Analysis: Bawa-Garba and the criminalisation of unintentional error. What can we learn from New Zealand?

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3 Analysis: The tragic cases of Jack Adcock, Dr HadizaBawa-Garba and Nurse Isabel Amaro: Contrasting
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5 consequences of criminalizing unintentional medical errors by the United Kingdom and New Zealand.
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47 Key messages
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50 Patient safety may best be upheld by
51 -standardised process for investigation of medical error
52 -protection of employment rights and ability to reflect fully
53 -candid multidiciplinary discussions between patients and healthcare providers
54 -no fault accident and rehabilitation compensation schemes
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Abstract

In November 2015, Dr HadizaBawa-Garba and agency nurse Isabel Amaro were convicted of manslaughter following the death of Jack Adcock, a six-year-old boy suffering from Group A Streptococcal (GAS) infection. We review this tragedy, which has global ramifications for personal culpability of professionals working in healthcare, from the perspectives of consultants from New Zealand (NZ) and the United Kingdom (UK). We explore the impact on National Health Service (NHS) practice, examine the consequences of criminalizing medical error on patient safety and investigate what the NHS might learn from other similar health care systems, such as NZ.

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Introduction

The tragic case of Jack Adcock, has sent international shockwaves through the healthcare professions. Dr Bawa-Garba, a trainee doctor, and Agency Nurse Amaro were convicted of manslaughter by gross negligence, following the tragic death of six-year-old Jack Adcock, with Group A Streptococcal (GAS) disease. This case has set a precedent for health professionals to be held criminally liable for unintentional mistakes made when working in extremely challenging conditions.[1]

While patient safety is paramount in both the UK National Health Service (NHS) and the New Zealand (NZ) District Health Boards (DHBs), there are important differences in legislation covering unintentional medical errors. [2 3] Auckland District Health Board (ADHB) accepts most unintentional medical errors are systemic rather than due to individual recklessness or negligence. [4] The governance structure allows concerns, by any member of staff, worried about patient care, to be investigated to determine how to improve processes. Once the "Datix Incident Management" system is activated, the error is escalated based on its severity. The management team is responsible for mitigating harm to patients and rectifying errors with the intention of improving systems safety and resilience. [4]

Registered quality improvement activities such as reflections, case discussions and minutes of morbidity and mortality meetings have significant legislative protection in NZ. [3] The confidential information usually cannot be revealed beyond the process for which it was intended, although such protection is not absolute, in terms of criminal courts. Enhanced protection quality improvement activities could facilitate open disclosure of medical errors leading to improved patient safety.[3 4]

We believe this case may have set back the patient safety agenda and have examined the healthcare systems in other countries to determine if there is a more effective way to manage complex medical errors, from which the NHS could learn.

Chronology of events

On Friday 18th February 2011, Jack Adcock, a six year old with Trisomy 21, on enalapril, following repair of an atrio-ventricular septal defect, was admitted with symptoms and signs of gastroenteritis and shock but was suffering from Group A Streptococcal (GAS) pneumonia. Dr Bawa-Garba, was a registrar on her first "on-call" day for paediatrics, at the University Hospitals of Leicester NHS Trust. She had recently returned from thirteen months of maternity leave but had not been provided with orientation to the Hospital.

There were medical staff shortages. Nursing numbers and skill mix did not reach nationally recommended standards of safety. [1 5] The laboratory information system (iLab) failed for the entire Hospital with results only available by telephone. There was no time for meal or bathroom breaks during the 13-hour shift.

There were errors and delays in Jack's care. He was moved to the general paediatric wards around the time of evening handover. At 8 pm, approximately 45 minutes after receiving a dose of enalapril, Jack collapsed. Dr Bawa-Garba, one of 11 professionals who attended, but not the team leader, briefly

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mistook Jack for another patient who had an agreed end of life plan. The resuscitation was interrupted for between 30 seconds and two minutes, not felt by expert witnesses to have affected the final outcome. Jack was pronounced dead at 9.20 pm.

The consultant responsible for the Children's Assessment Unit (CAU), who was at a conference for most of the day, encouraged Dr Bawa-Garba to reflect on the case, in the hospital cafeteria, where he hand wrote and later typed these notes. Several reports indicate this confidential document informed the prosecution case.[1]

The General Medical Council (GMC) confirmed that Dr Bawa-Garba bore no responsibility for the administration of the enalapril (p14 para IX) and that the consultant had overall responsibility for Jack's care (p14 para V).[6]

The Hospital internal review identified multiple systemic failures with no single root cause for Jack's death.[7] In 2012, two weeks after the birth of her daughter, Dr Bawa-Garba was arrested and questioned under caution, but informed she would not be charged. In 2013, after fresh expert evidence, the coroner referred the case back to the UK Crown Prosecution Service (CPS) who brought charges of manslaughter by gross negligence against Dr Bawa-Garba, Nurse Amaro and Sister T.

In court, each defense barrister focused on the guilt of the other two defendants. Dr Bawa-Garba's principal error was delay in diagnosing bacterial infection and prescribing antibiotics. The UK Chief Medical Officer in the same year acknowledged that "pendulum may have swung too far in advocacy of the need to reduce antibiotic use," but commented that most cases of gastroenteritis in young were likely viral.[8]

The court refused to hear particulars of improvements implemented by the Trust after the event, to aid understanding of the systems failures on the day. [9-11] These details highlighted the full range of actions needed to reduce the risk of recurrence of such a tragedy. The court concluded that the contraindicated enalapril contributed to, but did not cause death.

In November 2015, after several days of deliberation, Dr Bawa-Garba was found guilty of gross negligence manslaughter by a majority verdict of 10:2. Nurse Amaro was found guilty and Sister T was acquitted. Dr Bawa-Garba's relatives in Africa raised funds and met the Court fine. She unsuccessfully challenged her conviction in December 2016. Several online racist personal attacks were removed from the internet by the police.

On 13th June 2017, the Medical Practitioners Tribunal Service (MPTS) suspended Dr Bawa-Garba for a year, acknowledging the courts description of her as "before and after the tragic events … a competent, above average doctor,".[12] The GMC challenged the MPTS,[1] returning the case to the Court of Appeal. The Lord Justices upheld the appeal and Dr Bawa-Garba's name was erased from the UK Medical register but she has been allowed a further challenge

Many worldwide felt a grave injustice had occurred and raised funds to allow Dr Bawa- Garba to challenge her erasure and possibly her conviction. [13]

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The British Medical Association (BMA) and the Royal Colleges united in supporting Dr Bawa-Garba, in discussions with the GMC. The Hon Jeremy Hunt former UK Health and Social Care Secretary tweeted his concerns about the impact of the GMC appeal on openness and transparency in the NHS. [14] He ordered a rapid review of the area: the recently completed Williams inquiry, recommended robust and standardized investigation of gross negligence manslaughter and to revoke the right of the GMC to appeal future MPTS decisions.[15]

The Impact so far on Patient Safety

Many doctors feel "there but for the grace of God go I. "[16] One junior doctor comments "If we live in fear of being scapegoated by the system, by being thrown under the bus by our seniors and by personal reflective practice incriminating us, then we will practice defensively and we will not openly discuss failings to learn".[17] One online survey suggested that up to two thirds of doctors are less likely to disclose errors as a direct result of this case. [18] In another, 52% of 682 GPs said they had now "stopped or adapted" their reflections. [19]

The potential to discourage open disclosure of errors or suboptimal treatment, at personal through to organisational levels, could lead ultimately to less safe care

The NZ medico legal perspective.

The Medical Council of New Zealand (MCNZ) and the Health and Disability Commissioner (HDC), have broad statutory discretion for investigating and disciplining doctors accused of incompetence or negligence.[3] It is likely that the HDC and MCNZ, like the MPTS, would give weight to the complexity, mitigating factors, and uncertainties, particularly the role of enalapril, in their judgements.

Manslaughter by gross negligence is a statutory offence under the Crimes Act 1961. However, since the amendment of the NZ law in 1997 from a simple negligence threshold to the major departure test (s150A of the Crimes Act) for a manslaughter conviction for breach of the legal duties in ss155 or 156 of the Crimes Act, there has been no conviction of a health professional for manslaughter in NZ.[3]

It appears criminal prosecution in the absence of ill intent is viewed as purposeless in most cases. [20] There was no ill intent in Dr Bawa-Garba's actions. Professor Ron Paterson, former NZ Health and Disability Commissioner states "Prosecution has a limited part to play in accountability for unintended patient harm, and rehabilitation is an important goal in addressing the shortcomings of individual practitioners".[3]

NZ has a taxpayer funded no-fault Accident Compensation and Rehabilitation (ACC) scheme (1974) covering treatment injury. It offers a range of benefits including rehabilitation of injured persons and funding for retraining. [21] ACC is required to assess all treatment injury claims for risk of harm and notify relevant authorities where there may be a potential risk to the public, which assists in reducing the incidence of injury from treatment.[21] While the ACC does not afford medical practitioners immunity from criminal proceedings, the public generally accept that 'doctors cannot be sued' for negligence[3]

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through this scheme, although a plaintiff could bring a claim for exemplary damage arising from personal injury.

The NZ industrial relations perspectives

NZ enjoys collegial relationships between senior and junior medical staff. Unacceptable hierarchical behaviour, harassment, bullying does occur but is censured. [22 23] It has strict Health and Safety laws. Employers risk prosecution if they fail to provide a safe working environment with adequate meal and rest breaks. It is unlikely Dr Bawa-Garbawould have been permitted to work a thirteen-hour shift with no breaks for meals or rest

The New Zealand Resident Doctors' Association (NZRDA), which represents trainees, perspective is that strong medical unions with robust contractual protections are the best bulwark against unsafe hospitals. The collective agreement with DHBs ensures that providing cross-cover for colleagues is voluntary and only where the resident is confident in their ability to provide adequate of care. However the NZRDA has asked members to consider whether there are some situations when cross-cover is inappropriate, whether clinical orientation is sufficient, and to address situations where there is a reluctance to ask for consultant assistance.[24]

When asked about the case, the NZ hospital consultants union responded, "The Association of Salaried Medical Specialists (ASMS) strongly supports New Zealand's approach to unintentional medical error."

How can we learn from these tragedies to improve patient safety?

These devastating events have important implications for patient safety. The multiple systems and human factors caused the holes in the Swiss cheese model to align. [25 26] Opportunities for healthcare providers to learn from and to rectify systems errors are lost when one or two junior individuals are held criminally liable for errors when practicing in the overstretched, under-resourced NHS.[1] Doctors recognize that the public must be protected from negligence [27] but have called for a just culture to address unintentional errors, as in NZ.[4 28]

Whether the adversarial nature of a criminal court allows a lay jury to weigh appropriately the individual, team, systemic contributions along with the weight of scientific evidence in an area as complex as healthcare, is a question which has been asked by many.[29] Criminalizing inadvertent medical errors has potentially far reaching and chilling implications. Doctors have worried about the personal dangers involved in recording reflective practice with serious concern that there may be less open about discussion of potential mistakes. The Williams Review will go some way to allaying fears about an unjust process.[15]

Patients are best served by candour and accountability, especially when there is uncertainty about the best treatment option. Defensive medicine could lead to iatrogenic complications from overtreatment. Sensible investigation and reasonable compensation schemes for unintentional error, as occurs in NZ may decrease the need for litigation.[30] The National Patient Safety Agency (NPSA) has similarly recommended an open culture of reporting errors. [31] If mistakes or suboptimal treatments are not

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disclosed, they are likely to be repeated leading to erosion of public confidence in the medical profession.

Robust protection of trainee rights, as in NZ, enhances staff morale leading to good working practice. Healthcare professionals work in multi-disciplinary multi-ethnic teams from many backgrounds.[32] International trainees have expressed fears regarding UK public perception of black or minority ethnic (BME) doctors, [33] who are more likely to be sanctioned by the GMC.[34] UK recruitment for high risk specialties, such as paediatrics, [35] already vulnerable after Brexit, [36] may worsen due to fear of racial discrimination and criminalization of error.[37] Consequent declining staffing levels make serious errors more likely, such that the regulatory actions paradoxically decrease patient safety.

The role of managers and directors within organizations needs clarification with clear lines of responsibility for provision of safe healthcare with adequate resources. If healthcare cannot be safely provided, transparency and public accountability is required, acknowledging the complexity of the relevant issues.[38]

The Trust report indicated multiple factors contributed to Jack's death but did not address broader requirements for a leadership safety culture or more robust plans to recognise and mitigate IT failures.[7] Prosecuting frontline junior clinical staff for unintentional errors, made within the context of unsafe systems, for which they have no responsibility or influence, will further compromise patient safety. [20] International learning, rather than criminalization of unintentional medical errors should be the legacy of Jack Adcock's tragic death.

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Conflicts of Interest

RA: the NZ perspective is through the lens of unintentional error and does not address other challenges faced by the NZ health system such as inequitable access to health care. JC is a supervisor for Dr Bawa-Garba and has supported her throughout the criminal and regulatory process. JV is a medical manslaughter expert and member of Team Hadiza. HK was co-author of a blog used by Team Hadiza to fundraise for independent legal support.

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References

1. Jha S. To Err Is Homicide in Britain: The Case of Dr Hadiza Bawa-Garba 2018 [Available from: https://www.medscape.com/viewarticle/892210 accessed 3 April 2018.
2. Vaughan J. Gross negligence manslaughter and the healthcare professional 2016 [Available from: http://www.manslaughterandhealthcare.org.uk/wp-content/uploads/2016/02/Jenny-Vaughan-RCS-Bulletin-article-February-2016.pdf.
3. Paterson R. Medicine, crime and society. In: Griffiths D, Sanders A, eds. Bioethics, medicine and the criminal law: Cambridge University Press 2013:229-47.
4. Wilshser M. Moving to a safer place 2017 [cited 2018. Available from: https://adhb.org/2017/06/21/moving-to-a-safer-place/2018.
5. RCN. Defining staffing levels for children's and young people's services 2013 [Available from: https://www.rcn.org.uk/professional-development/publications/pub-0021722018.
6. GMC. Williams Review into Gross Negligence Manslaughter in healthcare GMC written submission 2018 [Available from: https://www.gmc-uk.org/-/media/documents/Written_submission_Williams_Review_74084026.pdf.
7. LRI. Investigation report in to death of Jack Adcock 2012 [Available from: https://www.whatdotheyknow.com/request/460255/response/1128108/attach/2/FOI.SUI%20REPORT%20FOI%20Redacted.pdf?cookie_passthrough=1.
8. Davies S. Chief Medical Officer Report 2011: antimicrobial resistance 2011 [Available from: https://www.gov.uk/government/publications/chief-medical-officer-annual-report-volume-2 accessed 30 April 2018 2018.
9. Kennedy I, Howard R, Jarman B, et al. The Bristol Royal Infirmary Inquiry 2009 [Available from: http://webarchive.nationalarchives.gov.uk/20090811143752/http://www.bristol-inquiry.org.uk/final_report/rpt_print.htm.
10. DOH. Care of the acutely or critically sick of injured child in the district general hospital 2006 [Available from: www.rcoa.ac.uk/system/files/PUB_ACSIC.pd.
11. Weik C, K,., Sutcliffe K, E,. Managing the unexpected: Wiley 2015.
12. Dyer C. Doctor convicted of manslaughter is suspended from register for a year. *Bmj* 2017;357:j2928. doi: 10.1136/bmj.j2928 [published Online First: 2017/06/18]
13. Iacobucci G. Bawa-Garba to appeal High Court ruling and may challenge manslaughter conviction. *Bmj* 2018;360:k655. doi: 10.1136/bmj.k655 [published Online First: 2018/02/14]
14. Hunt J. Comment on Dr Bawa-Garba's case 2018 [Available from: https://twitter.com/jeremy_hunt/status/956566247084347393?lang=en.
15. Williams N. Professor Sir Norman Williams Review 2018 [Available from: https://www.gov.uk/government/groups/professor-sir-norman-williams-review2018.
16. Godlee F. There but for the grace of God 2018 [Available from: https://www.bmj.com/content/360/bmj.k485.full.
17. Jawahar K. Bawa Garba: The fear now among doctors is – ‘You will be scapegoated for systemic failures 2018 [Available from: https://inews.co.uk/opinion/comment/bawa-garba-fear-now-among-doctors/ accessed 18.4.18.
18. Lay K. Doctors less likely to admit mistakes after boy’s death 2018 [Available from: https://www.thetimes.co.uk/article/doctors-less-likely-to-admit-mistakes-after-boys-death-r0p7j58z0 accessed 3 April 2018.
19. Donnelly L. Doctors won’t admit to mistakes after prosecution of paediatrician 2018 [Available from: https://www.telegraph.co.uk/news/2018/04/30/doctors-wont-admit-mistakes-prosecution-paediatrician/ accessed 14.5.18 2018.

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20. Merry A, Brookbanks W. Merry and McCall Smith's Errors, Medicine and the Law Cambridge: Cambridge University Press 2017.
21. Jansen P, Fernando K. Accident compensation. In: Morris K, A., ed. Cole's Medical Practice in New Zealand. Wellington: MCNZ 2017:445-59.
22. Meng-Yee C. Ex morgue worker on bullying claims: 'We've lost everything' NZ Herald; 2017 [Available from: https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=11855415.
23. ADHB. Dealing with harassment, discrimination and bullying 2018 [Available from: http://www.adhb.health.nz/assets/Documents/About-Us/Our-People/Speak-Up/Dealing-with-bullying-harassment-and-discrimination.pdf.
24. NZRDA. the case of Dr Hadiza Bawa-Garba 2018 [3 April 2018]. Available from: https://www.nzrda.org.nz/wp-content/uploads/The-case-of-Dr-Bawa-Garba.pdf accessed 3 April 2018.
25. Cusack J. GMC erasure case: how we learn from human error. *Bmj* 2018;360:k212. doi: 10.1136/bmj.k212 [published Online First: 2018/01/20]
26. Rimmer A. Bawa-Garba case: "When something goes wrong in healthcare there is never one person to blame". *Bmj* 2017;359:j5721. doi: 10.1136/bmj.j5721 [published Online First: 2017/12/10]
27. Armitage S, Aucott K, barry P, et al. Letter to Professor Terence Stephenson 2017 [Available from: http://www.manslaughterandhealthcare.org.uk/wp-content/uploads/2017/11/Letter_to_GMC.pdf2018.
28. Boysen PG, 2nd. Just culture: a foundation for balanced accountability and patient safety. *Ochsner J* 2013;13(3):400-6. [published Online First: 2013/09/21]
29. ThesecretBarrister. Some thoughts on Dr Bawa-Garba and our faith in the jury system 2018 [Available from: https://thesecretbarrister.com/2018/01/31/some-thoughts-on-dr-bawa-garba-and-our-faith-in-the-jury-system/ accessed 3 April 2018.
30. Merry AF. How does the law recognize and deal with medical errors? *J R Soc Med* 2009;102(7):265-71. doi: 10.1258/jrsm.2009.09k029 [published Online First: 2009/07/17]
31. NPSA. Learning from patient safety incidents 2018 [Available from: https://improvement.nhs.uk/resources/learning-from-patient-safety-incidents/.
32. Siddique H. Figures show extent of NHS reliance on foreign nationals 2014 [cited 2018. Available from: https://www.theguardian.com/society/2014/jan/26/nhs-foreign-nationals-immigration-health-service2018.
33. Banerjee A. Institutional racism is still a major problem in the NHS 2018 [Available from: https://blogs.bmj.com/bmj/2018/01/31/amitava-banerjee-institutional-racism-is-still-a-major-problem-in-the-nhs/2018.
34. BAPIO. BME doctors: The state of bias in the NHS and impact of differential sanctions by the GMC 2018 [Available from: https://www.bapio.co.uk/bapios-submission-to-the-williams-review-bme-doctors-the-state-of-bias-in-the-nhs-and-impact-of-differential-sanctions-by-the-gmc/2018.
35. Gallagher P. NHS crisis: almost one in five children's doctor roles vacant 2017 [Available from: https://inews.co.uk/news/health/nhs-childrens-doctor-roles-vacancies/2018.
36. Harvey T, Mcclosky S. The impact of Brexit on NHS staff 2018 [Available from: http://ukandeu.ac.uk/the-impact-of-brexit-on-nhs-staff/2018.
37. Mehta R, Bamrah J. 'The GMC treats BME doctors differently and harshly' 2018 [Available from: http://www.pulsetoday.co.uk/your-practice/practice-topics/legal/the-gmc-treats-bme-doctors-differently-and-harshly/20036073.article#.WnBHkRj3Q1c.twitter.
38. RCPCH. Facing the Future: Standards for acute general paediatric services 2015 [Available from: https://www.rcpch.ac.uk/sites/default/files/2018-03/facing_the_future_standards_for_acute_general_paediatric_services.pdf2018.

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Key messages

We examine the tragic case of Jack Adcock, the subsequent manslaughter conviction of Dr Hadiza Bawa-Garba and the responses of the regulator of the UK medical profession, the General Medical Council. We compare and contrast approaches to unintentional medical error in the United Kingdom and New Zealand and discuss what could be learnt, particularly with respect to:

1. Providing an adequate and effective response to patients who have been unintentionally harmed by healthcare
2. A greater focus on learning and resolution to improve patient safety rather than on retribution and blame
3. The need for a higher threshold in England for the use of criminal prosecution in response to deaths that arise despite conscientious efforts to care for patients under difficult circumstances
4. The importance of protecting confidential personal reflective practice and encouraging open disclosure
5. The urgent need to improve the clinical working environment and resourcing for safe functioning of hospitals

Abstract

Following the tragic death in February 2011 of Jack Adcock, a six-year-old boy suffering from Group A Streptococcal (GAS) sepsis, Dr Hadiza Bawa-Garba and agency nurse Isabel Amaro were convicted of manslaughter. We review this case, which has ramifications for personal culpability of professionals working in healthcare, from the perspectives of New Zealand (NZ) and United Kingdom (UK) practitioners. We explore the potential impact on National Health Service (NHS) practice and patient safety and discuss what could be learnt from the NZ model.

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2596 words without abstract, boxes and tables

Introduction

On 18th February 22011, Jack Adcock, a much loved six-year old child died in Leicester Royal Infirmary. Dr Bawa-Garba, a paediatric trainee doctor, under light supervision and with many other responsibilities, was tasked with his care. This was a complex case, and the legal and regulatory aftermath was protracted and controversial (see Box 1)[1], and prompted the Secretary of State for Health and Social Care to commission a rapid review of Gross Negligence Manslaughter (GNM).[2]

The failures in Jack's care undoubtedly called for a substantive response (see Box 2).[3] However, this does not, in itself, imply that criminal prosecution of individual practitioners was appropriate. [4] We do not primarily argue a special case for doctors - we would have similar concerns in equivalent circumstances in other socially essential services. Nevertheless, we doubt that the decision to prosecute in this case was a safe way to pursue justice or to advance the important goal of promoting a safe, effective and affordable health system.

In New Zealand (NZ), in the 1990s, there was a series of prosecutions of health professionals for GNM related to similarly tragic deaths from errors in the care of patients. After a review by a retired judge of the Supreme Court, it was recognized that the criminal law is poorly designed to deal with the complex mix of error, violation and system failure that typically characterizes the deaths that lead to such prosecutions. The NZ Government, through the Crimes Amendment Act of 1997, therefore gave a clear signal that the threshold for such prosecutions should be elevated.[5] Only one health professional has been charged with GNM, and none convicted, since then, yet healthcare today seems to be at least as safe in NZ as in England. Therefore, we were interested in reflecting on differences between these two countries in their approach to unintended harm to patients, and in what lessons might be learned by either from the other.

Errors and violations in a complex adaptive system

Within a complex adaptive system, such as healthcare, some errors are inevitable. It is fundamental to our position that errors, by definition, are unintentional. Thus, their incidence may be reduced by better system design but they cannot be eliminated simply by trying harder to practice safely. Thus the criminal prosecution of an individual cannot be expected to deter errors.[6] Violations involve decisions, and so can be avoided, but when people are trying to function in an under-resourced and over-stretched system,

certain types of violation may also be difficult to avoid. Deterrence should therefore include those who can influence the system, such as managers and service directors. [6-8] Many of these errors and minor violations are without consequence, but sometimes, typically when several failures align (as in James Reason's "Swiss Cheese" model of accidents),[9 10] serious harm or death occurs. There is typically little difference in the moral culpability of inconsequential failures in healthcare care and those where death results. Similarly, it is seldom demonstrated that the errors and minor violations that underpin prosecutions in cases with tragic outcomes actually differ from those in cases whose outcomes have been satisfactory. Outcome in individual patients is influenced by interplay of complexity and chance, as well as by the standard of care.

Far more patients are harmed than healthcare professionals are prosecuted for gross negligence. One view is that the threshold for such prosecutions in the UK is appropriately restrained. Conversely, one could question the logic, justice and deterrent value of prosecuting just some of the many cases of inadvertent harm in healthcare. Whilst reliable data tracking the incidence of prosecution is not available, the number of criminal and coronial investigations have increased under English law (although not under Scottish law) since late last century.[11] The severity of sentencing seems also to have increased recently. [12] Given the differing approach to GNM in Scotland, both prosecution policy and sentencing seems to differ within the United Kingdom. Importantly, doctors' anxiety over the risk of prosecution in the UK seems to have grown in recent years and, whether well founded or not, this could inhibit open disclosure and reflection, and promote defensive medicine. We doubt that many doctors are concerned about prosecutions arising from clearly avoidable egregious behaviour.

The concern is that at least some of these prosecutions have followed errors which unfortunately turned out to be fatal.[11] As noted, errors cannot be eliminated simply by trying harder, so for many doctors, this raises the sceptre of "there but for the grace of God go I". The widespread protests suggest that many doctors could readily identify with the position Dr Bawa-Garba found herself in. This is surely not the way a serious crime should be perceived – a crime should be clearly recognisable to all as such. It does not seem just to face serious criminal charges based on inadvertently getting things wrong while trying to do one's job conscientiously under difficult circumstances. Thus, we would take the converse view that even one *unjust* prosecution would be too many.

Understandably, some members of the public saw this case differently. Their concerns were captured by Jack's mother, who referred to "the number of errors that doctor made on the day for the judge to say 'truly exceptionally bad'".[1] Similarly, the GMC's action in challenging the decision of its own (albeit,

independent) committee, the MPTS, was presumably based on a desire to safeguard the public from "bad doctors", and to be seen to be doing so. One can imagine it would be difficult for a parent to accept any outcome short of incarceration and erasure from the medical register as an adequate response to the loss of a child. Nevertheless, justice is not solely about vengeance. There should surely be a place, in addition to punishment, for rehabilitation of a doctor widely seen as generally competent and well-motivated, but for whom things went badly wrong on one occasion.

Should this case have been placed before a jury?

In a prosecution for GNM, amongst other elements, the prosecution must establish "beyond reasonable doubt" that the defendant's alleged failures in care caused the death. This requirement is one of the weaknesses of criminal law in the context of complex medical cases. On one hand, a not guilty verdict may seem to imply that care was acceptable, when its only implication may actually be that the jury was unable to reach a firm conclusion on causation. On the other, there may be times, and this is one of them, when it is hard to understand how they could have safely reached such a conclusion.

It turns out that the direction to the jury on this point may have been quite nuanced. Nicol J directed the jury that they could convict if they were sure that the defendant's failures "significantly contributed to Jack's death, or led him to die significantly sooner than he would otherwise have done." [13] This may be good law, but it is not clear to us when a "significant contribution" would become causation beyond reasonable doubt. Similarly, it seems to us that the question at issue should be whether Jack would have recovered and gone home, not whether he possibly died a few hours sooner than he might otherwise have done. Obviously, the jury had the benefit of expert evidence – but the experts in this case disagreed on most points. Surely, the "beyond reasonable doubt" standard should, as a minimum, require alignment of the evidence of experts accepted by the court as credible? Our concern here lies with the decision to put such a complex case to the jury in the first place - we agree with Brazier et al who argue that such prosecutions should be initiated only on "strong factual and expert evidence relating to a clear legal test". [12]

There was a further difficulty for this jury.[14] They were asked to determine whether what Dr Bawa-Garba 'did or didn't do was "truly, exceptionally bad"'.[13] However, her failure involved competence rather than behaviour. This was not a doctor exhibiting laziness, or working under the influence of drugs or alcohol. This was a doctor taking on extra duties and responsibilities within an over-stretched hospital, with very

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little assistance in the way of supervision. There is, of course, an expectation that people doing dangerous activities should be competent to do so. Nevertheless, in assessing competence, we worry that juries in general might be more influenced by the rhetoric of the day, and by subjective biases (including outcome bias[15] and possibly subconscious racism[16]) than by any objective evaluation of complex claims and counterclaims of the sort illustrated in Table 1. We agree with Sir Robert Francis who observed that the need for juries to apply retrospective judgments on "seriousness" in complex circumstances will inevitably lead to inconsistency in how the law is applied.[17]

Criminal justice, organisations, teams, and the promotion of patient safety

It is typical of criminal prosecutions that there was little attention given in this trial to the role of the wider team responsible for Jack's care. Little or no evidence was presented on recommendations or standards regarding safe staffing, clinical and educational supervision, return to work programs or activation of the IT major incident route. In fact, the prosecution and defence agreed that the report commissioned by the trust should not be placed before the jury, and Nicol J commented that there was a 'limit to how far these issues could be explored at trial."[18] Surely these are the very issues that lie at the heart of this case and this view provides further support to our argument that it was, in several respects, too big an ask for a jury.

The role of the General Medical Council and the Medical Practitioners Tribunal Service

The actions of the GMC in appealing the finding of the MPTS seem to have been the final trigger for widespread protest from the medical profession and for the Williams Review. The MPTS appears to have taken a holistic view of the case and concluded that rehabilitation was both possible and appropriate. By contrast, the GMC appears to have seen the conviction for GNM, in itself, as justification for permanent erasure. This view is understandable. If this doctor was "so exceptionally bad" that the courts found her guilty of manslaughter, why would one allow her to practice again? Yet Dr Bawa-Garba's successful appeal against erasure suggests otherwise. Again, we think this conundrum reflects the poor fit of the criminal law to complex cases of this sort. The hospital's internal review and the MPTS hearing were surely more appropriate and more reliable in advancing both accountability and the cause of patient safety. Absent the prosecution, the MPTS would presumably have reached similar findings, more quickly and inexpensively, and these would have been accepted by the GMC. A year's suspension is a significant punishment, but, importantly, it is one that reflects failures in clinical practice rather than any suggestion of criminality.

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Responding to patient harm in New Zealand.

Under NZ's codified criminal law, the standard for GNM today is not obviously dissimilar to that set by precedence under the common law of England. However, criminal prosecution in the absence of *mens rea* is now seen as purposeless in most cases. [19 20] In the words of Professor Ron Paterson, former NZ Health and Disability Commissioner, "Prosecution has a limited part to play in accountability for unintended patient harm, and rehabilitation is an important goal in addressing the shortcomings of individual practitioners".[19] Interestingly, Brazier et al, in the context of the UK, have commented, similarly, that "The adversarial nature of the criminal trial does not lend itself to the task of identifying what lessons can be learned from a tragic and unexpected medical death."

Legal and regulatory systems are not static but instead develop over time, broadly in line with expectations from society. In New Zealand, when amending the law in 1997, it was also appreciated that the mechanisms for responding to unintended harm in healthcare needed to improve. Over many years, NZ has progressively developed an increasingly novel organisational and legislative approach to the provision and regulation of healthcare that today goes a long way towards ensuring the accountability of all who work in the sector (not just doctors) while promoting the quality and safety of healthcare (Box 3). It is unlikely that Dr Bawa-Garba would have faced criminal charges in NZ. Instead, the Health and Disability Commissioner would presumably have considered the case, with a focus on the system as manifest by hospital trust itself *as well as* on the *all* the individuals responsible for Jack's care.

More importantly, we also think that a junior doctor who was known to be light on recent relevant experience would probably have been more closely supervised in NZ today. Clearly, the clinical working environment for junior doctors and the safe functioning of the hospital overall, were key factors in this case. Unfortunately, the lot of junior doctors is not perfect in NZ. For example, despite a strong framework of industrial regulation and two strong unions for medical practitioners, there has recently been considerable concern over bullying in the sector and anecdotal evidence suggests that trainees in some specialities feel obliged to exceed the agreed limitations on hours of work. Nevertheless, we think there is at the least a cultural commitment by consultants to appropriate supervision as a cornerstone of high-quality medicine. Actually, we think that the same can be said of most UK hospitals, and we note that isolated failures in various aspects of patient care do also occur in NZ. Ultimately, our observation goes to culture, and we cannot see how the fear of unjust prosecution for GNM would be helpful in

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promoting a patient centred culture of excellence in any country – whether that fear is well founded or not.

Conclusions

Jack should have received better care, whether or not this would have resulted in a different outcome. In general, the best response to iatrogenic harm is to reduce its occurrence in the first place. There is no shortage of relevant guidelines in either NZ or the UK.[21] Rather, the challenge, everywhere, is to increase engagement with these guidelines, and with simply getting things right for patients.[22] [23] A strong culture of safety that pervades everyone from the Minister of Health to the most junior clinician at the frontline of patient care is the key to improving the quality (and therefore the safety) of healthcare for all patients. It is hard to envisage how the costly and prolonged criminal and disciplinary proceedings discussed here would advance such a culture or achieve anything else of value.[24] The commissioning of a rapid policy review of GNM in healthcare by the Secretary of State for Health and Social Care reflects this concern. The Williams report made numerous recommendations aimed at improving patient safety and moving the focus away from blame.[2] It also recommended that "a clear and consistent position on the law of gross negligence manslaughter" should be developed and that steps should be taken to ensure that this position is consistently understood and applied when making the decision to prosecute. It recommended enacting legislation to remove the GMC's right to appeal the findings of the independent professional tribunal. It recommended changes to improve the standard and consistency of expert evidence, and to safeguard and enhance the value of. In the same way that the Crimes Amendment Act of 1997 gave a clear signal for a change in policy to police and public prosecutors in NZ, the Williams Report signals a positive direction for change the UK. We call on legislators and policy makers to implement its recommendations urgently.

Acknowledgements

This article has been sent to ACC, ADHB, ASMS, NZRDA and medical regulatory organizations in NZ along with the UK GMC. We thank all for their helpful comments. Thoughtful reviews by Mr Nick Ross, as well as comments from medical and legal colleagues in NZ and UK, notably Dr Oliver Quick, have been most helpful.

Conflicts of Interest

RA: the NZ perspective is through the lens of unintentional error and does not address other challenges faced by the NZ health system such as inequitable access to health care.

JC is Dr Bawa Garba's educational supervisor for and has supported her throughout the criminal and regulatory process. He does not work in the Children's hospital and was not involved in Jacks clinical care or the Trust investigations.

JV was the medical lead in the successful appeal against conviction of David Sellu (FRCS) and a member of Team Hadiza.

HK was co-author of a blog used by Team Hadiza to fundraise for independent legal support.

AM is an anaesthetist whose research and writing addresses the safety and regulation of healthcare. He Chairs the Board of the Health Quality and Safety Commission in New Zealand.

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Box 1 An overview of the case and its aftermath

Dr Hadiza Bawa Garba had completed five years of specialty training in paediatrics and had recently returned from 13 months maternity leave, rotating to University Hospitals of Leicester NHS Trust from a different hospital. She had not yet received Trust induction and had last undertaken general paediatric practice four years earlier. On 18th February 2011, although assigned to the general paediatrics ward, she agreed to cover the busy Children's Assessment Unit, to assist in the face of an absent colleague. Throughout the day she was responsible for infants and children in several wards and departments. There were shortages in nursing staff, as well as in medical staff, and a laboratory IT failure occurred during the day. The on-call consultant hadn't realised he was on call and had made commitments elsewhere. He did not arrive at work until 4.30 pm. He did arrange for another consultant to provide cover, but she had her own duties in other parts of the hospital.

On this background, Jack Adcock, a six year old with Trisomy 21, on enalapril, following repair of an atrio-ventricular septal defect, was admitted with symptoms and signs of vomiting and diarrhea. The events between Jack's first assessment by Dr Bawa-Garba at 10.30 am, to his ultimate death at 20.21 pm are described elsewhere, but this was a difficult and complex case with multiple factors contributing to numerous failures by various providers in the delivery of optimal care (see Table 1).

An internal review was undertaken by the hospital. This identified multiple systemic failures rather than a single root cause for Jack's death, and made numerous recommendations. [3]

In 2012, Dr Bawa-Garba was arrested and questioned under caution, but no charges were laid. In 2013, on the basis of a change in expert evidence, the coroner referred the case back to the Crown Prosecution Service, who brought charges of manslaughter by gross negligence against her and two members of nursing staff. In November 2015, Dr Bawa-Garba and Nurse Amaro were found guilty of gross negligence manslaughter and subsequently given two-year suspended sentences.

In June 2017, the Medical Practitioners Tribunal Service (MPTS) suspended Dr Bawa-Garba from practice for one year.[25] The General Medical Council then successfully challenged this decision through the courts and in January 2018 Dr Bawa Garba's name was erased from the UK Medical

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register.[25]

This precipitated widespread protest from doctors, including expressions of no confidence in the GMC and expressions of concern that Dr Bawa-Garber's reflections had been used to inform the prosecution's line of questioning.[26] The Government ordered a rapid review, led by Sir Norman Williams. Finally, with crowd funding, Dr Bawa-Garba made a further appeal, and the decision of the Divisional Court has been set aside and that of the Tribunal restored. [27]

Box 2. **Desirable elements of a response to inadvertently caused harm in healthcare**

- Patients or their families should receive open disclosure and an apology. Where possible, the treatment injury should be treated, without charge, and as a priority.
- When relevant there should be compensation for the consequences of the injury.
- There should be appropriate mechanisms to hold all to account those involved with the delivery of care, including senior and junior clinicians, management, and those responsible for the governance of hospitals.
- Punishment may be appropriate,[28] but should be proportionate to the moral culpability of the behaviour in question rather than to the outcomes of complex clinical problems. Furthermore, punishment should itself serve to advance rather than inhibit the cause of improving patient safety.
- Responses to problems (including patient harm) should be timely – complex adaptive systems need repeated and rapid adjustment to function effectively and patient safety is not well-served improved by responses that take years to be determined and implemented.
- Well-motivated staff who try hard to care for sick people, often under difficult circumstances, should be afforded the safety of a "just culture" rather than either a "no-blame" culture on one hand or an undue focus on finding "the individual who is to blame" on the other.

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Table 1. A selection of Dr Bawa-Garba's alleged failings on which the prosecution case rested, and of the contrasting case made by the defense.[13] These lists are not comprehensive, but they illustrate the nuanced task faced by the jury, whose members were also expected to balance contrasting views from two different experts.

Some of the failings in Dr Bawa-Garba's management of Jack, alleged by the prosecution	**Some elements of Dr Bawa-Garba's defence**
1 That her initial evaluation of Jack was hasty. 2 That she missed obvious clinical symptoms and findings. 3 That she did not properly review a chest x-ray taken at 12.01 pm which would have provided earlier confirmation of the diagnosis of pneumonia. 4 That she failed to ensure that Jack was given appropriate antibiotics until four hours after the x-ray. 5 That she did not obtain enough blood from Jack at 2.12 pm to properly repeat the blood gas test and that she subsequently failed to act upon the results that she did get.* 6 That she failed to raise any concerns with the consultant other than flagging aspects of the blood results when he arrived on the ward at 4.30 pm for the normal handover, and again at 6.30 pm. 7 That she failed to make proper clinical notes recording times of treatments and assessments. *	1) She had taken a full history and carried out the relevant tests on Jack's admission. 2) Septic shock is difficult to diagnose and Jack's case was complicated, with subtle symptoms. 3) Jack showed early signs of clinical improvement in response to IV fluids, and these signs were supported by early repeat blood-gas results. 4) She prescribed antibiotics for Jack at 3pm as soon as she saw the x-ray. 5) A failure in the hospital's electronic computer system delayed the blood test results. 6) She had told her consultant about the increased infection markers at the handover meeting at 4.30pm (and he had recorded these in his notebook), and that he had overall responsibility for Jack. 7) A shortage of permanent nurses meant that an agency nurse caring for Jack had failed to observe him properly and to communicate his deterioration to her. 8) Dr Bawa-Garba had been heavily involved in treating other children, had worked a

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	double shift that day (12/13 hours straight) without any breaks, had been without the assistance of a senior house officer and had been doing her best under difficult circumstances.

*The serum lactate was 11.4mmol/L.

**Arguably, the possibility that Jack's death was associated with the well-intentioned administration of Jack's usual dose of enalapril on the ward by Jack's mother (after discussion with nursing staff) should have been weighted against the seriousness or otherwise of a busy junior doctor's failure to document in the notes that this drug should not be given, but this possibility was not given much emphasis during the case. The GMC confirmed Dr Bawa-Garba bore no responsibility for the administration of the enalapril. [29]

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Box 3. Approaches to inadvertent patient harm in New Zealand.

Like the UK, New Zealand has an excellent public health system, so patients can be assured of medical care for treatment injury without the need for litigation or prosecution. In addition, the Accident Compensation Commission (ACC) provides preferential support for patients with treatment injury without the requirement to show fault. The Nordic Countries have similar systems but uniquely in New Zealand the no-fault element is explicit and is linked to a loss of the right to sue for accidental injury[19 30] (except, theoretically, in relation to exemplary damages). The ACC assesses all claims for risk of harm and notifies relevant authorities when there may be a potential risk to the public, with a view to improving patient safety. [30] It also invests proactively in initiatives to reduce accidents in healthcare and more generally.

Following a highly publicized scandal involving leading academics in a major hospital in the early 1980's, [31] the NZ Government established the Office of the Health and Disability Commissioner to address deficiencies in accountability to patients. A code of patient rights was established.[32] Patient advocates are provided to assist any patient to lay a complaint. The Commissioner can investigate any health professional and also the institutions that deliver healthcare, primarily in an inquisitorial manner. This has led to a progressively more systems-oriented response to complaints. The Commissioner can find that practitioners or institutions in breach of the code and can refer them to other authorities including the relevant professional council and or the police if need be.

In 2010 the Government established a Health Quality and Safety Commission to advance quality improvement across the sector. Amongst other things, this Commission coordinates a national programme of reporting of serious adverse events. This reporting is supported in some instances by legislated privilege for quality assurance activities, but it mostly operates in an environment of trust that open disclosure and the processes of root cause analysis will be respected within a just culture.

NZ has strict Health and Safety laws which place high expectations on the directors that govern organisations to ensure a safe working environment. There are two strong unions, The NZ Resident Doctors' Association (NZRDA), and the Association of Salaried Medical Specialists (ASMS) which represent trainees and senior doctors respectively. These Union have contributed to robust contractual protections as a bulwark against unsafe employment practices.

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References

1. Cohen D. The inside story of a six-year-old boy's death. And the trainee doctor who took the blame. 2018. https://www.bbc.co.uk/news/resources/idt-sh/the_struck_off_doctor: accessed 10th December 2018.
2. Williams N. Professor Sir Norman Williams Review 2018 [Available from: https://www.gov.uk/government/groups/professor-sir-norman-williams-2018.
3. LRI. Investigation report in to death of Jack Adcock 2012 [Available from: https://www.whatdotheyknow.com/request/460255/response/1128108/attach/2/FOI.SUI%20REPORT%20FOI%20Redacted.pdf?cookie_passthrough=1.
4. Jha S. To Err Is Homicide in Britain: The Case of Dr Hadiza Bawa-Garba 2018 [Available from: https://www.medscape.com/viewarticle/892210 accessed 3 April 2018.
5. Skegg PDG. Criminal prosecutions of negligent health professionals: the New Zealand experience. *Med Law Rev* 1998;6:220-46.
6. Merry A, Brookbanks W. Merry and McCall Smith's Errors, Medicine and the Law Cambridge: Cambridge University Press 2017.
7. Braithwaite J, et al. Complexity Science in Healthcare - a white paper: Australian Institute of Health Innovation; 2017 [Available from: http://aihi.mq.edu.au/resource/complexity-science-healthcare-white-paper.
8. Perrow C. Normal Accidents: Living with High Risk Technologies. 2nd edition ed. Princeton New Jersey: Princeton University Press 1999.
9. Reason J. Managing the Risks of Organizational Accidents. Aldershot: Ashgate 1997.
10. Cusack J. GMC erasure case: how we learn from human error. *Bmj* 2018;360:k212. doi: 10.1136/bmj.k212 [published Online First: 2018/01/20]
11. Ferner RE, McDowell SE. Doctors charged with manslaughter in the course of medical practice, 1795-2005: a literature review. *J R Soc Med* 2006;99(6):309-14.
12. Brazier M, Devaney S, Griffiths D, et al. Improving healthcare through the use of 'medical manslaughter'? Facts, fears and the future. *Journal of Patient safety and risk management* 2017;22(5-6):88-93.
13. EWCA Civ 1879.
14. ThesecretBarrister. Some thoughts on Dr Bawa-Garba and our faith in the jury system 2018 [Available from: https://thesecretbarrister.com/2018/01/31/some-thoughts-on-dr-bawa-garba-and-our-faith-in-the-jury-system/ accessed 3 April 2018.
15. Kahneman D. Thinking, Fast and Slow. London: Penguin Books 2011.
16. Quick O. Medical Manslaughter and expert evidence: the roles of context and character. In: Griffiths D, Sanders A, eds. Bioethics, Medicine and the Criminal Law: Cambridge University Press 2013.

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17. Dyer C. Law on gross negligence manslaughter is flawed, says leading medical lawyer. *BMJ* 2018;363
18. Bawa-Garba v GMC [2018] at para 74 2018 [Available from: https://www.judiciary.uk/wp-content/uploads/2018/08/bawa-garba-v-gmc-final-judgment.pdf.
19. Paterson R. Medicine, crime and society. In: Griffiths D, Sanders A, eds. Bioethics, medicine and the criminal law: Cambridge University Press 2013:229-47.
20. Merry AF, Brookbanks W. Merry and McCall Smith's Errors, Medicine and the Law: 2nd Edition. Cambridge: Cambridge University Press 2017.
21. NPSA. Seven Steps to Patient Safety 2013 [Available from: http://patientsafety.health.org.uk/resources/seven-steps-patient-safety2018.
22. RCPCH. Facing the Future: Standards for acute general paediatric services 2015 [Available from: https://www.rcpch.ac.uk/sites/default/files/2018-03/facing_the_future_standards_for_acute_general_paediatric_services.pdf2018.
23. RCN. Defining staffing levels for children's and young people's services 2013 [Available from: https://www.rcn.org.uk/professional-development/publications/pub-0021722018.
24. Vaughan J. Post Bawa-Garba how do we de-toxify the climate of fear? *RCS Bulletin* 2018;100(8):325.
25. Dyer C. Doctor convicted of manslaughter is suspended from register for a year. *Bmj* 2017;357:j2928. doi: 10.1136/bmj.j2928 [published Online First: 2017/06/18]
26. BBC. Doctors on Trial: BBC; 2018 [cited 2018. Available from: https://www.bbc.co.uk/programmes/b0bh32lj accessed 24.11.18.
27. [Available from: https://www.judiciary.uk/wp-content/uploads/2018/08/bawa-garba-v-gmc-final-judgment.pdf
28. Wachter RM, Pronovost PJ. Balancing "no blame" with accountability in patient safety. *N Engl J Med* 2009;361(14):1401-6. doi: http://dx.doi.org/10.1056/NEJMsb0903885
29. GMC. Williams Review into Gross Negligence Manslaughter in healthcare GMC written submission 2018 [Available from: https://www.gmc-uk.org/-/media/documents/Written_submission_Williams_Review_74084026.pdf.
30. Jansen P, Fernando K. Accident compensation. In: Morris K, A., ed. Cole's Medical Practice in New Zealand. Wellington: MCNZ 2017:445-59.
31. Cartwright SR. The Report of the Committee of Inquiry into Allegations Concerning theTreatment of Cervical Cancer at NationalWomen's Hospital and into Other Related Matters. Auckland: Government Prininting Office 1988.
32. Bismark M, Dauer E, Paterson R, et al. Accountability sought by patients following adverse events from medical care: the New Zealand experience. *Cmaj* 2006;175(8):889-94. doi: 10.1503/cmaj.060429 [published Online First: 2006/10/13]