded that [Mrs B's] respiratory rate was 42/min, using accessory muscles, oxygen saturation 95% on 2 L/min, JVP + 3 cm, basal crackles to the mid zones, no wheeze. His impression was "? acute pulmonary oedema". A chest x-ray was ordered and "if worsening LVF stat frusemide". He was aware she had had frusemide at 5pm.

At interview the house surgeon recounted that he saw [Mrs B], that she was different from earlier in the day. He counted the respiratory rate himself, it was 44 (42 in progress notes) and this surprised him.

At interview [the bureau nurse] reported [Mrs B] was given more morphine to "settle" her (1 mg subcut at 9.30pm). This was the same treatment used earlier in the shift. She said she had to arrange the transport to X-ray, that it was not an urgent X-ray but required. She said she realised a transfer nurse was not likely to be available so she settled everyone down first before planning to leave the ward. She rang [Mrs B's] son at 10pm to inform him of the X-ray and then went to transfer [Mrs B] at 10.15pm and she found her dead.

At interview [the bureau nurse] did not communicate any sense of urgency about needing to see a rapid improvement in [Mrs B's] state, or recognise the significance of the doctor's findings at 9.30pm. The nurse did follow medical orders. At interview the nurse described her clinical background. She had worked for community providers and hospice and she then came into the acute services in the staff bureau a year ago working approximately two days per week in the medical wards. The nurse described the support on the shift from the Duty Nurse Manager, the earlier support of the Clinical Coach. The nurse was monitoring the patient's condition. She didn't believe they were short staffed on the shift.

Nurses routinely coach junior medical staff on appropriate care of patients and will suggest care, and if suggesting does not work, challenge decisions or ring the registrar. Suggestions to consider in this case would have been inserting an IV cannula and giving IV frusemide, even though [Mrs B] was passing urine and had had enteral frusemide, as the rate of absorption via the gut can vary, (in light of) the acuteness of her condition. In my opinion, at 9.15pm a nurse should have recognised the acuteness of [Mrs B's] state from the doctor's findings, and notified [her son] of his mother's condition. The care does not meet the New Zealand Nurses Organisation Standards for Practice 2.6 "Apply current nursing knowledge using a documented systematic approach to meet the stated and implied needs of clients/family" (p.8), 3.4 "Use an appropriate nursing framework to assess and determine client health status and the outcomes of nursing intervention and document appropriately" (p.12), and the registered nurse competency 2.2 (Nursing Council of New Zealand 2005).

The NEWS referral process would require the nurse in charge of the shift to be notified of the respiratory rate of 44, and to provide advice. Given the nurse caring for [Mrs B] was from the Bureau, the concern of the Clinical Coach at 4.30pm and the need for a medical consultation, the nurse in charge should have been observing [Mrs B] and the nurse throughout the shift. The shift co-ordinator's tracking of the medical consult and specific advice to the nurse was not in the record, and action was not mentioned at interview. The nurse in charge should have been informed of [Mrs B's] vital signs recorded by the house surgeon as per the NEWS scoring and to follow through on the required care to meet the shift leader responsibilities and the Nursing Council Competency "1.3 Demonstrates accountability for directing, monitoring and evaluating nursing care that is provided by nurse assistants, enrolled nurses and others."

The adequacy of the information sharing and communication with [Mrs B's] family
[Mrs B's son's] account of his communication with the nurse on the morning shift indicated his concern about his mother's condition. The nurse's note indicates she followed through by power-paging the on-call house surgeon.

[The son] requested the afternoon nurse to arrange for him to see his mother's doctor. The nurses called the on-call house surgeon and requested he attend. They followed the request up. They endeavoured to meet [his] request. The nurse rang him when the doctor had been.

The communication when [Mrs B] was in pulmonary oedema was delayed because the nurse did not prioritise the communication with her son. The significance of the clinical findings and the potential trajectories were not foreseen by the clinicians. Regardless of the clinical outcome, [Mrs B's son] had made it clear he wanted to be with his mother (he had come in previously when she experienced acute heart failure) and this was possible.

[The son's] concerns about the bell not being answered in a timely way, is a widespread concern in hospitals. Delays in answering bells are common but not acceptable. In my opinion there is a systems issue to be resolved in order to have bells answered in a timely way in a busy hospital. For the nurses, the bell rings in the corridor, and to see if it is their patient ringing they all have to stop what they are doing to go out in the corridor and see the bell locator which displays the room number. There is diffuse undifferentiated constant interruption to all nurses' complex work. This is common in old bell systems. This is similar to doctors being interrupted by pagers and is a patient safety issue (Agency for Healthcare Research and Quality, 2003). Tauranga's new hospital has a new bell system connected to pagers. When the patient or family rings the bell it rings directly to the right nurse's pager. If she/he does not answer in the programmed timeframe, the nurse in charge is automatically paged. This sort of system would have addressed [the son's] concern about delayed answering of bells.

The adequacy of communication between nursing and medical staff
In the section above, the contacts between the staff are described. The nurses communicated as required and passed on the information as they knew it. The on-call house surgeon prioritised his work based on the nurses' assessment. The rehabilitation ward is some distance from the other wards and he reported he had many patients to see who he believed, based on the information provided, he needed to see first. The information could have been much richer if a comprehensive focused assessment was completed.

Physical examination skills have been taught in some undergraduate nursing schools since 1990 and all schools since 2001. In 2001 the KPMG report "Reach further" to the Nursing Council of New Zealand recommended the "development of nursing assessment skills be a critical area for emphasis within the undergraduate curriculum" (Nursing Council website, p.11). Physical examinations is part of the undergraduate curriculum, is now a practice requirement for registration and has been part of RN practice standards since 2004 (Lesa and Dixon, 2007). It is within the Domain Two competencies, Management of Nursing Care.

Lesa and Dixon (2007) in writing about physical assessment in nursing practice, note "However, is not without its tensions as there is a large nursing workforce who did not learn physical assessment as part of their RN preparation, resulting in nursing students and new graduate nurses practicing in an environment that does not yet promote nurses using physical assessment (Milligan & Neville 2001). This gap has been acknowledged by the profession and courses are available for RNs to bring their physical assessment skills up to the standard of a present RN graduate" (p.166).

[The bureau nurse] entered practice at North Shore Hospital a year earlier and competence would be expected to have been assessed on orientation. If not met, remedial education would be expected to be arranged so that competence could be demonstrated. The nurse reported she had one day's orientation on taking up her position. The organisation would not meet the Health and Disability Sector Standard (NZS 8134: 2001) 2.7, requires consumers/kiritaki to receive timely, appropriate and safe service from sufficient suitably qualified/skilled/ and or experienced service providers, and criteria 2.7.3 requires the appropriate allocation of suitably qualified/skilled and/or experienced service providers to meet the needs of consumers/ kiritaki in a competent, safe and timely manner.

Waitemata DHB provides placements for undergraduate nursing students and its nursing staff would be expected to model professional practice and to coach contemporary practice to students.

[Mrs C]

[Mrs C] was admitted to North Shore Hospital ECC on 25 September 2007 by her GP, for assessment and treatment for fluid retention and an erratic pulse. She was transferred to a medical ward, ward 10 where she continued to deteriorate. The complaint raises concerns that [Mrs C's] vital signs were not adequately assessed, she had a reaction to medication that was unrecognised by staff, and the seriousness of her condition was not communicated to her family. [Mrs C] was found unresponsive at 12.20am on 27 September 2007 and death was pronounced.

My instructions were to comment on the standard of care provided to [Mrs C] by ward 10 North Shore Hospital, to explain what standards apply and whether they were complied with, and to include comment on:

a) the appropriateness of the nursing observations

b) the adequacy of nursing documentation

c) the appropriateness of the information sharing and communication with [Mrs C's] family.

<u>Supporting information assisting in the provision of this report</u>

General practitioner referral
St John report form
NSH Fax Handover Form
Patient Registration Form
ECC Assessment pages 1–6
Admission and Discharge Planner pages 1–12
Observation Chart and North Shore Early Warning System (NEWS) pages 1–4
Medicines chart pages 1–5
Fluid Balance (2 charts)
Clinical Notes
Complaint to HDC by [Mrs C's] daughter dated October 2007

Complaint Action form by [Mrs C's] daughter
Interview notes [Registered nurse]
Interview notes [Registered Nurse]
Interview notes [Medical registrar]
General Manager [Adult Services] letter to Complaints Manager 15 November 2007.

Appropriateness of Nursing Observations
Over the stay, [Mrs C's] observations were recorded TDS [three times daily] and the findings were similar, with the blood pressure between 110–120/75–50, pulse 85–98, respiratory rate 20–24 indicating continuing dyspnoea, O_2 saturation 90–97% on oxygen at 2 l/min, and a pain score 0–1/10. On 26 September [a] Nurse noted [Mrs C's] O_2 saturation dropped without O_2 therapy. The nurse on the afternoon shift of the 26 September reported [Mrs C] was short of breath. Oxygen remained on at 2–3 l/min throughout her stay. She had continued dyspnoea, tiredness and lethargy. Oxygen was prescribed, administered and its effect monitored.

The effect of the diuretic treatment for heart failure was monitored by fluid balance chart and a good response was noted following the IV 80mgs frusemide at 9.50pm on 25 September in the ECC. On the 26 September [Mrs C] had IV 40 mg at 7am and 40 mg oral at 2pm, with a urine output of 2170mls for the 24 hours.

On 27 September the urine output was 780mls with an input of 500mls. The nurses on both AM and PMs underlined the urine output in the clinical notes. On that same morning AM round the doctor noted basal crackles and a JVP + 4 cm, with decreased pedal oedema.

[Mrs C's] respiratory rate triggered a NEWS score of 1 throughout her stay, which according to Waitemata NEWS procedure required the nurse to inform the nurse co-ordinator in charge of the ward and to record the observations two hourly to monitor the patient's condition. The eight sets of observations recorded in the 49 hours of [Mrs C's] inpatient admission all equalled a NEWS score of 1. The score of 1 referral policy was followed once, with observations recorded two hourly after a set. At interview [an RN] indicated the NEWS process was a guide for when to call a doctor for nursing staff. [She] reported "that, given the NEWS score of 1, four hour observations were appropriate. This was fairly standard in her ward." This is contrary to the NEWS process that, with a score of 1, requires the nurse to "inform nurse co-ordinator" and to "Increase frequency of observations to two hourly" to establish a trend. There was a facility through the Critical Care Outreach Service for patients who trigger the NEWS system regularly, or have high scores, to be reviewed. This facility was not used in [Mrs C's] case.

The Waitemata DHB policy document on the North Shore Early Warning System states quite clearly, the purpose of the "track and trigger system is to identify the acutely ill adult at risk of deteriorating and relies on accurate recording of simple physiological variable". The rationale for its introduction was the increased acuity of patients in wards and "to improve recognition and quality of care that acutely ill patients receive". The policy goes on to say "The total NEWS score and subsequent trending of this, through the regular recording of observations, provides a clear overview of the patient's physiological condition … Employees of the Waitemata District Health Board who breach the Policy may be subject to performance review, disciplinary action or compulsory retraining."

The performance level in regards to the NEWS procedure does not meet the New Zealand Nursing Council of New Zealand 2005 competency "1.1 Accepts responsibility for ensuring that his/her nursing practice and conduct meet the standards of the professional, ethical and relevant legislated requirements with Indicator: Practises nursing in accord with relevant legislation/codes/policies and upholds client rights derived from that legislation." Given the reason for implementing the NEWS score was to aid nurses' decision-making, its lack of systematic use would meet with severe disapproval within the nursing profession.

The comment by [the RN] at interview around the lack of use of the NEWS track and trending system in Ward 10, if confirmed, indicates a systemic problem regarding the NEWS system, how it is to be used and its fundamental purpose. The general oversight of the quality of patient care on a shift was the shift co-ordinator's responsibility. The nurses reported shift co-ordinators have patients to care for as well as supervising casual staff and new graduates, and working short staffed. The Charge Nurse Manager was responsible for the overall quality of care in the ward, including the systems and processes and the adherence to policy, and monitoring adherence to procedure. There was no acuity system to determine if the nursing staffing was adequate for the workload. There were no audit processes, shared governance or time for quality assurance and improvement activities in the ward.

The lack of ward review of practice on a shift-by-shift basis and through audit to identify non-adherence to procedure does not meet the New Zealand Nurses Organisation Standard 4 criterion 4.6 "Control and participate in the regular review of nursing practice", criterion 4.7 "Critique and apply research in their practice", criterion 4.8 "Engage in creative and innovative approaches to ensure best practice standards are met", criterion 4.9 "Be a role model to colleagues, students, health professionals and others", Criterion 4.10 "Use reflection to critically analyse their practice". The Health and Disability Sector Standards (NZS 8134:2001) 2.1 C2.2 require that "The organisation has an established, documented and maintained quality and risk management system that reflects continuous improvement principles." The Safe Staffing Healthy Workplaces Committee of Inquiry Report 2006, a joint District Health Boards and New Zealand Nurses Organisation activity, highlights the need for quality and safety systems to be in place and for nurses to have the time to engage in such activities.

On 27 September PM the patient was "reported to be feeling drowsy and not well" which was put down to the one dose of Codeine, and the nurse had the patient reviewed by the on-call house surgeon, who stopped the Codeine. This consultation and the physical examination findings are not in the record for review.

[Mrs C's] daughter reported at interview her mother was "Dolalee" and didn't recognise people in the PM of 27 September. She said this was a dramatic change in her functioning and was distressing. [The RN] did not document an assessment of [Mrs C's] level of consciousness (if alert and orientated to time, person or place) or the presence/absence or improvement of pitting oedema (she commented at interview [Mrs C's] legs were oedematous and that she was nauseous), pulse rate rhythm quality, respiration patterns including rate, depth and use of assessory muscles, skin colour/texture, lung sounds or JVP in the progress notes, with a urine output 280mls for shift and a NEWS score of 1. Routine observations were not repeated after 4pm on the shift. At interview [the RN] noted [Mrs C] was feeling fine at 8pm and had dinner. The nursing notes in the patient's record state "comfortable at this time of report" (9.15pm). At interview [the RN] reported [Mrs C] was "very much the same as yesterday".

Physical examination skills have been taught in some undergraduate nursing schools since 1990 and all schools since 2001. In 2001 the KPMG report "Reach further" to Nursing Council of New Zealand recommended the "development of nursing assessment skills be a critical area for emphasis within the undergraduate curriculum" (Nursing Council website, p.11). Physical examination is part of the undergraduate curriculum, is now a practice requirement for registration and has been part of RN practice standards since 2004 (Lesa and Dixon, 2007). It is within Domain Two competencies, Management of Nursing Care.

Lesa and Dixon (2007) in writing about physical assessment in nursing practice, note "However, is not without its tensions as there is a large nursing workforce who did not learn physical assessment as part of their RN preparation, resulting in nursing students and new graduate nurses practicing in an environment that does not yet promote nurses using physical assessment (Milligan & Neville 2001). This gap has been acknowledged by the profession and courses are available for RNs to bring their physical assessment skills up to the standard of a present RN graduate" (p.166).

The lack of ongoing documented systematic review by the nurse does not meet the New Zealand Nurses Organisation Standards for Practice 2.6 "Apply current nursing knowledge using a documented systematic approach to meet the stated and implied needs of clients/ family" (p.8), 3.4 "Use an appropriate nursing framework to assess and determine client health status and the outcomes of nursing intervention and document appropriately" (p.12), 4.9 "Be a role model to colleagues, students, health professionals and others" (p.17) and the registered nurse competency 2.2 (Nursing Council of New Zealand 2005).

[Mrs C] was reported to be in significant pain on 27 September. She had a history of osteoarthritis and was on a non steroidal anti-inflammatory drug (NSAID) which was stopped on admission. Panadol was prescribed QID/PRN (four times daily, as required) and given twice a day at irregular intervals. [Mrs C] denied pain on the afternoon of 26 September but was sore all over at 6.30pm the next morning; a pain score was not recorded. Panadol was given and a pain score of 1 was recorded at 7.30am on 27 September. The remaining two pain scores were recorded as 0 on the observation chart during the period Codeine was being considered by the doctor, and commenced to treat her pain. Given osteoarthritis results in persistent pain and the NSAIDs were withdrawn, it would be expected nurses would have given the prescribed Panadol regularly, as a simple analgesia for foundational management. The fact the Panadol prescription was QID/PRN was confusing. The nurse would be expected to have this clarified and have the medication prescription rewritten. The Waitemata District Health Board has a pain management practice standard which requires nurses to understand the pathophysiology of pain and uses the pain ladder with Step 1 being simple analgesic followed by Step 2 being weak opioids. The stages were being followed in this case from a prescription point of view, but not the administration. The monitoring and treatment of [Mrs C's] pain does not meet the New Zealand Nurses Organisation Standards for Practice 2.6 "Apply current nursing knowledge using a documented systematic approach to meet the stated and implied needs of clients/family" (p.8), 3.4 "Use an appropriate nursing framework to assess and determine client health status and the outcomes of nursing intervention and document appropriately." (p.12), 4.9 "Be a role model to colleagues, students, health professionals and others" (p.17) and the registered nurse competency 2.2 (Nursing Council of New Zealand 2005).

Appropriate pain management is a fundamental human right and under management is a worldwide problem (Brennan, F., Carr, D. B; & Cousins, M., 2007). There are no pain standards or guidelines in New Zealand and management can be variable. The Joint Commission of Accreditation of Healthcare Organizations' approved standards for pain assessment and management in 1999[95] because of the under treatment of acute and persistent pain, regardless of years of emphasis on it, the evidence of harm to patients and families, and the costs to society.

The Waitemata District Health Board Rest and Sleep Clinical Practices Procedure (Nov 2005) identifies "Patients should be visually checked half hourly, including at night, in an unobtrusive manner" (p.2). [The] night nurse reported at interview that the ward was busy (three nurses and a care assistant on shift for 32 patients), that handover finished at 11.30pm, and they had to rearrange patient allocation as a nurse was sent to another ward. The shift started late as a consequence and they were short staffed. It would seem [Mrs C] was observed as soon as practical.

[95] http://www.painjournal.net/new page 6.htm.

Nursing Documentation

Much of the quality of the nursing documentation is discussed above. [Mrs C] had an admission assessment completed by a student nurse (not countersigned by a registered nurse as required by Waitemata Clinical Documentation procedure) which indicated she was independent at home until a few weeks prior to her admission. The risks assessments required by Waitemata DHB admission procedure — patient handling, pressure, and falls risk, were not included in the record provided or marked as completed on the admission form. These risk assessments are to be completed within two hours of admission according to the Admission Process for Hospital Patients procedure.

The Waitemata Care Planning Practices procedure states:

> "Care planning is an essential part of healthcare. Without a specific document delineating the plan of care important issues are likely to be neglected. Care planning provides a 'road map', to guide all who are involved with the patient's care. To be effective and comprehensive, the care planning process must involve all disciplines that are involved in the care of the patient. The ultimate purpose of the care plan is to guide all who are involved in the care of the person, to provide the appropriate treatment in order to ensure the optimal outcome during his/her stay in our healthcare setting. A caregiver unfamiliar with the patient should be able to find all the information needed to care for the patient in the plan of care. The first step of care planning is accurate and comprehensive assessment, followed by regular reassessment as often as the patient's status demands. Settings will have established protocols for initial assessments and ongoing re evaluation. A problem list is generated. The goals set are patient focused to make improvement or reduce deterioration or provide optimal quality of life, comfort or dignity for the person. The goal should be specific, measurable and attainable. The interventions should be measurable and realistic, and should be documented elsewhere in the record when performed."

The Waitemata DHB Nursing Care Plan structure provides space for the medical diagnosis, allergies and clinical alerts, medical team, NFR [Not for resuscitation] status and has a patient identification label area. A table below this is headed "activities of daily living and clinical needs" and then there are columns for the shift with the date and space for the nurse's signature. There was no signature box or requirement to print the name, and designation was not included. There is a list of daily activities headings with cues for care. Structurally there was no place for nursing problems to be listed with desired outcomes or goals as described in the Waitemata District Health Board Care Plan procedure.

There was no nursing care plan or list of patient needs and nursing problems with planned interventions in the patient record supplied to indicate what problems the nurses were observing, managing and monitoring.

I have reviewed the progress notes for nursing care themes reported which were vital signs, elimination, skin integrity, nutrition and hygiene. Nowhere in the notes have the nurses put the data they collected together, related to the heart failure symptoms, to make explicit they were monitoring the impact of therapy. This lack of systematic assessment does not meet the New Zealand Nurses Organisation Standards for Practice 2.6 "Apply current nursing knowledge using a documented systematic approach to meet the stated and implied needs of clients/family" (p.8), Standard 3.3 "Use an appropriate nursing framework to assess and determine client health status and the outcomes of nursing intervention and document appropriately", 4.9 "Be a role model to colleagues, students, health professionals and others" (p.17), and the registered nurse competency 2.2 "Undertakes a comprehensive and accurate nursing assessment of clients in a variety of settings" (Nursing Council of New Zealand 2005).

On the first morning of admission [Mrs C] had an assisted shower. The next day the nurse noted [Mrs C] was not able to mobilise because of dizziness (prior to administration of Codeine at 12.30pm). On 27 September the nurse completed the prescribed lying and standing blood pressure in the AM, and was not able to weigh her as she was too dizzy. The physiotherapist also noted [Mrs C] was too dizzy to treat at 11.30am on 27 September.

[Mrs C] had a full sponge in bed. Her skin at pressure points was reported as intact. [Mrs C] was reported to be eating and drinking well in the morning of the 27/9 and ate a moderate amount of dinner in the PM (at 10pm which was reported at the interview with the nurse).

The standard of content in the progress notes was adequate to describe the care delivered to [Mrs C] on the shifts on 26 and 27 September AM shifts but not the afternoon of the 27 September. It was extremely difficult to assess [Mrs C's] condition given the lack of assessment and observations in the notes. None of the nurses used a structured approach to document their progress notes. Waitemata DHB Clinical Documentation Procedure states progress notes are expected to be documented in a logical format and an example is provided "e.g. SOAP". The Waitemata District Health Board Orientation Workbook for the Acute Medical Wards promotes a systems approach to progress notes starting with "General appearance; Observations; Treatments; Pain; Cardiovascular; Respiratory; Genito-urinary; Gastro-intestinal; Neurological; Skin; Mental Health; Musculoskeletal; Psychological". The content of the note should include: "AIR (assessment/intervention/response) or DAR (data/action/response)". This was not followed in any report during [Mrs C's] stay.

The documentation of all the nurses was without a systematic approach related to the patients needs as required in the New Zealand Nurses Organisation Standards for Practice 2.6 "Apply current nursing knowledge using a documented systematic approach to meet the stated and implied needs of clients/family" (p.8), 3.4 "Use an appropriate nursing framework to assess and determine client health status and the outcomes of nursing intervention and document appropriately" (p.12), 4.9 "Be a role model to colleagues, students, health professionals and others" (p.17) and the registered nurse competency 2.2 (Nursing Council of New Zealand 2005).

The general oversight of the quality of patient care on a shift was the shift co-ordinator's responsibility. The nurses reported shift co-ordinators have patients to care for as well as supervising casual staff and new graduates, and working short staffed. The Charge Nurse Manager was responsible for the overall quality of care in the ward, including the systems and processes and the adherence to policy, and monitoring adherence to procedure. There was no acuity system to determine if the nursing staffing was adequate for the workload. There were no audit processes, shared governance or time for quality improvement activities in the ward.

Information Sharing and Communication with Family.
The nursing notes mention [Mrs C's] family once, on the afternoon of 27 September when they state "Family was concerned about patient appearing to be going 'down-hill'; but were reassured after r/v by OCHS. Patient for ? D/C Saturday as per plan." There were no other notes regarding communication with any family members or noting their presence visiting.

[Mrs C's daughter] indicated at interview she had an unsatisfactory conversation on the afternoon shift with a nurse on the 27 September 2007. [The RN] indicated she was not aware of this conversation but did inform her of the outcome of the on-call house surgeon's visit, not to administer any more Codeine.

While it is an expectation of routine practice in New Zealand to note in the patient's progress notes the presence of family and conversations with them, the Waitemata District Health Board Clinical Documentation procedure and the guidance on how to write a progress note was not explicit about recording visits and conversations with family members in the progress notes.

It is usual practice for the next of kin to be identified and generally for communication to go through that person unless they request specific communication with other family members. At interview [Mrs C's] daughter said she had a discussion with a nurse on 27 September when her mother was "Dolalee", about informing her sister [overseas] regarding her mother's condition. She thought this was a dramatic change in her mother's condition, and her sister wanted to attend if her mother became very sick. The nurse was reported to have said she would ring the next day after the doctor's round. (The nurses on both AM and PM noted [Mrs C] was "for ? D/C Saturday as per plan" as did the doctor on 27 September AM round.)

It would be expected with such a request being made, the nurse would establish the history and salient facts behind such a request. With informed choice by clients/family/whanau as a fundamental principle in healthcare, and processes in nursing, the profession would expect the nurse to affirm with [Mrs C] the need to call the daughter [overseas], and if [Mrs C] was not able to make such a decision, to have an informed discussion with the next of kin and respect the next of kin's decision. [Mrs C's daughter] indicated such a conversation did occur with her and the decision was to defer the call until after the medical round the next day. [She] did not indicate if she was dissatisfied with the outcome. There was no evidence in the patient record to indicate the nurse spoke with [Mrs C] about her daughter's request to call her sister [overseas] later in the PM shift when she improved.

[Mrs C's daughter] was called in the night to be told "your mother has died". Calling family with such news is very difficult. It was acknowledged in the investigation that this is a very challenging area of practice. [The medical registrar] and [a] Nurse reported at interview staff do not receive preparation in how to give bad news. This would not be unusual as many hospitals generally do not provide training in this area.

[Mrs E]

[Mrs E] was admitted to North Shore Hospital ECC on 17 October 2007 by her GP for assessment and treatment for shortness of breath. She was transferred to a medical ward, ward 10. The complaint alleges there were delays in providing her with care, and that there was a general lack of nursing assistance and ward hygiene.

My instructions were to comment on the standard of care provided to [Mrs E] by ward 10 North Shore Hospital, explain what standards apply and whether they were complied with, and include comment on:

a) the appropriateness of the management of respiratory problems
b) the appropriateness of the management of hygiene standards in ward 10.

<u>Supporting information assisting in the provision of this report</u>

General Practice referral letter 17 October 2007
St John report form
Patient Registration Form
ECC Assessment pages 1–6
Admission and Discharge Planner pages 1–12
Observation Chart and North Shore Early Warning System (NEWS) pages 1–4
Medicines chart pages 1–5 (2 charts)
Fluid Balance (2 charts)
Nursing Documentation of care
Individualised Falls Intervention Care Plan
Patient Handling Profile
Clinical Notes
Social Work Initial Assessment
[Mrs E's] letter of complaint to HDC dated May 2007
Interview notes [Registered nurse]

Interview notes (overhead slides of Team Nursing in ECC)
Interview Notes with [Mrs E] 12 December 2007 and 17 March 2008
Interview notes [Medical Registrar]
Chief Executive Officer, Letter to HDC dated 26 February 2008.

Appropriateness of the management of [Mrs E's] respiratory problems in the ECC
[Mrs E] was admitted to ward 10 via the ECC following transport by St John. The vital signs recorded by the St John ambulance staff and in the Emergency Care Centre on arrival indicated an increased respiratory rate. [A] Nurse noted [Mrs E] to have "tracheal indrawing on inspiration, cool skin, pale/pallor, clammy, no wheeze". She was reported in the doctor's admission assessment to have a component of asthma/COPD. ([Mrs E's] respiratory peak flow was not being routinely monitored at home.) Vital signs were recorded 4 hrs later. The pain score was 0.

Time	R	P	BP	T
1430 ST J	32	92	140/P	36.8
1450 ST J	28	90	130/P	
1505 ED	24	89	128/69	35.8
1630ED Medical review	tachypnoea	86		
1900 ED	Approx 18	Approx 94–8	Approx 105/55	36.1
2120 ED	Approx 18	Approx 88	120/61	

[Mrs E] had diarrhoea and was placed in a single room (for isolation purposes) that was visible to the nurses' station. According to the interview notes the house surgeon admitted [Mrs E] at around 14.30pm and his notes state that [Mrs E] had "tachypnoea". A respiratory rate was not recorded. Observations were recorded again at 7pm and 9.20pm. Two nurses recorded progress notes in the PM shift — transit care to Radiology and in the ECC while waiting for a ward bed. The observations were noted as stable. [Mrs E] was observed when attended in the PM shift. It was not stated if the nurse was present during the medical examination at 4.30pm.

The ECC orientation document for nurses states observations should be recorded half hourly until the patient is at least seen by the registrar. There is no other guideline about the minimum frequency of observation in the ECC. Nurses are expected to use their professional judgement. If the Waitemata DHB early warning system used in wards had been applied in the ECC, [Mrs E], with her dyspnoea, should have had 2 hourly observations from 3.05pm. The nurse is not required to take the observations herself/himself but to ensure they are taken. In this case the house surgeon's observations were available to the nurse in the record; they were just not transcribed onto the observation chart to assist in trending. The nursing profession would expect regular systematic observation of [Mrs E's] vital signs until her respiratory rate returned to within normal limits, and they were stable within that range for a period of time, and this was done.

[Mrs E] describes in her complaint, being left and on her own with her call bell after her initial assessments by the nurses and doctor. She rang the bell and timed the response by the nurse — 20 minutes. She had an IV luer inserted but no infusion started until 8pm (fluid balance says 7pm). She was admitted to ward 10 at 1am on 18 October 2007.

[The] Chief Executive Officer Waitemata District Health Board, in his response to HDC on 26 February 2008, acknowledged the lack of timeliness of [Mrs E's] care, he acknowledged the staff worked hard to deliver timely care, and stated there were 206 patients through the ECC over the 24 hours, and that she was one of 118 triage Category 3 patients. The ECC was reported as fully staffed at the time of [Mrs E's] attendance. At interview [the] Nurse indicated [Mrs E] was in the Acute North area of ECC and this area receives all patients, initially assessing patients. She reported the nurse staffing in the acute area was described as "three nurses for anywhere from 12 to 20+ patients".

The acute area was described as having 11 cubicle beds, six corridor bed spaces as well as three paediatric beds. When the investigation team and expert advisors visited North Shore Hospital ECC the nurses showed us where the corridor beds were placed, indicating where the signs for the corridor beds had been removed for our visit, and identified where the corridor beds were on the ECC computer system so that the patients could be entered and tracked. Staffing was planned so that nurses would have one nurse to four (1.83 nursing hours available per patient) [or] seven (1.04 nursing hours available per patient) patients at any one time; this does not account for readiness for the unpredictable work of an ED, or for admission and discharge turnover in the department or directing the nursing team. This level of workload was reported as experienced regularly in the ECC by the Charge Nurse Manager and Unit Manager at interview. This level of workload exceeds what would be expected for patients with known diagnoses and treatment plans in wards.

In Victoria, Australia, the legislated staffing ratios are 1:3 + in charge + Triage (2 triage nurses in the PM and resuscitation areas have specific staffing) for all EDs in the state, regardless of location. These recommended staffing levels would require 4.5 to 6.5 nurses or greater (depending on the flex) competent emergency nurses to staff the acute area [Mrs E] was in, plus the nurse in charge of the Team. Given the ECC skills mix is said to have significant numbers of first year nurses, more staff would be required to supervise, preceptor and support the nursing entry-to-practice nurses, and ensure patient safety.

The College of Emergency Nurses New Zealand staffing recommendations are in line with the Victorian level. This includes having supernumerary charge nurses and associate charge nurses for the shifts.

Staffing at the time [Mrs E] was in the department was not based on predictable patient numbers. The roster staffing level for the ECC was set by the physical orthodox bed spaces, not the flex (corridor beds routinely used) that was described as utilised throughout the period to effectively deliver ward nursing care for patients who were ready for transfer but "blocked" by hospital capacity.

At interview, [the] Charge Nurse Manager reported that budgeted staffing levels had been approved to be lifted by 11.6 Full Time Equivalents for the 2007/08 financial year but they had not been able to recruit to this level. She commented that "Normally by mid Jan (2008) they had nurses walking in the door wanting to be re-employed, but this time it was a lot more difficult to get nurses to work in the ECC." The Charge Nurse Manager said that "there had been a number of submissions over the years, for more staff and more beds but there had been no response until last year when the staffing was allocated an increase". At interview the Unit Manager indicated they had been asking since 2004 for a staffing budget increase.

While it was agreed to raise the base Full Time Equivalent establishment of the ECC for 2006/07, it appears this did not flow onto the daily roster numbers required at this time. [The] Chief Executive Officer Waitemata District Health Board, in his response to HDC on 26 February 2008, stated there was only one RN vacancy at the time [Mrs E] was in the ECC. The vacancy was not in the acute area. While acknowledging the need for staff, it appears this increase was not planned for each shift for the ECC to meet the expected demand. Additional cover was not built in as you would expect during the recruiting period, to manage the predictable workload. This would not meet Health and Disability Sector Standard (NZS 8134: 2001) 2.7, "Requires consumers/kiritaki to receive timely, appropriate and safe service from sufficient suitably qualified/skilled and/or experienced service providers."

The Emergency Nurses Association position statement "Crowding in the Emergency Department" states that "Although the emergency department is particularly susceptible to the effects of crowding, the causes of crowding often originate outside the emergency department. Therefore crowding is considered a systems issue, which can be examined at departmental and institutional levels as well as at local, regional and national levels" (p.2).

It goes on to say studies have identified that "crowding may result in reduced quality of patient care and increased risk to patient safety. Studies have linked crowding to prolonged wait times, patients leaving the department before being medically evaluated, boarding of inpatients in the emergency department". [Mrs E] boarded while she waited for her inpatient bed.

While it appears the nurses could see [Mrs E] from the station and she could see them, this could not be said to be regular monitoring of her health status. [The ECC registered nurse] described the Team Nursing management of the ECC at interview. She stated the team model did not work when there were too many patients in the department.

The department was divided into areas and each had a Level 3 nurse acting as a co-ordinator and is known as the 'Team Leader'. This nurse allocates the patients, oversees the care of patients, uses the whiteboard to track care (observations are noted as being recorded), and directs care; the nurses report back if they have concerns. The Team Leader also has patients. The organisation of the team affects the nurses' ability to meet their accountability as registered health professionals (Whitlock, 2002, p.61).

The modular (geographic limited) form of Team Nursing described at Waitemata ECC requires the nominated Team Leader to have and communicate the holistic view of all the patients in the area to prioritise and direct care. Team Nursing requires high levels of communication and regular case conferencing to review all the plans of care and progress with all team members (Sullivan and Decker, 2001, p.32). Team nursing is traditionally a functional approach to nursing care used for a team with a variety of qualifications under direction and non-qualified staff which focuses individual nurses on tasks, not necessarily on the person and the problems being treated. It is always adopted when there is significant short staffing and is the basis of the safe staffing escalation processes (MidCentral Health Safe Staffing Procedure 2003). A version of team nursing, ("collaborative nursing" in which registered nurses with varying levels of skills work side by side with their own allocated patients but in a small team with more oversight by the Team Leader) is also adopted when traditional preceptorship models cannot be used to provide adequate direction, coaching, monitoring of care and ensure evaluation of interventions because of an imbalance of experienced staff in the specialty in comparison to the number of staff orientating, casual, agency and first year of practice nurses.

In Team Nursing the principles of direction and delegation as laid down by the Nursing Council of New Zealand (Guideline: direction and delegation June 2008) apply to the Team Leader in this model of care:

> "(a) The registered nurse must complete a comprehensive assessment of the client and develop a plan of care prior to delegation. … (c) The registered nurse must be more directly involved with the client when the client's responses are less predictable or changing, and/or the client needs frequent assessment, care planning and evaluation. … 3(a) The registered nurse retains accountability for evaluating whether the person

carrying out the delegated activities maintains the relevant standards and outcomes." (p.9)

In the Waitemata ECC where the nurses are all registered, the registered nurse being delegated the care retains professional responsibility for their own practice. The Nursing Council of New Zealand competency 1.1 states, "Accepts responsibility for ensuring that his/her nursing practice and conduct meet the standards of the professional, ethical and relevant legislated requirements." The indicators are: "Practises nursing in accord with relevant legislation/codes/policies and upholds client rights derived from that legislation; Accepts responsibility for actions and decision making within scope of practice; Demonstrates knowledge of, and accesses, policies and procedural guidelines that have implications for practice; uses professional standards of practice."

Further guidance is given to the registered nurse in the team in Competency 2.8 which states, "Reflects upon, and evaluates with peers and experienced nurses, the effectiveness of nursing care." The indicators are: "Identifies one's own level of competence and seeks assistance and knowledge as necessary; Determines the level of care required by individual clients; Accesses advice, assistance, debriefing and direction as necessary." The registered nurse must decide to accept the delegation and work within the model of care.

The Council guideline goes on to say "Factors influencing a registered nurse's ability to delegate are: his/her level of experience, staffing levels, the acuity of patients, the number of staff, the workload, the policy, quality and risk management frameworks and access to other health professionals to support delegation and direction. Workload calculations need to include the time factored to safely delegate" (p.15).

While it is not an unusual expectation for an experienced nurse to have a patient load at the same time as managing the system, s/he also has to oversee the overall quality of care and support/guide all the nursing staff, to meet their professional responsibilities as laid down by the Nursing Council. The Safe Staffing Inquiry Report 2005 says, "There is an assigned role to co-ordinate and manage workflow and provide clinical support for each ward, unit or service 24 hours a day, seven days a week. Generally, for most acute areas, this role would involve a reduced or nil case-load" (p.11), it is context dependent. The ECC management has determined units within the ECC (acute, monitoring and observation) that require Team Leaders to oversee the shift. Adequate staffing levels and leadership responsiveness needs to take into account the variable skills mix of some experienced, junior or casual staff; and the unpredictable nature of client conditions in the ECC, as well as the need to establish baseline assessments to promptly initiate protocol treatments, to keep patients safe until they are examined, and implement treatment plans promptly.

Benner (1984) describes what is involved for nurses new to practice to acquire "a sense of salience — of perceiving that some things are more important than others" (p.146). [The ECC nurse] pointed out that some of the new graduates "are rather quickly orientated to monitored area". She believes experienced nurses should be allocated to the monitoring area. Current practice causes more pressure on the senior nurse there as the "inexperienced person does not necessarily have the ability to assess someone immediately".

Given the skills mix (RN skill level) in the ECC, the other factor to take into account is Waitemata District Health Board's responsibilities in its contract with the Clinical Training Agency for the Nursing Entry to Practice Programme. The requirements to be met are laid out in the Nursing Council Standards for Nurse Entry to Practice Programme. In particular, Standard Four states, "Appropriate resources are available to support the programme….Criterion 4.3, the programme is appropriately supported in terms of time allowance for preceptors working with the new graduates." (p.5)

As per the Safe Staffing Healthy Workplace Recommendations and in line with ED Victorian staffing, the Team Leaders should have no patient loads when the team includes significant numbers of first year nurses, and a reduced load when the team is made up of experienced nurses.

In this case the Team Leader did not document a care plan indicating her direction to the nurses caring for [Mrs E] for the shift in ECC. It is not unusual for the nurse in charge who is providing direction to registered nurses in any setting not to document their direction. This is generally because they allocate patients to specific registered nurses who then take the care forward, reporting in changes or when they need guidance. However, any advice and guidance needs to be recorded as being sought and the Team Leader needs to document their input into care to meet the standard of documentation required by the New Zealand Nurses Organisation (2003) which states, “provide documentation that meets legal requirements, is consistent, effective, timely accurate and appropriate” (Standard 1.10) or the Nursing Council of New Zealand (2005) competency 2.3 which says, “maintains clear, concise, timely, accurate and current client records within a legal and ethical framework”. As described by the nurses, the ECC whiteboard holds significant nursing care planning that needs to be captured in the patient’s notes. Local policy needs to be explicit about how this documentation is handled by these two nurses.

Appropriateness of the management of [Mrs E’s] respiratory problems in ward 10
The Admission and Discharge Planner with the “Initial Assessment and Risk Screen” was not completed within 24 hours of admission as per the Waitemata District Health Board Admission Process for Hospital Patients and Care Planning procedure. [Mrs E] was admitted from 3.15pm on 17 October to 4.30pm on the 19 October 2007.

The Waitemata Care Planning Practices Procedure states:

> “Care planning is an essential part of healthcare. Without a specific document delineating the plan of care, important issues are likely to be neglected. Care planning provides a ‘road map’, to guide all who are involved with the patient care. To be effective and comprehensive, the care planning process must involve all disciplines that are involved in the care of the patient. The ultimate purpose of the care plan is to guide all who are involved in the care of the person, to provide the appropriate treatment in order to ensure the optimal outcome during his/her stay in our healthcare setting. A caregiver unfamiliar with the patient should be able to find all the information needed to care for the patient in the plan of care. The first step in the care planning is accurate and comprehensive assessment, followed by regular reassessment as often as the patient’s status demands. Settings will have established protocols for initial assessments and ongoing re evaluation. A problem list is generated. The goals set are patient focused to make improvement or reduce deterioration or provide optimal quality of life, comfort or dignity for the person. The goal should be specific, measurable and attainable. The interventions should be measurable and realistic, and should be documented elsewhere in the record when performed.”

The Waitemata DHB Nursing Care Plan structure provides space for the medical diagnosis, allergies and clinical alerts, medical team, NFR status and has a patient identification label area. A table below this is headed “activities of daily living and clinical needs”. There are columns for the shift with the date and space for the nurse signature. There is no signature box or requirement to print the name and designation is not included. There is a list of daily activities headings with cues for care. Structurally there was no place for nursing problems to be listed with desired outcomes or goals and interventions on the Nursing Care Plan.

Under the heading “Routine activities of daily living and clinical needs” are headings with prompts. Next to this is a column for the shift to be identified, dated and signed:

> Nursing Interventions (to include direction around education, coaching and referrals) and prescribed care “SW NASC”,

Recordings/vital signs (to include BP, pulse, resp, weigh, CG's peak flows, O_2 sats, neuro obs — 2 line space) and prescribed care was "4º Obs",

Diet and fluid intake and prescribed care was "full diet",

IV therapy (to include fluids and medication — 2 line space) and prescribed care was "IVF",

Mobility Falls risk and prescribed care was "indep",

Hygiene & ADLs (to include comfort care, pain management — 2 line space) and prescribed care was "indep",

Skin Integrity (to include Waterlow score, pressure area care — 2 line) and prescribed care was "skin intact score 7",

Dressings (2 line space), Specimens (2 line space) and care prescribed was nil, Elimination (to include urine bowels — 2 line space) and prescribed care was "U.T.T",

Other special cares (one line space) and prescribed care was nil,

Psychological care (one line) and prescribed care was nil, while it is noted in the St John summary and presenting notes that [Mrs E] has been nursing her husband and has concerns about him,

Cultural needs (one line) and prescribed care was nil.

The care plan was completed for one shift, the 18 September AM shift. The plan does not reflect some of the problems that should be monitored for vomiting and diarrhoea or [Mrs E's] concerns about her husband and home situation. However, referrals to the NASC[96] and Social Worker Assessment indicate the nurse was aware of the concerns and was acting on them. This standard does not meet the New Zealand Nurses Organisation Standards for Practice 2.6 "Apply current nursing knowledge using a documented systematic approach to meet the stated and implied needs of clients/ family" (p.8), 3.4 "Use an appropriate nursing framework to assess and determine client health status and the outcomes of nursing intervention and document appropriately" (p.12), 4.9 "Be a role model to colleagues, students, health professionals and others" (p.17) and the registered nurse competency 2.2 (Nursing Council of New Zealand 2005).

The progress notes are adequate describing the care delivered. It is noted nebulisers were refused but why, and to what effort the nurse went to work with the patient, was not noted. It was also noted pain relief was refused but a pain score of 0/10 was recorded with the AM observations.

[An] Enrolled Nurse cared for [Mrs E]. Given the plan of care for [Mrs E] and her stable observations this appears to be an appropriate allocation of a stable and predictable patient which is in the scope of practice of an enrolled nurse.

> "Enrolled nurses practise under the direction of a registered nurse or midwife to implement nursing care for people who have stable and predictable health outcomes in situations that do not call for complex nursing judgment. The responsibilities of enrolled nurses include assisting clients with the activities of daily living, recognising the changing needs of clients and performing delegated interventions from the nursing or midwifery care plan."

An Enrolled Nurse is under the indirect supervision of a registered nurse. In this case there was no evidence in the record of who the registered nurse was. There is no evidence of reporting refusal of the care to the registered nurse as per enrolled nurse competency 1.5

[96] Needs Assessment Service Co-ordinator.

"Promotes an environment that enables client safety, independence, quality of life, and health. Indicator: Identifies and reports situations that affect client or staff members' health and safety" and 4.2 "Contributes to the evaluation of client care. Indicator: Relays information to the registered nurse that will contribute to the evaluation of client care." [Mrs E's] letter indicated she was not offered the nebuliser until [a registered nurse] offered it to her. There is no evidence of the direction or the care the registered nurse delivered to [Mrs E] that you would expect given her refusal of treatment on this shift.

The interview with [the] Enrolled Nurse indicated she was allocated her own patients and looked after patients with NEWS scores of three and four which would be considered unstable and unpredictable, but she then stated she wasn't generally allocated such patients. She explained her work was very similar to that of a registered nurse. She noted the enrolled nurse worked under/with RN staff. There is no evidence of which registered nurse was supervising [the] EN to assist with [Mrs E's] plan of care in the record, nor is it noted by any of the nurses at interview nor in the Waitemata District Health Board letter to HDC dated 26 February 2008. The registered nurse competency states clearly 1.3 "Demonstrates accountability for directing, monitoring and evaluating nursing care that is provided by nurse assistants, enrolled nurses and others." The principles of direction and delegation as set down by the Nursing Council of New Zealand (Guideline: direction and delegation June 2008) apply:

> "(a) The registered nurse must complete a comprehensive assessment of the client and develop a plan of care prior to delegation.…(c) The registered nurse must be more directly involved with the client when the client's responses are less predictable or changing, and/or the client needs frequent assessment, care planning and evaluation.…3 (a) The registered nurse retains accountability for evaluating whether the person carrying out the delegated activities maintains the relevant standards and outcomes." (p.9).

The registered nurse supervision does not accord with the above Nursing Council competencies. The planning and expression of caring recounted by [Mrs E] on 17 October does not meet the registered nurse cultural competencies which state:

> "Competency 2.1 Provides planned nursing care to achieve identified outcomes.
>
> Indicator: Contributes to care planning, involving clients and demonstrating an understanding of clients' rights, to make informed decisions. …
>
> 3.1 Establishes, maintains and concludes therapeutic interpersonal relationships with client.
>
> Indicator: Initiates, maintains and concludes therapeutic interpersonal interactions with clients.
>
> Indicator: Incorporates therapeutic use of self and psychotherapeutic communication skills as the basis for nursing care for clients with mental health needs. …
>
> Indicator: Utilises effective interviewing and counselling skills in interactions with clients. Indicator: Establishes rapport and trust with the client."

The Enrolled Nurse competency states:

> "3.2 Practises nursing in a negotiated partnership with the client where and when possible.
>
> Indicator: Undertakes nursing care that ensures clients receive and understand relevant and current information concerning their health care that contributes to informed choice.
>
> Indicator: Implements nursing care in a manner that facilitates the independence, self esteem and safety of the client and an understanding of therapeutic and partnership principles."

The next day, [a registered nurse on ward 10] was able to establish a rapport with [Mrs E] on her day of discharge and encouraged her to try the nebuliser. At interview [the nurse] stated that she was trained to deliver holistic care but when she came to ward 10 she was not able to do this because of short staffing.

[Mrs E's] vital signs were monitored as per the care plan and did not trigger a NEWS score. [Mrs E] was receiving oxygen throughout her stay. While oxygen is a prescription drug, there was no prescription for oxygen therapy on either of the two drug charts provided in the record. It was included in the medical plan but was not prescribed by the medical officer. Nurses can and should remind medical officers to chart oxygen.

None of the nurses used a structured approach to document their progress notes. Waitemata DHB Clinical Documentation Procedure states progress notes are expected to be documented in a logical format and an example is provided "e.g. SOAP". The Waitemata District Health Board Orientation Workbook for the Acute Medical Wards promotes a systems approach to progress notes starting with "General appearance; Observations; Treatments, Pain, Cardiovascular; Respiratory; Genito-urinary; Gastro-intestinal; Neurological; Skin; Mental Health; Musculoskeletal; Psychological". The content of the note should include: "AIR (assessment/intervention/response) or DAR (data/action/response)". This was not followed in any report during [Mrs E's] stay.

The documentation of most nurses was without a systematic approach related to the patient's needs as required in the New Zealand Nurses Organisation Standards for Practice 2.6 "Apply current nursing knowledge using a documented systematic approach to meet the stated and implied needs of clients/ family" (p.8), 3.4 "Use an appropriate nursing framework to assess and determine client health status and the outcomes of nursing intervention and document appropriately" (p.12), 4.9 "Be a role model to colleagues, students, health professionals and others" (p.17) and the registered nurse competency 2.2 (Nursing Council of New Zealand 2005).

At separate interviews, [two registered nurses], [the enrolled nurse] and [the Charge Nurse Manager] described a recent high staff turnover, difficulty in staffing the ward, not having time with patients, and difficulty in delivering quality care. Nurses reported having to prioritise care, to focus on tasks which limits the ability for nurses to have time to develop therapeutic relationships with patients. This type of environment creates a lack of sense of safety for the nurse. Poor communication with patients and family inhibits learning for graduates and students, ultimately contributing to staff turnover (Gordon, Buchanan and Bretherton, 2008).

There was no data available to assess the patient acuity and corresponding demand for nursing time or skills mix. Such a system (Nightingale) was in place in 1998 but was not maintained by the Information Systems Manager so was no longer available to nurses. When supplying the policies for workload assessment the comments were made with the papers that said that many nurses no longer used the paper-based acuity system as no one took any notice of it for staffing. Nursing hours required by patients was not tracked and used to determine staffing levels.

At interview the Charge Nurse Managers said that not many staffing incident forms were filled in, that there was not a lot they could feed back to the staff, and that being understaffed was business as usual. All they could do was acknowledge concerns and look at ways to prevent it from happening again.

Short staffing and skills mix inadequacies, even with full staffing, set up latent failure risks within the nursing system, increasing risk of adverse events (Agency for Healthcare Research and Quality, 2003, p.25). In the literature in a study of 1609 sentinel events, 24% were related to nursing short staffing (Agency for Healthcare Research and Quality, 2003, p.55). Researchers Aiken et al reported that for every extra patient a nurse has above a ratio of four, there is a corresponding 7% increase in 30 day mortality. Needleman et al (2002) found in a study of 799 hospital and 6,180,628 discharges, the higher the nurse staffing levels the lower the complications such as hospital-acquired pneumonia, urinary tract infections and failure to rescue patients who were deteriorating which is due to the time needed to build relationships to monitor the health status and provide surveillance.

In the letter to HDC the Chief Executive lists the routine staffing levels and notes there were difficulties with staffing on the afternoon of 18 October, as three health care assistants were required in the morning for watches and none were available in the afternoon. The ward roster was for six staff for AM, six PM, three for nights. It does not note enough staffing to have a shift co-ordinator supernumerary to manage a 35-bed ward or to meet professional responsibilities related to delegation for the skills mix of the ward. Using these figures, the roster routinely set up a ratio of one nurse to six patients. Adjustments that should be made for staffing, skills mix, managing a large ward and acuity of patients, were not budgeted for or staffed for. Allowances were made for watches. The staffing ratio in Victoria is one nurse to four patients. The Waitemata District Health Board nurse staffing system lacks an evidence base to support staffing, and high patient to nurse staffing ratios systematically ensure the ward will be routinely short staffed. This does not meet Health and Disability Sector Standard (NZS 8134: 2001) 2.7, requires consumers/kiritaki to receive timely, appropriate and safe service from sufficient suitably qualified/skilled and/or experienced service providers and criteria 2.7.3, requires the appropriate allocation of suitably qualified/skilled and/or experienced service providers to meet the needs of consumers/kiritaki in a competent, safe and timely manner.

In the report to [the] GM Adult Health Service dated 14 September 2007 [the] Associate Director of Nursing (ADON) reported there were 59 vacancies out of 340 budgeted nurse positions in the wards, representing a 17% vacancy. Occupancy was at 100%, nursing hours per patient day was 3.8 in surgical wards (at interview she reported she counted up the nurses on the roster to calculate this) and a 35-bed ward was effectively too large for a Charge Nurse Manager to effectively manage [with the recommended size being 24 beds]. Patient safety concerns were identified. [The] ADON proposed a four-pronged approach to improving the practice environment:

1. spread the management load amongst the Level 3 and Level 4 nurses
2. roster a supernumerary person in charge of morning shifts when the Charge Nurse Manager was not present on the floor increasing FTE by 15.36
3. implement a collaborative practice model
4. evaluate the impact with AUT.

The appropriateness of the management of hygiene standards in ward 10

[Mrs E's] intravenous line, which initially was in the back of her left hand, was disconnected each time she was to mobilise to go to the toilet. There was not enough equipment to mobilise and keep the line intact. Disconnecting lines for toileting and showering then reconnecting is poor practice, as it increases the risk of infection (MCH-968 Cleaning, Disinfection & Sterilisation procedure).

[Mrs E] described signs in the toilets requesting patients to clean their own toilet seats. The expectation that a patient with an IV line in their hand should clean their own toilet seat was a breach of infection control practices.

In her letter [Mrs E] noted the water was too hot to wash her hands for the prescribed time and commented on the lack of supply of plugs. Having hot water that is too hot for patients to wash their hands in is a hazard and safety risk to patients. The water temperature needs to be safe for frail and elderly patients. The Health and Disability Sector Standard 6.2 requires water temperatures to be determined by the Building Regulations Act 1992. The Health and Disability Sector Standards Criteria 6.3.2 says "Hot water for showering, bathing, and hand washing is provided at the tap at a safe temperature that minimises harm to consumers." The Health and Disability Sector Standards 6.3.4 says "Fixtures, fitting, floor and wall surfaces are constructed from materials that ensure hygiene and infection control practises are met." Use of plugs in hospital hand basins is against infection control practice as they harbour infection (Colville A, Weaving P, and Cooper T, 2007).

The standard of cleaning at this time was not routinely monitored by the Charge Nurse Manager (does not meet the Nursing Council Competency 1.4 "Promotes an environment that enables client safety, independence, quality of life, and health") or Waitemata District Health Board. The general description of disorder with no bedside rubbish facilities, with rubbish on floors, and "clutter" reported by [Mrs E] was supported by the nurses. There was a lack of ward support and this was confirmed in the letter (p.9 & 10) from [the CEO], dated 26 February 2008, to HDC. However, there were no healthcare assistants on the afternoon, night and morning of [Mrs E's] admission. This was confirmed in the letter on p.5. Compounding the cleaning issues, [a registered nurse on ward 10] reported the cleaner worked in two wards, and came to ward 10 after lunch. The level of service provided by Waitemata District Health Board does not meet the Health and Disability Sector Standard (NZS 8134: 2001) Standard 5.5 Cleaning and Laundry Services and 5.6 Infection Control Management.

Overall Opinion of the Practice Environment

In my opinion, the practice environment represented excessive workload, skills mix imbalance, absence of clinical governance by registered nurses, lack of professional line management, and the absence of systematic monitoring and evaluation of the organisational systems and processes staff work within. The Nursing Philosophy, the PDRP[97] and procedures designed by nursing staff at Waitemata District Health Board are sound. The senior leadership is fully aware of the situation but has no authority to affect it. They are working through existing structures making an impact when the other managers engage. The lack of empowerment, the poor systems, and inadequate support structures of the core businesses of the organisation, hinders nurses from fulfilling their professional responsibilities.

5. **Please comment generally on the systems and policies in place at Waitemata DHB between April and October 2007 to ensure patients received appropriate and timely care. In particular:**

   a) **contingency planning with respect to bed availability**
   b) **the adequacy of systems in place to facilitate patient flow through the hospital**
   c) **any other factors impacting on patient flow and hospital capacity**
   d) **the predictive models and reporting systems used by the DHB.a) Contingency plans**

There appears to have been no contingency plans in place for staffing in the April to October 2007 period. Patient volume was demand driven, staffing and physical capacity was fixed. The documents supplied indicate workload/acuity measurement tools and contingency planning occurred in 2008. The complainants' letters and interview transcripts indicate the way of coping with the winter workload was to develop corridor beds and to use all available physical beds, regardless of whether or not they were staffed, for physical capacity. The organisation had legitimated the corridor beds in the ED by accommodating them with signage on the walls which was removed at the time of our visit. Staff pointed out where the A and B beds were located and showed them on their computer systems. Patients were moved from an ED designated bed area to a corridor area to keep space available for new admissions who needed such a physical environment. [The] Nurse indicated that patients who needed

[97] Professional Development Recognition Programme.

intensive monitoring would be placed in appropriate Resus or Monitoring beds. In interviews Nurses said while the corridor beds were open routinely, they were not routinely staffed nor were they factored in to be staffed at any point when a nurse was available.

Senior staff had alerted the organisation regularly over the years to the ongoing issues with physical capacity and the impact on patient safety. They put case after case for an increase in physical capacity at North Shore Hospital.

b) The adequacy of systems in place to facilitate patient flow through the hospital

Vacancy Gap
The size of the vacancy gap was significant as low staffing levels make the organisation unsafe and inefficient. They also set up a negative spiral as nurses do not want to come to work each day and be impeded in delivering quality care because of staffing. They also do not want to put themselves at risk in areas of chronic shortage.

The skills mix in the ECC was described as having a significant number of nurses entering practice in ECC and being supervised by senior staff. The nursing care delivery system was described as team nursing, with a senior nurse supervising and acting as Team Leader (reporting to the Charge Nurse) for the junior and casual/pool staff. [The] Nurse reported the Team Leader was not always able to supervise because of workload.

The casualised nature of the work force did not assist in continuity or assuring the standards of care. It added to the burden of the everyday work of Team Leaders and Shift Co-ordinators who were trying to ensure quality care was delivered. The burden on experienced nurses to maintain staff and patient safety was significant. The impact is reflected in the inability to recruit to the environment, even though they take nurses new to nursing.

Competence or Time, or Both?
Nurses had not institutionalised physical examination into their routine assessment. In the patients reviewed, they did not routinely complete comprehensive assessment and care plans, nor did they have a systematic approach to documenting their care. Allocation of patients to nurses lacked continuity. These issues would have added to the burden of each nurse taking up the patient load for the shift. The nurses were endeavouring to prioritise and deliver nursing care in a chaotic, understaffed environment. This decrease in surveillance of patients causes discontinuity which in turn can lead to failure to rescue, and adverse events (Institute of Medicine, 2004). The limited lack of rigour in holistic assessment, intermittent use of documents, and the lack of a standard approach to progress notes would have added to this burden. The lack of role models and lack of supervision would have compounded the effects for nurses, increasing dissatisfaction, and a perception of a lack of safety for patients and self, increasing turnover. This compounds, repeats and spirals unless significant intervention occurs.

Waitemata District Health Board has many entry-to-practice nurses and would be teaching nursing students. Nurses are expected to examine a patient comprehensively, and this includes physical examination, and to focus on the needs and problems, to set plans and outcomes with patients so that together they can determine progress. This was not evident in these cases. The institutionalisation of rigour in contemporary nursing assessment and care planning processes needs top priority, resources and urgency.

Capacity
High occupancy and the systems did not allow medical and nursing staff to work together. Nurses were not able to attend the rounds of so many teams that would arrive at any time, given the spread of their work. Doctors were making rounds of patients, right across the hospital and were not able to complete discharge processes in a timely manner. Consequently patients were regularly discharged without discharge summaries.

The situation staff found themselves in repeatedly was not an indication of management inaction in trying to get a sustainable solution. I was supplied with multiple Waitemata DHB reports about the ECC, its issues and potential impact on patients and staff, including:

1. Report on the ECC Review September 2002
2. Urgent Primary Care Services and Utilisation of ECC October 2004
3. Emergency Care Centre Planning: Waitakere Hospital November 2004
4. Dealing with Pressure in North Shore Hospital ECC 2004
5. Urgent Primary Care Services and Utilisation of ECC 2004
6. ECC Flows, Team Structures and Access to Medical Specialist Assessment Project Plan May 2005
7. Enhancing acute primary care to try and alleviate demand upon ECC
8. Impact of Waitakere Hospital Emergency Care Centre Remaining Closed overnight December 2005
9. ECC Governance review: Proposed Model April 2006
10. Adult Medical Services, Patient Safety and Inpatient capacity 2006/07.

The scenarios and risks identified by staff in these papers have been evident in the systems and processes of the ECC and the way the teams work in the facility in the cases being reviewed. The [Emergency Department acting Clinical Director] reported that [the] former Clinical Director Emergency Medicine, had presented to the Board concerns about overcrowding. The usual processes of business case development occurred which were presented in August and December but they were not approved. [The Acting Clinical Director] commented "in the past there had been a sense of 'business case inertia'".

It is worth noting the Board did not have quality on its agenda.

Multidisciplinary and Multi-professional Team Work
All the interviews covering the ECC and wards indicate the members of the multi-professional team were working separately from each other. Evidence provided in the areas indicated doctors routinely saw patients without nurses being present. They then searched for a nurse to relay instructions to, and comments indicate this was not always the nurse caring for the patient.

The reasons for this occurring are well explained and not isolated to this hospital.

The patient safety literature reports multi-disciplinary rounds and inter-professional ways of working, as key to developing a culture of collaboration and improvement, allowing patient-centred care planning, prevention of harm, and improved patient outcomes (Institute of Medicine 2004). In <u>Keeping Patients Safe: Transforming the Work Environment of Nurses</u> (Institute of Medicine 2004, Appendix B, p.341–383) an evidence-based review of the literature is reported.

A search on the Institute of Health Improvement website brought up 120 activities directed at improving this aspect of care.[98] Co-ordination of care is cited as a requisite to continuity and integration of plans, optimising outcomes. This features in the registered nurses competencies and Health and Disability Sector Standards.

Organisational Design
The Charge Nurse of the ECC indicated that the area had been requesting more budget for staffing since 2004 and had received a significant increase (11.6 FTE) in 2007. It had been granted for the 2007/08 financial year but they had not been able to fill the positions.

[98] http://www.ihi.org/ihi/search/searchresults.aspx?searchterm=multi+ptrofessional+ward+rounds& searchtype=basic

However, the lead time for recruitment and orientation would mean that there would have been minimal staffing increase impact on the winter of 2007.

A Duty Nurse Manager was put in charge of the Duty Nurse Manager Team in the July 2007 restructure to provide leadership for cohesion and consistency in decision-making to improve patient flow. The Duty Nurse Managers are co-ordinating daily bed meetings. The Duty Nurse Managers reported they have few tools to assist them to oversee the organisation's workload and patient flow. There are no projections of workload, no ability to match nursing resources to predicted workload or the work of the shift.

There were no electronic systems to monitor and aggregate staffing (paper rosters), to monitor patient demand and nursing supply and to report the gap to the organisation. The paper-based acuity system had variable use. As evident from the Charge Nurse Manager's experience, staffing need made no difference to staffing levels.

Senior professional leaders were well positioned to participate in decision-making. This was not replicated at each level of the organisation.

[The Clinical Director of General Internal Medicine] and [the Service Manager] reported that prior to July 2007 the services such as Medical, had no responsibility for associated facilities. The Service Managers, under the Unit Managers, have since taken up responsibility for the facilities. Also at this time a unit management structure was put in place which reduced the number of direct reports.

The organisation recognised the disconnect between the services and the wards, and restructured in 2007 to increase participation in ownership of the problems and solution finding. For example, Internal Medicine became responsible for the medical ward beds. It has moved the responsibility back to those who are admitting to make the beds for their admissions, which was reported to be a driver for patient flow.

The design of the clinical organisation was a product line with generic management and professional leadership. Medicine had the traditional supervisory line structure and clinical governance. Nursing did not. The redesign was to have Clinical Nurse Directors to partner the Unit or Service Manager and Clinical Director. This had not occurred by the time of the site visit to North Shore Hospital. This continues to mean there is a lack of nursing input or insight into decision-making within the operations unless the Associate Director attends every meeting in the clinical organisation.

There was no partnership model for a multi-professional team functioning at ward level (where the work gets done) planned into the organisational redesign. Medicine and nursing did not have formal mechanisms to meet for clinical governance.

Operationally, the first-line managers of the clinical areas, Charge Nurse Managers, report to non nurses in the second-line positions. This is counter to the large body of international evidence that identifies the need for nurses to report through a professional nursing structure led and managed by a well-qualified senior nurse in order to maintain patient safety and quality patient outcomes. The generic manager role sits in the nurses' chair and effectively blocks nursing participation and connection.

Given the role of both the Unit Manager (generic) and Charge Nurse Manager is setting and assuring the standards of care, responsibility for design and quality of processes to deliver quality and patient safety, and development of a professional practice environment and professional workforce, both need to be qualified, credible, current and practising in the discipline to lead practice and evaluate the output and outcomes. The Charge Nurse Manager was fully engaged in backing up staffing and not available to participate to the degree required to contribute the nursing subject matter into decision-making affecting her/his team and patients. In this structure, to meet the standards, all performance management and development of Charge Nurse Managers would need to be completed by the Associate

Director of Nursing (ADON), including practice quality improvement needs and professional development and recognition programme requirements. The span of professional control without equivalent management and structure was untenable. The ADON has no authority.

There was a sense of disempowerment evident e.g. no longer using acuity as no-one took any notice, no filing of incident reports as it makes no difference, there was no feedback, or monitoring ward standards of practice. The workload of the Charge Nurse Managers would have prevented the time required for first order and second order problem-solving of systems issues in their areas (Institute of Medicine, 2004, p.146). Waitemata District Health Board is not facing this situation alone (DHBs and NZNO Safe Staffing and Healthy Workplaces Committee of Inquiry 2006).

Transit
The presence of a transit nurse service was excellent. In cases where patients were escorted to X-ray and then onto the ward, the transit nurse noted attendance and some interventions. Ongoing observations were not included and for patients who were experiencing symptoms, it left the reader of the clinical record without any ongoing trending in the patient's response to therapy.

Elective Work
At the time of the site visit there were no processes to systematically assess capacity to determine if scheduled elective work should go ahead, and no agreed processes for cancellation. Given the high occupancy this would be a priority to preserve patient safety and prevent planning unsafe environments for patients and staff.

c) Any other factors impacting on patient flow and hospital capacity

Organisational Learning: Quality Assurance and Improvement
There were no measures of patient outcomes used to measure patient safety or quality of patient care. At the time of the site visit the Associate Director of Nursing reported they were developing nurse-sensitive outcome measures to track nursing performance and patient care quality. In turn there did not appear to be any second-order attention to preventing recurrence of problems (Institute of Medicine, 2004, p.145).

Building quality in requires basic surveillance measures at ward level, oversighting care and the practice environment in each shift, and strong clinical governance by those who do the work. The nurses did not have the resources to create a learning environment. While each nurse's practice was audited three-yearly through the professional development and recognition programme, the casual nature of the workforce and the staff turnover would reduce the impact. There was a pervasive lack of organisational audit of procedures, practices and systems in the ECC and medical areas. Quality and risk was not the first item on the Board agenda at this time.

Clinical Expertise
The nursing structure had a number of clinical coaches (or nurse educators under the national titling) to support nurses in clinical practice. This was extremely important to all new staff to an area. There was no Clinical Nurse Specialist to input into patient care in wards or the ECC. Creation of such roles in the wards and linking them to the specialist departments would address the high volume of respiratory and cardiovascular patients along with the pervasive issues of recognising the significance of dyspnoea as a symptom that requires advanced practice to manage the acuity. In Aiken's work, nurses reported they valued the support of advanced clinical experts because it improves recruitment and creates a career pathway for retention, as well as improving the outcome.

d) The predictive models and reporting systems used by the DHB

There was work completed to establish bed numbers for building physical capacity. These processes had no life in everyday practice of managing the organisation.

6. Please comment on Waitemata DHB's initiatives designed to improve patient flow and hospital capacity

The organisation is building more capacity. Meanwhile they need to manage the continued high demand and its impact on care. The Operational Capacity Escalation Plan-NSH was developed in February 2008. In my opinion the RED alert level is set too high as it has corridor beds already in place and the nurse to patient ratio is 1:8. Aiken's work would show the added unnecessary rise in level of complications and mortality at this level would be in excess of 9/1000. The orange staffing is unsafe at 1:6, green is acceptable but not what is budgeted (1:6 is budget).

The chaotic environment and lack of consistent senior supervision on the floor was addressed through the paper "Programme Budgeting and Marginal Analysis", submitted [by] the General Manager Adult Services, for funding in December 2007. [It] requested supernumerary co-ordinator positions for wards for morning shifts. [This] needs to be addressed to make the environment attractive for nurses to want to work within. I don't think this went far enough, given the levels of junior, bureau and casual staff. Shift co-ordinators are needed in the afternoons and weekends to match patient demand and improve after-hours staffing support.

The current structure doesn't value the Charge Nurse Manager role as a practising nurse manager as it does not provide a professional management line for coaching in practice, participation, engagement in the direction of the organisation, involvement in solution finding, or a sense of "voice". The organisation needs to tip itself upside down and put the clinicians and their first-line supporters to the top.

There was no visibility of the ECC remotely; this was going online after the site visit. The Duty Nurse Managers had one computer between them to work with on the shift.

The implementation of a discharge planner is an important step and this will need to be 13 hours per day, seven days per week to maximise effect.

The increased number of health care assistants to support the clinical areas is fantastic.

The NEWS scoring system provided a framework for trending the condition of the patient and flagging concerns. The Critical Outreach Service that can be called when there is frequent triggering of scores or high scores is an asset to the organisation. The NEWS use in the medical wards was extremely limited in the cases reviewed. There remained an Observation Procedure that needed to acknowledge and position the NEWS system within it to reduce confusion about the trending requirements. There needs to be monitoring of the NEWS system along with physical assessment to ensure nurses get to understand how it works and how it can help track and trend.

Late in 2007 the organisation piloted software that could predict workload, and it had been recommended for purchase. The information system support for the Duty Nurse Managers was very limited. Supporting nursing with tools to manage is the core business of the organisation. One of its largest and most expensive resources did not seem to be a priority. A note on the index of additional documents WDHB provided on 28 April 2008 states "Waitemata DHB had an acuity system called Nightingale since 1998 (not Trendcare). The system has not been maintained over time as not prioritised by the IS [Information Systems] manager at NSH ... A number of wards have acuity measures (Wds 6, 11, 8, all Waitakere medical wards) … Managers have not taken any notice of the data, so CNMs have not persisted".

7. Please provide any recommendations for improvement

I acknowledge the work already underway and know Waitemata Health will continue to implement the recommendations of the Safe Staffing/Healthy Workplaces Committee of

Inquiry recommendations. I would specifically recommend Waitemata management provide leadership in these key short-term priorities needed to institutionalise the patient safety culture that nurses, doctors, allied health professionals and managers desire, and patients and families need:

1. Determine the management of electives for safety of ECC patients in this environment of 100% occupancy.
2. Develop training to assist staff develop skills in giving bad news to patients and families.
3. Work systematically through the barriers to the delivery of professional practice in the setting with nurses, and address these.
4. Strengthen the transfer nurse process so it is more than a transport process.
5. A process needs to be developed to capture the care planning that is recorded on the whiteboards in the ECC.
6. Review the health assessment competency required as per the registration requirements and ensure all nurses demonstrate competence and confidence in holistic health assessment, and model this in practice for the future workforce.
7. Review the care planning and progress notes format and ensure they provide a framework to enable nurses to demonstrate the registration competencies in their practice.
8. Ensure the requisite knowledge, skills, and systematic nursing process are internalised in each nurse, and monitor practice at individual, day, week and month level to assure quality of care.
9. Revisit the amount of support requirement for the number of entry to practice, bureau and casual staff, including orientation, particularly in the ECC.
10. Extend the planned increase in surveillance through supernumerary clinical shift co-ordinator positions to all shifts (given the size of the areas and the complexity) in AMs and PMs and partially on nights, as per Safe Staffing recommendations, so that the “Team Leader” is enabled to meet their professional obligations in this clinical supervisory role. Educate and train, and recognise and reward these positions for the added clinical managerial responsibility they carry.
11. Re-set the nursing establishment requirements and staff to them. Establish the nursing hours per patient day required based on acuity, as per the Health Round Table and patient utilisation rates (includes daily turnover) for wards and for each area of the ECC, and calculate the nursing FTE required. Add on all leave, the amount of orientation and continuing education that will be required given the skills mix and vacancy rate, and support positions.
12. Acknowledge the patient complexity and skills mix mismatch and create Clinical Nurse Specialist positions linked to specialty medical departments to work in each ward and in each area in the ECC. Specialty expertise needs to be built into the acute services in response, to respond to the acuity and case mix in order to, in a timely way, systematically consult on complex care, role model the expected quality of practice, and advance the practice of the nurses after they complete the entry to practice programme or their orientation programme to the specialty. This will also provide a career structure and succession, improving retention of Level 3 and 4 nurses.
13. Implement full-time Clinical Nurse Directors positions to lead and manage nursing services in the specialties as soon as practicable to strengthen nursing leadership, enable multi-professional partnerships, and to give a voice and heart to the largest key asset of the organisation, the nurses.

14. Make it the brief of the Clinical Nurse Directors to institute clinical governance, to monitor efficiency and effectiveness of nursing services, including nurse-sensitive outcome measures, and to evaluate their contribution to the broader multi-professional organisation and patient outcomes.
15. Link up the nursing structure so the responsibility, accountability and authority is aligned to the positions and vested in current practising nurses.
16. Align the nursing structure to the management and medical structure so the desired multi-professional teamwork is modelled, enabled and expected across and at every level of the organisation.
17. Provide adequate access to modern, linked, electronic tools so that nurses have the information they require to plan, implement, monitor and evaluate their work. Information areas include patient demand, acuity, staffing and competence, care planning, quality and risk including nurse-sensitive outcome measures as well as audit, along with usual consumable imprests, human resources and finances.
18. Invest in a modern patient call bell system to differentiate the ringing for the nurses.

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Cannulation — Intravenous
Care Planning
Clinical Documentation
Delirium Management
Handover
ICU Outreach
Medicine Management and Administration
MRSA
NEWS
Nursing Development Service Orientation Workbook Acute Medical Wards
Nutrition
Nursing Philosophy
Opiods
Operational Capacity Escalation Plan — NSH
Pain Management
Patient Care Essentials — Essence of Care
PEG (Percutaneous Endoscopic Gastrostomy) Tube care

Pressure Ulcer: Assessment, Prevention and Management
Rest and Sleep
Roster Planning/Scheduling and Safe Staffing
Practice Development Programme
Patient Placement in InPatient Settings
Phlebotomy — Venepuncture for Adults
Professional Development and Recognition Programme User Guide for Nurse 2006
Stroke Patient Positioning.

Subsequent advice
Ms Wood reviewed Waitemata DHB's response relating to nursing care and commented:

"The organisation has been making significant improvements to many systems that impact on patients, nursing and nurses. There has been much activity at ward/area level to improve care. The methods are all well tested and established in health. ...

PDRP
The PDRP performance appraisal rate was not requested at the time of the review as the PDRP was not in question. However, Waitemata did raise the PDRP as the quality control measure of patient care and this was the point raised in the review.

At the time of the site visit Waitemata were clear that they needed a broader active quality assurance programme with a set of measures related to patient care and system quality at ward level that nurses needed to be involved in clinical governance. This is part of the current 'Releasing time to care' programme and addresses the above point.

The Waitemata PDRP process is robust and approved by the Nursing Council. The point in the report that was being made was the difference between a nursing professional development process and an active patient care quality assurance programme. Knowing what to do, having the time to do it and doing it to the standard required consistently in a staffing shortage is challenging. It was noted at the time of the review that the nurses described their inability to deliver consistent care to the required standard because of the sheer volume of work. That is not a reflection on the PDRP process per se.

Nurses who complete PDRP portfolios construct evidence for assessment i.e. case review, reflections. The reliability and authenticity is established through two peer reviews and appraisal. The documents used are very precise and clear in expectations.

Real time evidence from practice is not utilised e.g. identified patient assessments and care plans and progress notes (with patient consent).

Reliability of the technical assessors of nursing practice, peer reviewers and appraisers is not described in the programme documents provided to nurses, but will have been addressed in the Nursing Council audit process to receive accreditation.

Leadership
The section on the professional structure describes roles and functions. It is acknowledged there are many senior nurses at Waitemata DHB. …

The response does not address the span of control of the ADON [Associate Director of Nursing] Adult Services. It fills the gap at service level by having the ADON work across Adult Services at service level as well as at her own level.

The business case that was put forward for shift co-ordinators by the ADON also included the Clinical Nurse Director positions. These were supported in principle but not funded at that time.

It is accepted by Waitemata DHB that the medical staff need a clinical director at service level but nurses do not.

The nurses were clear at the review that the structure did not give authority over daily practice or connect them up in a real time way. It did not enable meaningful partnership (presence) with Clinical Directors and managers.

The service managers were not required to be nurses but those interviewed in the medical area were.

It is also worth noting at the time of the site visit in 2008 a direct question was asked of the CNMs, Service Managers and CD regarding [Clinical Nurse Specialist] involvement in inpatient care. Examples were given to these people of Respiratory and Cardiac CNS. It was reported there were such positions but they were not medical inpatients; they were outpatient based. The response says they do have such positions working in the inpatient services.

Team Nursing
The ideal team delivery model was described by me. The approach taken of working as one large team when supply and demand do not match (a tactic to preserve safe staffing) was also described by me. This is the safe staffing escalation process agreed in New Zealand.

This does not seem clear to Waitemata DHB.

It was known at the time of the review, team nursing (small teams of different levels of nurses and HCAs working with a defined group of patients within the bigger department team) was to be used in the ECC. The overheads of the ECC training were provided to me. In the business case for the shift co-ordinators and Clinical Nurse Directors, the collaborative model was to be put in place in the medical wards.

Team nursing and the collaborative nursing models applied as described by Waitemata DHB, and me, are appropriate when nursing supply and patient demand match.

In the response they do refer to implementing the safe staffing recommendations but have not applied this to the model of care in their response.

The nurses indicated in the ECC that team nursing in the model, described by Waitemata DHB in the response, did not work given their workload. This reality is not acknowledged at all in the response on Team Nursing and the response on safe staffing is one line.

In asserting that team nursing is different from safe staffing team nursing, they have not addressed the issue of how they will work when they are short staffed and not able to preserve the communication and oversight processes of team nursing, as in 2007. Their response as to how they will work when supply of nursing time is below patient demand level needs to be sought.

I am really concerned that in asserting that team nursing is an appropriate model of care (failed in 2007 under the surge) they have missed the point and not address how they will work when they are short staffed. There is one line about safe staffing recommendations, but they did not understand/recognise the process in the review and are arguing against it in their assertions about the robustness of their version of team nursing.

…

NEWS

[In relation to the DHB's recent audit data]: Comprehensive audit, pleasing results. Great to get to trending over time. I would encourage [Waitemata DHB] to continue with regular feedback as they are going."

APPENDIX 3 — EXPERT ADVICE — EMERGENCY MEDICINE, DR MIKE ARDAGH

Initial advice

Introduction

I have been asked to provide an opinion to the Health and Disability Commissioner (the Commissioner) regarding investigation 07HDC21742.

I have read and agree to follow the Commissioner's Guidelines for Independent Advisors.

I am an Emergency Medicine Specialist working at Christchurch Hospital Emergency Department and Professor of Emergency Medicine at the University of Otago, Christchurch. My qualifications are MBChB, DCH, FACEM, PhD.

Instructions

Purpose:

To provide independent expert emergency medicine advice about whether Waitemata District Health Board provided an appropriate standard of care to [Ms A], [Mrs B], [Mrs C], [Mr D] and [Mrs E].

Issues under investigation:

1. The appropriateness of the services provided by Waitemata District Health Board at North Shore Hospital between 31 March and 31 October 2007 to patients attending the Emergency Care Centre or in wards 10 and 11, including the services provided to:
   a) [Ms A] from 31 March to 2 April 2007;
   b) [Mrs B] from 6 July to 14 July 2007;
   c) [Mrs C] from 25 to 27 September 2007;
   d) [Mr D] from 20 September to 18 October 2007; and
   e) [Mrs E] from 17 to 19 October 2007.
2. The adequacy of the information provided by Waitemata District Health Board at North Shore Hospital between 31 March and 31 October 2007 to patients attending the Emergency Care Centre or in wards 10 and 11, and the effectiveness of communication with those patients, including:
   a) [Ms A] from 31 March to 2 April 2007;
   b) [Mrs B] from 6 July to 14 July 2007;
   c) [Mrs C] from 25 to 27 September 2007;
   d) [Mr D] from 20 September to 18 October 2007; and
   e) [Mrs E] from 17 to 19 October 2007.

Expert Advice Required:

The following specific questions were asked of me:

1. Please comment on the standard of care provided to [Ms A] in North Shore Hospital ECC. Explain what standards apply and whether they were complied with. Please include comment on:
   a) the appropriateness of the management of [Ms A's] condition.
   b) the adequacy of the discharge planning.

2. Please comment on the standard of care provided to [Mrs B] by North Shore Hospital ECC. Explain what standards apply and whether they were complied with. Please include comment on:
   a) the appropriateness of the assessment and management of [Mrs B's] multiple medical problems.
3. Please comment generally on the systems and policies in place at Waitemata DHB between April and October 2007 to ensure patients received appropriate and timely care. In particular:
   a) contingency planning with respect to bed availability.
   b) the adequacy of systems in place to facilitate patient flow through the hospital.
   c) any other factors impacting on patient flow and hospital capacity.
   d) the predictive models and reporting systems used by the DHB.
4. Please comment on Waitemata DHB's initiatives designed to improve patient flow and hospital capacity.
5. Please provide any recommendations for improvement.
6. Are there any aspects of the care provided by Waitemata DHB that you consider warrant additional comment?

Interpretation of instructions

My instructions are to provide "emergency medicine" advice and specifically regarding the care in North Shore Hospital's Emergency Care Centre (ECC) provided to [Mrs B] and [Ms A]. I am aware that advice will be forthcoming from expert nursing and expert general medical perspectives about all of the cases subject to this investigation. Consequently I will focus on the care of [Mrs B] and [Ms A], and on the performance of the ECC. However, I have reviewed the documentation of all of the cases. [Mrs E] also had some specific issues regarding the ECC, so I will give advice regarding her management too. I am aware that the functioning of the ECC is significantly influenced by the ability of the whole institution to provide acute care. The documentation pertaining to the other cases gives useful insights in this regard, and so I will refer to the other cases as appropriate, although I will not discuss aspects of their care not relevant to the ECC nor to "emergency medicine".

Information reviewed

- Complaint letters and complainant interview notes.
- Notification letters.
- Relevant medical records.
- Letter to Waitemata DHB dated 28 March 2008.
- Responses received to date from Waitemata DHB.
- Relevant Waitemata DHB policies and procedures.
- Transcripts of staff interviews on 19 May 2008.
- Additional Waitemata DHB material arising from the 19 May interviews.

Brief factual summary of each of the cases

[Ms A]

- [Ms A] was admitted to Waitakere Hospital ECC on 31 March 2007, having suffered an episode of haematemesis and malaena (upper gastrointestinal bleeding).
- At Waitakere ECC seen by nurses (nurse entries in notes mention no pain). Seen by [ECC house officer] — medical assessment completed including a neurology exam, which included assessment of power of the limbs. No pain noted. General Medical House Surgeon assessment [conducted] — no other findings noted. General Medical Registrar assessment [conducted] — no other findings noted. There was no formal musculoskeletal assessment or mobilisation at Waitakere. However, two notes by the same staff member, on a page titled "Waitakere Hospital ECC Assessment — Page 3" and timed 1.30am and 5.50am state that on both occasions she was assisted to the commode. The second note states "Pt appears scared of mobilising requiring 2 nurses to transfer".
- Because of need for possible endoscopy and other management of upper gastrointestinal bleeding, decision was made to transfer to North Shore Hospital. Referral was from General Medical Registrar to General Medical Registrar by telephone, and (I understand) there was telephone handover from ECC nurse to ECC nurse.
- Arrived at North Shore Hospital morning of 1 April.
- In North Shore ECC for 36 hours and cared for in three parts of the ECC.
- Nursing notes mention no pain and comfortable.
- Seen by [a General Medical Registrar] — no mention of symptoms or signs of possible fractured neck of femur, although musculoskeletal exam not specifically recorded.
- In the morning of April 1st, seen by [the General Medical Consultant]. No abnormality detected, although no specific musculoskeletal exam recorded. Apparently the decision was made that [Ms A] could be discharged soon, making her a "short stay patient". Consequently the request for a ward bed was cancelled (short stay patients can stay in ECC's observation area).
- At 11.30am on April 2nd (the morning of discharge) she was seen by [a medical registrar]. Noted to be alert and comfortable, although apparently limbs not examined and not mobilised.
- [Ms A's] partner came to pick her up soon after.
- There is no indication [Ms A] got out of bed while in ECC.
- [Ms A's] partner notes, in his statements and the transcription of his interview, regarding picking up [Ms A] that:
    - he needed to seek assistance to dress her and with her mobilisation to the car, (he found a nurse to help him, and two ambulance officers helped put her in the car).
    - there was no staff member who was able to give an update or advice,
    - there were no discharge papers available at that time, and
    - that he had difficulty in mobilising her from the car to the rest home after discharge.
- On April 4th [Ms A] was returned to North Shore Hospital because of pain and immobility. On examination when she returned it was noted that she had a shortened externally rotated right hip which was extremely painful on palpation and movement.

- On April 6th she underwent surgery.
- Her condition deteriorated and she died on April 14th. (No concerns have been raised about her second admission.)

[Mrs B]

- [Mrs B] arrived at North Shore Hospital ECC at 8.20am on July 6th, 2007. She had been transferred from [another country], via Auckland International Airport, having suffered a severe stroke while on holiday.
- On arrival it appears [Mrs B] was poorly responsive, although her son's statement notes that she acknowledged the presence of loved ones by nodding and fixing her eyes.
- She was placed in the "Monitored" area. [An] RN, ECC, looked after [Mrs B] for 40 minutes in Monitored, then transferred her to another section. The 40 minutes included a 10-minute handover from the transfer team, and then she did an ECG and took blood samples. (It is worth noting that the initial ECG showed ST elevation in leads V_2–V_4 and the blood test at 8.30am revealed a TNI of 2.29. These results suggest [Mrs B] had an acute myocardial infarction sometime in the prior week to 10 days, and no more recently than a few hours prior. Most likely the time of the myocardial infarction was somewhere between 10 hours and a few days prior to arriving in New Zealand. I am unaware if this diagnosis was made [overseas] or if it happened en route.)
- [Mrs B] became short of breath, due to congestive heart failure. It is unclear when this began, but it appears it was between 12.30pm and 1.30pm ([Mrs B's] son notes she was stable and resting at 12.30pm, but he was called at 1.30pm to be told she was breathless).
- Her admission note states: "CHF on lasix (frusemide) now. Fever and increased White Cell Count, ?aspiration pneumonia". These suggest she arrived with significant contributors to breathlessness, although it appears it worsened soon after arrival (after 12.30pm) and then again on the 14th.
- [Mrs B's] family raised two concerns about this phase of [Mrs B's] care:
    - The handover from the medical escorts to ECC staff — needed to repeat the history to several providers.
    - [Mrs B] was in a supine position in ECC when, because of her breathlessness, she should have been propped up.
- After medical assessment in ECC [Mrs B] was given intravenous frusemide at 1.30pm, to treat her congestive heart failure. The congestive heart failure was considered to be the cause of her shortness of breath. (The congestive heart failure is likely to have been secondary to the acute myocardial infarction mentioned above).
- At 4.30pm she was transferred to ward 11.
- On July 14th [Mrs B's] shortness of breath was perceived to be significantly worse and the family requested medical review. She was found not breathing later that night.
- [Mrs B's] family raised these concerns about this phase of her care:
    - Delay to on-call House Surgeon review on the night of her death (6 and a quarter hours).
    - Nursing shortages, slow response times, rudeness and failure to appreciate [Mrs B's] deterioration.

[Mrs C]

- [Mrs C] was admitted to North Shore Hospital ECC on 25 September 2007. She had been referred by her GP to a General Medical Team.
- In ECC she was seen by the [General Medical Registrar] and treated for Congestive Heart Failure. She spent 4 hours in ECC before being transferred to ward 10. There seem to be no concerns about this phase of her care.
- In the early hours of September 28th, [Mrs C] died on the ward.
- Concerns raised by the family about the care on ward 10 include:
  - Possible reaction to codeine, causing [Mrs C's] deterioration,
  - Infrequency of nursing observations,
  - Slowness to respond to concerns of family,
  - And inadequate communication re the gravity of the situation.

[Mr D]

- [Mr D] was admitted to North Shore Hospital ECC on 20 September 2007 with complex medical problems.
- He was transferred to ward 11, and all of the concerns raised by family members relate to his care during his time on ward 11.
- Review of the notes suggest that [Mr D's] medical problem list included:
  - Congestive Heart Failure with pleural effusions (fluid around his lung). Persistent hypotension (low blood pressure) developed during the course of his admission suggesting cardiogenic shock — a condition with a very poor prognosis.
  - Ischaemic heart disease. A small rise in a blood test (TNI) suggests he might have had a myocardial infarction during his admission.
  - Chronic obstructive airways disease.
  - Respiratory failure.
  - Benzodiazepine dependence.
  - Severe agitation, probably contributed to by all of the above.
- [Mr D] died on 18 October.
- The concerns about his care, raised by his family, include:
  - Poor communication by the medical staff with the patient and the family.
  - Confusion between the concepts of "active" versus "palliative" care.
  - Concerns that they and the patient were ignored, including poor care to avoid bed sores, poor attention to his nutrition and needs for urination.

[Mrs E]

- [Mrs E] was admitted to North Shore Hospital ECC on 17 October 2007. She had been referred by her GP directly to a General Medical Team, for assessment and treatment of shortness of breath.
- On arrival, observations were recorded, an ECG was done, intravenous access was obtained and blood samples were taken by an ECC nurse and she was triaged as Category 3 (ideally should be seen within 30 minutes).

- She was seen by the General Medical House Surgeon one hour and seven minutes after arrival.
- IV fluids and antibiotics were not started until 4 hours after arrival (7pm).
- Chest x-ray was done six hours after arrival.
- Prednisone was administered six and three quarter hours after arrival.
- [Mrs E] went to ward 10, ten hours after arrival.
- On ward 10 she was treated for an infective exacerbation of airways disease and eventually discharged home.
- [Mrs E's] concerns include:
    - Difficulty getting help when she needed it, including getting help to the toilet.
    - Poor cleanliness of the ECC.
    - Slow provision of care, especially intravenous fluids and antibiotics.

Expert Advice

I will address the specific questions asked of me and add some comments about the care of [Mrs E] in the ECC. In addition I will allude to a common theme of the complaints, which includes the complaints about the care on wards 10 and 11. However, as instructed, I will not comment on the specifics of medical and nursing care on wards 10 and 11.

In relation to the questions about the performance of the Hospital and DHB I will engage in a general discussion about acute care services. Finally, as requested, I will outline my opinion regarding the standard of care delivered and my recommendations.

However, before doing this, I note that each of the cases under investigation describes a patient referred acutely to the General Medical teams of North Shore Hospital. It would be worth outlining the pathway for such patients.

Acute General Medical Admission Pathways

At the time of the cases under review, patients admitted "acutely" (urgently, as opposed to as an "elective patient") to North Shore Hospital, would usually get there by one of two pathways.

Pathway One — the patient who comes to ECC without referral from a doctor or other agency:

Step 1) A patient might attend without referral from a doctor or other agency, either by calling an ambulance or by making their own way to the ECC.

Step 2) At the ECC they would be "triaged" by a trained triage nurse. Triage assigns them an urgency code for medical attention, as well as defining which part of the department would be most appropriate for their needs. The patient would then be taken to that part of the department (for example "Monitored") as space allows.

Step 3) In that part of the department they would be cared for by a nurse while they await assessment by a doctor. Skilled modern Emergency Nurses (as exist in North Shore Hospital ECC) may deliver a significant portion of the patient's initial management, including an assessment of their condition, recording of vital signs, insertion of an intravenous cannula and the performance of some tests (blood tests and an ECG).

Step 4) An Emergency Medicine doctor would see the patient, take a history of this and previous illnesses, examine the patient, order or perform any other tests as necessary, formulate a management plan and begin any necessary treatment. If the plan includes likely admission to hospital then they would call the relevant specialist team (for example, General Medicine).

Step 5) The patient would then wait in ECC to be assessed by members of the specialist team, who would follow a similar process to the Emergency Medicine doctor (although usually truncated because of information already obtained) culminating in the specialist team's management plan. If this plan confirms a need for admission to hospital, then a bed in a ward is ordered.

Step 6) Once the bed in the ward is available, the patient is transferred there. However, in hospitals with high rates of bed occupancy (such as North Shore Hospital) this wait can be prolonged.

It is my understanding that, at North Shore Hospital, ordering the bed and transferring the patient to it could not occur until the "OK" to do so had been given by the specialist registrar, despite the assessment by the Emergency Medicine doctor (who may be more senior than the specialist registrar) that admission is appropriate. A consequence of this is the build up of patients in the ECC for further assessment before a bed can be ordered.

One exception to Step 6 in practice at North Shore Hospital was to keep patients in ECC Observation Area who are likely to need a hospital bed for 18 hours or less.

Pathway Two — the patient referred directly to a specialist team after pre-hospital assessment by a health care professional (usually a GP).

Step 1) If patients have been assessed by a GP, and the GP has determined they need hospital admission under a specialist team, then the GP calls the specialist team registrar (for example, the General Medical Registrar) and sends the patient to hospital with a referral letter. The ECC is notified of the patient's pending arrival, and of the specialist team who will see them.

Steps 2) and 3) are the same as for Route One.

Step 4) This step, assessment by an Emergency Medicine Doctor, usually doesn't occur, unless the patient's condition demands urgent attention and/or the specialist team cannot see the patient in a timely fashion.

Steps 5) and 6) are the same as for Route One.

An advantage of Pathway Two is that the patient, having had a pre-hospital assessment, doesn't need another assessment by the Emergency Medicine doctors. However, the patient still requires specialist team assessment in ECC before a ward bed can be ordered, despite the determination by the patient's GP that admission is appropriate. A disadvantage of Pathway Two is often a long wait for first medical assessment in the ECC, as the specialist doctors are not based in ECC, and don't necessarily share the ECC's triage prioritisation philosophy. Furthermore, patients who are clearly destined for an in-patient bed are added to an often crowded ECC to go through these frequently protracted steps before they are allowed to access one.

Steps 5 and 6 commonly introduce delays to the patient's progression, resulting in crowding of the ECC as more patients come in to ECC than can get out of the ECC to the ward. Of great frustration to the ECC staff is that they have no ability to change Steps 5 and 6, as the specialist medical staff, and the hospital beds, are beyond their authority to influence.

Patients of this type (with acute medical problems requiring admission to a hospital bed) generally require a stretcher to lie on and often have complex needs requiring close nursing attention. These patients, in the early stages of an acute illness, are a high risk group. The consequences of these patients "building up" in the ECC are a crowded department with patients on stretchers in corridors, and an overwhelmed nursing resource with a patient load greater than they can adequately care for.

The more of these high risk patients in the ECC, the less care each can be afforded and so the risk compounds. In order to simply keep patients safe, non-essential aspects of medical and nursing care may be sacrificed. Patients, and their relatives, who experience delays, crowding, and less attention than they would like, will be dissatisfied.

While the medical intervention with patients in ECC is episodic, and can be directed to just those patients for whom the specialty has responsibility, the nursing input for patients is continuous and the ECC nurses are responsible for all patients in ECC regardless of the responsible medical specialty. As patients accumulate it is the nursing resource that is stretched most. Eventually the safety of patients is compromised as the patient load exceeds the nursing capacity to observe them. At North Shore Hospital (and at many others) the ECC bears the burden of patient dissatisfaction and increased risk despite the significant contribution from things outside the ECC's authority (inefficient admission processes, lack of admitting rights, and difficult access to ward beds because of high hospital occupancy rates).

Response to Question 1: Please comment on the standard of care provided to [Ms A] in North Shore Hospital ECC. Explain what standards apply and whether they were complied with. Please include comment on:

a) the appropriateness of the management of [Ms A's] condition

b) the adequacy of the discharge planning.

- Standards

The issue of [Ms A's] fractured hip, and her discharge arrangements, I will discuss below. Other than these issues I have no reason to doubt that the individual doctors and nurses provided care of an appropriate standard.

[Ms A] was a direct referral to the General Medical team and it appears her management followed the usual processes (as discussed in "Pathway Two" above). As such, the accepted standard at North Shore Hospital (and accepted in other hospitals) was provided. However, if North Shore Hospital is to manage its acute medical workload better then it will need to update its processes, in addition to increasing its bed capacity.

[Ms A] was managed throughout her 36-hour stay by the nurses of ECC, with input from doctors of the General Medical team. She was not managed by Emergency Medicine doctors. She never made it to a medical ward partly because of delays in accessing a medical bed, and then a decision that she was likely to go home the next day so could remain a "short stay" patient in ECC (in keeping, as I understand, with the short stay policy). Her remaining in ECC, to be cared for by doctors who visit and by nurses who are overburdened, compromised the quality of her discharge (discussed further below). Her remaining in ECC was a consequence of deficiencies of process and capacity — processes that demand ECC is used for patients who do not need to be in an Emergency Department, and insufficient hospital bed capacity.

- The fractured hip

It appears that one of the main concerns regarding [Ms A's] care is that she fractured her hip while in ECC and was sent home with the fracture undiagnosed and untreated. While fracturing a hip in hospital can happen, as it can at home, this does not necessarily represent poor care. However, sending an elderly patient home with a fractured hip (if this happened) would suggest a deficiency of care.

However, it is unclear when [Ms A] fractured her hip. The medical assessments in Waitakere Hospital, in North Shore ECC on the day of her arrival, and on the morning of her discharge make it unlikely that she had a fractured hip at those times.

A specific musculoskeletal assessment wasn't performed on any of the examinations at North Shore ECC. However, it is not inappropriate to omit examinations to systems which have no relevant symptoms. Not examining [Ms A's] hips, in the absence of symptoms of hip pain, does not represent substandard care. It would seem unlikely that the symptoms of a fracture would go unnoticed during the remainder of her examination. When she returned with her fractured hip it was noted to be externally rotated and very painful. Fractured hips can be subtle but it appears [Ms A's] fracture was not a subtle one. Although I cannot be certain, it seems likely that [Ms A] fractured her hip after the final doctor's assessment by [the medical registrar] at 11.30 on April 2nd (the morning of discharge). Consequently, from the information I have reviewed, I must conclude that there is no evidence the medical staff "missed" a fractured hip. However, I have concerns about [Ms A's] discharge.

- Discharge

On the morning of her discharge [Ms A] was seen by the medical registrar and was instructed that she may go home. Her partner was informed of this and came to pick her up. When he arrived there was a lack of clarity about what should happen next. He expressed concern in his statements that there was no staff member available who knew what was happening with [Ms A], and there was no discharge paperwork available. He gained the assistance of a nurse, and then two ambulance staff, and they assisted [Ms A] to the car.

Although the medical registrar had discharged [Ms A], by her partner's account there was poor communication relating to the discharge.

It is expected that patients discharged are provided with sufficient information in relation to questions of this type:

- What's wrong? — diagnosis, possible diagnosis, current state of illness.
- What needs to be done? — treatment including discharge medication, follow-up arrangements.
- What happens next? — where to, how to get there, and how to behave when there (rest, mobilise etc).

In addition, it is expected that the staff will reassure themselves sufficiently that the patient is well enough to be at home (or has opted to go home despite not being well enough) and will manage there. For elderly patients this should include an assessment of mobility (sufficient for the circumstances of their ongoing care) and activities of daily living (ability to feed, toilet and dress). Many Emergency Departments have the assistance of Social Workers, Occupational Therapists and Physiotherapists to achieve this. However, reassurance in this regard should occur even without these professionals.

I can find no evidence of adequate informing, nor of reassurance that [Ms A] was able to manage. In particular, there appears no record that [Ms A] was able to walk prior to discharge. Although I have suggested that the fractured hip likely occurred after the final medical review, the failure to document mobility makes it very hard to be sure of this.

It is my opinion that the failure to provide discharge information and to establish the patient's ability to manage after discharge represents care below an acceptable standard.

However, I would like to temper this with two comments. First, many emergency departments struggle to provide ideal discharge care. It is very easy for patients, who have been given an indication of discharge, and are unaware that more information should be provided, to find their own way out of the department while the staff are distracted by multiple other demands.

I am aware that problems of this type have been a focus of at least a few investigations of the Commissioner's office. North Shore ECC is not extraordinary in this regard and it may be that there needs to be a national approach to tidying up this phase of care.

Second, the reasons (in my opinion) for the deficiency of discharge care in [Ms A's] case relate to the systemic problems already discussed, of ECC overcrowding, poor processes for admitted patients and poor access to ward beds. It is understandable if ECC staff prioritise keeping sick patients from coming to harm over double checking that a patient who is no longer sick (by virtue of their clearance to go home) is, in fact, OK to go home.

Response to Question 2: Please comment on the standard of care provided to [Mrs B] by North Shore Hospital ECC. Explain what standards apply and whether they were complied with. Please include comment on:

a) **the appropriateness of the assessment and management of [Mrs B's] multiple medical problems.**

[Mrs B] was transferred from another hospital and already had management instigated. The expectations of the ECC would be to:

- Receive [Mrs B] and her transfer team, including paying due attention to the handover from the team.

  [Mrs B's] family raised concerns about the attention paid to the handover and specifically, the need to repeat themselves to a number of ECC staff. The response from the ECC staff was that no specific difficulties were recalled.

- Undertake an appropriate initial nursing assessment particularly to check that the diagnosis and management from the transferring hospital are not clearly deficient and to ensure there have been no significant changes or new developments en route.

  It appears the initial nursing assessment was thorough and appropriate.

- If there was a need for further assessment and treatment of her condition, then this should occur.

  I am unsure when [Mrs B] developed congestive heart failure, although it appears it became apparent after 12.30pm on the day of arrival. As previously mentioned, she had suffered an acute myocardial infarction prior to arriving in New Zealand, and the congestive heart failure was likely to have been a consequence.

  On arrival she was short of breath and [Mrs B's] family rightly suggest that she would have been propped up, rather than lying flat, to assist her breathing. However, statements from the staff suggest her positioning was given careful attention.

  The performance of blood tests and ECG was appropriate.

  The appropriate treatment for her congestive heart failure, in addition to posturing and supplemental oxygen, is frusemide (a diuretic to reduce the fluid in her lungs). She received frusemide about five hours after arrival, and after being assessed by the General Medical team. It is not clear how bad [Mrs B's] breathlessness was, nor if it represented a significant deterioration. If she was significantly breathless, and if she was worsening, then a wait of five hours for definitive care does represent a deficiency of care. The delay to the administration of frusemide is likely to be contributed to by the need to wait for assessment by the specialist registrar, and crowding of the ECC leading to delays in many aspects of care not essential for patient safety.

In summary, there is conflicting information regarding the quality of reception of the handover and of the issue of posturing of [Mrs B] to assist her breathing. Even so, I don't consider these concerns represent a failure to deliver an appropriate standard of care. There was a delay to definitive care of her congestive heart failure, but I don't consider this to be of great significance, nor to represent a concerning standard of care. The delays relate to the issues already raised about patients being admitted to North Shore Hospital, and will be discussed further in this advice.

In summary, it is my opinion that [Mrs B] was assessed and managed to an appropriate standard, while in the ECC.

Comments about [Mrs E's] care in ECC

Although not specifically asked to comment on [Mrs E's] care, it is relevant to my brief.

[Mrs E] raised concerns about care in both the ECC and in the ward. Her concerns are informed by her knowledge of the system and are in the context of concerns about other aspects of care from previous encounters with the system.

In relation to the ECC she was concerned about cleanliness, difficulty getting care when needed and delays to treatment.

Although [Mrs E] had prompt initial nursing care (including the insertion of an intravenous cannula and the performance of initial investigations) it is clear that definitive care for her condition was delayed. She, like the other patients subject to this investigation,[99] was a direct referral to the General Medical team. She waited in a busy, overcrowded ECC for assessment by the team. After that she was given specific treatment for her condition (antibiotics, fluids and prednisone) and then a bed was allowed to be ordered.

Although the process for acute General Medical admissions was followed (Pathway Two, above) [Mrs E] was made to suffer care in an overcrowded ECC (and therefore less nursing attention than she might have expected) and delays awaiting management by the General Medical team.

I appreciate her distress, waiting with an acute exacerbation of shortness of breath, feeling as if she was abandoned or ignored at times, and knowing she needed treatment of a certain type, but having to wait before it was delivered.

Comments about care of the patients in wards 10 and 11

I have not been asked to comment on the care in the medical wards, although I note similar issues to those raised in relation to the care in ECC. I have seen the complaints and the statements from staff, and I participated in interviews of some key staff members. I note concerns from staff about high acuity over winter, vacancies, staff sickness and a need to rely on junior and bureau staff.

- [Mrs B]

[Mrs B's] family record concerns about delays to response to calls for assistance, failure to appreciate deterioration and poor communication. I have read the patient records and all of the statements. Commenting on the specific medical and nursing care is outside my brief, but I am of the opinion that timeliness of interactions, and quality of communication may have been compromised by workload.

- [Mrs C]

[Mrs C] was treated on the ward for congestive heart failure. She deteriorated and died, unexpectedly, after a change to her pain killer medication. The family have raised concerns

[99] In fact, Mr D self-referred to ECC, unlike the other four patients who were referred by their doctor.

about a possible reaction to codeine, the infrequency of nursing observations, the slowness to respond to family concerns, and the inadequacy of communication of the gravity of the situation.

I have read the patient records and all of the statements from staff. I appreciate [Mrs C's] family's concerns about frequency of interactions, and responsiveness of staff. Both of these complaints feature prominently in the other cases under investigation. Although it is difficult to be certain, as details of such matters are not easily obtained and the statements do not confirm all of the concerns, it seems likely that frequency and timeliness of interactions could have been better, and that workload may have contributed to this.

- [Mr D]

[Mr D's] case is complex, and the distressing nature of his final days must have been very difficult for his loved ones. All of their concerns relate to the care while on ward 11 and there are specific concerns regarding aspects of nursing and medical care. These concerns are outside my brief. However, complaints also relate to communication, the frequency of interactions, and responsiveness to concerns. Clearly communication between loved ones and staff was difficult at times, and possibly interactions were slow and infrequent as suggested by the complaints, (although I cannot say for sure, as staff statements contradict the complaints). However, if there were deficiencies, and in keeping with similar concerns raised in the other cases under review, it is likely that the workload of staff contributed.

- [Mrs E]

[Mrs E], after leaving the ECC, was admitted to the ward, where she continued her treatment for an infective exacerbation of chronic airways disease. In the ward she had concerns similar to those voiced regarding the ECC — cleanliness and responsiveness. I have read the accounts from the staff in response to [Mrs E's] concerns, and appreciate that measures have been put in place to improve both of these. The employment of more Health Care Assistants is part of the solution to timeliness of response when the nursing staff have multiple calls to respond to.

Although there are some specific issues related to cleanliness, other than these I am of the view that the difficulties [Mrs E] encountered on the ward were a consequence of the nursing staff being overwhelmed.

Response to Questions 3–6: Please comment generally on the systems and policies in place at Waitemata DHB between April and October 2007 to ensure patients received appropriate and timely care. In particular:

a) **contingency planning with respect to bed availability**

b) **the adequacy of systems in place to facilitate patient flow through the hospital**

c) **any other factors impacting on patient flow and hospital capacity**

d) **the predictive models and reporting systems used by the DHB.**

Please comment on Waitemata DHB's initiatives designed to improve patient flow and hospital capacity.

Please provide any recommendations for improvement.

Are there any aspects of the care provided by Waitemata DHB that you consider warrant additional comment?

Since the events related to this investigation Waitemata DHB has made a number of changes intended to improve the functioning of the ECC, the flow of patients through their hospital journey, and the care of patients while there. These changes include:

a) A change to the nursing structure, including the establishment of Unit Managers, to allow greater communication with, and input of ward charge nurses.

b) The pending appointment of a new position of Clinical Director of the ECC.

c) The appointment of a new CEO with an understanding of, and a commitment to improving patient flow.

d) The pending appointment to fill the vacant Chief Medical Officer position.

e) The establishment of an HDU.

f) The establishment of more acute medical beds with more planned in November.

g) The planned development of the Lakeview Wing, including an acute medical unit.

h) The appointment of more Health Care Assistants to the wards and to ECC.

Consequently, some of my advice will already be "in hand". However, I will discuss the issues as they existed at the time relevant to the investigation, and then make a comment about how, as I understand, they are being addressed.

Summary of the issues from the cases

I cannot identify significant deficiencies of [Mrs B's] care in the ECC. However, her family expressed concerns about her care and specifically about handover with the transfer team and positioning of [Mrs B]. Certainly, the process of medical assessment, and treatment of her congestive heart failure was slow, although (as stated), this is unlikely to have been of prognostic consequence. This brings into question the process of managing medical admissions, and the possibility that the workload of the nursing staff limited their interaction with [Mrs B] and her family.

[Ms A] was disadvantaged by never accessing a medical inpatient bed, even though she was a medical inpatient. It is my view that this, and the workload of the ECC staff, contributed to a poor discharge.

[Mrs E] received less attention from ECC staff than she would have liked, and had delays to a number of aspects of her care. The inefficient processes for medical admissions and the workload of the ECC staff contributed to these deficiencies.

The complaints about the care of [Mrs B], [Mrs E], [Mrs C] and [Mr D] on the medical wards include concerns about delayed responsiveness, less staff attention than they would have liked, and poor communication. These, and the many statements, suggest overwhelmed staff whose interactions with patients may have been affected by the demands of other priorities and the stress of their workload.

A common theme is an acute service (particularly the ECC and General Medicine) which was overwhelmed. I will discuss this further.

Overview of an overwhelmed acute service

To discuss this further I will use the term "overcrowding" in a very general sense, to mean those circumstances where the Emergency Department (ED) has a demand for its services which exceeds its ability to provide services of an appropriate standard. Often this manifests as patients on stretchers in corridors. However, an ED's ability to provide appropriate services can be overwhelmed even without patients overflowing into corridors. Furthermore, although I will mostly discuss the ED (as that is my brief), the problems facing the ED cannot be divorced from the similar issues facing other parts of the hospital's acute services. In fact, ED overcrowding is a manifestation of an overwhelmed system and my discussion of the ED shouldn't detract from the problems and needs of allied services. In relation to this investigation the acute General Medical services of North Shore Hospital are clearly part of the problem.

I will refer to EDs, in this discussion, rather than ECC (which is simply an alternative title for an ED) as this discussion, at this point, is generic and not specifically about North Shore Hospital. However, I will allude to the circumstances at North Shore Hospital as appropriate.

Much of this discussion is taken from publications on this matter in the New Zealand Medical Journal.[1, 2]

ED overcrowding is common throughout the western world, and is the subject of much examination and debate. Over the past several years a focus has begun to form on the multiple causes and the general types of solutions. Enlightened hospitals and health systems have put much effort into battling the problem, and some have made headway. However, many hospitals have failed to give the problem due attention, often despite pleas for assistance from those working in the EDs and related acute care services. In New Zealand in particular, District Health Boards have been slow to grapple this issue and this, in part, is due to a failure of any national directives, or incentives, to do so. In contrast, the English National Health Service's Acute Care Reforms were heavily "top down", with explicit incentivised, target-driven directives. Attempts to solve this problem in New Zealand have mostly been "bottom up" with clinicians and managers often frustrated by failure to progress without meaningful higher level support.

Although a variety of approaches may be taken, I will suggest three conceptual models to define the causes of the problems and the potential solutions. From these three conceptual models six principles fall.

- The Cardiac Failure Analogy for Emergency Department Overcrowding

Emergency Department overcrowding is a manifestation of a failing acute care system. The cardiac failure analogy emphasises contributions to ED overcrowding in the areas of "Preload" (the number and complexity of patients seeking acute care), "Contractility" (the ability of the system to accommodate these patients, including the physical and human resources and the processes for getting things done), and "Afterload" (the ease of getting the patient to the next phase of care, most notably into a hospital bed). For clinicians these three headings have appeal, because they are the same headings under which the causes of heart failure may be categorised. However, another way of describing this is "input", "throughput" and "output".[3] "Afterload" is also referred to as "Access Block" or "Bed-Block", to reflect difficulty accessing in-patient beds. It is apparent that "access block" is a major contributor to overcrowding of the ECC at North Shore Hospital.

Every system tends to have contributions in all three of these areas although with differing proportions from place to place. In each centre the most significant local contributions to overcrowding can be identified in each of these three areas, and solutions defined. Solutions will appear in all three areas. Focusing on a single solution (for example, efforts to reduce low acuity patient presentations, or opening more hospital beds), independent of other contributing factors, will frustrate those attempting to fix the problem. So will attempts to fix the problem of ED overcrowding by focusing on the ED only, when two of the three contributing areas are outside the ED's influence. Therefore, from this model, two principles fall:

1. The causes and solutions are multi-factorial and should be considered in concert.
2. Two of the three areas of contribution are outside the authority of the ED, so solutions need to be driven at a DHB level.

- The Whole Patient Journey Paradigm

This model encourages us to take the whole patient journey perspective, from referral to discharge. A number of different patient journeys will need to be considered, based on presenting problem, whether referred by general practitioner, age, local patterns of practice, and so on.

The pathways are examined (diagnostics) to identify which parts of the pathway are unnecessary and where in the pathway are the tightest "bottlenecks" to patients accessing the required next phase of care. Parts of the General Medical admission pathway at North Shore Hospital have been described above and wastage, duplication and unnecessary bottlenecks are readily apparent.

Solutions then have two focuses: to eliminate unnecessary steps (referred to as "lean thinking") and to prioritise solutions which fix the narrowest "bottlenecks" first. Fixing obstructions to patient care, when there are bigger obstructions in the same pathway, will not improve patient movement and instead will disillusion and frustrate. So, from this model, two further principles fall:

3. Unnecessary steps in the patient journey should be identified and eliminated.
4. The narrowest bottlenecks in the patient journey should be fixed first.

- The Models of Care Paradigm

A variety of models of acute care have been proposed and trialled and some have had success. The common features of these models are that they take the patient's perspective (what is good for the patient is good for the model), they continue the whole patient journey (therefore whole system) paradigm, and they emphasise "lean thinking" and working on the narrowest bottlenecks first. The additional contribution they make is the emphasis on "value added" tasks, and how best to achieve them. To explain this it is worth describing the "Models of Care" paradigm as being the "itinerary" of the "whole patient journey". In other words: where does the patient go, what happens there, and who does it? Patients have some "value added" things happen to them on their journey, such as resuscitation, diagnosis, or definitive care. They also have a number of things happen which do not add value, such as waiting, repeated assessments and "storage" in lieu of an appropriate place to go, and elimination of these steps is in keeping with the concept of "lean thinking". To do the "value added tasks" well it is appropriate to have a place resourced to do that task, with staff trained for, and focused on that task. Putting a number of different patients, with different required "value added tasks", with multiple staff with different objectives, in a single clinical space (for example, an ED) results in inefficiency, confusion and frustration.

I imagine that at times in parts of North Shore Hospital ECC there were patients being assessed by Emergency Medicine staff, others being assessed by General Medical staff, others being assessed by other specialty staff, others receiving treatment, others being seen on a ward round, others being monitored, others waiting for a bed, others waiting for tests, others waiting to be discharged, and so on. The mixed and confused function, with multiple different patients, multiple different staff, and multiple different tasks all in the one space, makes for errors and inefficiencies.

EDs should have governance structures which allow authority over the "department", so that processes can be modified to minimise these inefficiencies. The Clinical Director of Emergency Medicine at North Shore Hospital (the specialty, not the department) did not have such authority and it appears had limited capacity to influence how other specialties used the department. It is likely that this governance structure contributed to a persistence of inefficiencies. Indeed, the Clinical Director of Emergency Medicine position has been vacant for some time and the impotence of the position may be contributing to its unpopularity as well as to the inefficiencies of the ECC.

One solution to these inefficiencies is the formation of "acute medical assessment units", where patients go specifically for assessment by acute General Medical teams. The unit is dedicated to this task. Its formation means that the General Medical assessment does not occur in a place not dedicated to this task (for example, an ED cubicle, or corridor) and once the task is complete, the patient moves on (home, or the ward) for the next part of their journey. From this paradigm fall a further two principles:

5. Important tasks in the patient journey (value added tasks) need an appropriately staffed and resourced place dedicated to undertaking that task efficiently and effectively.
6. When the patient has completed that task, he or she moves to the next place, for the next task.

From these 6 principles, solutions can begin to be developed.

In New Zealand, as in many other parts of the world, a major contributor to ED overcrowding is the accumulation of in-patients (those needing a hospital bed) in the ED, who cannot yet access a hospital bed (access block) either because a bed is not available or because permission has not yet been granted to seek one. So both, capacity of the hospital, and processes for admission contribute to access block. Both of these are contributors at North Shore Hospital.

Some argue that it is just about capacity, others argue there are enough beds but the problem is how we use them (processes). Inevitably it is some combination of both capacity and processes. An unfortunate consequence of this debate has been the opportunity for inefficiencies of process to be an excuse to avoid investment in capacity.

Although I cannot be sure why, I note from the submissions and statements that Waitemata DHB avoided investment in capacity at North Shore Hospital.

I am aware of a number of submissions in this regard, but I am aware that these do not represent all of the concerns raised. Included in the documentation I examined were a list of Incident Reports related to overcrowding in the ECC (although the list does not include dates so I am unsure what time period is included), and a "timeline" of events related to overwhelming of acute services in a document titled *"An account of the pressures faced by WDHB in relation to the provision of services at North Shore Hospital during the period under investigation and details of the contingency planning and action taken to address those pressures"* which included these items:

- 2002, Review of acute services by [the Inpatient Services Manager], in which a number of concerns were raised, including concern that length of stay in Observation often exceeded 18 hours.
- 2004, Paper, "Dealing with pressure on North Shore Hospital ECC" authored by [the General Manager for Adult Services], outlining concerns re high occupancy of hospital (>100%), and ECC (198%), staff vacancies (21–33%), average ECC Length of stay 11 hours (up to 3.9 days).
- 2005, "ECC flows, team structures and access to medical assessment project plan" authored by [the Commissioning Project Manager].
- 2005, "ECC/Acute Assessment project background paper" authored by [the Director of the Health Improvement Team].

- 2005, “Scheduling discharges project description” authored by [the Commissioning Project Manager].
- 2005, All staff memo re closing of 34 medical beds across four wards for summer months. [General Manager for Adult Services].
- 2005, “Impact of Waitakere ECC remaining closed overnight” report to Board authored by [the General Manager for Adult Services].
- 2005, “Information paper — Expansion of Critical Care”. Proposal for HDU.
- 2006, Increased overcrowding, with voicing of frustration, and complaints. Incumbent CD of ECC resigned.
- 2006, Media scrutiny and questions in Parliament.
- 2006, “ECC governance review proposed model draft 2” authored by [the DHB Project Manager].
- 2007, Letter to Ministry re difficulty providing a service due to RMO shortage.
- 2007, “Business case for PBMA Adult Medical Services Patient Safety and Inpatient Capacity”. Describes high occupancy and very well and strongly worded argument for more beds.
- 2007, “Strategies for managing a shortage of acute inpatient beds at NSH” [General Manager for Adult Services], report to Board. Requesting funding to open existing beds, and to build new beds.
- 2007, Information paper, Finance and Audit. Observations and discussion on issues facing adult health services. Paper for the Board recommending a number of initiatives to increase bed capacity.

In addition, interviews with staff confirmed unrequited requests for assistance. One example, from the transcript of an interview from a staff member, states this:

> *“Dr X felt that governance was a big issue and it was difficult for him to effect change. In 2004 he presented to the Board that overcrowding was an issue, need to plan for more beds, he did not feel like anyone was listening. The Board seemed to have other priorities.”*

Another transcript records these comments:

> *“… at the highest level of management (the Board) they did not listen to what they were being told and were obstructionist about establishing more beds. It was suggested that the Board did not fully grasp the business cases put to them. The Board was requested by senior staff to provide more beds but focused more on gaining improvements by other process means. They have now, finally got the message that they need more beds. Staff are now desperately trying to hold situation and ‘catch-up’ over next two years.”*

It is apparent that things have changed, as suggested in another quote, and confirmed in other discussions:

> *“… positive changes have resulted from the crises of last year* (referring to the events subject to this investigation). *The Board understands now that beds are a priority. Board has been more proactive about beds in last six months.”*

Although it is good to see action since the events subject to this investigation, this does not mitigate a lack of action which may have contributed to the problems noted in 2007.

Opinion

General comments

The common contributions to the cases subject to this investigation are ECC overcrowding and a generally overwhelmed acute care system at North Shore Hospital.

As more patients, who should be in ward beds, accumulate in the ECC the less care each can be afforded, so patient dissatisfaction and clinical risk compound. Good medical and nursing staff (and I have no doubt that the staff at North Shore Hospital are good) will prioritise their interventions so that patient safety is preserved as best it can be. Non-essential aspects of medical and nursing care may be sacrificed simply to keep patients safe. Patients, and their relatives, who experience delays, crowding, and less attention than they would like, will be dissatisfied. The complaints under investigation reflect this.

As patients accumulate it is the nursing resource that is stretched most. Eventually the safety of patients is compromised as the patient load exceeds the capacity to observe them. At North Shore Hospital (and at many others) the ECC bears the burden of patient dissatisfaction and increased risk despite the significant contribution from things outside the ECC's authority (inefficient admission processes, lack of admitting rights, and difficult access to ward beds because of high hospital occupancy rates, etc).

It is my opinion that the concerns raised about the standard of care delivered by ECC have legitimacy, but it is an injustice that the staff of ECC must defend themselves when they appear to have worked well and hard against overwhelming odds. It must be particularly frustrating for ECC staff that they find themselves under this scrutiny after submissions to those who might have been able to improve matters were not embraced.

Specific Advice

In relation to this discussion, and after examination of the information provided to me, I have formed the following opinions:

1. [Ms A] (and her partner) received discharge care below an acceptable standard.
2. All of the patients under investigation received delays in care — less interaction than they (or the family) would have liked, and perceived deficiencies in communication. The delays are documented. The deficiencies in care and communication remain perceptions and are debated in the information provided. I suspect there is legitimacy in these perceptions, but I cannot identify any definite episodes of substandard care in this respect.
3. The substandard discharge care provided to [Ms A], the delays in care, and any real or perceived deficiencies in care or communication, do not appear to be due to failings of any of the clinical staff, but rather to do with the context in which they were working.
4. An overwhelmed acute care service (specifically ECC overcrowding and an overwhelmed acute General Medicine service) was the principal reason for the deficiencies observed.
5. Waitemata DHB had been made aware that acute care services at North Shore Hospital were overwhelmed and suggestions for increased capacity had not been accepted. It is my opinion that the failure to respond to the state of acute care at North Shore Hospital, including the dismissal of specific requests for increased capacity, represents a failure to ensure services of an adequate standard.
6. Concerns about overwhelmed acute care services in the hospitals of New Zealand, and ED overcrowding specifically, have been brought to the attention of the Ministry

of Health, and various Ministers over recent years, and have been a feature of a number of reviews, investigations and publications of which the Ministry is aware. Despite these concerns DHBs remained without direction or incentives encouraging them to take this issue seriously. It is my opinion that the Ministry and Ministers must bear some responsibility for the deficiencies identified in this investigation.[100]

Recommendations

Although many of the following suggestions are being advanced, I will state, as is my brief, recommendations for improvement. I will make a comment after each, regarding my impression of progress Waitemata DHB has made in relation to each recommendation:

1. A programme for improving management of the acute patient at North Shore Hospital (incorporating the principles discussed above) needs to be advanced by Waitemata DHB with urgency, and embraced as being of the highest importance for the DHB. Components of such a programme would likely include:

   (i) Immediate actions for quick results.

   (ii) Medium and longer term projects commenced without delay, and consistent with long term strategic planning for acute services. (Such projects, because of continually changing context and demands, will be based partly on best judgement and good faith. They take time to bear fruit so should not be delayed due to thoughts that things might change. In the extremely unlikely event that, at some future time, acute capacity significantly exceeds demand then the DHB will find itself with the luxury of a service which is happy and future proofed.

   (iii) Clinical Leadership.

   (iv) Management support and investment.

   (v) Adequate project management support.

   (vi) Capital investment.

   Specific actions resulting from such a programme would likely include:

   (i) Addressing capacity (bed and other recourses) needs of the ECC and the specialty services.

   (ii) Addressing the staff needs (nursing, medical and other professionals) of the ECC and specialty services.

   (iii) Improving processes for patient care, based on the principles discussed above, and specifically improving the admission pathways for General Medical admissions (likely to include movement of General Medical patients out of the ECC once referral has occurred, to a more suitable location for General Medical "work-up").

   Comment: Waitemata DHB has made a commitment to work of this type, although it may be less comprehensive than suggested. The new CEO has an understanding of the

[100] In January 2009, the Ministry of Health published the Report of the Working Group for Achieving Quality in Emergency Departments, *Recommendations to Improve Quality and the Measurement of Quality in New Zealand Emergency Departments.* In February 2009, in his letter of expectations to DHB Chairs, the Minister of Health set a formal responsibility for DHBs to "Improve emergency department waiting times — we expect improved service in EDs in relation to both the current triage time indicators and the new emergency department length of stay target". A formal work programme is being developed by the Ministry of Health.

Hospital's needs and has expressed a commitment to fulfilling them. Increased capacity is coming, with some short-stay beds on line in June [2008], and others in November, with plans for the new Lakeview wing in two years' time.

2. Bed management processes which include:

   (i) Capacity and demand forecasting.

   (ii) Daily active bed management according to actual demand.

   (iii) Days/weeks-out bed management based on forecasted demand.

   (iv) Crisis (Gridlock) bed management plans when access to beds is threatened by a high rate of hospital bed occupancy.

   (v) Control of all admissions, and integration of acute and elective admission processes so that movement of acute patients into ward beds is prioritised.

Comment: Capacity planning tools are in use and I understand that daily bed management meetings ("Balancing Meeting") and weekly planning meetings are occurring. It is understood that the "Balancing Meeting" will be based more on quality capacity/demand predictions in the future.

3. Appointment of a Clinical Director of ECC who (with the nursing and managerial leadership of ECC), has authority over all the activities within the ECC whether they be Emergency Medicine or other specialty activities, and who contributes clinical leadership to all of the above.

Comment: I understand an appointment is pending,[101] although the authority of the position may need to be ensured.

4. Development of an explicit, serious and meaningful commitment in the Ministry of Health, with the support of the Minister and government policy, to address the issue of overwhelmed acute care services in New Zealand.

Comment: The Ministry recently co-hosted a workshop on this issue and has shown an interest in patient flow through the work of the Quality Improvement Committee. It is uncertain if the Ministry or the Minister will commit to the recommended future steps from the Workshop, which included the establishment of a well constituted working group to develop recommendations for enhancing quality in Emergency Department services.[102]

References

1. Ardagh M, Richardson S. Emergency Department Overcrowding — can we fix it? *NZ Med J.* 2004; 117 (1189).
2. Ardagh M. The case for a New Zealand Acute Care Strategy. *NZ Med J.* 2006; 119 (1247).
3. Asplin BR, Magid DJ, Rhodes KV, et al. A conceptual model of Emergency Department crowding. *Ann Emerg Med* 2003; 42: 173–80.

[101] The new Clinical Director of Emergency Medicine was appointed in September 2008.

[102] As noted in footnote 101 above, the Working Group has produced recommendations that are being developed into a formal work programme by the Ministry of Health.

Subsequent advice

Dr Aradagh reviewed Waitemata DHB's response relating to ECC services and provided the following comment:

"Under the heading '1.1 ECC' there is a description of some of the changes being made to the Emergency Care Centre including the appointment of a Clinical Director and new developments to be opened in 2011. These developments are excellent and Waitemata DHB should be congratulated for them.

Under the heading '3 Emergency Care Centre' and the subheading '3.1 Special Features of North Shore Hospital ECC' it is stated that I 'may not have recognised the implications of the fact that North Shore Hospital's ECC provides both an ED and an Assessment and Diagnostic Unit (ADU) function for acutely referred patients,' then suggests that the ED function is mostly limited to non-referred patients and that my recommendations are only relevant to the ED (non-referred) function of the ECC. These comments cause me some disquiet. First, they are wrong in every respect but worse, they suggest a persisting mindset that contributed to the ED Clinical Director being unable to influence how referred patients in the ECC were managed. The artificial separation of 'emergency medicine' patients (over which the Clinical Director had influence) and 'non-emergency medicine' patients (over which the Clinical Director had no influence) was a significant contributor to the problem.

'Streaming' referred patients (particularly patients referred to General Medical services) to a separate unit dedicated to this task is good for patients and is an important part of the solution to Emergency Department overcrowding. However, during the time relevant to the review (and still) both referred and non referred patients were cared for in the same space by the same nurses. If referred patients are in this space (and it doesn't matter if it is called an ED or an ECC) then they become part of that space's workload."

APPENDIX 4 — EXPERT ADVICE — MEDICAL CARE, DR JOHN HENLEY

I have been asked to give an Independent Advisor's Report. I have read the guidelines and agree to follow these.

My name is John Wilton Henley. I am a qualified specialist General Physician (MBChB, FRACP) and have worked in the General Medicine Department since 1977, for 12 years as its Clinical Director. Much of my work involves the care of acute elderly patients, initially via the Admission & Planning Unit (of which I [was at the time of preparing this report] Clinical Director) and afterwards in the inpatient wards.

The overall terms of reference for the report to the HDC are:

1. The appropriateness of the services (medical) provided by the Waitemata District Health Board (WDHB) at North Shore Hospital between 1 July and 31 October 2007 to patients attending the Emergency Care Centre (ECC) or in wards 10 and 11.
2. The adequacy of the information (medical) provided by the Waitemata District Health Board at North Shore Hospital between 1 July and 31 October 2007 to patients attending the Emergency Care Centre or in wards 10 or 11.

   a) [Ms A] from 31 March to 2 April 2007

   b) [Mrs B] from 6 July to 14 July 2007

   c) [Mrs C] from 25 to 27 September 2007

   d) [Mr D] from 20 September to 18 October

   e) [Mrs E] from 17 to 19 October 2007

Information for the basis of this report has been supplied to me by the Health & Disability Commissioner. This includes summaries of complaints, interviews with staff, full copies of all case records and hospital protocols. A full record of all recorded information can be obtained from the Commissioner.

For the purpose of the report, comments regarding each patient will be made separately, preceded by a summary of the initial complaint.

[Ms A] (dec)

Executive Summary:

[Ms A] was transferred from Waitakere Hospital to North Shore Hospital for investigation and treatment of probable haematemesis. Following her discharge from hospital on return to her rest home she was found to have a fractured hip and returned to North Shore Hospital.

Specific Complaint:

Discharged from hospital with a fractured hip.

Expert Advice Required:

Please comment on the standard of care provided to [Ms A] by medical staff in ECC. Please explain what standards apply and whether they were complied with. Please include comment on:

a) The appropriateness of [Ms A's] discharge.

[Ms A] was admitted to Waitakere Hospital on 31 March 2007 because of possible haematemesis. After full medical assessment, including neurological examination which showed "power N", she was transferred to NSH. No mention was made of any pain in the hips at that time.

She was admitted to the ECC and NSH in the early hours of 1 April 2007. She was admitted, treated conservatively as far as her possible gastric bleeding was concerned, and eventually discharged on 2 April 2007.

Careful perusal of both medical and surgical notes give no evidence at all of possible fall resulting in a fractured neck of femur. Noted to "be comfortable" and to have "no complaints" recognising there was some mild confusion documented.

She was reviewed at 11.30am on 2 April 2007 and discharged back to her rest home.

Following discharge, she was placed in a private car, with the help of two ambulance officers. On arrival at the rest home [Ms A's] partner attempted to get her out of the car. He was stopped by the nursing staff and she was placed in a wheelchair, following which she complained of pain and was unable to mobilise. X-ray confirmed a fracture. The rest home filled out an incident form relating to these events.

I disagree completely with the comment by [the General Manager for Adult Services] in a letter sent to the HDC on 17 September 2007. She said "the possibility she did fall and the fall was not witnessed however, cannot be discounted." If [Ms A] had fallen and fractured her hip, she would not have been able to get up, and would have been found on the floor.

I find there is absolutely no evidence that a fracture occurred in North Shore Hospital. The timing of such a fracture is conjecture and will not be further discussed.

<u>Summary</u>:

There is no evidence at all that a fracture occurred while [Ms A] was in the care of staff in the ECC. Medical and nursing care was entirely appropriate.

Perhaps attention should be given to providing more support for elderly patients going home with their own transport.

[Mrs B] (dec)

<u>Executive Summary</u>:

[Mrs B] was transferred to North Shore Hospital ECC on 6 July 2007, after suffering from a severe stroke while on holiday [overseas] in June 2007. She remained generally unresponsive and died on 14 July. Her family have complained that while in ECC there was a lack of communication and handover between staff. Changes in personnel required a reiteration of patient history on the family's part. [Mrs B] had an episode of breathlessness but was left supine by nursing staff. Once admitted to ward 11 later on 6 July, nursing staff appeared "stretched and stressed" which led to delays in nursing cares. There was also lack of continuity of care with no particular staff taking ownership of [Mrs B's] care. On 14 July, [Mrs B] went into respiratory distress, and there was delay in her being seen by the on-call medical staff. Her family believe that nursing staff failed to recognise the extent of her respiratory distress.

<u>Specific Complaints from family were</u>:

1. Lack of communication and handover between staff.
2. Reiteration of patient's history because of change-over of staff.
3. Left lying supine despite breathlessness.
4. Delays in nursing care as nurses "stretched and stressed".
5. Lack of continuity of care with no one taking ownership.

6. Delay in care when condition deteriorated, and failure to recognise the extent of the illness.

<u>Expert Advice Required</u>:

Please comment on the standard of care provided to [Mrs B] in ECC and ward 11. Explain what standards apply and whether they were complied with. Please include comment on:

a. the appropriateness of the medical assessment and follow-up on the afternoon of 14 July 2007

b. the adequacy of communication between nursing and medical staff

c. the adequacy of communication with [Mrs B's] family.

Standards of care for all patients admitted acutely to public hospitals are similar for every patient. They include rapid triage in the emergency setting, transfer to an appropriate facility for continuing management, timely nursing and medical assessment, management plans instituted and good handover when patients transfer from the Emergency Department to the inpatient wards. When in the inpatient wards nursing care should be appropriate as outlined in nursing protocols and targeted to individual patients' needs.

As documented in the extremely thorough response from WDHB to the Health and Disability Commissioner on 26 February 2008, [Mrs B] was admitted on 6 July 2007, after a month in hospital [overseas] following a major stroke. Other medical problems included ischaemic heart disease with a documented inferior myocardial infarct in 1999, ongoing ischaemic changes on her ECG, pulmonary hypertension, chronic renal impairment and poorly controlled hypertension.

She was immediately Triaged 3 (Australasian Triage Category) and put in a single room because of concerns regarding MRSA in a patient coming from an overseas hospital.

Handover between the ECC staff and the Air Flight team was performed, documentation from the [overseas hospital] was thorough and she was receiving PEG feeding (this was transiently stopped when she was started on IV fluids). Nursing management was appropriate for a stroke patient, and despite comments from the family that she was left lying supine despite breathlessness, there is documentation that [Mrs B] was elevated when she was noted to be more short of breath. This notation was transferred to the wards where instructions were given to keep her at least at 30º to aid breathing. She was placed under [the general medicine consultant's] team. I see no evidence of lack of continuity of care — she was admitted by [the general medicine consultant's] team, seen by him on three occasions during her stay (including the post acute rounds) and medical documentation of her course was very adequate.

Handover documentation from ECC to the ward is satisfactory, and WDHB have outlined in full the process of handover from shift to shift in the hospital. Certainly the nursing documentation which is very thorough shows no evidence of difficulty in understanding the nursing issues. She was seen by the stroke service, Nutrition Service, Allied Health, NASC, OT and SLT. Documentation from all these services is very complete.

A concern about having to reiterate [Mrs B's] history to numerous staff is something we hear often. However with so many medical and nursing staff looking after each patient this is unavoidable, and in that [Mrs B] could not respond, it seemed likely that her family would be asked.

Over the week [Mrs B] remained in hospital she remained reasonably stable, recognising the critical nature of her illnesses. It is difficult to assess from the records that there were inappropriate delays in nursing attention, and a comment that the nurses looked "stretched and stressed" could be directed at every medical ward in major metropolitan hospitals.

That the nurses were under pressure does not conclude that nursing care was anything but satisfactory. Nurses, like doctors, have to prioritise time to attend to specific needs. They may well have done so in this situation.

The major concerns relating to [Mrs B's] care seems to relate to the afternoon of 14 July. A very thorough weekend plan is recorded in the notes, asking for a Registrar review the next day. This was performed, and there were no specific concerns voiced, and she was continued on IV antibiotics. The hospital was very busy and he felt he had to prioritise his assessments. Conversations with the nurse on the ward had not given him the impression that there was any major deterioration and the NEWS score (an indication of clinical activity) had not changed from 2. In retrospect he said he could have seen the patient earlier if he had known of any major deterioration.

He documented failure, and was concerned about aspiration and hence the request for the X-ray. He then handed over the night shift, including his worries, plans and what was happening. He had no further input into her care; hearing she had died the next morning he was distressed and required counselling from the Duty Manager.

In reviewing this care, I believe there is no information to confirm that the nursing or medical care was substandard, leading up to the last evening. Documentation was excellent, nursing was targeted to her particular problems, medical continuity was maintained, and communication with the family continuous, even to the extent of ringing [Mrs B's son] to let him know that an X-ray was being done.

The only aspect of her care that could be criticised is the delay in seeing [Mrs B] on the day of her death (first paged at 3pm, seen at 9.15pm). In mitigation the house surgeon in question did keep in close touch with the ward, and was unaware of any significant deterioration.

Whether such deterioration was not appreciated by the nursing staff and this not communicated to [the on-call house surgeon] is difficult to assess.

Interestingly, apart from documenting failure, his assessment did not reflect any major emergency at the time. Her death was sudden but in view of her major medical problems not unexpected.

However nursing notes at 3pm on 14 July 2007 noted "Obs — stable and afebrile…..O_2 at 2h/min, nasal prongs continued and saturation 98%". Despite these stable recordings suggesting nothing untoward, the nurse noted "family very concerned re: patient and ringing the bell+++". At that time the on-call house surgeon was power paged.

Further documentation from the Clinical Coach (time not recorded), revealed the family was concerned about the rising respiratory and heart rate and the possibility of increasing heart failure. In discussions with [Mrs B's] medical son, morphine was given (4.45pm), and was more settled (nursing notes) at 5.30pm. The on-call house surgeon was again paged and later called by phone.

The on-call house surgeon reviewed [Mrs B] at 9.15pm, and ordered a chest X-ray, with comments: "if evidence of increasing heart failure for stat. frusemide".

At 10.20pm [Mrs B's] son was notified that a CXR was being done, commenting that "if any acute changes through the night he wishes to be notified". At that time he also expressed some frustration at the time taken to be seen by the on-call house surgeon.

Fifteen minutes later [Mrs B] died.

Of all the concerns voiced by the family, the delay in being seen can certainly be substantiated. However, there are considerable extenuating circumstances which seem important when trying to assess whether this delay was appropriate or not (as outlined in medical brief).

[The on-call house surgeon] was aware of [Mrs B's] medical situation having admitted her when she first came to hospital.

He was on-call the afternoon of 14 July and was asked on several occasions (as documented) to see [Mrs B]. He was aware she had been fully reviewed in the morning.

<u>In Summary</u>:

The only deficiency was delay in assessment, but with some mitigating circumstances. To maintain appropriate standards, this patient should have been seen earlier.

[Mrs C] (dec)

<u>Executive Summary</u>:

[Mrs C] was referred to North Shore Hospital by her General Practitioner on 25 September 2007. [Mrs C] had been suffering from a virus and had developed symptoms of fluid retention and an erratic pulse. She remained in ECC for four hours before being transferred to ward 10. …

[Mrs C's] family are concerned about the services she received in ward 10. They believe that staff did not respond in a timely fashion to a dramatic change in their mother's condition, following the administration of Codeine. They believe a lack of continuity of nursing staff was a contributory factor. In addition, the period between nursing observations on the day of her death was too long. The family are also concerned about the information they received and are disappointed that the seriousness of their mother's condition was not conveyed to them. Communication they received from nursing staff, after their mother's death, was upsetting and displayed a lack of compassion.

<u>Specific Complaints from family</u>:

1. Lack of response from nurses when [Mrs C's] condition deteriorated (following codeine).
2. Lack of continuity of nursing staff.
3. Poor communication regarding seriousness of condition.
4. Lack of empathic communication post death.

<u>Expert Advice Required:</u>

Please comment on the standard of care provided to [Mrs C] in ward 10, North Shore Hospital. Explain what standards apply and whether they were complied with. Please include comment on:

a) the appropriateness of the management of [Mrs C's] medication
b) the appropriateness of [Mrs C's] treatment plan
c) the adequacy of doctors' communication with [Mrs C's] family.

[Mrs C] was admitted to ward 10 on the evening of 25 September 2007 after transfer from the ECC. Diagnosis was of congestive heart failure. She had a comfortable night and was seen by [the Clinical Director of General Internal Medicine] on the post acute ward round the next morning. Treatment for CHF continued (oral frusemide only), and an interesting comment regarding her clinical acuity was made "Aim home Saturday morning" — (three days' time). This suggests there were expectations of significant improvement over that period of time.

Although there has been a suggestion that clinical deterioration was in response to codeine, I think this unlikely, as she was seen on 27 September 2007, and noted by [the medical registrar] to be "feeling lousy". The codeine was charted first on the 27 September, and stopped on the same day, after discussion with the family. Review of the medication charts does not help in assessing whether codeine was given, but it is likely that if this occurred the dose was very small (30mgs), and not repeated.

At no time was there any documentation of codeine sensitivity, either from GP, patient or in discussion with the New Zealand family. This was raised only by the daughter [overseas].

Review by [the medical registrar] on 27 September again suggested improvement, although “feeling lousy”. The “Aim home Saturday” was repeated.

Nursing notes written at 1.15pm on 27 September indicate significant dizziness on sitting, although lying and sitting blood pressures are recorded. [Mrs C] was noted to be eating and drinking well.

Unfortunately I am unable to ascertain the frequency of observations between 1.15pm and 9.15pm when the next nursing notes are written as the TPR chart is not in the documents sent to me. I note however in the letter to the Commissioner from WDHB dated 15 November 2007, recognition that standard nursing protocols regarding monitoring were not followed and an apology was forthcoming.

Nursing notes at 9.15pm indicate [Mrs C] was feeling drowsy and unwell, but settled and comfortable. The family felt their mother was going “downhill” but were said to be reassured after a review by the on-call house surgeon. Unfortunately there was no written review of his / her findings.

Later that night [Mrs C] died unexpectedly. The case was referred to the Coroner, who was happy the death certificate could be completed, with the cause of death being ischaemic heart disease.

At 9.30am on 28 September 2007, [the medical registrar] reports, “discussed admission and progress with [Mrs C’s son and daughter]. Have no concerns about care. All questions answered and informed then of likely cause of death”.

[The medical registrar] then saw both daughters at 12.30pm on 29 September. He confirmed only one dose of Codeine given, and explained likely cause of death.

Documented that one daughter was “concerned about infrequent observations performed on mother in the evening, but overall happy with above explanations.”

In response to concerns regarding lack of information about the “seriousness” of [Mrs C’s] condition, from the medical records her sudden death was unexpected, and all documentation suggested a possible discharge in three days.

It is inherent in the understanding of an 85-year-old woman with CHF and IHD that the possibility of sudden death is always likely.

Finally the communication between [the medical registrar] and the family appears exemplary, and is thoroughly documented. There is a comment in the Executive Summary that “communication they received from the nursing staff after their mother’s death was upsetting and displayed a lack of compassion”.

This is obviously a subjective comment and I cannot comment more except to refer this to the nursing administration.

Summary:

Possible failures in standard of care include:

1) Lack of monitoring from nursing staff during afternoon of 27 September 2007.

2) Failure of documentation of review by OCHS.

3) Possible lack of empathy from nurses to family following [Mrs C's] death (subjective and unsubstantiated).

[Mr D] (dec)

Executive Summary:

[Mr D] was admitted to ward 11 at North Shore Hospital from 20 September to 18 October 2007 with complex medical needs including a heart condition, anxiety and hyperventilation. His family have complained about the lack of information given to them about his condition, prognosis and treatment plan. They received different information about his condition from different staff and there was confusion about whether he was for rehabilitation or whether his care should have been palliative. The family believe that he should have been treated as a palliative patient and provided with more effective pain relief to alleviate his suffering. There was a lack of continuity and co-ordination in relation to his care. They are concerned about a general lack of compassion and timeliness displayed by nursing staff. [Mr D] died from complications from a punctured lung, possibly incurred during a biopsy procedure he received while in hospital.

Specific Complaints:

1) Lack of information about condition, prognosis and treatment plan.

2) Should have had more effective palliative care.

3) Lack of compassion and timeliness from nursing staff.

Expert Advice Required:

Please comment on the standard of care provided to [Mr D] in Ward 11. Explain what standards apply and whether they were complied with. Please include comment on:

a) the appropriateness of the care provided by medical staff

b) the management of [Mr D's] chest aspiration

c) the appropriateness of the care planning for [Mr D] in relation to his anxiety

d) the appropriateness of the plan to discharge [Mr D] on 18 October 2007

e) the adequacy of the communication and information sharing with [the family]

f) the co-ordination of [Mr D's] care by medical staff.

Standards of care that apply have been documented at the beginning of this report. As is often the case in these situations it is difficult to be absolutely certain of the sequence of events as they differ considerably between the case notes and the family perception of care. A very full summary has been sent to the HDC by WDHB, and this outlines the progress of care in what was a very difficult management in an elderly man with numerous co-morbidities who over a period of weeks, continued to deteriorate despite ongoing medical attention.

Comments from the family outline many perceived problems, both in nursing and medical management. Some of these in nursing included slowness to answer the bell, poor access to the bell and fluid, lying in bed which was wet for a long period of time, cold and callous nurses (although interestingly four favourites were mentioned), infrequent turning, hygiene of the ward and infrequent eye drops. Despite copious comments from the WDHB it is difficult to completely refute some problems with nursing care, possibly related to the shortage of healthcare assistants and extreme workload.

Although the family complained of lack of information about [Mr D's] condition, prognosis and treatment plan, there are many notations in the progress notes that such information was given. On 16/10/07, according to the report from WDHB dated 26 February 2008 (Pg 32) and supported by progress notes — "Registrar Round — [medical registrar] — noted a lengthy meeting with family members (daughters and son) regarding an update on [Mr D's] condition….."

[The medical registrar's] note: "Had a long discussion with family about the apparent deterioration in clinical status of yesterday … Supportive management at present. If there is improvement the options include possible rehabilitation / rest home. If he continues to deteriorate family are keen to take [Mr D] home."

There are concerns that "the doctors did not tell us he was palliative". In fact as far as I can tell it was the family, rather than the medical staff who first raised this issue. "They want him to be comfortable … They want him to be palliative" soon after he was visited by a NASC member, as the family wished him to be transferred to a private hospital as soon as possible.

It was interesting to note, that assessment by the AT & R team, including [the] (Geriatrician) stated "[Mr D's] overall condition had deteriorated, and it is not expected to improve, though the medical team consider his condition is not yet palliative. Family informed … now looking for private hospital facility. This is appropriate for ongoing care."

The definition of palliative could be discussed at length, but certainly does include long term management of seriously ill patients, not just those obviously dying.

In answer to specific questions highlighted by the Commissioner:

a) I believe the medical care was appropriate. There were obvious difficulties in management of an elderly patient with multi-system disease, as is often the case. There is no evidence of lack of care, and progress management is well documented.

b) On 15 September a pleural aspirate was attempted in view of increasing size of pleural effusions. The patient/family were informed re: risks benefits, aseptic technique was carried out, but after 3 attempts (using ultrasound marked spot) no adequate samples were obtained. The only difficulty apart from this appeared to be an inability of the patient to maintain an upright sitting position. A CXR was performed after the procedure was abandoned, and initially reported as normal (amended later to show a small apical pneumothorax). I have nothing to suggest that the aspiration was anything but totally appropriate in performance.

c) From the start of [Mr D's] admission, and continuing through until his death, there were constant documented concerns about his anxiety, something that was apparently present prior to admission. Comments were made about benzodiazapine dependence, and the medical staff were very aware and concerned about this. They sought help from the liaison psychiatry team who were involved in trying to find alternatives to benzodiazapines which might help [Mr D]. From all accounts this was not successful, but the attempt seemed entirely medically appropriate.

   It is very interesting to note the comments from the Chaplain, who noted that [Mr D] was more anxious when family members were present, and suggested less family involvement. That the family acquiesced to this suggestion suggests they understood his concerns.

d) The decision to discharge [Mr D] on 18 October was more at the behest of the family, than the medical staff. There was strong input from Allied Health and Social Work Services, and although there were medical concerns about his continued deterioration, all parties agreed it was a reasonable alternative to transfer him to a private hospital.

   That he returned suddenly because of rapid deterioration (due to development of ventricular tachycardia), bears no relevance to the plan agreed by all parties.

e) This is one area which is very difficult to comment on. The family obviously had many concerns, and [a senior Registrar] is reported to be very distressed that his attempts seem to have been belittled by the family. I do not believe I can comment on the adequacy of the communication. The perception of [the family] was that this was not enough, but this is not supported by documentation and comments made by the medical staff.

f) The co-ordination of care by all medical staff is also difficult to ascertain, although it is documented that a very large number of medical and Allied Staff had input into his care. WDHB in their report to the HDC on 26 February 2008 stated, "despite the great work and effort by all the multi-disciplinary team, this does not seem to have been well executed, leaving [Mr D] and the family ill informed, frustrated and dissatisfied with the episode of care."

In Summary:

Apart from some failure of the multi-disciplinary team to co-ordinate care, I find no evidence of inappropriate medical management. There were some issues raised, relating to nursing, perhaps mitigated by shortage of Health Care Assistants and an extreme workload.

[Mrs E]

Executive Summary:

On 17 October 2007, [Mrs E] was referred to ECC by her general practitioner, with symptoms of shortness of breath. She is concerned that during her time in ECC there were lengthy delays in her IV line being attached, and delays in nursing staff responding to her requests for assistance. Overall, she felt that she did not receive timely care while in ECC, and nurses were "brusque".

After her transfer to ward 10 early that morning, [Mrs E] is concerned about long delay in nurses answering call bells, lack of nursing care, lack of assistance when moving rooms, delays in turning her drip back on, failure to adequately treat her respiratory symptoms and uncaring and unprofessional behaviour by staff. It also appears that, at some stage, [Mrs E] was left without a patient identification bracelet. Furthermore, [Mrs E] was particularly concerned about the standard of hygiene on ward 10 (she also commented that her oxygen mask was dropped on the floor while in ECC and then replaced). [Mrs E] also queries whether her shortness of breath was adequately managed.

Specific Complaints:

1. Delays in medical and nursing assistance.
2. Lack of nursing care.
3. Uncaring and unprofessional behaviour by staff.
4. Standard of hygiene.
5. Adequacy of medical management.

Expert Advice Required:

Please comment on the standard of care provided to [Mrs E] in ward 10. Explain what standards apply and whether they were complied with. Please include comment on:

a) the appropriateness of the management of [Mrs E's] respiratory condition.

Through her previous occupation as a nurse, and as a Board Member of WDHB, [Mrs E] outlined many concerns relating to staff, communication, cleanliness, patient comfort and outpatient clinics. All these points (a total of 27) have been very thoroughly responded to by [the Director of Nursing/Quality Facilitator] in a letter written to [Mrs E] on 3 March 2008. [She] has outlined strategies available for improvement and I do not believe these need to be reiterated, but will concentrate on medical and nursing concerns.

Careful perusal of the notes, does not document any major medical mismanagement except perhaps for a long delay before IV fluids were started in ECC, especially as it is documented in the notes she had continuing diarrhoea.

She was given standard treatment for an upper respiratory tract infection. Although nebulisers were not specifically charted (? mistake as charted as inhalers), nursing notes document she was offered nebulisers early in the afternoon following her admission to ward 10. She is said to have refused these, and continued with inhalers. The next day she got some benefit from a nebuliser (including saline). This may well have been included in the therapeutic regimen earlier, but is certainly not universal standard treatment (saved for people with significant mucous plugging).

It is more difficult to comment on [Mrs E's] complaints re the nursing service. WDHB has already responded to her comments. As mentioned, notes do not allow us to document delays in attention, difficulties in transit, or indeed hygiene of the wards.

However, at a time [Mrs E] was under particular stress (commented on several times in the notes) she perceived considerable deficiencies in nursing care and this must be accepted.

<u>Summary</u>:

I find no major deficiencies in the treatment of her URTI apart from some problems with IV access and fluid institution.

There may well have been some perceived deficiencies in optimum nursing care, exacerbated by a shortage of HCAs and extreme nursing workload.

<u>General issues</u>

Contingency Planning

a) The Clinical Practices Manual outlines procedures to be followed at times of considerable workload pressure. This includes assessment of workload using the Acuity Management tool, actions where resources are limited (flow diagram), admission process, warding and implementing a care plan, and patient placement in Inpatient settings. All document ways in which patients are admitted, and refer to contingencies when difficult situations arise. A specific contingency — "Operational Capacity Escalation Plan", notifies all staff when a certain level of capacity is reached, and contingencies including input from senior clinicians to help move patients on, and release more beds.

b) One cannot facilitate flow through the hospital if the facilities and beds are inadequate to cope with the volumes flowing into those facilities. In that there has been corridor medicine in ECC and the hospital capacity over 95% for much of this winter (recommended 85%), there is little doubt that there has been compromise with optimal patient flows.

c) The ability to cope with enormous volume of patients is threatened by lack of staff, medical, nursing and allied. Shortages in all three areas have been documented, and puts extra burden on an already overworked clinical force.

d) The predictive models and reporting system appear satisfactory. They continue to highlight the ongoing problems with workload in this hospital.

The major concern in past few years has been the inadequacy of the Emergency Care Centre to cope with an increasing influx of patients arriving unannounced, or after referral from their general practitioners and A & M Clinics. Such an influx is unlikely to go away (especially in the winter months) and efforts must be made to reduce the non-emergency admissions to the ECC.

This can be done in two ways:

i) **Enhancing primary care**, and increasing numbers of patients that can be handled in the community. I am not sure of what WDHB is doing in respect to primary care options, but this has been successful at CMDHB and ADHB and should be encouraged if not already in place.

ii) **Demand Splitting**: This involves taking non-emergency (Triage 3–5) patients referred to inpatient services out of ED, and bypassing them into an admission ward. As far as I am aware a plan for an 80+ Admission Ward had been approved by the Board and will be built, hopefully in the near future. This will alleviate the pressure on the ECC but will not necessarily negate the need to build more capacity in the major hospital in the future.

As far as I am aware, the Emergency Department at WDHB is the only department in New Zealand that does not have absolute leadership of the Emergency Department facility. Like inpatient departments it is just a user of the system. This has left an enormous leadership vacuum, and a strong recommendation would be to place the ECC under Emergency Department leadership immediately,[103] with the inpatient services continuing to utilise the services as before. This may bring about a considerable improvement in many facets of emergency care performance.

It is interesting to note that as long as four years ago the clinical leaders were constantly outlining to the Board the need for more beds to cope with the predicted increase in patient workloads. This concern seems to have been ignored up until recently, perhaps motivated by some unfavourable clinical events.

This delay in forward planning has left the clinical staff in an intolerable situation, hoping to cope as best they can in a facility not capable of sustaining such volumes. Medical and nursing staff continue to work under extreme pressure.

Of all aspects of performance that has most impinged on ability to provide appropriate standards of care the Board should perhaps be held the most accountable.

[103] Dr Henley clarified that when he refers to leadership in ECC, he means someone who has overall control of how things are managed in the department; he does not mean that the medical care/management of the medical patients should be carried out by ED specialists.