

Child dies after being discharged from hospital following seizure

1. On 12 October 2021, this Office received a complaint from the Nationwide Health and Disability Advocacy Service regarding the care provided to the late Master A at Health New Zealand | Te Whatu Ora (Health NZ). Master A's mother, Ms A was concerned that her son Master A did not receive services provided with reasonable care and skill. In particular, Ms A raised concern that Master A was misdiagnosed with a suspected febrile seizure,¹ leading to Master A becoming unresponsive while at home and subsequently passing away from a stroke.² My deepest condolences go to Ms A and her family for the tragic loss of their son and brother.

Information gathered

2. Prior to the events of this complaint, Master A was a healthy active three-year-old with a language developmental delay.³ At 9.40am on 4 September 2021, he suddenly called out to his mother and fell to the ground unresponsive, stiff, and shaking. He recovered consciousness after approximately 10 minutes but was unable to talk, walk, sit, or stand. Ms A took Master A to his general practitioner (GP), who suspected he had experienced a seizure and advised transfer to the hospital Emergency Department (ED) for further assessment.
3. Master A arrived at the hospital ED at 11.44am. He was unable to stand to have his height measured and was weighed while sitting. The registered nurse documented in the clinical record that Master A was unsteady and unable to weight-bear on his right leg. The registered nurse completed observations, including blood pressure, heart rate, oxygen saturation, temperature, level of consciousness, and respiratory rate, at 11.51am and neurological observations at 12.07pm. Master A's blood pressure was abnormally high, with a systolic⁴ reading of 135.⁵ An internal serious event review (SER) completed by Health NZ notes that the nurse recognised that the reading was high and intended to recheck Master A's blood pressure. The review also notes that the observations, including blood pressure, were recorded in the electronic record but that the nurse did not verbally communicate to the paediatric registrar that Master A's blood pressure was elevated.
4. Health NZ's Nursing Observation and Monitoring – Paediatrics policy outlines situations where blood pressure is to be measured more frequently than the initial complete set of observations. The policy states that blood pressure should be recorded at least hourly, or as directed by the medical team, when there are signs of hypertension (high blood pressure)

¹ Convulsions in children triggered by fever or high temperature.

² When blood flow to the brain is interrupted by either a blocked blood vessel or bleeding in the brain.

³ Master A had a vocabulary of a few single words and was seeing a speech language therapist.

⁴ The higher number in a blood pressure reading, representing the pressure on arteries when the heart is contracting.

⁵ Normal systolic for Master A's age would be 80–100.

or neurological concerns and that, if a blood pressure is outside of the normal range, it should be retaken with a manual blood pressure cuff. In addition, the policy notes that neurological observations are required for new or significant seizure activity and that neurological observations will be recorded, at a minimum, hourly unless otherwise specified by the medical or surgical team. The clinical record initial assessment neurological section has a highlighted area noting 'This patient has presented with a neurological condition. Continue to monitor neurological status.'

5. At 12.47 pm, the paediatric registrar reviewed Master A. Ms A said that she tried to explain Master A's symptoms and that the registrar told her she already knew what had happened because she had spoken to Master A's GP. Ms A explained that Master A could not stand and said the registrar told her that many patients who had experienced a seizure took a long time to recover and that she should not worry. The registrar requested a urine sample, and Ms A explained that Master A had not urinated or had anything to eat or drink since the collapse. The clinical record documents a physical and neurological examination and notes that Master A was drowsy. The documented plan was to reassess Master A neurologically when he recovered. The registrar then discussed her assessment and plan of care with the on-call paediatrician.
6. Observations are documented on the Paediatric Early Warning Score (PEWS) chart at 1.30pm, but no blood pressure reading is recorded. There is also no record of any further neurological observations being taken. The SER notes that the nurse did not take Master A's blood pressure at this time because Master A was asleep and Ms A had indicated that she did not want him woken. Ms A stated that Master A was sleepy and not responding well while he was in hospital and that he was asleep when the registrar came back to see him at around 1.50pm.
7. By 2.36pm, Master A began recovering. He was eating and drinking small amounts and was walking with support when the nurse attempted, unsuccessfully, to obtain a urine sample. Nursing change-of-shift handover occurred between 2.30pm and 3pm. The SER notes that, during handover, the afternoon shift nurse was informed that Master A had recorded a high blood pressure and a further measurement needed to be taken. At around 4pm, Master A was encouraged to go to the playroom. The clinical record notes 'has returned to baseline, walking around, rode on toy tractor in playroom.' Shortly after this, the registrar and the nurse observed him as walking unaided with no apparent leg weakness or gait abnormality. In contrast, Ms A stated that Master A was unable to stand or walk independently and that she used a wheelchair to take him home.
8. The SER notes that Master A's test results⁶ were normal and had been reviewed by the paediatric registrar. The SER also notes that the registrar did not recall being alerted to Master A's high systolic blood pressure reading, and an audit of the electronic record showed that she did not independently view the observation chart. The SER also notes that

⁶ Electrocardiogram (ECG) and blood tests.

the registrar had considered and discussed alternative diagnoses, including a single seizure, epilepsy, and a tumour or other brain event, with the on-call paediatrician.

Discharge from hospital

9. Master A was discharged home with patient information about seizures, how to manage if a seizure occurred, and when to get medical help. Ms A said that she questioned the decision to discharge Master A, saying to the doctor “are you sure I can take my son home? He still looks very sick, I’m very worried about him.” Ms A said she was told not to worry and that it took many patients time to recover from seizures. In contrast, the registrar told HDC that she did not go through the discharge advice herself as she had delegated this to a nursing colleague and that any parental concerns or questions expressed at the time of discharge are usually fed back to the medical staff. The registrar stated that it would not be her usual practice to send a child home after a seizure if the parent’s opinion was that they had not fully recovered and that she does what she can to make sure parents of patients are comfortable with discharge plans. The registrar expressed regret that this was not the case for Master A and Ms A. She felt that Master A had fully recovered as she and the nurse had seen him walking and the nursing notes documented him eating and drinking.
10. Master A’s blood pressure was not rechecked before discharge. The afternoon shift nurse told the SER team that Master A was asleep when she went into his room, so she left without disturbing him. The SER notes that, if further monitoring had shown a sustained elevated blood pressure, this may have resulted in further investigations and a change in diagnosis. However, it is very unlikely to have altered the outcome or resulted in Master A’s survival.
11. After returning home, Master A went to bed and slept. Ms A said she attempted to wake Master A so he could eat and drink at around 7pm, but he did not get up and went back to sleep.
12. The clinical record of 5 September 2021 documents that Master A was reported to have been retching all evening, walking abnormally, and only ate a small amount of dinner. Ms A said she checked on Master A several times throughout the night, but he did not wake up. At approximately 5.45am on 5 September 2021, Ms A found Master A unresponsive. He was not breathing and did not have a heartbeat. Ms A immediately called emergency services.
13. Master A was given CPR and transferred by ambulance to the hospital, where he was admitted to the intensive care unit. A CT head scan found that he had suffered a posterior cerebral circulation stroke⁷ and had unsurvivable brain swelling. Master A passed away surrounded by his family in September 2021.

Use of interpreter

14. Ms A’s first language is Mandarin. During Master A’s admission of 4 September 2021, Ms A was not offered an interpreter. The SER notes that the Paediatric Nursing Initial Assessment electronic form has a section for identifying cultural and communication concerns. If the

⁷ When blood flow is disrupted in the arteries supplying the back of the brain. Health NZ stated that this is a rare condition in paediatrics and can be difficult to diagnose.

questions in this section, relating to communication and whether an interpreter is required, are answered with 'No', this section does not appear in the finalised document. The clinical record for 4 September 2021 does not contain this section of the form.

15. The registrar acknowledged that Ms A's concern that she was not offered an interpreter on 4 September 2021 was valid. Although the registrar believed at the time that she understood Ms A's concerns well and that Ms A understood her assessment, she regrets not offering this service. Health NZ told HDC that, if an interpreter had been used, Ms A may have been able to describe events that occurred at home more easily and express her concerns about Master A's condition and the plans for discharge.
16. Health NZ provided the Hospital Health Pathway for interpreter services, which notes that interpreter services are available 24 hours a day, seven days a week. The pathway also notes that 'some patients who are competent with everyday English may still require an interpreter for complex consultations, particularly if compounded by distress or illness.'
17. The social work assessment for 5 September 2021 documents that Ms A's first language is Mandarin and that she can communicate in English but would benefit from an interpreter. On arrival, Ms A was introduced to a paediatric registrar who spoke Mandarin. The clinical record notes regular use of interpreter services between 5 and 7 September 2021.

Responses to provisional decision

Ms A

18. Ms A was provided with a copy of the 'information gathered' section of my provisional report and did not comment.

Health NZ

19. Health NZ was provided with a copy of my provisional report and given an opportunity to comment. Health NZ advised they accepted my decision and appreciated that the report acknowledged the significant improvements it has made since these events. Health NZ agreed with my recommendations and stated that it is committed to implementing them.

Decision: Health NZ – breach

20. In making my decision, I sought independent clinical advice from Dr Heidi Baker, paediatrician (Appendix A).
21. Master A's blood pressure reading was abnormally high when he was admitted to hospital on 4 September 2021. He had experienced a seizure-like event that day and, at the time the observations were taken, was under investigation with no formal diagnosis determining the cause of his seizure. A single set of neurological observations was completed during this admission, and Master A's blood pressure was not rechecked before he was discharged home. In addition, the abnormal blood pressure reading was not communicated to the paediatric registrar so it could be considered when forming a differential diagnosis and treatment plan. I note that the high blood pressure recording was documented but not independently reviewed by the registrar.

22. Dr Baker advised that Master A's blood pressure should have been brought to the attention of medical staff and should have been repeated, as hypertension would normally warrant further assessment or observation until normalised. In Dr Baker's opinion, failure to take these actions constitutes a moderate departure from the accepted standard of care, and failure to recheck Master A's blood pressure before discharge constitutes a severe departure from the accepted standard of care.
23. I accept Dr Baker's advice, and I note that Health NZ's policy advises at least hourly blood pressure recordings, unless directed otherwise by the medical team, when there are signs of hypertension or neurological concerns and that a high blood pressure recording should be repeated manually. The policy also states that neurological observations are required for new seizure activity, and the electronic record states 'continue to monitor neurological status.' In my view, one set of neurological observations is insufficient to meet this requirement. I am highly critical of the failure to notify medical staff of an abnormal blood pressure reading and that observations were not carried out as outlined in the policy. The rationale given for not rechecking Master A's blood pressure was to avoid waking him. Taking observations is a key safety measure and as such, eclipses the patient's comfort in allowing them to sleep. It is important that staff prioritise these processes to ensure the correct information is obtained to make good clinical decisions. I note that only two attempts were made to recheck Master A's blood pressure during his admission and both times he was left to sleep. I consider that there was a reasonable opportunity to repeat a blood pressure recording, as it is documented that Master A was awake mobilising at 2.37pm and encouraged to go to the playroom at 4pm.
24. Dr Baker advised that if Master A had not been walking and had not returned to baseline function, this would raise red flags for further investigation. Therefore, discharging Master A home if he had not returned to baseline would constitute a severe departure from the expected standard of care. I accept Dr Baker's advice and note her comment regarding the discrepancy between Ms A's recollection and the clinical staff reports, as noted in the SER and documented in the clinical record. I have considered that Ms A, as Master A's parent, would be most familiar with his usual behaviour. I have also considered the contemporaneous documentation that notes Master A walking without any apparent abnormality. I note Dr Baker's advice that neurological assessments on very young children can be challenging and that Master A's preexisting speech delay, along with English being Ms A's second language, would have made the assessment more difficult, particularly without the use of an interpreter.
25. Two staff witnessed Master A walking normally, and clinical documentation notes this. Although he may have been mobilising and eating better than when he arrived, I find it more likely than not that Master A was not back to baseline functioning at the time of discharge, as reported by his mother who raised questions prior to his discharge on this matter. I note that Master A was not seen by a medical officer on discharge, there was no repeat blood pressure reading indicating it had returned to baseline, and there is a lack of clarity on how Master A's baseline function was assessed. It is clear to me that Ms A did not feel listened to and was unable to effectively communicate her concerns. I am critical that an interpreter was not contacted to assist with communication. The use of an interpreter would have

reduced the language barrier, allowing for clear communication between Ms A and the medical team assisting them to understand Master A's developmental challenges, his normal baseline, and Ms A's concerns.

26. As outlined above, Health NZ did not provide care in accordance with its policy. The staff failed to take the regular observations required for Master A's situation and did not escalate the finding of an abnormal blood pressure or ensure that all vital signs and neurological function had returned to normal before discharge. Accordingly, I find that Health NZ did not provide services with reasonable care and skill and breached Right 4(1) of the Code.⁸

Changes made

27. Health NZ has made several changes following the SER, including the following:
- a. Extensive education has been provided to paediatric medical and nursing teams on communication and escalation of abnormal observation findings. Further education was provided with the nationwide rollout of the PEWS document in 2023, which reiterated the importance of blood pressure recordings and observation frequency for certain conditions.
 - b. The nursing electronic discharge template has been updated to include a prompt to check whether observations were completed within the last hour before discharge.
 - c. Links prompting staff to assess language and understanding before using an interpreter have been incorporated into a pathway for accessing interpreter services within electronic documentation assessment templates used by both medical and nursing staff.
 - d. Nursing staff and their managers are required to complete an online communication learning package called Kōrero Mai.

Recommendations and follow-up actions

28. I recommend that Health NZ:
- a. Provide a formal written apology to Ms A and her family for the breach of Right 4(1) of the Code identified in this report. The apology is to be sent to HDC, for forwarding to Ms A, within three weeks of the date of this report.
 - b. Provide HDC with an update on implementation of the outstanding SER recommendations, within three months of the date of this report, including but not limited to:
 - i. Translation of the Kōrero Mai Family Escalation document into other languages;

⁸ Right 4(1) of the Code states: 'Every consumer has the right to have services provided with reasonable care and skill.'

- ii. Managing phone calls from non-English-speaking families; and
 - iii. Incorporation of condition-specific safety netting advice into the paediatric discharge summary.
 - c. Audit the last three months of paediatric nursing and medical orientation records for compliance with completion of the Kōrero Mai online learning package and training in PEWS and the escalation pathway. The results of this audit and any corrective action are to be provided to HDC within three months of the date of this report.
29. A copy of this report with details identifying the parties removed, except Health NZ and the clinical advisor on this case, will be placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

Dr Vanessa Caldwell
Deputy Health and Disability Commissioner

Appendix A: Independent clinical advice to the Commissioner

The following independent advice was obtained from Dr Heidi Baker, paediatrician:

'I have been asked to provide clinical advice to HDC on case number 21HDC02446. I have read and agree to follow HDC's Guidelines for Independent Advisors.

I am not aware of any personal or professional conflicts of interest with any of the parties involved in this complaint.

I am aware that my report should use simple and clear language and explain complex or technical medical terms.

Qualifications, training and experience relevant to the area of expertise involved:	MBBS (Melb), FRACP (General Paediatrics 2005, Paediatric Emergency Medicine 2009), FACEM (Adult and Paediatric Emergency Medicine 2010). I worked in Paediatric Emergency Medicine for 15 years at Starship CED. I continue to work in Adult Emergency at Te Toka Tumai (15 years). I have also trained and work as a General and Neurodevelopmental Paediatrician – private practice (POD Paediatrics – Queenstown and Auckland).
Documents provided by HDC:	1. Letter of complaint dated 12 October 2021 2. Health NZ's response dated 7 July 2022 3. Clinical records from Health NZ covering the period 4 September 2021 to 7 September 2021
Referral instructions from HDC:	In relation to the care provided by Health NZ [...] ([the] hospital Paediatric Service), please advise on the following: 1. Was the assessment and diagnosis of seizure on 4 September 2021 reasonable? 2. Was the decision to discharge [Master A] on 4 September 2021 appropriate? 3. Was the discharge carried out to an acceptable standard? Please include comment on whether the safety netting advice was adequate. 4. Was the paediatric registrar adequately supervised? 5. Any other matters in this case that you consider warrant comment.

Factual summary of clinical care provided complaint

Brief summary of clinical events:	The complaint has been raised by [Ms A], [Master A]'s mother. [Ms A] raised concerns about inadequate assessment and inappropriate discharge of [Master A] from the paediatric service at [the] hospital on the 4/9/2021. This was the day prior to his presentation from the community (home) after cardiac arrest during which he received CPR, two doses of adrenaline and was intubated and admitted to ICU. [Master A] was subsequently diagnosed with an R posterior circulation stroke, hydrocephalus and an unsurvivable brain injury. His life support was discontinued following several family meetings [in early September] 2021.
-----------------------------------	---

Names have been removed (except Health New Zealand and the advisor on this case) to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name.

	[Ms A]’s complaint does not centre on care from 5/9/21 up to [Master A]’s passing. Summary of events – 04/09/2021 3 y 11-month-old [Master A] presented to [his local] AH care following an acute event that morning at home. He had previously been well, with background of speech delay only. On the morning of the 4th he was observed to have breakfast with his family then suddenly slump, call “mummy” and become stiff. He remained unresponsive for up to 10 minutes. He was assessed at Urgent care and transferred with call ahead to [the] Emergency Department where he was seen by the nurses (12:12) and the paediatric registrar (12:52) in the Children’s Emergency Centre. [Master A] was not able to walk into the department or stand for weighing. He was assessed, observed and discharged home with written discharge advice, seizure information sheets and follow-up plan of an EEG [electroencephalogram] to assess for first afebrile seizure – the working diagnosis. [Master A] had one blood pressure done in ED on arrival and was hypertensive. This was not repeated. There are discrepancies between nursing & medical notes, and the recollection of his mother around his recovery from this event prior to discharge home on 4 September. While he was unable to mobilise and stand upon arrival on the 4th, the medical staff and nurses note he walked, rode a tractor in the playroom and ran from a toilet towards his mother prior to discharge. [Ms A] states he was unable to walk independently upon discharge and that she wheeled him from hospital. [Ms A] was given a written discharge letter with return advice and the number to call if she had concerns. [Ms A] noted [Master A] retched all evening upon returning home. [Master A] went to bed that evening as he usually does in his mother’s bed. [Ms A] states she tried to wake him and checked on him on four occasions. He was too sleepy to eat or to pass urine. [Master A] was found unresponsive in the morning of 5/9/21 in the bed next to [Ms A]. He had last been seen breathing and warm at 0230 by [Ms A]. First responders found him in non-shockable cardiac arrest. He received CPR first by Fire Brigade and then St Johns. Two doses of adrenaline were given and ROSC [return of spontaneous circulation]
--	---

	was obtained. [Master A] was intubated to support his breathing and transferred to [the] hospital. [Master A] was admitted to ICU. Further investigations demonstrated a right-sided posterior circulation stroke, with herniation and hydrocephalus. He did not receive any ongoing sedation and after a period of observation, discussion with Neurosurgeons, Neurologists, Social work, Paediatrics and his mother – supportive care was withdrawn. [Master A] passed away in his mother’s arms [...] in ICU. [Ms A] gives a recollection of [Master A] not returning to baseline level of function prior to leaving ED on the 4th – particularly around his inability to stand and walk independently (a skill he was proficient in) and his inability to eat (normally independent). The medical and nursing staff had a different recollection of his recovery and have documented this in both their clinical notes and in their response to the complaint. The initial hypertension noted by nursing staff was not transferred to the medical team – who acknowledge they would normally check and repeat this had it been identified or drawn to their attention. The nursing team made an attempt to repeat the BP, but [Master A] was asleep at the time and his mother asked for him to be left. It was not subsequently repeated, however, before discharge. [Master A]’s case was discussed by the treating registrar on the 4th with the SMO Paediatrician on duty. There were no acute bed flow issues, and the usual practice of the admitting team is to provide a longer period of observation or admission if a family member is unhappy about the wellbeing of their child. In her complaint, [Ms A] states she raised concerns about her son to staff but did not feel heard. [Ms A]’s primary language is Mandarin. An interpreter was not used during the 4 September presentation. An interpreter was subsequently used when [Master A] represented on 5 September and throughout his time in ICU. In brief (as not part of the primary complaint) – [Master A] spent time from 5/09/25 to his passing in ICU. He was seen, cared for and discussed by ICU, Paediatrics, Neurosurgery, Neurology and had investigations done to exclude causes for a posterior circulation stroke. His case was discussed with the Neurology team at Starship Hospital.
--	--

Question 1: Was the assessment and diagnosis of seizure on 4 September 2021 reasonable?	
Sources of information reviewed other than the documents provided by HDC:	Starship Acute Stroke Guidelines – published 2024 Starship Seizure Afebrile Guidelines – published 2018 CENA/ACEM Statement on Vital Signs Monitoring in EDs – November 2023 (www.acem.org.au)
Advisor's opinion:	Seizures in children present in many different ways and have usually resolved by the time a child is seen by medical staff. The diagnosis therefore relies upon – • History from witnesses • Examination – for sources/causes • Investigations – either acutely (bloods, imaging) or follow up (EEG). The history and notes provided are consistent with seizure-like activity, followed by a post ictal period. Atypical features for seizure of [Master A]'s presentation are tonic (rather than tonic clonic) body posturing, no incontinence and no tongue biting. [Master A] appears to have had a prolonged period afterwards with failure to return to baseline. [Master A] was hypertensive on arrival. If the hypertension had been recognised as abnormal, in the setting of seizure, it should have alerted physicians to a need for further evaluation or at minimum observation until normalisation. There is inconsistency between parent report of recovery and medical/nursing report of recovery prior to discharge home.
What was the standard of care/accepted practice at the time of events? Please refer to relevant standards/material.	Hypertension was noted on admission. [Master A]'s blood pressure should have been brought to medical attention and should have been repeated. Failure of his blood pressure to normalise would raise red flags for considering further investigation +/- admission to hospital. Accepted practice would be to observe return to baseline following a seizure. Failure to do so would raise red flags for further investigation. I am unable to see the <u>Triage Category</u> that [Master A] was assigned to in the Children's Emergency Care setting. ACEM [Australasian College for Emergency Medicine] guidelines recommend use of triage categories to support timely assessment of patients.

Names have been removed (except Health New Zealand and the advisor on this case) to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name.

Was there a departure from the standard of care or accepted practice? • No departure; • Mild departure; • Moderate departure; or • Severe departure	<u>Hypertension</u> – moderate departure. Attempt was made by second nurse to do blood pressure but was declined as [Master A] slept at the time. <u>Mobility</u> – if not walking/back at baseline – severe departure. It is difficult to comment on this with certainty, however, given the discrepancy between parental report and two staff reports (medical and nursing).
How would the care provided be viewed by your peers? Please reference the views of any peers who were consulted.	<u>Hypertension</u> would routinely warrant further assessment for normalisation, investigation for cause, and treatment if not settling the BP in a normalising direction (Paediatric ED colleagues, Neurology colleagues). If [Master A] had not <u>returned to baseline</u>, further investigations with a CTH [CT scan of the head] at minimum would be considered or a child would be admitted under paediatrics for further work-up and observation until resolution and exclusion of concerning conditions. Moderate/severe deviation.
Please outline any factors that may limit your assessment of the events.	There are <u>discrepancies</u> between nursing & medical notes, and the complainant's (mother's) recollection of events. The discrepancies around whether [Master A] returned to baseline functioning are significant in knowing whether he was discharged inappropriately or had a secondary extension or event that led to his second presentation. <u>Neurological assessment</u> in any three to four-year-old child can be challenging and may involve observations of play and interactions over and above more formalised assessments. In this case, <u>language barriers</u>, both with English as second language and speech delay, may have impacted further assessment, particularly without the use of an interpreter as occurred here.
Recommendations for improvement that may help to prevent a similar occurrence in future.	<u>Abnormal vital signs</u> should be repeated until normalised or an explanation found. This should be communicated to families clearly so they understand the need to repeat them. Recording of PEWS (Paediatric Early Warning Scores) should be flagged prior to discharge of any child from ED/acute services. An <u>interpreter</u> should be offered to ensure no miscommunication or misunderstanding.

Question 2: Was the decision to discharge [Master A] on 4 September 2021 appropriate?	
List any sources of information reviewed other than the documents provided by HDC:	Starship Acute Stroke Guidelines – published 2024 Starship Seizure Afebrile Guidelines – published 2018
Advisor's opinion:	[Master A]'s abnormal blood pressure should have been alerted to medical staff. He should have remained until it was recorded to have normalised prior to discharge, particularly when he presented with alteration in neurological state. An explanation should have been sought for his raised blood pressure. This should always be taken in context of past history. In [Master A]'s case, there was no documented history of hypertension.
What was the standard of care/accepted practice at the time of events? Please refer to relevant standards/material.	Standard of care would be normalisation of observations and return to baseline before discharge. There is literature around children being sent home with one abnormal vital sign from paediatric departments. This is usually temperature when the treating staff have documented what the cause of a temperature might be (ie, viral).
Was there a departure from the standard of care or accepted practice? • No departure; • Mild departure; • Moderate departure; or • Sever departure.	Severe departure – blood pressure was not repeated prior to discharge, including when noted child was awake by nursing and medical staff. It is not typical for a child of this age to have a raised blood pressure without a clear cause (ie, known renal impairment). This along with any concerns about level of alertness or gait would typically have led to admission and further investigations. It is noted that admission is unlikely in this instance to have led to an alternate outcome for [Master A] but may have been less traumatic for his family.
How would the care provided be viewed by your peers? Please reference the views of any peers who were consulted.	Expect normalisation of observations prior to discharge or further work-up/explanation. Unusual to send home a hypertensive child without clear understanding of cause.
Please outline any factors that may limit your assessment of the events.	The variable histories provided between family and staff.
Recommendations for improvement that may help to prevent a similar occurrence in future.	Use of an interpreter if English is a second language. Paediatric Early Warning Scores (PEWS) used – they are referenced here as 2 but not clearly stated what the points were scored for. Lower threshold for admission/observation if English is second language or other mitigating circumstances. Clarity around return to baseline with parents clearly documented as joint decision/observation.

Names have been removed (except Health New Zealand and the advisor on this case) to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name.

Question 3: Was the discharge carried out to an acceptable standard? Please include comment on whether the safety netting advice was adequate.	
List any sources of information reviewed other than the documents provided by HDC:	
Advisor's opinion:	Yes – written, verbal and follow-up plan provided to family. Safety netting advice and phone number given. Doctor acknowledges usually speaks to patients themselves, but if return to baseline nurses may hand paperwork to them. Unclear if patient seen to eat in department from notes. Blood pressure should have normalised prior to discharge.
What was the standard of care/accepted practice at the time of events? Please refer to relevant standards/material.	No – observations should have returned to baseline before discharge. Neurologically post seizure should be back at baseline and eating or drinking.
Was there a departure from the standard of care or accepted practice? • No departure; • Mild departure; • Moderate departure; or • Severe Departure	Severe departure – BP not rechecked. No departure – in written information given.
How would the care provided be viewed by your peers? Please reference the views of any peers who were consulted.	Normalisation of observations essential before discharge unless alternative explanation.
Please outline any factors that may limit your assessment of the events.	As noted – variable history
Recommendations for improvement that may help to prevent a similar occurrence in future.	No discharge for hypertension in a child presenting with neurological abnormalities. It is noted, however, that even had [Master A] been admitted, it is unlikely the outcome for him may have been any different. His family, however, would not have had to experience an out-of-hospital cardiac arrest.
Question 4: Was the paediatric registrar adequately supervised?	
List any sources of information reviewed other than the documents provided by HDC:	

Names have been removed (except Health New Zealand and the advisor on this case) to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name.

Advisor's opinion:	Yes – it would be typical for a registrar to see, examine and then call their senior. The senior may only see the child later in the day if there are persistent concerns raised or specifically asked by a trainee. Otherwise, they would typically see patients the following morning on a ward round if admitted to hospital. In some situations (Emergency Departments), there may be a FACEM (Fellow of Australasian College Emergency Medicine) in the department either 24/7 or at least until 2300–2400 hours. In many departments, [this hospital] included, the FACEM may not be responsible for the oversight of paediatric patients unless the patient is in the resuscitation room. The paediatric trainees would call the Paediatric Specialist on call directly – bypassing the FACEM in a process that is formalised.
What was the standard of care/accepted practice at the time of events? Please refer to relevant standards/material.	Standard of care followed regarding supervision.
Was there a departure from the standard of care or accepted practice? • No departure; • Mild departure; • Moderate departure; or • Severe departure.	No departure
How would the care provided be viewed by your peers? Please reference the views of any peers who were consulted.	No departure
Please outline any factors that may limit your assessment of the events.	Unclear what the experience of the registrar was (first year registrar vs final year trainee).
Recommendations for improvement that may help to prevent a similar occurrence in future.	Ensure abnormal observations are alerted to the medical staff by nursing staff.
Question 5: Are there any other matters that you consider are relevant to this case?	
List any sources of information reviewed other than the documents provided by HDC:	Starship Acute Stroke Guidelines – published 2024 Starship Seizure Afebrile Guidelines – published 2018
Advisor's opinion:	Acute stroke is rare in childhood. Posterior Circulation Stroke in children is an even more rare condition. Seizures are more common and less likely to occur due to this.

Names have been removed (except Health New Zealand and the advisor on this case) to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name.

	Features of PCI can be – • Headache (requires language) • Hypertension (should have been rechecked) • Reduced GCS [Glasgow Coma Scale] (reported RN and Medical return to normal, discrepancy with mother) • Focal neurology (difficult examination in children)
What was the standard of care/accepted practice at the time of events? Please refer to relevant standards/material.	For normalisation of neurology and observations following afebrile seizure and if not – admission for further investigation.
Was there a departure from the standard of care or accepted practice? • No departure; • Mild departure; • Moderate departure; or • Severe departure.	Moderate departure – hypertension not followed up and not rechecked prior to discharge. Maternal request not to be done when attempt was made.
How would the care provided be viewed by your peers? Please reference the views of any peers who were consulted.	Nil further to add.
Please outline any factors that may limit your assessment of the events.	The variable report from family to staff.
Recommendations for improvement that may help to prevent a similar occurrence in future.	<u>Education</u> around stroke presentation in children. Access to <u>interpreters</u> encouraged for all non-English-speaking families. Clear <u>advice on return</u> – even if same day.

By signing this report, I agree to HDC correcting any formatting, spelling, or grammar issues on the proviso that the substance of the report and any quoted material remains unchanged.



Signature:

Name: Dr Heidi Baker

Date of Advice: 27 September 2025'

Addendum 14 October 2025

‘Regarding Blood Pressure –

- 1) Initial failure to repeat within a time frame would be moderate (with expectation it would be done prior to discharge), ie, If a child is asleep, or unsettled, it might be a greater length of time before checked again.
- 2) If a child was determined to be hypertensive but without another cause found – the BP should be rechecked prior to discharge, ie vital signs should have returned to normal or to have had a clear explanation for abnormalities. An elevated BP in a child who had a seizure, that did not normalise, would be a severe departure without providing another explanation for the hypertension.

There can be many factors that limit or influence a one-off BP reading for a child – cooperation, movement, activity, etc.

Hence – sometimes a greater delay between readings.

Abnormal BP though should be checked before clearing a child.’