30th September 2022

Dr Andrew Connolly
Acting Chief Medical Officer
Counties Manukau
100 Hospital Road
Otahuhu

Dear Dr Connolly

Thank you for your request for reviewing this particular case that occurred at Middlemore Hospital which is provided below.

Introduction and conflicts

I am a Fellow of the Australasian College for Emergency Medicine and have been working as an Emergency Physician in the Emergency Department of Wellington Regional Hospital since 2004. I was the Clinical Leader of the department from 2009 to 2019 and am currently the Clinical Director for the Hospital Flow group at Te Whatu Ora – Capital, Coast and Hutt Valley. I am on the NZ Faculty Board of ACEM and have been the Faculty Chair until recently. I am still in active Emergency Medicine clinical practice.

I have no known conflict of interest in this case.

Scope

This review will focus on the first presentation of this patient (henceforth referred to as Ms A) to the Middlemore Emergency Department between approximately 01:00 and 01:30 on 15th June 2022. I have not been asked to review or comment on the subsequent presentation later the same day, although I am aware of the outcome.

Information provided

To assist with this review I have been provided with:

- A brief summarised timeline of the event
- General ED data pertaining to the time Ms A was in the ED area
- A summary of clinical space in ED
- Trigger tool for Triage from the 14th and 15th June
- A morning status update from 15th June
- Minutes of a Winter Response Team meeting the week prior
- CMH Surveillance briefing, representing week 23 (the week prior to this incident)

I have not received or read any clinical notes. I have not reviewed any policies regarding the triage process or escalation procedures as outside the scope of this review. I have not visited the site in person.

Summary of events from the information provided to me

The data provided shows that it was a busy evening in the ED with over 200 patients in the department in each of the seven hours leading up to this event. In a department with 151 treatment spaces, this reflects a sustained over-capacity situation with marked overcrowding. -

A high number of patients (46) were in the waiting room at the time Ms A presented. The waiting room has 30 physical seats, so the significant overcrowding extended into the waiting room which would've looked extremely busy to anyone walking into the area. It is unclear what the general acuity for patients in the waiting room were, but it can be surmised from the ACNM's actions that there were concerns about prolonged waiting times for patients to be assessed.

The ACNM informed the people in the ED waiting room around 00:45 that the waiting time for non-urgent cases would be 'some hours'. Alternative options were provided for those considering not to wait in the ED and it is unclear how many took up those options.

The information provided allude to the fact that there were 3 nursing rostering vacancies (about 10%) at the time of this event; most notably, one of those was a nurse allocated to the waiting room. I have not been provided with a task description for this role so cannot make any further comments as to whether this would have helped the situation.

It was noted (via CCTV) that Ms A entered the ED waiting room on her own around 01:00 and that she did not register nor attend triage at the time. It is unclear whether she was present and heard the announcement by the ACNM about delays in assessment.

A conversation then occurred between Ms A and the ACNM. It is unclear how this conversation was initiated and whether it was documented in any form. The ACNM recalled that Ms A told her that she had had a headache for 2 days (no other information shared). She was given the option to wait and be assessed or alternatively to go home, presumably, and return should any concern arose. Ms A was not offered an Emergency Q voucher (no information as to the rationale behind this decision was provided).

The patient is then observed on CCTV speaking to her husband, and they are seen to leave the Department at approximately 0130 hours, without any further discussions with clinical staff.

Comments

A busy and overcrowded Emergency Department

The ED was busy and at least 30% over-capacity, leading to a large number of patients awaiting assessment and/or treatment in the waiting room, with delays very likely. The Trigger Tool for Triage provided, confirms a sustained influx of high numbers of patients from around 20:00 and particularly from around 22:00 well into the early hours of the morning. As the footnote on the Tool states, it is well known that a surge in patient presentations will have a downstream impact, not only on the ED but also on other inpatient and ancillary services. The Morning Status report confirms this downstream impact and paints a stark picture of a hospital system under enormous pressure, with ED over capacity and an incredible 94 patients in ED awaiting bed placement and a hospital (Medical and Surgical) occupancy of 98.5%. This will indicate that ED had more than a ward-full of inpatients in their spaces, very likely preventing them from assessing and treating recently arrived patients in a timely manner.

What is also clear from the data is that this was not an isolated busy day. Information provided in the minutes of the Winter Response Team meeting the week prior shows a system under significant and sustained pressure, reflected in the worse-ever compliance with the Shorter Stays in ED health target for CMH during the month of June (only to be surpassed in July), reflecting both the admitted and discharged streams. This is a good barometer of how well a system is managing its acute care

streams and it is clear that this institution is struggling. The CMH Surveillance briefing, representing the week prior to this incident, shows a stark rise in presentations, reaching record numbers. I note the comment that the number of patients requiring admission has not increased by the same margin. It is difficult to draw conclusions as to why that is without an in-depth analysis of the data (outside the scope of this review) as it could be due to improved processes in ED, increasing use of ambulatory and/or community care post-discharge or it could reflect an increased usage of the ED by the local population unable to access primary care, including urgent care centres, as they are also under pressure.

Overcrowding, long delays in ED assessment and delays to ward transfers are sadly far too common in hospitals and Emergency Departments across Aotearoa New Zealand. Overcrowding, which refers to the situation where ED function is impeded because the number of patients exceeds either the physical and/or staffing capacity of the ED, is the most concerning issue facing Emergency Medicine across Aotearoa New Zealand and is a critical indicator of a system dysfunction. The evidence provided to me strongly reflects an overcrowded ED, a hospital well over acceptable capacity and subsequent system dysfunction. I strongly suspect that it is only through the exceptional hard work and dedication from staff that there are not many more serious incidents occurring that affects patient safety. This is an unsafe environment for both patients and staff and is not sustainable.

Research has repeatedly shown that ED overcrowding leads to increased morbidity (delays in assessment and treatment, increased risk of error, increased inpatient length of stay) and increased mortality. Of note, ED overcrowding leads to an increase in patients not waiting for assessment and/or treatment.

Patient left before triage or full assessment

The ED did not get the opportunity to assess Ms A in more detail. We do not know what reasoning let to Ms A's decision not to wait for a triage and/or full assessment, despite her self-triaging as requiring ED care in the early hours of the morning. It is important to note that at no stage was the patient at fault here. The overloaded and under pressure health system failed her.

Based on the limited information provided, I will make the following observations regarding the time Ms A presented:

- It is clearly a system under significant pressure with a large number of patients in the ED and ED waiting room at 01:00 in the morning, further exacerbated by nursing absences.
- It is unclear why this patient did not present herself for registration and/or triage on arrival and why they made a decision to leave before a full triage assessment. Possible contributing factors might've been:
    - Not understanding the registration and/or triage process – I am unable to comment further on this as I have not seen the layout and signage in the waiting area
    - Seeing an overcrowded waiting room and thinking she won't be seen for a while
    - Thought the interaction with the ACNM was a triage assessment and felt that she would not be seen; language barriers may have contributed to a misunderstanding
    - Hearing the announcement (or part thereof) and thinking that she may not have an urgent condition – we do not know for sure if she was in the waiting room at the time

It is important to note that an early triage assessment may not have change the eventual outcome. I appreciate that a triage and/or 'front of house' assessment may have recognised 'red flags' that may have led to early imaging. Unfortunately we cannot assume this i) would've happened, ii) would've showed evidence of haemorrhage or ii) would've changed the outcome.

As Emergency Departments continue to struggle with ever-increasing presentation numbers, delays in admitting patients to wards and significant ED overcrowding, announcements in ED waiting room regarding delays in assessment / treatment occurs at an increasing frequency throughout EDs in Aotearoa New Zealand. This occur more frequently at night due to a general reduction in overall efficiency across the whole system (e.g. reduced medical & nursing staffing, fewer senior clinical decision makers, reduced access to imaging, delays in transfers to wards). The announcement, when used, should be aimed at keeping patients informed and allow them to make informed decision and appropriate alternatives need to be provided. From the information I received, it appears this had occurred. The unintended consequence is that people may not always be able to make an informed decision on the seriousness and/or acuity of their condition and some may stay that could safely have seek alternative care and some with serious conditions may leave as they don't want to wait. Ideally patients who decide to leave should have a repeat triage assessment to minimise the risk of those with potentially serious conditions leaving. Unfortunately, this is often not possible due to staffing shortages and/or other pressures on the system at the time. It is of utmost importance that there is no blame aimed at the ACNM making the announcement as they only tried to communicate a desperate situation to the public and keeping them informed. Above all, these type of announcements will not be required if the system-as-a-whole is functional and allows for good patient flow throughout the system.

Headache presentation to ED – in general

Just a few brief notes on patients presenting to ED with headache. Headache is a relatively common presentation to Emergency Departments (around 2-4% of all ED visits) and can be really challenging as a small percentage (< 2%) will be potentially life-threatening or severely disabling. Many more patients with benign headache will present to ED for every patient with a serious cause. It is impossible to differentiate unless at least a focussed history and brief physical assessment is done (looking for 'red flag' symptoms). Any patient who presents with headache who wants to leave before a full assessment should be reassessed prior to leaving, noting that the majority will have a benign cause.

Summary and recommendations

Firstly, I wish to express my sincerest condolences to Ms A family for the sudden loss of a loved one.

Despite knowing the final outcome, from the information supplied to me, I have to deduce that this was an unfortunate, unpredictable and likely unavoidable outcome. The ED staff did not get an opportunity to fully assess Ms A. I cannot comment whether an early full assessment would have changed the outcome as I do not have detailed information about the subsequent presentation. Patients commonly presents to an ED with headache and the vast majority will have a benign cause that likely require minimal further investigation and/or complex treatment. Considering the event in isolation, removing retrospective bias, I conclude that the ED staff acted in good faith according to acceptable practice at the time. They were under significant pressure and felt those waiting to be assessed needed to be informed of delays. I suggest Middlemore ED review the indications for a waiting room announcement when delays in assessment are prolonged and script it to ensure consistency.

I do, however, need to express serious concern about the degree of ED overcrowding at Middlemore ED, which is an indicator of significant system failures. Ministry data show that only around 50% of admitted patients leave the Middlemore ED within 6 hours which will always cause overcrowding downstream. This will also affect the discharge stream negatively, as delays to assessment will ensue. I urge Te Whatu Ora – Counties Manukau to review and improve acute patient flow with an emphasis on ensuring admitted patients leave the ED when the emergency part of their journey

have been completed. This will allow space in the ED to assess newcomers in a more timely fashion, which in turn should lead to less overcrowding. Liaison with surrounding primary care and urgent care facilities, as well as communication to the population will be important aspects of a system-wide approach.

Yours sincerely

Dr André Cromhout (MBChB, FACEM)

Emergency Physician
Clinical Director, Hospital Flow
Te Whatu Ora – Capital, Coast and Hutt Valley