Complaints to HDC involving District Health Boards

Report and Analysis for period 1 January – 30 June 2012



Introduction

This report provides aggregated DHB data and data specific to individual DHBs for the period 1 January – 30 June 2012. The data reflects only complaints to the Health and Disability Commissioner involving a DHB — it excludes those complaints made directly to a DHB that are not received by HDC.

Please also note that data reported captures only those complaints in which the DHB was identified as a provider by the complainant. Where a complaint is made about an individual practitioner at a DHB and the DHB is not identified, the complaint may not be included in these reports.

The report includes:

- 1. Data on complaints received:
 - (a) Current period:
 - how many
 - service type
 - matters of concern
 - for National report: key words and primary issue
 - for individual reports: key words

classification of concerns by service type

- rate of complaints received
- (b) Comparison over time (trend data):
 number and rate of complaints received over current and previous six-monthly periods
- 2. Data on complaints closed:
 - (a) Current period:
 - how many
 - outcomes how the matter was resolved
 - (b) Comparison over time (trend data):
 rate of complaints investigated over current and previous six-monthly periods
- 3. Ranking
 - by rate of all complaints
 - by rate of complaints investigated
- 4. Case studies

New material

Some case studies have been expanded to include comment or discussion that illustrates themes and concerns recurring in complaints made to HDC.

Please note: Discharge (denominator) data

Data for this report is provided by the Ministry of Health (MOH) and is provisional as at the date of extraction, **1** August 2012. It excludes short stay discharges from emergency departments and patients attending outpatient units and clinics.

MOH discharge data is updated as figures come to hand from DHBs. Differences in data extracted at two dates six months apart can be considerable and are more apparent in larger DHBs. Rates for the two previous periods (where the changes are greatest) have been recalculated according to most recent data, and consequently frequency data presented here may differ from that provided in earlier HDC reports.

Classification of concerns by service type

Feedback received in response to previous reports suggested that if the service associated with patient concerns were identified, those concerns could be more directly addressed through targeted service improvement. In this, and the previous report, this data was included for individual DHBs. Where a specific service are the subject of a complaint, the report showed correlations between those services and the substance of the complaints (key words) received about the care provided by those services.

The evaluation for this period specifically asks for feedback on this additional data. If you believe this data is helpful for your DHB and wish to continue to receive it, please indicate this on the form.

Other comment (as noted in previous reports)

(i) Timeliness

Respondents have suggested that having the reports available in a more timely manner may assist in the relevance and currency of the information. However, denominator data is obtained from the Ministry of Health and is not available before the end of the month following that in which DHBs provide it to the Ministry. The drafting, checking and review of the 21 reports is time consuming. We accept that the delay in their dissemination reduces their currency.

(ii) Ranking

The ranking system is based on rates of complaints; these rates are calculated using discharge numbers. To the extent that discharge numbers are a measure of DHB activity, this parameter appears to be a reasonable one to use for calculating rates and making comparisons across and within DHBs. It is accepted that discharge numbers are a limited indicator of DHB activity; that complexity is another factor, as are the numbers of patients that are not included in discharge data. Discharge data does not include short stay discharges from emergency departments and patients attending outpatient units and clinics, and yet these departments still generate complaints. Thus for DHBs where there are busy emergency departments and/or large numbers of patients attending clinics, the resulting rate of complaints may become inflated. Conversations with DHB staff (especially at the HDC Complaints Workshops in March and April 2010) have indicated that although the data has limitations, it is helpful.

We would appreciate further feedback on any other simple methods of representing this data.

National Data for all District Health Boards

1.0 Complaints received

In the period January—June 2012, HDC received a total of **355** complaints about care provided by all District Health Boards. Numbers of complaints in the previous four six-monthly periods from 1 January 2010 are 256, 257, 268 and 255; an average of 259 complaints received per six-monthly period. The total for the current period shows a 37% increase over the average number of complaints received for those previous periods.

1.1 Service type category

Complaints to HDC are shown by service type in Table 1.

Table	1
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Service subject to complaint	Number of complaints
Accident and emergency	26
Aged care	2
Assessment for third party	3
Counselling/therapy	1
Dental	3
Home care	1
Inpatient mental health services	16
Laboratory service	3
Maternity services ¹	18
Medical services	14
Mental health services	29
Methadone/drug & alcohol services	1
Midwifery	4
Multiple ²	50
Needs Assessment Services	1
Non health or disability service	1
Nursing	4
Oncology	7
Other	4
Paediatric	2
Palliative care	1
Physician care	14
Prison health	1
Public hospital care ³	80
Rehabilitation services	1
Rest home care	3
Specialist care ⁴	8
Specialist equipment services	1
Surgery — private sector	1
Surgery — public sector	48
Vision care	7
Total	355

1. Maternity services denotes care provided by any attending staff.

2. The category 'multiple' refers to a complaint where several services are involved.

3. The public hospital care category relates to complaints about the overall level of care, where no individual practitioners are specifically mentioned, or practitioners are mentioned in a general way.

4. Specialist care refers to a complaint where a specific senior clinician has been named in the complaint.

The identifiable services where the numbers of complaints were greatest are public sector surgery (13.5%), mental health services (8.2%), and accident and emergency (7.3%).

1.2 Patient concerns

The substance of each complaint to HDC is identified by a broad primary issue, and further by the key words patients and their families tend to use to describe their concerns more specifically. The frequently used key words in these 355 complaints to HDC in this period are listed in Table 2. As each complaint may contain more than one key word, the totals do not add up to 100%.

The key word data for the previous three periods are shown for comparison.

Key word	Complaints containing this word (%)						
	Jul-Dec 10	Jan–Jun 11	Jul–Dec 11	Jan-Jun 12			
Inadequate treatment	41%	43%	35%	33%			
Attitude/manner	30%	22%	19%	17%			
Communication with family	25%	15%	12%	10%			
Diagnosis	21%	17%	18%	21%			
Inadequate care	21%	14%	12%	18%			

Table 2

- The most frequently occurring key word in all periods reported remains *inadequate treatment;* however, the percentage of complaints where each of these appears is reducing.
- Complaints citing concerns about *attitude and manner* and *communication with family* continue to reduce over consecutive periods.
- The percentage of complaints citing concerns with *diagnosis* remains steady.
- Inadequate care was not reported in previous periods, but is now reported for current and earlier periods as it appears as a concern in a greater percentage of complaints than previously. Inadequate care is a concern in more complaints than *communication with family* and *attitude and manner*.

Please note: *inadequate care* differs from *inadequate treatment* in that 'care' refers to supporting activities (eg a nurse fails to take observations) whereas 'treatment' describes more active intervention where a standard of practice is relevant.

Please note also: concerns about complaints processes, present as the key words *inadequate response to complaint, reprisal/retaliation as a result of complaint lodged, information about complaint process not provided*, and *no response to complaint lodged*, occurred in 26 complaints in this period, compared to six in the previous period (July—December 2011) and 15 in the period January—June 2011.

1.3 Primary issues

For each complaint received by HDC, one primary issue was identified. The primary issues are listed in Table 3. The table shows that *Treatment* is the most common primary concern, occurring in 213 (60%) of the complaints received by DHBs in this period.

Table 3	
Primary issue in complaints	Number of complaints about this issue
Access and funding	30
Communication	41
Consent/information	26
Disability/Other issues	4
Discharge & transfer arrangements	11
Fees and costs	1
Grievance/complaints process	1
Management of facilities	7
Medical records/reports	6
Medication	9
Privacy/confidentiality	5
Professional conduct	1
Treatment	213
Total	355

Table 4 shows a comparison over time for the two main issues complained about. *Treatment* is the subject of a reduced percentage in this period compared with the previous period, and *communication* is the primary issue in a slightly greater percentage.

Table 4

	Complaints about this issue (%)						
Primary issue in all complaints	Jul–Dec 10	Jan-Jun 11	Jul–Dec 11	Jan–Jun 12			
	n=257	n=268	n=255	n=355			
Treatment	65%	60%	66%	60%			
Communication	14%	15%	10%	12%			

1.4 Overview of the content of complaints

Over the four periods reported:

- *treatment* remains the over-riding concern. *Treatment* occurs as the primary issue in an average of 63% of complaints, and is mentioned in an average of 38% as having key importance; and
- patients have consistently identified inadequacies in *communication;* this is noted as a primary issue and/or a key concern in between 10% and 15% of complaints over the four periods reported.

1.5 Service type and concerns raised in complaints

For each service type, the concerns raised in complaints received about the care provided by that service can be identified. The reports for individual DHBs list the services in that DHB that were subject to complaint, and the concerns associated with these services.

1.6 Rate of complaints received — current period

When numbers of complaints to HDC are expressed as a rate per 100,000 discharges, comparisons can be made between DHBs, and within DHBs over time, enabling any trends to be observed.

Frequency calculations are made using discharge data provided by the Ministry of Health (provisional as at the date of extraction, 1 August 2012). Please note that the number of total discharges (439,575) excludes short stay emergency department discharges, and patients attending outpatient units and clinics.

As current provisional discharge data may differ from that provided by the MOH for previous periods, and rates for more recent periods have been recalculated accordingly (see note on page 3), frequency data quoted may differ from that provided in earlier HDC reports.

Table 5 shows that the rate of complaints about DHBs made to HDC in the period January—June 2012 was **80.76** complaints per 100,000 discharges.

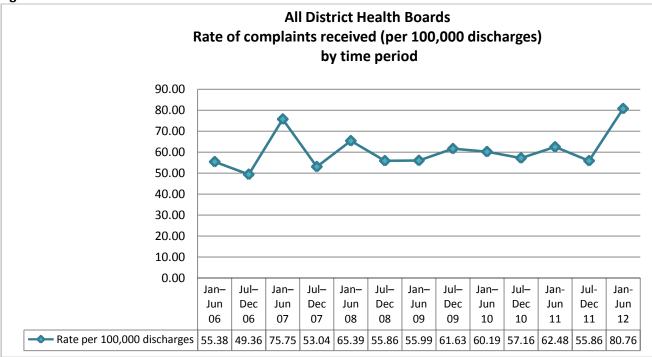
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Number of	Rate per
complaints	100,000
Jan-June 2012	discharges
355	80.76

1.7 Rate of complaints received — comparison over time

Figure 1 shows the rate of complaints received by HDC per 100,000 discharges, for current and previous six-monthly periods.





	Jan– Jun 06	Jul– Dec 06	Jan– Jun 07	Jul– Dec 07	Jan– Jun 08	Jul– Dec 08	Jan– Jun 09	Jul– Dec 09	Jan– Jun 10	Jul– Dec 10	Jan– Jun 11	Jul– Dec 11	Jan– Jun 12
Complaints received	210	200	299	216	258	236	230	270	256	257	268	255	355
Rate per 100,000 discharges	55.38	49.36	75.75	53.04	65.39	55.86	55.99	61.63	60.19	57.16	62.48	55.86	80.76

The rate is the highest of all periods reported.

2.0 Complaints closed

HDC closed **302** complaints involving DHBs in the period January — June 2012. This compares with 217 in the previous period.

2.1 Outcomes of complaints closed

Complaints are classified into two groups according to the manner of their resolution: whether investigation or non-investigation. Within each classification, there is a variety of possible outcomes. Once HDC has notified a DHB that a complaint concerning that DHB is to be investigated, the complaint remains classified as an investigation, even though an alternative manner of resolution may subsequently be adopted. An investigation may also be discontinued. Notification of investigation generally indicates more serious or complex issues.

The manner of resolution and outcomes of complaints closed is shown in Table 6.

The data is also presented in Figure 2 where the number of complaints for each outcome type is shown as a percentage of all closed complaints (percentages rounded to one decimal place).

Outcome	Number of complaints closed
Investigation	
Breach	7
No breach	2
Investigation discontinued s38(1) ¹	4
Non-investigation	
Referred to Advocacy	25
No further action — s $38(1)^1$	144
Referred to Dental Council	1
Referred to District Inspector	9
Referred to Medical Council	1
Referred to Ministry of Health	1
Referred to Physiotherapy Board	1
Referred to Privacy Commissioner	1
Referred to Provider ²	69
Referred to Psychologists Board	1
Resolved at Mediation	1
Resolved by Commissioner	3
Resolved by Parties	3
Withdrawn	17
Outside jurisdiction	12
Total	302

1. The Commissioner has a wide discretion to take no further action on a complaint. For example, the Commissioner may take no further action because careful assessment indicates that a provider's actions were reasonable in the circumstances, or a more appropriate outcome can be achieved in a more flexible and timely way than by means of formal investigation, or that the matters that are the subject of the complaint have been, or are being, or will be appropriately addressed by other means. This may happen, for example, where a DHB has carefully reviewed the case itself and no further value would be added by HDC investigating, or where another agency is reviewing, or has carefully reviewed the matter (for example, the Coroner, the Director-General of Health, or the District Inspector).

2. In line with their responsibilities under the Code, DHBs have increasingly developed good systems to address complaints in a timely and appropriate way. It is often appropriate for HDC to refer a complaint to the provider to resolve, with a requirement that the provider report back to HDC on the outcome of its handling of the complaint.

Table 6

In summary, Figure 2 illustrates that:

- more than 70% of complaints were either closed with no action or no further action (47.7%), or referred to the provider for resolution (22.9%); and
- just 8.3% of complaints were referred to Advocacy in this period.

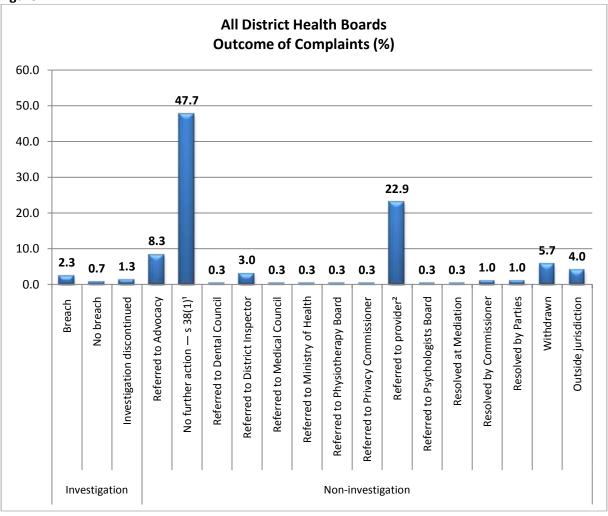


Figure 2

2.2 Outcomes of complaints closed - comparison over time

The outcomes of closed complaints that are not closed following investigation are most commonly *referred to advocacy*, referred *to provider* or resolved with *no further action*. The distribution of these outcomes in the last four six-monthly periods is shown in Table 7.

Outcome of non- investigated complaints			Perce	ntage of com	plaints		
	Jan—Jun 2009 (n=247)	Jul—Dec 2009 (n=228)	Jan—Jun 2010 (n=262)	Jul—Dec 2010 (n=257)	Jan—June 2011 (n=246)	Jul—Dec 2011 (n=217)	Jan—June 2012 (n=302)
Referred to Advocacy	9.7%	11.4%	10.3%	15.6%	16.4%	15.2%	8.3%
No further action — s38(1)	46.6%	38.6%	49.2%	42.8%	41.1%	48.8%	47.7%
Referred to provider	24.7%	28.9%	27.9%	30.7%	28.9%	21.2%	22.9%

Table 7

Table 7 shows that:

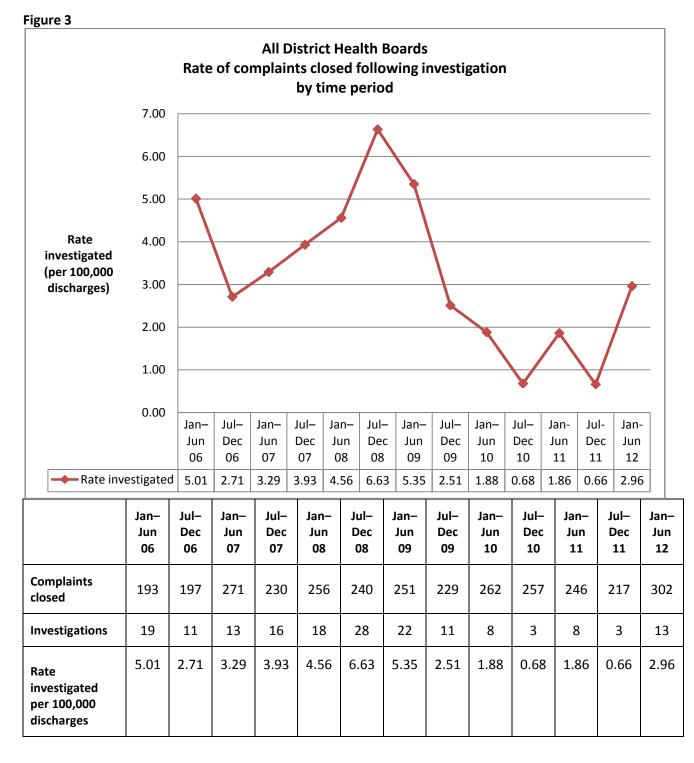
- the percentage of complaints *referred to advocacy*, steady over the last three periods, is considerably reduced in this period;
- no further action is taken in a similar percentage of complaints as in the previous period; and
- the percentage of complaints *referred to provider* is similar to the previous period.

2.3 Rate of complaints closed following investigation - current period

Calculations made using MOH data (439,575 discharges) show that the rate of complaints notified for investigation for the current period is **2.96** per 100,000 discharges.

2.4 Rate of complaints closed following investigation – comparison over time

Figure 3 shows the rate of complaints closed following investigation for the current period in comparison with the rate for previous periods. The rate is the highest in the last six periods reported.



3.0 Ranking

Tables 8 and 9 show the rate of complaints about DHBs received by HDC (Table 8), and those investigated (Table 9), per 100,000 discharges for each DHB (ranked, not named¹) relative to other DHBs for this period.

Each DHB's ranking on the tables can be identified from its individual report.

All individual DHBs were subject to some complaints to HDC. The rate of complaints ranged from 41.97 complaints per 100,000 discharges to 217.33 complaints per 100,000 discharges — a greater than five-fold increase in frequency across DHBs.

Table 8

DHB ranking	Rate of complaints to HDC per 100,000 discharges	DHB ranking	Rate of complaints to HDC per 100,000 discharges
DHB 1	41.97	DHB 11	85.68
DHB 2	62.92	DHB 12	88.57
DHB 3	63.41	DHB 13	90.66
DHB 4	64.75	DHB 14	97.13
DHB 5	66.10	DHB 15	97.29
DHB 6	70.99	DHB 16	97.76
DHB 7	72.27	DHB 17	130.65
DHB 8	72.77	DHB 18	130.82
DHB 9	73.09	DHB 19	167.08
DHB 10	73.63	DHB 20	217.33
		All DHBs	80.76

For investigated complaints (Table 9), the data from all DHBs showed a rate of 2.96 investigated complaints per 100,000 discharges, and a range of 0 to 41.77 complaints per 100,000 discharges. One DHB was not included in this table as no complaint involving the DHB was closed in this period.

¹ Individual DHBs have not been named in this report given the small sample size and the short period covered (six months).

Table 9

DHB ranking	Rate of investigated complaints per 100,000 discharges
DHB 1–10	No complaints investigated
DHB 11	1.83
DHB 12	2.38
DHB 13	3.77
DHB 14	4.33
DHB 15	6.94
DHB 16	6.95
DHB 17	8.39
DHB 18	10.17
DHB 19	41.77
All DHBs	2.96

4.0 Learning from complaints — HDC case reports

In the following cases, the complaint raised issues of concern, and action was taken to improve hospital systems and practices. The first two complaints were investigated — the full anonymised reports can be found on the HDC website.

Antenatal care of woman carrying fetus small for dates (09HDC01581)

Ms B, a 21-year-old woman whose routine scan identified concern about the growth of her baby, was referred to the DHB fetal medicine service. She was first seen in the 21st week of her pregnancy by an obstetrician and gynaecologist, Dr A, a specialist in maternal-fetal medicine.

Antenatal clinic appointments

Ms B attended five appointments at the fetal medicine clinic. At the fourth appointment, she had an ultrasound scan and was seen by Dr A. Ms B's mother, who accompanied her, was concerned that her daughter had swollen hands and feet, and says she told the obstetrician of her concern that her daughter might be developing toxaemia. The clinic midwife, Ms D, who was responsible for conducting routine assessments (blood pressure, urinalysis and weight) of the women attending the clinic, had noted the woman's attendance, but the woman's routine antenatal assessments were not checked. Dr A signed off the woman's record, which included blanks for the uncompleted blood pressure and urinalysis tests, but she did not follow up the absence of the assessments. The next week, at the fifth appointment, Ms B had a severe headache, blurred vision and swollen hands, and these symptoms were communicated to the obstetrician. The absence of the previous week's antenatal assessments was noted, but again no routine antenatal assessments were performed.

Although Ms B, her mother and her partner recall Ms B experiencing various symptoms at the time of these appointments and communicating those symptoms to Dr A, Dr A is emphatic that she was not advised of these concerns. The clinical notes do not record any discussion of Ms B's wellbeing having taken place at either appointment.

Following events

Later on the day of her fifth appointment, Ms B became seriously unwell. An ambulance was called and Ms B was admitted to hospital with elevated blood pressure. She was found to have serious toxaemia and underwent an urgent Caesarean section to deliver her baby at 26 weeks' gestation. The baby was transferred to a neonatal intensive care unit but died a few days later.

Systems failures

Staff working at the fetal medicine clinic had expressed concerns about their ability to assess and process patients because of the systems in place. HDC's expert advisor commented that the organisation of the clinic contributed to Ms B not being adequately examined and her symptoms not being followed up. The difficult configuration of the department also had an impact on the ability of the clinic staff to provide a quality service.

Hospital systems should support a patient's seamless journey through the clinic for individual appointments with various team members – midwife/nurse, sonographer (if required) and specialist. The system used at the fetal medicine clinic for progressing women from arrival at reception to midwifery assessment, ultrasound and consultant review was not always followed in this clinic at the time of Ms B's visits, and resulted in Ms B missing out on midwifery input on her fourth and fifth appointments. It is standard practice for all antenatal clinics to do a minimum of baseline observations of patients; the DHB acknowledged that this did not occur on two occasions during Ms B's antenatal visits. The DHB carried out a review of the clinic and made a number of changes, including:

- that both the patient's scan and observations must be completed prior to the patient being seen by the consultant;
- the midwife allocated to the clinic is dedicated to this clinic only;

- the midwife is required to be present during the patients' consultations with the specialist and
- the scheduling of patients visits in the clinic was revised to allow this to occur.

HDC decision

It was held that the obstetrician breached Right 4(1) for twice failing to adequately assess the woman or follow up the absence of blood pressure recordings and urinalysis results. This was part of the expected assessment of the woman and should have been carried out as part of the consultations. It was recommended that the obstetrician enter into an appropriate mentoring relationship. She was also referred to the Director of Proceedings; the outcome of this referral in this case was that the matter was settled by negotiated agreement.

The midwife assigned to the clinic, who was not established to have seen the woman on the two relevant visits, failed to take steps to ensure that the woman's routine recordings were taken or to ensure the woman was advised not to leave before the observations were taken. However, she was not found to have breached the Code.

By not ensuring the fetal medicine clinic had appropriate systems in place, that roles at the clinic were clearly defined, and that the clinic midwife was able to undertake the necessary observations of all patients, the DHB breached Rights 4(1) and 4(4). Recommendations to the DHB included ensuring the implementation of clear pathways for the care of patients attending the clinic.

Care provided during labour to patient with large baby (09HDC01592)

Mrs A planned to deliver her first baby at home under the care of her lead maternity carer (LMC). However, at 37 weeks' gestation, a growth scan revealed that her unborn baby was large for gestational dates. The LMC consulted a specialist and delivery at hospital was recommended. The woman went into spontaneous labour and was assessed by the locum midwife because her LMC was on leave. Following assessment, the midwife recommended transfer to hospital.

Hospital admission

Mrs A's labour and the baby's birth were managed by the hospital midwife and obstetric registrar. A CTG was commenced when the woman arrived at the hospital. The midwife noted concerning features on the CTG and called the obstetric registrar for review at 2.40am, 4.10am, 4.20am, and 6am. Following the 4.20am review the obstetric registrar noted a "suspicious but not pathological pattern" on the CTG which he considered to be due to maternal dehydration. The obstetric registrar identified no other concerns and was satisfied that everything was progressing normally.

The hospital midwife was aware that meconium had been present after the woman's membranes were ruptured. She remained concerned about the CTG readings. Despite not being reassured by the registrar's assessment and feeling "fearful of the outcome of the delivery", the midwife did not contact the on-call consultant.

Delivery

At 7.05am, the baby's head was delivered but the delivery was obstructed by shoulder dystocia. An emergency call was made and after approximately five minutes the baby was born. Resuscitation was commenced but the baby's response was not favourable. The baby was transferred to a specialist neonatal unit but died a short time later.

Outcome

It was held that the hospital midwife acted appropriately in consulting with the duty obstetric registrar with regard to the management of Mrs A's labour, and when she was concerned about the CTG trace. However, when she strongly suspected that the baby was at risk, she had a duty to fully advise the obstetric registrar of these concerns and, further, to contact the on-call obstetrician

directly when she remained concerned. In not doing so, the midwife failed to provide the expected standard of services to the mother and her unborn child, and was held to have breached Right 4(1).

The obstetric registrar was on duty at the time of Mrs A's admission and was responsible for the obstetric care she received. He acknowledged that he misinterpreted Mrs A's CTG and failed to take appropriate action in the case of fetal distress, breaching Right 4(1) of the Code. In addition, he breached Right 4(2) by failing to follow the relevant policies on CTG recordings.

The Commissioner found that the DHB met its duty of care to Mrs A. The DHB had a consultant obstetrician on call, an appropriately trained and experienced midwife and obstetric registrar on duty, and appropriate policies on CTG monitoring in place. The DHB was also not vicariously liable for the breaches of the Code by either the midwife or the obstetric registrar.

Discussion and learning

The case raised concerns about communication between providers where there is clinical disagreement between those on duty as to the management of the labour.

The midwife told HDC that when she first became concerned about the wellbeing of the baby, the feeling was intuitive, with no firm evidence. She said that over the next two hours she had several discussions with the doctor, voicing her concerns that the CTG was less than optimal; that they discussed the possibility of a shoulder dystocia and the need to consider proceeding to a Caesarean section. She believed that only a registrar could phone the consultant and felt that she did not have the authority to do so, and that previously when midwives had short-circuited the registrar and consulted the more senior clinician they had been reprimanded. However, there was no record of the midwife's concerns or of any clinical disagreement in the clinical notes. It appears that in this case, the existence of a hierarchy with regard to seeking advice, particularly after hours, may have created a barrier (either perceived or real) which may have got in the way of good team-work and the best interests of the mother and baby.

As a result of these findings, the DHB now has a mechanism for managing clinical points of difference to ensure that appropriate advice and further verification is sought. A flow chart has been developed "Communication in the instance of clinical points of difference" to provide guidance on whom midwives should communicate with, should there be a difference of clinical opinion. This flowchart is posted at the midwifery staff station and the LMC office. It is also available electronically to all practitioners. The DHB reported to HDC that this has resulted in practitioners escalating their communications in a number of instances since the flowchart was released.

Cerebrospinal fluid examination as a diagnostic tool

A woman who had been referred to a hospital Emergency Department with severe headache, vomiting, photophobia and neck stiffness underwent a non-contrast (un-enhanced) CT scan of the brain to exclude or confirm a sub-arachnoid haemorrhage SAH; this was reported by the DHB radiologist as showing no evidence of abnormality and no evidence of intracranial bleeding. Reports of other tests showed a slight elevation in the woman's white cell count and normal renal function. A lumbar puncture (LP), reported as being 'difficult', showed heavily blood-stained cerebrospinal fluid (CSF)but with an absence of xanthochromia (the breakdown of products of red blood cells, used as a clinical indicator for SAH). The woman was managed with analgesics and given intravenous fluids.

The following day, a consultant physician reviewed the CT scan and confirmed that it appeared normal and an SAH was unlikely. A cervical spine X-ray reported no bony abnormality. Although the woman's neck pain was worse and her neck movement restricted, a diagnosis of cluster migraine headaches was made and the woman was discharged with analgesia. Three days later she presented to her GP with a further headache, but as there had been no obvious mass or SAH diagnosed, his

action focussed on possible future neurology referral. The woman died at home six days later. The finding of the post mortem was that her death was due to a "subarachnoid brain haemorrhage caused by ruptured Berry aneurysm".

As part of the family's complaint to HDC, they organised for a US-based specialist neurologist to review their mother's CT scan. He advised that there was no evidence of acute bleed but he felt the aneurysm was visible to the trained eye.

Radiologist's response

The DHB radiologist responded that the CT scan did not show a subarachnoid haemorrhage, and he did not interpret a small density on the scan as a small aneurysm. He also stated that with the benefit of hindsight, he could see a small density at the anterior (front) communicating artery site, which represents the aneurysm. He noted that a non-contrast CT is a sensitive test for a subarachnoid bleed but that it is not 100% accurate to exclude a minor bleed. In addition, a non-contrast CT is not the test for a small aneurysm. If a CT report is negative, a lumbar puncture is performed to confirm or exclude a bleed, which was done in this case. If there had been a strong clinical impression of a bleed, further follow-up imaging could have been performed – either a repeat CT scan or MRI study. If there is an SAH, a patient is sent urgently to the neurosurgical department in a tertiary hospital for further management.

DHB review

Subsequent to the woman's death, several reviews of the management of the case were conducted. The view of those who participated was that in the working situation it was not unreasonable that this small aneurysm could be missed in the absence of subarachnoid bleeding; that the scan appearance was not conclusive for an aneurysm, and that the small density visible on the scan was within normal limits. They also identified the difficulty in distinguishing blood from a traumatic tap from an SAH in a patient with a negative CT scan.

Expert physician advice

HDC's expert physician advised that it is possible that xanthochromia might not have been visible at the time that the LP was taken, and that if a further lumbar puncture had been requested in the morning (meaning well after 12 hours) there may have been xanthochromia present. However, his view was that most doctors would not be aware that it is necessary to wait 12 hours to perform a confirming lumbar puncture, and that in most hospitals a negative CT scan would be followed almost immediately by an LP in patients suspected of having an SAH. (As far as he was aware, there are no New Zealand guidelines regarding the timing of CSF examination particularly in the acute setting).

The expert physician also commented that the sample tubes of CSF taken had uniform blood-staining in them. The importance of this — ie, the absence of clearing of the CSF — was unfortunately not fully recognised. He considered that most internal medicine specialists would have reached the same conclusion as the treating physician because the absence of xanthochromia is seen as being more sensitive and specific than a decreasing number of red blood cells in the CSF.

Expert radiology advice

HDC's expert radiologist reviewed all the key documents and information including scout images (which help identify which plane is being viewed), the scanned request form, 5mm transverse unenhanced images of the brain, and 1.25mm transverse unenhanced images of the brain. He advised that an unenhanced CT scan of the brain is the standard investigation of a patient with a suspected SAH. Sensitivity for acute subarachnoid blood on a CT scan is greater than 95%. He stated that the appropriate investigation was performed, the scan was of good quality, it was reported to a reasonable standard, and in his view there was no radiological evidence of an SAH. The expert radiologist also noted that the radiologist in this case had followed standard radiological practice for reporting of urgent CT scans of the head, and that it is not normal practice to obtain a second opinion for acute CT scans of the brain unless there is a specific point of clarification needed.

The expert radiologist also advised that the image shows an abnormality which is isodense with the middle cerebral artery, measuring 7mm in diameter. This is apparent with hindsight and the knowledge of the outcome of the case. The abnormality would be regarded as a "low conspicuity lesion" and in the absence of an SAH could easily be overlooked by general radiologists (called a 'failure of perception'). In his view, the abnormality would have been missed by a significant number of general radiologists working in district general hospitals in an equivalent position to the radiologist in this case.

In relation to the usefulness of collegial 'blind' reading, the expert stressed the limitations of this practice. He noted that is not possible to recreate the normal working environment that doctors would have found themselves in at the time; and that review of imaging (once the outcome is known) is hampered by retrospective bias.

Systems

The DHB documentation relating to its radiology service and the processes in place to support quality was reviewed by the expert radiologist and found to be consistent with those of other DHBs. The DHB noted that non-contrast CT scans of the brain remain the initial imaging examination for suspected SAH, and that this accorded with protocols used at its tertiary referral centre.

The DHB also confirmed its policy that if a CT scan confirms an SAH, the patient is referred to its tertiary referral centre for further investigation. The DHB radiology service has the capability (albeit limited) to transfer images to this centre prior to a patient transfer. If the CT is negative for SAH, the radiologist is expected to report on any findings that may contraindicate a lumbar puncture, as a lumbar puncture usually becomes the next line of investigation.

Changes to practice

The DHB has modified the information presented on CSF reports. They now provide more detailed information to clinicians about issues and potential action to consider in the absence of xanthochromia. Specifically, they now include the statements:

"No xanthochromia present, by visual inspection. Factors other than products of lysed red blood cells are occasionally responsible for xanthochromia (yellow discolourisation), eg jaundice. Xanthchromia may take up to 12 hours to develop after subarachnoid haemorrhage. Absence of xanthochromia does not exclude subarachnoid haemorrhage. If symptoms are suspicious it is strongly recommended to discuss with consultant in charge."

Outcome

The expert radiologist's view was that the interpretation of the CT, although probably erroneous in retrospect, was reasonable for a radiologist in the circumstances, given his general radiological background, the clinical details provided, and the lack of subarachnoid haemorrhage to support a diagnosis of aneurysmal disease. The complaint was closed (under s38(1) of the Act) with an emphasis on the learnings arising from the complaint: the formation of guidelines regarding the timing of CSF examination.

Documenting for patient refusal of care

Background

Ms A was resident in an acute mental health inpatient unit and receiving treatment with medication including lithium. When her parents became concerned about her condition, behaviour and distress, testing indicated that Ms A had a potentially toxic level of lithium in her system. This was not considered to be a result of an overdose, but was related to an unusually marked increase in serum levels when the patient became mildly dehydrated in association with a urinary tract infection, tendency to poor hydration and increase in physical activity. As lithium has a narrow therapeutic index, toxicity is possible when there are major changes in medication and health status. Monitoring of Ms A's lithium levels was complicated by her refusal to give blood. The complaint made by her

parents concerned, among other things, the systems failures which gave rise to their daughter's lithium toxicity, and the way the staff managed the related issues.

DHB response

The DHB noted that while Ms A had been refusing to allow bloods to be drawn, there was nothing in her presentation to indicate lithium toxicity prior to the date of the blood test that revealed the toxic level. Despite this, the DHB acknowledged that Ms A's lithium levels could have been monitored more frequently, particularly following any changes in dose. They acknowledged that if Ms A continued to refuse bloods being drawn, a decision should have been made on how to intervene. The DHB apologised that this did not occur at the time.

Expert advice

Expert advice was provided by HDC's in-house clinical advisor, and a consultant psychiatrist. The advice indicated that while the decision to commence the young woman on lithium treatment was appropriate, and the DHB's guidelines regarding the prescribing and monitoring of lithium were sufficiently robust, the management of the lithium monitoring was not undertaken in a manner consistent with expected standards or with the DHB's guidelines. The expert consultant psychiatrist, working from the clinical notes, was unable to say with certainty whether Ms A's clinical symptoms indicated lithium toxicity. His advice was that the DHB's guidelines regarding patient refusal to comply with treatment are as clear as possible for this particularly difficult situation, but noted that that documentation regarding Ms A's refusal to give blood was scarce. The issues identified in relation to lithium prescribing and monitoring represent a moderate departure from expected standards.

Outcome

As a result of the clinical review undertaken in response to this complaint, the DHB has implemented a definitive guideline to be followed when a patient has been prescribed lithium and is refusing regular monitoring blood tests. The clinical team, along with family, will make a decision to either secure bloods by force, or discontinue lithium and replace it with an alternative medication, which may or may not have the same clinical efficacy.

The DHB also made the following changes:

- 1. Education sessions have been held with Mental Health and Addiction Services clinicians to further improve their documentation, including the reporting of medication refusal. In addition, regular audits of clinical documentation are carried out to ensure compliance.
- 2. Education sessions have been developed, with input from the consumer and family advisor, on how to manage patient medication/monitoring refusals. This includes using alternative solutions to manage patients who refuse medication and monitoring.
- 3. The DHB is currently in the process of procuring whiteboards to be placed behind the doors of patient rooms. The whiteboards will be used to list current medications and the intended benefits to assist patients in understanding why these medications have been prescribed.
- 4. The DHB's pharmacist conducts group medication sessions in the inpatient unit and is available to provide individual education sessions for patients.
- 5. The Services' family advisor has been working with staff to ensure the voice of the family is heard and that family are included in care planning, treatment provision and monitoring. Staff are also encouraged to utilise family to encourage patient adherence with medical advice.

Discussion

There were two key issues of consumer-centred care highlighted in the complaint. First, the family felt that their concerns were ignored by clinicians when they attempted to advocate on their

daughter's behalf. Although clinicians attempted to consult with Ms A's parents at the time she was receiving treatment, this was clearly not done in a satisfactory manner. When a person is mentally or physically unwell, family support becomes even more important and should be respected. Family and friends often notice subtle changes in their loved one's condition that may not be immediately obvious to the treating clinician.

Secondly, there are concerns about the unsatisfactory manner in which Ms A's refusal of medication and monitoring was handled. While a patient's right to refuse treatment should be respected, this needs to be considered in light of the patient's physical and mental welfare. Lithium has a notoriously narrow therapeutic window. While Ms A's particular sensitivity to medications may not have been predicted, her contributing factors (urinary tract infection, increased level of physical activity and tendency not to hydrate often) combined with the knowledge about lithium, should have been in the forefront of the clinicians' minds when Ms A was refusing to be monitored. It was surprising that Ms A's mother was not utilised more to help aid Ms A's compliance, as Ms A had previously complied with staff instructions when her mother was assisting. The need to listen to the patient and the patient's family is a recurring theme in complaints to HDC.